

FIRST STEPS DATABASE

THE FIRST STEPS PROGRAM: 1989-2004

Laurie Cawthon, M.D., M.P.H.
Research and Data Analysis
Department of Social and Health Services

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In 1989, the Washington State Legislature enacted the Maternity Care Access Act to provide “maternity care necessary to ensure healthy birth outcomes for low-income families.” The legislation called for removal of unnecessary barriers to receiving prenatal care, provided for increased access to care, and expanded Medicaid services for low-income pregnant women through the creation of the First Steps Program.

Such expanded Medicaid services were possible due to federal legislation passed in the 1980s that allowed states to expand their Medicaid programs for pregnant women and to provide enhanced prenatal care services to augment traditional prenatal medical visits. These programs were based on the premise that, while access to prenatal care is necessary to improve birth outcomes, in many cases, especially for high-risk women, prenatal medical care alone may not be sufficient to achieve better birth outcomes.

The First Steps Program has served low-income pregnant women in Washington State for more than fifteen years, since August 1989. By the end of 2004, nearly 350,000 women had received services through this program, and Medicaid was funding 46% of all births to Washington residents. Gains in prenatal care access and birth outcomes (low birth weight and infant mortality) were clear during the first five years of the program.

A 1998 study of AFDC (now TANF) women found that Washington’s Medicaid Maternity Support Services and Maternity Case Management programs were associated with a decrease in the low birth weight rate of medically high-risk women. The greatest effect on low birth weight rates occurred among adult women with pre-existing medical conditions, over 90% of whom had diabetes or chronic hypertension. The authors concluded that such enhanced prenatal care services can serve as one strategy to reduce low birth weight for the subgroup of women with high medical risks (Baldwin et al., 1998).

In October 2003, First Steps services were re-organized to increase efficiency and to emphasize basic health messages and core services for all women. Separate case management services were limited to the postpartum period for infants in high-risk families. These changes paralleled ongoing program evolution with greater emphasis on longer-term outcomes and implementation of performance measures focused on family planning (2001) and smoking cessation (2004).

This brief report will address the following issues:

- Current status of birth outcomes (low birth weight);
- Risk factors for poor birth outcomes;
- Service utilization patterns for Maternity Support Services; and
- Future directions to maximize impact of enhanced prenatal services on birth outcomes.

See: Revised Code of Washington 74.09.760-850.

Medicaid Prenatal Care: States Improve Access and Enhance Services but Face New Challenges. (GAO/HEHS-94-152BR, May 1994).

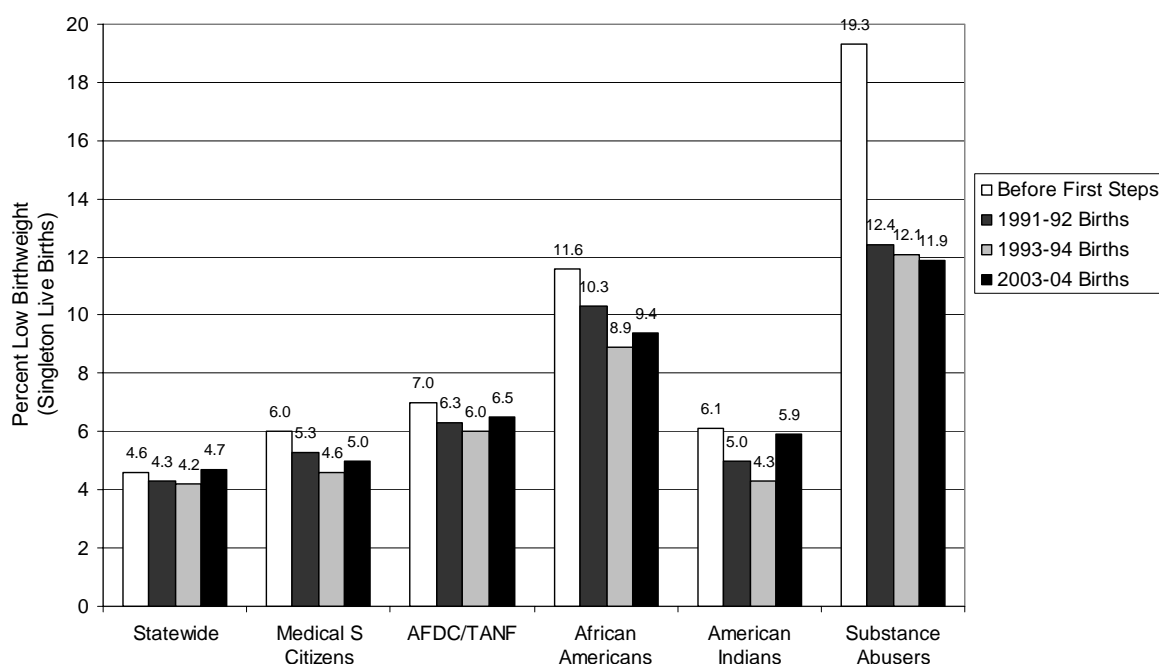
Baldwin LM et al. The effect of expanding Medicaid prenatal services on birth outcomes. *American Journal of Public Health* 1998;88:1623-1629.

Ricketts SA, Murray EK, Schwalberg R. Reducing low birthweight by resolving risks: Results from Colorado’s Prenatal Plus Program. *American Journal of Public Health* 2005;95:1952-1957.

LOW BIRTH WEIGHT

Birth weight is a primary indicator of the newborn infant's health. Infants with birth weight of less than 2500 grams (5.5 pounds) are classified as low birth weight. Low birth weight is associated with increased risk of infant death and a wide range of disorders, including neuro-developmental conditions, learning disorders, and lower respiratory tract infections. In addition, the costs of medical care for low birth weight infants are substantial. Established risk factors for low birth weight include poverty, smoking, medical risks, pregnancy complications, substance abuse, and African American race.

Birth weight was obtained from the birth certificate and the low birth weight rate was compared for singleton liveborn infants.

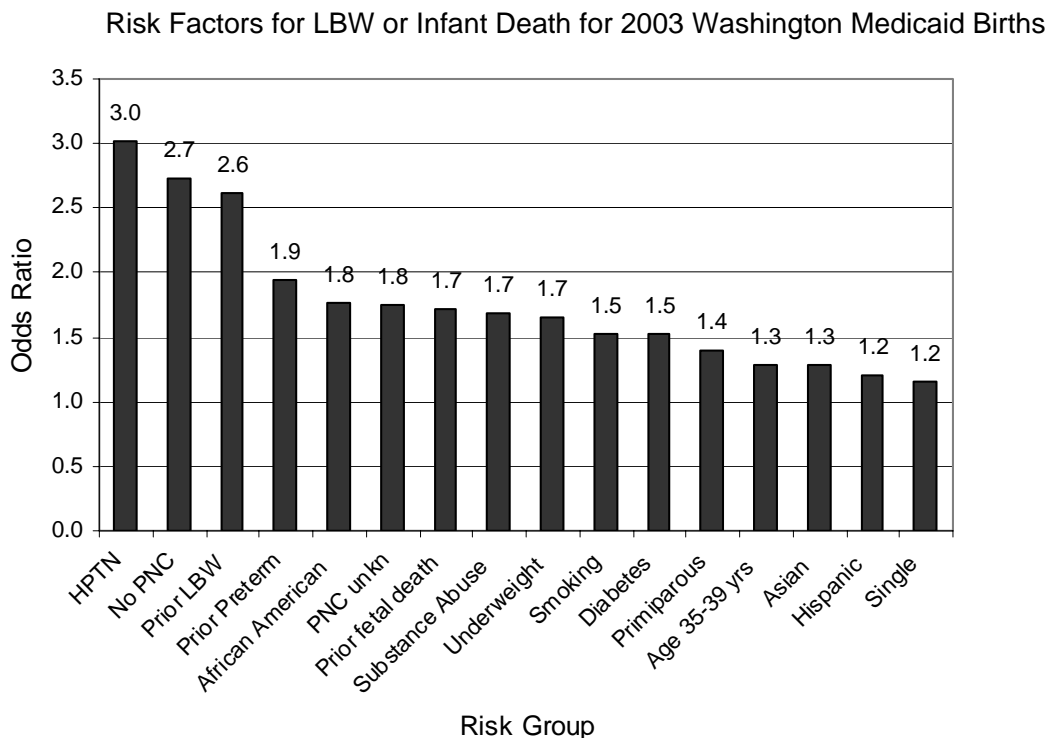


- For five of the six groups portrayed, the low birth weight rate is higher for 2003-04 births than for births during 1993-94. While low birth weight rates decreased after First Steps, disparities between higher income and lower income women, and between African American women and white women, have persisted. For American Indians, the disparity widened in 2003-04.
- For American Indians, the 2003-04 low birth weight rate (5.9%) is nearly as high as the 1988-89 rate of 6.1% (before First Steps). For statewide births, the 2003-04 low birth weight rate (4.7%) exceeded the 1989 rate (4.6%).
- Among Medicaid women with identified substance use problems, the 2003-04 low birth weight rate (11.9%) is slightly lower than the 1993-94 rate of 12.1%. However, if these women are identified prenatally and receive treatment for chemical dependency and/or an intensive comprehensive program before they deliver, their low birth weight rates may be considerably lower. A previous study of the Safe Babies, Safe Moms comprehensive program showed a 66% reduction in low birth weight (from 16.1% to 5.5%) associated with prenatal enrollment and a 32% reduction in low birth weight (from 13.4% to 8.9%) associated with prenatal treatment for chemical dependency.

RISK FACTORS FOR POOR BIRTH OUTCOMES

No single factor or condition has been identified as the cause of low birth weight. In fact, low birth weight and infant death may have many different causes, and the distribution of the risk factors and causes may vary in different populations. Until the causes of poor birth outcomes are better understood, the best strategy is to target modifiable risk factors and causes that may be resolved by early identification and targeted interventions prior to delivery.

Logistic regression is a statistical method designed to describe the likelihood of experiencing an outcome of interest, controlling for other factors also known to be associated with the outcome of interest. The odds ratio (O.R.) indicates the increase (or decrease) in risk (or likelihood) associated with a given factor, all other things being equal, with an O.R. of 1 equal to even odds (no increase or decrease in risk). Outcomes of interest in this model were low birth weight (LBW) and infant mortality (IM). Risk factors are portrayed from highest level of risk (O.R.=3.0) to lower levels of risk (O.R.=1.2).



- The risk of LBW/IM was 3.0 times greater for women with hypertension (HPTN) (pre-existing or pregnancy-induced) than for women without hypertension, after controlling for other risk factors. This group represented 5% of total Medicaid women who gave birth and their LBW rate was 15.9%.
- The risk of LBW/IM was 2.6 times greater for women with a prior LBW infant than for women without a prior LBW infant, after controlling for other risk factors. This group represented 3.8% of total Medicaid women who gave birth and their LBW rate was 19.0%.
- The risk of LBW/IM was 1.7 times greater for women with identified substance abuse than for women without substance abuse, after controlling for other risk factors. This group represented 5.6% of total Medicaid women who gave birth and their LBW rate was 12.0%.

USE OF MATERNITY SUPPORT SERVICES

Maternity Support Services (MSS) are preventive health services to promote healthy pregnancy. MSS include assessment, education, intervention and counseling. A team of community health specialists, including nurses, nutritionists, behavioral health workers and, in some agencies, community health workers, provides the services. The intent is to provide MSS as soon as possible to promote positive birth and parenting outcomes.

Risk factors identified in the model described on page three, developed for 2003 births, were used to determine each client's statistical risk for low birth weight or infant death, and Medicaid women who gave birth in 2004 were divided into three groups reflecting the probability of poor birth outcome.

Mother's Risk Group, LBW, and MSS Service Use for 2004 Washington Medicaid Births

	N of Women	LBW Rate	Rec'd MSS	N of MSS Visits
High Risk	2,661	19.0	61.2%	5.0
Moderate Risk	7,617	8.4	65.8%	5.3
Low Risk	26,018	3.6	62.0%	5.3

- The actual rates of low birth weight for the three risk groups show that the LBW rate for the high risk group (19%) was more than 5 times that for the low risk group (3.6%). The moderate risk group was intermediate.
- The proportion of women in each group who received MSS ranged from 61% to 66% and appeared to be unrelated to the risk level for poor birth outcomes.
- Among those who received MSS, the average number of visits ranged from 5.0 to 5.3 and appeared to be unrelated to the risk level for poor birth outcomes.

FUTURE DIRECTIONS

Rising rates of low birth weight in Washington State challenge maternity care providers to offer interventions with greater effectiveness. Other studies have shown that enhanced prenatal services for pregnant women are effective when services are targeted toward the resolution of specific risk factors known to be associated with low birth weight, such as smoking, inadequate weight gain, and psychosocial problems (Ricketts et al., 2005). Together with the findings from the 1998 evaluation of First Steps and the risk profile for Washington Medicaid women, these data highlight the accomplishments and challenges for First Steps.

The First Steps Program's Maternity Support Services are uniquely positioned to provide multidisciplinary services to low-income women. The benefits of these services can be increased by addressing the individual risks of clients for poor birth outcomes, individualizing services depending on the client's risk level, and providing appropriate and timely interventions prior to delivery.

The First Steps Database was developed as a program monitoring tool for First Steps. The database links Medicaid claims and eligibility with birth and death certificates provided by Washington Department of Health Center for Health Statistics. Additional copies of this report and a list of references may be requested from DSHS Research and Data Analysis (phone 360-902-0707). RDA reports are available at the website, www1.dshs.wa.gov/rda.