MEDICAID PRENATAL CARE
States Improve Access and Enhance Services, but Face New Challenges
May 10, 1994

The Honorable Edward M. Kennedy
Chairman, Committee on Labor and Human Resources
United States Senate

Dear Mr. Chairman:

About 37,000 infants die in the United States each year, many unnecessarily. Although the nation's infant mortality rate continues to decline, the most recent data available ranks the United States 22nd among nations in infant mortality and 21st in low birth weight. Low birth weight is a major contributor to infant death and is associated with increased initial medical costs for infants and long-term medical and special education costs for those who survive. Public funds pay for many of these expenses.

In response to concerns about infant mortality, beginning in 1986 the Congress expanded Medicaid eligibility for prenatal care. In addition, the Congress allowed states to use Medicaid to reimburse for services that enhance prenatal care, such as health education and nutrition counseling. Moreover, many states are now moving their Medicaid population into managed care to improve access and control costs. Given these changes to Medicaid, you asked us to determine

- whether states are using Medicaid to improve access to prenatal care services and enhance services to low-income women and what reported effect that may have had on birth weight and infant mortality and
- whether lessons have been learned about providing care for underserved populations that the Congress should consider as it weighs health care reform.

As agreed with your staff, we interviewed state and local officials in four states—Indiana, Massachusetts, North Carolina, and Washington—and reviewed state and local documents to determine state changes to Medicaid and to prenatal care services and any evaluation of their effects. We included states from different geographic regions, and sought states that had evaluated aspects of their prenatal care efforts, and provided Medicaid reimbursement for enhanced services. We also interviewed federal officials and public health experts to determine what services they

1Managed care refers to a health care delivery system with a single point of entry. A primary care physician participating in the health plan provides basic care and decides when a referral to a specialist or admission to a hospital is necessary.
believed were needed to improve birth outcomes and how other federal programs, such as Title V, the Maternal and Child Health Block Grant, assisted states in serving low-income pregnant women. In addition, we reviewed national surveys of state prenatal care conducted by the National Governors' Association and the Alan Guttmacher Institute and analyzed the literature on comprehensive prenatal care, managed prenatal care, and health outcomes. We did our work between June 1993 and March 1994 in accordance with generally accepted government auditing standards. We briefed your committee on the results of this work and, as agreed with your office, are providing you with our final results in this report.

In summary, we found that since 1986, many states have used Medicaid to improve access and enhance prenatal care services for women, but states' efforts to improve outcomes will face challenges in the new health care environment. The states we visited varied in their efforts to improve access and in how many women they reached with enhanced prenatal care services. While it may be premature to definitively judge outcomes, those states serving a majority of Medicaid women with enhanced services had done evaluations that suggested these services improve birth outcomes.

The health care system is in a state of change, with increased use of managed care for the Medicaid population and both state and national efforts at health care reform. Both trends may open access for low-income families but could also undermine efforts to enhance prenatal care and improve birth outcomes for low-income women. Medicaid managed care has had quality and access problems in the past—if states want to improve infant health, they must focus on making managed care plans accountable for improving the health of the enrolled population. And health care reform may bring changes in financing that may limit states' abilities to maintain enhanced services.

Today, Medicaid pays for almost one-third of all U.S. births—about 1.2 million per year. In addition to Medicaid, other federal programs, including the Special Supplemental Food Program for Women, Infants, and Children (WIC), the Title V Maternal and Child Health (MCH) program, and the Healthy Start Initiative also fund aspects of prenatal care.

Most states have used Medicaid to improve access to prenatal care services, and many have also enhanced the prenatal care services reimbursable through Medicaid. Thirty-four states have increased Medicaid eligibility levels beyond the federally mandated level to help
low-income women get prenatal care. Almost all states made administrative and policy changes to ease pregnant women's entry onto Medicaid, such as expediting their Medicaid eligibility determinations or allowing them to mail in their Medicaid applications. Forty-four states have also begun to reimburse for more enhanced prenatal services, such as care coordination, to improve state birth outcomes.

The states we visited implemented a number of strategies to get women onto Medicaid and into prenatal care:

- Three states allow pregnant women to apply for Medicaid eligibility by mail, rather than in person, and North Carolina plans to implement it in the future.
- Two states implemented expedited eligibility while one recommends expedited eligibility but does not require it.
- North Carolina disregards parental income for pregnant teens because state officials found that teens were moving out of their parents' homes to qualify for Medicaid-financed prenatal care at a time when they needed the support of their families most.
- Washington expanded eligibility for family planning from 60 days postpartum to 1 year postpartum with their own state funding to delay repeat pregnancies.

In addition, each state had specific outreach strategies to bring women into care.

The states we visited all reimbursed for some enhanced services, although women's access to enhanced services varied greatly by state. States such as North Carolina and Washington developed statewide programs through which almost 60 percent of their Medicaid-enrolled pregnant woman could get Medicaid-financed care coordination and health and nutrition education services. On the other hand, Indiana chose to provide Medicaid-financed care coordination services only to high-risk women, and only 3 percent are served.

It may be too soon to definitively judge whether these efforts will improve low birth weight and prenatal care utilization rates, since many factors, such as overall economic conditions, can affect such rates and the enhanced services are relatively recent. However, evaluation evidence from the two states with the most extensive enhanced services suggests

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Care coordination includes performing a risk assessment, developing a plan of care, coordinating referrals to appropriate service providers, and follow-up to ensure clients receive needed services.
that such services have positive effects at reducing low birth weight. In North Carolina, Medicaid women who did not receive care coordination had low birth weight rates 21 percent higher than women who did, and their infants' average Medicaid charges for the first 60 days postpartum were $277 higher. In Washington, the low birth weight rate for all low-income births declined from 6.2 percent before its program started to 5.5 percent in 1991.

Lessons for Health Care Reform

Health care delivery for low-income women and children is changing. States are increasingly enrolling their low-income pregnant women and children into managed medical care and, at the same time, state and national health care reform may be imminent. While both trends may increase access to medical care, they could also undermine state efforts to enhance prenatal care.

Enrolling women in managed care plans does not ensure that women are entering care, getting the services they need, nor having healthy births. Past evaluations have shown that making managed medical prenatal care available to low-income women has generally not improved their likelihood of actually getting adequate medical prenatal care or their birth outcomes. If states want to improve infant health, they must focus on making managed care plans accountable for improving the health of their enrolled population. Two mechanisms exist to do so. One is using the quality assurance process to monitor health outcomes and take corrective action when health outcomes are poor. A second is to put performance expectations into managed care contracts to ensure that Medicaid women actually receive the care for which the government has already paid.

Content of care and access to services are also important to improving outcomes. While the Administration's Health Security Act covers pregnancy-related services, it is not specific on what services would be covered for pregnant women and how comprehensive or enhanced the services would be. Both the American College of Obstetricians and Gynecologists (ACOG) and the Public Health Service (PHS) recommend (1) initial and continuing risk assessment, (2) the development of a care plan and referral to other educational and social services as needed, (3) health and nutritional education promoting positive health behaviors, and (4) extra services for women assessed at high risk. PHS includes more intensive care coordination, mental health services, substance abuse

Usually, managed care plans receive a set monthly fee to provide care and are then put at financial risk. If the cost of care exceeds the fee payments, the health plan loses money. This can provide an incentive to limit medical services.
services, social services, and home visiting as services for women at higher risk.

Health care reform may remove Medicaid as a financing mechanism for more enhanced services to many currently eligible pregnant women. The Health Security Act would continue Medicaid financing for some groups of recipients for services not included in the comprehensive benefit package, but perhaps almost half of currently eligible pregnant women might no longer be eligible for these additional services. Some other health reform proposals would abolish Medicaid altogether. Other sources of financing have been proposed. The Health Security Act would establish a grant fund to allow health providers to fund services to enable low-income people to access the health care system. And the Chafee-Thomas bill would establish a new Maternal and Infant Care Coordination program that would give grants to states to help states develop coordinated, multidisciplinary, and comprehensive primary health care and social services and health and nutrition education programs, targeted to women of childbearing age, particularly to women at risk of having a low birth weight infant. Such sources might help states maintain the prenatal improvement efforts they have begun.

We discussed a draft of this briefing report with responsible Health and Human Services (HHS) officials in the Health Resources and Services Administration, Bureau of Maternal and Child Health and in the Health Care Financing Administration, who generally agreed with our findings, and have included their comments where appropriate.

As arranged with your staff, unless you publicly announce its contents earlier, we plan no further distribution of this briefing report until 7 days from the date of this letter. At that time, we will send copies to the Secretary of Health and Human Services and other interested parties.
Please contact me on (202) 512-7119 if you or your staff have any questions. Major contributors to this briefing report are listed in appendix II.

Sincerely yours,

Mark V. Nadel

Mark V. Nadel
Associate Director, National and Public Health Issues
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Abbreviations

ACOG  American College of Obstetricians and Gynecologists  
AFDC  Aid to Families With Dependent Children  
EPSDT  Early and Periodic Screening, Diagnostic, and Treatment program  
HCFA  Health Care Financing Administration  
HHS  Department of Health and Human Services  
HMO  health maintenance organization  
MCH  Maternal and Child Health  
PHS  United States Public Health Service  
SSI  Supplemental Security Income  
WIC  Special Supplemental Food Program for Women, Infants, and Children
While rates of infant mortality have been declining in the United States for many years, rates of low birth weight have been relatively stable. If low birth weight rates could be reduced, infant mortality rates should decline further. Public health experts have stated that at least some low birth weight births are preventable. Since low birth weight is associated with smoking, drinking alcohol, using illicit drugs, and having poor nutrition during pregnancy, low birth weight rates could be improved if mothers would improve their health habits. Women who receive late or no prenatal care, uninsured women, teenagers, older women, poor women, and African American women have higher rates of low birth weight.

Public health experts agree that access to medical prenatal care is a basic service needed to help prevent infant mortality, but that high-risk women may need more than just medical prenatal care. The Institute of Medicine concluded in 1985 that providing comprehensive prenatal care that included medical prenatal care, health education, psychosocial and nutritional services, and screening for risk, could reduce low birth weight. Since their review, additional research on programs that provided more comprehensive prenatal care, or that provided elements of more comprehensive care, such as nutrition education or smoking cessation support, found positive and statistically significant effects on birth outcomes. In 1987, GAO found that low-income women faced barriers to receiving early and adequate prenatal care, with lack of money the major stumbling block. Low-income women also reported problems with lack of transportation and child care and with not knowing they were pregnant and problems getting appointments. Many women faced multiple barriers.

Starting in 1986, the federal government, through a series of Medicaid law changes, encouraged states to reduce barriers and improve perinatal services by liberalizing Medicaid eligibility rules and allowable services for low-income pregnant women and children. The Congress mandated that pregnant women with income at or below 133 percent of the federal poverty level would be eligible for Medicaid coverage during pregnancy by 1990. The Congress also required states to provide adequate Medicaid payment to obstetric and pediatric providers sufficient to enlist enough providers so that care and services are available to Medicaid recipients at least to the extent that such care and services are available to the general population in the geographic area.

Medicaid pays for almost one-third of all U.S. births—about 1.2 million per year. The federal government also funds the Maternal and Child Health

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1The Omnibus Budget Reconciliation Act of 1989, Public Law 101-239.
Program as part of the Title V Block Grant, which provides funds to states—$687 million in fiscal year 1994, of which almost $575 million is distributed to states—to provide services for pregnant women and children. The federal government funds the Healthy Start initiative—$97.5 million in fiscal year 1994—which provides grant funds to selected communities with extremely high rates of infant mortality. The federal government also funds the Special Supplemental Food Program for Women, Infants, and Children, which provides supplemental food and nutrition education to low-income pregnant, breastfeeding, and postpartum women, infants, and children up to age 5 who are found to be at nutritional risk—$3.2 billion in fiscal year 1994.
States Used Medicaid to Improve Access and Services

Most states instituted a broad set of strategies to improve women's access to medical prenatal care and enhance prenatal care services. States made program and policy changes designed to increase the number of women eligible for care, ease entry into care, increase reimbursement to obstetric providers, and provide enhanced services such as care coordination/case management.

Many states have taken advantage of the Medicaid expansions of eligibility to increase the number of low-income women receiving Medicaid-financed prenatal care and improve access to care. By January 1994, 34 states had increased eligibility by providing Medicaid coverage to pregnant women with incomes above 133 percent of the federal poverty level, and 45 states eliminated their assets tests. Many states also improved access to Medicaid by making administrative and policy changes, such as simplifying the application form. Fifty of the 51 states (including the
Section 2
States Used Medicaid to Improve Access and Services

District of Columbia) have implemented at least one strategy to streamline Medicaid eligibility. (See table 2.1.)

<table>
<thead>
<tr>
<th>Strategies to streamline eligibility</th>
<th>Number of states</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dropped assets test</td>
<td>45</td>
</tr>
<tr>
<td>Adopted presumptive eligibility</td>
<td>30</td>
</tr>
<tr>
<td>Shortened Medicaid application</td>
<td>42</td>
</tr>
<tr>
<td>Expedited pregnant women's eligibility determinations</td>
<td>25</td>
</tr>
<tr>
<td>Allowed mail-in of eligibility forms</td>
<td>20</td>
</tr>
</tbody>
</table>


A survey by the Alan Guttmacher Institute found that almost all states increased Medicaid reimbursement for obstetric services between 1986 and 1991. The Institute estimated that the Medicaid global obstetric fee for an uncomplicated delivery increased 15 percent in constant 1986 dollars during this period.

In addition, states tried to provide more enhanced prenatal care services by allowing Medicaid reimbursement for such services. Among these are care coordination, risk assessment, nutritional counseling, health education, psychosocial counseling, and home visiting. (See table 2.2.)

<table>
<thead>
<tr>
<th>Medicaid-reimbursable enhanced prenatal care services</th>
<th>Number of states</th>
</tr>
</thead>
<tbody>
<tr>
<td>Care coordination/case management</td>
<td>42</td>
</tr>
<tr>
<td>Risk assessment</td>
<td>43</td>
</tr>
<tr>
<td>Nutritional counseling</td>
<td>36</td>
</tr>
<tr>
<td>Health education</td>
<td>37</td>
</tr>
<tr>
<td>Psychosocial counseling</td>
<td>33</td>
</tr>
<tr>
<td>Home visiting</td>
<td>37</td>
</tr>
</tbody>
</table>


The States Visited Varied in Their Implementation of Medicaid Expansions

The four states we visited had similarities as well as significant differences in their efforts to improve access to care and enhance prenatal services to low-income women. North Carolina and Washington provided the most extensive enhanced services, and both had evaluation evidence to suggest that their strategies had positive effects on birth outcomes. Despite varying efforts to establish such services, state officials in all the states agreed that enhanced services are necessary for comprehensive prenatal care for women. States that are moving their Medicaid population into managed care are taking steps to continue providing enhanced services as medical care financing changes. However, despite efforts to increase prenatal care, state and local officials report that barriers to care and service gaps remain.

The four states we visited differed somewhat in the number of Medicaid-financed births, their infant mortality rate and percentage of low birth weight births, and other indicators of access to prenatal care, such as early or late entry into care. (See table 3.1.) Indiana has had the greatest increase in percentage of births paid for by Medicaid. Massachusetts and Washington have lower infant mortality rates than the national average, while Indiana's and North Carolina's rates are higher. Massachusetts is the only state of the four that has both decreased in the percentage of women receiving late or no prenatal care and increased in the percentage of women receiving care in the first trimester. Starting in 1985, before the Medicaid expansions, Massachusetts used state money to finance perinatal care coverage for uninsured pregnant women with incomes below 185 percent of the federal poverty level through its Healthy Start Program. Massachusetts is also the only state visited that has expanded coverage of pregnant women to 200 percent through its own state program.
## Table 3.1: States Differ in Infant Mortality Rates and Reliance on Medicaid to Finance State Births

<table>
<thead>
<tr>
<th>Total number of births</th>
<th>Ind.</th>
<th>Mass.</th>
<th>N.C.</th>
<th>Wash.</th>
<th>U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991</td>
<td>85,707</td>
<td>88,205</td>
<td>102,362</td>
<td>79,711</td>
<td>4,110,907</td>
</tr>
<tr>
<td>Estimated percentage of Medicaid births</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1991</td>
<td>39</td>
<td>23</td>
<td>39</td>
<td>36</td>
<td>32</td>
</tr>
<tr>
<td>1985</td>
<td>5</td>
<td>16</td>
<td>11</td>
<td>18</td>
<td>15</td>
</tr>
<tr>
<td>Infant mortality rate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1991</td>
<td>9.1</td>
<td>6.6</td>
<td>10.8</td>
<td>7.5</td>
<td>8.9</td>
</tr>
<tr>
<td>1990</td>
<td>11.3</td>
<td>8.5</td>
<td>11.5</td>
<td>9.8</td>
<td>10.4</td>
</tr>
<tr>
<td>Percentage of low birth weight births</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1991</td>
<td>6.7</td>
<td>5.9</td>
<td>8.4</td>
<td>5.1</td>
<td>7.1</td>
</tr>
<tr>
<td>1986</td>
<td>6.4</td>
<td>5.8</td>
<td>7.9</td>
<td>5.2</td>
<td>6.8</td>
</tr>
<tr>
<td>Percentage of women obtaining first trimester prenatal care</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>1991</td>
<td>76.7</td>
<td>85.5</td>
<td>76.3</td>
<td>75.1</td>
<td>74.6</td>
</tr>
<tr>
<td>1986</td>
<td>74.3</td>
<td>82.0</td>
<td>77.6</td>
<td>75.3</td>
<td>74.3</td>
</tr>
<tr>
<td>Percentage of women obtaining late or no prenatal care</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1991</td>
<td>5.6</td>
<td>2.4</td>
<td>5.2</td>
<td>4.1</td>
<td>5.6</td>
</tr>
<tr>
<td>1986</td>
<td>5.1</td>
<td>2.8</td>
<td>4.6</td>
<td>4.8</td>
<td>5.9</td>
</tr>
</tbody>
</table>

Sources: Estimated percentage of Medicaid births, 1985 and 1991 (for the U.S.) from Frost et al. State Implementation of the Medicaid Eligibility Expansions for Pregnant Women, Alan Guttmacher Institute, New York, 1993. U.S. estimate is based on responding states only. All other data from the National Center for Health Statistics.
Section 3
The States Visited Varied in Their Implementation of Medicaid Expansions

Although all four states increased their Medicaid eligibility for pregnant women beyond the federally mandated level by 1991, they expanded eligibility at different times and to different degrees. Massachusetts, North Carolina, and Washington began expanding eligibility before Indiana. By 1991, Indiana had expanded its eligibility level to 150 percent of the federal poverty level, and the other states had expanded to 185 percent of the federal poverty level. Massachusetts and North Carolina eliminated their assets tests in 1987, Indiana did so in 1988, and Washington did so in 1989.

The States Visited Varied in Their Implementation of Medicaid Expansions

Washington all shortened their Medicaid application forms, but that did not take effect until 1990 or later.

In addition, the states used several other approaches to ease entry into care:

- Three states (Indiana, Massachusetts, and Washington) allow pregnant women to apply for Medicaid eligibility by mail, rather than in person, and North Carolina plans to implement it in the future.
- Two states (Massachusetts and Washington) implemented expedited eligibility while North Carolina recommends expedited eligibility but does not require it.
- North Carolina disregards parental income for pregnant teens because state officials found that teens were moving out of their parents' homes to qualify for Medicaid-financed prenatal care at a time when they needed the support of their families most.
- Washington expanded eligibility for family planning from 60 days postpartum to 1 year postpartum with its own state funding to delay repeat pregnancies.

Several states increased provider reimbursement. According to information from the Alan Guttmacher Institute, Washington, North Carolina, and Massachusetts increased their Medicaid obstetrical reimbursement rates for uncomplicated deliveries from 20 to 85 percent in constant 1986 dollars between fiscal year 1986 and fiscal year 1991. Indiana's reimbursement rate remained essentially the same in constant dollars during this period.
<table>
<thead>
<tr>
<th>GAO</th>
<th>Enhanced Services Seen as Necessary Part of Care</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• State officials, experts, and local providers said enhanced services were valuable to improve birth outcomes</td>
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<tr>
<td></td>
<td>• Enhanced services included</td>
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<tr>
<td></td>
<td>• risk assessment</td>
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<tr>
<td></td>
<td>• care coordination</td>
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<td></td>
<td>• nutrition counseling</td>
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<td></td>
<td>• health education</td>
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<td></td>
<td>• psychosocial counseling</td>
</tr>
<tr>
<td></td>
<td>• home visiting</td>
</tr>
</tbody>
</table>

Enhanced Services Structure Differed in the States Visited

All four states we visited allowed Medicaid reimbursement for enhanced services: risk assessment, care coordination/case management, and home visiting (See table 3.2). Massachusetts, North Carolina, and Washington also allow Medicaid reimbursement for health education, nutritional education, and psychosocial counseling. However, the states differed in what services they reimbursed for, who was eligible, how services were structured, how many women received services, and whether these services were available statewide. These differences could affect the likelihood that women receive the services.

1Care coordination includes performing a risk assessment, developing a plan of care, coordinating referrals to appropriate service providers, and follow-up to ensure clients receive needed services.

2Health education includes information on healthful behavior during pregnancy, among other topics. Nutrition education includes information on the relationship between proper nutrition and good health during pregnancy and infant feeding. Psychosocial counseling involves helping women with problems that can affect health status, such as physical abuse during pregnancy.
The States Visited Varied in Their Implementation of Medicaid Expansions

Table 3.2: Visited States Reimbursed for Enhanced Services

<table>
<thead>
<tr>
<th>Medicaid reimbursed enhanced service</th>
<th>Ind.</th>
<th>Mass.</th>
<th>N.C.</th>
<th>Wash.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Care coordination/case management</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Risk assessment</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Home visiting</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Nutritional counseling</td>
<td>X</td>
<td>x</td>
<td>x</td>
<td>X</td>
</tr>
<tr>
<td>Health education</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Psychosocial counseling</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

North Carolina and Washington both had statewide programs of enhanced services for which any Medicaid-eligible pregnant woman was eligible. They both served about 58 percent of their Medicaid pregnant women in 1992. Massachusetts either provided larger reimbursements to medical care providers who agreed to provide enhanced services or required health maintenance organizations (HMOs) to provide them. However, Massachusetts did not know how many pregnant women received enhanced services and did not monitor whether medical care providers were actually providing the services. Indiana limited care coordination to high-risk women, and only 3 percent of Medicaid pregnant women received services. In addition to Medicaid efforts, in every state we visited, state Maternal and Child Health (MCH) agencies were involved in activities to improve services for pregnant women and enroll them in care. The collaboration was closest in North Carolina and Washington, where the state MCH and Medicaid agencies jointly developed identifiable programs and shared program administration. For more information, see appendix I.
Both North Carolina and Washington chose to deliver enhanced services through a statewide program developed, implemented, and monitored collaboratively by their MCH and Medicaid agencies. These programs included outreach, have name recognition with local providers, planned data collection at the beginning of their programs to allow for evaluation, do not limit enhanced services to high risk women, and are actually serving a large number of Medicaid women.

Both programs share administration between MCH and Medicaid staff. The Baby Love Program was jointly developed and is jointly administered by the state MCH bureau, the state Medicaid bureau, and the North Carolina Office of Rural Health and Resource Development. State officials told us that these three agencies developed a partnership that broke down traditional turf barriers and worked together to focus on infant mortality.
Section 3
The States Visited Varied in Their Implementation of Medicaid Expansions

Washington's First Steps project is administered by Medicaid and the state's MCH bureau. The project, enacted in 1989, currently has a central clearinghouse coordinator to provide consistency statewide and to link communities, clients, and providers. Interagency working groups provide project direction and monitoring for First Steps' services. The Medicaid agency administers the maternity case management services, while the MCH administers the maternity support services.

<table>
<thead>
<tr>
<th>GAO Evaluation Results Preliminary But Some Promising</th>
</tr>
</thead>
<tbody>
<tr>
<td>• It may be too soon to fully assess effects</td>
</tr>
<tr>
<td>• However, NC and WA, with the most extensive enhanced services, have positive evaluation results</td>
</tr>
<tr>
<td>• NC - better outcomes for women receiving services</td>
</tr>
<tr>
<td>• WA - reductions in low birth weight</td>
</tr>
</tbody>
</table>

Evaluation Evidence Mixed but Suggests Benefits From Enhanced Services

Researchers are beginning to examine the Medicaid expansions to determine whether the strategies used will improve birth outcomes, but it may be too soon for definitive answers. Nationally, infant mortality declined at a slightly faster rate between 1989 and 1991 than it did between 1981 and 1986. However, the low birth weight rate was essentially stable through the 1980s and other measures of access, such as starting prenatal care during the last 3 months of pregnancy, did not improve.
Using national or state data for all women to evaluate the expansion overlooks (1) other trends that influence national and state figures, (2) the extent to which efforts focused only on low-income women can influence whole population figures, and (3) time lags in implementation and data collection.

Other Trends
Between 1986 and 1991, the United States experienced a recession, and at least one study has correlated increased rates of late or no prenatal care and low birth weight among low-income women to times of economic stress. In addition, during this time crack cocaine use became more common among child-bearing women. Both of these trends could adversely affect birth outcomes indicators. On the other hand, technological advances have improved neonatal hospital care and should be improving birth outcomes. Given such influences on overall state birth outcome rates, it is difficult to isolate the effect of state Medicaid expansions from other trends over time.

Low-Income Focus
In addition, state efforts for low-income women affect only that segment of the population, and changes in outcomes among low-income women might be masked by changes among more affluent women.

Time Lags for Data and Implementation
Finally, states were still implementing aspects of their expansions in 1991. But 1991 infant mortality rates, the most recent national results available, represent the results of 1990 and 1991 pregnancies. Therefore, it is probably premature to judge the effects of the expansions by looking at statewide rates for all women.

Expanding Eligibility Alone May Not Improve Outcomes
Several evaluations of expanding financial eligibility for prenatal care suggest that expanding access alone may not be enough to improve outcomes. Two evaluations of expanded Medicaid eligibility in Tennessee showed no overall improvements in birth outcomes following expansions in Medicaid eligibility, although after Tennessee increased eligibility levels

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to 100 percent of the federal poverty level, late or no prenatal care decreased. An evaluation of the Massachusetts Healthy Start program (which expanded financial eligibility for perinatal care before the Medicaid expansions) compared prenatal care and birth outcomes in 1984 and 1987 between (1) uninsured women and women with private insurance and (2) uninsured women and women with Medicaid coverage. This evaluation found no statistically significant changes in birth outcomes or satisfactory prenatal care for uninsured women compared to either control group. This evaluation also examined the difference in prenatal care and birth outcomes among uninsured women in 1987 by comparing those in Healthy Start with those who remained uninsured. The results showed that women who enrolled in Healthy Start were significantly more likely to receive satisfactory prenatal care and less likely to have a poor birth outcome. However, the evaluators were unsure whether this was due to the program or to selection bias.

Outcomes Improved With Enhanced Services

However, two evaluations showed positive outcomes among low-income women in states where many Medicaid pregnant women received enhanced prenatal services. North Carolina compared outcomes among Medicaid pregnant women who had received care coordination, health education, and psychosocial support to those who did not and found improved birth outcomes among women who had received these enhanced services.

Washington has evaluated its First Steps project and found that low birth weight has declined in its low-income population since the program’s implementation. Both these evaluations suggest that providing enhanced services is beneficial. In addition, a recent evaluation of a randomized trial of comprehensive prenatal care in Tennessee found an increase in birth

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8Neither Massachusetts nor Indiana has conducted a statewide evaluation of its Medicaid expansions.


weight among first-time mothers who received comprehensive prenatal care.\textsuperscript{11}

In North Carolina, Medicaid women who received Baby Love Maternity Care Coordination were compared to Medicaid women who did not. The researchers found the following:

- Among Medicaid women who did not receive care coordination, the low birth weight rate was 21 percent higher, the very low birth weight rate was 62 percent higher, and the infant mortality rate was 23 percent higher.
- For each $1.00 spent on maternity care coordination, Medicaid saved an estimated $2.02 in medical costs for newborns up to 60 days of age.
- Comparing only women with term births, women who received care coordination for 3 or more months had lower rates of low and very low birth weight than those who received it for less than 3 months. In addition, their average Medicaid newborn costs were $396 lower than Medicaid women who had received care coordination for less than 3 months.

In Washington, an evaluation of the Washington First Steps project found that, in comparing rates in 1988 before the First Steps project and in 1991:

- The proportion of women with no prenatal care declined 62 percent, and the proportion of women with care beginning after the second trimester declined 22 percent.
- Declines in the proportion of women receiving delayed, later, or no prenatal care have been greatest among women in demographic groups with historically poorest access to prenatal care—that is, low-income women, racial minorities, teens, and unmarried women.

An evaluation comparing birth outcomes from January to June 1988 and from July to December 1991 found the following:

- The low birth weight rate for all low-income births declined from 6.2 percent to 5.5 percent. Among non-low-income births, the low birth weight rate declined from 3.4 to 3.1 percent.
- The very low birth weight rate also declined and declined more for low income births than for non-low-income births.

No matter what happens with health care reform, states are increasingly using managed care to provide for low-income pregnant women's health care. Medicaid managed care has had access and quality problems in the past. But enhanced prenatal care services can be continued under managed care. And states can use other mechanisms, such as quality assurance programs, coupled with state monitoring and oversight, to improve health outcomes. In addition, putting performance or service expectations into managed care contracts may achieve expected service or performance levels.

Current health care reform proposals, if enacted, would change funding and services for low-income women. What services would be included for pregnant women is a significant issue that has not yet been fully addressed. Changing funding streams may complicate state efforts to provide enhanced services.
Figure 4.1

GAO Medicaid Managed Care Has Had Problems in the Past

- Stinted on services
- Lacked quality assurance
- Did not correct care problems
- Did not provide EPSDT services
- Used some substandard providers

States Are Moving Their Medicaid Population Into Managed Care, but Medicaid Managed Care Has Had Problems in the Past

States are rapidly developing or expanding their Medicaid managed care programs, most often for low-income women and children on Medicaid, to increase access to care and control costs. Currently, 49 states have a managed care program in place or planned, and Medicaid enrollment in managed care doubled between 1987 and 1992.

Several models of Medicaid managed care exist. They range from prepaid or capitated models where organizations are paid a per capita amount each month to provide or arrange for all covered services, to primary care case management models, which are similar to traditional fee-for-service arrangements except that providers receive a per capita management fee to coordinate a patient's care in addition to reimbursement for services provided. Common to all managed care models is the use of a primary care physician to control access and coordinate delivery of health services.
Managed care is seen as a way to improve Medicaid recipients' access to medical services by ensuring that Medicaid patients have a primary care provider, but Medicaid managed care has had quality and access problems in the past. In the past we found managed care plans for Medicaid recipients that

- used incentive payments to physicians that rewarded them for limiting services to Medicaid program beneficiaries;¹
- lacked adequate quality assurance programs;
- did not gather and analyze utilization data to detect potential underserving of program beneficiaries;
- did not follow up and correct care quality problems;²
- did not provide timely and federally mandated Early Periodic Screening, Diagnostic, and Treatment (EPSDT) services for children;³ and
- contracted with physicians whose performance was substandard or unprofessional.⁴

Moving to a managed care model creates new challenges for state oversight. Paying for Medicaid services on a capitated basis gives providers incentives to stilt on services. In addition, putting providers at financial risk can put them at risk of insolvency, which can leave beneficiaries unprotected. For some states, managed care programs are new, and states need to take the time to adequately plan and develop the organizational structure to administer and monitor managed care programs. However, states have been working to improve their monitoring and quality assurance for these programs.

²For the above problems, see GAO/HRD-93-121.
⁴See GAO/HRD-93-67.
Figure 4.2

GAO Medicaid Managed Care Alone May Not Improve Outcomes

- Use of Medicaid managed care increasing
- Enrollment in managed care had mixed results in improving birth outcomes in 6 plans studied

Medicaid Managed Care Has Had Mixed Results at Improving Birth Outcomes

Managed medical care has not always improved adequacy of prenatal care and birth outcomes for Medicaid women. Four evaluations compared the level of prenatal care and birth outcomes among Medicaid women in six managed care arrangements with those of similar Medicaid women in fee-for-service care. Enrollment in managed medical care did not significantly improve adequacy of prenatal care or birth outcomes of
Medicaid women in four of six managed care plans reviewed. In two plans, managed care enrollees had better birth outcomes.

Figure 4.3

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<tr>
<th>GAO</th>
<th>Services to Continue Under Managed Care</th>
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<tr>
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<td>• IN - planning to develop more integrated care coordination</td>
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<td>• WA - maintaining fee-for-service enhanced care</td>
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*See Carey, Weis, and Homer and Krieger et al.
## States We Visited Plan to Continue Enhanced Services Under Medicaid Managed Care

In all four states we visited, some or all of their Medicaid-eligible pregnant women are in managed medical care systems. However, officials from all four states we visited believe enhanced services such as care coordination/case management and social services are necessary to have positive birth outcomes. Therefore, these states have preserved a Medicaid reimbursement mechanism for their enhanced services under managed care to ensure that these services will continue.

- Indiana is planning to bring its Medicaid Aid to Families with Dependent Children (AFDC) and AFDC-related population into managed care in the next 3 years. It plans to use managed care providers as gatekeepers for care coordination and reimburse enhanced services such as care coordination separately.

- All Massachusetts women and children enrolled in Medicaid are in managed care arrangements. Enhanced services are reimbursed through the enhanced global fee for those providers who choose to offer enhanced services and through a capitated rate for HMOs.

- A relatively small proportion of North Carolina Medicaid enrollees are in managed care. Pregnant managed care enrollees can receive Baby Love services, which are reimbursed separately.

- Washington is currently moving most of its Medicaid population into managed care. However, it is maintaining maternity support and maternity case management services as additional fee-for-service reimbursed services to encourage their use. The state has tried to either link new managed care providers with maternity support and maternity case management service providers or have managed care providers become maternity support or maternity case management service providers.
Better Outcomes Require Provider Accountability, Appropriate Services, and Access

Figure 4.4

Better Outcomes Require Provider Accountability

Improving outcomes in a managed care environment may require care plans to become accountable for improving their patients' health through:

- quality assurance process with state monitoring and oversight
- setting specific expectations

While there are no clear and simple answers, improving low-income women's birth outcomes in a managed care environment may require managed care plans to become accountable for improving their patients' outcomes. The means for achieving this may be through quality.
Improvement efforts coupled with changes in practice if health outcomes are poor or through putting performance or service expectations into managed care contracts.

The quality assurance process provides one mechanism to work on improving health outcomes under managed care. Federal law requires that all managed care organizations contracting with state Medicaid programs under capitation or other risk payment arrangements have an internal program of quality assurance as part of their contract. Internal quality assurance programs consist of systematic activities by the managed care organization to monitor and evaluate the care delivered to its enrollees according to predetermined objective standards and to effect improvements in care as needed. States are responsible for monitoring each managed care organization to assess the extent to which its quality assurance program meets state-specified standards and the quality of health care delivered by the managed care organization.

In 1991, the Medicaid bureau began the Quality Assurance Reform Initiative to develop a Health Care Quality Improvement System for Medicaid managed care programs. As part of this effort, the Health Care Financing Administration (HCFA) has developed A Health Care Quality Improvement System for Medicaid Managed Care: A Guide for States. This document outlines (1) a framework for a health care quality improvement system for Medicaid managed care; (2) recommended standards for internal quality assurance programs of managed care organizations; (3) recommendations on priority clinical areas of concern, use of clinical indicators, and practice guidelines; and (4) a recommended scope of work for conducting external quality reviews.

HCFA recommends that state Medicaid agencies require managed care contractors to continuously monitor and evaluate the quality of care they provide for pregnant women. Care for pregnant women and childhood immunizations are considered the two top-priority categories for monitoring quality of care. HCFA recommends using date of entry into prenatal care, number of visits, whether the woman has a live birth or fetal loss, when the woman joined the managed care organization, and birth weight to monitor quality of care. Through this monitoring, states can identify managed care plans that are not improving health outcomes for Medicaid pregnant women and help the plans take corrective action.

"The National Academy of Sciences defines quality of health care as "the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge."
Quality assurance programs can only work if the federal and state governments diligently monitor quality of care. States and participating plans have not always complied with quality assurance systems and procedures in the past nor taken corrective action quickly. In our prior work, we documented some of the potential problems that arise when safeguards and oversight systems do not function properly—such as plans’ not adequately documenting services provided in medical records, not systematically collecting utilization data, and not following up on reported problems to ensure corrective action was taken.

A second approach to improving outcomes under managed care is to put measurable performance expectations into managed care contracts. Washington has put the expectation into its contracts that managed care providers will provide EPSDT services to 40 percent of its enrolled children in 1993, 50 percent in 1994, and 80 percent by 1995. A HCFA managed care official did not know of any other states trying to put measurable performance expectations into managed care contracts. But performance expectations could be used for prenatal care—for example, the percentage of enrolled women who entered prenatal care in the first trimester. If performance expectations lead to improved EPSDT enrollment among children in managed care in Washington, other states may try similar strategies.
Lessons for Health Care Reform

**Figure 4.5**

GAO Better Outcomes Require Improved Access

- Medically underserved populations may need special services to help them access health care and promote their health—including funding for enabling services

Better Outcomes Require Improved Access

Currently health care reform is high on the Congress's and the administration's agenda. A number of competing proposals for change have been introduced in the Congress. If health care reform legislation is passed, it will change prenatal and well child care for low-income families. While it may give access to some kinds of care for some families, it may also close access for some kinds of care.

Services that Medicaid recipients can now receive may not be provided if they are not part of the comprehensive benefit package. For example, in the Administration's bill, the Medicaid program will no longer cover services provided as part of a comprehensive benefit package. Medicaid will be limited to long term care services and Medicare cost-sharing. However, Medicaid coverage for items and services not covered under the comprehensive benefit package will continue to be covered for Medicare, AFDC, and Supplemental Security Income (SSI) recipients and for children under age 18 (or up to age 22 at state option.) However, this coverage
would not extend to non-AFDC low-income pregnant women currently being covered under the Medicaid expansions.

Many low-income pregnant women now covered in state programs for enhanced services are not AFDC or SSI recipients. They would not have Medicaid coverage for these services if enhanced services are not included in the comprehensive benefit package. This change in coverage may impact states' abilities to continue to provide such services. In Washington, for example, in the first 6 months of 1991, only 52 percent of the pregnant women receiving First Step services were recipients of AFDC or certain other state income support programs.

The Administration’s bill addresses the needs of medically underserved populations or locations for special services to enable people to gain access to the health care system and to promote their health. The bill establishes grant funds to provide health services for medically underserved populations. It provides extra funding to Community and Migrant Health Centers and to develop qualified community health plans and practice networks, with the proviso that these practice networks serve medically underserved populations or in health professional shortage areas. In addition, the bill establishes grant funding for enabling services, including transportation, outreach, education, translation, and other services. The bill authorizes $1.2 billion for enabling services for fiscal years 1996 through 2000.

A different health care reform bill, S.1770/H.R.3704 (Chafee-Thomas) would authorize a new "Maternal and Infant Care Coordination" program to provide grants to states for the coordination of Medicaid, WIC, family planning, MCH-Title V, community health centers, and substance abuse programs. These grants are to help states develop and implement coordinated, multidisciplinary, and comprehensive primary health care and social services, and health and nutrition education programs designed to improve maternal and child health, targeted to women of childbearing age, particularly women at risk of having a low birth weight birth.
Better Outcomes Require Appropriate Care Content

While the Health Security Act covers pregnancy-related services, it is not specific on what services would be covered for pregnant women and how comprehensive the services would be. The American College of Obstetricians and Gynecologists and the Public Health Service have developed standards of practice and recommended content of care and service packages. These reports approach prenatal care in slightly different ways and stress necessary content of care to different degrees,

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but generally, as a part of or in addition to medical prenatal care, they recommend:

- initial and continuing risk assessment, coupled with the development of a care plan and referral to other educational and social services as needed;
- health and nutritional education promoting positive health behaviors and reducing negative behaviors, including emphasis on avoiding smoking, alcohol, and drug use, particularly illicit drugs;
- extra services for women assessed at high risk, including more intensive case management or care coordination, mental health services, substance abuse services, social services, and home visiting.
Appendix I

Visited States Structured Enhanced Services to Pregnant Women Differently

GAO Scope and Organization of Enhanced Services Differed

- IN - care coordination for high risk only—about 3% served
- MA - providers get larger fee for enhanced services—little oversight
- NC - care coordination available to all—58% served
- WA - 2 levels of care coordination—58% served

Indiana In Indiana, Medicaid reimburses for care coordination on a fee-for-service basis to an individual practitioner who is not required to join a sponsoring organization or provider practice. This approach will change in July 1994, when the state places its Medicaid-eligible pregnant women into managed care systems. At that time, prenatal care providers will become the gatekeepers for care coordination. While all Medicaid-eligible pregnant women can be assessed for risk, only those considered high risk are eligible for Medicaid-reimbursed care coordination, which includes additional services. Medicaid officials told us that approximately 3 percent of its pregnant Medicaid population receives care coordination.

Indiana MCH also has a prenatal care coordination program that incorporates the Medicaid care coordination reimbursement when appropriate and provides additional MCH block grant, and sometimes county, money to place prenatal care coordinators across the state. The primary purpose of this program is to get women into prenatal care as early as possible, then provide them whatever services they need to have a
Appendix I
Visited States Structured Enhanced Services
to Pregnant Women Differently

healthy birth outcome. While Indiana Medicaid reimburses for care coordination services for at-risk women only, this program serves all low-income pregnant women. Currently 66 of Indiana’s 92 counties have at least one prenatal care coordinator. Few Indiana low-income pregnant women receive these MCH-funded services. Approximately 6 percent of the Medicaid population receives prenatal care through MCH services. MCH officials estimated that in 1992, of those women receiving prenatal care through MCH, 6 percent received care coordination services.

Massachusetts

Medicaid reimburses for coordinated medical management, health care counseling, and obstetrical risk assessment and monitoring through its enhanced global fee. However, while all Medicaid pregnant women are eligible for these services, not all providers elect to offer them and receive the increased fee. For Medicaid-eligible pregnant women receiving care through a health maintenance organization, the HMO contract requires the HMO to provide these enhanced services. The HMO is reimbursed through its capitated rate. While Medicaid officials could not tell us how many women receive enhanced services, they believe most of these women receive them because most providers bill for the enhanced global fee, and HMOs are required to provide them. However, the state Medicaid agency does not monitor providers to ensure that those billing the enhanced global fee are actually providing these services. At one site we visited that provided some enhanced services, staff did not realize that the fee the health center received for pregnant women required them to provide enhanced prenatal services in addition to medical prenatal care.

Low-income women in Massachusetts can also access some services through the Healthy Start program administered by the Department of Public Health’s MCH bureau. The Healthy Start program, established in 1986, primarily addresses the financial barriers to comprehensive obstetrical care; however, through its statewide system, it also provides telephone referral to link pregnant women to other vital services such as the Special Supplemental Food Program for Women, Infants, and Children and the Parenting and Pregnancy Support Programs. The Parenting and Pregnancy Support Programs, located at 22 sites across the state, are geared toward women, infants, and their families at risk due to social and environmental factors. The programs’ services include home visiting, service coordination and advocacy, health education and promotion, health assessment and monitoring, parenting education and support, and infant developmental monitoring. While both Healthy Start and the Parenting and Pregnancy Support Programs are administered by the
Appendix I

Visited States: Structured Enhanced Services to Pregnant Women Differently

Department of Public Health's MCH bureau, Medicaid helps fund these two programs.

North Carolina

In 1987, North Carolina introduced its Baby Love Program which, in addition to offering outreach and advocacy, established a statewide system of maternity care coordination. North Carolina provides care coordination to all Medicaid recipients who wish to enroll in the Baby Love Program. This statewide program's care coordination services include risk assessment, nutritional counseling, psychological/social services, home visits, and postpartum maternal and newborn home assessment. Baby Love staff provide technical assistance to local providers and each year run a Baby Love conference, where providers come together to share ideas and receive training. These enhanced services are available in all 100 North Carolina counties, and approximately 58 percent of the pregnant Medicaid participants who gave birth from July 1991 to June 1992 received them.

North Carolina is also experimenting with lay Maternal Outreach Workers to supplement the work of care coordinators by serving as outreach workers and to provide more intensive services to some women. The Maternal Outreach Workers, chosen from women in the community with natural leadership skills, provide some of their services through home visiting. This project is funded jointly through Medicaid and a foundation grant and is being evaluated.

Washington

Washington's enhanced prenatal services are provided primarily by two components of the First Steps project. Medicaid reimburses these services on a fee-for-service basis. The two components of First Steps that involve delivery of enhanced services are "maternity support services" and "maternity case management":

- All Medicaid-eligible women can receive maternity support services, which are preventive health services, including assessment, education, intervention, and counseling. These are provided by an interdisciplinary team of community health nurses, nutritionists, and psychosocial workers. In 1992, about 58 percent of Medicaid-eligible women delivering babies in the state obtained maternity support services. Medicaid reimburses maternity support service providers for as many as 10 visits per client, including home visits. If the provider identifies the client as high risk, Medicaid reimburses for as many as 20 visits. Providers also refer these high-risk clients to maternity case management.
Appendix I
Visited States Structured Enhanced Services to Pregnant Women Differently

- Maternity case management services are provided to high-risk pregnant women—predominantly substance abusers or pregnant teens. In 1992, case management was received by more than 20 percent of Medicaid-eligible women delivering babies in the state. Medicaid reimburses case management providers on a monthly basis through the babies' first year of life. Providers must meet face-to-face monthly with each client to review the required written service plan.
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Related GAO Reports

Infants and Toddlers: Dramatic Increases in Numbers Living in Poverty (GAO/HEHS-94-74, Apr. 7, 1994).

Medicaid Managed Care: Healthy Moms, Healthy Kids—A New Program for Chicago (GAO/HRD-93-121, Sept. 7, 1993).


Medicaid: States Turn to Managed Care to Improve Access and Control Costs (GAO/HRD-93-46, Mar. 17, 1993).


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