Maternal and Child Health Policy and Tobacco

Performance Measures for the Title V Program Largely Fail to Address Tobacco Use by Pregnant Women and Parents

Prepared for Rep. Henry A. Waxman

Minority Staff Report
Special Investigations Division
Committee on Government Reform
U.S. House of Representatives
www.reform.house.gov/min

February 27, 2003

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EXECUTIVE SUMMARY

Despite the enormous harm to children caused by the tobacco use of parents and pregnant women, there are large gaps in access to effective smoking cessation services. State Medicaid programs and private insurers often fail to help smokers quit their addiction, and many pregnant women and parents who smoke are uninsured. One federal program that is well positioned to improve access to cessation services is the Title V program of the Social Security Act, which distributes more than $700 million to states to promote maternal and child health each year. At the request of Rep. Henry A. Waxman, the Special Investigations Division of the minority staff of the Government Reform Committee reviewed the Title V performance measures and targets to assess whether these measures and targets include appropriate tobacco-related goals.

The report finds:

- **No national performance measure in Title V tracks tobacco use.** In the Title V block grant program, there are 18 national performance measures that states must address, covering topics from the number of breastfed infants at hospital discharge to the percentage of third graders with at least one protective sealant on a molar tooth. Not one of these measures, however, covers smoking by pregnant women or parents. In the Title V Special Projects of Regional and National Significance program, none of the 37 national performance measures tracks smoking rates among women or parents.

- **Only 20 states and the District of Columbia have state-level performance measures under Title V related to smoking by pregnant women.** Five additional states include tobacco in the larger category of substance abuse during pregnancy. The remaining 24 states have no state performance measure in Title V related to tobacco.

- **Even fewer states have performance measures that set more than a minimum goal for reducing smoking by pregnant women**. A reasonable minimum goal is to reduce smoking by pregnant women by 10% from 2000 to 2005. Only ten states and the District of Columbia have state-level performance measures that meet or exceed this minimum goal.

- **No states have set Title V performance measures on parental smoking**. Despite abundant evidence of the harmful effects of secondhand smoke on children, not a single state has set a Title V performance measure related to smoking by parents.

- **The failure of Title V performance measures to address tobacco use cannot be justified on the basis of the criteria used to develop these measures.** The Maternal and Child Health Bureau of the Department of Health and Human Services decides on performance measures for the block grant program based on nine criteria, all of which are met in the case of tobacco use. Prevention experts believe that improved access to smoking cessation services offers the potential for the greatest improvement in health of all available preventive interventions

I. INTRODUCTION

By any measure, smoking by pregnant women and parents is a major cause of chronic disease, disability, and death in children. Approximately one in eight pregnant women smoke.[1] It is estimated that prenatal exposure to tobacco causes over 1,000 infant deaths per year[2] and accounts for 20% to 30% of all low birth weight babies in the United States.[3] Infants, toddlers, and older children raised in a home with smokers also face health risks as a result of exposure to secondhand smoke. Infants whose mothers smoke during and after pregnancy are three times more likely to die from Sudden Infant Death Syndrome,[4] and children exposed to secondhand smoke suffer an estimated 7,500 unnecessary hospitalizations for pneumonia and 200,000 asthma attacks each year.[5]

Beyond death and disability, smoking by pregnant women and parents has an enormous economic impact in the United States. In 1996, more than $350 million was spent on smoking-related neonatal health problems,[6] and experts believe health care for children injured by secondhand smoke at home costs $4 billion annually.[7]

While numerous studies have shown that smoking cessation therapy for pregnant women and parents is effective,[8] it is not often accessible. One in three pregnant women who smoke are

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[1]National Center for Health Statistics, *Smoking During Pregnancy in the 1990s*, National Vital Statistics Reports (2001).

[2]Centers for Disease Control and Prevention, *Annual Smoking-Attributable Mortality, Years of Potential Life Lost, and Economic Costs — United States, 1995–1999*, Morbidity and Mortality Weekly Reports, 300–303 (May 8, 2002).

[3]American Lung Association, *Smoking and Pregnancy Fact Sheet* (2002).

[4]Department of Health and Human Services, *Women and Smoking: A Report of the Surgeon General* (2001).

[5]Environmental Protection Agency, *Fact Sheet: Respiratory Health Effects of Passive Smoking* (1993).

[6]Centers for Disease Control and Prevention, *supra* note 2.

[7]C. Orleans et al., *Helping Pregnant Smokers Quit: Meeting the Challenge in the Next Decade*, Tobacco Control, III6–11 (2000).

[8]C. Melvin, P. Dolan-Mullen, and R. Windsor, *Recommended Cessation Counseling for Pregnant Women Who Smoke: A Review of the Evidence*, Tobacco Control, III80–84 (2000).

covered by Medicaid.[9] Yet only one state Medicaid program offered coverage in 2000 for all smoking cessation services recommended by the U.S. Public Health Service.[10] Private insurance plans also frequently fail to cover smoking cessation,[11] even though it is considered the second most important preventive intervention after childhood vaccination.[12] For the more than 41 million Americans without health insurance, smoking cessation programs are often out of reach as well.[13]

One major federal program with the potential to fill these gaps is the Title V program of the Social Security Act. Created by Congress in 1935, Title V funding provides flexibility for states to improve the health of women, children, and children with special health care needs.

Today, the two largest components of Title V are the block grant program and the Special Projects of Regional and National Significance (SPRANS) program, which together represent more than $700 million in federal spending each year. To comply with the Government Performance and Results Act of 1993, the Maternal and Child Health Bureau (MCHB) of the Department of Health and Human Services (HHS) has structured Title V around national core performance measures of maternal and child health. Since 1997, states seeking block grants must both provide data on national measures and set targets for improvement in succeeding years. In the application process, states also negotiate with HHS over the creation of additional state-specific performance measures.[14] The first performance measures for the SPRANS program, which exist only at the national level, were proposed in August 2002 and finalized in January 2003.[15]

Despite the central importance of Title V to maternal and child health policy in the United States, there has never been a review of how well the program addresses tobacco use among

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[9]National Governors Association, *MCH Update 2001: Trends in State Health Insurance Coverage of Pregnant Women, Children, and Parents* (2002).

[10]Centers for Disease Control and Prevention, *State Medicaid Coverage for Tobacco-Dependence Treatments — United States, 1998–2000,* Morbidity and Mortality Weekly Report, 979–982 (Nov. 9, 2001).

[11]K. Pickett et al., *Coverage of Tobacco Dependence Treatments for Pregnant Smokers in Health Maintenance Organizations,* American Journal of Public Health, 1393–1397 (2001).

[12]Centers for Disease Control and Prevention, *supra* note 10.

[13]Census Bureau, *Numbers of Americans with and without Health Insurance Rise*, Census Bureau Reports (2002).

[14]Maternal and Child Health Bureau, *Annual Report and Application Guidance* (1997).

[15]Maternal and Child Health Bureau, *Common Grant Guidance for Maternal and Child Health Bureau Discretionary Grants* (August 2002).

pregnant women and parents. At the request of Rep. Henry A. Waxman, the Special Investigations Division of the minority staff of the Government Reform Committee examined the Title V program's performance measures and targets for relevance to tobacco use. This report assesses, for the first time, whether indicators related to tobacco use by pregnant women and parents are included in national and state performance measures and whether targets for future tobacco use are sufficiently ambitious to motivate improvements in state policy.

II. METHODOLOGY

The Special Investigations Division first reviewed Title V national performance measures to identify any that track tobacco use. Measures for the block grant program were obtained on the Maternal and Child Health Bureau web site (http://mchb.hrsa.gov/). SPRANS measures were obtained from the Maternal and Child Health Bureau.

Using the Title V information system (www.mchdata.net), the Special Investigations Division also examined the most recent Title V block grant annual reports and applications from the 50 states and the District of Columbia for the presence of state-specific performance measures concerning tobacco use by pregnant women or parents.[16]

For those states with measures for smoking by pregnant women, the targets set by states for future years were further analyzed according to a minimal standard: Did the states set a target of at least a 10% decline in tobacco use from 2000 to 2005? This minimum standard is supported by experts consulted by the Special Investigations Division as well as by the HHS initiative *Healthy People 2010*, which seeks to reduce the rate of smoking during pregnancy to 1% by 2010, a significantly more aggressive goal.[17] The targets set by states were calculated by comparing the year 2000 prevalence of smoking by pregnant women in the state with the state's goal for the prevalence of smoking by pregnant women in 2005. Both of these numbers were found in the states' most recent block grant application.[18]

To assess whether the variation in the existence of performance measures and the adequateness of targets might be explained by state-to-state differences in smoking rates, the Special Investigations Division examined whether the state prevalence of smoking during pregnancy was associated with either the existence of a performance measure or an adequate

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[16]Outside the scope of this report are state-level performance measures that address smoking by teenagers or young people. Only seven states have such measures.

[17]Objective 16-17c in HHS, *Healthy People 2010: Understanding and Improving Health* (2000).

[18]Two states, Alaska and New York, did not provide prevalence data for 2000, but did provide data for 1999. For these states, the report uses the 1999 data.

target. For a consistent comparison between states, this analysis was conducted using the rate of pregnant women smoking in each state as reported by the National Center for Health Statistics.[19]

Finally, the Special Investigations Division obtained from the Maternal and Child Health Bureau the nine criteria used to set Title V national performance measures in the block grant program and assessed whether these criteria could explain why measures of tobacco use are not included. This analysis involved an extensive review of the medical literature and consultation with experts in maternal and child health.

III. FINDINGS

A. No National Performance Measure in Title V Tracks Tobacco Use

There are 18 national performance measures for the Title V block grant.[20] Topics for performance measures include the birth rate for teenagers aged 15 to 17 years, the percent of third graders who have received protective sealant on at least one of their molars, and the percentage of breastfed infants at hospital discharge. States must report data on these measures annually and set targets for improvement. However, not one of the existing national measures relates to tobacco use.

There are 37 national performance measures in the SPRANS program. According to the Maternal and Child Health Bureau, these measures "communicate the MCHB 'story' to a broad range of stakeholders on the role of the Bureau in addressing the needs of maternal and child health populations."[21] Two of these measures mention tobacco.[22] Performance measure 22, which is called "[t]he degree to which MCHB supported programs facilitate health providers' screening of women participants for risk factors," asks grantees to provide on a 0 to 2 scale whether their program supports screening for smokers and promotes a "system of care that ensures linkages between health care providers and appropriate intervention programs." Performance measure 35, called "[t]he degree to which States and Communities have implemented comprehensive systems for women's health services," asks grantees to rate on 0 to 2 scale whether the "state or program has linkages with smoking cessation programs."

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[19]National Center for Health Statistics, *supra* note 1.

[20]Maternal and Child Health Board of the Health Resources and Services Administration, *National "Core" Performance Measures* (online at www.mchb.hrsa.gov, File: Search TVIS).

[21]Maternal and Child Health Bureau, *supra* note 15.

[22]A third performance measure (number 21) measures "the number of women participating in MCHB supported programs requiring a referral, who receive a completed referral." This measure could include women referred to smoking cessation programs, but does not separately measure women referred to smoking cessation programs. Maternal and Child Health Bureau, *supra* note 15.

The SPRANS performance measures related to tobacco have several weaknesses. First, SPRANS projects do not have to meet all performance measures. As a result, states can receive SPRANS funding without any of the tobacco-related measures applying. Second, the tobacco-related measures are not their own performance measures, but are part of broader measures. For example, performance measure 22 asks states to provide information on screening for alcohol, illicit drugs, eating disorders, depression, hypertension, diabetes and domestic violence.[23] Performance measure 35 also asks states to rate whether there are linkages with breast and cervical cancer programs, chronic disease programs, perinatal health programs, mental health programs, nutrition programs, substance abuse services programs, health promotion/disease prevention, and oral health services programs.[24] Third, and most fundamentally, the two SPRANS tobacco-related measures are based on the state's self-reports, not on actual data on the percentage of pregnant women or parents smoking.

B. Only 20 States and the District of Columbia Have Title V Performance Measures Related to Smoking by Pregnant Women

Twenty states and the District of Columbia have negotiated with HHS to establish state-level performance measures related to smoking by pregnant women. Five additional states include tobacco in the larger category of substance abuse during pregnancy, and one has a performance measure for the percentage of women of child-bearing age who report smoking in the last 30 days. The remaining 24 states have no state performance measure in Title V related to tobacco use. *See* Table 1.

One possible explanation for variation in whether states have set performance measures on smoking by pregnant women is that states with low rates of tobacco use may not see the need for a performance measure. However, there is no correlation between the rate of smoking among pregnant women in a state and whether a state has a state-level performance measure. Of the 20 states and the District of Columbia with performance measures on smoking during pregnancy, the mean prevalence of pregnant women who smoked was 14.3% in 1999. Of the 24 states without any performance measures related to tobacco use and pregnancy, the mean prevalence was 14.2%.[25]

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[23] *Id.*

[24] *Id.*

[25] This comparison is based on data from the National Center for Health Statistics. These data were not available for one state in each group. National Center for Health Statistics, *supra* note 1.

Table 1: States with and without Title V Performance Measures on Tobacco Use during Pregnancy		
States with Performance Measure on Tobacco Use during Pregnancy	**States with Performance Measure on Substance Abuse, but Not Tobacco Use Alone, during Pregnancy**	**States with No Performance Measure on Tobacco Use during Pregnancy**
Alaska, Connecticut, Delaware, District of Columbia, Florida, Indiana, Maryland, Massachusetts, Mississippi, Missouri, Montana, New Hampshire, New York, North Carolina, North Dakota, Oregon, South Dakota, Utah, Washington, West Virginia, Wisconsin	Georgia, Hawaii, Louisiana, Minnesota, Wyoming	Alabama, Arizona, Arkansas, California, Colorado, Idaho, Illinois, Iowa, Kansas, Kentucky, Maine, Michigan, Nebraska,* Nevada, New Jersey, New Mexico, Ohio, Oklahoma, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Vermont, Virginia *Measures percent of women of child-bearing age who report smoking in the last 30 days.

C. Only Ten States and the District of Columbia Have Set a Goal of Reducing Smoking during Pregnancy by 10% over Five Years

In the Title V program, states with performance measures for smoking during pregnancy must set targets for reducing smoking by pregnant women in the state from 2000 to 2005. The targets range from a 0% reduction by Maryland (the state met its 2005 target in 2000) to a 36.3% reduction in New York. *See* Figure 1.

A reasonable minimum goal for a reduction in smoking by pregnant women from 2000 to 2005 is 10%. This target is supported by the Public Health Service, which estimates that at least a 10% reduction in smoking among pregnant women can be achieved with the provision of cessation services whose effectiveness has been clinically proven.[26] It is also supported by the HHS initiative *Healthy People 2010*, which seeks a reduction in the rate of smoking during pregnancy of far more than 10% for each state by the year 2010 (to an absolute rate of 1%).[27] Smoking cessation experts consulted by the Special Investigations Division agreed that a 10% decline over five years was a minimal standard for states.[28]

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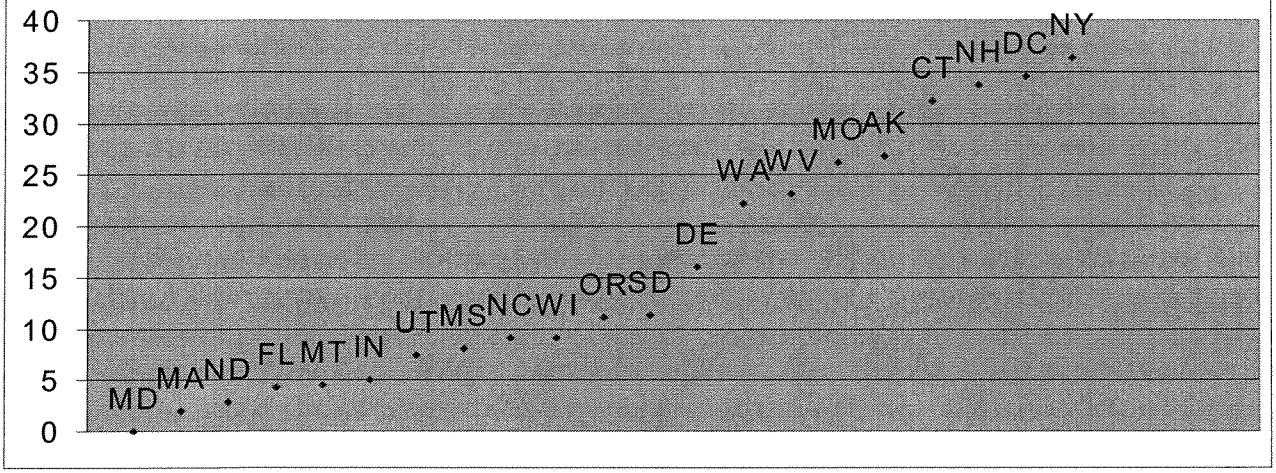
[26]Public Health Service, *Treating Tobacco Use and Dependence* (June 2000).

[27]Objective 16-17c in HHS, *supra* note 16.

[28]E-mail communication with Dr. Cathy L. Melvin, Director, Child Health Services Program and Smoke-Free Families National Dissemination Office, Cecil G. Sheps Center for

Figure 1: Goal for Percent Drop in Smoking during Pregnancy by State, 2000-2005



Only ten states and the District of Columbia set a goal of reducing the rate of pregnant women smoking that met this minimum standard. The other ten states that had state-level goals for reducing smoking by pregnant women all had goals that sought less than a 10% reduction.

One possible explanation for variation in target declines in smoking by pregnant women is that states with lower rates of smoking have set less ambitious targets. However, no correlation was found between the prevalence of smoking among pregnant women in a state and the strength of the state's goal. For example, Indiana, which had a smoking rate of 20.2% among pregnant women in 2000, set a 2005 goal of 19.2%, about a 5% reduction. Conversely, Connecticut, which reported a smoking rate among pregnant women of just 7.8% in 2000 had a 2005 goal of 5.3%, a 32% reduction.

D. No States Have Set Title V Performance Measures on Parental Smoking

Despite abundant evidence of the harmful effects of secondhand smoke on children, not a single state has set a Title V performance measure related to smoking by parents.

E. The Failure of Title V Performance Measures to Address Tobacco Use Cannot Be Justified on the Basis of the Criteria Used to Develop these Measures

According to the Maternal and Child Health Bureau, nine criteria are used to choose which health indicators are national performance measures for the Title V block grant program. These criteria are:

Health Services Research, University of North Carolina (Feb. 6, 2003); E-mail communication with Dr. Michael Weitzman, Professor of Pediatrics, University of Rochester School of Medicine and Dentistry (Feb. 7, 2003).

1. Measure is relevant to major state Title V activities and Block [Grant] dollars.
2. Measure is applicable for vast majority of state programming.
3. The measure should be important and understandable to policy makers and the public.
4. There should be a demonstrated link of the measure to the desired outcome.
5. Data should generally be available from all states and jurisdictions.
6. Measurable change in the measure should be expected within five years or less.
7. If not a health outcome, the process or capacity building measure should clearly lead to an improved health outcome.
8. Consideration should be given to the magnitude and feasibility of correcting the problem related to the measure.
9. Consideration should be given to measures which are prevention focused.[29]

Under these criteria, national performance measures on smoking rates of pregnant women and parents are justified.

1. Smoking Cessation Is Relevant to State Title V Activities

Title V activities aim to advance maternal and child health. Addressing the adverse health effects of smoking on children and their mothers is relevant to this goal. Smoking by pregnant women and parents leads to a wide range of serious adverse health effects, including low birth weight, asthma, and pneumonia. Indeed, the relevance of smoking cessation to maternal and child health is demonstrated by the fact that HHS has already negotiated state-specific performance measures with twenty-six states that relate to smoking by pregnant women. Some of the programs funded by Title V include: providing awareness materials for expectant mothers (Alaska), providing cessation counseling and materials through a prenatal care coordination program (Wisconsin), and screening of pregnant women for tobacco use by community health workers (New York). [30]

2. Smoking Among Pregnant Women and Parents Is a Problem in All States

No state is unaffected by smoking by pregnant women and parents. Between 4% and 26% of pregnant women smoked in the 50 states and the District of Columbia in 1999.[31] States spend between 1% and 4% of neonatal healthcare dollars on smoking-related complications.[32] This

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[29]HHS, Maternal and Child Health Bureau, *Criteria for Selecting MCH Measure and Indicators* (1997).

[30] Maternal and Child Health Board of the Health Resources and Services Administration, *Title V State Narratives* (online at www.mchb.hrsa.gov).

[31]Centers for Disease Control and Prevention, *State Prenatal Smoking Databook, 1999* (online at www.smokefreefamilies.org).

[32]*Id.*

makes smoking by pregnant women a significant financial burden on states. The costs of smoking by parents are also well known.[33]

3. Smoking Cessation Is Important and Understandable to Policymakers and the Public

A Gallup poll in 2002 found that 85% of Americans think that exposure to secondhand smoke is very or somewhat harmful.[34] Another survey in 1999 found that over 65% of Americans recognize that smoking by pregnant women could cause birth defects.[35] These data indicate that national maternal and child health performance measures on tobacco use would make sense to policymakers and the public.

4. Performance Measures Link to Outcome Measures for Tobacco Use by Pregnant Women and Parents

Smoking cessation has immediate health benefits that are well recognized by the medical community. One study found that women who stop smoking during pregnancy reversed tobacco's effects on their fetuses almost immediately.[36] Another study found that pregnant women who quit smoking gave birth to infants that were 200 grams heavier on average than infants of women who did not stop smoking.[37] Immediate benefits are also known to accrue to adults who quit smoking. A recent study in California found a significant decrease in the number of deaths from heart disease during an aggressive anti-tobacco advertising campaign that lowered smoking rates in California more quickly than the rest of the United States.[38]

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[33]Centers for Disease Control and Prevention, *Annual Smoking-Attributable Mortality, Years of Potential Life Lost, and Economic Costs — United States, 1995–1999,* Morbidity and Mortality Weekly Reports (Apr. 12, 2002).

[34]Gallup Poll, *Tobacco and Smoking* (online at www.gallup.com, File: Gallup Poll News Service, In-Depth Analysis).

[35]*Id.*

[36]M. Sexton and J. Hebel, *A Clinical Trial of Change in Maternal Smoking and Its Effect on Birth Weight,* Journal of the American Medical Association, 911–915 (Feb. 17, 1984).

[37]C. Li et al., *The Impact of Infant Birth Weight and Gestational Age on Cotinine-Validated Smoking Reduction During Pregnancy*, Journal of the American Medical Association, 1519–1524 (Mar. 24–31, 1993).

[38]C. Fichtenberg and S. Glantz, *Association of the California Tobacco Control Program with Declines in Cigarette Consumption and Mortality from Heart Disease,* New England Journal of Medicine, 1772–1777 (Dec. 14, 2000).

5. Data on Tobacco Use Is Widely Available

Maternal smoking is reported on birth certificates in 49 states (only California is excluded) and the District of Columbia.[39] Other resources for determining the number of women who smoke while pregnant include the National Survey of Family Growth and the Behavioral Risk Factor Surveillance program.[40] The Centers for Disease Control closely monitors smoking prevalence in all major demographic groups across the United States.

6. Change in the Percentage of Smoking Parents and Pregnant Women Is Measurable in Five Years or Less

The Public Health Service strongly recommends that smoking cessation services be provided to all smokers, including pregnant women, because of extensive evidence of efficacy.[41] As many states have demonstrated, an effective tobacco control program can immediately and substantially reduce tobacco use.[42]

7. Smoking by Pregnant Women and Parents Is Directly Linked to Multiple Health Outcomes

In children, the adverse outcomes linked to parental smoking include neonatal death, low birth weight, asthma, pneumonia, and ear infections.[43] The adverse health outcomes associated with smoking by adults include chronic lung disease, heart disease, and cancer.[44]

8. A Plausible Solution to Smoking By Pregnant Women and Parents Exists

The *Clinical Practice Guideline on Treating Tobacco Use and Dependence* recommended that pregnant smokers receive extensive cessation counseling.[45] Methods that were found to be effective included: (1) provision of pregnancy-specific self-help material coupled with one ten-minute counseling session by a health educator; and (2) two to three minutes of advice from a

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[39]National Center for Health Statistics, *Births: Final Data for 2000,* National Vital Statistics Report (2002).

[40]*Id.*

[41]Public Health Service, *supra* note 24.

[42]American Lung Association, *State of Tobacco Control: 2002* (2003).

[43]M. Werler, *Teratogen Update: Smoking and Reproductive Outcomes,* Teratology, 382–388 (June 1997).

[44]Department of Health and Human Services, *Women and Smoking: A Report of the Surgeon General* (2001).

[45]Public Health Service, *supra* note 24.

physician regarding the risks of tobacco and tips for quitting plus one ten-minute counseling session by a midwife and the provision of a self-help manual and followup letters.[46] The Public Health Service, which recommends smoking cessation for all smokers, found that women who receive these counseling measures are two-and-a-half times more likely to quit smoking.[47]

9. Smoking Cessation Is a Prevention-Focused Measure

Smoking cessation services are highly recommended by the U.S. Preventive Services Task Force. In fact, improved access to such services is considered to offer the greatest potential for improved health of all available preventive interventions.[48]

IV. CONCLUSION

While smoking by pregnant women and parents causes grave damage to child health, the Title V program does not set adequate performance-based measures on tobacco use. Those measures that do exist are frequently accompanied by targets that do not anticipate even a 10% drop in smoking. The criteria used by the Maternal and Child Health Bureau to set national performance measures in the block grant program cannot explain the absence of any national measure tracking tobacco use. Overall, the performance measures in Title V programs appear to be a missed opportunity for progress in smoking cessation.

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[46] *Id.*

[47] *Id.*

[48] Centers for Disease Control and Prevention, *supra* note 10.