CAMPAIGN for TOBACCO-FREE Kids®

MEDICAID AND MEDICARE COSTS & SAVINGS FROM COVERING TOBACCO CESSATION (Based on Proposals in Senate Bill S. 854 and House Bill H.R. 3676)

The clinical and health care merits of providing a tobacco cessation benefit through the Medicare and Medicaid programs are well established, but this fact sheet presents the first careful research-based estimates of the monetary costs and savings from providing Medicare and Medicaid cessation benefits, based on those proposed in the "Medicare, Medicaid and MCH Tobacco Cessation Promotion Act of 2001 (S. 854 and H.R. 3676)."[1]

In the context of total spending for either Medicare or Medicaid, the costs are minimal. In Medicare, the benefit could constitute as little as one half of one percent of current program spending and, based upon conservative assumptions, nearly pay for itself over the course of a ten-year budget window. In Medicaid, the benefit could constitute as little as one-tenth of one percent of current spending. In both cases, if non-program savings are factored in, the cessation savings significantly exceed the costs. Moreover, during its first ten years, providing this benefit would prompt at least 615,000 Medicare and Medicaid beneficiaries to stop smoking and, consequently, enjoy longer, healthier, and less-disabled lives, while preventing as many as 560,000 Medicare and Medicaid beneficiaries from ever dying from smoking-caused disease.

The tables below focus only on those costs and savings (in constant 2002 dollars) actually expended or accrued during the 10-year period of time. But it is important to note that substantial additional governmental and private savings accrue in subsequent years because of the long-term smoking reductions achieved within the 10-year period. We estimate the combined Medicare, Medicaid and non-governmental savings that will accrue beyond the 10-year period to be as much as an additional $881 million.

Summary of Estimated Costs & Savings of the Medicare Cessation Benefit

Smoking Beneficiaries Utilization Rate	Average Annual Medicare Cost	Ten-Year Medicare Costs	Ten-Year Medicare Savings	Ten-Year Non-Medicare Savings
2% Utilization	$11.2 million	$112 million	$75 million	$62 million
5% Utilization	$28.1 million	$281 million	$188 million	$154 million
10% Utilization	$56.2 million	$562 million	$377 million	$308 million

Note: Non-Medicare savings include savings to other Federal programs such as Medicaid, VA and FEHB, as well as various state-government and non-governmental savings. Amounts in 2002 dollars.

Summary of Estimated Costs & Savings of the Medicaid Cessation Benefit

Smoking Beneficiaries Utilization Rate	Average Annual Medicaid Costs		Ten-Year Medicaid Costs		Ten-Year Medicaid Savings		Ten-Year Non-Medicaid Savings
2% Utilization	**Federal**	**State**	**Federal**	**State**	**Federal**	**State**	
Drug Plan 1	$58.2 million	$43.9 million	$582 million	$439 million	$177 million	$134 million	$239 million
Drug Plan 2	$21.8 million	$16.4 million	$218 million	$164 million	$177 million	$134 million	$239 million
5% Utilization							
Drug Plan 1	$145.5 mill.	$109.7 mill.	$1.5 billion	$1.1 billion	$443 million	$334 million	$598 million
Drug Plan 2	$54.4 million	$41 million	$544 million	$410 million	$443 million	$334 million	$598 million
10% Utilization							
Drug Plan 1	$290.9 mill.	$219.5 mill.	$2.9 billion	$2.2 billion	$886 million	$668 million	$1.2 billion
Drug Plan 2	$108.8 mill.	$82.1 million	$1.1 billion	$821 million	$886 million	$668 million	$1.2 billion

Note: The Federal Government, on average, reimburses the states for 57% of all state Medicaid program costs. Non-Medicaid savings include savings to other Federal programs such as Medicare, VA and FEHB as well as state-government and non-governmental savings. Amounts in 2002 dollars.

1400 I Street NW - Suite 1200 - Washington, DC 20005
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As shown below, the assumptions used to estimate these Medicare and Medicaid cessation costs and savings are based on the most current research and data available. Using different assumptions would yield different results, but these projections provide a conservative view of the potential costs and savings from the proposed new cessation coverage.[*]

How the Cost Estimates Were Calculated

The following are the key factors that need to be considered when estimating the cost of a tobacco cessation benefit:

- The estimated number of smokers covered by Medicare and Medicaid.
- The estimated number of smokers who will utilize tobacco cessation services.
- The estimated number of smokers who will actually quit (of those who utilize services).
- The estimated growth in the numbers of beneficiaries over time.
- The types of nicotine replacement therapies (NRTs), along with non-NRTs – such as bupropion SR (a.k.a., Zyban) -- that are covered, if any, along with any restrictions on prescription length.
- The estimated cost of NRTs and non-NRTs to Medicaid (retail cost vs. drug rebate agreements).
- The estimated cost of tobacco cessation counseling services.

Medicare. The following is an estimate of the cost of a Medicare counseling-only tobacco cessation benefit:

1. Currently, an estimated 4.4 million Medicare beneficiaries smoke (this model assumes a constant rate of smoking over 10 years and builds in annual quitters to subsequent year smoking rates).[2]

2. It is estimated that between two and 10 percent of Medicare beneficiaries who smoke will utilize the cessation benefit each year.[3]

3. It is estimated that 20 percent of those Medicare beneficiaries who utilize the benefit will quit and achieve long-term abstinence.[4]

4. The Medicare population is expected to grow from the 2002 baseline estimate of 41.2 million to 47.9 million beneficiaries in 2012 (increasing the number of smokers from an estimated 4.4 to nearly 5 million beneficiaries).[5]

5. It is estimated that telephone and individual, in-person counseling would cost $100 and $140 per beneficiary who utilizes the service, respectively (half are assumed to use telephone counseling and half, individual, in-person counseling).[6] These costs are held constant for each year of the model.

6. No drug treatment would be available under S. 854.

7. At a utilization level of:

    * Two percent (of covered tobacco users), the average annual cost to the Medicare program is estimated at $11.2 million ($112 million over ten years);

    * Five percent (of covered tobacco users), the annual cost to the Medicare program is estimated at $28.1 million ($281 million over ten years); and,

    * Ten percent (of covered tobacco users), the annual cost to the Medicare program is estimated at $56.2 million ($562 million over ten years).

Medicaid. The following is an estimate of the costs of a Medicaid drug treatment and counseling tobacco cessation benefit (with drug treatment available to all beneficiaries who use tobacco and counseling available only to pregnant beneficiaries who use tobacco):

1. Currently, an estimated 8.7 million Medicaid beneficiaries smoke (36% of adult beneficiaries and 28% of beneficiaries age 14-18) and would be eligible for drug treatment under S. 854.[7] Of these Medicaid smokers, an estimated average of 340,000 become pregnant each year, and would be eligible for additional cessation counseling services.[8]

2. It is estimated that between two to 10 percent of the Medicaid beneficiaries who smoke and are covered under this proposal will utilize the benefit each year.[9] However, due to the unique circumstances of pregnant women, we have

[*] These estimates offer a detailed starting point for the development of official government budget projections by the Congressional Budget Office, the Office of Management and Budget, or the Center for Medicare and Medicaid Services' Office of the Actuary.

calculated their use rates differently assuming they would be 50% less likely to use drug treatment (since it is only recommended as a last resort after counseling and other treatments fail) and 50% more likely to use counseling.

3. It is estimated that 20 percent of those Medicaid beneficiaries who utilize the benefit will quit and achieve long-term abstinence.[10]

4. The Medicaid population is expected to grow approximately 1.57 percent per year over the next 10 years (increasing the number of smokers from 8.7 to 10.1 million beneficiaries).[11]

5. For pregnant beneficiaries who smoke, it is estimated that individual, in-person counseling would cost $140 per beneficiary (these costs are held constant throughout the model for each year) who utilizes the service.[12]

6. The cost estimates shown here reflect the federal share of costs only (federal FMAP national average of 57%) – however, the summary tables above do show the state share of costs and savings.[13]

7. The cost estimates (for drugs) reflect a 25 percent discount off of retail drug prices stemming from each state's drug rebate program.[14] In addition, the estimated unit cost and duration of use for each NRT and non-NRT was taken directly from the PHS Guidelines and used to calculate the pharmacy costs for the benefit (the unit costs have been inflated each year to account for expected price increases).

8. In addition to estimated utilization and numbers of smokers, the design of the drug formulary has a significant impact on costs. Options can range from the provision of all NRTs and non-NRTs recommended in the PHS Guidelines, without any limitations on prescription length (but limited to one treatment episode per beneficiary per year), to more restrictive versions, such as those that would provide only nicotine patches and gum along with bupropion SR with an 8-week limit on prescriptions (limited to one treatment episode per beneficiary per year).[15] It is likely, given the current design of state prescription drug plans, that some limitations would be imposed.

9. Below, we have illustrated two possible drug plans, one that is the least restrictive and a second with a reasonable set of formulary limitations (we have assumed that despite differences in formulary design, overall effectiveness of either approach is the same thereby generating identical savings projections for both drug plans).

    * Drug Plan 1 - All NRTs and non-NRTs available based upon prescription length contained in PHS Guidelines;
    * Drug Plan 2 - Nicotine gum and patch and bupropion SR only available with 8-week limit on prescription length.

10. At a utilization level of:

    * Two percent (of covered tobacco users), the annual cost to the Medicaid program (counseling and drugs) is estimated at:
        – Drug Plan 1 - $58 million to $580 million over ten years;
        – Drug Plan 2 - $22 million to $220 million over ten years.

    * Five percent (of covered tobacco users), the annual cost to the Medicaid program is estimated at:
        – Drug Plan 1 - $145 million to $1.5 billion over ten years;
        – Drug Plan 2 - $54 million to $540 million over ten years.

    * Ten percent (of covered tobacco users), the annual cost to the Medicaid program is estimated at:
        – Drug Plan 1 - $291 million to $2.9 billion over ten years;
        – Drug Plan 2 - $109 million to $1.1 billion over ten years.

How the Benefits and Savings Estimates Were Calculated

Providing tobacco cessation benefits as designed in S. 854 would produce the following estimated benefits and savings.

Medicare:

1. Depending upon actual utilization (2% to 10%), 187,000 to 937,000 beneficiaries would successfully quit using tobacco (achieve long-term abstinence) over a 10 year period of time (number of smokers multiplied by estimated utilization rate multiplied by the quit rate multiplied by 10 years). Of these, 30,000 to 150,000 would avoid premature deaths caused by tobacco use.[16]

2. Similarly, for Medicare beneficiaries who successfully quit, this means a cumulative total of 374,000 to 1.87 million additional years of life for these beneficiaries.[17]

3. On average, smokers incur approximately $2,800 in extra medical expenses (this figure is held constant over the ten-year budget period) over a five-year period versus non-smokers, with larger excess costs over time.[18] Those who quit smoking early in their smoking career are likely to enjoy this same magnitude of reduced lifetime healthcare costs, with overall average healthcare cost savings to those who quit equal to perhaps two-thirds as much as the difference between smokers and nonsmokers, or about $1,860 per person who quits.[19] With elderly smokers, such as Medicare recipients, the total healthcare cost "savings" from quitting would be less, but still significant – perhaps totaling, on average, one-third as much as the difference between smokers and non-smokers, or about $930 per quitting smoker ($2,800 x 33%).[20]

4. Due to the design of the Medicare benefit package, Medicare by itself only covers little more than half (55%) of a beneficiaries' healthcare related expenditures.[21] As a result, the average savings, in reduced Medicare costs per beneficiary who quits is likely to be about $508 ($930 X 55%).

5. Multiplying that annual savings rate times the number of Medicare beneficiaries likely to quit smoking each year, given the cessation coverage called for in S. 854, produces likely Medicare cost savings over a ten-year period of approximately $83 to $414 million (depending on the rate of utilization).[22]

6. Despite low estimates of utilization and conservative estimates in terms of savings for elderly smokers who quit, these ten-year program "savings" during the first ten years, alone, cover about two-thirds of the ten-year cost of providing the cessation benefit, with additional savings in future years also locked in by the smoking declines secured by the cessation benefit during the first ten years. If non-Medicare savings from the smoking reductions are factored into the equation (e.g., savings to other federal healthcare programs, to state government healthcare programs, to third party healthcare payors, such as Medigap supplemental insurers, and to health consumers out-of-pocket costs), the total savings far exceed the costs of the benefit.

Medicaid:

1. Depending upon actual utilization (2% to 10%), it is estimated that 372,000 to 1.9 million program beneficiaries -- not counting pregnant beneficiaries (see below) -- would successfully quit using tobacco (achieve long-term abstinence) over a 10 year period of time. Of these, 79,000 to 394,000 would avoid premature deaths from tobacco use.[23]

2. As noted above, on average, smokers incur approximately $1,860 in extra health care expenses over a five-year period versus the average person who quits smoking.

3. Like Medicare, Medicaid covers roughly half of a beneficiaries' total health care expenditures.[24] Accordingly, the total Medicaid Program's average five-year savings per beneficiary who quits is approximately $1,000 ($1860 X 55%).

4. Because the Federal Government pays for only about 57% of all Medicaid Program costs (through reimbursements to the states that pay the rest), the average five-year federal Medicaid savings per beneficiary who quits is roughly $590 (this figure is held constant for each year of the budget model).

5. Accordingly, the 372,000 to 1.9 million (non-pregnant) smoking Medicaid beneficiaries who would be likely to quit because of the cessation coverage called for in S. 854, would reduce Federal Medicaid costs over a ten year period by as much as $167 to $834 million.[25] At a minimum, these ten-year "savings" would likely cover approximately one-third to more than 85% of the actual ten-year costs of a drug-counseling cessation benefit (depending upon the formulary design). Similar to Medicare, if non-Medicaid savings (e.g., reimbursements by third party payors) are factored in, the savings generated by this benefit dwarf the actual costs of the program.

6. As noted previously, Medicaid provides insurance coverage to an estimated 340,000 pregnant women smokers (and their offspring) each year (on average).[26] Because pregnant women who smoke are more likely to suffer birth complications and babies with low birth weights and other health problems (which entail much higher healthcare costs), a reduction in the number of pregnant Medicaid beneficiaries who smoke would produce additional Medicaid savings (federal share only) of $10 to $52 million over a ten year period of time.[27] The reduction of smoking among pregnant Medicaid beneficiaries would also reduce a wide range of other health problems suffered by newborns, infants, and young children, which would produce additional cost savings that are not estimated here.[28]

Comparison to Other Medicare Preventive Benefits

The July 2001 *American Journal of Preventive Medicine* provides an exhaustive research review that ranks the effectiveness of various clinical preventive services recommended by the U.S. Preventive Services Task Force, using a one to ten scale, with ten being the highest possible score.[29] Of the thirty preventive services evaluated, tobacco cessation ranked second in its degree of effectiveness, scoring a nine out of 10 (the highest ranking was for childhood vaccines which scored a 10). Among other preventive services covered by Medicare, colorectal cancer screening received a score of eight and mammography screening scored a six.

Coverage of Tobacco Cessation by Other Insurers

- ***Federal Employees Health Benefits Plan.*** In its annual call for contracts for the 2002 contract year, the Office of Personnel Management, which administers the Federal Employees Health Benefits Plan (FEHBP) and covers approximately 9 million current and former federal employees (including members of Congress and their staff) and their dependents – included language that strongly encourages prospective plans to include smoking cessation benefits as part of their standard benefits (consistent with the June 2000 PHS Guidelines).[30]

- ***Medicaid.*** A 2001 survey found that 34 states already cover some type of tobacco cessation benefit, ranging from limited NRTs (32 states) to some form of counseling services (13 states).[31]

- ***Private Health Plans.*** Private insurance coverage of tobacco cessation varies. While only four states mandate some form of coverage of cessation benefits (California, Colorado, New Jersey, North Dakota), 75 percent of managed care organizations report offering some form of tobacco cessation benefit. Most (54%) only provide self-help materials, and a limited number provide counseling or drug treatment (33% and 25%, respectively).[32]

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Related Campaign Fact Sheets (available at http://www.tobaccofreekids.org/)

- *Key Tobacco-Cessation Findings and Recommendations*
- *What Kind of Tobacco Cessation Might Medicare, Medicaid, or Private Insurers Cover?*
- *Summary of the Durbin-Brownback Tobacco Cessation Bill (S. 854)*
- *Treating Tobacco Addiction And Otherwise Helping People Quit Reduces Tobacco Use*
- *Table: State Cessation-Related Statistics & Potential Savings*

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[1] Go to http://www.congress.gov/ and type in either "S. 854" or "H.R. 3676" to obtain a copy of the complete bill text.
[2] U.S. Centers for Disease Control and Prevention (CDC), "Cigarette Smoking Among Adults – United States, 1999," *Morbidity and Mortality Weekly Report (MMWR)*, October 12, 2001;Vol. 50; No. 40; :869-873 – reported 10.6% prevalence among adults 65 years old and older (http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5040a1.htm).
[3] Utilization of cessation benefits estimated at 2-10% of covered smokers. Curry SJ et al., "Use and Cost Effectiveness of Smoking Cessation Services Under Four Insurance Plans in an HMO," *New England Journal of Medicine*, 1998, 339(10):673-679.
[4] Fiore MC, et al., *Treating Tobacco Use and Dependence*. U.S. Public Health Service Clinical Practice Guideline, June 2000 (http://phs.os.dhhs.gov/tobacco/treating_tobacco_use.pdf).
[5] Health Care Financing Administration*, Medicare 2000: 35 Years of Improving Americans' Health and Security*, July 2000 (http://www.hcfa.gov-stats-35chartbk.pdf/).
[6] Cost estimated at $50-$150 per person ($100 average); Professional Assisted Cessation Therapy, *Reimbursement for Smoking Cessation Therapy: A Healthcare Practitioner's Guide*, February 2001 (http://www.endsmoking.org/resources/reimbursementguide/pdf/reimbursementguide.pdf); Cost estimate based on $35 provider reimbursement fee being paid by HCFA in its Healthy Aging Medicare cessation demonstration project and capped at 4 sessions.
[7] Schauffler, HH et al*, State Medicaid Coverage for Tobacco Dependence Treatments – United States, 1998 and 2000*, MMWR, November 9, 2001/50(44);979-982 (http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5044a3.htm) – contains estimate of 36% smoking prevalence for Medicaid; personal interview (11/8/01) with H.H. Schauffler indicates that 36% prevalence is for adults only and based upon Behavioral Risk Factor Surveillance Survey data; Medicaid enrollment numbers used are from the HCFA 2082 data – http://www.hcfa.gov/medicaid/msis/2082-6.htm (40.6 million enrollees, 1998); data for smoking prevalence for 14-18 year olds is based on 2000 high school data contained in *Youth Tobacco Surveillance – United States 2000*, MMWR, November 2, 2001/50 (SS04);1-84 (http://www.cdc.gov/mmwr/preview/mmwrhtml/ss5004a1.htm).
8 Total of 4,063,000 live births in 2000 multiplied by 12.3% estimate of pregnant women who smoke during pregnancy multiplied by 65 percent which is estimated percentage of pregnant women who smoke on Medicaid - Marriages, Divorces and Deaths: Provisional Data for January - December 2000," *National Vital Statistics Report*, August 22, 2001, 49(6), http://www.cdc.gov/nchs/data/nvsr/nvsr49/nvsr49_06.pdf; Matthews, T.J., "Smoking During Pregnancy in the 1990s," *National Vital Statistics Report,* August 28, 2001, 49(7), http://www.cdc.gov/nchs/data/nvsr/nvsr49/nvsr49_07.pdf.
[9] Utilization of cessation benefits estimated at 2-10% of covered smokers. Curry SJ, et al., "Use and Cost Effectiveness of Smoking Cessation Services Under Four Insurance Plans in an HMO," *New England Journal of Medicine*, 1998, 339(10):673-679.
[10] Fiore MC, et al., *Treating Tobacco Use and Dependence*. U.S. Public Health Service Clinical Practice Guideline, June 2000 (http://phs.os.dhhs.gov/tobacco/treating_tobacco_use.pdf).
[11] HCFA, "A Profile of Medicaid: Chartbook 2000" (http://www.hcfa.gov/stats/2Tchartbk.pdf).
[12] Cost estimate based on $35 provider reimbursement fee being paid by HCFA in its Healthy Aging Medicare cessation demonstration project and capped at 4 sessions.
[13] HCFA, *A Profile of Medicaid: Chartbook 2000* " (http://www.hcfa.gov/stats/2Tchartbk.pdf).

[14] Section 1927 of the Social Security Act creates a drug rebate program that enables states to purchase prescription drugs at substantially discounted prices (in comparison to retail prices) by forcing manufacturers to sell their drugs at the best available price. While the actual rebate percentages range from drug to drug, an average of 25 percent rebate is not unusual.

[15] This limit is imposed while recognizing the fact that tobacco dependence is a chronic disease and that very few tobacco users achieve long-term abstinence in their first quit attempt (long-term abstinence often takes multiple quit attempts spread over several years). While not ideal from a treatment standpoint, it is effective as a means of controlling for potential fraud and abuse of the benefit by imposing a limit on annual use.

[16] U.S. Centers for Disease Control and Prevention (CDC), "Projected Smoking-Related Deaths Among Youth -- United States," *MMWR* 45(44): 971-974 (November 11, 1996); CDC, "Smoking Attributable Mortality and Years of Potential Life Lost - United States, 1984" [with editor's update for 1990-1994], *MMWR* 46(20): 444-451 (May 23, 1997).

[17] Sachs, DPL, "Cigarette Smoking: Health Effects and Cessation Strategies," *Clinical Geriatric Medicine* 1986, 2:337-362; RAND, 2000.

[18] Hodgson, *Milbank Quarterly*, 1992 70(1). Using 1990 data, this study estimates that over a five-year period the average smoker's health care costs are $2,300 more than a non-smoker's. Updating for general inflation, this figure amounts to more than $2,800 in 2001. Bureau of Labor Statistics (BSL), Consumer Price Index (CPI) inflation calculator at http://stats.bls.gov/cpihome.htm. Adjusting for the general increase in medical care prices since 1990 indicates that a smoker's excess health care costs total more than $3,800, http://stats.bls.gov/cpihome.htm. Over an entire lifetime, this study estimated that the average smoker's health care costs exceeded the average nonsmoker's by $10,000, which amounts to more than $12,000 in today's dollars and more than $15,000 if adjusted for the increase in medical care costs since the study made its calculations. For more on validity of the Hodgson estimates, see Warner, K.E., et al., "Medical Costs of Smoking in the United States: Estimates, Their Validity, and Their Implications," *Tobacco Control* 8(3): 290-300, Autumn 1999. See, also, Nusselder, W., et al., "Smoking and the Compression of Morbidity," *Epidemiology and Community Health*, 2000.

[19] See, e.g., CDC, "Projected Smoking-Related Deaths Among Youth -- United States," *MMWR* 45(44): 971-974, November 11, 1996 [smoking-caused death rates of quitters roughly one third to three-quarters of the smoking-caused death rate for continuing smokers]. See, also, Lightwood & Glantz, "Short-Term Economic and Health Benefits of Smoking Cessation -- Myocardial Infarction and Stroke," *Circulation* 96(4), August 19, 1997.

[20] Ibid; Sachs, DPL, 1986; Lacroix, AZ, "Thiazide diuretic agents and prevention of hip fracture," *Comprehensive Therapy* 1991, 17(8)30-9 [published erratum in *Comprehensive Therapy* 1992 February, 18(2):42]; RAND, 2000;

[21] Medicare Current Beneficiary Survey, CY 1996 Cost and Use Public Use File, Table 4.1, Personal Health Care Expenditures for Medicare Beneficiaries, by Source of Payment and Type of Medical Service, 1996.

[22] The savings amounts have been rounded down to account for the fact that Medicare does not cover all health care costs of its beneficiaries.

[23] CDC, "Projected Smoking-Related Deaths Among Youth -- United States," *MMWR* 45(44): 971-974 (November 11, 1996); CDC, "Smoking Attributable Mortality and Years of Potential Life Lost - United States, 1984" [with editor's update for 1990-1994], *MMWR* 46(20): 444-451 (May 23, 1997).

[24] The percentage used is 54.6% (rounded to 55%), based on information obtained from analysts at the Kaiser Family Foundation, extracted from data contained in the 1997 Medical Expenditure Panel Survey (MEPS) full year consolidated public use file (HC-020). Medical Expenditure Panel Survey, Center for Cost and Financing Studies, Agency for Healthcare Research and Quality, provided by the Kaiser Commission on Medicaid and the Uninsured.

[25] The savings amounts have been rounded down to account for the fact that Medicaid does not cover all health care costs of its beneficiaries. In addition, the ranges given here are the upper range of savings due to "churning" of beneficiaries on and off Medicaid eligibility during the course of any five-year period.

[26] Matthews, T.J., "Smoking During Pregnancy in the 1990s," *National Vital Statistics Report*, August 28, 2001, 49(7), http://www.cdc.gov/nchs/data/nvsr/nvsr49/nvsr49_07.pdf ; Orleans, CT, et al., "Helping Pregnant Smokers Quit: Meeting The Challenge in the Next Decade," *Tobacco Control*, 2000; 9 (Supplemental III): 6-11; "Births, Marriages, Divorces and Deaths: Provisional Data for January - December 2000," *National Vital Statistics Report*, August 22, 2001, 49(6).

[27] Miller, Dave, et al, "Birth and first-year costs for mothers and infants attributable to maternal smoking," *Nicotine & Tobacco Research, 2001, 3, 25-35* [the total incremental cost per smoking pregnant woman that is attributable to smoking is $1,142 in 1996 dollars, which equals $1,298 when adjusted for inflation].

[28] See, e.g., Campaign for Tobacco-Free Kids Fact Sheet, *Harm Caused by Pregnant Women Smoking or Being Exposed to Secondhand Smoke*, http://www.tobaccofreekids.org/.

[29] Coffield, A, et al. "Priorities Among Recommended Clinical Preventive Services," *American Journal of Preventive Medicine*, July 2001, 21(1), www.meddevel.com/site.mash?left=/library.exe&m1=1&m2=1&right=/library.exe&action=home&site=AJPM&jcode=AMEPRE.

[30] U.S. Office of Personnel Management, Office of Insurance Programs, FEHBP Program Carrier Letter, Letter No. 2001-09, April 10, 2001.

[31] Schauffler, HH, et al, State Medicaid Coverage for Tobacco Dependence Treatments – United States, 1998 and 2000, *MMWR*, November 9, 2001, 50(44): 979-982, http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5044a3.htm.

[32] *Professional Assisted Cessation Therapy*, 2001, http://www.endsmoking.org/resources/reimbursementguide/pdf/reimbursementguide.pdf.