Perinatal Care: Improving Pregnancy Outcomes

Improvement in the health of West Virginia’s perinatal population is a result of a carefully crafted, highly-interdependent partnership. Tertiary care centers, primary care centers, local health departments, private practitioners and community agencies have worked with the Office of Maternal, Child and Family Health (OMCFH) for nearly 30 years to improve the health and well-being of the State’s people. In conjunction with its medical advisory boards, OMCFH has designed a system that offers early and accessible health care to low-income, medically indigent and underinsured women and children. A successful perinatal care system requires adequately trained professionals to provide complete reproductive health services that include family planning, preconceptual counseling, prenatal care, delivery, newborn care, and care for the woman in the postpartum period.

**Preconceptual Services**

Preconception care is a critical component of health care for women of reproductive age. The primary goal of preconception care is to provide health promotion, screening, and interventions for women of reproductive age to reduce risk factors that might affect future pregnancies. Preconception health care is critical because several risk behaviors and exposures affect fetal development and subsequent outcomes. The greatest effect occurs early in pregnancy, often before women enter prenatal care or even know they are pregnant.

For more than three decades, the WV Family Planning Program has been an integral component of the public health system, providing high-quality reproductive health services and other preventive health care to low-income or uninsured individuals who may otherwise lack access to health care. Subsidized medical care provided by Family Planning Program clinics prevents unintended pregnancies, reduces the need for abortion, lowers rates of sexually transmitted diseases, including HIV, detects breast and cervical cancer at its earliest stages and improves the overall health of women, children and families.

Family planning has been a public health success story, across the nation as well as in West Virginia. Family Planning Program clinics not only provide quality health care services, but also save the government money. Investments in discretionary programs often lead to savings in mandatory spending. For every dollar spent on publicly funded family planning three dollars is saved in pregnancy-related and newborn care costs for Medicaid.

Any female or male capable of becoming pregnant or causing pregnancy whose income is at or below 250% federal poverty level is income eligible to receive free or low-cost clinical examinations and free contraceptives through the Family Planning Program. In West Virginia, 138 publicly funded family planning clinics provide contraceptive care to 59,400 women – including 17,070 sexually active teenagers. Family Planning clinics in West Virginia serve 56% of all women in need of publicly supported contraceptive services and 60% of teens in need. Every county in West Virginia has at least one family planning clinic. Among the 50 states and the District of Columbia, West Virginia ranked 6th in service availability in 2006. Publicly
funded family planning clinics in West Virginia help women prevent 15,700 unintended pregnancies each year.

In West Virginia, 177,300 women are in need of contraceptive services and supplies. Of these, 106,240 women need publicly supported contraceptive services because they have incomes below 250% of the federal poverty level (77,880) or are sexually active teenagers (28,360). West Virginia’s teenage pregnancy rate declined by 21% between 1992 and 2000, due in part to teen’s access to confidential services.

Family Planning Program clinics offer counseling and referral for patients regarding future planned pregnancies, management of current pregnancies, or other individual concerns (i.e., nutrition, sexual concerns, substance use and abuse, sexual abuse, domestic violence, or genetic issues). Preconception counseling is provided if patient history indicates a desired pregnancy in the future. Clients in need of enhanced preconception counseling or genetics testing are referred to tertiary care facilities or specialty providers for additional assessment.

**PERINATAL INFRASTRUCTURE**

Ensuring access to health care for low-income women and children has been an ongoing concern for state and federal officials. The Bureau for Medical Services (Medicaid) and the Office of Maternal, Child and Family Health (OMCFH) have worked collaboratively to develop special initiatives that extend support services to women and infants at-risk of adverse health outcomes. This partnership has not only expanded the State’s capacity to finance health care for medically indigent women and children, but has also strengthened the delivery of care by establishing service protocols, recruiting medical providers and developing supportive services such as case management and nutrition counseling which contribute to improved patient well-being.

Medicaid and the OMCFH share a common commitment to the goal of ensuring healthy births, reducing the incidence of low birth weight, and improving the health status of West Virginia’s children. These agencies also recognize the importance of maximizing scarce fiscal resources and the benefit of collaborative efforts in the development of programs that support shared goals. West Virginia’s efforts to improve the health status of pregnant women and children have been successful over time as evidenced by broadened medical coverage, streamlined medical eligibility processes, shared government funding for targeted populations, targeted outreach, risk reduction education, and development of comprehensive programs that address both medical and behavioral issues.

Early preventive prenatal care and education are recognized as the most effective and cost effective ways to improve pregnancy outcomes. West Virginia’s Perinatal Program, the Right From The Start Project (RFTS), was birthed in 1989 as a partnership between OMCFH and Medicaid to provide access to early and adequate prenatal care to low-income pregnant women and infants. Currently, RFTS provides comprehensive perinatal services to low-income women up to sixty (60) days postpartum and care coordination for Medicaid eligible infants up to one (1) year of age. Right From The Start also provides direct financial assistance for obstetrical care for West Virginia pregnant women who are uninsured or underinsured and are above income guidelines for Medicaid coverage. These pregnant women may qualify for assistance for prenatal care if they are a West Virginia resident, have income between 150%-185% of the federal poverty level, are a pregnant teen age 19 or under, or are a non-citizen. Under this Title V-funded service, women who have no funding source for prenatal care coverage or have not yet
been approved for coverage can receive assistance for payment of their first prenatal visit, ultrasound, and routine laboratory procedures if ordered on their first visit.

The Right From The Start Project was implemented in April 1990 for infants and July 1990 for women. In recognition of the importance of developing systematic approaches to deal with problems of access to prenatal care, Senate Bill 4242 was enacted. Under the provisions of the Bill, the WV Department of Health and Human Resources, Bureau for Public Health, was assigned responsibility for administration of RFTS, with Title XIX and Title V designated as payor sources. Through the RFTS Project, the Office of Maternal, Child and Family Health fulfills this oversight responsibility by assuring:

- Availability of medical providers who agree to provide care in accordance with American College of Obstetricians and Gynecologists (ACOG) Standards of Care;
- Availability of licensed practitioners credentialed to provide care coordination and patient education for low-income women with high risk of adverse pregnancy outcomes or for low-income families with infants at risk of poor health or death;
- Technical assistance to RFTS providers; and
- Quality assurance monitoring and improvement to assure government sponsored patients receive care provided in accordance with national standards.

Right From The Start works with approximately 76 community agencies throughout West Virginia under contract to provide care coordination and enhanced education services to high risk pregnant women and infants. The State is divided into eight (8) regions for management of RFTS. Each region has a Regional Care Coordinator (RCC) overseeing the activities of Designated Care Coordinators (DCC). In addition to assigning patient referrals and promoting the project, the RCC coordinates training and education for DCC staff, and recruits obstetrical care providers and designated care coordination agencies. The Prenatal Risk Screening Instrument (PRSI) is completed upon referral to RFTS and identifies risk factors. The risk factors for the program include, but are not limited to, medical complications, nutritional needs, and psychosocial factors.

The 165 Designated Care Coordinators (DCCs), who are licensed social workers and registered nurses, have been dedicated to the core public health function of assisting with access to early and adequate prenatal health care. In addition to RFTS DCCs, there are many obstetricians, nurse practitioners, nurse midwives and family practice physicians in West Virginia and bordering states under contractual agreement with the RFTS Project to provide quality obstetrical and delivery care to pregnant women.
Right From The Start care coordination components include an in-home assessment to identify barriers to health care, an individually designed care plan to meet the patient’s needs, community referrals as necessary, follow-up and monitoring. Care coordination services are provided to families in the privacy of their own homes or other agreed upon locations. Another crucial component of RFTS is health education which includes preventive self-care such as the signs of pregnancy complication, smoking cessation, childbirth education, parenting education and nutrition counseling. The RFTS Project also assists women in accessing transportation to medical appointments through a community-based initiative called the Access to Rural Transportation (ART) Project.

High risk infants are referred to RFTS by the West Virginia University, Birth Score Program. The Birth Score Developmental Risk/Newborn Hearing Screen Instrument is a population-based assessment designed to identify infants at birth who may be at risk for developmental delay or death within the first year of life. Other Medicaid-sponsored infants who are considered at risk are referred to RFTS from various sources for care coordination.
Patient information and utilization data is provided to the Right From The Start regional offices by providers of obstetrical care services using standardized project screening tools. Those screening tools include the Prenatal Risk Screening Instrument (PRSI), the Alternate Entry Form, the Infant Birth Score Card, Tobacco Screening Forms, Tracking Form and Outcome Measures Form.

The Office of Maternal, Child and Family Health and West Virginia University continue to collaborate to provide services to high-risk pregnant women and infants through the Healthy Start, Helping Appalachian Parents and Infants (HAPI) Project. The HAPI Project focuses on helping women become healthier before becoming pregnant, encourages spacing of pregnancies, and focuses on mental health issues. Care coordination services for pregnant women and infants are offered in accordance with standard RFTS Project protocols, but services are expanded to include the preconception phase as well. Initially started in four (4) West Virginia counties, the HAPI Project has been expanded to eight (8) counties, with the addition of new service components (oral health services, substance abuse screening and referral, and outreach services utilizing former consumers).

**CHALLENGES TO PRENATAL CARE**

**Access to Prenatal Care:**
Nationally, federal health agencies, insurance companies, health researchers, and policy groups promote the need for a "continuum of care" with patients. It is recognized that continuity of coordinated, quality care is the best model of care for patients and is the most cost effective method for providing and paying for services. A continuum of care is best achieved through consistent access to quality health providers and services. Gaps in consistent care result in increased need for intensive and crisis care, which results in higher costs for health care services.
Research supports greater patient compliance with care plans when positive relationships with health care providers are well established.

The Right From The Start Project has utilized the established DCC network of Registered Nurses and Licensed Social Workers to provide this model of care since the 1980’s. Because of this network, West Virginia’s access to first trimester prenatal care rate has improved from 60-70% in the 1980’s to nearly 86% in 2003. In comparison, national access to first trimester prenatal care was 84.3% in 2003.

West Virginia Prenatal Care by Year

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>1st Trimester</th>
<th>2nd Trimester</th>
<th>3rd Trimester</th>
<th>No Prenatal Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>85.8</td>
<td>11.8</td>
<td>1.6</td>
<td>0.6</td>
</tr>
<tr>
<td>2002</td>
<td>86.1</td>
<td>11.5</td>
<td>1.6</td>
<td>0.6</td>
</tr>
<tr>
<td>2001</td>
<td>86.5</td>
<td>11.5</td>
<td>1.5</td>
<td>0.5</td>
</tr>
<tr>
<td>2000</td>
<td>86.1</td>
<td>11.9</td>
<td>1.5</td>
<td>0.5</td>
</tr>
<tr>
<td>2000</td>
<td>85.0</td>
<td>11.9</td>
<td>1.5</td>
<td>0.5</td>
</tr>
<tr>
<td>1998</td>
<td>83.7</td>
<td>12.5</td>
<td>2</td>
<td>0.6</td>
</tr>
</tbody>
</table>

Source: WV Health Statistics Center

Provider Availability:
A key component of ensuring continuing access to prenatal care services is having sufficient provider availability. Obviously, gaps in the distribution of providers create geographic barriers that affect access to prenatal care. West Virginia counties that do not have hospitals or have hospitals that do not offer perinatal services are depicted on the following map:

WEST VIRGINIA BIRTHING FACILITIES 2006

Besides these providers, obstetricians, nurse practitioners, nurse midwives, and family practice physicians in West Virginia and bordering states contract with OMCFH to provide obstetrical care and delivery care to pregnant women. This network of providers has offered services to eligible West Virginia families since 1989 and continues to do so even though many express reimbursement concerns.

WVDHHR/BPH/OMCFH/DPWH/Perinatal Programs/5-4-06 6
Despite an unequal distribution of prenatal care providers, the network of practitioners has proven effective as evidenced by data indicating that 86% of West Virginia women have access to first trimester prenatal care.

Financial Constraints:
Medicaid is a major source of financing for health care services provided to pregnant women and infants. According to the WV Health Statistics Center, 53.2% of West Virginia births were paid for by Medicaid in 2003. Due to declining economic circumstances in West Virginia, the percentage of Medicaid eligible families has continued to increase.

West Virginia has experienced numerous funding cuts in reimbursement rates for service provision in the past few years, which have compounded difficulties in service delivery. The RFTS Project provider network has not received an increase in care coordination or medical service reimbursement rates for Medicaid eligible patients since inception of the Project. Because the cost to provide prenatal and infant care has dramatically increased in the last ten years, providers report experiencing difficulty maintaining their practices due to poor reimbursement for medical services. As a result, some providers have opted to discontinue provision of prenatal care services for Medicaid covered patients. Even though access to first trimester prenatal care for West Virginia women has improved in the last ten years and pregnant women are now healthier, the improvements may begin to decline and poor birth outcomes may be experienced unless there is an increase in provider reimbursement.
MEDICAL AND SOCIAL FACTORS AFFECTING PREGNANCY OUTCOMES

Even with the most comprehensive and competent system of care, some women and infants will experience adverse outcomes. The outcome of pregnancy is influenced by both medical and social conditions, so affecting pregnancy outcomes will require non-traditional interventions. In West Virginia, 28,260 of the 372,890 women of childbearing age become pregnant each year. Seventy-four percent (74%) of these pregnancies result in live births, 10% in abortion, and the remainder end in miscarriage.

Pregnancies and Their Outcomes:
West Virginia has struggled with the incidence of low birth weight infants. Birth weight is the single most important predictor of survival. Low birth weight is defined as a weight of less than 2,500 grams at birth and may result from preterm birth (before 37 weeks) or poor fetal growth for a given duration of pregnancy (intrauterine growth retardation) or both. In the United States, most infant deaths are associated with low birth weight. Risk factors for preterm birth and low birth weight include: previous preterm and/or low birth weight birth, multiple births, smoking, unplanned pregnancy, infections, poor nutrition, lack of access to adequate and early prenatal care, harmful substance abuse, and domestic violence.

WV Health Statistics Center, Vital Statistics data prove that although access to first trimester prenatal care in West Virginia is approximately 86%, the State continues to experience a higher than average number of babies born preterm and/or low birth weight. Between 1991 and 2000, the percent of all mothers in West Virginia receiving adequate or adequate plus prenatal care increased 16%. However, between 1992 and 2002, the rate of infants born preterm in West Virginia increased 30%. Because of this continued upward trend for the last several years, there is still much work to be done in the arena of prenatal care and education.
While the specific causes of spontaneous preterm labor and delivery are largely unknown, research indicates they are likely due to a complex interplay of multiple risk factors, as opposed to any single risk factor. The most consistently identified risk factors for preterm labor and birth include a history of preterm birth, current multi-fetal pregnancy, and some uterine and/or cervical abnormalities. West Virginia has three (3) tertiary care facilities providing fertility care and treatment services. Multiple births represent 3% of live births in West Virginia. In 2002, 11.9% of singleton births were preterm, compared to 60.6% of multiple births.

According to the WV Health Statistics Center, the following table shows the decline in the national and State infant mortality rates from 1950 through 2004:

### Infant Mortality, 1950 – 2004
**West Virginia and United States**
(Number and Rate per 1,000 Live Births)

<table>
<thead>
<tr>
<th>YEAR</th>
<th>WEST VIRGINIA</th>
<th>UNITED STATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950</td>
<td>31.4</td>
<td>29.2</td>
</tr>
<tr>
<td>1955</td>
<td>27.1</td>
<td>26.4</td>
</tr>
<tr>
<td>1960</td>
<td>25.3</td>
<td>26.0</td>
</tr>
<tr>
<td>1965</td>
<td>27.1</td>
<td>24.5</td>
</tr>
<tr>
<td>1970</td>
<td>23.3</td>
<td>20.0</td>
</tr>
<tr>
<td>1975</td>
<td>18.3</td>
<td>16.1</td>
</tr>
<tr>
<td>1980</td>
<td>11.8</td>
<td>12.6</td>
</tr>
<tr>
<td>1985</td>
<td>10.7</td>
<td>10.6</td>
</tr>
<tr>
<td>1990</td>
<td>9.8</td>
<td>9.1</td>
</tr>
<tr>
<td>1995</td>
<td>7.6</td>
<td>7.5</td>
</tr>
<tr>
<td>1996</td>
<td>7.2</td>
<td>7.2</td>
</tr>
<tr>
<td>1997</td>
<td>9.5</td>
<td>7.2</td>
</tr>
<tr>
<td>1998</td>
<td>8.1</td>
<td>7.2</td>
</tr>
<tr>
<td>1999</td>
<td>7.6</td>
<td>7.1</td>
</tr>
<tr>
<td>2000</td>
<td>7.6</td>
<td>6.9</td>
</tr>
<tr>
<td>2001</td>
<td>7.3</td>
<td>6.9</td>
</tr>
<tr>
<td>2002</td>
<td>9.1</td>
<td>6.9</td>
</tr>
<tr>
<td>2003</td>
<td>7.3</td>
<td>6.9</td>
</tr>
<tr>
<td>2004</td>
<td>7.6</td>
<td>NA</td>
</tr>
</tbody>
</table>

*Source: WV Health Statistics Center*
Prematurity/low birth weight is the leading cause of death in the first month of life. In addition to mortality, prematurity is a major determinant of illness and disability among infants, including developmental delays, chronic respiratory problems and vision and hearing impairment. Through enhanced education and intervention, birth outcomes can be improved. Tracking the proportion of births that are preterm and identifying other risk factors such as low-income levels and education affirms that focusing attention on government sponsored patients (i.e., Medicaid, Title V, Title XIX) remains important.

Smoking During Pregnancy:
Although smoking during pregnancy has declined in the United States in response to public education and public health campaigns, smoking among West Virginia pregnant women remains a problem. Cigarette smoking during pregnancy adversely affects the health of both mother and child. The risk for adverse maternal outcomes (i.e., premature rupture of membranes, abruptio placenta, and placenta previa) and poor pregnancy outcomes (i.e., neonatal mortality and stillbirth, preterm delivery, and sudden infant death syndrome) is increased by maternal smoking. Infants born to mothers who smoke weigh less than other infants; low birth weight (<2,500 grams) is a key predictor for infant mortality.

Women who quit smoking before or during pregnancy can substantially reduce or eliminate risks to themselves and their infants. Evidence suggests that specific smoking cessation programs have been at least partially successful. However, not all women have responded to these public health messages. Over one-fourth (26.2%) of the 20,986 births in 2003 were to mothers who smoked during their pregnancies. Although overall national rates reported a 38% decrease in the rate of pregnant smokers, the rate in West Virginia only dropped from 27.8% to 26.2%, a 5.8% decrease.

<table>
<thead>
<tr>
<th>WEST VIRGINIA BIRTHS</th>
<th>MEDICAID BIRTHS N = 9075</th>
<th>MEDICAID MATERNAL SMOKING N (%)</th>
<th>NON MEDICAID BIRTHS N =8586</th>
<th>NON MEDICAID MATERNAL SMOKING N (%)</th>
<th>ALL PREGNANT WOMEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTALS</td>
<td>9075</td>
<td>4172 (46%)</td>
<td>8586</td>
<td>1454 (17%)</td>
<td>32%</td>
</tr>
</tbody>
</table>

Due to West Virginia frequently ranking worst in the United States for smoking during pregnancy, the Right From The Start Project implemented the RFTS Smoking Cessation Reduction in Pregnancy Treatment (SCRIPT) initiative as statewide protocol in October 2003. This initiative has been funded using tobacco settlement monies and Medicaid fee-for-service resources to target pregnant women for education on smoking cessation and second-hand smoke. Standard program protocol requires Designated Care Coordinators to analyze the smoking status of pregnant participants and offer best practice methods for cessation or reduction. Carbon monoxide monitors have proven to be a valuable tool allowing DCCs to measure smoking cessation/reduction results of RFTS participants. RFTS SCRIPT data (2003) showed that at case closure, 34% of the pregnant women decreased the number of cigarettes smoked per day and 23% had quit.

Although a significant number quit smoking during pregnancy, RFTS data also indicates that most pregnant smokers relapse after the infant is born. In response, the RFTS Project concentrates on smoking cessation during pregnancy and establishing a smoke-free environment for the infant after birth. RFTS Client Satisfaction Surveys (2003) showed that 64.1% of pregnant smokers who participated in the Project received education on smoking cessation from their DCC. Continued efforts are needed to educate women of the health risk posed to their infants and themselves from smoking during pregnancy.

**Substance Abuse:**
Prematurity can be a complication of substance abuse which can cause a child to suffer life long adverse physical effects and may also cause the child to be slow to develop and prone to disease or disability. After birth, infants may experience serious or even fatal substance withdrawal symptoms. Besides being a contributing factor to preterm births, substance abuse often leads to risky behaviors for the pregnant woman which can lead to other complications such as premature rupture of membranes, stillbirth, sexually transmitted infections, domestic violence, increased stress, poor nutrition, inadequate finances, lack of resources, and lack of adequate support.

When a pregnant woman with substance abuse issues requests help, RFTS Project DCCs provide empathetic case management and support, education, referrals for treatment, and follow-up. RFTS Project DCCs develop trusting relationships with clients and follow them for extended periods of time, enabling excellent opportunities for clients to access substance abuse treatment. It also provides support for clients to begin addressing their substance issues and acquire tools which could assist them in attempting to remain substance abuse free.

**Unintended Pregnancy:**
An unplanned pregnancy can be a barrier to obtaining timely prenatal care because it may take weeks or months for a woman to realize or accept she is pregnant. The consequences of unintended pregnancy can be serious, even life altering, particularly for women who are young or unmarried, have just recently given birth or already have the number of children they want. Lack of prenatal care, along with poor birth spacing, or giving birth before or after one’s childbearing prime can pose health risks for the woman and her newborn.
In addition, an unintended pregnancy can interfere with a young woman’s education, limiting her employment possibilities and her ability to support herself and her family.¹

Even though the Centers for Disease Control and Prevention in 1999 declared family planning to be one of the 10 most significant U.S. public health achievements of the 20th century, half of all pregnancies in the United States are still unintended.² In 2002, 41.7% of women living in West Virginia and delivering a live infant reported their pregnancies to be unintended, representing a decrease in the number of unintended pregnancies.

Many conditions such as maternal death or ill health decrease when women have births that are adequately spaced giving their bodies’ sufficient time to regain strength. Babies born less than two years after a prior birth are much more likely than those born after a longer interval to be premature or low-birth-weight.³ Increased use of Family Planning Program services enables women to reduce closely spaced births and limit childbearing to their 20’s and 30’s, which may greatly reduce the infant mortality rate.

**Domestic Violence:**
Spousal domestic violence is more prevalent during the time that a couple experiences pregnancy. For the first time in RFTS data collection, Project participants listed domestic violence as one of the top four risk factors, suggesting that RFTS DCCs establish trusting relationships with pregnant women which enables disclosure of this sensitive issue. The RFTS DCCs are experienced in recognizing signs and symptoms of domestic violence among pregnant women and are trained on how to interview women in a safe environment and how to refer to community resources for intervention when indicated.

**Postpartum Depression:**
Depression among mothers in the months after delivery has surfaced as an important maternal and child health concern. Many West Virginia pregnant women are at risk for postpartum depression, since the population includes a large number of women who are low-income, medically indigent, uninsured/underinsured, have less than a high school education, lack resources, experience domestic violence, and use harmful substances. The RFTS Project screens pregnant women for depression at or near the time of delivery and then again prior to sixty (60) days postpartum. The RFTS Project has clear guidelines for referral criteria, based on scores obtained on the depression screening tool.

The RFTS Project also partners with the HAPI Project to address mental health issues including postpartum depression. A companion project to RFTS, the HAPI Project uses the existing RFTS DCC network to assess needs and deliver expanded services to at-risk women and infants in eight (8) West Virginia counties following discharge from the RFTS Project at sixty (60) days postpartum.

**Congenital Defects:**
Neural tube defects such as spina bifida and anencephaly can be prevented by up to 70% if folic acid consumption begins before pregnancy. In 138 Family Planning Program clinics, women of childbearing age planning pregnancy are offered a supply of multivitamins with folic acid, given information/educational materials, and are counseled on the benefits of folic acid use before pregnancy.
**PERIODONTAL DISEASE**

Studies have shown a relationship between periodontal disease and preterm, low birth weight babies. Women with periodontal disease may be seven times more likely to have a baby that is born too early and too small. The WV Healthy Start/HAPI Project is partnering with Phillips Oral Healthcare on a study investigating the link between poor oral health and premature births. In the eight (8) West Virginia counties participating in the HAPI Project, pregnant women who agree to participate in the study receive a dental exam to assess their oral health and a dental cleaning. Participants then receive a home visit by the DCC to provide education on the importance of maintaining good oral health during pregnancy. The DCC provides follow-up visits and phone calls to monitor compliance with the oral health program. After delivery, the woman receives a dental exam by a dentist, with reassessment of oral health status and documentation of pregnancy length. The data is under evaluation, for comparison to similar studies linking periodontal disease and preterm birth.

**IMPROVING THE UTILIZATION OF PREGNATAL CARE**

Trends in prenatal care utilization in West Virginia have shown continued improvement since the 1980’s. West Virginia has studied barriers to timely prenatal care throughout the years. These studies included informed stakeholder interviews with postpartum women, satisfaction surveys, but the most constant source of information has been the Pregnancy Risk Assessment Monitoring System (PRAMS) surveys. Findings from the survey related to access to care is portrayed as follows:

**West Virginia PRAMS Data 2000-2003**

*Did you get prenatal care as early in your pregnancy as you wanted?:*

![Graph showing PNC As Early As Wanted](image)

![Graph showing Barriers to PNC](image)
Nearly fifteen years ago, a West Virginia Perinatal Task Force was established and charged with developing recommendations to address the interrelated problems of infant mortality, infant morbidity and unintended pregnancy. In 1992, the first Perinatal Task Force, comprised of State leaders in industry, medicine and government, made recommendations that served as a blueprint for public health programs for more than seven years. This Task Force worked to identify strategies to improve the lives of mothers and babies and affect family well-being. The overall strategy was to enlist partners who could evaluate present systems of care; review West Virginia health statistics; identify populations in need of referral to access to care; and to develop mechanisms for data collection, analysis and disbursement among data collecting agencies. In 2000, the Perinatal Task Force was reconvened and identified the following areas of concern related to perinatal outcomes:

- Low birth weight
- Teen/unwed pregnancy rate
- Access to accelerated visits for high birth score babies
- Recruitment of rural health care providers (access)
- Smoking during pregnancy
- Effect of managed care on perinatal services
- Dental care for pregnant women
- Unintended pregnancies
- Local resources for women with poor pregnancy outcomes

As a result, twelve (12) problem areas were identified for targeted improvement. Over time, these recommendations have been implemented in public health programs to affect health status changes and reduce the State’s infant mortality rate.

**SUMMARY**

Since the Right From The Start Project was first initiated in 1989, access to first trimester prenatal care has shown improvement from 69.7% to 83% in 2003. This correlates with intense care coordination and support provided by Right From The Start staff to families in rural West Virginia.

The Right From The Start Project staff and partners understand and embrace the philosophy that meeting the health care needs of women requires a comprehensive approach of multiple interrelated issues including: social, cultural, economic, and physical environments; financial and physical access to health care services; provider and partner awareness of the need for health services; and the resulting outcomes.

Although West Virginia has serious perinatal health care issues such as smoking among pregnant women, premature deliveries, and low birth weight infants, OMCFH has woven together a patchwork of funding streams to create a system of health care for women, infants and children. OMCFH maintains strong partnerships across the State with the medical community and private sectors, as well as community health centers and local health departments, in an effort to assure continued access to care.


Prepared by:
Anne Williams, Director
Division of Perinatal and Women’s Health

Jeannie Clark, Director
Perinatal Program/Right From the Start Project

May 4, 2006