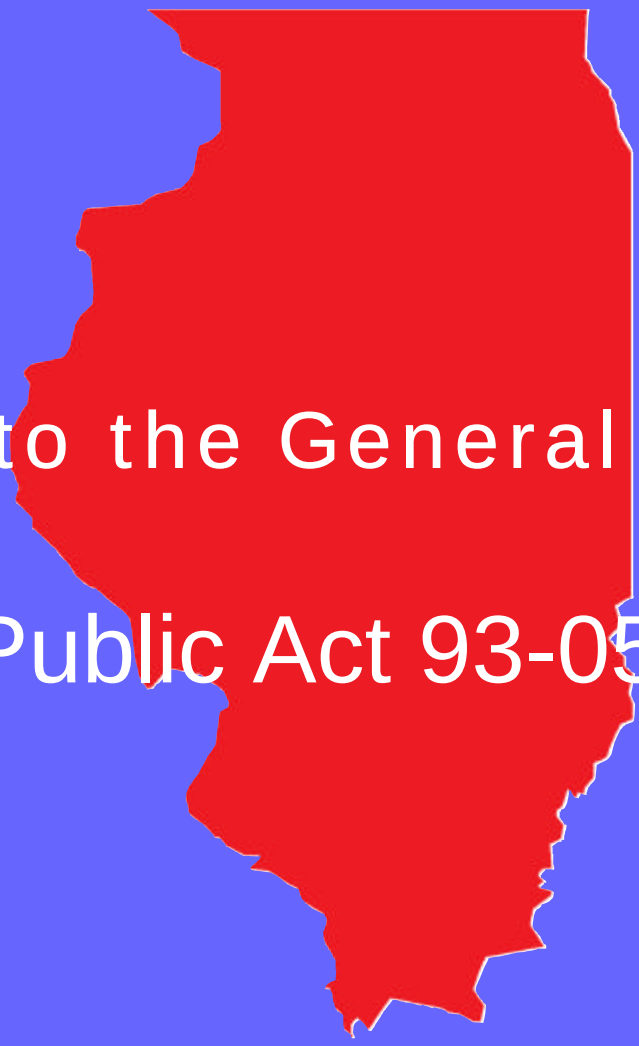

Report to the General Assembly

Public Act 93-0536

State of Illinois
Rod R. Blagojevich, Governor

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Report to the General Assembly
Public Act 93-0536

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Executive Summary

Public Act 93-0536 (305 ILCS 5/5 – 5.23) was passed with the aim of improving birth outcomes for over 80,000 babies whose births are covered by Illinois Medicaid every year. The new law states that the Illinois Department of Public Aid 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, IDPA is required to develop a plan for prenatal and perinatal health care for presentation to the General Assembly by January 1, 2004. IDPA 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.

Given the enormity and importance of this task, IDPA is presenting this report as an initial plan with the intention of continuing work on this topic throughout the upcoming year. IDPA respectfully submits this initial report to the General Assembly outlining our strategic planning process.

IDPA established a Perinatal Task Force made up of a broad range of partners, including advocates and experts in the area of perinatal health representing both clinical practice and academia as well as other state agencies involved with maternal and child health. The task force was asked to make recommendations regarding coverage for, and measuring success of enhanced perinatal services that have been scientifically demonstrated to have a positive impact on birth outcomes.

The current status of perinatal health nationally and in Illinois Medicaid was studied for program planning implications and to determine priorities. Other states' enhanced perinatal initiatives were researched to ascertain if outcomes were determined. In many cases, cost benefit findings have not yet been ascertained by states with such initiatives. Finally, recommendations were made for IDPA consideration, subject to appropriation. IDPA prioritized the recommended intervention as high, medium, low or needs further study. IDPA's suggested ranking is identified by each recommendation. IPDA has also developed a list of top priorities, which is included after the Executive Summary.

Summary of Recommendations Agreed to by IDPA, Subject to Appropriation Where Necessary

- **Planned Pregnancies**

  One recognized strategy for improving birth outcomes is to improve preconception health and to promote and achieve a "planned pregnancy," with appropriate spacing between births. The use of contraceptives not only helps women avoid unintended pregnancies, but also helps women plan pregnancies. Women who plan their pregnancies are more likely to adequately space their pregnancies, address risk factors that affect birth outcomes prior to conception and receive early and adequate prenatal care, which is essential for good maternal and infant health. Experts agree that having a healthy pregnancy and baby begins during the preconception period before the window of opportunity for intervention is too late. According to the National Commission to Prevent Infant Mortality, "infant mortality could be reduced by an

estimated 10 percent if all pregnancies were planned. In addition, the incidence of low-birth weight infants could be reduced by 12 percent."

It was recommended that IDPA request an amendment for Illinois Healthy Women (family planning federal waiver) to:

- Provide coverage for 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)
- Include folic acid and vitamin supplementation in the package of covered services under Illinois Healthy Women (high priority)
- Add coverage for a preconception visit (high priority)
- Expand coverage under the Illinois Healthy Women program to all women who would otherwise be eligible for Medicaid maternity coverage and whose income is below 200 percent of the federal poverty level, irrespective of whether they were previously enrolled in Medicaid or SCHIP (high priority)

Estimated Cost: There is no additional appropriation needed for the expansion of Illinois Healthy Women to include Title XXI program participants who are leaving the program. The projections of this population are similar to earlier waiver population projections. All family planning waivers must demonstrate budget neutrality to the federal government and so by definition, approval of an expansion will not result in additional overall costs but instead, cost savings are projected from a reduction in unintended births that would be otherwise covered by Medicaid. However, approximately $2 million is required in start up funds to implement coverage for all women whose income is below 200 percent of the federal poverty level. This investment will be recouped over the life of the waiver, in addition to realizing additional savings.

- **Mental Health During the Perinatal Period**

The perinatal period is a time of heightened vulnerability for the development of major depression in some women. Obstetrical and neonatal complications of untreated depression during pregnancy are devastating and may include fetal growth retardation, pre-eclampsia, premature labor, placental abruption, inconsolable infants, decreased prenatal care, insufficient weight gain, increased use of addictive substances, increased risk of being a victim of violence, and other unhealthy outcomes, including a disturbed mother-infant relationship and psychiatric morbidity in children later. It is also found that even when a pregnant woman is decreasing her own use of alcohol or addictive substances, including smoking, there may be an increased use by family members due to increased stress, related to the pregnancy. It was recommended that the State:

- 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 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 primary care providers (high priority)

- Allow reimbursement for screening for depression, such as for the Edinburgh Postnatal Depression Scale during the prenatal and postpartum period (high priority)
- Provide information and training to providers on how to use the depression screening tool (medium priority)
- 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)

Estimated Cost: The Illinois Department of Human Services, Division of Mental Health, estimates that the first year of the Perinatal Mental Health Consultation Service would cost approximately $222,000.

There would be no additional costs for the Edinburgh Postnatal Depression Scale to be allowed as an acceptable risk assessment during pregnancy as risk assessments during pregnancy are already covered. However, there would be an additional cost to allow reimbursement for the Edinburgh Postnatal Depression Scale during the postpartum period. Based on CY 2002 enrollment of pregnant women, assuming that one-half of the pregnant women receive a postpartum visit, and of those, 20 percent will be screened for depression, the estimated cost is $144,000. Although it is recognized by IDPA that mental health screening should be universal for these women, it is unlikely that universal screening would initially occur.

IDPA will collaborate with the other state agencies, provider groups, the Medicaid Advisory Committee, and other advocate and advisory groups to develop and implement a strategy for provider education in this area. Additionally, IDPA will work with the Illinois Department of Human Services, Division of Mental Health to explore available resources for providing mental health screening to women who are no longer eligible for Medicaid coverage. An appropriation of $66 million was included in the Governor's FY 05 Budget to expand FamilyCare from 90 percent to 133 percent of the federal poverty level. FamilyCare offers health insurance to parents living with their children 18 years old or younger. FamilyCare also covers relatives who are caring for children in place of their parents. This expansion will assist more mothers in having access to health care, including mental health services, beyond the 60 days postpartum period. IDPA will explore the possibility of extending depression screening for up to six months post partum for those women enrolled in FamilyCare.

- **Oral Health**

Oral infections (dental caries and periodontal diseases) are among the most prevalent chronic diseases in the United States and are most prevalent in economically disadvantaged and minority populations. There is evidence to support the hypothesis that poor oral health adversely affects pregnancy leading to poor birth outcomes. It has been estimated that more than 18 percent of all cases of preterm low birth weight may be due to periodontal disease, making it a clinically important risk factor for preterm

low birth weight. In addition, oral disease in pregnancy adversely affects the oral health of children.

It is clear that continued research on periodontal disease and pregnancy is needed and is underway. It is of concern that pregnant Medicaid participants do not have coverage of, or resources for, regular preventive dental services or periodontal treatment. Coverage for dental services for adults is optional under the Medicaid program. The recommendation for oral health coverage was to:

- Expand Medicaid 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)

Estimated Cost: Providing dental care to pregnant women is estimated to cost $2.3 million per year for dental exams, prophylaxis, periodontal scalings and periodontal maintenance for an estimated utilization rate of 25 percent of pregnant women on Medicaid who are over age 21. It is possible that cost savings might also be realized by providing this benefit due to a reduction in the incidence of prematurity. Several other states have recently added some dental services for pregnant women and they estimated net savings over costs due to projections of reductions in premature births and low birth weight births. Coverage in these states is too new to be able to judge whether such savings have been realized. Subject to specific appropriations, IDPA could provide dental coverage for pregnant women for screening and treatment of periodontitis and dental caries. IDPA could also work with IDPH to look for grant funding to pilot these additional services so as to test the efficacy and cost effectiveness of these interventions, and could work with Chapin Hall or another research institution to evaluate this strategy as a method for improving birth outcomes.

- **Smoking Cessation**

Tobacco is the leading preventable cause of death in the United States. It is the primary cause of lung cancer, the leading cancer killer of women, and is also a primary risk factor for cardiovascular disease, the leading overall killer of women. Smoking has devastating consequences for mother and child. A pregnant woman who smokes is between 1.5 and 3.5 times more likely to have a low birth weight baby. Cigarette smoking has been associated with increased risk of ectopic pregnancy, placenta complications and stillbirth. Additionally, infants whose mothers smoked during pregnancy have 2.3 times the risk of Sudden Infant Death Syndrome than infants of non-smoking pregnant women. IDPA covers pharmacology therapy, however, no studies are currently available on the effectiveness or safety of these products for pregnant women. Therefore, physicians may be reticent to recommend these products to pregnant women. Currently, IDPA does not cover smoking cessation counseling or classes, as a separate, unique service.

Recommendations regarding smoking cessation included:

- Encourage providers to assess smoking status and update smoking status at each visit, providing advice to quit (high priority)

- Provide a booklet, which is motivational and includes self-help skills for quitting to providers for distribution (high priority)
- 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)
- 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)

Estimated Cost: It is estimated that approximately $1.5 million would be needed to cover smoking cessation counseling for pregnant women who smoke. The cost of services is dependent on the number of women who take advantage of smoking cessation services during their pregnancy. It is also possible that cost savings could be realized with the addition of this service. However, predicting such savings involves many assumptions and is difficult therefore to quantify.

- **Perinatal Addiction**

Prenatal drug exposure prevalence and its impact are well documented. Prenatal alcohol use is one of the leading preventable causes of birth defects and developmental disabilities. It is estimated that as much as 12 percent of the Medicaid population needs treatment for alcohol or other drug abuse. Nationally, mothers abusing drugs during pregnancy accounted for most of the $3 billion of Medicaid spending in 1994 on inpatient hospital care for illness and injury due to substance abuse. An addicted woman is most approachable to intervention when she is pregnant.

Recommendations included:

- Identify existing resources needed to establish a Maternal Child Health team with a substance abuse treatment specialist (requires further study)
- Provide training for physicians and other health care professionals on the signs, symptoms and screenings for addictions (high priority)
- Increase the number of outreach workers and treatment slots for pregnant women (requires further study)
- Convene a subcommittee on data and evaluation to recommend strategies to improve capturing birth outcomes of addicted women (high priority)
- Include a substance abuse specialist in the Targeted Intensive Prenatal Case Management and Healthy Start programs (high priority)
- Fund a smoking cessation specialist position in DASA to review and recommend smoking cessation programs and provide smoking cessation training (requires further study)
- Establish a formal network for consultation as needed by primary care providers (high priority)

Estimated Cost: IDPA supports the efforts of IDHS/DASA to implement the above recommendations. IDHS/DASA will need specific federal grant dollars or state appropriation to implement many of the recommendations presented above. For instance, $250,000 per year would be required to fund five outreach workers for finding "hard to reach" pregnant women and providing counseling and referral for needed

health care services. IDHS/DASA estimates that $100,000 would be needed for funding a smoking cessation specialist to provide curriculum and training for smoking cessation.

- **HIV Counseling**

  In an effort to reduce mother-to-child transmission of HIV, a bill was passed last year by the General Assembly that requires health care professionals to provide pregnant women with HIV counseling and voluntary testing. Public Act 93-0566 requires every health care professional who provides health care to a pregnant woman or a professional or facility providing labor and delivery services to provide HIV counseling and offer HIV testing, unless she has already received an HIV test during pregnancy. The Act requires that any pregnant woman who agrees to be tested for HIV sign an informed consent form prior to taking the test. The law requires 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 to the parent or guardian of the infant, and automatically perform HIV testing when the HIV status of the infant's mother is unknown, if the parent or guardian does not refuse. HIV counseling and testing have been found to be cost effective and reduce vertical transmission of HIV. However, strategies to ensure pregnant women receive prenatal care and provider education about standards of care, the importance of counseling, testing and documenting HIV testing results are key. IDPA does not currently provide separate reimbursement for HIV counseling services. However, HIV testing and treatment are covered.

  The recommendations regarding HIV included:

  - Cover HIV counseling and testing under Illinois Healthy Women (family planning waiver) (high priority)
  - 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)
  - Refer pregnant women who are HIV-positive to Targeted Intensive Prenatal Case Management (high priority)
  - 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)
  - Provide separate IDPA reimbursement for HIV counseling as a means to help reduce the transmission of HIV infection (medium priority)
  - 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)
  - Educate providers on reimbursement for perinatal rapid testing, allowing payment for this laboratory procedure and office visit, which includes counseling (high priority)

Estimated Cost: It is estimated that approximately $950,000 would be needed to provide separate reimbursement for HIV counseling of pregnant women during the prenatal visit. IDPA concurs that additional efforts are needed to outreach and case find pregnant women to ensure that they receive prenatal care and Family Case Management services, with those pregnant women who are HIV-positive being referred to Targeted Intensive Prenatal Care Management. IDPA has requested CMS approval to cover HIV screening under Illinois Healthy Women. IDPA will work in collaboration with the other state agencies, advocates, clinicians and other experts to educate providers about HIV counseling, testing and IDPA's reimbursement policies for such services.

- **Nurse Midwifery in Illinois**

Studies show that comprehensive prenatal care programs administered by nurse-midwives may promote a reduction in adverse pregnancy outcomes among indigent mothers. National data support the findings that certified nurse midwives have excellent birth outcomes and may provide a viable alternative to maternity care in the United States, particularly for low to moderate risk women. IDPA provides reimbursement for Certified Nurse Midwives. However, that reimbursement is currently 70 percent of the state's established maximum reimbursement rate for physicians. Over half of the states provide 100 percent Medicaid reimbursement for Certified Nurse Midwife services.

Recommendations relative to Certified Nurse Midwives were to:

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

Estimated Cost: Allowing CNMs to receive 100 percent of the physician's rate for both prenatal visits and deliveries would cost an additional $55,000 per year.

- **Lactation Counseling**

The advantages of breastfeeding are indisputable and include nutritional, immunological and psychological benefits to both infant and mother, in addition to economic benefits. The mother who plans to, or is breastfeeding, may be more conscious of her own nutrition during the perinatal period, and thus select a healthier diet, which undoubtedly will positively impact births. Nutritional and lactation counseling and food supplements are an integral part of the WIC program. Medicaid pregnant women and infants are income eligible for the WIC program. IDPA will continue to encourage WIC enrollment of pregnant women receiving Medicaid coverage and work with the Illinois Department of Human Services, Office of Family Health to:

- Use the task force model to develop an awareness and outreach campaign to more effectively utilize services across agencies (high priority)
- Provide updated breastfeeding information to physicians who serve Medicaid participants (implementation requires further study)
- Provide reimbursement for lactation counseling/support for breastfeeding women during the first weeks after birth (requires further study)

Estimated Cost: No additional costs are estimated for the state agencies to accomplish these recommendations. The suggestion that IDPA provide reimbursement for a public health visit after delivery for breastfeeding support, assessment of mother-infant bonding, assessment of perinatal depression and parenting skills, as well as EPSDT well child screening services needs further study. This visit is estimated to cost an additional $2.5 million, if all new mothers could be located for the post delivery home visit (at $30.00 for the visit).

- **Labor Support During the Perinatal Period**

  Continuous labor support (defined as continuous one-to-one intrapartum support) can occur either through doula or monitrice. Limited data exists suggesting there are demonstrated benefits in improving birth outcomes, as defined by the task force's definition of a healthy birth, by implementing a program of labor support. However, doulas have been demonstrated to have a positive impact on breastfeeding and on improving mother-infant interaction. This area requires further study of costs and analysis of benefit.

- **Case Management and Home Visiting**

  Case management has been reported in some instances as being as effective in reducing health care costs through improving outcomes: reducing low birth weight and infant mortality; improving access to prenatal care, improving use of well child care, increasing immunization levels, increasing participation in family planning and decreasing emergency room visits for young children. The state's case management programs, Family Case Management, Targeted Intensive Prenatal Case Management and Healthy Start programs have demonstrated promising results in improving birth outcomes. Targeted Intensive Prenatal Case Management and Healthy Start programs are available only in a limited number of high-risk communities.

  Recommendations regarding case management and home visits were to:

  - Expand the existing case management program to target high-risk areas, which is supported by IDPA (high priority)
  - Expand outreach efforts (especially in Chicago) to locate "hard to reach" pregnant women and get them into care (high priority)
  - 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)

  Estimated Cost: To provide adequate funding to serve all Medicaid pregnant women in Chicago and to increase the amount paid to the Family Case Management providers by

10 percent per family, per month that is used for the basis for reconciling expenditures to serve all Medicaid-eligible pregnant women in the state, an additional $9 million would be needed by IDHS.

To expand the targeted, intensive high-risk case management program to twenty additional sites, an additional $5 million would be required by IDHS. Dedicated funds ($500,000) could be used to pilot new techniques to outreach to "hard to reach" pregnant women to get them into care.

Other Recommendations included:

- Disseminate information to the provider community concerning standards of care
- Work with the provider community to educate their colleagues about the standards of care
- Consider performing a focused quality study that assesses the extent to which providers are performing medical services according to ACOG guidelines
- Provide an educational campaign to encourage pregnant women to be active in their reproductive health care
- 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 (IDPA will be working on this comparison and will provide this data to interested parties at a later date.)
- Analyze birth outcomes utilizing predictive analytics to better understand factors affecting the health of births
- Look at the effects of nutritional support from WIC and food stamp participation on birth outcomes

Top Priorities

The following is a listing of the order of top priorities for IDPA with respect to this report:

1. Expansion of Family Care from 90 percent, to 133 percent of the federal poverty level:

   Providing access to comprehensive health benefits, including family planning is a top priority for IDPA. We expect the provision of health care services not only during the prenatal period but also preconceptionally to improve the overall health of beneficiaries and with it, improve birth outcomes.

   The appropriation included in the Governor's FY 05 Budget is $66 million.

2. Expansion of Family Planning Services:

   IDPA has applied to modify its existing family planning waiver, known as Illinois Healthy Women. We hope to add coverage for HIV testing, multivitamins and folic acid and to cover young women who are aging out of KidCare, as well as cover mothers or female caretaker relatives who lose coverage under FamilyCare and who otherwise meet the age qualifications under Illinois Healthy Women. IDPA also plans to apply for a further modification of the waiver to cover women who would be

eligible for maternity coverage if pregnant, i.e., whose income is under 200 percent of the federal poverty level and who meet other requirements.

It is estimated that $2 million in start up funds will be needed to initiate the family planning expansion. However, these costs will be recouped over the life of the waiver, in addition to realizing other savings.

3. Addition of Targeted Intensive Prenatal Case Management for High Risk Pregnancy Sites:

   Review of this pilot indicates that even though this program serves a high-risk group of pregnant women, there has been a consistent reduction in low birth weight outcomes in the Targeted Intensive Prenatal Care Program population since its inception. These are promising findings. We believe that this model of providing intensive services by nurses and social workers is effective. Therefore, we believe it would be appropriate to expand this program to 10 additional sites.

   An estimated $2.5 million would be needed by the Illinois Department of Human Services, Office of Family Health to expand the Targeted Intensive Prenatal Case Management Program to 10 additional sites.

4. Addition of Certain Dental Services for Pregnant Women:

   Scientific studies indicate that the addition of screening and treatment for both dental caries and periodontitis may decrease prematurity and also decrease the incidence of dental caries in children. In the absence of a specific appropriation, IDPA plans on designing a pilot project to test this hypothesis and to seek funding for such a pilot. If appropriation is forthcoming, then IDPA would add these dental benefits to the service package for pregnant women statewide.

   An estimated $2.3 million would be needed to expand dental coverage benefits to pregnant women.

5. Development of a Smoking Cessation Program for Pregnant Women:

   IDPA plans to work collaboratively with the Illinois Department of Public Health, the Illinois Department of Human Services and other experts in the field to look at models for successful intervention for pregnant women. We believe that it will take some time for us to determine what the best approach to this problem may be, and to design the intervention.

   An estimated $1.5 million would be needed to cover smoking cessation counseling for pregnant women.

6. Pilot for outreach to locate the “hard to reach” pregnant women:

   In Calendar Year 2001, about six percent of pregnant women who received Medicaid benefits reported receiving no prenatal care or entered prenatal care in the third trimester and an additional 20 percent of pregnant women who received Medicaid

benefits reported beginning prenatal care in the second trimester. Current efforts to reach these women have been unsuccessful. There is a need to look for new ways to reach these "hard to reach" women early in their pregnancies and get them into prenatal care services. An estimated $500,000 would allow IDPA in collaboration with IDHS to pilot new approaches and to evaluate these different approaches.

7. Creation of a Statewide Perinatal Mental Health Consultation Service:

IDPA supports the implementation of a Statewide Mental Health Consultation Service by the Illinois Department of Human Services, Division of Mental Health. The Statewide Mental Health Consultation Service would include a university-based team charged with developing a model program template for addressing the specific needs of 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 primary care providers. In addition, allowing reimbursement for screening for depression is also a priority for pregnant and postpartum women, for up to six months after delivery. Expansion of Family Care from 90 percent to 133 percent of the federal poverty level will assist with providing coverage to more mothers after the 60 days postpartum period.

An estimated $222,000 would be needed by the Illinois Department of Human Services, Division of Mental Health for the development of a Statewide Perinatal Mental Health Consultation Service. Additionally, an estimated $144,000 would be initially required for the coverage of risk assessment for depression during the 60 days postpartum period. Some additional funds would be needed for the coverage of risk assessment for depression for an additional four months (six months in total) after delivery for mothers enrolled in the program who were not screened in the first two months but who show signs of postpartum depression.

Legislative Mandate for this Report

Public Act 93-0536 (305 ILCS 5/5 – 5.23) was passed with an aim of improving birth outcomes for over 80,000 babies whose births are covered by IDPA's medical programs every year.

The new law states that the Illinois Department of Public Aid (IDPA) **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.** These services may include comprehensive risk assessments for pregnant women, women with infants, and infants, lactation counseling, nutrition counseling, childbirth support, psychosocial counseling, treatment and prevention of periodontal disease, and other support services that have been proven to improve birth outcomes.

The Act requires IDPA to maximize the use of preventive prenatal and perinatal health care services consistent with federal statutes, rules, and regulations and further, **to develop a plan for prenatal and perinatal preventive health care for presentation to the General Assembly by January 1, 2004 (hereafter referred to as the Initial Plan).**

Further, IDPA 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** reimbursed by IDPA in preventing low birth weight infants and reducing the need for neonatal intensive care hospital services. Each report shall include an evaluation of how the ratio of expenditures for treating low birth weight infants compared with the investment in promoting healthy births and infants in local community areas throughout Illinois.

Given the enormity and importance of this task, the agency is presenting this report as an initial plan with the intent of continuing work on this topic throughout the upcoming year. The agency also intends to create specific working groups to study and further develop key components of this plan to improve prenatal and perinatal preventive health care.

IDPA respectfully submits this initial report to the General Assembly outlining our strategic planning process and related findings designed to meet our mission as well as to comply with Public Act 93-0536. Specifically, this report will describe the current state of perinatal health in Medicaid, with the goal of developing a cost-effective, evidence based approach to improving birth outcomes during a time of fiscal constraint.

IDPA's Implementation of the Legislative Charge

Illinois is a state rich with medical expertise. The state has 67 teaching hospitals and is home to numerous universities with active research portfolios in the areas of maternal and child health, epidemiology, obstetrics, neonatology, pediatrics, general public health and other areas pertinent to prenatal and perinatal health. The state also benefits greatly from a strong advocacy community committed to improving children's health. To fully capitalize on such state advantages and expertise, IDPA convened a "Perinatal Task Force" (task force) made up of a broad range of partners, including advocates and experts in the area of perinatal health representing both clinical practice and academia.

The task force was asked to make recommendations on improving access to, coverage for, and measuring success of, enhanced perinatal services that have been scientifically demonstrated to have a positive impact on birth outcomes. IDPA invited other state agencies (Illinois Department of Public Health (IDPH), Illinois Department of Human Services (IDHS) and the Illinois Department of Children and Family Services (DCFS)) involved in the perinatal health care delivery system to participate in the task force in order to share data, provide information about their perinatal programs and assist in IDPA's strategic planning process for improving birth outcomes and maternal health for the low-income population.

In order to better understand the unmet needs of mothers and children who depend on public assistance for their health care coverage, available Illinois specific data was analyzed. The primary data sources and information utilized in this report include:

- IDPA eligibility data
- IDPA MMIS paid claims data
- Birth outcome information for the Medicaid population obtained by a birth file match conducted by IDHS
- IDHS Title V MCH Block Grant Report
- IDPH – Illinois specific infant mortality, birth outcome information and Pregnancy Risk Assessment Monitoring System (PRAMS) data
- U.S. data from the Centers for Disease Control
- Data derived from the literature research conducted by task force members and IDPA

IDPA's objective in this strategic research and planning effort was to identify resources and service gaps so as to coordinate with, rather than duplicate, other initiatives. It should be noted that services under consideration are optional under Medicaid law and would be enhancements over Illinois' extensive pregnancy-related coverage package. IDPA's comprehensive approach to planning an expansion initiative has at its roots the challenge of more fully answering the central questions of:

- What is the Medicaid experience with birth outcomes as compared to other populations, both national and Illinois experiences;
- How do the experts define a healthy birth; and
- What has been scientifically demonstrated to work to improve birth outcomes and maternal health?

The task force was able to achieve consensus for a definition of "healthy birth" and began to identify service gaps and available resources with the goal of addressing those gaps.

With limited dollars available in the State to provide health care coverage for an expanded package of enhanced perinatal services, priorities need to be established. It is also essential, given the current severe constraints on the State budget, that all services suggested be conclusively shown to be effective in improving birth outcomes. However, obtaining recommendations for expansion of Medicaid coverage for specific services based on sound data concluding the intervention would very likely result in positive outcomes (a healthy birth), was challenging as much of the outcome data to support a particular enhanced service is either inconclusive or preliminary. Thus, task force consensus to expand coverage for many of the enhanced services listed in the legislation has not yet been fully accomplished. Certain strategies identified in the legislation remain under further study at this time and await more conclusive evidence of cost and health benefit.

Definition of a "Healthy Birth"

The task force defines a "healthy birth" as a live birth that is:

- Full term (greater than or equal to 37 weeks)
- With a birth weight greater than 2500 grams
- Without congenital anomalies or other birth defects
- Without significant identified morbidity during the hospital stay
- Without neonatal intensive care unit (NICU) care
- Without maternal complications, including pregnancy-related hospitalizations other than labor and delivery or major mental illness

Current Status of Perinatal Health Nationally and in Illinois Medicaid

Improving maternal and child health outcomes continues to present a public health concern nationally, as well as in Illinois. Among developed countries, the United States continues to have a poor record with regard to infant mortality ranking 25th behind such countries as Czech Republic, Ireland, Portugal and Slovenia.[1] While there has been a significant reduction in infant mortality over the past century, little progress has been made in decreasing the preterm labor rate and current data suggests that it is increasing. In 2001, 11.9 percent of live births in the U.S. were delivered preterm. Additionally, the rate of low birth weight has increased over the past decade (7.1 percent in 1991 and 7.7 percent in 2001).[2]

While technological advances to increase survival among preterm infants have been made, there exists a significant disparity in premature birth across populations within the U.S.[3] According to the March of Dimes, "in an average week, 9,159 babies are born preterm; 1,493 babies are born very preterm; 5,937 babies are born low birth weight; and 1,113 babies are born very low birth weight.[4]

A woman who has previously experienced a preterm birth and/or low birth weight is at risk for subsequent preterm birth. Low birth weight is also associated with maternal age and other demographics, such as race and income level.[5] Lifestyle risks include late or no prenatal care, smoking, drinking alcohol, using illegal drugs, domestic violence, lack of social support, high levels of stress, long working hours with long periods of standing, environmental exposures and low-income.[6]

Although gaps between income groups have narrowed, low-income women remain less likely to obtain prenatal care. Poor birth outcomes remain a complex and unresolved problem despite the billions of dollars expended to improve health and provide services to low-income pregnant women and their infants and in spite of significant expansions of prenatal coverage through the Medicaid program over the last two decades.

Dubay et al. published an analysis of the effect of increased access to prenatal health care through Medicaid expansions and found that while the expansions led to an increase in prenatal health care utilization among women of low socioeconomic status, this was not sufficient to narrow the gap in newborn health between poor and non-poor populations.[7]

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[1] UN, Department of Economic and Social Affairs, The World's Women 2000: Trends and Statistics, http://unstats.un.org/unsd/demographic/ww2000/table3a.htm

[2] United States Department of Health and Human Services, Centers for Disease Control and Prevention, *National Vital Statistics Reports*, Vol. 52, Number10, page 89, December 17, 2003

[3] Kramer, M.S., Goulet, L., Lyndon, J., Seguin L., McNamara H, Dassa C, et al., "Socioeconomic disparities in preterm birth: causal pathways and mechanisms," *Pediatric and Perinatal Epidemiology*, 15 (Suppl.2):104-123, 2001

[4] March of Dimes website: http://www.modimes.org/prematurity/5510_5810.asp

[5] Kiley, JL; Yu, S.; Rowley, D.L., "Low Birth Weight and Intrauterine Growth Retardation," United States Department of Health and Human Services, Centers for Disease Control and Prevention, *Public Health Surveillance for Women, Infant and Children*, 185-202

[6] March of Dimes website: http://www.modimes.org/prematurity/5510_5810.asp

[7] Dubay L, Joyce, T, Kaestner, R, Kenney, G.M. "Changes in Prenatal Care Timing and Low Birthweight by Race and Socioeconomic Status: Implications for the Medicaid Expansions for Pregnant Women (2001)," Health Services Research (36): 373-98

McCormick (2001) followed this analysis up by suggesting that while prenatal care may be necessary, it is not sufficient to mitigate other factors. Additionally, the generally accepted measures of birth outcomes may be somewhat blunt instruments to measure overall well being.[8]

The chart to follow provides data on the past decade on infant mortality, low birth weight and very low birth weight in the U.S. It depicts the disparities of birth outcomes throughout the U.S., based on race.

Selected Perinatal Statistics by Race Category for the U.S.: 1990-2001

U.S.

	All Races IMR	Black IMR	White IMR	All Races % LBW	Black % LBW	White % LBW	All Races % VLBW	Black % VLBW	White % VLBW
1990	9.2	18.0	7.6	7.0	13.3	5.7	1.3	2.9	1.0
1991	8.9	17.6	7.3	7.1	13.6	5.8	1.3	3.0	1.0
1992	8.5	16.8	6.9	7.1	13.3	5.8	1.3	3.0	1.0
1993	8.4	16.5	6.8	7.2	13.3	6.0	1.3	3.0	1.0
1994	8.0	15.8	6.6	7.3	13.2	6.1	1.3	3.0	1.0
1995	7.6	15.1	6.3	7.3	13.1	6.2	1.4	3.0	1.1
1996	7.3	14.7	6.1	7.4	13.0	6.3	1.4	3.0	1.1
1997	7.2	14.2	6.0	7.5	13.0	6.5	1.4	3.0	1.1
1998	7.2	14.3	6.0	7.6	13.0	6.5	1.5	3.1	1.2
1999	7.1	14.6	5.8	7.6	13.1	6.6	1.5	3.1	1.2
2000	6.9	14.1	5.7	7.6	13.0	6.5	1.4	3.1	1.1
2001	6.8	14.0	5.7	7.7	13.0	6.7	1.4	3.1	1.2

Source: National Center for Health Statistics, CDC, 1/2004

The challenge for the nation remains, given the significant efforts that have already been made, what are the specific services that can be provided in the prenatal period that will make a difference in birth outcomes? Should additional services or efforts be mainly targeted at the most "at-risk" population? And, should we be looking more intensely at the preconception period to promote health and remove certain modifiable risk factors, as many researchers seem to be suggesting today?

[8] McCormick, "Prenatal Care – Necessary but not sufficient," Health Services Research, Vol (3), 2001

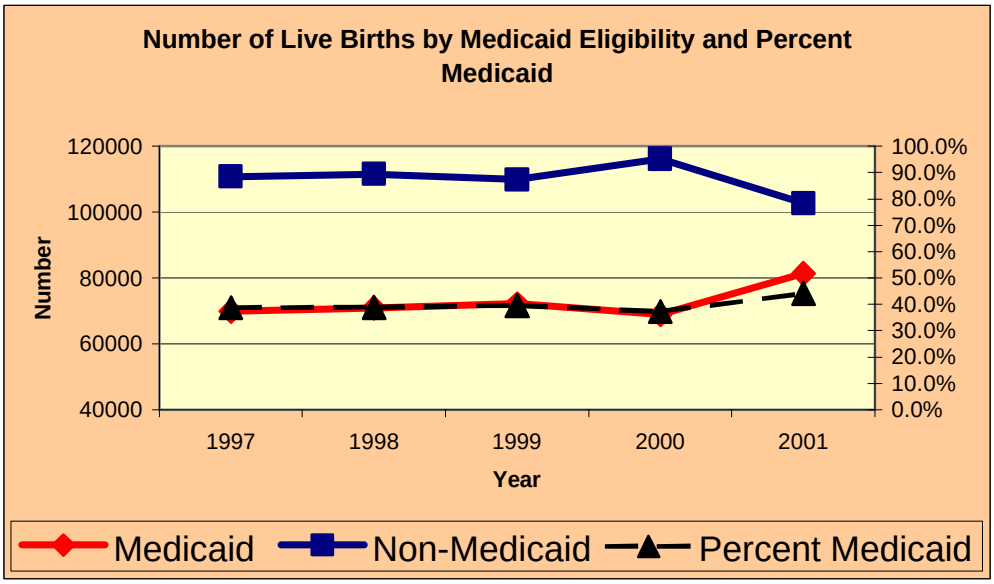
Status of Perinatal Health in Illinois Medicaid – Assessment of Need

Population

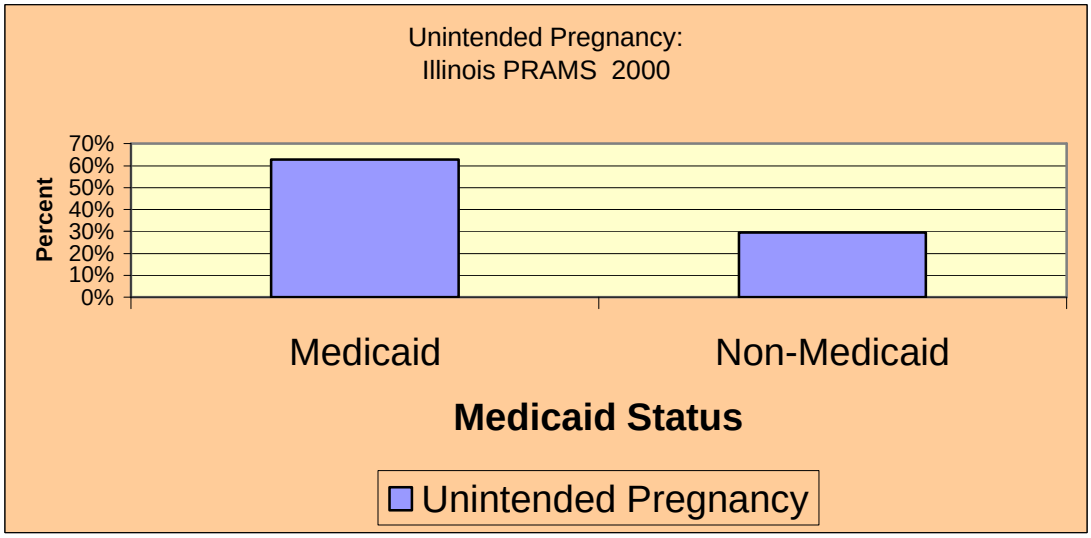
In order to develop strategies to implement enhanced services that address the delivery needs of the population covered by Medicaid, the covered population must be identified and their unmet needs assessed. Based on the birth file match and paid claims analysis, data presented below shows what is known about Medicaid birth outcomes and costs of services.

A Large Percentage of Illinois Births are Covered by Illinois Medicaid:
There were 184,022 births in Illinois in CY 2001. Attachment 1 shows detail about these births.

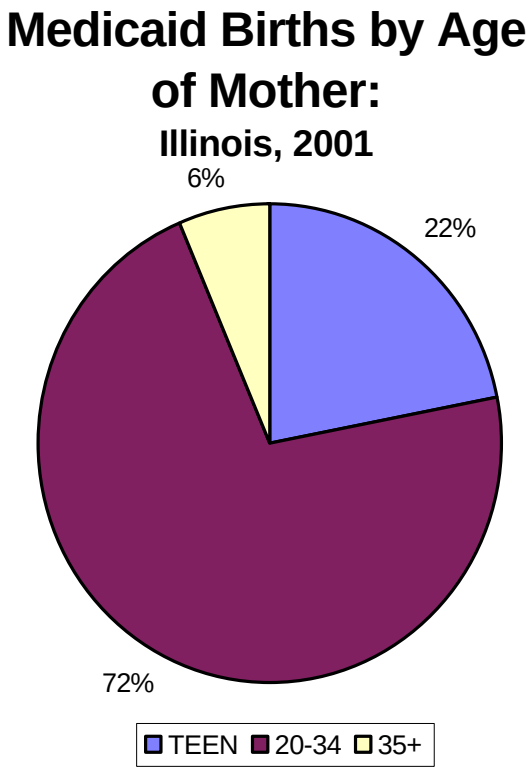
Medicaid covers approximately 40 percent of the live births each year. Illinois Medicaid paid for 69,863 births (normal deliveries) for a total liability of $215 million in CY 2001, although according to the birth file match performed by IDHS, there were 81,000 births covered by Medicaid during that year. (The primary difference in the numbers is due to the difference in data sources, one derived from paid claims and the other derived from the birth file match with Medicaid eligibility data. Paid claims information does not account for multiple births or those not claimed by the hospitals for reimbursement.)



A Majority of Medicaid Births were Unintended, Mistimed or Unplanned:
According to the PRAMS data, approximately 66 percent of Medicaid births were unintended. Medicaid-eligible women are more than twice as likely as Non-Medicaid women to have an unintended birth.

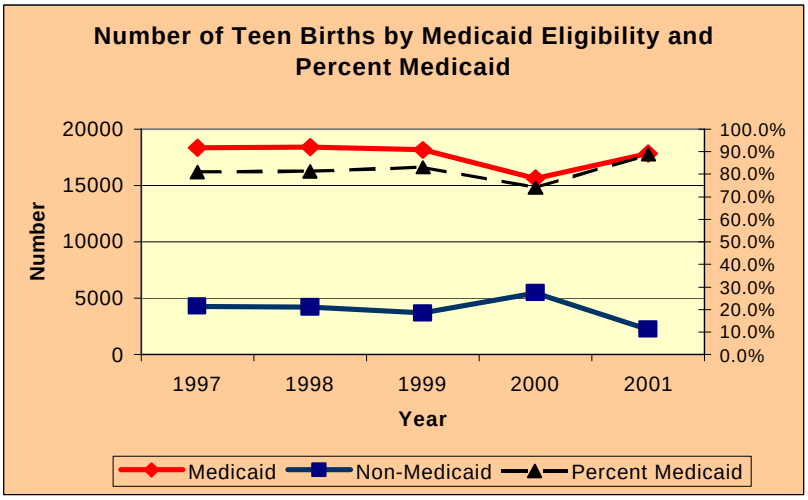


Most Medicaid-eligible women who give birth each year are between 20 and 34 years of age.



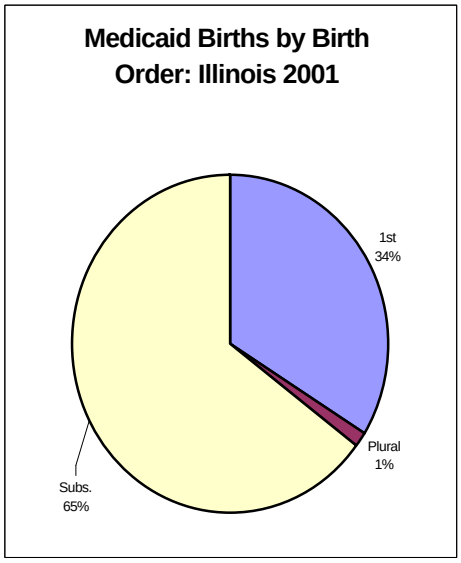
Most Births to Teens are Covered by Medicaid:

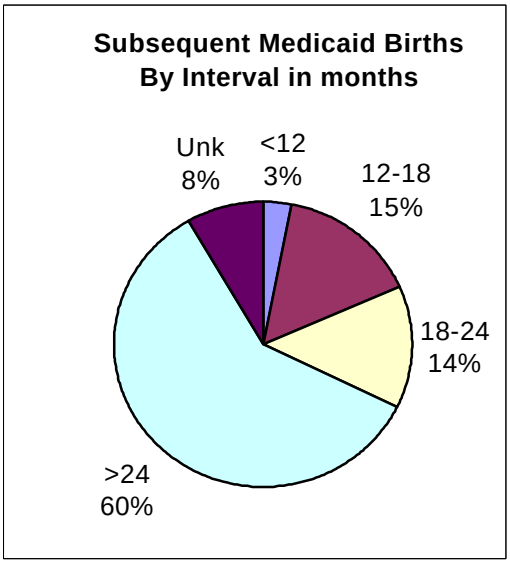
Teenagers make up about 11 percent of all births in Illinois although the number of teenage births in the State is on the decline. Twenty-two percent of Illinois Medicaid births are to teenagers. Medicaid covers about 18,000 births to teens each year. In 2001, this number represented 89% of the total teen births. (2001 Birth File Match Data)



A Majority of Medicaid Births are not a Woman's First Birth:

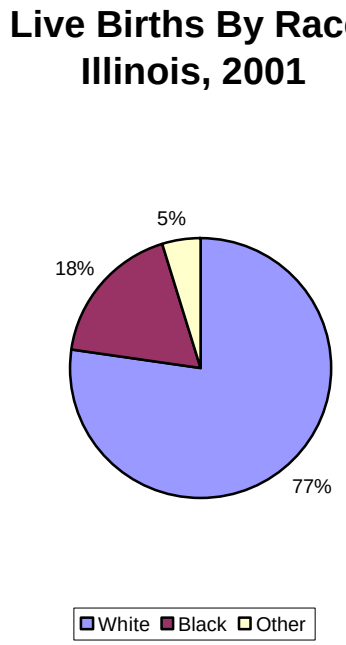
Sixty five percent of Medicaid births were subsequent births (2nd or higher). (2001 Birth File Match Data)

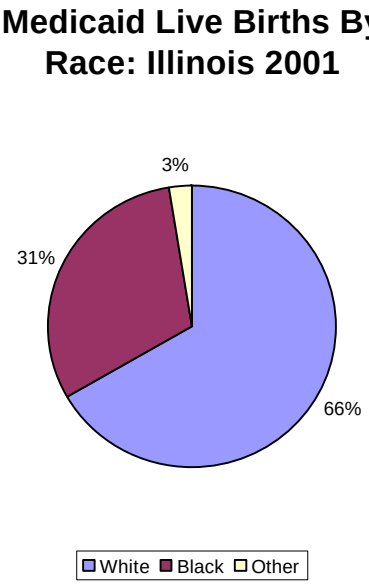




Medicaid Covers a High Proportion of African-American Births:

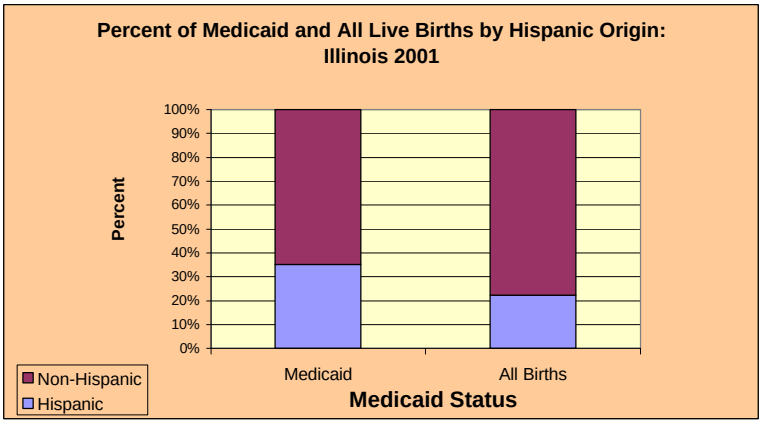
A high proportion of African-American births are covered by Medicaid. (2001 Birth File Match Data)





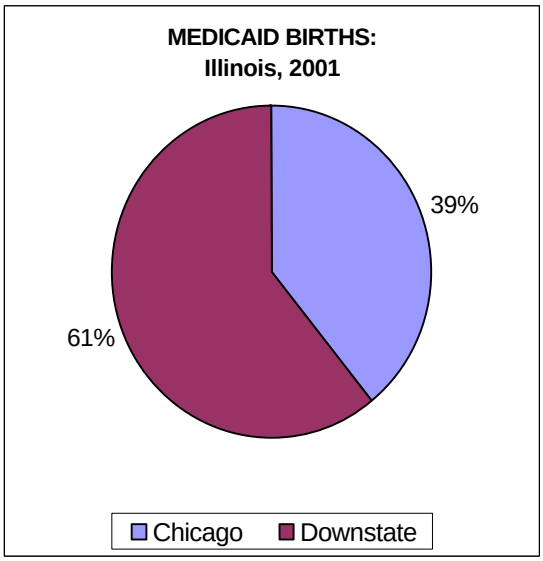
Hispanics and Latinas Births are also more often covered by Medicaid:

Additionally, a high proportion of Hispanic and Latina births are covered by Medicaid. (2001 Birth File Match Data)



Geographic Distribution of Births:

About 40 percent of Medicaid births occur in Chicago. (2001 Birth File Match Data)



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."[9] Because of the potential to improve the health of mothers and infants, the American College of Obstetricians and Gynecologists and the American Academy of Pediatrics recommend that all pregnant women receive early (in the first trimester) and regular prenatal care visits. [10]

According to the January 2, 2004 Morbidity and Mortality Weekly Report, prenatal care is also key to stopping the spread of HIV to infants. While the rates of mother-to-infant HIV spread have dropped dramatically in the US, when it does occur a lack of prenatal care is generally indicated.[11] On the other hand, accessing adequate prenatal care is not a panacea. As will be seen later in this report, women accessing the recommended level of care may still experience less than the optimal birth outcomes. States such as Utah, which in 2003 ranked 49th in adequate prenatal care, was 3rd best in the United States with regard to the rate of infant mortality.[12]

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[9] 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

[10] United States Department of Health and Human Services, Centers for Disease Control and Prevention, "Prevalence of Selected Maternal Behaviors and Experiences, Pregnancy Risk Assessment Monitoring System (PRAMS), " http://www.cdd.gov/mmwr/preview/mmwrhtml/ss5102a1.htm

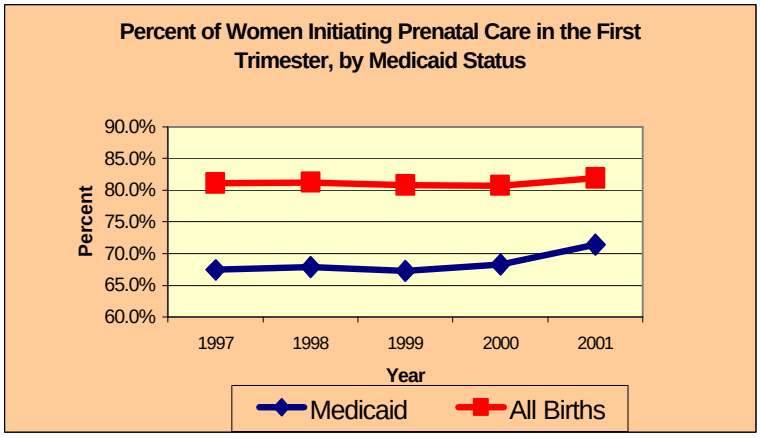
[11] United States Health and Human Services, Centers for Disease Control and Prevention, *Morbidity and Mortality Weekly Report*, January 2, 2004

[12] "America's Health: State Health Ranking" 2003 Edition, United Health Foundation

Initiation of Prenatal Care

Healthy People 2010[13] is a set of health objectives for the Nation to achieve over the first decade of the new century. It was developed by the federal Department of Health and Human Services in consultation with experts from all 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 2001, 82 percent of pregnant women in Illinois began prenatal care in the first trimester. While Illinois Medicaid eligible pregnant women initiate prenatal care later than non-Medicaid women, the gap is narrowing. Approximately 71 percent of Medicaid-eligible women enter prenatal care in the first trimester. (2001 Birth File Match Data)



Adequate Prenatal Care

All pregnant women need health promotion and timely detection and treatment of health risks. One of the Healthy People 2010 objectives (Objective 16-6b) is to increase to at least 90 percent the proportion of all live-born infants whose mothers receive early (first trimester) and adequate (or more than adequate) prenatal care. First trimester (and continuous) care provides an opportunity to identify and address health issues and behaviors that may cause problems in fetal development and the mother's health that will lead to improved birth outcomes.[14] In 2001, 74 percent of mothers received early and adequate prenatal care nationally.

There are two generally accepted methods to help assess whether adequate prenatal care occurred. The two-part (Kotelchuck) Adequacy of Prenatal Care Utilization Index[15] combines independent assessments of the timing of prenatal care initiation and the frequency of visits received after initiation. The Kotelchuck Index incorporates an adequate

[13] U.S. Department of Health and Human Services, Healthy People 2010, November 2000
[14] United States Department of Health and Human Services, *Caring for our Future: The Content of Prenatal Care*. Washington, DC: USDHHS/PHS, 1989
[15] Kotelchuck, M., "An Evaluation of the Kessner Adequacy of Prenatal Care Index and a Proposed Adequacy Prenatal Care Utilization Index, "*American Journal of Public Health*, 84:1414-1420, 1994

plus category – women who start by the fourth month of pregnancy and have a greater than expected number of visits. The adequate plus group likely represent at-risk women; these women receive "adequate care" but may still experience a poor birth outcome due to their high risk status. Another commonly used scale is the Kessner Index.[16] This scale also assesses the timing of prenatal care and the frequency of visits received after initiation, adjusted for duration of pregnancy, although it does not adjust for risk.

Applying both assessment tools results in similar findings for Illinois' births. Approximately 75 percent of pregnant women are receiving as much prenatal care services as they should (77.5 percent using the Kotelchuck Index and 74.5 percent using the Kessner Index). Medicaid specific data has been measured using the Kessner Index. The Medicaid population fares less favorably using these measures with only 62.3 percent of Medicaid women receiving adequate prenatal care (Kessner Index). However, with the intervention of WIC or FCM, better compliance with prenatal care is achieved, according to the data derived from the birth file match. Even with FCM and/or WIC, the percentage of Medicaid-eligible women receiving adequate prenatal care is below both the state and national level.

Calendar Year 2001

		Adequate	Kessner	No Care		Third Trimester		Second Trimester	
	Births	Number	Percent	Number	Percent	Number	Percent	Number	Percent
WIC or FCM	67127	43279	64.47%	598	0.89%	2394	3.57%	13520	20.14%
***Medicaid Only**	14244	7452	52.90%	788	5.53%	818	5.74%	3011	21.14%

*No WIC or FCM

In summary, Medicaid-eligible women fare less well than the general population in seeking out early and continuous prenatal care, but improvement results when these women receive the intervention of FCM and/or WIC and the percentage with first trimester and/or adequate prenatal care has increased over the last five years. Significant challenges remain in outreach to these "hardest to reach" women to encourage them to seek timely prenatal health care.

Costs of Prenatal and Delivery Care

Prenatal Care Costs

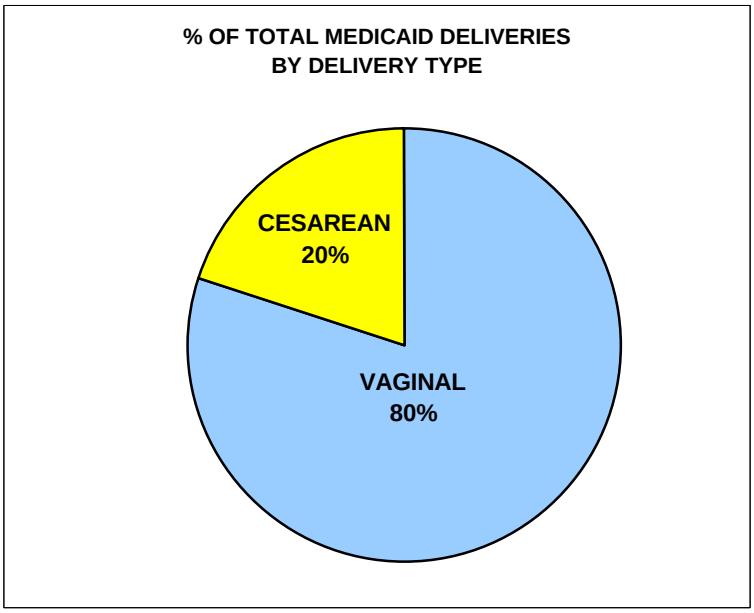
The average per capita prenatal care costs (without transportation costs) was $607.30 (CY 2001).

Prenatal Vitamins: According to paid claims data, only about 54 percent of women are filling prenatal vitamin prescriptions. This figure may under represent the percentage of women using vitamins because many providers handout free samples. From paid claims data, about 54 percent of the women who experience a "normal" delivery had filled their

[16] Kessner, D.M., Institute of Medicine, "Infant Death: An analysis by maternal risk and health care. Contrasts in health status," Vol. 1, ed. Washington, D.C, *National Academy of Sciences*, pp. 58-59, 1973

prenatal vitamins while 56 percent of the women experiencing a “non-normal” delivery filled prenatal vitamin prescriptions

Delivery Experience and Costs
Vaginal and Cesarean Section Delivery: When analyzing delivery claims during that same calendar year, Illinois Medicaid fares favorably to national statistics in the percentage of vaginal deliveries. Nationally, 75 percent of births were vaginal and 25 percent are cesarean section. Statewide, 79 percent of births were vaginal and 21 percent were cesarean section, while in Illinois Medicaid, 80 percent of births were vaginal and 20 percent were cesarean section.



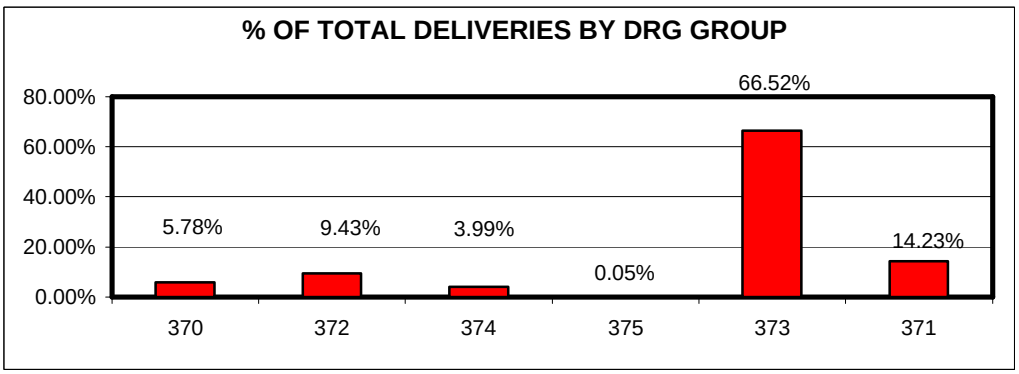
Delivery Costs
The expenditure for 69,863 births during CY 2001 totaled $214,747,510, for an average of $3,073.84. The total delivery costs represented 10.86 percent of all inpatient liability for CY 2001.

“Non-Normal” deliveries represented 19.25 percent of delivery claims in CY 2001, and 25.04 percent of total liability for deliveries in the same calendar year. These “Non-Normal” deliveries represented 2.72 percent of all inpatient liability for CY 2001.

“Normal” deliveries represented 80.75 percent of delivery claims in CY 2001, and 75.96 percent of total liability for deliveries during the same calendar year. These “Normal” deliveries represented 8.14 percent of total inpatient liability.

DELIVERY CLAIMS- CY2001					
"NON-NORMAL" DELIVERIES WITH COMPLICATIONS					
DRG	**CLAIMS**	**DELIVERY DESCRIPTION**	**DELIVERY COST**	**AVG COST**	**% OF TOTAL INPATIENT SPENDING**
370	4,035	CESAREAN SECTION W CC	$21,271,659	$5,271.79	1.08%
372	6,591	VAGINAL DELIVERY W COMPLICATING DIAGNOSES	$23,571,863	$3,576.37	1.19%
374	2,789	VAGINAL DELIVERY W STERILIZATION &/OR D&C	$8,749,018	$3,136.97	0.44%
375	36	VAGINAL DELIVERY W O.R. PROC EXCEPT STERIL &/OR D&C	$190,955	$5,304.31	0.01%
TOTAL	**13,451**	**TOTAL**	**$53,783,495**	**$3,998.48**	**2.72%**
"NORMAL" DELIVERIES WITHOUT COMPLICATIONS					
373	46,470	VAGINAL DELIVERY W/O COMPLICATING DIAGNOSES	$121,177,231	$2,607.64	6.13%
371	9,942	CESAREAN SECTION W/O CC	$39,786,784	$4,001.89	2.01%
TOTAL	**56,412**	**TOTAL**	**$160,964,015**	**$2,853.36**	**8.14%**
TOTAL	**69,863**		**$214,747,510**	**$3,073.84**	**10.86%**

(Data subject to review and change)



(Data subject to review and change)

Perinatal strategies that positively impact birth outcomes will also have a positive effect on reducing expenditures. Although "Normal" newborns represent the vast majority of the Medicaid population, their costs are less than one percent of the total Medicaid costs for newborns. Babies born in Medicaid who were considered "Normal" newborns represent 68.68 percent of the newborn claims. However, they represent only 0.74 percent of the total liability for all Medicaid babies (2001). "Non-Normal" newborns represented 31.32 percent of the total baby claims although they represent 99.26 percent of the total liability for newborns.

A healthy newborn has virtually no costs over and above the delivery expense. In contrast, a premature or low/very low birth weight birth will incur significant costs over and above delivery costs.

Cost of "Non-Normal" Newborns

(Data subject to review and change)

BABIES BORN ONTO MEDICAID - CY 2001

	DRG	Claims		NetLiabilityAmt	AVG COST By Facility Level	% of Total Liability
PERINATAL NON-LEVEL 3 FACILITIES	385	944	NEONATES, DIED OR TRANSFERRED TO ANOTHER ACUTE CARE FACILITY	$2,728,097	$2,889	7.15%
	386	371	EXTREME IMMATURITY OR RESPIRATORY DISTRESS SYNDROME, NEONATE	$6,779,465	$18,283	17.76%
	387	722	PREMATURITY W MAJOR PROBLEMS	$6,760,063	$9,368	17.71%
	388	1,627	PREMATURITY W/O MAJOR PROBLEMS	$4,941,835	$3,038	12.94%
	389	2,839	FULL TERM NEONATE W MAJOR PROBLEMS	$8,627,886	$3,039	22.60%
	390	5,673	NEONATE W OTHER SIGNIFICANT PROBLEMS	$8,343,318	$1,471	21.85%
		12,176		**$38,180,664**		

	DRG*	Claims		NetLiabilityAmt	AVG COST By Facility Level	% of Total Liability
PERINATAL LEVEL 3 FACILITIES	985	474	NEONATES, DIED OR TRANSFERRED TO ANOTHER ACUTE CARE FACILITY	$15,212,365	$32,114	8.23%
	986	1007	EXTREME IMMATURITY OR RESPIRATORY DISTRESS SYNDROME	$82,689,481	$82,098	44.75%
	987	838	PREMATURITY, W/ MAJOR PROBLEMS	$34,365,734	$40,991	18.60%
	989	1,682	FULL-TERM NEONATE, W/ MAJOR PROBLEMS	$23,947,082	$14,240	12.96%
	388	1,227	PREMATURITY W/O MAJOR PROBLEMS	$17,521,050	$14,277	9.48%
	390	3,191	NEONATE W OTHER SIGNIFICANT PROBLEMS	$11,059,747	$3,466	5.98%
		8,419		**$184,795,460**		

*900 Series represents similar 300 series DRG's paid at a level 3 facility.

TOTAL "NON-NORMAL" NEWBORNS	**20,595**	**$222,976,124**	

391	**45,166**	**NORMAL NEWBORN**	**$1,660,986**	**$36.78**

44,744 PAID AT ZERO	**$0**
226 PER DIEM HOSPITALS	**$1,470,613**
166 DRG HOSPITALS	**$190,373**

*Some normal newborns (i.e.: transfers, ineligible Moms, Cook Hospitals) have a payment associated with a 391 DRG.

TOTAL BABIES	**65,761**	**$224,637,110**

Medicaid Newborns

The Medicaid newborns can be analyzed by race/ethnicity to analyze health disparities. African-American newborns make up almost 30 percent of all Medicaid newborns but are only 25 percent of the "Normal" newborns and close to 40 percent of the "Non-Normal" newborns.

Race	Normal Newborns		Non-Normal Newborns		Total Newborns	
Caucasian	14,880	33.0%	5,681	28.2%	20,561	31.5%
African - American	11,369	25.2%	7,803	38.8%	19,172	29.4%
American Indian / Alaskan	98	0.2%	31	0.2%	129	0.2%
Hispanic	16,970	37.6%	5,892	29.3%	22,862	35.0%
Asian / Pacific Islanders	1088	2.4%	416	2.1%	1,504	2.3%
Other	215	0.5%	106	0.5%	321	0.5%
Not Available	534	1.2%	206	1.0%	740	1.1%
	45,154	100%	20,135	100%	65,289	100%

(Data subject to review and change)

Medicaid claims also indicate that African-American women are less likely to seek prenatal care.

Delivery with Complications Race	Total Women who gave birth	Total Women who gave birth and had prenatal care	% receiving prenatal care
Caucasian	4,180	3,272	78.3%
African - American	4,857	2,864	59.0%
American Indian / Alaska	22	16	72.7%
Hispanic	3,880	2,885	74.4%
Asian / Pacific Islanders	225	177	78.7%
Other	51	40	78.4%
Not Available	226	167	73.9%
	13,441	9,421	70.1%
Delivery without Complications			
Race			
Caucasian	18,037	14,077	78.0%
African - American	14,529	8,668	59.7%
American Indian / Alaska	102	83	81.4%
Hispanic	20,672	15,855	76.7%
Asian / Pacific Islanders	1,540	1,263	82.0%
Other	321	232	72.3%
Not Available	1,124	774	68.9%
	56,325	40,952	72.7%

(Data subject to review and change)

Costs in the First Year of Life

Similarly, costs in the first year of life can be analyzed.

	Normal Newborns	Non-Normal Newborns			
Payments		Normal Birth Weight	Low Birth Weight	Very Low Birth Weight	Total
Caucasian	$ 20,468,732	$16,161,258	$6,050,204	$ 4,811,000	$27,022,462
African - American	$ 20,912,514	$20,535,226	$7,316,045	$ 11,128,928	$38,980,199
American Indian / Alaskan	$ 110,674	$59,220	$8,177	$0	$67,397
Hispanic	$ 24,694,727	$18,368,647	$7,911,673	$ 3,125,595	$29,405,916
Asian / Pacific Islanders	$ 1,038,073	$833,047	$650,808	$ 332,439	$1,816,293
Other	$ 163,260	$172,786	$45,082	$ 48,570	$266,438
Not Available	$ 571,639	$209,793	$128,079	$ 267,107	$604,979
	$ 67,959,619	$56,339,975	$22,110,068	$19,713,639	$98,163,683
Newborns					
Caucasian	14,880	4,340	1,043	298	5,681
African - American	11,369	5,649	1,583	571	7,803
American Indian / Alaskan	98	25	6	-	31
Hispanic	16,970	4,780	899	213	5,892
Asian / Pacific Islanders	1,088	320	78	18	416
Other	215	83	20	3	106
Not Available	534	167	27	12	206
	45,154	15,364	3,656	1,115	20,135
$ per Newborn					
Caucasian	$ 1,376	$ 3,724	$ 5,801	$ 16,144	$ 4,757
African - American	$ 1,839	$ 3,635	$ 4,622	$ 19,490	$ 4,996
American Indian / Alaskan	$ 1,129	$ 2,369	$ 1,363	$ -	$ 2,174
Hispanic	$ 1,455	$ 3,843	$ 8,801	$ 14,674	$ 4,991
Asian / Pacific Islanders	$ 954	$ 2,603	$ 8,344	$ 18,469	$ 4,366
Other	$ 759	$ 2,082	$ 2,254	$ 16,190	$ 2,514
Not Available	$ 1,070	$ 1,256	$ 4,744	$ 22,259	$ 2,937
	$ 1,505	$ 3,667	$ 6,048	$ 17,680	$ 4,875

(Data subject to review and change)

Average Length of Hospital Stay of Newborns

Finally, the average length of stay can be analyzed. "Normal" newborns' average length of stay was 1.9 days whereas the "non-normal" newborns' average length of stay was 4.9 days (CY 2001). Average length of stay can also be examined by DRG.

	DRG	Newborns	Days	ALOS	Variance from Normal Newborn ALOS
Normal	391	45,166	83,929	1.9	
Non-Normal	385	980	2,369	2.4	0.6
	386	515	10,376	20.1	18.3
	387	793	8,327	10.5	8.6
	388	2,853	15,776	5.5	3.7
	389	3,053	12,347	4.0	2.2
	390	8,863	23,498	2.7	0.8
	985	417	6,458	15.5	13.6
	986	861	35,206	40.9	39.0
	987	767	14,709	19.2	17.3
	989	1,466	9,358	6.4	4.5
		20,568	138,424	6.7	4.9

(Data subject to review and change)

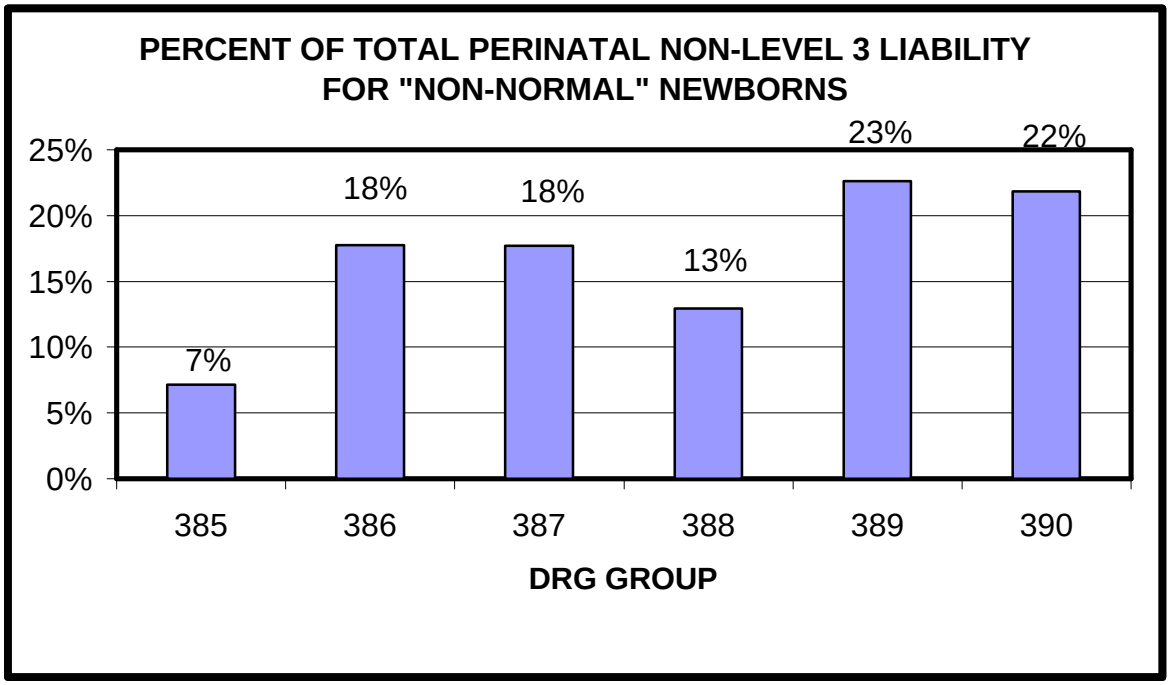
Type of Hospital used for High-risk, "Non-Normal" Births:

In Illinois, birthing hospitals are designated by intensity level of care. (See Current State Administered Programs) The Healthy People 2010 objective (16-8) is to increase the proportion of very low birth weight infants born at Level 3 hospitals or subspecialty perinatal centers.[17]

Level 3 facilities served 41% of "Non-Normal" newborns, accounting for 83% of "Non-Normal" liability. Non-Level 3 facilities served 59% of "Non-Normal" newborns, accounting for 17% of "Non-Normal" liability. During calendar year 2001, stratification by perinatal designation was as follows:

Level 3 facilities: 41% of "Non-Normal" Newborns
Level 2+ facilities: 17% of "Non-Normal" Newborns
Level 2 facilities: 39% of "Non-Normal" Newborns
Level 1 facilities: 2% of "Non-Normal" Newborns
Level 0 facilities: 1% of "Non-Normal" Newborns

[17] U.S. Department of Health and Human Services, Healthy People 2010, November 2000



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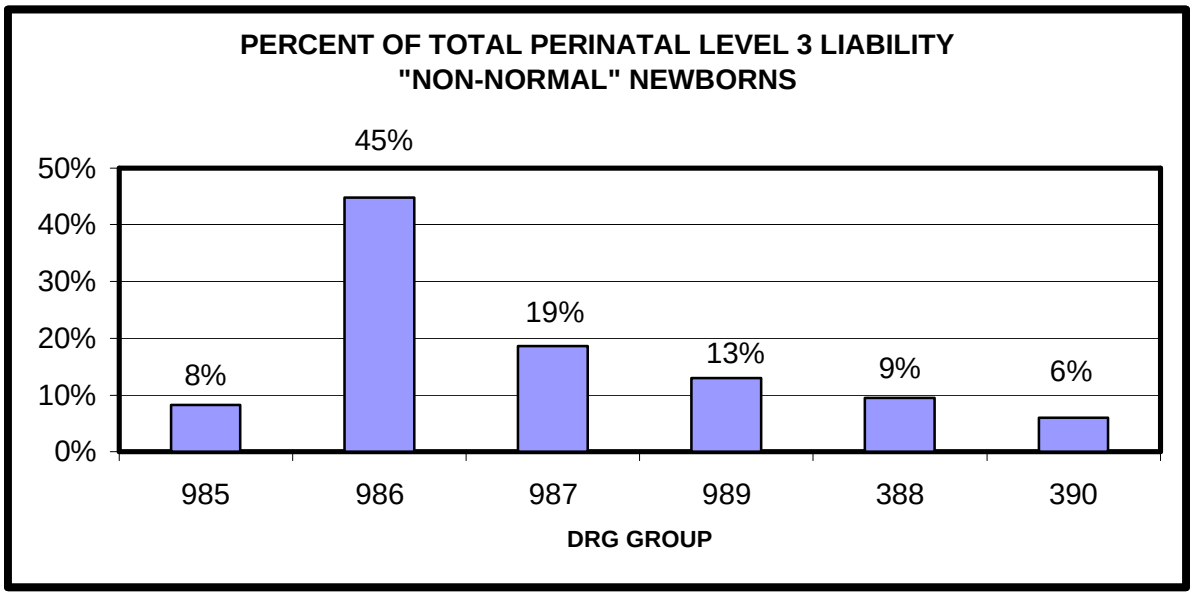

(Data subject to review and change)

Infant Mortality, Premature Birth, Low Birth Weight and Very Low Birth Weight

Infant Mortality

The principle causes of infant mortality (infant deaths under age one) include inadequate or no prenatal care, very low birth weight births and low gestational age. By reducing these causes, the rate of infant mortality will also be reduced. Low birth weight and premature birth (<37 weeks gestation) are the leading causes of neonatal mortality and the third leading cause of infant mortality in the U.S.[18] Congenital malformations, disorders relating to short gestation and unspecified LBW, sudden infant death syndrome and newborn affected by maternal complications of pregnancy attributed to approximately half of all infant deaths in the United States in 2001.[19] Over the years, perinatal health care and birth outcomes have improved through technological advances and efforts to increase access to prenatal care through Medicaid coverage and the state's program of case management.

Even though infant mortality rates have decreased over the years, a major issue in Illinois as well as throughout the United States is that of health disparities between races in perinatal health outcomes, including infant mortality. Conditions of poverty increase a woman's chances of having poor birth outcomes, as defined, in part by an infant being born with a low birth weight or very low birth weight. Poverty is more prevalent among minority populations. However, even when controlling for socioeconomic conditions, African-American infants are far more likely to die in their first year of life than their Caucasian counterparts.[20]

According to the Alan Guttmacher Institute, there are three major categories of women that are at risk for having children who will die in their first year: adolescents, women in their 40's, and women who have closely spaced births. [21]

The Healthy People 2010 (Objective 16-1c) recommends the infant mortality rate be no more than 4.5 per 1,000 births (Baseline, 7.2, US, 1998). Illinois' goal as published in the MCH Block Grant Application was to reduce infant mortality to 7.3, by 2007. The infant morality rate in Illinois (2001) was 7.5 (5.9 for infants of white mothers and 14.9 for infants where the race of the mother was Black or African American, with the ratio of 2.5 Black infant deaths to every 1 White infant death). According to the Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System, the rate of infant mortality in the United States was 6.8 (5.7 for infants of white mothers and 14.0 for infants where the race of the mother was Black or African American). (2001)

From 1990 to 2001, Illinois' infant mortality rate has decreased 32% although the infant mortality rate disparity among races is dramatic, as illustrated in the table below.

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[18] Singh, G.K. & Yu, S.M. "Infant mortality in the United States: Trends, differentials, and projections, 1950 through 2010," A*merican Journal of Public Health*, 85(7), 957-964, 1995

[19] Arias, E.; MacDorman, M.; Strobino, D.; Buyer, B., "Annual Summary of Vital Statistics – 2002" *Pediatrics*, Vol.112, No. 6, December 2003

[20] National Center for Policy Analysis, Excerpted from John C Goodman and Gerald L Musgrave, "Prenatal Care and Infant Mortality," Washington, D.C., Cato Institute, 1992

[21]The Alan Guttmacher Institute. "Issues in Brief: Family Planning Can Reduce High Infant Mortality Levels," April 2002

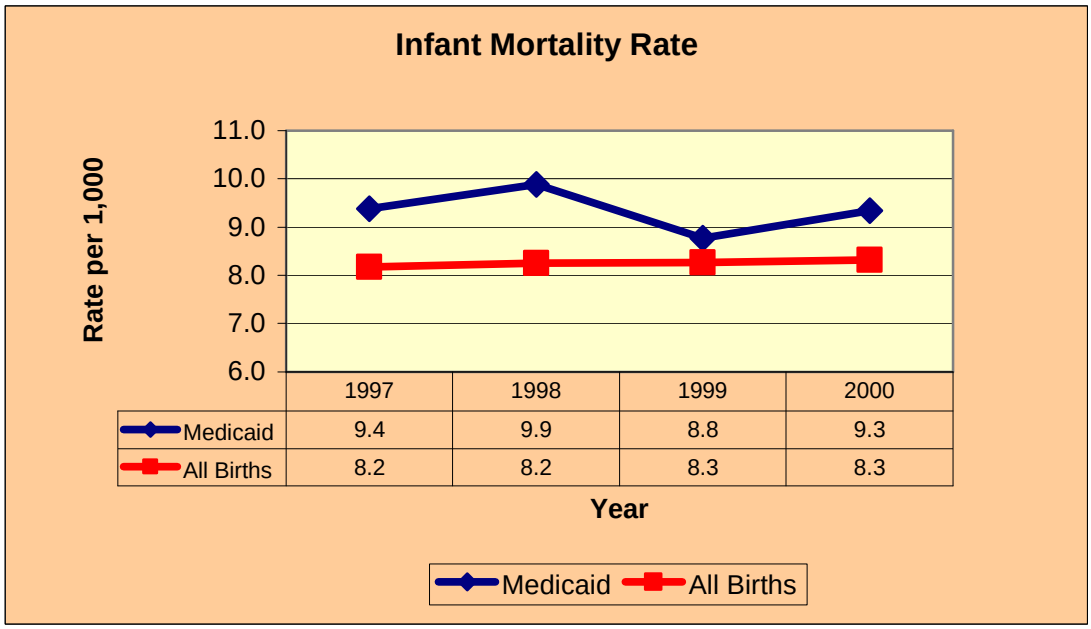
Illinois Infant Mortality

Year	Number	Overall Rate (%)
2001	1,379	7.5
2000	1,528	8.3
1999	1,504	8.3
1998	1,505	8.2
1997	1,476	8.2
1996	1,536	8.2
1995	1,724	9.3
1994	1,711	9.0
1993	1,838	9.6
1992	1,911	10.0
1991	2,068	10.7
1990	2,090	10.7

Illinois Infant Mortality Rate By Race

White (%)	African-American (%)
5.9	14.9
6.5	16.3
6.2	17.4
6.3	16.8
6.2	16.5
6.3	17.1
7.2	18.2
6.7	17.9
7.1	18.8
7.4	19.5
7.9	21.1
7.6	22.1

The Medicaid infant mortality rate in CY 2000 was 9.3, and it is higher than the statewide rate. Medicaid birth file match data does not exist prior to 1997 therefore, useful data is unavailable prior to that year. It increased from CY 1999 and CY 2000, although remains slightly lower than in CY 1997.



Premature Births, Low Birth Weight and Very Low Birth Weight

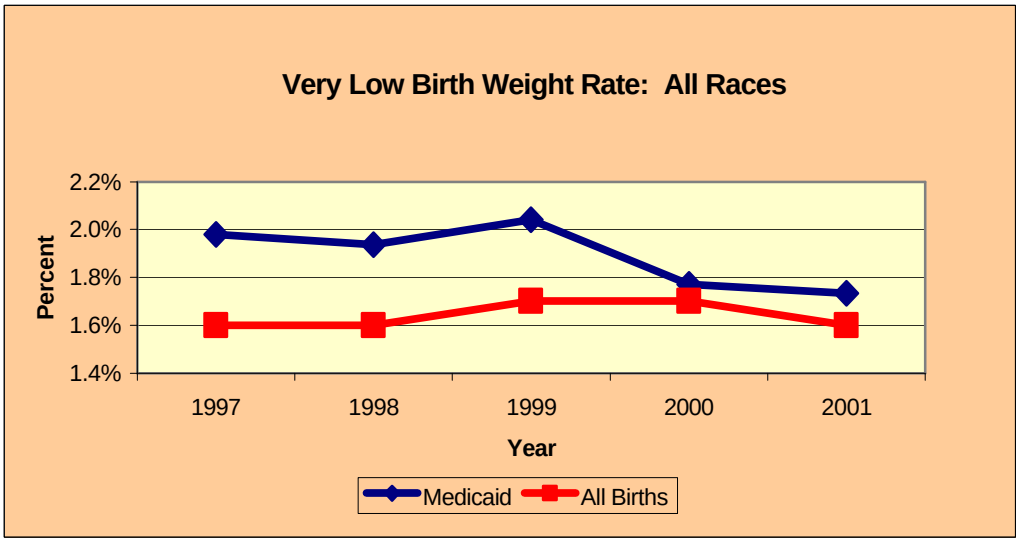
Low birth weight (LBW), defined as weighing less than 2500 grams or about 5.5 pounds, is one of the leading risk factors for infant mortality and morbidity and continues to require additional effort to address. Nationally, low birth weight accounts for 60 percent of all infant mortality. The Centers for Disease Control estimates a low birth weight infant is 40 times more likely to die during the first 28 days of life than normal weight infants. Overall, the rate of LBW in Illinois for CY 2001 was 8 percent. The Medicaid population experienced a LBW rate of 9.53 percent, however, those in FCM and/or WIC had a LBW rate of 8.66 percent, and those without WIC and/or FCM experienced a LBW rate of 13.59 percent, 56.9 percent higher than those with the intervention. The Healthy People 2010 Objective (16-10a) is to reduce the LBW rate to 5.0 percent.

Very low birth weight (VLBW), defined as weighing 1500 grams, or less than 3 pounds, 5 ounces,[22] is an issue that requires continued effort on the part of the State, providers, advocates and general population. Medicaid has experienced a dramatic decrease in VLBW outcomes during the past several years. There has been a 15 percent reduction in Medicaid VLBW outcomes between 1997 and 2001. The Healthy People 2010 Objective (16-10b) is to reduce the VLBW rate to 0.9 percent.

The VLBW rate for Illinois was 1.56 percent (CY 2001). The Medicaid VLBW rate was 1.73 percent while the VLBW rate of babies born to Medicaid women who received WIC and/or FCM was 1.32 percent. The women who were on Medicaid but who were without the intervention of WIC and/or FCM experienced a rate of 3.7 percent VLBW outcome. This rate is three times higher than the rate of VLBW outcomes among women with intervention. Medicaid 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 1.45 percent.

The Illinois Department of Human Services analysis of LWB and VLBW for the 77,855 Medicaid participants in WIC and/or FCM in SFY 2003, from Cornerstone data, reveals a LBW rate of 8.5 percent and VLBW rate of 1.2 percent, although this is preliminary data, which has not been cross checked with birth file records. Birth file data for that period will not be available until December 2004. FCM and/or WIC agency-specific data on LBW and VLBW program participant outcomes is available.

[22]National Institute of Child Health and Human Development, "Research on Preterm Labor and Premature Birth," May 15, 2003



Kogan, et al., examined the relationship between the content of prenatal care and birth outcome. Over 9,000 women were surveyed and the results suggested that women who report receiving health behavior advice and education are at lower risk of delivering a low birth weight infant.[23] Although risk assessment, health education and guidance, including behavior advice are component parts of the prenatal visit, the State implemented the Family Case Management Program to locate Medicaid pregnant women and provide referral to obstetrical care and WIC, with follow up to assure they were receiving health care services, provide health guidance and support. Results of that program appear promising for the Medicaid population (see Family Case Management Program). Remarkably, the VLBW outcome of this high risk Medicaid population who receive the state's intervention (WIC and FCM) is better than the general population. (See Attachment 1)

It should be noted that in Illinois, the Family Case Management program is often intertwined with the WIC program. Many FCM providers are also WIC providers and funding from FCM is vital to those WIC providers because WIC administrative funding provided by the federal government is inadequate without supplementation. The two sets of services complement each other. In addition, where FCM and WIC co-exist, this allows a pregnant woman "one stop shopping" for these important services.

[23] Kogan, M.D.; Alexander, G.R.; Kotelchuck, M.; Nagey, D.A.; Jack, B.W., "Comparing mothers' reports on the content of prenatal care received with recommended national guidelines for care," *Public Health Report*, 109(5): 637-46, September–October 1994

Low birth weight and very low birth weight in Illinois over the last decade are illustrated below.

Selected Perinatal Statistics by Race Category for Illinois: 1990-2001

Illinois

	All Races % LBW	Black % LBW	White % LBW	All Races % VLBW	Black % VLBW	White % VLBW
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

Source: Illinois Center for Health Statistics, IDPH
1/2004 Vital Statistics

General Discussion on Factors Influencing Birth Outcomes:
As medical technology advances, physicians are able to keep babies born at lower birth weights and at younger gestational ages alive. While providing prenatal care to expectant mothers might prevent a significant number of these preterm and low birth weight births, a disparity still exists. Even when all income and educational differences between blacks and whites are removed, a substantial difference in birth outcomes remains. Middle-class, college-educated black women are twice as likely to give birth to low birth weight babies as white women in the same levels of income and education.[24]

Additionally, lifestyle choices (i.e., drinking, smoking, taking drugs, etc.) greatly attribute to the high rate of infant mortality and morbidity. Regardless of the availability of prenatal care, some women will choose late or no entry into prenatal care, or continue with lifestyle factors that lead to an increased risk of preterm and low birth weight infants.[25]

According to the March of Dimes, women at the greatest risk for preterm delivery include women with multi-gestation (i.e. twins, triplets, etc.), women with previous preterm birth

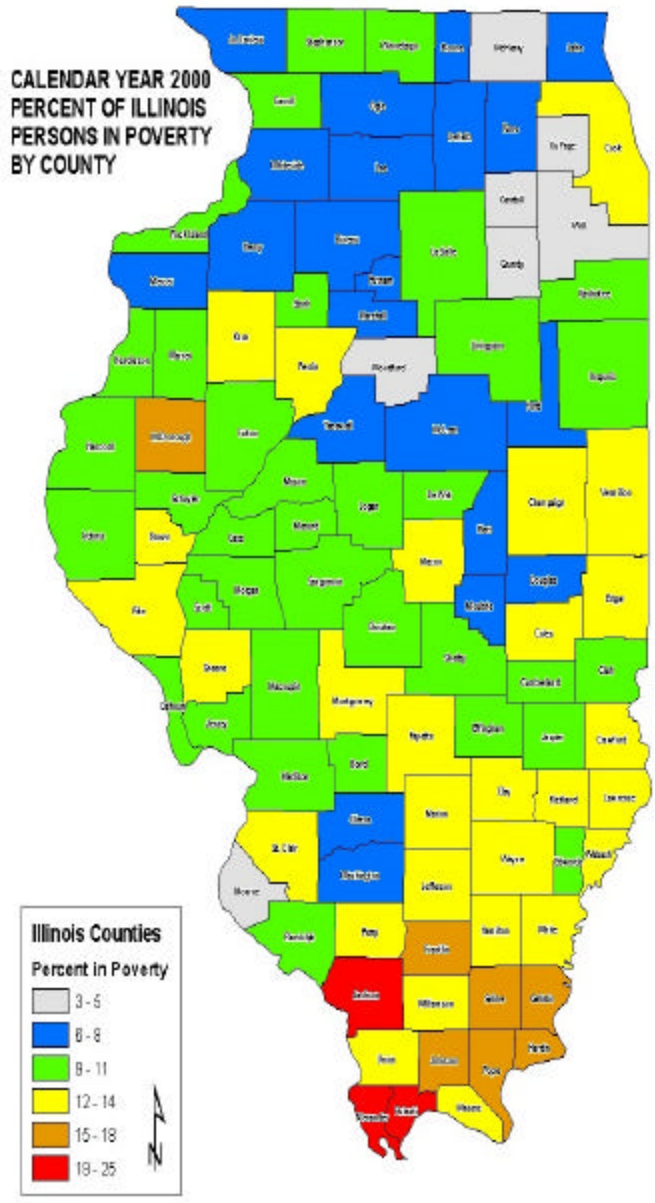
[24] National Center for Policy Analysis, Excerpted from John C Goodman and Gerald L Musgrave, "Prenatal Care and Infant Mortality," Washington, D.C., Cato Institute, 1992
[25] National Center for Policy Analysis, Excerpted from John C Goodman and Gerald L Musgrave, "Prenatal Care and Infant Mortality," Washington, D.C., Cato Institute, 1992

and women with certain uterine or cervical abnormalities. Researchers have also identified African American women and women younger than seventeen and older than thirty-five have an increased risk of preterm birth. Lifestyle, including low income, and medical risk factors also increase the likelihood for preterm or low birth weight infants.[26]

[26]March of Dimes website: http://www.modimes.org/prematurity/5510_5810.asp

CY 2000: Percent of Illinois Persons In Poverty By County

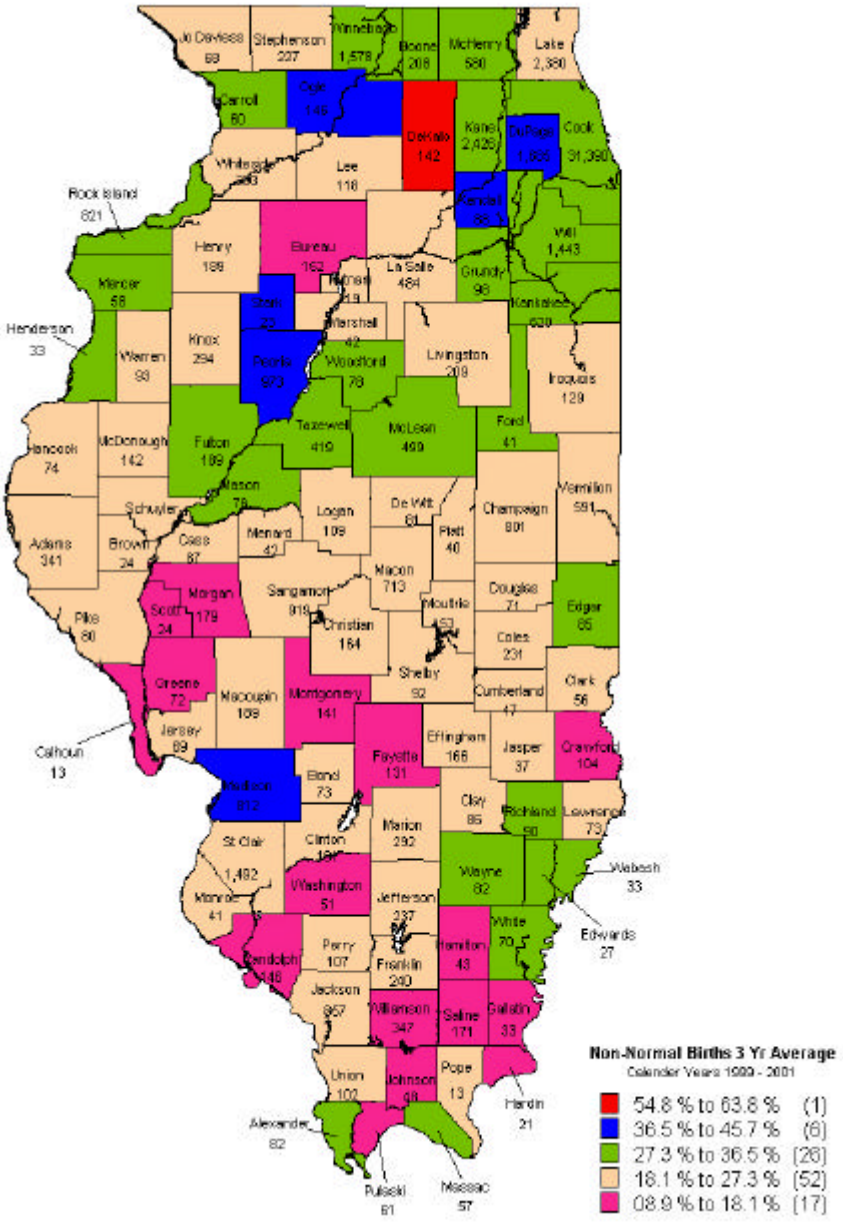
Epidemiological studies consistently demonstrate a direct relationship between less than optimal birth outcomes and social disadvantage including poverty.[27, 28, 29] The following map portrays the percentage of Illinois persons in poverty, by county of residence. The correlation between poverty and birth outcomes can be analyzed.



[27] Kramer, M.S., "Determinants of low birth weight: methodological assessment and meta-analysis," *Bulletin of the World Health Organization*, 65:663-737, 1987
[28] Wilkins, R.; Sherman, G.; Best, P.; "Birth outcomes and infant mortality by income in urban Canada," *Canada Health Report*, 3:7-31, 1991
[29] Berkowitz, G.; Papiernik; "Epidemiology of preterm birth," *Epidemiologic Reviews*, 15(2) 414-43, 1993

Incidence of "Non-Normal" Medicaid Births
By County

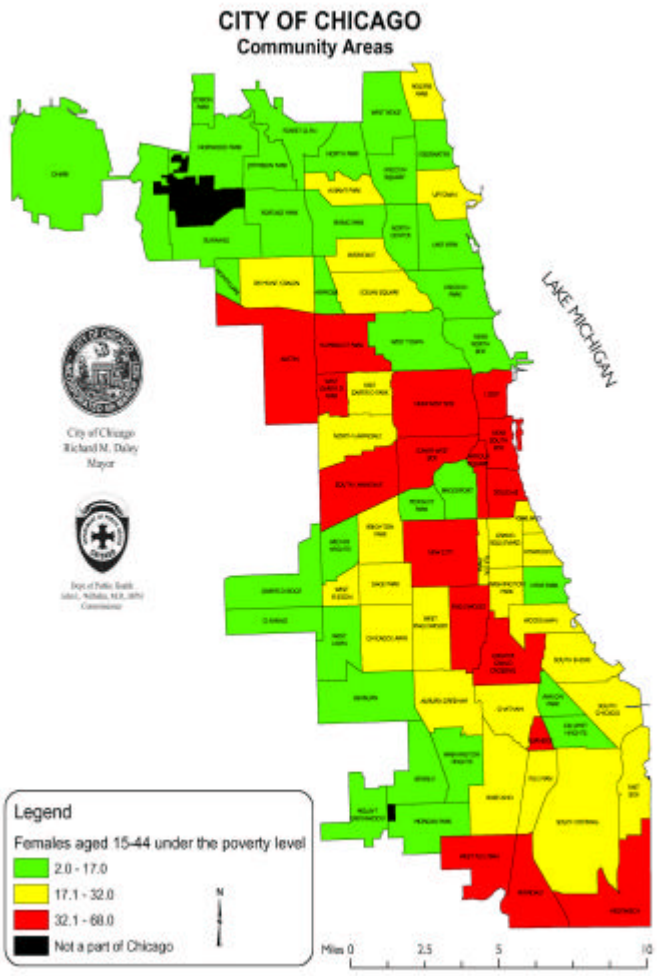
The percent of "Non-Normal" Medicaid Births and the number of Medicaid paid births are shown by county of residence (three year average for calendar years 1999-2001).

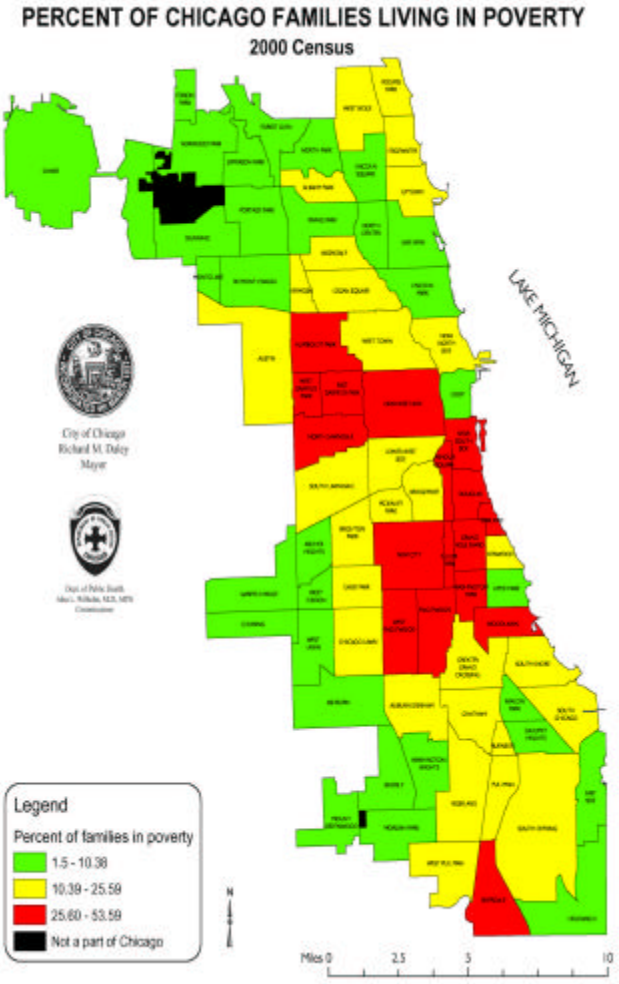


***Numbers placed in the counties represent the 1999-2001 three-year average number of total births**

2000 Census:
Chicago Community Area by Poverty Level

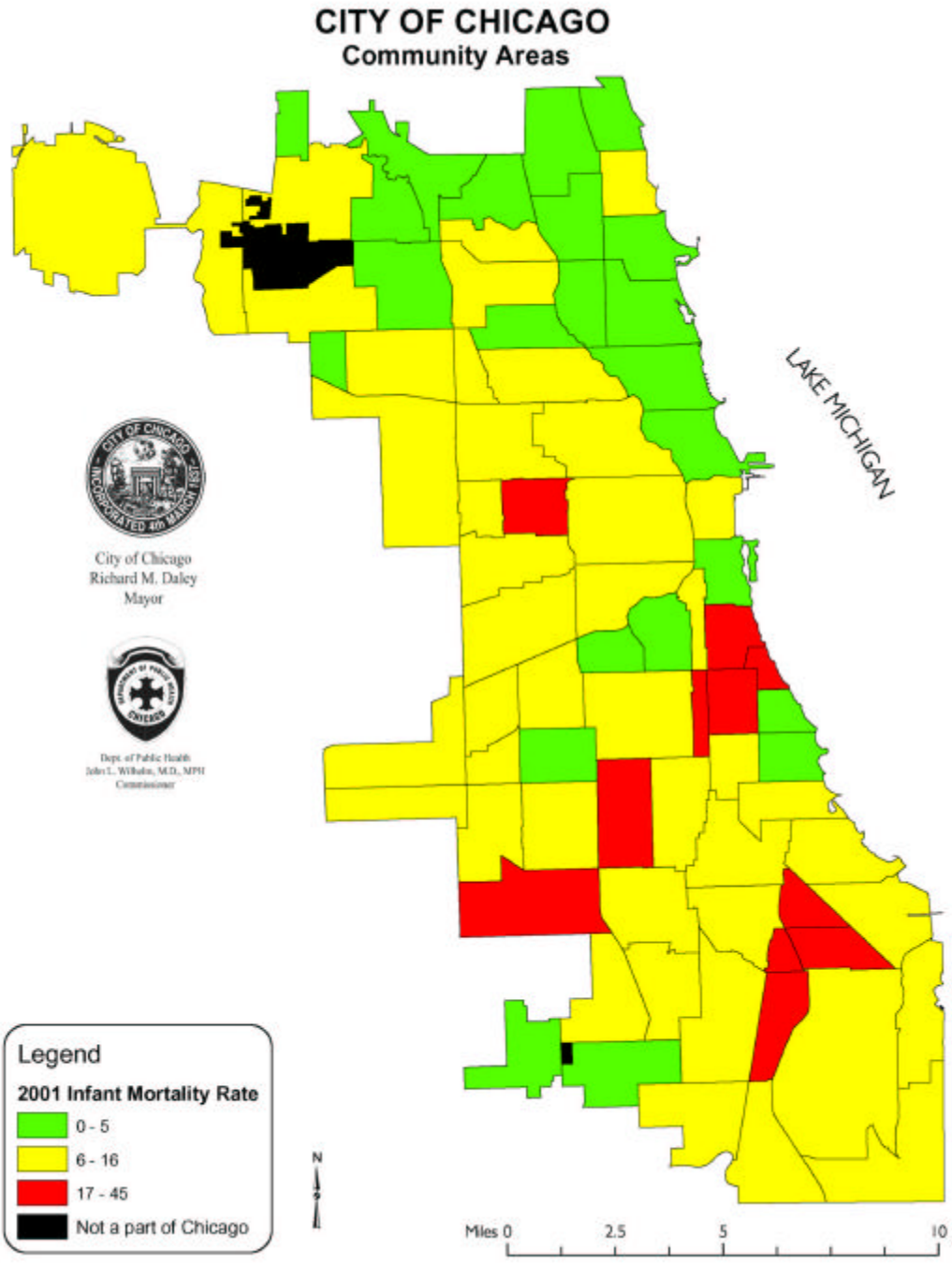
Chicago represents a high-risk area. The following Chicago Community Area maps depict the association between poverty and poor birth outcomes. They represent the percent of females, ages 15-44 under the poverty level and percent of families in poverty.





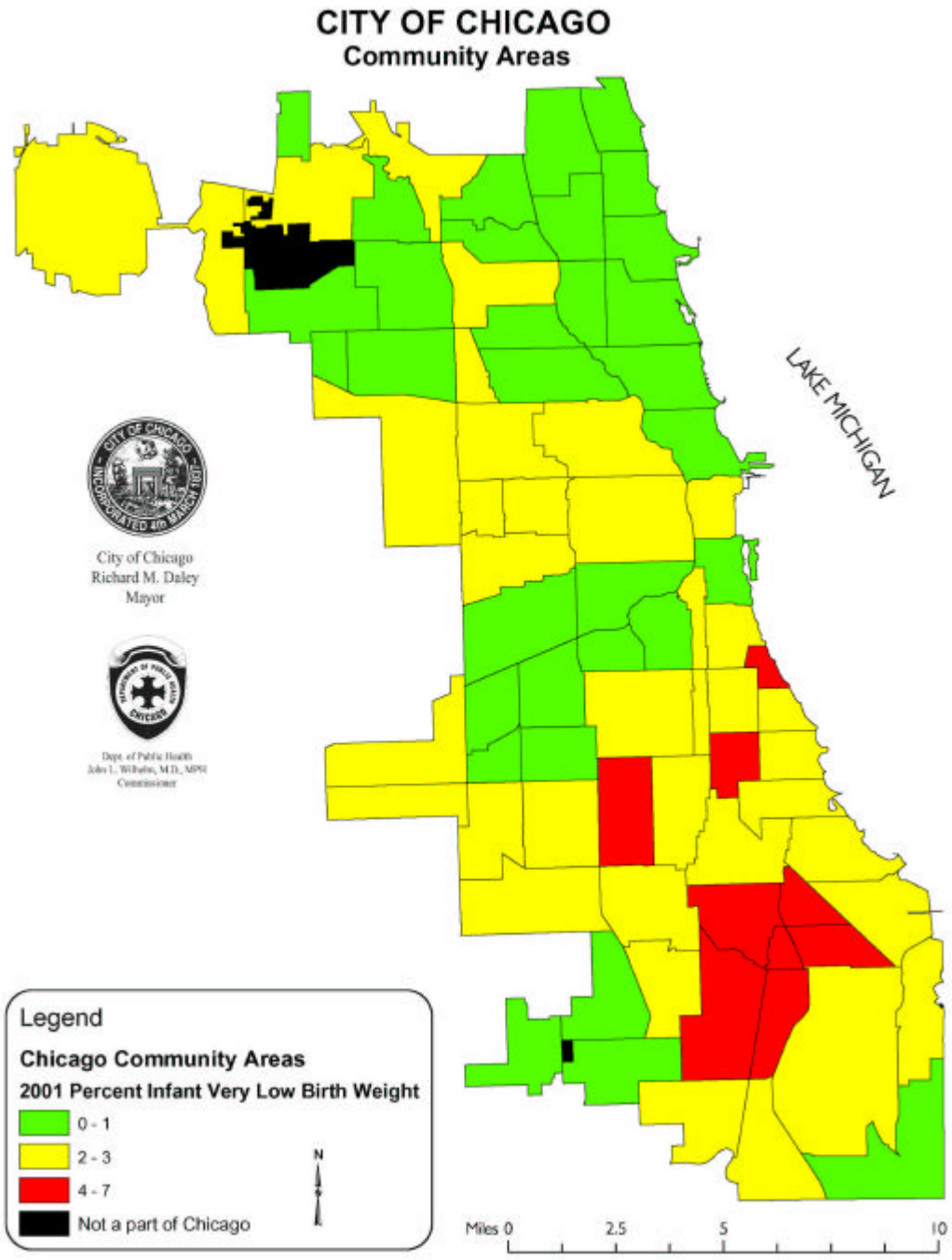
CY 2001: Infant Mortality Rate

A map depicting the infant mortality rate for births in CY 2001 by community area in the city of Chicago is presented below.



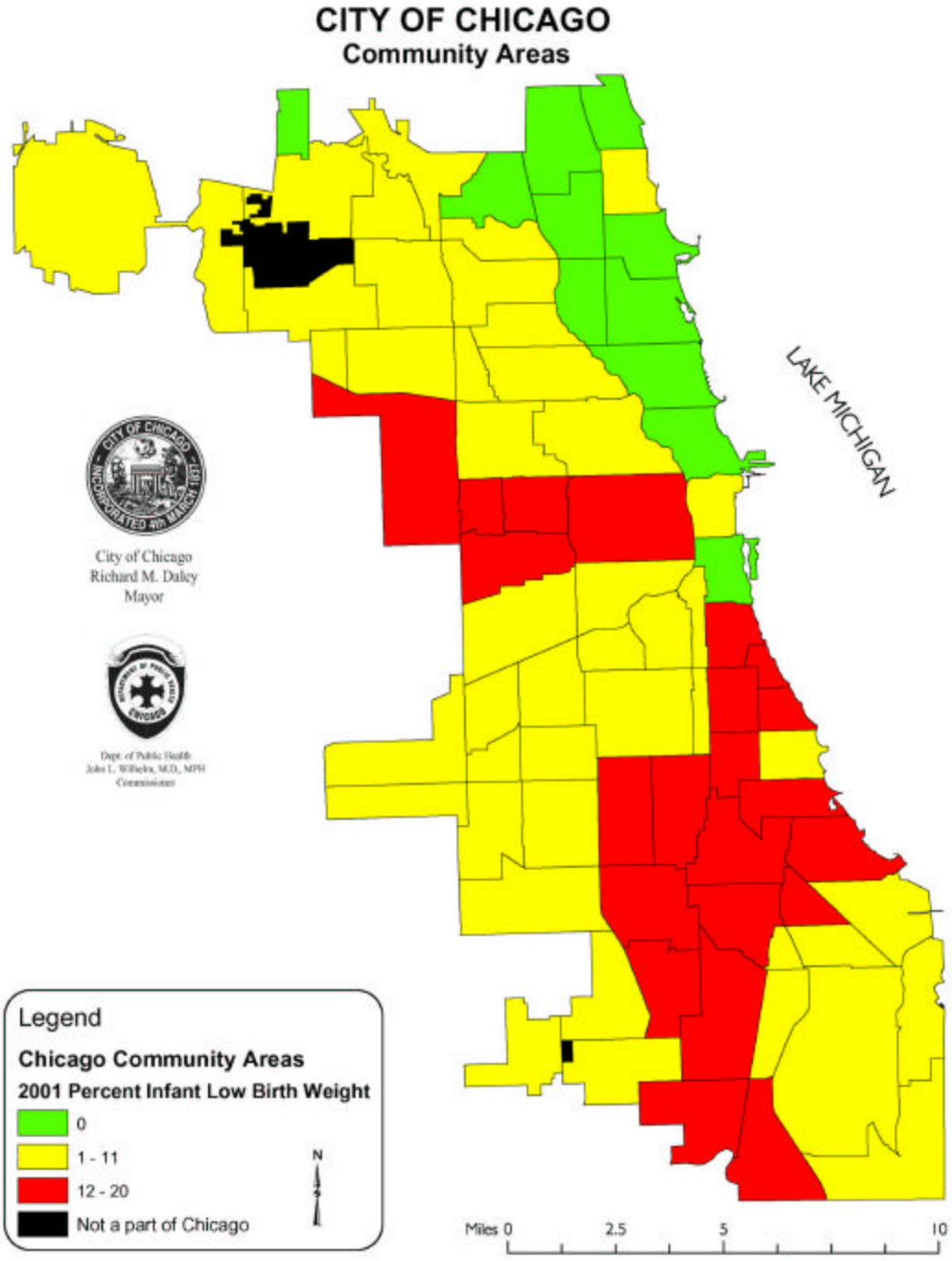
CY 2001: Percent of Very Low Birth Weight
By Chicago Community Area

A map depicting the percent of very low birth weight for CY 2001 births by community area in the city of Chicago is presented below.



CY 2001: Percent of Low Birth Weight
By Community Area

A map depicting the percent of low birth weight for CY 2001 births by community area in the city of Chicago is presented below.



Model for Evaluation in Future Years

In order to address the legislative mandate in future reporting to the General Assembly, IDPA will reconvene the task force members to provide guidance to IDPA on the evaluation component of each of the strategies implemented. IDPA 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 reimbursed by IDPA in preventing low birth weight infants and reducing the need for neonatal intensive care hospital services. Each report will include an evaluation of how the ratio of expenditures for treating low birth weight infants compared with the investment in promoting healthy births and infants in local community areas throughout Illinois. Thus, each strategy will be evaluated in terms of implementation costs and averted poor birth outcomes and consequent infant costs.

IDPA will continue its efforts with other State agencies to obtain birth file information for continued evaluation of outcomes in comparison to the provision of enhanced perinatal services. A cost benefit analysis will ensue. In order to facilitate this type of analysis, IDPA will need the birth file data, without the removal of identifying information. IDPA will perform trending analyses, including trending of PRAMS data in specific areas, such as smoking and substance abuse as well as explore other mechanisms to evaluate the cost-benefit of IDPA's initiatives.

The data presented in the previous section allows us to determine a baseline for future analysis of services delivered as a result of this perinatal health care review.

Using the definition of a healthy birth adopted by the taskforce, a variety of measures may be utilized to judge the effectiveness of any given intervention. While each intervention will require specific analysis and adoption of the most appropriate measures of both health outcomes success and cost effectiveness, some general guidelines can be put forth at this stage for consideration.

Within the definition of a healthy birth the following are likely the variables that are most accessible to our analysis:

- Proportion of births that are full term (greater than or equal to 37 weeks)
- Proportion of births with a birth weight greater than 2500 grams
- Proportion of births without neonatal intensive care unit (NICU) care
- Proportion of births without maternal complications, including pregnancy-related hospitalizations other than labor and delivery or major mental illness
- Infant mortality rates

In addition, the following data can be used to measure cost effectiveness of a given approach:

- Medicaid costs associated with births
- First year of life Medicaid costs

Additional variables that may be considered are:

- Length of stay for mother and baby

This list is clearly not exhaustive and our intention is to work with our partners to ensure that we carefully measure our baseline and set up interventions in a manner that will yield data that will answer the question as to whether the intervention was successful and cost effective.

Illinois Healthy Women (the State's family planning waiver) contains an evaluation component. It will be the items listed in that evaluation that will be used to judge the effectiveness of that program. IDPA will evaluate the effectiveness of the initiative in terms of:

- Increasing the number of eligible women who, after delivery, or after leaving transitional Medicaid or Title XXI, participate in the waiver each year
- Increasing the number of low-income women who obtain publicly-funded family planning services (includes the waiver participants in addition to participants in the State's family planning program administered by IDHS, which is funded by Title X, Title V, Title XX and GRF)
- Increasing the proportion of women with a Medicaid financed delivery with an interpregnancy interval of 18 months or greater, and 24 months or greater, from the CY 2001 baseline
- Reducing the incidence of unintended pregnancies of women with a Medicaid financed delivery, as reported through PRAMS
- Reducing the fertility rates for women in families with incomes at or below 200 percent of the federal poverty level
- Reducing the Medicaid expenditures for pregnancy-related, infant health care costs and child care costs during the first five years of life
- Facilitating the referral of enrolled women in need of primary care services to accessible sources of primary care

IDPA welcomes input from interested parties on this evaluation component of the legislation.

Current State Administered Programs

Several programs in the State have been implemented to reduce the rate of infant mortality. Those programs include:

- Regionalized Perinatal Care Program
- Adverse Pregnancy Outcome Reporting System (APORS)
- Perinatal HIV Program
- Pregnancy Risk Assessment Monitoring System (PRAMS)
- Tobacco Cessation Initiative
- Special Supplemental Nutrition Program for Women, Infants and Children (WIC)
- Family Case Management (FCM)
- Targeted Intensive Prenatal Case Management and Healthy Start programs
- High Risk Infant Follow-Up Program
- Alcohol and Substance Abuse Treatment
- Mental Health Services

Regionalized Perinatal Care Program (administered by IDPH, with grant funding from IDHS)

The Illinois Regionalized Perinatal Program is a comprehensive statewide system of inpatient services designed to provide optimal care to infants and their mothers. There are ten regional networks, each led by a university-affiliated regional "Perinatal Network Center" responsible for administrative structure and continued quality improvement. A Perinatal Advisory Committee and its various subcommittees oversee this program. There are various levels of Perinatal Care in Illinois:

- Level 1 - Basic Care
- Level 2 - Intermediate Care
- Level 2 Plus - Specialty Care
- Level 3 - Advanced and Subspecialty Care

All Perinatal Network Centers must be Level 3 facilities. These centers provide training and consultation to their member hospitals to assure that pregnant women and neonates receive the most appropriate level of intensive care as their health condition warrants. IDPH has the statutory authority to determine the designation of the perinatal network hospitals. According to IDPH, there are 142 maternity hospitals in the Illinois Perinatal Network (26 hospitals are designated by IDPH as Perinatal Level 3; 23 hospitals are designated by IDPH as Perinatal Level 2+; 73 hospitals are designed by IDPH as Perinatal Level 2; and 20 hospitals are designed by IDPH as Perinatal Level 1).[30]

One of Illinois' goals under the Title V MCH Block Grant is to assure that at least 77.3 percent of very low birth weight infants (premature infants) are delivered at facilities for high-risk deliveries and neonates. The current state data demonstrates that 78 percent of these births occur at Level 2 or Level 3 perinatal facilities.

[30] Illinois Department of Public Health, Division of Children's Health and Safety

Adverse Pregnancy Outcome Reporting (APORS) (administered by IDPH)
Under state law, all hospitals in Illinois are required to report to IDPH and local health departments the names of infants that are born with high-risk medical conditions, as defined by Administrative Rule (e.g., infants born at very low birth weight or congenital anomalies). IDPH maintains a data system for surveillance purposes and local health departments, under the guidance of IDHS, utilize this data to identify high-risk infants that should receive intensive home visit follow up (see High Risk Infant Follow Up Program). IDPH task force members report that additional funding for staff support to provide data linking and analysis of outcomes is needed.

Perinatal HIV Program (administered by IDPH)
The Illinois Department of Public Health, Division of Infectious Disease, has within its responsibility to identify strategies to detect HIV among pregnant women and reduce the incidence of HIV transmission to their newborns. As part of this mission, in CY 2000, IDPH convened a task force to identify barriers that prevent perinatal providers from offering routine HIV counseling and testing, and then to develop the interventions necessary to overcome those barriers. IDPH's central aim is to ensure treatment of HIV positive pregnant women. IDPH is implementing a plan that contains the following major components: 1) promoting outreach efforts to get pregnant women into prenatal care; 2) raising awareness and training practitioners to integrate the provision of HIV counseling and testing of pregnant women into their delivery of care; and 3) increasing community awareness on the need for all pregnant women to know their HIV status. IDPH continues to track data for dissemination on the prevalence of HIV in pregnant women and their newborns.

Pregnancy Risk Assessment Monitoring System (PRAMS), *(administered by IDPH)*
Illinois is one of seventeen states participating in the Centers for Disease Control sponsored population based survey of new mothers.

Tobacco Cessation Initiative (administered by IDPH in cooperation with IDHS)
The Illinois Department of Public Health implemented the "Make Yours A Fresh Start Family" smoking cessation curriculum in approximately seventy-five local health departments throughout the state. The intervention includes brief counseling (10 minutes) by a health care professional and a self-study booklet. IDPH recommends funding for smoking cessation for the Medicaid population.

Special Supplemental Nutrition Program for Women, Infants and Children (WIC), (administered by IDHS)
WIC is designed to improve the health and nutritional status of women, infants and children; reduce the incidence of infant mortality, premature births and low birth weight; aid in the development of children and refer women to other health care and social service providers. WIC serves income eligible women and children (185 percent of the federal poverty level or coverage by Title XIX or Title XXI):

- Pregnant, breastfeeding (up to the infant's first birthday) and postpartum women (up to 6 weeks after birth or after the pregnancy ends, if not breastfeeding) who have a medical or nutritional risk
- Infants and children up to 5 years of age who have a medical or nutritional risk

Eligibility for WIC is based on income and the presence of a risk factor for poor nutrition. The presence of risk factors is identified through a comprehensive nutritional assessment. The nutritional assessment includes physical assessment (height, weight, and iron deficiency), health history and a diet assessment. The diet assessment uses a 24-hour recall method to examine dietary habits, access sufficient amount of foods, dietary quality and food frequency.

WIC benefits include screening, nutritious foods, nutrition education, counseling and support, breastfeeding support, lactation counseling and referral to other services. WIC is not an entitlement program, but instead, a federal grant program for which Congress authorizes a specific amount of funds each year for that program. Illinois currently receives $200 million in federal funding from the Department of Agriculture (USDA). No state dollars fund the WIC program. Dieticians, nutritionists and nurses staff WIC.

As mentioned earlier in the report, WIC in Illinois is often provided together with Family Case Management (described below). A WIC provider receives, on average, $12 per month, per pregnant woman case to provide services to a pregnant woman case. FCM providers receive $26.25 per family, per month. In many instances, a WIC provider might be unable to provide full services to a participant unless the WIC provider is also receiving FCM funding.

Breastfeeding education and support receive a great deal of attention in Illinois' WIC program. WIC program activities to promote and support breastfeeding include:

- Providing technical assistance and consultation to local health departments and WIC programs, and
- Promoting and supporting the activities of a statewide and several regional breastfeeding task forces.

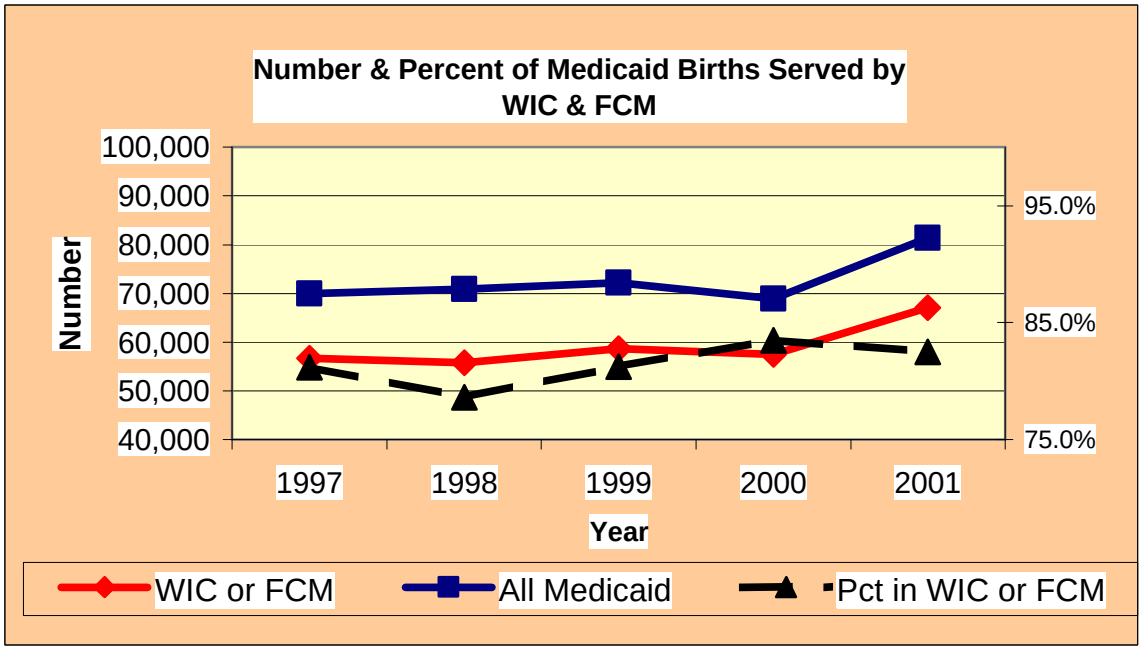
As of January 2003, WIC served 266,500 program participants (34,000 pregnant women; 14,000 breastfeeding and 18,000 postpartum, not breastfeeding women; 78,500 infants and 122,000 children between ages one and five). Annually, an estimated 497,000 individuals are served by WIC. Approximately 76 percent of the WIC infants and children, and 82 percent of the WIC pregnant, postpartum and breastfeeding women are covered by IDPA's medical programs. According to Mathematic Policy Research, Inc., "every dollar spent on prenatal WIC benefits saves between $1.92 and $4.75 in Medicaid costs during the first 60 days after birth." [31] Along with the Family Case Management Program as an intervention, improvement in birth outcomes have been demonstrated.[32]

Family Case Management (FCM) (administered by IDHS)
FCM is a statewide program that provides service coordination to low-income families with a pregnant woman, infant or certain high-risk child (DCFS ward). Families are given a comprehensive risk assessment; a care (service) plan is developed; families are linked to community services (especially health care services); staff advocates for families as necessary; and the risks are periodically reassessed. The risk assessment examines the

[31] Devaney, B., Bilheimer, L. and Schore, J. "The Savings in Medicaid Costs for Newborn and their Mothers from Prenatal Participation in the WIC Program" Mathematica Policy Research, Inc. Vol. I, October 1, 1990, Vol. II, April 1992.
[32] Cornerstone Match File Data.

participant's needs for health, social, educational, vocational, substance abuse treatment, childcare, transportation or other services. There are 125 FCM agencies funded by IDHS, including local health departments downstate, as well as community based organizations and federally qualified health centers, in Cook County. FCM staff primarily consists of nurses and social workers with case management assistants helping with case finding and outreach activities. In Chicago, due to difficulty in recruiting nurses because of the lack of funding and increased salary demands, some of the community based case management agencies utilize other professional staff (individuals with social service or health education related bachelor degrees) to perform case management activities.

In CY 2001, the WIC and FCM programs served about 84 percent of the Medicaid eligible births/pregnant women that occurred in the state. In 2001, there were 81,000 Medicaid births, of which WIC and FCM served approximately 69,000 of those families.



FCM currently serves approximately 84 percent of Medicaid eligible women and infants in Illinois (96 percent of the Medicaid pregnant women and infants downstate and 71 percent of the pregnant women and their infants in Chicago.) The FCM budget is $44 million per year. Agencies are paid $26.25 per family, per month. This amount has not increased since its inception (in the early 1990s). According to IDHS, the program would need an additional $9 million in order to adequately fund and locate the "hard to reach" pregnant women, mostly in Chicago (an estimated 10,000 additional pregnant women).

In SFY 2003, the Illinois Department of Human Services awarded a total of $48.5 million to 121 agencies to implement the FCM and intensive case management programs. A total of 366,675 women, infants and children were served.

Each agency is required to show time and activity expenses directly related to the Medicaid participants (tracked by Cornerstone, a public data and tracking system) that equals or

exceeds the amount of payment. Program activities are federally matched under an administrative claim by IDPA.

Each agency is required to perform a face-to-face visit with the pregnant woman, in each trimester that she is enrolled in FCM. Additionally, the FCM agency is required to perform a home visit, either during pregnancy or the infant's first year of life. Face-to-face visits are required at age two, four, six, nine and 12 months of the infant's first year of life. Case management performance is monitored by IDHS on an ongoing basis, and quarterly reports depicting performance in relationship to home visits and face-to-face encounters are produced.

Actual Experience to FCM Agencies:
Reports show that on a statewide basis, agencies are performing more than twice the amount of required home visits, and over four times the amount of face-to-face visits required for pregnant women, and almost twice the amount of face-to-face visits for infants.

In downstate Illinois, the FCM program provides over three times the required home visits, over four times the required face-to-face visits for pregnant women and over twice the amount of required face-to-face visits for infants. To further illustrate this data and the commitment to serve this population by agencies, the Macon County Health Department FCM program staff provided over three times the amount required for home visits and over five times the amount of face-to-face visits for pregnant women. (December 2003)[33]

In order to assist with the funding of this program, at no additional cost to the state, IDPA recently entered into Intergovernmental Agreements (IA) with the FCM agencies that were governmental entities (e.g., local health departments). There are 86 local health departments currently with an IA. This IA allows claiming federal match on the local tax dollars used to provide otherwise uncompensated case management services to this Medicaid population. Federal match dollars received are forwarded to the respective local health department when received, on a quarterly basis. About 50 of the local health departments submit a claim in a given quarter. The federal match dollars forwarded to the respective participating local health department averages about $1.7 million per quarter.

Targeted Intensive Prenatal Case Management and Healthy Start programs
IDHS supports two intensive service coordination programs for low-income families with a pregnant woman or infant. This effort is to provide a more intensive approach to case management for high-risk women. Areas selected were based on high infant mortality and/or high Medicaid costs areas. There are six Chicago community areas that are federally funded with $1.8 million per year that participate in this intensive case management initiative for pregnant women and infants through age two. There are eleven projects in ten counties that provide intensive prenatal care case management, with general revenue funds totaling $2.5 million per year. The initiatives use the same intervention model during the prenatal period. Services are provided by nurses or social workers; caseloads are much smaller and the frequency of patient contact and home visiting is much more intense compared to the basic FCM program. The Chicago Healthy Start Initiative

[33] Illinois Department of Human Services, "Case Management Performance," HSPR 1014 for Q2 of FY 2004, December 30, 2003

also has licensed mental health professionals who conduct risk assessments for prenatal depression. Women who appear to be at risk are referred for additional assessment and intervention services. Both programs are operated as an enhancement to FCM. Since the inception of the Chicago Healthy Start Initiative in 1990, there has been a 50 percent reduction in the infant mortality rate in those communities.

Specific criteria were developed for eligibility to this Targeted Intensive Prenatal Case Management Program. In November 2003, the most common medical eligibility factors for the Targeted Intensive Prenatal Case Management Program included: 1) diseases that affect pregnancy; 2) previous preterm birth; 3) fourth pregnancy or third child due within 40 months; 4) pre-pregnancy weight <100 pounds. The most common "social" risk factors included 1) low educational attainment, 2) domestic violence and 3) homelessness or temporary housing. Although this is a high-risk group being served, there has been a consistent reduction in LBW in the Targeted Intensive Prenatal Case Management Program over its inception (the last three years).

Number and Rate of Low Birth Weight Infants Among Participants in Targeted, Intensive Prenatal Case Management, by Project Year			
	Year 1	Year 2	Year 3
# LBW	52	186	177
# Births	287	1,161	1,472
LBW Rate	18%	16%	12%

There is a need to increase the number of locations that receive funding for targeted, intensive prenatal case management. It is estimated that 20 additional sites costing $5 million per year would be needed to provide this intervention to additional high-risk areas.

IDHS performed an analysis of perinatal outcomes between WIC and FCM program participants to assess whether those initiatives had any effect on lowering prematurity and infant mortality. Findings show that the infant mortality rate among infants born to women who participated in both WIC and FCM programs was 6.1 per 1,000 in CY 2000, one-third the rate (23.4 per 1,000) among infants born to Medicaid 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 African-Americans, Hispanics, single mothers, teen mothers and the entire population, the infant mortality rates (per 1,000 live births) in 1999 were:

	African-American	Hispanic	Single	Teen	State
FCM/WIC	8.8	3.4	6.8	7.9	6.1
Medicaid, no intervention	29.1	17.0	24.9	27.3	23.4
Percent Decrease	69.8%	80.0%	72.1%	71.1%	73.9%

The Illinois Department of Human Services using the birth file match data evaluated the benefit of participating in the Family Case Management and WIC Programs during pregnancy. The findings are presented below.

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:

The Very Low Birth Weight Rate (per 100 births) Among Infants Born to Medicaid Eligible Women by Program Participation Status and Year					
Program Participation	1997	1998	1999	2000	2001
Participated in WIC and FCM During Pregnancy	1.3	1.4	1.3	1.3	1.2
Did Not Participate in WIC or FCM During Pregnancy	3.9	3.7	4.3	3.4	3.7
Percent Difference	66.7	62.2	69.8	61.8	67.0

Notes: "Prematurity" is defined as a very low birth weight infant, or an infant weighing less than 1,500 g. (3 pounds, 5 ounces) - Data are for the entire state

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:

The Low Birth Weight Rate (per 100 births) Among Infants Born to Medicaid Eligible Women by Program Participation Status and Year					
Program Participation	1997	1998	1999	2000	2001
Participated in WIC and FCM During Pregnancy	8.3	8.8	8.4	7.9	8.1
Did Not Participate in WIC or FCM During Pregnancy	15.8	14.0	14.7	12.9	13.6
Percent Difference	47.5	37.1	42.9	38.6	40.4

Notes: A low birth weight infant weighs less than 2,500 g. (5 pounds, 8 ounces) - Data are for the entire state

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:

Mortality Rate (per 1,000 Live Births) Among Infants Born to Medicaid Eligible Women by Program Participation Status and Year					
Program Participation	1997	1998	1999	2000*	2001*
Infants Born to Mothers Who Participated in WIC and FCM During Pregnancy	6.9	7.1	6.8		
Infants Born to Mothers Who Did Not Participate in WIC or FCM During Pregnancy	15.8	23.4	19.0		
Percent Difference	56.3	69.7	64.2		

Notes: *Data are not yet available for 2000 or 2001. Data are for the entire state.

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:

Average Medicaid Expenditures During the First Year of Life by Program Participation Status and Year					
Program Participation	1997	1998	1999	2000	2001*
Infants of Mothers Who Participated in WIC or FCM During Pregnancy	$4,673	$5,035	$4,989	$5,540	
Infants of Mothers Who Did Not Participate in WIC or FCM During Pregnancy	$8,800	$10,675	$8,556	$8,652	
Percent Difference	46.9	52.8	41.7	36.0	

Notes: This table, unlike tables 1-3, 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. Medicaid claims data was used for comparison with the birth file match data set. Data are for the entire state - *Data for 2001 are not yet available.

Through integrated delivery of WIC and FCM, the health of children born to participating women has been substantially improved. The VLBW rates among infants born to women who participate in both programs is almost 70 percent lower than the rate among infants born to Medicaid eligible women who did not participate in either program. Further, the LBW rate among program participants is nearly 43 percent lower than the rate among infants born to non-participants; the infant mortality rate was more than 64 percent lower and Medicaid expenditures during the first year of life were 36 percent lower.

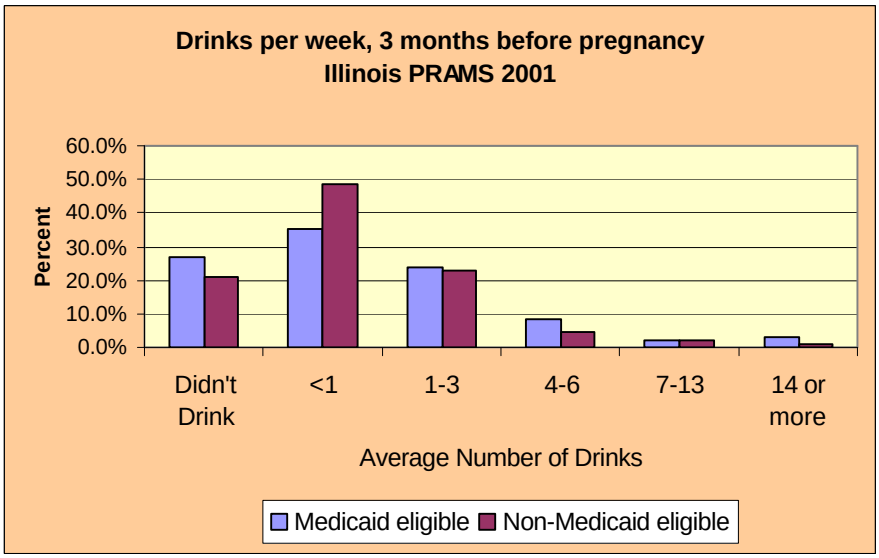
Comparison of Outcome Measures Between Medicaid Eligible Pregnant Women Who Did and Did Not Participate in WIC and FCM: 1999			
Outcome Measures	WIC & FCM	No Intervention	Percent Difference
Very Low Birth Weight	1.3%	4.3%	69%
Low Birth Weight	8.4%	14.7%	42.9%
Infant Mortality	6.8/1,000	19.0/1,000	64.2%
Average first year of life expenditures	$5,540	$8,652	36.0%

High Risk Infant Follow up (Administered by IDHS)
This program provides five home visits by public health nurses for follow-up on high-risk infants, as defined below:

- Infants born having a very low birth weight or having been discharged from the neonatal intensive care unit (NICU)
- Infants with a positive toxicology
- Infants born with a congenital anomaly or infection
- Infants born with an endocrine, metabolic, blood or immune disorder
- Mothers who experienced a neonatal death

Alcohol and Substance Abuse Treatment and Prevention (administered by IDHS)
The Illinois Department of Human Services administers programs for alcoholism and substance abuse through their Division of Alcohol and Substance Abuse (DASA). They provide block grants to providers to serve the population. Those services that are provided to the Medicaid population are claimed for federal match. The state is required by the Public Health Service Act to expend at least five percent of the block grant funds to increase the availability of treatment services designed for pregnant women and women with dependent children. This is a contractual expectation. The program services include outpatient, intensive outpatient, residential extended care, detoxification, and residential rehabilitation. Women with an addiction who are pregnant or have children are a priority population. The care is provided to pregnant women in consultation with their prenatal physician and all DASA providers are required to make available prenatal care to women who need such services (directly or through referral arrangements). In state fiscal year 2003, the total estimated spending for pregnant women and parenting women totaled $43.9 million with an estimated 110 babies being born drug free (savings estimated at $27.5 million).

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



Gaps in the alcohol and substance abuse service delivery, according to IDHS staff include:

- All services are not readily available in all areas of the state
- Funding is needed for additional residential services for pregnant women
- Funding is needed for more child care for moms in treatment
- There is a need for aggressive training for health care professionals, case managers, outreach workers by a professional regarding the signs and symptoms of substance abuse, observational and objective screening for substance abuse, and referrals to appropriate treatment
- Data linking for assessment of outcomes

Mental Health (administered by IDHS)

The Illinois Department of Human Services, Division of Mental Health (DMH) contracts with over 200 agencies throughout the state to make available the full range of mental health services to indigent Illinois residents. DMH-grant funded services are targeted to individuals with severe and persistent mental illness, including schizophrenia, bipolar illness and recurrent major depression. Therefore, the services offered by these agencies, as well as by the state- operated psychiatric hospitals are geared to pregnant women with severe depression or psychosis.

The Medicaid Program as it relates to Pregnancy

Medicaid paid for more than 1 million births throughout the United States in 1998.[34]

Established in the mid-1960's, Medicaid is the federal program authorized under Title XIX of the Social Security Act (42 U.S.C. 1396-1396s) that reimburses states for providing health benefits to low-income persons. The federal law sets out requirements and limitations that states must follow in operating their programs. Medical assistance provided in Illinois under the Public Aid Code generally qualifies for reimbursement by the federal government under Title XIX at a rate of 50 percent. Title XIX limits the kinds of services that states may provide. Generally speaking, eligible services must be of a medical or rehabilitative nature.

The early years of Medicaid were characterized by eligibility limited largely to low-income, single mothers and their children who were receiving welfare (formerly known as Aid to Families with Dependent Children or AFDC, and now known as Temporary Assistance to Needy Families or TANF).

However, in the mid-1980's, a series of reports, including one by the Institute of Medicine, brought to the U.S. Congress' attention the issue of preventing low birth weight and decreasing infant mortality by expanding access to publicly-funded prenatal care.[35] In addition, concerns were expressed about the high cost of maternity care and neonatal care for those babies who experienced adverse birth outcomes. Prenatal care coverage had been declining in the United States in the early 1980's.[36] In response, the U.S. Congress passed The Deficit Reduction Act (DEFRA) of 1984, the Consolidated Omnibus Reconciliation Act of 1985 (COBRA) and the Omnibus Budget Reconciliation Act of 1986 and 1987 (P.L. 99-509 and P.L. 100-203), which expanded pregnancy-related coverage and allowed states to offer Medicaid to low-income pregnant women, infants and children in families with incomes above the AFDC qualifying level; encourage early, uninterrupted prenatal care; and simplify the eligibility determination process.[37] Through these legislative initiatives, states were able to break the traditional link between welfare and medical assistance to the low income, qualifying population. Many states responded by raising income limits for Medicaid eligibility, removing the asset test, extending Medicaid coverage to pregnant women and infants; guaranteeing continuous eligibility, offering presumptive eligibility for pregnant women, removing the asset tests for pregnant women, infants and children as part of the process of determining eligibility.

Congress went further in OBRA 1989 (P.L. 101-239) requiring states to provide Medicaid coverage for all pregnant women and children up to age six with family incomes up to 133 percent of the federal poverty level. At their option, states could expand eligibility for pregnancy-related services to women with incomes up to 185 percent of the federal poverty

[34] Cornell, Emily V., Health Policy Studies Division, "Maternal and Child Health Update: States Have Expanded Eligibility and Increased Access to Health Care for Pregnant Women and Children," February 22, 2001
[35] Institute of Medicine, "Preventing Low Birthweight," 1985
[36] United States General Accounting Office Report on Prenatal Care: "Early Success in Enrolling Women Made Eligible by Medicaid Expansions, " February 1991
[37] United States General Accounting Office Report on Medicaid: "States Expand Coverage for Pregnant Women, Infants and Children," August, 1989

level and even beyond. OBRA 1990 required states to phase-in mandatory coverage of children up to 100 percent of the federal poverty level and the Balanced Budget Act of 1997 (BBA) (P.L. 105-33) created the State Children's Health Insurance Program that was designed to assist working families with incomes too high for Medicaid but too low to afford private health insurance.[38, 39]

Generally, when a state adds specific services to their Medicaid program, the state is required to make that service available to all beneficiaries who might need such a service based on medical necessity. There is an exception to the comparability requirements under federal policy with respect to enhanced services that may be made available to pregnant women. Under this exception, states may elect to provide additional services to Medicaid pregnant women without violating comparability requirements. The only stipulation is that these additional services must be available to all Medicaid pregnant women. This provision includes coverage for preventive and curative services not presently covered under the State Plan and services that are optional under 1905(a)(9)(13) of the Social Security Act, including health education, outreach services, clinic services, nutrition counseling, vitamins and over-the-counter medications.

[38] United States Department of Health and Human Services. Centers for Medicare & Medicaid Services, "Medicaid: A Brief Summary," January 2004

[39] United States Department of Health and Human Services, Centers for Medicare & Medicaid Services, "History of Medicare and Medicaid," March 6, 2002

Illinois Medicaid

The mission of the IDPA, Medical Assistance Program is:

- To improve the health of Illinois families, and
- To provide access to quality healthcare.

Today, over 1.8 million Illinoisans receive health care through the Illinois Medicaid program. Over 1 million of those Illinoisans are children. Illinois Medicaid covers forty percent of Illinois births. Epidemiological studies consistently demonstrate a direct relationship between less than optimal birth outcomes and social disadvantage, including poverty.[40, 41, 42] Given the income distribution of Medicaid recipients, this fact would suggest that Illinois Medicaid covers a disproportionate number of "at risk" births. Consequently, a focused attempt to improve the health and well being of our youngest residents through improvement in birth outcomes will, of necessity, center on the Illinois Medicaid program. But additionally, given the connection between social disadvantage and less than optimal births, efforts will be needed to link Medicaid initiatives to other programs whose aim is to decrease social disadvantage, including poverty.

What Has Been Done - Current IDPA Strategies

Illinois has implemented a multitude of strategies to improve low-income women's access to perinatal health services. These techniques to streamline eligibility help to reach out to low-income women and encourage them to enroll in Medicaid. Medicaid provides reimbursement for a comprehensive package of medical services for pregnant and postpartum women. (See Current Medicaid Coverage for Perinatal Services)

Eligibility Expansion Initiatives

Increased Eligibility Standards
IDPA provides Medicaid coverage to pregnant women and infants (if born to a Medicaid-eligible woman) in families whose countable income is at or below 200 percent of the federal poverty level, currently $3,067 per month, for a family of four in 2003. Eligibility for this *KidCare Moms and Babies Program* increased from 133 percent, to 200 percent of the federal poverty level in January, 1998. An eligible woman is covered during her pregnancy and 60 days postpartum. A baby is covered until its first birthday.

Eligibility Simplification - Elimination of the Asset Test as Part of the Financial Eligibility Determination
The asset requirement for determining eligibility for pregnancy related Medicaid coverage was eliminated in 1991. In 1998, IDPA eliminated the asset test for all family cases for Medicaid eligibility determinations. Not considering assets of pregnant women and their families allows more pregnant women to be eligible for Medicaid and significantly simplifies the Medicaid application process.

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[40] Kramer, M.S., "Determinants of low birth weight: methodological assessment and meta-analysis," *Bulletin of the World Health Organization*, 65:663-737, 1987
[41] Wilkins, R.; Sherman, G.; Best, P.; "Birth outcomes and infant mortality by income in urban Canada," *Canada Health Report*, 3:7-31, 1991
[42] Berkowitz, G.; Papiernik, "Epidemiology of preterm birth," *Epidemiologic Reviews*, 15(2): 414-43, 1993

Elimination of the Face-to-Face Interview Requirement in Favor of a Mail-In Application
Pregnant women are no longer required to go to their local Illinois Department of Human Services office during regular business hours to be interviewed as part of the Medicaid application process. This option is still available, but a large number of pregnant women apply through the mail-in application. Pregnant women who wish to apply for Medicaid can go to one of 1400 KidCare Application Agent sites throughout the state to get assistance in completing the short mail-in application. Many of these locations offer assistance in the evening and on weekends. Pregnant women can also complete a mail-in application without assistance and mail it to the Central KidCare Unit for processing.

Shortened Eligibility Application Form
The KidCare and FamilyCare application, used by families and pregnant women to apply for Medicaid and SCHIP coverage, is significantly shorter than it was years ago. Changes were made to remove, shorten or more clearly ask questions on the application. The application was 30 pages long, then shortened to 9 pages, and is currently less than three pages in length.

Acceptance of Applications at Sites Other than Welfare Offices and use of Application Agents
In 1991, IDPA implemented a process whereby outstation sites began accepting applications and providing assistance in completing the application and obtaining verifications needed by local offices to determine eligibility. In 1999, with the implementation of IDPA's Title XXI Program, outstation providers were changed to KidCare Application Agents who were paid $50 per approved application. This payment provided a source of funding for outreach, application assistance and referral to needed services. There are over 1400 KidCare Application Agents statewide.

Applications in Language Other than English
Applications for medical assistance are available in English and in Spanish. Additionally, the local Department of Human Services offices and KidCare Central Unit have English and Spanish speaking staff available to assist participants and potential participants. If other languages are spoken, translator services are utilized through telephonic contact (3-way calling) to a language translation service for assistance in communicating with individuals who speak other languages.

Continuous Eligibility
Pregnant women remain eligible throughout their pregnancy and 60 days postpartum, regardless of whether they have fluctuations in income or changes in their employment. Infants remain eligible for twelve months of continuous coverage, as do all children. Continuous 12-month eligibility for Medicaid children was implemented in March 2000. For children covered under SCHIP (Share, Premium and Rebate), continuous 12-month eligibility was implemented at the inception of the program (October 1998).

Early Entry Into Prenatal Care

Medicaid Presumptive Eligibility (for pregnant women) (MPE)
IDPA implemented presumptive eligibility for pregnant women in 1989. This program continues to be effective in providing medical coverage to otherwise uninsured pregnant women. MPE allows women to enroll temporarily in Medicaid while their application for Medicaid is being processed. It provides outpatient medical services so that the woman can begin prenatal care as soon as she has a confirmed pregnancy test if, by a declaratory income process, she is within 200 percent of the federal poverty level. The MPE coverage continues until the end of the month following the month of the application. The MPE qualified provider determines eligibility for this program. Many of these sites provide prenatal care, medical services for children, and/or care coordination. MPE allows the health care setting, where the eligible population is more likely to seek services, to become the point of application. These providers consist of over 300 community-based providers who receive federal funding for other pregnancy-related programs, primarily local county health departments and federally qualified health centers. Staff at those sites also assist women in completing the application for ongoing medical assistance (to be processed by the KidCare Unit centrally) or refer them to the local Illinois Department of Human Services for cash assistance and/or food stamps, in addition to medical assistance. During state fiscal year 2002, 43,000 women received medical coverage under this program. Of the 43,000 total women approved for MPE coverage, the KidCare Unit approved 36,000 or 84 percent, centrally.

Increased Reimbursement/Provider Incentives

MCH Provider Agreement and Enhanced Rates
In an effort to increase access to quality medical services for maternal and child health services, incentives for participating physicians who meet the following IDPA established quality standards (for care to pregnant women) were developed. In order to receive the enhanced rate, physicians must agree to:

- Maintain admitting/delivery privileges
- Perform risk assessment
- Provide obstetrical care and delivery services as appropriate
- Maintain 24-hour telephone coverage for consultation, including ensuring "at risk" pregnant women are treated as needed, based on a triage of need
- Provide medical care coordination including scheduling of diagnostic consultation and specialty visits
- Provide adequate equal access to medical care for clients
- Communicate/cooperate with the state's case management program

This initiative to ensure quality care and improve access began in 1993. Currently, 1,540 of the 2,774 physicians (56 percent) who have delivery privileges recorded on their file are enrolled as MCH Providers.

Managed Care

Voluntary Managed Care Program Requirements
Illinois maintains a voluntary managed care program in eight counties of the State (Cook, Jackson, Madison, Perry, Randolph, St. Clair, Washington and Williamson). Among other categories of assistance, women who are enrolled in the KidCare Moms and Babies Program may elect managed care as their delivery system. IDPA contractually requires the Managed Care Organization to provide or arrange quality care for pregnant Enrollees, including:

- A comprehensive prenatal evaluation and care in accordance with the latest standards published by the American College of Obstetrics and Gynecology or American Academy of Family Physicians. The specific areas to be addressed in regard to the provision of care include, but are not limited to: content of initial assessment, including history, physical, lab and risk assessment including HIV counseling and voluntary HIV testing; follow-up laboratory testing; nutritional assessment and counseling; frequency of visits; content of follow-up visits; anticipatory guidance and appropriate referral activities.
- The requirement that during the first year of the contract, at least seventy percent of all pregnant enrollees receive the minimum level of prenatal visits adjusted for the date of coverage with the MCO. During the second year of the contract, the percentage is increased to 80 percent.
- The MCO track and monitor prenatal care on an ongoing basis and have in place a quality improvement initiative addressing prenatal care compliance until such time as the performance goal is achieved.
- The MCO provides or arranges to provide nutritional assessment and counseling for all pregnant enrollees. Individualized diet counseling is to be provided as indicated.
- The requirement that its Primary Care Providers and Women's Health Care Providers identify maternity cases presenting the potential for high-risk maternal or neonatal complications and arrange appropriate referral to physician specialists or transfer to Level 3 perinatal facilities as appropriate. The MCO is required to utilize, for high-risk consultation or referrals, the standards of care promulgated by the Statewide Perinatal Program of the Illinois Departments of Public Health and Human Services.
- Monitoring, at a minimum:
  - Number of prenatal visits
  - Provision of ACOG recommended prenatal screening tests
  - Frequency of ongoing prenatal care
  - Neonatal deaths
  - Birth outcomes
  - Length of hospitalization for the mother and length of newborn hospital stay for the infant

In order to obtain reliable encounter data for pregnant women and deliveries and provide actuarially sound reimbursement, pregnancy and delivery related services were excluded from the capitation rate and instead, a hospital delivery case rate will be provided for each hospital delivery.

Current Medical Coverage for Perinatal Services Covered Under Medicaid

Medical Coverage

Early and routine prenatal care saves money and lives. Women who start prenatal care early in their pregnancies tend to have fewer problems than do women who delay or have no prenatal care at all. Early prenatal care can help diagnose or circumvent certain complications in pregnancy and delivery.[43] According to the Institute of Medicine, for every dollar spent in prenatal care, $3.38 can be saved.[44] IDPA's medical coverage for pregnant women under its Medicaid program is comprehensive. IDPA supports the American College of Obstetricians and Gynecologists (ACOG) guidelines, recommending comprehensive medical services, including risk assessment, as part of the office visit. ACOG recommends that women receive at least 13 prenatal visits during a full-term, low-risk pregnancy.[45] There is no limit on the number of office visits received by pregnant women. This contrasts with certain other states where limits are put on the number of prenatal visits that are allowed. For example, according to the Kaiser-funded National Survey of Medicaid Coverage of Perinatal Services,[46] two states limit the number of prenatal visits reimbursed by Medicaid and four states limit the number of office visits, irrespective of whether they are for prenatal health care or other healthcare.[47]

IDPA reimburses $44.10 for a routine prenatal office visit. Some providers currently bill the Evaluation and Management (E&M), New Patient, CPT code for the initial visit of a new pregnant patient. Depending on the level of complexity of the services provided, these codes can pay as high as $70.85. The office visit includes nutrition assessment and guidance as well as health education. In addition to covering the office visit, pharmaceuticals including prenatal vitamins, laboratory services, radiology services including sonograms/ultrasound, medical supplies, including equipment rental, and transportation to and from a source of medical care are covered. Additionally, substance abuse and mental health treatment are Medicaid covered services. Risk assessment of pregnant women is reimbursed as a separate service. The Risk Assessment has a maximum reimbursement rate of $14.60. Health education, nutritional screening and guidance and lactation counseling are a component part of the medical (office) visit and are not currently reimbursed separately. IDPA promotes the WIC program and sends notices to women on an annual basis about the availability of WIC.

Emergency services and inpatient care including labor and delivery are covered for pregnant women. Physicians who have signed a Maternal and Child Health (MCH)

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[43] Cornell, Emily V., Health Policy Studies Discussion, "Maternal and Child Health Update: States Have Expanded Eligibility and Increased Access to Health Care for Pregnant Women and Children," February 22, 2001

[44] Nichols, E., Committee to Study the Prevention of Low Birthweight, "Preventing Low Birthweight, Summary Report," Institute of Medicine, National Academy Press, Washington, D.C., 1985.

[45] American College of Obstetricians and Gynecologists, *Standards for Obstetric and Gynecologic Services*, Sixth Edition, 1985

[46] Health Systems Research, Inc. "Medicaid Coverage of Perinatal Services: Results of a National Survey," The Henry J. Kaiser Family Foundation, 2000

[47] The Kaiser Commission on Medicaid and the Uninsured, "Medicaid Benefits: Nurse Midwife Services," www.kff.org/medicaidbenefits/nursemidwife.cfm

Agreement with IDPA receive an additional payment of $389.25 for either a vaginal or C-Section deliveries: vaginal deliveries with an MCH Agreement pay at $924.45 versus $535.20 without an agreement and C-Section deliveries with an MCH Agreement pay at $1,070.45 versus $681.20 without an agreement.

Genetic screening is also reimbursed by IDPA. The reimbursement ranges from $88 for amniotic fluid testing to $188 for more involved chromosome analysis.

Advanced Practice Nurses (APN):

IDPA enrolls advance practice nurses to provide medical services within their scope of practice in compliance with the Omnibus Budget Reconciliation Act of 1987 (OBRA) legislation to improve access to primary medical care for children and pregnant women. Included as APN providers are Certified Nurse Midwives (CNM), Certified Family Nurse Practitioners (CFNP), Certified Pediatric Nurse Practitioners (CPNP) and Certified Registered Nurse Anesthetists (CRNA).

A CNM may enroll with IDPA to provide service if he or she is licensed as an advanced practice nurse and holds a valid license in the state of practice and legally authorized under state law or rule to practice as a nurse midwife pursuant to the Nursing and Advanced Practice Nursing Act (225 ILCS 65) and its implementing regulations or comparable law in the state of practice. The CNM must maintain a written collaborative agreement with a physician licensed to practice medicine in all its branches. A CNM who attends deliveries must have a written collaborative agreement with a physician who has hospital privileges. APNs are reimbursed at 70 percent of the physician's payment established by IDPA, if billing in the APN's name. If the billing is in the name of the collaborative physician, the physician will be reimbursed at 100 percent of the maximum allowable fee. The majority of CNMs are believed to bill under the physician's name, although statistics are unknown, as currently this information is not collected. Allowing midwives to be paid at 100 percent of the physician rate for all services would cost an additional estimated $55,000 annually.

Discussion of the Results of the National Survey, Medicaid Coverage of Perinatal Services (Kaiser Report)

The Kaiser Foundation[iii] conducted a national survey of state Medicaid programs to analyze state policies on coverage of perinatal care.[48] The report documents that compared to other states, Illinois provides broad eligibility, offering pregnancy-related coverage for women whose income is up to 200 percent of the federal poverty level, with no asset test, with continuous coverage up to 60 days postpartum and with presumptive eligibility available so that women can be enrolled quickly in the program and access prenatal care without waiting until eligibility is determined. Illinois has also adopted most eligibility streamlining techniques with the exception of outstationing eligibility workers. Instead, Illinois uses KidCare Application Agents to assist pregnant women in applying for Medicaid. In addition, Illinois covers a wide array of services including unlimited prenatal care visits, non-emergency transportation, home visits, substance abuse treatment, case management, vitamins and social and medical risk assessment.

The report has been cited by some who advocate for expansion of covered services in the Illinois Medicaid program. While this study provides a wealth of interesting information, and is most likely the most comprehensive report comparing pregnancy related services covered by state Medicaid programs, the report was misleading in some areas. It inaccurately reported that Illinois does not cover genetic services under the Medicaid program. Further, the report did not fully describe all of the services provided by other state funded initiatives, which are available to pregnant and postpartum women who receive their health coverage from the Medical Assistance Program. In addition, the report failed to address whether there was scientific evidence demonstrating a benefit from some of the services enumerated in the report, including evidence for reducing infant mortality, decreasing the incidence of low birth weight or very low birth weight or other positive effects associated with a healthy birth.

A chart depicting available services in Illinois is presented below.

[48] Health Systems Research, Inc., "Medicaid Coverage of Perinatal Services: Results of a National Survey," The Henry J. Kaiser Family Foundation, 2000

Perinatal Health Coverage for Illinois Medical Assistance Program Participants

Agency	Medical Care	Risk Assessment	Breastfeeding Lactation Counseling	Health Education	Nutrition Assessment & Counseling	Infant Care Education	Childbirth Support, (e.g., doulas)	Child-birth Education	Psychosocial Counseling Mental Health Alcohol & Substance Abuse	Dental	Smoking Cessation	Equipment Rental
IDPA	X[1]	X[2]	X[3]	X[3]	X[3]	X[3]			X[4]	LX[5]	LX[2, 5]	X[7]
IDHS/OFH	X[8]	X[8]	X[9]	X[9, 10]	X[8, 9]	X[8, 9]		X[8]			X[8]	X[9]
IDHS/DMH									X[10]			
IDHS/DASA									X[11]			
IDPH		X[12]		X[12]						X[13]		
Other						X[14]		X[14]				

X = Covered Service

Lx – Limited covered service

[1]IDPA provides comprehensive medical coverage for perinatal care. There is no limit on the number of medically necessary prenatal visits.

[2] IDPA reimburses physicians, nurse midwives, general outpatient clinics, nurse practitioners & others (e.g., local health departments) separately for risk assessment of pregnant women. No limit on medically necessary risk assessments as determined by the attending physician.

[3] Component part of the medical visit

[4] IDPA reimburses for acute inpatient and outpatient psychiatric services. IDPA reimburses physicians for psychiatric care. IDPA reimburses Federally Qualified Health Centers (FQHCs) under the Rehab Option. IDPA reimburses for mental health, alcohol and substance abuse treatment.

[5] Covered adult services include emergency exams, X-rays, tooth restorations, extractions and denture services. Screening or treatment for periodontal care and prophylaxis are not covered.

[6]IDPA reimburses for smoking cessation pharmacology. IDPA does not reimburse for smoking cessation counseling as a separate service.

[7] IDPA reimburses for purchase of manual breast pump.

[8]IDHS/OFH provides case management of pregnant women under FCM, and to some extent FCM agencies offer childbirth education.

[9]IDHS/OFH services provided by WIC program. WIC supplies breast pumps and supplemental foods.

[10]IDHS/DMH provides community based clinic services.

[11]IDHS/DASA provides community based and residential treatment for alcohol and substance abuse.

[12]IDPH provides information and training to providers on HIV clinical care standards and counseling and testing of pregnant women.

[13]IDPH/Division of Oral Health provides oral health information.

[14]Cook County Hospital, as well as some other hospitals, offer classes free of charge.

Task Force Recommendations

The task force experts reported on the strategies that were specifically identified in the legislation. They reported their literature research findings and evidence-based data to support the effectiveness of each of the suggested initiatives. They learned about the state's many initiatives from the participating state agencies.

As earlier indicated, The Health Systems Research, Inc., with funding from The Henry J. Kaiser Family Foundation, conducted a survey of states to ascertain their expanded coverage for perinatal services under Medicaid (2000). IDPA staff has been seeking information from the other states that have enhanced perinatal services to ascertain their experience in terms of improved health outcomes, effectiveness, costs and cost impact/savings. IDPA is seeking this information of "best practices" to determine the appropriateness of employing such strategies in the Illinois Medicaid program. Such enhanced services for which Medicaid reimbursement may be received include:

- Breastfeeding/Lactation Support
- Nutritional Counseling
- Labor Support
- Childbirth Education and Infant Education
- Risk Assessment
- Smoking Cessation, especially through Counseling
- Oral Health
- Psychosocial Counseling
- Home Visiting and Case Management
- HIV Counseling
- Perinatal Addiction Treatment

The requested information has not yet been received. That information will be provided to the task force members when received. However, the task force members made several insightful recommendations for IDPA consideration. The section to follow includes the recommendations of the task force and IDPA's initial response to those recommendations. It also includes information about other states' coverage, as reported by The Health Systems Research report of their national survey findings.

Planned Pregnancies: Improving Birth Outcomes

Unintended pregnancy is both frequent and widespread in the United States. In 1996, 50 percent of all pregnancies among females aged 15-44 were unintended.[49, 50, 51] The Healthy People 2010 goal (Objective 9-1) is that 70 percent of all pregnancies among females aged 15 to 44 years be intended. The rate of unintended pregnancies is higher for low-income women, including women on Medicaid and for teenagers and women ending their reproductive years.[52, 53] In Illinois, about two-thirds of all Medicaid births are unintended.[54] Illinois ranks 11th nationally for its teen pregnancy rate.[55]

What do we know about unintended or unplanned pregnancies?

A woman with an unintended pregnancy is less likely to seek early prenatal care and is more likely to expose the fetus to harmful substances.[56] The child of an unwanted conception is at greater risk of being born at low birth weight, of dying in its first year of life, of being abused, and of not receiving sufficient resources for healthy development.[57] According to the National Commission to Prevent Infant Mortality, "infant mortality could be reduced by an estimated 10 percent if all pregnancies were planned." In addition, the number of low birth weight infants could be reduced by 12 percent.[58]

Avoiding unintended or unplanned pregnancies

According to the publication, Preventing Pregnancy, *Protecting Health*, most women in the United States want to have children.[59] The key is being able to have children when they are most able to care for them and to determine the number and timing of children they have. Conservative estimates of the effects of family planning suggest that the use of family planning reduces a low-income woman's probability of pregnancy by 79 percent during any year that she uses family planning services.[60] Access to high quality contraceptive services continues to be an important factor in promoting healthy

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[49] Committee on Contraceptive Research and Development, Institute of Medicine, National Academy of Sciences, "Contraceptive Research and Development: Looking to the Future (Polly F. Harrison and Allan Rosendfield, eds.), *National Academy Press*), S-3, 1996

[50] Brown, S.S.; Eisenbert, L. (eds); "The best intentions: unintended pregnancy and the well being of children and families," Washington, D.C.: *National Academy Press*, 1995

[51] Henshaw, S.K., "Unintended Pregnancy in the United States," *Family Planning Perspectives*, 30(1) 24-29, 1998

[52] Henshaw, S.K., "Unintended Pregnancy in the United States," *Family Planning Perspectives*, 30(1) 24-29, 1998

[53] United States Department of Health and Human Services, Centers for Disease Control and Prevention: "PRAMS Pregnancy Risk Assessment Monitoring System 1997 Surveillance Report," Atlanta, GA, CDC, 1999

[54] Illinois Pregnancy Risk Assessment Monitoring System (PRAMS), Illinois Department of Public Health, Center for Health Statistics

[55] The Alan Guttmacher Institute, "Contraception Counts: Illinois", June 2002

[56] Jameison, Denise J.; Buescher, Paul A., "The Effects of Family Planning Participation on Prenatal Care Use and Low Birth Weight," *Family Planning Perspectives*, 24, 214-218, September/October 1992

[57] Institute of Medicine, Committee on Unintended Pregnancy, National Academy of Sciences, "The Best Intentions: Unintended Pregnancy and Well-Being of Children and Families" (Sarah S. Brown and Leon Eisenburg eds.), *National Academy Press*, 1995

[58] National Commission to Prevent Infant Mortality, "Troubling Trends: The Health of America's Next Generation," 38, 1990

[59] The Alan Guttmacher Institute, "Preventing Pregnancy, Protecting Health: A New Look at Birth Control Choices in the United States," New York, AGI, 1991

[60] Lopez et al.,"Pregnancies Averted in Publicly Funded Family Planning Services in Florida," 1995

pregnancies and preventing unintended pregnancy.[61] The use of contraceptives not only helps women avoid unintended pregnancies, but it also helps women plan pregnancies. Women who plan their pregnancies are more likely to adequately space their pregnancies and to receive early and adequate prenatal care, which is essential for good maternal and infant health.[62] The family planning visit also offers health benefits for women beyond contraceptives. During the annual visit, health problems and concerns can be identified and addressed.

There are two major public sources for payment for family planning service in Illinois. First, Illinois' Title X Family Planning program, which served 138,184 women in 1999, 25,531 of whom were Medicaid-eligible. Program services are free for women whose income is less than 100 percent of the federal poverty level, or on a sliding scale for women with incomes between 100 percent, to 250 percent of the federal poverty level. Second, Illinois' Medicaid program covers family planning services. In 2003, 90,144 women obtained family planning services through Medicaid.

According to the Alan Guttmacher Institute, Illinois ranks 47th in the provision of contraceptive services to women in need. There are approximately 701,090 women in need of publicly-funded family planning services.[63] As outlined above, about 200,000 women received publicly-funded services. Therefore, nearly one-half million women who are estimated to be in need of services do not receive publicly-funded family planning services.[64] This number may be somewhat inflated due to the fact that a number of women receive family planning services through rural health centers or federally qualified health centers, which are paid a flat rate per service encounter and specific diagnostic or service data are not reported to the Illinois Medicaid program. In addition, this number assumes that all women would choose to use or are in need of contraceptives if they were provided.

With the implementation of the new Illinois Healthy Women program this year, which will provide family planning services to women who are losing Medicaid benefits, this situation should improve. The Illinois Healthy Women program will be available to over 120,000 women. In addition, comprehensive health care benefits, including family planning services, are available through FamilyCare. The FamilyCare program, which provides health insurance to parents of children enrolled in KidCare, was expanded last July to cover parents with incomes up to 90 percent of the federal poverty level. The program is scheduled for further expansion over the next two years. Governor Blagojevich has committed to expanding eligibility for FamilyCare for parents or caretaker relatives with incomes up to 185 percent of the federal poverty level. This expansion will make an additional 300,000 parents eligible for health benefits over the three years. An appropriation of $66 million was included in the Governor's FY 05 Budget to expand FamilyCare from 90 percent, to 133 percent of the federal poverty level.

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[61] Wilcox, L.S; Koonin, L.M.; Adams, M.A., "Quality measures for unintended pregnancy in managed care: opportunities and challenges," Women's Health, 9:250-8, 1999

[62] Jameison, Denise J.; Buescher, Paul A., "The Effects of Family Planning Participation on Prenatal Care Use and Low Birth Weight," *Family Planning Perspectives*, 24, 214-218, September/October 1992

[63] The Alan Guttmacher Institute, "Conceptive Needs and Services," January 1998

[64] The Alan Guttmacher Institute, "Contraception Counts: Illinois," June 2002

Even with the above-mentioned expansions, a significant number of low-income women, in particular those who do not yet have children, will not have access to publicly-funded family planning services.

Options for Expanding Access to Family Planning Services:

While Illinois provides maternity coverage to women whose income is up to 200 percent of the federal poverty level, Illinois does not provide corresponding family planning services to all women of the same income. However, the state does have the option of doing so by requesting a modification of its family planning waiver to expand it to cover not only women losing Medicaid but also women whose income would qualify them for maternity benefits. It is estimated that "for every dollar spent on family planning services, $3 would be saved."[65] Additionally, under Medicaid (or a waiver), Illinois receives 90 percent federal match for family planning services.

The Centers for Medicare & Medicaid Services, through its investigators from the CAN Corporation, The University of Alabama at Birmingham and Emory University, evaluated Medicaid Family Planning Demonstrations (November 2003).[66] The overall conclusions showed that "all states were budget neutral and that savings from averted births exceed costs of family planning coverage. Some states experienced an increase in the use of family planning although other states did not. The researchers concluded that evidence from non-program sources suggest that presence of family planning demonstration can be associated with decreases in unintended pregnancies"[67] The fifteen states operating family planning demonstration programs included in the evaluation were Alabama, Arkansas, Arizona, California, Delaware, Florida, Mississippi, Missouri, New Mexico, New York, Oregon, Rhode Island, South Carolina, Virginia and Washington.

Preconception Services and Planning:

Experts agree that having a healthy pregnancy and baby begins during the preconception period before the window of opportunity is too late. The period of greatest sensitivity to the environment for the developing fetus is between 17 and 56 days after conception. Many structural anomalies occur prior to the eighth week and given this fact, the recognition of the importance of these early weeks when a woman is likely to be unaware of her pregnancy status, interventions or assessment of risks prior to conception may have more chance of affecting birth outcomes than prenatal care alone.[68] The American College of Obstetricians and Gynecologists (ACOG) recommends:

- Preconception Care Immunization – for women who have not already had measles, mumps or rubella (MMR), the MMR vaccine is recommended at least three months before conception to avoid rubella, which can have devastating consequences for a fetus
- Folic Acid – the vitamin folic acid can reduce the risk of neural tube defects (such as spina bifida) in newborns, if taken before conception and the first three months of pregnancy. Research indicates that folic acid taken every day by women of

[65] The Alan Guttmacher Institute, "Contraception Counts: Illinois," June 2002
[66] Edwards, J.; Bronstein, J.; Adams, K.; Jones, J., "Evaluation of Medicaid Family Planning Demonstrations," The CNA Corporation, CMS Contract No. 752-2-415921, November 2003
[67] Edwards, J.; Bronstein, J.; Adams, K.; Jones, J.; "Evaluation of Medicaid Family Planning Demonstrations," The CNA Corporation, CMS Contract No. 752-2-415921, November 2003
[68] Moos, MK, Cefalo, RC "Preconceptional health promotion: A focus for obstetric care," *AM J Perinatal* 4: 63-67, 1987

childbearing age can reduce the risk of brain and spinal cord (neural tube) defects by up to 70 percent when taken before and continued in early pregnancy.[69]
- Reducing the risk of sexually transmitted infections (STIs)

In addition to the above mentioned interventions, others may also be important. For example, low maternal weight and nutritional inadequacy has been found to correlate with increased prematurity and low birth weight. Assessing this risk factor prior to conception could reduce such risks. Additionally, counseling about the impact of pregnancy and parenthood for a woman and her family, advice about medications and their possible effects on the outcome of pregnancy and information regarding radiation, environmental or infectious exposures are likely to be beneficial.

Coverage by Other States: According to the Kaiser report, twenty-one states explicitly cover preconception counseling, and six states (Delaware, Iowa, Virginia, Vermont and West Virginia, in addition to Illinois) cover this counseling as part of an office visit.[70] Alabama, Arizona, Arkansas, California, Colorado, Florida, Hawaii, Idaho, Kentucky, Louisiana, Massachusetts, Minnesota, Missouri, Nebraska, Nevada, New Hampshire, New Jersey, Pennsylvania, Tennessee, Texas and Wisconsin make up the states that explicitly provide preconception counseling.

Recommendations

In concert with the Centers for Disease Control's recommendations, Perinatal Task Force experts advocate the following:

For all patients:
- Publicly-funded coverage of women's reproductive health care and voluntary family planning services after losing eligibility for Title XIX or Title XXI, assuring availability and accessibility to such services, removing barriers to receiving such care. In addition, it was recommended to expand publicly-funded coverage of family planning services to all women who would be eligible for Medicaid, if pregnant. (It is noted that the Illinois Department of Human Services' funding for family planning in the amount of $10.9 million is insufficient to cover the need for these services.)

For low risk patients:
- Folic acid and vitamin supplementation
- Pregnancy spacing

For high risk women with existing chronic medical conditions (e.g., diabetes, or hypertension):
- Metabolic control
- Medication management
- Avoidance of multiple gestation

[69] United States Department of Health and Human Services, Centers for Disease Control and Prevention, "Promoting a Folic Acid Education Program to Prevent Birth Defects," CDC website

[70] Health Systems Research, Inc., "Medicaid Coverage of Perinatal Services: Results of a National Survey," The Henry J. Kaiser Family Foundation, 2000

IDPA Response

IDPA recently received approval from the Centers for Medicare & Medicaid Services (CMS) to implement a five-year demonstration project under the authority of section 1115 of the Social Security Act (waiver) designed to improve women's health outcomes by expanding coverage of publicly-funded family planning services. Women who would otherwise lose their Medicaid coverage, who are between the ages of 19-44 and who want to receive confidential family planning services, may receive those services under the Illinois Healthy Women program. Illinois will receive ninety percent federal match for family planning services under this waiver and fifty percent federal match for women's reproductive health related services authorized under the waiver. Illinois Healthy Women is scheduled to begin in April 2004. The program is designed to increase interpregnancy spacing, to positively impact on a woman's reproductive health, and to improve birth outcomes by promoting planned pregnancies.

As a result of the Perinatal Task Force recommendation, IDPA plans to submit an amendment to CMS requesting approval to:

- Expand the population eligible for the family planning waiver to Title XXI women who age out of KidCare (age 19) and to female parents or female caretaker relatives who are age appropriate for Illinois Healthy Women and losing eligibility for the Title XXI waiver under FamilyCare
- Cover vitamins and folic acid supplementation under the waiver and work directly with the Illinois Chapters of ACOG and IAFP to assist IDPA in educating their members of the importance of this supplementation for promoting healthy birth outcomes

Additionally, IDPA will:

- Work with experts to develop the content of a preconception visit
- Seek approval from federal CMS to expand it to all women whose income is below 200 percent of the federal poverty level who would otherwise meet eligibility requirements, once Illinois Healthy Women is operational

All family planning waivers are required to be budget neutral to the federal government. Therefore, IDPA does not anticipate an additional expense from these expansions beyond start up costs. As mentioned earlier, recent analysis of all of the existing family planning waivers including those that already provide coverage to 200 percent of the federal poverty level indicate that they are at a minimum, budget neutral. In fact, it is estimated that cost savings from reducing unintended pregnancies will result. While an estimated $2 million in start up funds is required in the first year to implement coverage for all women whose income is below 200 percent of the federal poverty level, an estimated $19.9 million in cost savings will result from the reduction in unintended births over the five-year life of the waiver. As mentioned earlier, recent analysis of all the existing family planning waivers including those that already provide coverage to 200 percent of the federal poverty level indicate that they are at a minimum budget neutral.

In addition, IDPA does not anticipate increased expense with the development of an explicit preconception visit due to the fact that such services are already covered through family planning visits and the services provided decrease the risks of "non-normal" births, which result in significant expenditures.

Mental Health During the Perinatal Period

Task force members, as well as experts throughout the literature, concur that perinatal depression is under-recognized and under treated.[71] When it is recognized, it may be difficult to find a treating health professional. Many physicians are not adequately trained in optimal pharmacologic treatment of peripartum depression, and do not have access to expert consultation. The consequences of untreated perinatal depression can be devastating for the mother, her offspring, and other family members. Untreated depression can have long-term adverse effects to both mother and child.[72]

The prenatal period is a time of heightened vulnerability for the development of major depression in some women and affects an estimated 18,000 women within the state of Illinois each year (derived from the statistic that an estimated 10-20 percent of women in the United States who give birth, within 6 months of delivery experience a major depression.) Rates are substantially higher in women with low socioeconomic status. Postpartum psychosis is estimated to affect 180-360 women each year in Illinois. [73]

Obstetrical and neonatal complications of untreated depression during pregnancy may include fetal growth retardation, pre-eclampsia, premature labor, placental abruption and newborns more inconsolable. Other risks for untreated major depression during pregnancy include decreased prenatal care, insufficient weight gain, increased use of addictive substances, increased risk of being a victim of violence, decision to abort due to depression and suicide, especially in women abandoned by partners or denied abortions.[74] Consequences of untreated postpartum depression include disturbed mother-infant relationship; psychiatric morbidity in children later; more recurrent, treatment-refractory depression and suicide/homicide.[75]

Providers may experience some diagnostic issues in that the symptoms of depression during pregnancy overlap normal pregnancy changes. Currently, there is a lack of capacity in the community mental health system to treat perinatal depression unless diagnosed with a major mental illness. Early detection of symptoms and prompt initiation of treatment can greatly reduce adverse consequences. Research indicates that medication and psychosocial interventions can effectively treat depression.

Recommendations

The task force delineated interventions that they believed to be realistic and likely to result in improved health outcomes by lowering rates of obstetric complications (fetal growth

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[71] Georgiopoulos, A, M.; Bryan, T.L.; Wollan, P., et al., "Routine screening for postpartum depression," *Journal of Family Practice*, 50:117-122, 2001

[72] Jacobsen, T., "Effects of postpartum disorders on parenting and on offspring," In Miller, LJ, ed., *Postpartum Mood Disorders*, Washington, D.C., *American Psychiatric Press*, 99-117, 1999

[73] Attia, E.; Downey, J.; Oberman, M., "Postpartum psychoses," In Miller LJ, ed., *Postpartum Mood Disorders*, Washington, D.C., *American Psychiatric Press*, 99-117, 1999

[74] Miller, L.J., Women's Services Division, University of Illinois at Chicago, "Presentation to the IDPA Perinatal Task Force: Mental Health Considerations," 2003

[75] Miller, L.J., Women's Services Division, University of Illinois at Chicago, "Presentation to the IDPA Perinatal Task Force: Mental Health Considerations," 2003

retardation, pre-eclampsia, premature labor, placental abruption); and improving long-term prognosis for offspring (less depression, less conduct disorder, higher IQ). Those recommendations include to:

- Create a statewide Perinatal Mental Health Consultation Service for providers, including primary care physicians, with reimbursement for consultative services. The consultation service would include a university-based Perinatal Mental Health Consultation Team charged with developing a model program template for addressing the specific needs of 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 primary care providers.
- Provide information and training to providers on how to use the screening tool to detect depression
- Allow reimbursement for a screening for depression. The Edinburgh Postnatal Depression Scale (which can be adapted for screening for depression during the prenatal period) was recommended as effective in increasing early diagnosis.
- Reimburse health care professionals for diagnostic evaluations of women who screen positive on the screening tool, regardless of whether the women end up with a diagnosis
- Provide evidence-based psychotherapy: both cognitive-behavioral and interpersonal psychotherapy have demonstrated efficacy in the treatment and prevention of peripartum depression
- Include more ambitious prevention interventions (e.g., interventions for women with risk factors for perinatal depression who are not yet symptomatic) and providing social support (case management, outreach, respite care and support groups)
- Develop models including financing options for mental health consultation to primary care and other providers who work with pregnant women and women with infants to screen and treat depression
- Explore options for covering services provided by additional mental health providers
- Identify a mechanism to provide mental health screening and treatment to women beyond the 60 days postpartum eligibility period

Coverage by Other States: According to the Kaiser report, psychosocial counseling is covered for perinatal women in 37 states (Alabama, Alaska, Arizona, Arkansas, California, Connecticut, Delaware, Georgia, Hawaii, Idaho, Illinois, Indiana, Kansas, Kentucky, Louisiana, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Nebraska, Nevada, New Hampshire, New Jersey, New York, North Carolina, North Dakota, Oregon, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Utah, Vermont, Virginia and West Virginia).

Risk assessments are identified in the Medicaid Coverage of Perinatal Services National Survey as "medical" and "social." According to the report, a total of 44 states cover medical risk assessment and 38 states cover social risk assessment. Illinois was one of the states providing coverage of these risk assessments.

IDPA Response

IDPA provides reimbursement for risk assessment during pregnancy. IDPA will begin to implement policy changes to recognize the Edinburgh Postnatal Depression Scale as a "risk assessment" tool that is acceptable for use with this population during pregnancy, and during the postpartum period in order to increase early diagnosis and treatment of depression. A Provider Notice will be generated to inform providers about reimbursement for this risk assessment screening tool. There would be no additional costs for risk assessment during pregnancy as risk assessments are already a covered benefit. However, there would be a cost to allow reimbursement for the Edinburgh Postnatal Depression Scale during the postpartum period. Although it is recognized by IDPA that mental health screening should be universal for these women, it is unlikely that universal screening would initially occur. Based on CY 2002 enrollment of pregnant women, assuming that one-half of pregnant women receive a postpartum visit, and of those, 20 percent will present a risk factor for depression, the estimated cost is $144,000.

Provider education is key. In April 2003, the Illinois Department of Human Services (IDHS) distributed information to physicians on prescription products to treat perinatal depression. It is too soon to evaluate the effectiveness of that effort. IDPA will work with IDHS to support the continued effort for provider education in this area including use of a screening tool for depression. IDPA can help support this effort by sending a Provider Notice with the information and will include this provider information on our website. IDPA will also work with other state agencies, provider groups, the Medicaid Advisory Committee and other advocate and advisory groups to develop and implement a strategy for provider education in this area.

IDPA will begin a planning process with other state agencies (e.g., Illinois Department of Human Services, Division of Mental Health) to evaluate the feasibility of their establishing a statewide Perinatal Mental Health Consultation Service for providers of obstetrical and pediatric care. Additionally, IDPA will consult with the Illinois Department of Human Services relative to case management training and assistance in coordination of care of pregnant women and mothers. The Illinois Department of Human Services, Division of Mental Health estimates that the first year of the Perinatal Mental Health Consultation Service that includes provider training and consultation would cost approximately $222,000. It is envisioned that this service would be provided through a contract under the direction and oversight of the Illinois Department of Human Services, Division of Mental Health.

With the expansion of FamilyCare from 90 percent to 133 percent of the federal poverty level, more parents or caretaker relatives will receive comprehensive health benefits from IDPA. Additionally, IDPA will collaborate with the Illinois Department of Human Services, Division of Mental Health to explore available resources for providing mental health screening to women who are no longer eligible for Medicaid coverage.

Reimbursement for psychiatric services is provided to enrolled physicians for services they personally render to eligible participants. There are also several access points for participants to receive services from other mental health professionals. Clinical social works and psychologists provide services to Illinois Medicaid participants through 78 hospital outpatient psychiatric clinics enrolled with IDPA. In addition, Federally Qualified Health Centers and Rural Health Clinics, who are enrolled for behavioral health services,

may be reimbursed by IDPA an encounter rate for services provided by a clinical social worker or psychologist. IDPA also reimburses for acute inpatient psychiatric services provided to patients who are in need of short-term inpatient hospital for active treatment of an emotional or mental disorder. Professional services related to inpatient stays are paid separately on a fee-for-service basis.

In previous years, legislation has been introduced to allow psychologists and clinical social workers to bill Medicaid directly. To expand the provider group to include social workers and psychologists who are individually enrolled to provide mental health services (outside of the community mental health or community health center system), the additional cost is estimated at $18 million.

Under the Rehab Option with the Illinois Department of Human Services, this population has not been a priority. However, in concert with the other Children's Mental Health Task Force recommendations, expanding service delivery to this population is recommended. IDPA has begun discussions with the Illinois Department of Human Services and the Illinois Department of Children and Family Services to implement the Children's Mental Health Act and will assess the mental health resources in the community mental health network for Medicaid pregnant women during that planning process.

Task force members will be invited to participate in further strategic planning on addressing the identification and treatment of depression during the perinatal period.

Oral Health

Although they are both preventable and treatable, oral infections (dental caries and periodontal diseases) are the most prevalent chronic diseases in the United States and are most prevalent in economically disadvantaged and minority populations. There is evidence to support the hypothesis that poor oral health adversely affects pregnancy leading to bad birth outcomes. In addition, oral disease in pregnancy adversely affects the oral health of children.

Bacteria associated with dental caries are transmitted from mothers (caregivers) to their children.[76, 77, 78] This transmission can be interrupted by prenatal and post-natal dental care and thus reduce caries in children.[79, 80, 81, 82] Early childhood caries is the most severe form of caries in children and it can cause pain, infection, and lead to failure to thrive.[83] In a study published in 2000 by Kanellis et al,[84] researchers looked at the Medicaid costs associated with hospitalization of young children for restorative dental treatment under general anesthesia. Costs in 1994 for hospitalizing children under 5 for such treatment were $2,009 per case. Less than two percent of Medicaid-enrolled children accounted for 25 percent of all dollars spent on dental services for this age group. Given the expense of treatment of dental caries in young children, maternal interventions could be cost effective.

Periodontitis is a bacterial infection. Periodontal Disease is characterized by receding and/or bleeding gums that can lead to tooth loss. The effects of periodontitis are not limited to the oral cavity and can have systemic effects. A significant number of studies since 1996 have demonstrated a strong association between periodontal infections and preterm low birth weight and maternal pre-eclamsia in the United States and South America.[85, 86, 87, 88]

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[76] Caufield et al., "Plasmid-containing strains of Streptococcus mutans cluster within family and racial cohorts: implications for natural transmission," *Infect. Immun.* 56:3216-320, 1988

[77] Gonroos, L. et al. "S. mutacin production by Streptococcus mutans may promote transmission of bacteria from mother to child," *Infect. Immun.* 66:2595-2600, 1988

[78] Redmo, I.M., et al., "Demonstration of identical strains of mutans streptococci within Chinese families by genotyping," *Eur. J. Oral Sci* 106:788-794, 1998

[79] Brambilla, E. et al., "Caries prevention during pregnancy: results of a 30-month study," *Journal of the. American Dental Association,* 129:871-877, 1998

[80] Gunay, H., et al., "Effect on caries experience of a long term preventive program for mothers and children starting during pregnancy," *Clin. Oral Invest*., 2:137-142, 1998

[81] Gomez, S.S. et al., "A prospective study of caries preventive program in pregnant women and new mothers on their offspring," *J. Pediatr. Dent.* 11:117-122, 2001

[82] Zanata, R.L. et al., "Effect of caries preventive measures directed to expectant mothers on caries experience in their children," *Braz. Dent. J.*, 14:75-81, 2003

[83] Acs, G., et al., "Effect of nursing caries on body weight in a pediatric population," *Pediatric Dentistry,* 14(5):302-305, 1992

[84] Kanellis, et al., "Medicaid costs associated with the hospitalization of young children for restorative dental treatment under general anesthesia," *J. Pub Health Dent*, 60(1):28-32, 2000

[85] American College of Obstetricians and Gynecologists News Release, "Periodontal Disease Associated with Pre-eclampsia Risk," January 31, 2003

[86] Boggess, K.A. et al., "Maternal periodontal disease is associated with an increased risk for pre-eclampsia," *Obstet. Gyneocol*. 101:227-231, 2003

[87] Jeffcoat, M.K. et al., "Periodontal infection and preterm birth: Results of a prospective study," *J. Amer. Dent Assoc.,* 132:875-888, 2001

[88] Offenbacher et al., "Periodontal infection as a possible risk factor for preterm low birth weight," *J. Periodontal,* 67(S) 1103-1113, 1996

According to the National Healthy Mothers, Healthy Babies Coalition *Oral Health and Pregnancy Policy Statement*, research indicates that pregnant women with periodontal disease are seven times more likely to deliver a premature baby. Additionally, there is accumulating evidence that treating periodontal diseases in pregnancy reduces the incidence of preterm births.[89, 90]

The National Institute of Dental and Craniofacial Research is conducting a study on obstetrics and periodontal therapy. This study is currently recruiting patients. The purpose of the study is to determine if non-surgical periodontal (gum) treatment can reduce the incidence of preterm birth and low birth weight babies in mothers with periodontitis. IDPA will follow this study and others that may assist in providing policy direction on the effectiveness of dental care in improving birth outcomes.

Recommendations

There are clear indications for treating periodontal disease in pregnancy – first, to improve oral health and well-being and second, to reduce the infectious burden on the mother. Perinatal infections have been strongly linked to premature low birth weight babies, and preliminary results indicate the possibility that periodontal care improves neonatal outcomes.

Task force recommendations included:

- Medicaid should provide coverage for treatment of oral disease in pregnant women
    - Treatment should include measures to reduce colonization of S. mutans
    - Treatment should include measures to control periodontal infections

Coverage by Other States: California recently added dental benefits for pregnant women to include an initial episode treatment examination; periodic examination every 6 months; prophylaxis once a year; for over age 21, subgingival curettage and root planing per treatment; and occlusal adjustment (limited) per quadrant. It is too early to project any cost or impact data. Louisiana recently expanded dental services to pregnant women. They anticipate saving $1.2 million for the first year of the program from the prevention of low-birth weight and associated NICU care costs.

California estimated a savings of $22,000 for each preterm low birth weight birth avoided, using a study done by Offenbacher, et al. In the study, the authors estimated that 18.2 percent of all preterm low birth weight cases may be due to periodontal disease.[91]

IDPA Response

While continued research on periodontal disease and pregnancy is needed, it is of concern to IDPA that pregnant participants do not have coverage of, or resources for, regular dental care. Providing dental care to pregnant women is estimated to cost $2.3 million per year for dental exams, prophylaxis, periodontal scalings and periodontal maintenance at an

[89] Lopez, N.J., et al., "Periodontal therapy may reduce the risk of preterm low birth weight in women with periodontal disease: A randomized control trial," *J. Periodontal*, 73:911-924, 2002

[90] Jeffcoat, M.K., et al., "Periodontal disease and preterm birth: Results of pilot intervention study," *J. Periodontal*, 74: 1214-1218, 2003

[91] Offenbacher, et al., "Periodontal infection as a possible risk factor for preterm low birth weight," *J. Periodontal*, 67(S) 1103-113, 1996

estimated utilization rate of 25 percent, and subject to specific appropriations, IDPA could provide dental coverage for pregnant women. IDPA plans to:

- Collaborate with the IDPA dental contractor, Dental Advisory Committee, including Dental Society, IDPA dental consultants and the Illinois Department of Public Health, Division of Oral Health and others in the dental community as well as the task force members to identify those services that are critical to the oral health of pregnant women
- If a specific appropriation was granted to IDPA for oral health care for pregnant women, IDPA would take the appropriate steps to cover these services for pregnant women
- Alternatively, IDPA will work with IDPH to seek funding for a pilot project to test the efficacy and cost effectiveness of these interventions, and may work with Chapin Hall for evaluating this strategy as a method for improving birth outcomes

Again, if the necessary appropriation was forthcoming and federal approval was granted IDPA would:

- Work with our dental contractor, Dental Advisory Committee, including the Dental Society; IDPA dental consultants and the Illinois Department of Public Health, Division of Oral Health to identify dentists who will accept referrals for the provision of oral health care for Medicaid pregnant women
- Ensure that referral information is provided to the provider community
- Work with the advocate community to help devise an outreach and educational campaign targeted to the Medicaid pregnant population on oral health and expanded covered benefits

Smoking Cessation

Tobacco use is the leading preventable cause of death in the United States, killing over 178,000 women each year.[92] It is the primary cause of lung cancer, the leading cancer killer of women, and is also a primary risk factor for cardiovascular disease, the leading overall killer of women. Smoking is a critical women's health issue.

The Centers for Disease Control reports devastating consequences caused by smoking during pregnancy:

- A pregnant woman who smokes is between 1.5 and 3.5 times more likely than a nonsmoker to have a low birth weight baby and significantly increases the risk of preterm delivery[93]
- Cigarette smoke has been associated with increased risk of ectopic pregnancy. A pregnant woman who smokes is 1.8 times more likely than a nonsmoker to have this condition[94]
- Other risks of smoking include placenta complications and stillbirth[95]
- Infants whose mothers smoked during pregnancy have 2.3 times the risk of Sudden Infant Death Syndrome than infants of nonsmoking pregnant mothers[96]

Estimated number of LBW and pre-term deliveries that could be avoided by not smoking during pregnancy

Using 20,000 pregnant smokers in the Cornerstone system and the approximate average risk rates as per cumulative evidence:

Expected number of pre-term delivery if non-smokers:
20,000 x average 6.0 % pre-term risk = ...1,200
Expected number of pre-term delivery if smokers
20,000 x average 9.1 % pre-term risk = ...1,820

Avoidable **premature** cases: 1,820 - 1,200 = ... **624 (34.3%)**

Expected number of LBW if non-smokers
20,000 x average 3.6 % LBW risk = ... 720
Expected number of LBW if smokers
20,000 x average 9.2 % LBW risk = ... 1,840

Avoidable **LBW** cases: 1,840 - 720 ..... **1,120 (60.0%)**

[92] United States Department of Health and Human Services, Center for Disease Control and Prevention, "State Medicaid Coverage for Tobacco-Dependence Treatments – United States, 1994-2001," *Morbidity and Mortality Weekly Report*, 52(21); 496-500, May 30, 2003
[93] United States Department of Health and Human Services, Public Health Service, Office of the Surgeon General, "Women and Smoking: A Report of the Surgeon General," Rockville, MD: U.S.D.H.H.S, 2001
[94] Castles, A.; Adams, E.K.; Melvin, C.L.; Kelsch, C.; Boulton, M.L.; "Effects of smoking during pregnancy: Five meta-analyses," *American Journal of Preventive Medicine*, 16(3):208-15, 1999
[95] National Governor's Association Center for Best Practices, Health Policy Study Division, Issue Brief: "Preventing Maternal Smoking," July 24, 2001
[96] United States Department of Health and Human Services, Center for Disease Control and Prevention, "Health & Economic Impact: Smoking Cessation for Pregnant Women," July 2002

Abruptio Placentae (the separation of the placenta from the uterine wall) is associated with smoking and is the leading cause of maternal and fetal death. Further, leading authorities contend that miscarriage (fetal death before 28 weeks) and still birth (fetal death after 28 weeks) are both associated with smoking and carry an increased risk for infection and other complications for women. Smoking is a risk factor for premature births, and 20 percent of low birth weight infants are due to smoking. Smoking is associated with reduced breast milk production, shorter duration of breastfeeding, and nicotine present in the breast milk of smokers.[97] The U.S. Public Health Service estimates that if all pregnant women stopped smoking during their pregnancies, there would be a 10 percent drop in infant deaths.[98]

The Healthy People 2010 prevention agenda's established goals related to smoking are many. These are among those objectives (related to adults and pregnant women, and their medical providers:

- Reduce cigarette smoking among adults (18 years and older) to 12 percent (Objective 27-1a)
- Increase smoking cessation attempts by adult smokers to 75 percent (Objective 27-5)
- Increase smoking cessation during pregnancy to 30 percent (Objective 27-6)
- Increase to at least 85 percent the proportion of primary care and oral health care providers who advise patients who smoke to quit (Objective 3.10)

Smoking Prevalence

Evidence of smoking prevalence rates - National data

Source: National Center for Health Statistics, U.S. Department of Health and Human Services, "Women and Smoking: A Report of the Surgeon General," 2001

Percent of live births in which mothers reported smoking during pregnancy, 1998:	
White, non-Hispanic.	16.2 %
Black, non-Hispanic	9.6 %
Hispanic	4.0 %
With less than 8 years education	11.7 %
With 9-11 years education	25.5 %
With 12 years education	16.8 %

[97] United States Department of Health and Human Services, Public Health Service, Office of the Surgeon General, "Women and Smoking: A Report of the Surgeon General," Rockville, MD, U.S.D.H.H.S, 2001

[98] National Governor's Association Center for Best Practices, Health Policy Study Division, Issue Brief: "Preventing Maternal Smoking," July 24, 2001

Evidence of smoking in pregnancy: Illinois

Illinois, PRAMS:	
Women who smoked during last 3 months of pregnancy:	12.8 %
with income less than $15,000/year:	19.8 %
Data from Cornerstone system:	
Number of pregnant women who were smokers in 1998:	14.6%
(20,096 of total 137,621 pregnant women)	
(source: Illinois Institute for maternal and child health leadership technical assistance project: Analysis of Cornerstone data related to smoking and pregnancy)	
Medicaid Birth File Match (2001):	
Medicaid pregnant women who report smoking	16.45%
Other low-income women who report smoking	9.20%
General population (non Medicaid or other low income) ...…	5.35%

Overall, between 15 percent and 30 percent of women smoke at some point during their pregnancy.[99] According to PRAMS data, Illinois Medicaid-eligible women are more likely to smoke than non-Medicaid women prior to pregnancy. Approximately 28 percent of the Medicaid-eligible women smoke three months prior to pregnancy while 18 percent of the non-Medicaid women smoked three months prior to pregnancy.

The CY 2001 birth file match data similarly indicate that Medicaid-eligible women are more likely to smoke during pregnancy than are their non-Medicaid counterparts (16.5 percent versus 5.4 percent).

Effects of Smoking Cessation Intervention

Infants of women who quit smoking by the first trimester have weight and body measurements comparable to infants of nonsmokers.[100] Prenatal smoking cessation programs have been shown to have a protective effect on intrauterine growth retardation.[101]

Economic Benefits of Smoking Cessation Programs

The Centers for Disease Control and Prevention report the total cost of adult smoking to Medicaid in 1997 was estimated to be more than $17 billion, or 12.1 percent of all Medicaid expenditures.[102] This estimate did not include neonatal health care costs. The Centers for Disease Control and Prevention further report that direct neonatal health care costs attributable to maternal smoking that were paid by Medicaid in 1996 are estimated to be more than $227 million. Early studies suggest that every $1 spent on smoking cessation

[99] 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

[100] United States Department of Health and Human Services, Public Health Service, Office of the Surgeon General, "Women and Smoking: A Report of the Surgeon General," Rockville, MD, U.S.D.H.H.S., 2001

[101] Ershoff, D.H.; Quinn, V.P.; Mullen, P.D., et al. "Pregnancy and medical cost outcomes of a self-help smoking cessation program in an HMO," *Public Health Reports*, 105(4):340-7, 1990

[102] Zhang, X.; Miller, L.; Max, W.; Rice, D.P., "Cost of smoking to the Medicare program," *Health Care Financing Review*, Vol. 20, No. 4, 179-196, Summer 1999

for pregnant women could save about $3 in reduced neonatal intensive care costs.[103] A single percentage point decline in smoking prevalence among pregnant women could prevent 1,300 cases of low birth weight among babies annually and save $21 million in direct medical costs.[104]

Nationally, smoking attributable neonatal health care costs for the Medicaid system total almost $228 million, or about $738 per smoker whose delivery is paid by the states' Medicaid programs. If 25% of pregnant smokers on Medicaid received counseling that achieves an 18% cessation rate, almost $10 million in excess Medicaid neonatal health care costs could be averted.[105]

Smoking Cessation Pharmacotherapy and Pregnant Women

The pharmacology therapy recommendations include: Nicotrol (tablets, inhaler, nasal spray); Nicorette gum, Nicoderm CQ (patch); and Bupropion (Zyban). No studies are currently available on the effectiveness or safety of these products for pregnant women. There is some evidence of neurotoxicity from nicotine in NRT. Dangerous nicotine levels are reached if a woman smokes while using NRT. Bupropion has caused seizures in 1 out of 1,000 users. Smoking cessation pharmacy products are covered by Medicaid. Pharmacotherapies are appropriate for women who are not pregnant or lactating. However, because of the lack of clear information and guidelines, potential health risks to the patient, and the need for additional patient monitoring, physicians may be reticent to recommend these products to pregnant women.

USDHHS Clinical Guidelines for use of Pharmacotherapy in Pregnancy

- Augmented or extended behavioral intervention should always be the first choice
- Pharmacotherapy should be considered for a pregnant woman when she is otherwise unable to quit
- When the likelihood of quitting, with its potential benefits, outweighs the risk of the pharmacotherapy and the risk of potential continued smoking

IF PHARMACOTHERAPY IS PRESCRIBED:

- Use lowest end of effective range of medication delivery
- Choose intermittent delivery (e.g. gum) rather than continuous delivery (e.g. patch)
- Monitor blood nicotine levels to assess amount of nicotine delivered

[103] Marks, J.; Koplan, J.; Hogue, C.; Delmat, M., "A Cost-Benefit/Cost-Effective Analysis of Smoking Cessation for Pregnant Women" *American Journal of Preventive Medicine*; 6(5), 287, 1990

[104] Lightwood, J.M.; Phibbs, C.S.; Glantz, S.A., "Short-term economic and health benefits of smoking cessation: low birth weight," *Pediatrics*, 104(6): 1323-20, 1999

[105] United States Department of Health and Human Services, Centers for Disease Control and Prevention, "Smoking-Attributable Mortality, Morbidity, and Economic Costs (SAMMEC): Maternal and Child Health (MCH)," software, 2002b. Available at http://www.cdc.gov/tobacco/sammec

Recommendations

According to the task force, brief smoking cessation intervention delivered as part of routine health care services have been proven effective in multiple studies. These interventions can reach all smokers, regardless of their interest or motivation to quit smoking (i.e., there is no selective participation or acceptance based on motivation and readiness to quit). Providers should be encouraged to assess smoking status at each visit; provide minimal advice to quit (e.g., less than 3 minutes) and provide a booklet, which is motivational and includes self-help skills for quitting to be distributed by providers.

There is a strong dose-response relationship between the intensity of tobacco dependence counseling and its effectiveness. Pregnant women are receptive to advice to improve the health of their babies. However, an important strategy to reduce smoking during pregnancy is to provide smoking cessation intervention with women in the public delivery of care system who are not currently pregnant. Quitting in pregnancy is often temporary and not motivated by long-term cessation goals: one-third (1/3) of women who quit early in pregnancy relapse before delivery, and 70% relapse within one year of delivery. Many women have more than one child. Likelihood of abstinence while pregnant decreases with parity. Behavioral interventions have been proven effective in family planning and well-child clinics, and in WIC programs. The task force recommends reimbursement for a more intensive smoking cessation program, which includes one-to-one counseling, telephone support and cessation classes or support groups.

Coverage by Other States: The NGA Center for Best Practices reported information on Medicaid reimbursement for smoking cessation services for low-income pregnant women. Twenty-one states offer smoking cessation counseling (Arizona, Arkansas, Delaware, Georgia, Indiana, Kansas, Kentucky, Maine, Maryland, Michigan, Minnesota, New Mexico, New York, Ohio, Oregon, Pennsylvania, Rhode Island, South Carolina, Utah, West Virginia and Wisconsin). Ten states offer behavioral support counseling smoking cessation classes (Delaware, Maine, Maryland, Minnesota, New Mexico, Ohio, Oregon, Pennsylvania, Rhode Island and Virginia). Twelve states provide psychosocial counseling for smoking cessation (Arizona, Illinois (limited through FCM), Kansas, Maryland, Minnesota, New Jersey, New Mexico, North Carolina, Ohio, Oregon, Rhode Island and Vermont). Behavioral support counseling is reimbursed by 11 states (Arizona, Delaware, Kansas, Michigan, Minnesota, New Jersey, New Mexico, Ohio, Oregon, Rhode Island and Vermont). Smoking cessation classes are reimbursed by 10 states (Delaware, Maine, Maryland, Minnesota, New Mexico, Ohio, Oregon, Pennsylvania, Rhode Island and Virginia).[106]

IDPA Response

IDPA, subject to specific appropriation, accepts the recommendation to collaborate with the other state agencies and task force members to design a program for smoking cessation that includes both brief intervention, motivational booklets and more intensive smoking cessation support.

- Brief Intervention and Motivational Booklets: IDPA will encourage providers of women's health care to follow the standards of care regarding risk assessment,

[106] National Governor's Association Center for Best Practices, Health Policy Study Division, Issue Brief: "Preventing Maternal Smoking," July 24, 2001

monitoring for smoking, and smoking cessation guidance. IDPA will explore the feasibility of allowing providers to utilize the established risk assessment billing code to claim for assessing and guidance related to smoking cessation in both family planning and obstetrical practices.

- Intensive Smoking Cessation Support Program: It is estimated that approximately 16 percent of Illinois Medicaid pregnant women smoke (81,000 x 16 percent = 13,000) and optimally all of these women should receive monitoring and encouragement from their provider to quit smoking.

It is estimated that approximately $1.5 million would be needed to cover smoking cessation counseling for pregnant women who smoke. The cost of services is dependent on the number of women who take advantage of smoking cessation services during their pregnancy. It is also possible that cost savings could be realized with the addition of smoking cessation related services. However, predicting such savings involves many assumptions and is difficult therefore to quantify.

Treatment of Perinatal Addiction

Prenatal drug exposure prevalence and its impact is well documented. Prenatal alcohol use is one of the leading preventable causes of birth defects and developmental disabilities.[107] There are several sources that report the prevalence of prenatal alcohol and other drug use, but the data appears incomplete and contradictory. According to the 1999 Behavioral Risk Factor Surveillance System, 12.8 percent of women reported drinking alcohol during pregnancy.[108] The birth file match data shows less than one percent of Medicaid pregnant women self-reported alcohol use during pregnancy (CY 2001). The prevalence of drinking alcohol during the last three months of pregnancy for the Medicaid population was reported as 4.1 percent, according to the Illinois 1999 PRAMS data.[109]

IDPH's "Surveillance of Illinois Infants Prenatally Exposed to Controlled Substances 1991-1999," reports information related to infants' exposure to controlled substances, as reported to APORS. Information about newborn's exposure to controlled substances was first collected by APORS in 1991. Babies reported to APORS as prenatally drug exposed are most likely to have been exposed to cocaine. This is in contrast with Illinois and national rates of drug use among the general population, where cannabis is used almost twice as much as all other drugs combined. Since each birthing hospital in Illinois sets its own policy about which newborns should be tested for exposure to controlled substances, the number is likely under-reported. Some hospitals test every child routinely; others may test babies showing signs of drug toxicity or withdrawal. IDPH cautions that the APORS data may be incomplete and biased, and therefore, misleading. Without more confidence in the quality of data reported to the APORS program, IDPH claims that the data are suggestive only.[110]

While the substance abuse reporting in Illinois used to determine prevalence data may be incomplete, the effects of prenatal substance abuse are not unknown. Children exposed to alcohol during fetal development can suffer multiple disorders that range from subtle changes in I.Q. to profound mental retardation. They can also suffer growth retardation and be born with birth defects of major organ systems.[111] One of the most severe outcomes is fetal alcohol syndrome (FAS), which includes central nervous system disorders, growth retardation, and facial malformations. CDC studies have documented FAS prevalence rates ranging from 0.2 to 1.5/1,000 live births.[112] The costs for one FAS child is estimated to be

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[107] National Organization on Fetal Alcohol Syndrome, www.nofas.org

[108] United States Department of Health and Human Services, Centers for Disease Control and Prevention, "National Task Force on Fetal Alcohol Syndrome and Fetal Alcohol Effect," *Morbidity and Mortality Weekly Report*, September 20, 2002

[109] United States Department of Health and Human Services, Centers for Disease Control and Prevention, "PRAMS 1999 Surveillance Report for Illinois," February 14, 2004

[110] Illinois Department of Public Health, "Surveillance of Illinois Infants Prenatally Exposed to Controlled Substances, 1991-1999, November 2001, www.idph.state.il.us//about/epi/pdf/Epi01-4.pdf

[111] United States Department of Health and Human Services, Centers for Disease Control and Prevention, "National Task Force on Fetal Alcohol Syndrome and Fetal Alcohol Effect," *Morbidity and Mortality Weekly Report*, September 20, 2002

[112] United States Department of Health and Human Services, Centers for Disease Control and Prevention, "National Task Force on Fetal Alcohol Syndrome and Fetal Alcohol Effect," *Morbidity and Mortality Weekly Report*, September 20, 2002

$2 million over a lifetime.[113] The short term economic costs for perinatal cocaine exposure are estimated at $33 million to $650 million (in 1989 dollars) per year. The cost estimates vary widely because accurate estimates of the number of infants born exposed to this drug each year are not available.[114]

Alcohol, Tobacco, and Other Drug Use by Medicaid Recipients in Illinois: Prevalence and Treatment Need Report (1999) estimates that 12 percent of Medicaid participants are in need of treatment for alcohol or other drugs, and 35 percent of females are smokers. [115] The negative impact can include intrauterine growth retardation, prematurity and low birth weight, central nervous system damage, and congenital physical malformations, among others.[116]

Alcohol abuse during pregnancy is the leading preventable cause of mental retardation. The costs associated with caring for individuals with FAS or fetal alcohol exposure (FAE) caused by prenatal exposure to consumed alcohol or drugs is staggering, totaling nearly $1.4 million, per person, over a lifetime.[117] Mothers abusing drugs during pregnancy account for most of the $3 billion that Medicaid spent in 1994 on inpatient hospital care for illness and injury due to substance abuse.[118] The cost for one FAS child is estimated to be $2 million over a lifetime.[119] An addicted woman is most approachable to intervention when she is pregnant.[120] Thus, Illinois instituted policies and aggressive efforts during the prenatal period, which have resulted in thousands of successful birth and treatment outcomes, according to the Illinois Department of Human Services, Division of Alcohol and Substance Abuse.

The Center for Addiction and Substance Abuse at Columbia University conducted a study on *The Cost of Substance Abuse to America's Health Care System.* The study shows that when substance abuse is present, the costs of varied health care issues are increased (anywhere from 6 to 20 times more costly) from medical complications. The report states, "Babies born with complications due to the mother's abuse of substances during pregnancy are the major contributor to these costs and account for 32 percent of all Medicaid (inpatient) days." The report includes a breakdown of Medicaid days attributable to substance abuse as a major risk factor of premature rupture of membrane, spontaneous

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[113]Illinois Department of Human Services, Division of Alcoholism and Substance Abuse, "Facts About FAS/FAE – The Preventable Birth Defect: Did you know that?" http://www.taconic.net/seminars/fas-a.html

[114] Phibbs, C., "The Economic Implications of Prenatal Substance Exposure," *The Future of Children*, Spring, 1993

[115] Cho, Y.; Johnson, T.; Farrar, I., "Alcohol, Tobacco, and Other Drug Use by Medicaid Recipients in Illinois: Prevalence and Treatment Need Report (1999)," Illinois Department of Human Services, Office of Alcoholism and Substance Abuse (OASA), April 2000

[116] National Organization on Fetal Alcohol Syndrome, www.nofas.org

[117] Kalotra, C., "Estimated Cost Related to the Birth of a Drug and/or Alcohol Exposed Baby," Office of Justice Programs Drug Court Clearinghouse and Technical Assistance Project at American University, March 2002

[118] The National Center on Addiction and Substance Abuse at Columbia University, J.A.C., Jr. "It's Drugs, Alcohol and Tobacco, Stupid!" 1996

[119] Illinois Department of Human Services, Division of Alcoholism and Substance Abuse, "Facts About FAS/FAE: The Preventable Birth Defect: Did you know that?" http://www.taconic.net/seminars/fas-a.html

[120] United States Department of Health and Human Services, Public Health Service, Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Treatment, "Pregnant Substance-Using Women, Treatment Improvement Protocol (TIP) Series 2," Rockville, MD, 1993

abortion, placenta previa, preterm delivery, congenital defects of newborns, low birth weight.[121] The short-term economic costs for perinatal cocaine exposure are estimated at $33 million (in 1989 dollars) per year. The cost estimates for cocaine vary widely because accurate estimates of the number of infants born exposed to this drug each year are not available.[122]

The strategies employed to engage addicted women into treatment must take into consideration the reality of their lives, such as living in stressful environments that may include physical and sexual abuse, single parenthood, poverty, homelessness, living in high crime areas, drug infected housing and limited or negative social support. Specialized treatment approaches during the perinatal periods help women successfully parent their children, abstain from use of alcohol and other drugs and address complex social issues. Pregnancy is an important time in the lives of most women. It also provides an opportunity to educate women about the harmful effects of drugs and may provide the needed stimulus to get women off drugs. Sophisticated cost-benefit economic analyses are not needed to show that providing basic services for pregnant women, such as education, basic drug treatment, and long-term follow up, are urgently needed to prevent the birth of low birth weight infants and subsequent long-term disabilities caused by prenatal drug exposure.[123]

The issues which impact birth and treatment outcomes and are currently part of the substance abuse treatment in Illinois include collaborative case management and case coordination activities noted throughout this report, such as prenatal care, transportation, child care, physical and sexual abuse treatment, parenting, WIC, smoking cessation, nutrition and housing.

Studies show barriers to accessing treatment, even for women trying desperately to abstain from alcohol and other drugs, include the fear of punishment or loss of their children if they seek treatment, as well as lack of transportation and child care.

Successful birth outcomes, resulting from the IDHS/DASA treatment system, represent savings in billions of dollars.[124] Through collaboration, those strategies can be built upon, systems strengthened and birth outcomes further improved. Maternal and child health (MCH) teams were created over a decade ago. Some are functioning in some communities, but do not exist statewide.

Among Medicaid eligible women, approximately 12 percent are in need of substance abuse treatment. There is a need to establish benchmarks and move toward improving the number of women being screened, referred to treatment, admitted, and completing treatment by increasing available treatment, outreach and vital services to find and engage addicted

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[121] The National Center on Addiction and Substance Abuse at Columbia University, "The Cost of Substance Abuse to America's Health Care System: Report 1 Medicaid Costs", July 1993

[122] Phibbs, C., "The Economic Implications of Prenatal Substance Exposure," *The Future of Children*, Spring 1993

[123] Phibbs, C., "The Economic Implications of Prenatal Substance Exposure," *The Future of Children*, Spring 1993

[124] Kalotra, C., "Estimated Cost Related to the Birth of a Drug and/or Alcohol Exposed Baby," Office of Justice Programs Drug Court Clearinghouse and Technical Assistance Project at American University, March 2002

women into treatment. Additional federal grants would allow Illinois to increase services and implement the recommendations identified below.

Recommendations

- Identify existing resources needed to establish in each community a MCH team with a substance abuse treatment specialist. These teams could help facilitate the following:
  - Formalize linkages between the MCH team and substance abuse treatment programs
  - Assign a liaison between the Perinatal Task Force and the Women's Committee of the DASA Advisory Council with both groups addressing perinatal addiction issues
  - Strengthen linkages to all the services needed for addicted women statewide
  - Identify primary care providers who will accept referrals for these high-risk women
  - Study effective strategies and policies regarding reducing the chronic relapsing condition of drug addiction, which has a negative impact on breastfeeding, maternal functioning and parenting
- Provide training for physicians and other health care professionals on the signs, symptoms and screening for addictions. In addition to the training on the signs, symptoms and screening for addictions, the curriculum should include:
  - How to effectively communicate, intervene and refer women who need treatment
  - How to include substance abuse treatment specialists in the health care delivery team for high-risk pregnancies due to addictions
  - How to implement effective strategies for the 'team' to re-engage addicted pregnant and post partum women who leave treatment against medical advice
  - How to encourage health care professionals to provide the substance abuse treatment agency with birth outcomes, which they are required to report
- Increase the number of outreach workers and treatment slots for pregnant women, especially in high prevalence areas (The DASA system successfully meets the waiting list via formal and informal collaboration, but not necessarily in the ideal level of care and with the ideal wrap around services.)
- Convene a subcommittee on data and evaluation to recommend strategies to improve capturing birth outcomes of addicted women in the DASA system
  - Evaluate the cost benefit of treatment in terms of reduction in poor birth outcomes
  - Evaluate women in treatment in terms of birth outcomes and the impact of substance abuse treatment on infant costs
  - Review data from the Targeted Intensive Prenatal Case Management and Healthy Start initiatives to determine the number of screenings that are referred for treatment, the number that result in a substance abuse related diagnosis, the number that enter treatment, the number who successfully complete treatment and the recidivism rate

    Use this data to benchmark, assess and provide technical assistance and alcohol, tobacco and other drugs (ATOD) training to improve engagement and retention of addicted women
- Include a substance abuse specialist in the FCM, Targeted Intensive Prenatal Case Management and Healthy Start programs across the state for consultation on perinatal addiction, on an "as needed" basis
- Fund a smoking cessation specialist position in DASA to review and recommend smoking cessation programs and provide smoking cessation training
- Establish a formal network for consultation as needed by primary care providers (e.g., obstetricians) with an addiction specialist

Coverage by Other States: Substance abuse treatment is covered by Illinois, and 23 other states throughout the United States (Alabama, Alaska, Arizona, Colorado, Connecticut, Kentucky, Maryland, Massachusetts, Missouri, Nevada, New Hampshire, New York, North Carolina, North Dakota, Ohio, Oregon, Pennsylvania, Rhode Island, South Carolina, Tennessee, Vermont, Virginia and Wisconsin). Thirty-seven states cover psychosocial counseling, as a separate service. Forty-two states cover case management.[125] Coverage by other states specifically for outreach and specialists related to substance abuse are unknown.

IDPA Response:

IDPA supports the efforts of IDHS/DASA to implement the above recommendations. IDHS would undoubtedly need to receive specific appropriation to implement each of the above recommendations, or federal grant dollars specifically targeted to a respective strategy. For instance, IDHS estimates that adding five outreach workers at $50,000 each would cost $250,000. Funding a smoking cessation specialist position in DASA would total approximately $100,000.

[125] The Henry J. Kaiser Family Foundation, "Medicaid Coverage of Perinatal Services: Results of a National Survey"

HIV Counseling and Treatment

Risk assessment is an important part of prenatal care, and counseling to reduce risk is a recommended component of prenatal care.[126] While HIV infection is increasing faster in women, especially young women, than in the overall population, the percentage of HIV-positive women who give birth to HIV-positive infants has declined "dramatically" in developed nations, due largely to the use of antiretroviral drugs. However, a lack of prenatal care increases a woman's likelihood that she will transmit the virus to her infant.[127] In the United States, HIV infection is the third-leading cause of death among all women aged 25-44.[128]

In an effort to reduce mother-to-child transmission of HIV, a bill was passed last year by the General Assembly that requires health care professionals to provide pregnant women with HIV counseling and voluntary testing. Public Act 93-0566 (Perinatal HIV Prevention Act) became effective on August 20, 2003. This Act requires that every health care professional who provides health care services to a pregnant woman or a professional or facility providing labor or delivery services, shall provide the woman with HIV counseling and offer HIV testing, unless she has already received an HIV test during pregnancy. The Act requires that any pregnant woman who agrees to be tested for HIV sign an informed consent form prior to taking the test ("opt in"). Additionally, the law requires that every health care professional or facility that cares for a newborn shall, upon delivery or within 48 hours after the infant's birth, provide counseling to the parent or guardian of the infant, and automatically perform HIV testing when the HIV status of the infant's mother is unknown, if the parent or guardian does not refuse ("opt out").

The Illinois Department of Public Health endorses the routine provision of HIV counseling to all pregnant women and voluntary HIV testing in conjunction with counseling about the test and interventions available to reduce the risk of transmission of infection. This recommendation is consistent with the guidelines of the United States Public Health Service, the Centers for Disease Control and Prevention, the Institute of Medicine and the American College of Obstetrics and Gynecology. Current federally approved treatment guidelines, including the *U.S. Public Health Service Task Force Recommendations for the Use of Antiretroviral Drugs in Pregnant Women Infected with HIV-1 for Maternal Health and for Reducing Perinatal HIV-1 Transmission*, updated February 25, 2000, are available at www.hivatis.org.

The past ten years have witnessed a dramatic improvement in the effectiveness of HIV care and reduction of "vertical transmission" of HIV. From 1993 through 1996, the proportion of HIV-infected women with diagnosis before delivery increased from 70 percent to 80 percent and those with a diagnosis who received zidovudine (ZDV) prenatally increased

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[126] American College of Obstetricians and Gynecologists, *Standards for Obstetric and Gynecologic Services*, Sixth Edition, 1985

[127] United States Department of Health and Human Services, Centers for Disease Control and Prevention, "Prenatal HIV Testing and Antiretroviral Prophylaxis at an Urban Hospital – Atlanta, Georgia, 1997-2000," *Morbidity and Mortality Weekly Report, Rueters Health Reports*, January 2004

[128] United States Department of Health and Human Services, Centers for Disease Control and Prevention, "Update: mortality attributable to HIV infection among persons aged 24-44 years – United States, 1994," *Morbidity and Mortality Weekly Report*, 45, 1996

from 27 percent to 83 percent and intrapartum, 6 percent to 75 percent.[129] The benefit of these advances should be available to all. All clinical care providers need to be trained on the benefits of these practices and future advances to the care of all patients. Medical advances have shown that it is possible to prevent approximately 98 percent of all perinatal HIV infections.[130] Practitioners have found that, when appropriately counseled, up to 95 percent of pregnant women will consent to HIV testing during prenatal care.[131] If test results are positive, appropriate medical care can provide women with education about the ways to both address their own health care needs and prevent transmission to their unborn child. Although the mother may allow her infant to be tested, she does not have to be tested. According to the Centers for Disease Control and Prevention's perinatal HIV research, Dr. Mary Glenn Fowler said, "We know that if we get women into prenatal care, get them properly tested and start them early on antiretrovirals, we can reduce the vertical HIV transmission rate to about two percent."[132] IDPH data shows that the number of HIV exposed infants from 1999 through February 2003 totaled 326, although this number may be under-reported.[133]

Some health professionals believe that all pregnant mothers should be routinely tested for HIV, and if positive, receive treatments that significantly reduce the passage of the virus to their children during pregnancy, delivery or afterward (through breast feeding). However, many professionals involved in public health believe that mandated testing will drive women out of the health care system and will result in less prenatal care. Last year's legislation balances these views by requiring counseling for HIV testing without instituting mandatory testing.

Although testing rates have improved, many health professionals do not provide counseling, either because they do not know how or believe that it takes too much time. The Midwest AIDS Training and Education Center (MATEC) has a contract with the Illinois Department of Public Health to train physicians, nurses and other health professionals to counsel women. Adequate HIV counseling takes between 15-30 minutes and physicians may be reluctant to add the extra time to an office visit.

According to IDPH, approximately eighty percent of Illinois' HIV exposed babies are born in Chicago while the remaining 20 percent are scattered in numerous areas around the state.

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[129] United States Department of Health and Human Services, Centers for Disease Control and Prevention, "Successful Implementation of Perinatal HIV Prevention Guidelines," *Morbidity and Mortality Weekly Report*, 50(RR06),17-28, May 2001 http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5006a2.htm

[130] United States Department of Health and Human Services, Centers for Disease Control and Prevention, "Revised Recommendations for HIV Screening of Pregnant Women," *Morbidity and Mortality Weekly Report*, November 9, 2001

[131] Britton, Carolyn Barley, MD, "An Argument for Universal HIV Counseling and Voluntary Testing of Women," *Journal of the American Medical Women's Association*, 50:3&4:86, May/June 1995

[132] United States Department of Health and Human Services, Center for Disease Control, Morbidity and Mortality Weekly Report, "Prenatal HIV Testing and Antiretroviral Prophylaxis at an Urban Hospital – Atlanta, Georgia, 1997-2000, *Rueters Health Reports*, 1/02/04

[133] Illinois Department of Public Health, HIV/AIDS, Surveillance Unit, "HIV Exposed Infants by County and Hospital of Birth," HIV exposed cases reported through 2/28/03, 2004

Recommendations

- Implement strategies (e.g., outreach and case finding of pregnant women) to ensure that pregnant women receive prenatal care and Family Case Management services
- Refer pregnant women who are HIV-positive to Targeted Intensive Prenatal Case Management
- Cover HIV counseling and testing under Illinois Healthy Women (family planning waiver)
- 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
- Provide separate IDPA reimbursement for HIV counseling as a means to help reduce the transmission of HIV infection
- 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
- Educate providers on reimbursement for perinatal rapid testing, allowing payment for this laboratory procedure and office visit, which includes counseling

Other States Coverage: HIV testing is covered by Illinois and counseling is a component part of the prenatal care visit. Additionally, Illinois provides separate reimbursement for risk assessment during pregnancy. Medical risk assessment is covered by 44 states; social risk assessment is covered by 38 states. Health education is covered by 21 states. [134]
Minnesota covers counseling of pregnant women at the following reimbursement rates:

- Cost of pretest counseling of pregnant women: $22
- Cost of post-test counseling of pregnant women who are HIV negative: $48.20
- Cost of post-test counseling of pregnant women who are HIV positive: $77.34

Minnesota estimates that the average weighted lifetime costs of care for pediatric HIV/AIDS patients is approximately $100,000 and that providing universal care is necessary and cost effective. Additionally, a monetary benefit cannot be placed on prolonged life and improved quality of maternal life by prompt HIV identification.[135]

IDPA Response:

IDPA provides reimbursement for HIV screening and HIV/AIDS treatment. IDPA provides separate reimbursement for risk assessment provided to pregnant women. The risk assessment and each office visit should include counseling and anticipatory guidance/education. To add a separate risk assessment reimbursement for HIV counseling would cost $14.60 per pregnant woman (the current risk assessment reimbursement rate) for an estimated total of $950,000 per year. Cost savings are anticipated, as demonstrated in the study cited above, as well as quality of life, with the implementation of quality care

[134] The Henry J. Kaiser Family Foundation, "Medicaid Coverage of Perinatal Services: Results of a National Survey"
[135] Minnesota Department of Health, "Human Immunodeficiency Virus (HIV) Testing for Pregnant Women, June 18, 1997," www.health.state.mn.us/htac/hiv.htm

standards that includes universal counseling and optional testing. IDPA will be collaborating with IDPH and other experts in the area of HIV counseling, testing and treatment to explore HIV rapid testing provider education and clarification of coverage/reimbursement under Medicaid.

IDPA has applied to the Centers for Medicare & Medicaid Services (CMS) to add HIV testing to the package of services available under Illinois Healthy Women.

Nurse Midwifery in Illinois

There are an estimated 320 Certified Nurse Midwives (CNM) in Illinois who provide services to an estimated seven to eight percent of the births (higher in Chicago and in underserved populations). Thirty-eight of the states reimburse CNM on a fee-for-service basis at the 100 percent of the physician reimbursement rate. Other states, as with Illinois, pay a percentage of the physician reimbursement rate.[136] While IDPA provides reimbursement for CNM, that reimbursement is currently 70 percent of the state's established maximum reimbursement rate for physicians. Because of the lower reimbursement rate, it is believed that most CNMs bill under their collaborating physicians and therefore, their care and outcomes become invisible within Illinois.

According to the task force experts, there is evidence to support that CNMs have excellent birth outcomes. CNMs provide a safe and viable alternative to maternity care in the US, particularly for low to moderate risk women. CNMs may utilize creative models of care that focus on health promotion (e.g., Centering Pregnancy, a group model of prenatal care that combines education, support and risk assessment into a comprehensive model of care, which focuses upon health promotion, self-care skills, social support and empowerment).

Findings from one study examining the effect of a comprehensive prenatal and delivery program administered by nurse midwives on the risk of low birth weight births among indigent women concluded that nurse midwives may promote a reduction in adverse pregnancy outcomes among indigent mothers.[137] Additionally, the Centers for Disease Control and Prevention, National Center for Health Statistics conducted a study to determine if there were significant differences in birth outcomes and survival for infants delivered by certified nurse midwives compared with those delivered by physicians and whether, after controlling for socio-demographic and medical risk factors, the differences remained. "After controlling for social and medical risk factors, the risk of experiencing an infant death was 19 percent lower for certified nurse midwife attended than for physician attended births, the risk of neonatal mortality was 33 percent lower, and the risk of delivering a low birth weight infant 31 percent lower. Mean birth weight was 37 grams heavier for the certified nurse midwife attended than for the physician attended births." The researchers concluded that their study, as well as national data support the findings that certified nurse midwives have "excellent birth outcomes and provide a safe and viable alternative to maternity care in the United States, particularly for low to moderate risk women.[138]

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[136] The Kaiser Commission on Medicaid and the Uninsured, "Medicaid Benefits: Nurse Midwife Services," www.kff.org/medicaidbenefits/nursemidwife.cfm

[137] Visintainer, P.F.; Uman, J.; Horgan, K.; Ibald, A.; Verma, U.; Tejani, N., "Reduced risk of low weight births among indigent women receiving care from nurse-midwives, " *Journal of Epidemiology and Community Health,* 54-233-238 March 2000

[138] United States Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics, MacDorman, MF, Singh, GK, "Midwifery care, social and medical risk factors, and birth outcomes in the USA," *Journal of Epidemiology and Community Health,* Vol 52, 310-317, 1998

Recommendations

Task force experts recommended:

- Increase the use of CNMs as a cost-effective group of perinatal providers
- Improve reimbursement rates with reimbursement based upon the service provided, not whether it was provided by the physician or the CNM
- Allow CNMs to have MCH (enhanced rate) status
- Encourage the use of innovative programs that can improve outcomes

IDPA Response

IDPA recognizes the value of CNMs in the delivery of perinatal health care. Opportunities to creatively and more effectively utilize CNMs will require further collaborative and planning efforts with the task force members. Allowing CNMs to receive 100 percent of the physician's rate for both prenatal visits and deliveries would cost an additional $55,000 per year.

Lactation Counseling

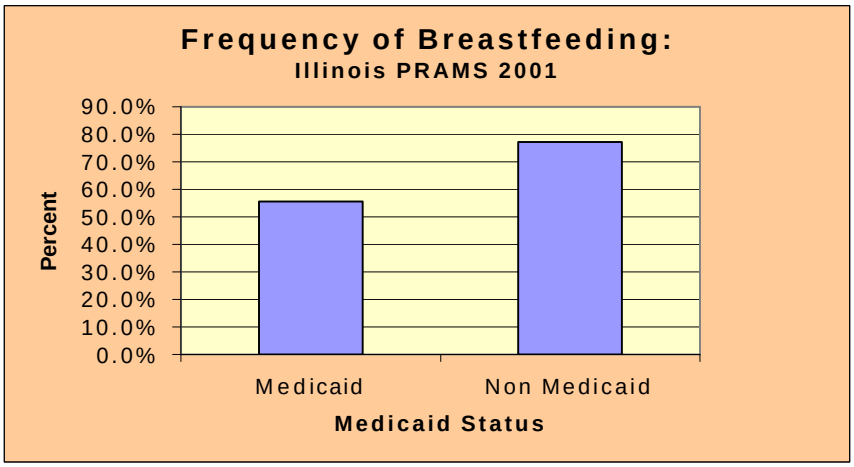
The Healthy People 2010 Objective (16-19a) regarding breastfeeding has as its goal to increase to at least 75 percent the proportion of mothers who breastfeed their babies in the early postpartum period and to at least 50 percent the proportion who continue breastfeeding until the infant reaches five to six months of age. The advantages of breastfeeding are indisputable and include nutritional immunological and psychological benefits to both infant and mother, in addition to economic benefits. The mother who plans to or is breastfeeding may be more conscience of her own nutrition during the perinatal period, and thus select a healthier diet, which undoubtedly will positively impact on a healthy birth. Nutritional and lactation counseling and food supplements are an integral part of the WIC program. The WIC program works closely with the Family Case Management Program to assure that families are receiving services for health care and other identified needs. Medicaid-eligible pregnant women and their infants are income eligible for the WIC program. While WIC is not an entitlement, infants and pregnant women are a priority population for WIC enrollment and there is currently no waiting list for WIC enrollment for that population.

The Illinois Department of Human Services has as one of its performance measures, "the percentage of mothers who breastfeed their infants at hospital discharge." Illinois surpassed its goal for increasing the proportion of mothers who were breastfeeding at hospital discharge. The state's actual performance in FY 2001 was 65.2 percent and the objective was 64.0 percent. According to the Chicago Department of Public Health Breastfeeding Initiation Report for 2002, 46 percent of infants in the Chicago WIC program were breastfed. Of these, 25 percent breastfed for six months and 20 percent were breastfed for 12 months.

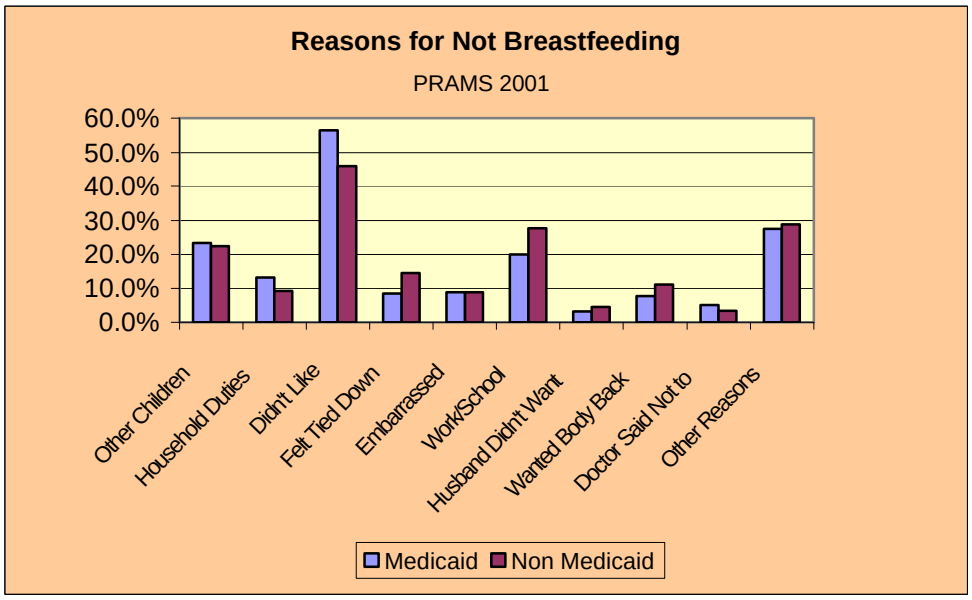
The rate of breastfeeding at hospital discharge increased among WIC participants from 26 percent in 1992 to 51.6 percent in March 2003. Further, the proportion of WIC participants who continue breastfeeding for six months has increased from 11.4 percent in 1992 to 21.8 percent in March 2003. PRAMS data indicates that 55 percent of Medicaid-eligible women initiate breastfeeding as contrasted to 76 percent of their non-Medicaid counterparts.

In order to better achieve initiation and continuation of breastfeeding among Medicaid-eligible women, we must first understand the reasons women give for either not initiating, or continuing with breastfeeding.

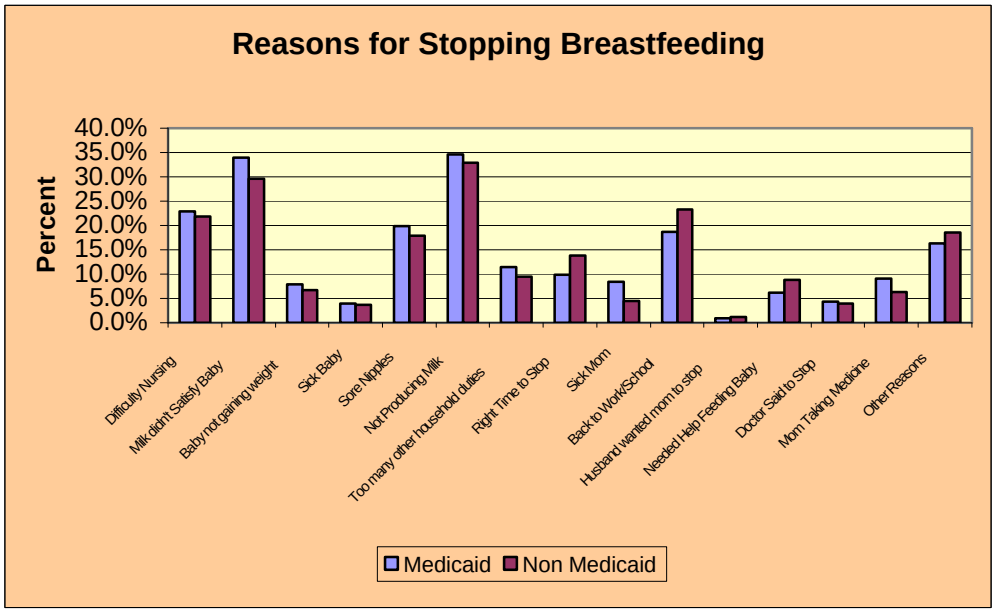
Medicaid-eligible women are less likely to initiate breastfeeding:



Reasons given for not breastfeeding are not significantly different in the Medicaid population, as illustrated in the table below (PRAMS, 2001).



Similarly, reasons given for stopping breastfeeding are similar in the Medicaid and non-Medicaid population.



Recommendations

The task force identified the mother's preparation for breastfeeding, initiation and continuation of breastfeeding to be a major indicator of healthy births and important parenting bonding. While the rates of breastfeeding initiation of low-income WIC/Medicaid participants have shown steady improvement for more than 10 years, many women discontinue breastfeeding before their infants reach six months of age. The addition of lactation counseling for breastfeeding women as a perinatal support service may improve breastfeeding continuation. Several strategies have been suggested for consideration:

- Work in coordination with the Illinois Departments of Human Services and Public Health to use the State and Regional Task Forces as a model, develop an awareness and outreach campaign to more effectively utilize services across agencies, including making appropriate educational resources available at local offices
- Partner with the Illinois Department of Human Services to provide updated breastfeeding information to physicians who serve Medicaid participants
- Consider Medicaid reimbursement for lactation counseling or payment for prenatal and postpartum education classes at local hospitals, with the expectation that "peer support," a breastfeeding hotline for telephonic lactation counseling when needed will result
- Consider reimbursement for a home visit for breastfeeding dyads within the first 48 hours post hospital discharge (This recommendation could have the additional benefit of assessing mother-infant bonding, EPSDT screening of the infant and anticipatory guidance.)

Coverage by Other States: Breast-feeding education is covered by twenty-two states (Alabama, Arizona, Arkansas, California, Delaware, Idaho, Kentucky, Louisiana, Michigan, Minnesota, New Hampshire, New Jersey, New York, North Dakota, Oklahoma, Oregon, Pennsylvania, Rhode Island, Texas, Vermont, Virginia and West Virginia). Breast-feeding equipment rental (breast pumps) is covered by only nine states (California, Idaho, Minnesota, New Hampshire, New York, Oregon, Pennsylvania, Rhode Island). Seven states (Georgia, Illinois, Indiana, Kansas, Missouri, Ohio, and South Carolina) reported that breast-feeding education is covered as part of an office visit or postpartum visit, not as a separate service. California is the only state in which Medicaid covers the purchase of human milk.[139]

IDPA Response

IDPA is encouraged by the dramatic increase in the percent of WIC Medicaid participants who initiate breastfeeding and continue breastfeeding for six months. Further progress is needed in this area. IDPA accepts the recommendation to work in coordination of other state agencies to help develop an awareness and outreach campaign. IDPA will begin efforts to develop and centrally generate a notice to Medicaid-eligible women who are identified as being pregnant about the importance of early and continuous prenatal care and the availability of Family Case Management and WIC. Additionally, IDPA will prepare a Provider Notice on WIC, Family Case Management and breastfeeding. Given that lactation counseling is a core mission of WIC, IDPA will continue to look for new ways to ensure that its clients are enrolled in WIC.

The suggestion that IDPA provide reimbursement for a public health visit after delivery for breastfeeding support, assessment of mother-infant bonding, assessment of perinatal depression and parenting skills, as well as EPSDT well child screening services needs further study. This visit is estimated to cost an additional $2.5 million, if all new mothers could be located for the post delivery home visit (at $30.00 for the visit).

[139] The Henry J. Kaiser Family Foundation, "Medicaid Coverage of Perinatal Services: Results of a National Survey,"

Labor Support During the Perinatal Period

The task force experts report that continuous labor support (defined as continuous one-to-one intrapartum support), can occur either through:

- Doula – trained or experienced companion who offers non-medical, emotional, physical and informational support and encouragement to a woman and her family before, during and after birth, or
- Monitrice – provides basic medical care in addition to support

Common elements of Labor Support include: emotional support; information about the labor progress and advice regarding coping and what to do for comfort; and advocacy (helping the woman express her desires to others). Evidence suggests that women who have continuous, one-to-one support during labor (either by a familiar - family member or friend, or unfamiliar person) were less likely to:

- have regional analgesia/anesthesia;
- have an operative vaginal birth;
- have a cesarean birth, or
- report dissatisfaction with the birth experience.

The effects of support appear stronger when support begins before active labor. There are other benefits related to breast-feeding:

- One study of postpartum doula support found an increase in duration of breast-feeding among low-income primiparous women.
- There is some belief that doulas may increase breastfeeding initiation and continuation rates.

Reported findings conclude no association between labor support and use of oxytocin; low 5-minute Apgar scores, admission to NICU, postpartum reports of severe labor pain, decrease in labor length, perineal trauma, urinary and fecal incontinence.

Doulas have been demonstrated to have a positive impact on breastfeeding and on improving mother-infant interaction.

Coverage by Other States: According to the Kaiser report, only seven states (California, Ohio, Oregon, Pennsylvania, Rhode Island, South Dakota, and Washington) cover support services during childbirth, such as doula or labor coach.

IDPA Response

While there may be potential for labor support beginning in the antenatal period to make a difference in some areas as identified above, further study and cost benefit analyses would be required before IDPA could consider reimbursement for this enhanced perinatal strategy. Coverage of this care is outside the limits of most private insurance and IDPA would prioritize other areas prior to considering this service. Without further evidence in terms of outcomes and cost effectiveness to support Medicaid reimbursement for doula or other type of labor support services, it is recommended that this area be further studied. IDPA will work with the task force members to further explore research and the data available to support its effectiveness in healthy birth outcomes.

Case Management and Home Visiting

It has been documented repeatedly that the single most important factor contributing to infant death and disability is low birth weight.[140, 141] The incidence of low birth weight can be reduced through the use of early, continuous, and comprehensive prenatal care.[142] Analysis of case management as a tool to improve birth outcomes has been examined in many settings with mixed results. A systematic review of support programs for pregnant women at increased risk of low birth weight babies concluded that the programs examined were ineffective.[143] Other studies have reported case management as effective in reducing health care costs through improving outcomes: reducing low birth weight and infant mortality; improving access to prenatal care; improving use of well child care, increasing immunization levels, increasing participation in family planning and decreasing emergency room visits for young children. One such study was by conducted on the FCM in DuPage County, Illinois. Birth outcomes for 1996 clients of the program who had a previous low birth weight infant and a subsequent birth using the prenatal services of the FCM program were analyzed. Analysis of the data showed improvements in maternal weight gain, infant birth weight and gestational age, prenatal care access, public health nurse contacts, and physician visits. A positive association was shown between the early entry and increased use of prenatal services to improved birth outcomes in the subsequent pregnancy.[144] This evaluation supported another research study wherein the researchers concluded a strong association between early public health nursing contact and increased physician prenatal services.[145]

North Carolina evaluated the impact of their Maternity Care Coordination, established in late 1987. The findings revealed that among women on Medicaid not receiving maternity care coordination services, the low birth weight was 21 percent higher, the very low birth weight rate was 62 percent higher, and the infant mortality rate was 23 percent higher than among women on Medicaid who did receive the services.[146] From data derived from the birth certificates, researchers concluded that the better outcomes were not due to favorable status on measured risk factors as women on Medicaid who received the maternity care coordination were at higher risk for several maternal characteristics often associated with low birth weight and infant death.[147]

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[140] Lee, K.; Paneth, N.; Gartner, L.M.; Peralman, M., "The very low birthweight rate: principal predictor of neonatal mortality in industrialized populations," *J. Pediatr*, 97-759-764, 1980

[141] McCormich, M.C., "The contribution of low birthweight to infant mortality and childhood morbidity," *New England Journal of Medicine*, 312:82-90, 1985

[142] Institute of Medicine, "Preventing Low Birthweight," 1985

[143] Hodnett, ED, Fredericks, S., "Support during pregnancy at increased risk of low birthweight babies," Cochrane Database Collaboration, Vol (3), 2003

[144] Prozialeck, L; Pesole, L., "Performing a Program Evaluation in a Family Case Management Program: Determining Outcomes for Low Birthweight Deliveries," *Public Health Nursing* Vol. 17, No.3, pp. 195-201, May/June 2000

[145] Baldwin, K.A.; Chen, S.C., "Use of public health nursing services: Relationship to adequacy of prenatal care and infant outcome," *Public Health Nursing*: 13(a), 13-20, 1996

[146] Buescher, P.; Roth, M.; Williams, D.; Goforth, C., "An Evaluation of the Impact of Maternity Care Coordination on Medicaid Birth Outcomes in North Carolina," *American Journal of Public Health*, 81:1625-1629, 1991

[147] Buescher, P.; Roth, M.; Williams, D.; Goforth, C., "An Evaluation of the Impact of Maternity Care Coordination on Medicaid Birth Outcomes in North Carolina," *American Journal of Public Health*, 81:1625-1629, 1991

In Washington, the statewide Medicaid-sponsored support service and case management program was associated with a decrease in the low birth weight rate of medically high-risk women. The percentage of expected prenatal visits completed increased significantly, from 84 percent to 87 percent and the low birth weight rate decreased (7.1 percent to 6.4 percent). In this study, a similar state was used as the control.[148]

One study (California) examined the contribution of the adequacy of nutrition, psychosocial and health education support service delivery in explaining variation in birth outcomes among Medicaid women and concluded that providing at least one nutrition, psychosocial and health education service session each trimester of care contributes significantly to explaining better birth outcomes.[149] A study that was conducted on New York State's Prenatal Care Assistance Program (PCAP), a comprehensive prenatal care initiative that includes risk assessment, nutritional services, health education, as well as prenatal diagnostic and treatment services, found that there was an association with 20 percent increase in the likelihood of enrollment in WIC, an increase in mean birth weight of 35 gm. and 1.3 percentage point drop in the rate of low birth weight. Several strategies were utilized in this study to minimize potential bias from unobserved differences between participants and non-participants. The researcher stratified the analysis by year and Medicaid category, by the timing of the first prenatal care visit using a cross-sectional regression.[150]

In a recently published study by Keeton, et al., the effects of the Illinois Family Case Management program were studied in relation to birth outcomes. Results showed that the rates of very low and low birth weight were significantly lower among women on Medicaid who participated in the Family Case Management program than among those who did not participate in the program. The goal of the Family Case Management program is to assist women in navigating the services available to them. The study showed that a higher percentage of women who participated in Family Case Management also participated in WIC (77.8% vs. 53.9%). Low birth weight and very low birth weight are serious problems nationally as well as locally. Evidence has shown that routine access to prenatal care may not be enough to address all the factors that lead to poor birth outcomes. In addition to traditional prenatal care, low-income women must have their basic housing, nutrition, healthcare, and transportation needs met. The Family Case Management program may assist low-income women in meeting these needs. This study suggests the Illinois Family Case Management program to be effective in improving birth outcomes among low-income women through enhanced prenatal care services.[151]

The Illinois Department of Human Services performs ongoing evaluation of its Family Case Management and WIC program. There is impressive data to support that the

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[148] Baldwin, L.; Larson, E.; Connell, F.; Norlund, D.; Cain, K.; Cawthon, M.; Byrns, P.; Rosenblatt, R. "The Effect of Expanding Medicaid Prenatal Services on Birth Outcomes," *American Journal of Public Health*, 1623-1629, April 30, 1998

[149] Homan, R.; Korenbrot, C., "Explaining Variation in Birth Outcomes of Medicaid-Eligible Women with Variation in Adequacy of Prenatal Support Services," *Medical Care*, Vol. 36, No. 2, pp. 190-201, 1998

[150] Joyce, Theodore, "Impact of augmented prenatal care on birth outcomes of Medicaid recipients in New York City," *Journal of Home Economics*, 18; 31-67, 1999

[151] Keeton, K.; Saunders, S.; Koltun, D., "The Effect of the Family Case Management Program on 1996 Birth Outcomes in Illinois", *Journal of Women's Health*, Vol. 13, No. 2, 2004

intervention has been positive in promoting use of essential WIC services and improving birth outcomes among the Medicaid population. (See Current State Administered Programs) Women who receive case management or WIC are more likely to receive prenatal care. However, there are high-risk pregnant women and women who are not reached that require more intensive services.

The Illinois Department of Human Services currently provides $44.6 million for the Family Case Management Program. In order to serve all Medicaid eligible pregnant women in the state and to increase by 10 percent the per-family-per month amount that is used as the basis for reconciling expenditures, an estimated $9 million additional would be needed. There are eleven projects in ten counties that provide intensive prenatal care case management, with general revenue funds totaling $2.5 million per year. For the Targeted Intensive high-risk case management program to expand to twenty additional sites, an additional $5 million from general revenue funds would be required.

Enhanced outreach (especially in Chicago) is needed to identify and engage the "hard to reach" Medicaid-eligible women who are not accessing prenatal health care services and are not part of the program. Some studies show the effectiveness of home-based interventions on infants and mothers when performed by professionals (social workers or nurses).

Given the differences in the effectiveness of those interventions, it is particularly important to accurately measure baseline data, adjust for any possible biases and closely evaluate these programs.

Recommendations

It was recommended that the Targeted, Intensive Case Management initiative be expanded to include twenty additional sites. Additionally, women who are high risk (e.g., delivery of a premature or LWB infant) should be tracked and followed after delivery (e.g., infant being case managed). Addition of new targeted high-risk sites may be done with reference to areas without current service that have a concentration of "non-normal" births. There is also the recommendation to pilot more intense 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 two years of life. There is the recommendation to expand outreach efforts, especially in Chicago, to locate the "hard to reach" pregnant women and get them into care. It was also recommended that the WIC/FCM programs provide additional focus on weight gain during pregnancy as approximately 30 percent of WIC participants do not gain adequate weight during pregnancy and maternal weight gain has been associated with improved birth outcomes.[152] Additionally, it was recommended that increased effort be given to assure that women receive their postpartum visit, which would help to assure screening for depression. There is a need to follow existing best practice guidelines with regard to providing case management, including the use of health professionals, particularly in the intensive case management approach.

Coverage by Other States: According to the Kaiser report, 41 states and Washington, D.C. cover prenatal care coordination/case management. More than 2/3 of the states cover

[152] Ehrenberg, H.; Dierker, L.; Milluzzi, C.; Mercer, B. "Low maternal weight, failure to thrive in pregnancy and adverse pregnancy outcomes," *American Journal of OB/GYN*, 189: 1726-30, 2003

prenatal and postpartum home visiting. However, several states restrict the circumstances under which home visits are covered. Colorado, Iowa and Tennessee cover prenatal and postpartum home visits only for high risk or medically necessary cases. Florida covers visits only for enrollees who are home bound for medical reasons. Arkansas and California cover postpartum home visiting only in cases of high risk, early discharge or special medical reasons. Home visiting services are carved out in Maryland; the state pays local health departments to provide this service. In Massachusetts the Medicaid program does not pay for these services, although some managed care plans provide them to high-risk enrollees**.**

IDPA Response

IDPA will also work with IDHS to assure federal financial participation to obtain 50 percent federal match for an expansion as well as work with the task force members to identify other models for consideration for piloting, especially in Chicago.

IDPA supports increased appropriation to IDHS for both the FCM program and in particular, for the expansion of the Targeted Intensive Prenatal Case Management Program.

IDPA, subject to appropriation, would be willing to establish a grants program to pilot different models of interventions including models for home visitation and strategies to engage the "hardest to reach" women into care. IDPA will collaborate with IDHS to ensure that the FCM program focuses on implementing strategies to ensure that women who deliver seek their postpartum medical visit.

Other Recommendations

- Assure Quality Care
  - Disseminate information to the provider community concerning care standards
  - Work with the provider community to educate its colleagues about standards of care
  - Consider performing a focused quality study that assesses the extent to which providers are performing medical services according to ACOG guidelines
  - Provide an educational campaign to encourage pregnant women to be active in their reproductive health care
  - Measure outcomes by provider type
  - Measure costs of care by MCH vs. non-MCH physicians
  - Provide available data on midwife services
  - Measure the extent to which this population is receiving mental health services, and the provider type

Conclusion

Over the last decade, Illinois has demonstrated dramatic improvement in reducing the incidence of infant mortality and a primary public health focus has been placed on improving access to prenatal care. However, additional efforts and service coverage may be needed to sustain and further those accomplishments – the subject of this legislation. In light of the economic conditions nationwide, and in Illinois in particular over the past two years where unemployment has been higher than the national average, more women are living in poverty, lack private health insurance and will need health care coverage under Medicaid for their reproductive health care.

While Illinois has succeeded in improving its coverage for comprehensive prenatal care services under Medicaid, improvements can be accomplished. Prenatal care alone cannot change impoverished conditions, acute stresses and malnourishment associated with poverty, unhealthy lifestyle or behaviors that are not conducive to healthy birth outcomes. Health care coverage does not guarantee that those women most in need will utilize the services made available under Medicaid. Enhanced services may be required to improve maternal health status and healthy births. Innovative approaches designed to improve the health care delivery system for the hardest to reach population need to be explored. Evidence-based, cost efficient and effective medical strategies need to be further studied in order to expand services that are most likely to result in improved health care and cost savings. If continued progress toward attainment of the goals of timely health care services, improved maternal and child health outcomes, and promoting healthy births are to be achieved, further strategic planning will be required. Given specific appropriation to implement the enhanced strategies discussed throughout this report that details an initial plan, IDPA could expand its package of covered services for pregnant women, based on a priority of need, beginning in the preconception period.

The areas that have been identified for improvement have been discussed throughout this document. The Perinatal Task Force members have been instrumental in the process of

research, data finding in order to make recommendations for enhanced perinatal care and in preparation of this Report to the General Assembly. That process is ongoing. IDPA intends to continue quarterly meetings with the task force over the next year to assist in the continued research, planning and as appropriate, development of pilot projects to assess the efficacy of various strategies. IDPA is also considering the establishment of smaller working groups to develop projects in specific areas. IDPA is committed to evaluate the effectiveness of each strategy implemented on an ongoing basis, in terms of improved birth outcomes, costs and cost savings. Toward that end, the Perinatal Task Force and its working groups will continue to provide consultation.

Acronyms and Terms

Adverse Pregnancy Outcome Reporting System (APORS) - collects information on the statewide prevalence of congenital anomalies and other adverse pregnancy outcomes identified during the newborn hospitalization to improve infant and child health.

Birth weight – the weight of an infant determined immediately after delivery or as soon thereafter as feasible. It is expressed to the nearest gram.

Calendar Year or CY – the period from January 1st to December 31st of a given year.

Certified Nurse Midwife or CNM - must be licensed as an advanced practice nurse who holds a valid license in the state of practice and is legally authorized under state law or rule to practice as a nurse midwife pursuant to the Nursing and Advanced Practice Nursing Act (225 ILCS 65) and its implementing regulations or comparable law in the state of practice. The CNM must maintain a written collaborative agreement with a physician licensed to practice medicine in all its branches. The CNM who attends deliveries must have a written collaborative agreement with a physician who has hospital privileges. The CNM has education in midwifery - the care of pregnant women & newborns. They are certified by the American College of Nurse Midwives. Their experience and education also includes providing gynecological and family planning care.

Diagnosis Related Group or DRG – refers to IDPA's reimbursement methodology for inpatient services, which is a single payment per discharge that is calculated according to the billed diagnosis and procedure codes and other relative factors including, but not limited to, the patient's age.

FamilyCare - FamilyCare offers health insurance by IDPA to parents living with their children 18 years old or younger. FamilyCare also covers relatives who are caring for children in place of their parents.

Gestational age – the number of weeks that have elapsed between the first day of the last normal menstrual period and the date of delivery, regardless of whether the gestation results in a live birth or a fetal death.

Illinois Department of Human Services/Division of Alcohol and Substance Abuse (IDHS/DASA) - IDHS is the single state authority for substance abuse issues in Illinois, licensing and monitoring all alcohol and other substance abuse treatment programs in the state as well as working closely with the communities of Illinois to promote and address issues through an integrated service delivery system. IDHS/DASA is primarily responsible for providing prevention, intervention and treatment services related to alcohol, tobacco and other drugs to the citizens of Illinois. The commitment to an integrated system of care for substance abuse services in Illinois is reflected in Illinois legislation (Public Act 85-965 and incorporated into Illinois Revised Statutes 1987 Chapter 111 ½ paragraph 6351 et seq., and recodified in July 1996 through House Bill 2632, effective July 1, 1997.

Illinois Department of Human Services/Division of Mental Health (IDHS/DMH) – The primary mission of the IDHS/DMH is to assure that recovery-oriented, evidence-based, community-focused treatment and supports are accessible, through fiscally efficient use of public funds, to children, adolescents and adults most in need of mental health services, in order that they may be empowered to recover, succeed in accomplishing their goals and live full and productive lives. It is the vision of the IDHS/DMH that all persons who experience mental illness will recover and that effective treatment and supports, essential for full participation in one's community, will be accessible and available at all states of a person's life.

Illinois Department of Human Services/Office of Family Health (IDHS/OFH) - the Office that administers the state's Title V MCH Services Block Grant, Title X Family Planning Program, the Special Supplemental Nutrition Program for Women, Infants and Children (WIC), the Family Case Management Program, Targeted Intensive Prenatal Case Management and Healthy Start. This Office provides leadership in building the maternal and child health infrastructure through efforts, including but not limited to community health nursing, sharing responsibility for regionalized perinatal care with the Illinois Department of Public Health, providing funding to the University of Illinois at Chicago Division of Specialized Care for Children for services provided to children with special health care needs and providing funding for maternal and child health initiatives.

Illinois Department of Public Health (IDHS) – the state agency responsible for public health oversight for the state. The agency's mission is to improve health – one community at a time.

Illinois Department of Public Health/Division of Oral Health - the mission is to improve oral health through population-based interventions and to promote oral health as integral to health.

Infant mortality rate – the number of deaths of infants (under age 1) per 1,000 live births. *According to America's Health: State Health Rankings,* 2003, infant mortality is an indication of prenatal care, access and birth process for both child and mother. Data on infant mortality rates are based on death certificates, fetal death records, and birth certificates.

KidCare Application Agents – enrolled with IDPA to assist families in completing KidCare applications. They are paid $50 for each complete application that results in new coverage. Organizations or individuals who may enroll as a KidCare Agent include insurance agents, licensed by the Illinois Department of Insurance, enrolled medical providers and other agencies serving the Medicaid population such as child care centers, Child & Family Connections (early intervention entry points), Head Start agencies, WIC agencies, Home Health agencies, faith based organizations and other social services entities.

Low birth weight (LBW) – any infant regardless of gestational age, whose weight at birth is less than 5 pounds, 8 ounces, or 2500 grams (ACOG).

Medicaid-eligible – term used throughout this report to mean the same as covered by Medicaid.

"Non-Normal" Births - births associated with DRG birth assignments not equal to DRG 391 (Normal Birth).

Periodontal (gum) disease – a chronic bacterial infection that affects the gums and bone supporting the teeth. This gum disease, including gingivitis and periodontitis, are serious infections that, left untreated, can lead to tooth loss. The word *periodontal* literally means "around the tooth." It can affect one tooth or many teeth. It begins when the bacteria in plaque (the sticky, colorless film that constantly forms on the teeth) causes the gums to become inflamed. (American Academy of Periodontology website: http://www.perio.org/consumer/2a.html#types)

Pregnancy Risk Assessment Monitoring System (PRAMS) - a population based surveillance system designed to identify and monitor selected maternal behaviors and experiences before, during and after pregnancy. The Illinois Department of Public Health conducts this surveillance in partnership with CDC.

Preterm birth – the birth of an infant before completion of 37 weeks of gestation. One of the top causes of infant death in the U.S.

Preterm labor – labor occurring before 37 weeks of pregnancy and occurs in between 8 to 10 percent of all pregnancies in the U.S.

S. mutans – means Streptococcus Mutans.

Targeted Intensive Prenatal Case Management – also referred to as the *Intensive Prenatal Performance Project*, helps pregnant women with serious medical or social problems obtain the health and medically-related services they need to have a healthy baby. Services are provided by a registered nurse or licensed social worker who maintains a limited caseload because of the intensive nature of the services provided. This program was designed to supplement the IDHS Family Case Management program. These pregnant women: have a disease that affects pregnancy; are pregnant for more than the fourth time or are experiencing their third child within 40 months; are victims of domestic violence; have previously delivered prematurely; weighed less than 100 pounds before becoming pregnant; are abusing alcohol or other drugs; have HIV or repeated infections with sexually transmitted disease; have a mental illness; are under age 15; are expecting twins or triplets/multiple births; are over age 18 with less than a 10^{th} grade education; are homeless or living in temporary housing; are under house arrest or have been incarcerated; or have or have had a child in DCFS custody.

Term delivery – the birth of an infant from 38 to 42 weeks of gestation.

Special Supplemental Nutrition Program for Women, Infants and Children (WIC) - seeks to improve the health status of women, infants and children; to reduce the incidence of infant mortality, premature births and low birth weight; to promote breastfeeding as the best choice for infant feeding; and to aid in the growth and development of children. The program serves income-eligible pregnant, breastfeeding and postpartum women, infants and children up to five years of age who have a medical or nutritional risk. Participants receive food prescriptions based on their nutritional needs. WIC foods include milk, cheese, eggs, adult and infant cereal and juice, peanut butter, tuna, carrots, beans and infant

formula. There are 98 local agencies, including local health departments, not-for-profit health care agencies, and social service agencies for WIC services. Services are provided statewide through more than 220 clinics.

Very low birth weight (VLBW) – any infant, regardless of gestational age, whose weight at birth is less than 3 pounds, 5 ounces, or 1500 grams (ACOG)

Vital Records - IDPH serves as the State's Registrar to collect, amend, certify and maintain records of birth and death. IDHS uses these vital records to match birth outcomes of the Medicaid population.

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Attachment 1 – 2000 and 2001 Birth Outcomes

Attachment 1 -2000 and 2001 Birth Outcomes - All Women - Illinois
(Based on Birth File Match)

STATE

State Total - All Women 2001

Intervention	Live births	Very Low Birth Wt	Low Birth Wt	Teens	Single	Tobacco Use	Alcohol Use	No Prenatal	Trimester Prenatal Care Started		
									1st	2nd	3rd
Illinois Total	184,022	2,875	14,773	20,092	63,426	19,244	819	1,832	150,690	22,786	4,132
Percent		1.56%	8.03%	10.92%	34.47%	10.46%	0.45%	1.00%	81.89%	12.38%	2.25%
Medicaid Only (no intervention)	14,244	527	1,936	2,638	8,971	2,348	173	788	9,079	3,011	818
Percent		3.70%	13.59%	18.52%	62.98%	16.48%	1.21%	5.53%	63.74%	21.14%	5.74%
Medicaid with FCM and/or WIC	67,127	883	5,815	15,189	43,944	11,037	299	598	48,996	13,520	2,394
Percent		1.32%	8.66%	22.63%	65.46%	16.44%	0.45%	0.89%	72.99%	20.14%	3.57%
General Population (no intervention)	93,151	1,351	6,262	1,390	7,382	4,985	334	390	84,551	5,209	773
Percent		1.45%	6.72%	1.49%	7.92%	5.35%	0.36%	0.42%	90.77%	5.59%	0.83%
NON Medicaid with WIC&/or FCM	9500	114	760	875	3129	874	15	56	8064	1046	147
Percent		1.20%	8.00%	9.21%	32.94%	9.20%	0.16%	0.59%	84.88%	11.01%	1.55%
Medicaid (Intervention + No Intervention)	81,371	1,410	7,751	17,827	52,915	13,385	472	1,386	58,075	16,531	3,212
		1.73%	9.53%	21.91%	65.03%	16.45%	0.58%	1.70%	71.37%	20.32%	3.95%

STATE Total - All Women 2000

Intervention	Live births	Very Low Birth Wt	Low Birth Wt	Teens	Single	Tobacco Use	Alcohol Use	No Prenatal	Trimester Prenatal Care Started		
									1st	2nd	3rd
Illinois Total	185,003	3,067	14,747	21,108	63,823	20,122	969	2,331	149,237	24,797	4,799
Percent		1.66%	7.97%	11.41%	34.50%	10.88%	0.52%	1.26%	80.67%	13.40%	2.59%
Medicaid Only(no intervention)	11,365	392	1,471	1,995	7,402	1,986	156	704	6,746	2,732	804
Percent		3.45%	12.94%	17.55%	65.13%	17.47%	1.37%	6.19%	59.36%	24.04%	7.07%
Medicaid with CM and/or WIC	57,540	828	4,847	13,617	38,367	10,126	312	628	40,306	12,901	2,568
Percent		1.44%	8.42%	23.67%	66.68%	17.60%	0.54%	1.09%	70.05%	22.42%	4.46%
General Population (no intervention)	99,707	1,556	6,932	2,557	10,348	6,053	440	802	89,107	6,739	1,049
Percent		1.56%	6.95%	2.56%	10.38%	6.07%	0.44%	0.80%	89.37%	6.76%	1.05%
NON Medicaid with WIC&/or CM	16,391	291	1,497	2,939	7,706	1,957	61	197	13,075	2,425	378
Percent		1.78%	9.13%	17.93%	47.01%	11.94%	0.37%	1.20%	79.77%	14.79%	2.31%
Medicaid (Intervention + No Intervention)	68,905					12,112	468				
						17.58%	0.68%				