Financing Smoking Related Illness and Smoking Cessation: Can it be Done?

T Parish

Citation

T Parish. *Financing Smoking Related Illness and Smoking Cessation: Can it be Done?*. The Internet Journal of Health. 2003 Volume 3 Number 2.

Abstract

A review of the literature was undertaken, exploring the tremendous economic burden that cigarette smoking places on the United States. The cost of medical care and lost productivity related to smoking is conservatively estimated to be $150 billion. These costs to smokers and non-smokers alike are funded at the state and national levels. The literature supports the idea that the single most important barrier to smoking cessation is the cost of medications and smoking cessation programs. In this article, I propose that millions of smokers could be assisted to quit by federal government intervention alone. A federal tax on cigarettes could fund smoking cessation in federal insurance programs and provide incentives for private insurers to do the same.

INTRODUCTION

BACKGROUND

Smoking is a significant risk factor for the development of the 4 leading causes of death in this country; heart disease, malignancies, cerebrovascular disease, and chronic respiratory diseases.[1] The knowledge that cigarette smoking has negative health consequences is reflected in the dramatic decrease in the numbers of people who smoke in this country. In 1965, approximately 65% of the adult population smoked cigarettes. In 1990, the number of smokers had declined to about 23%. Unfortunately, in the past 13 years, that number has remained constant at about 23% of the adult population.[2]

Cigarettes contain at least 43 distinct cancer-causing chemicals. About 87% of all lung cancers can be directly attributable to cigarette smoking, as are most cases of emphysema and chronic bronchitis. Smoking is also linked to coronary heart disease, peripheral vascular disease, strokes, peptic ulcer disease, infertility, low birth weight, pre-term deliveries, and infant deaths. Smoking by parents is associated with adverse effects on children including; exacerbation of asthma, frequent colds, increased ear infections, and sudden infant death syndrome. In addition, “an estimated 150,000 to 300,000 cases of lower respiratory tract infections in children less than 18 months of age, resulting in 7,500 to 15,000 annual hospitalizations, are caused by secondhand smoke.” [3]

COSTS OF SMOKING

The economic, social, and emotional burden imposed on the people of the United States (U.S.) by tobacco smoking is tremendous. Cigarette smoking remains the single most important preventable cause of death, disease, and disability in the U.S. It results in “more deaths each year than AIDS, alcohol, cocaine, heroin, homicide, suicide, motor vehicle crashes, and fires – combined”.[2] It is estimated that cigarette smoking kills more than 440,000 people a year in the U.S.[3] Further, the number of people in the U. S. who die from environmental tobacco smoke (ETS), sometimes called second-hand smoking, and from pregnancy-related smoking is approximately 40,000 per year.[4]

The total annual public and private healthcare expenditures caused by smoking-related disease and disability is at least 75 billion dollars. Annual Medicaid payments total $23.5 billion , with the federal government share being about 57% and the states paying 43%. The federal government also pays at least $20 billion per year in smoking-related Medicare costs. An additional $8billion in smoking-related healthcare costs is paid through the Veteran's Administration health system.[4]

The non-healthcare-related costs associated with cigarette smoking include: residential and commercial property losses from smoking related fires, commercial cleaning and maintenance, and Social Security Survivors insurance for children who have lost a parent to smoking. These costs

combined equal an estimated $6.6 billion per year. The largest single non-healthcare cost is lost productivity, which is estimated to cost at least $82 billion per year.[4]

The cumulative economic burden of cigarette smoking in this country totals more than 150 billion dollars per year. Health costs and productivity losses are more than $7.00 for every pack of cigarettes sold. The federal and state tax burden for "smoking caused" government spending is $550 per household per year.[4] It is clear that cigarette smoking in this country is costly to smokers and non-smokers alike.

The above figures are impressive, but they do not account for the tremendous emotional burden imposed by cigarette smoking. Many smoking individuals and their families must watch the slow agonizing loss of function associated with most smoking-related illnesses. In addition, families suffer the death of their smoking family members, on average, 13 to 14 years earlier than they might have had they not been smokers.[5]

DISCUSSION

HEALTH CARE MARKET

Approximately 45 million adults in this country are regular smokers. They continue to smoke in spite of the mountain of evidence that it causes harm to themselves and those around them. Surveys indicate that at least 70% of all smokers want to quit but only 4.7% of those who attempted it were able to maintain abstinence for 3 to 12 months.[6] One of the most important barriers to quitting is the cost of smoking cessation treatment programs and medications. A means of financing these programs is needed and shall be presented here. In addition, education programs aimed at adults and children should be expanded to include school based anti-smoking programs. American society should also become less accommodating to smokers, by restricting smoking in all public places and workspaces.

HEALTH CARE NEEDS

The U. S. Public Health Service provides clinical practice guidelines for smoking cessation programs.[7] Their recommendations are the basis for the cost estimates for the federal programs. The guidelines suggest that programs provide tobacco cessation counseling as well as pharmacotherapy.

Tobacco cessation counseling can be either formal or informal, and provided by medical or dental providers, pharmacists, nurses, or psychologists. The discussions should include problem-solving skills, how to seek support from friends and family, and should include individual or group counseling.

Pharmacotherapy should be offered in addition to counseling. First line therapy should include nicotine replacement therapy in the form of gum, patches, nasal inhalers, or nasal sprays. An additional first-line therapy is Zyban (bupropion HCl), a selective serotonin re-uptake inhibitor that decreases withdrawal symptoms and doubles the likelihood of long-term success. Second-line therapies are, clonidine, or nortriptyline, as they both tend to moderate withdrawal symptoms and enhance the likelihood of abstinence from smoking.[7]

ROLE OF PUBLIC INSURANCE PROGRAMS

It is believed that the insurance industry in this country may hold the key to further decreasing the rate of adult smoking. A Centers for Disease Control (CDC) study indicates that the lack of access to treatment and its high cost are a primary obstacles to reducing rates of smoking. According to the CDC, "the high cost of smoking cessation treatments, and the lack of health insurance coverage for them, are among the biggest obstacles for smokers seeking to quit. It finds that nearly half the smokers above the poverty line had quit, while barely a third of smokers below the poverty line had done so".[8]

A CDC study released in 2002 indicated that most states are not providing Medicaid coverage for smoking cessation services and treatments as recommended by the U.S. Public Health Service clinical practice guidelines. They found that most states' Medicaid programs provided limited coverage of smoking cessation services, 17 provided no coverage, and only Oregon provided full coverage of recommended services.[4]

Legislation proposed in the Senate in 2001 would have mandated coverage for all beneficiaries of Medicare, Medicaid, and the Maternal and Child Health Block Grant programs. This bill would have added new benefits for diagnostic services, treatments, and counseling related to smoking cessation in all three programs. However, this bill was read twice on the floor of the U.S. Senate, and then referred to the finance committee without further action.[4]

A summary of estimated 10-year costs and savings of a Medicare smoking cessation benefit is broken down according to the percentage of smoking beneficiaries who might use the benefit, shown in Table 1.[4] If these estimates

proved to be correct; the program would essentially pay for itself.

Figure 1

Table 1: Costs and Savings of a Medicare Smoking Cessation Benefit

Utilization Rate	Medicare Cost	10 yr Medicare Savings	10 yr Non-Medicare Savings
2%	$112 million	$75 million	$62 million
10%	$562 million	$377 million	$308 million

If Medicaid programs funded smoking cessation using drug plans recommended by the U.S. Public Health Service guidelines, the costs and savings would be somewhat less balanced, as seen in Table 2.[4]

Figure 2

Table 2: Costs and Savings of a Medicaid Program Using U.S. Public Health Service Guidelines

Utilization Rate	Federal cost	State	Total 10-year cost	10-Year Savings
2%	$582	$439	$1.02 billion	$311 million
10%	$2.9	$2.2	$5.1 billion	$1.5 billion

While the cost of the Medicaid programs are not completely balanced by the expected savings in future claims, the cost of not providing this coverage may be far worse. If rates of smoking remain the same in this country, the economic burden on the Medicare and Medicaid systems would continue.

ROLE OF PRIVATE INSURANCE

Employer provided private insurance has an acknowledged role in smoking cessation as well. The Hartford Loss Control Department, acknowledges that there are both direct and indirect costs to employers related to employees who smoke. They cite National Cancer Institute data that suggests that employers incur costs of a $1000.00 per year for every employee who smokes. The costs are a reflection of direct medical claims, absenteeism, and added building maintenance. They further suggest that smokers are absent from work 50% more often than non-smokers, have twice as many on the job accidents, and are 50% more likely to be hospitalized. The Hartford also acknowledges that employers could save the equivalent of $3.00 in smoking-related healthcare costs and lost productivity for every $1.00 spent on smoking cessation programs. Even acknowledging that smoking cessation programs are effective only about 10% to 20% of the time, it is clear that the money spent is not “wasted”.

In spite of the general acceptance by employers that there are medical and non-medical costs associated with employing smokers, there is no consensus regarding the role of smoking cessation programs. The availability of coverage for programs and drugs is quite variable. As an example, The US Office of Personnel Management, outlines available coverage for insurance programs available to employees of various government agencies. Not all of the plans available cover smoking cessation, but those that do only pay after the calendar year deductible has been met ($100.00 to $300.00), and cap payments for such services at $100.00 per member per lifetime.[10] Nicotine replacement therapy or Zyban could each cost that much for a course of therapy. In addition, it is generally accepted that multiple attempts at smoking cessation may be required for successful long-term abstinence.

Tax incentives should be extended to companies that offer reasonable and comprehensive smoking cessation services to their employees. In this way, the federal government could establish appropriate standards for these programs, while increasing the numbers of employers who offer them. Further, employers of all sizes could form buying pools for needed program materials and medications to further reduce costs, particularly to smaller companies. The tax incentives could be financed by increases in tobacco taxes.

TIME NEEDED FOR RESULTS

Intuitively, it would seem that the results of smoking cessation campaigns would require decades to show benefit in the form of reduced claims and absenteeism. Interestingly, state tobacco control programs have demonstrated early and dramatic benefit. These results should provide encouragement to insurers and employers alike.

California began a statewide comprehensive tobacco control program in 1989. Their efforts were modest in the early years, with tax hikes on cigarettes. Finally, in 1998 they banned all indoor smoking, and began to realize a return on their efforts. They realized substantial savings in their healthcare costs, more than paying for the cost of the program. For every $1.00 spent on the California program, they reduced statewide heath care costs by $3.60.[4]

The state of Massachusetts started their comprehensive tobacco control measures a few years ago but is already realizing savings. An economic impact study by the Massachusetts Institute of Technology found that the state had already reduced statewide healthcare costs by $85 million per year. They realized savings of at least $2.00 in reduced smoking related healthcare costs for every $1.00 they spent on their tobacco prevention efforts.[4]

These examples are presented to encourage public and private entities that the potential savings are not just theoretical and do not represent only distant future returns on the investment in tobacco control programs.

CONCLUSIONS AND RECOMMENDATIONS

Medicare and Medicaid programs in this country already assume a great deal of the burden of payment for smoking related illnesses. As outlined earlier, these two programs alone spend about $43.5 billion of the total $75 billion spent on smoking-related healthcare each year. If only these programs were targeted to include smoking cessation programs as a benefit, the impact could be substantial. There are, however, means of broader inclusion of these benefits in both the public and private sectors.

Ideally, the programs suggested below would be implemented along with comprehensive tobacco control programs directed by the states. These programs are slowly being embraced in several states. They would include; state funding for smoking cessation programs, a ban on indoor smoking to include bars and restaurants, enforcement of existing laws regarding sales to minors, elimination of tobacco vending machines, and comprehensive tobacco education programs.

My proposals will be limited to the influence that the federal government can exert on insurers and their ability to raise revenue via taxation.

FEDERAL TAXES ON CIGARETTES

It is estimated that a $0.50 per pack federal cigarette tax increase would generate $10.3 billion in new revenue each year. In addition, it would decrease the numbers of youth smokers by 10%, or 1.7 million fewer new youth smokers. This segment of the population appears to be the most sensitive to increased prices. It would cause a decline in adult smokers of 3%, resulting in nearly 1.5 million fewer smokers. Overall, future smoking related deaths would be decreased by more than 850,000 and result in long-term health care savings of $32 billion.[11]

The $10 billion in new annual revenue could be used to fund smoking cessation programs in all federal healthcare programs including Medicare, Medicaid, Maternal and Child health, and Veteran's Administration health programs.

RECOMMENDED LEGISLATION

1. Require coverage of smoking cessation treatment in all Medicare, Medicaid, and Maternal and child health programs. I am opposed to unfunded mandates for federal programs, but confident that the more than $10 billion in new tax revenues would be able to cover the federal and state expenses related to the program. The highest estimated cost of offering smoking cessation drugs for Medicare and Medicaid, at 10% utilization equaled about $350 million annually. In addition, the savings to Medicare and Medicaid resulting from the programs are estimated to total at least $1.6 billion over a 10-year period.4

2. Encourage all classes of private insurance to offer comprehensive smoking cessation services to beneficiaries. In addition, they should be encouraged to offer treatment as many times as is necessary. A single lifetime benefit is not supported by current medical standards of care. The federal government, and possibly state governments, should offer tax incentives to insurers who offer these services. Cigarette tax revenues mentioned above could fund the tax incentives. In addition, as mentioned previously, employers tend to realize a $3.00 savings for every $1.00 spent on these programs.

3. Increase rates of health insurance for smokers. It would be a means for recovering at least some of the costs associated with smoking related illness and smoking cessation programs. This is supported by current practice, as some insurers already do this. There is no question that evidence supports the idea that smokers are disproportionately high users of health services. But, because smoking is largely self-reported, and undoubtedly a powerful addicting substance, it would likely be a tough measure to defend and enforce.

4. Gradually decrease and then end tobacco grower's farm subsidies, including direct farm supports, insurance, reinsurance, or non-disaster crop assistance for tobacco. Tax dollars should not support an industry that kills nearly a half-million Americans per year. In 1997, a modest $34 million was authorized for crop disaster relief to tobacco growers.5 It seems fundamentally wrong to support companies and growers with tax dollars.

5. Require that state tobacco settlement funds are used to pay for tobacco related health costs,

smoking cessation programs, and anti-smoking education for adults and children. In 1998, the tobacco industry agreed to pay the fifty states a total of $246 billion to settle lawsuits filed to recover billions of taxpayer dollars spent to treat tobacco related disease. The original intent of these funds was to pay for smoking related disease and to provide anti-tobacco education. Most states are failing to fund tobacco prevention programs at the minimum levels recommended by the CDC.4 Using the settlement money as part of a state general fund only passes on the financial burden that smoking imposes to future generations. Even worse is the currently popular practice of "securitization". Tobacco industry settlements are paid out over a twenty-year period. Securitization is the practice of accepting 30% to 40% of the total settlement in a single lump sum. This has been used to attempt to solve short-term fiscal problems. The bottom line is, that the states already have the funds for these programs available to them in the form of tobacco settlement funds. They should use these funds to free the states and taxpaying citizens from the shared burden that smoking imposes.

LIMITING FACTORS

The primary barrier to the above plan is the political power and reach of the tobacco industry. They spent $9.7 billion in advertising in 2002.4 Tobacco companies spend millions of dollars each year to support political candidates who are sympathetic to their cause. They frequently have used political influence and power to delay or derail legislative efforts at all levels of government. In spite of this, the political climate may be right for the first time in decades to pass effective legislation in this area. Many of those who have tobacco interests attempt to portray cigarette smoking as a protected right. Public health ethics would suggest that a smoker's autonomy essentially ends when they share breathing space with a non-smoker.

Cigarette smoking represents a significant social and economic burden in this country. It is my hope that the social climate has changed sufficiently to allow legislation to protect workers and families, while reducing this burden on all Americans.

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Author Information

Thomas G. Parish, PA-C, MPH
Medical College of Ohio