WRITTEN TESTIMONY BEFORE THE SENATE JUDICIARY COMMITTEE HEARINGS ON THE "PROPOSED GLOBAL SETTLEMENT: WHO BENEFITS?"

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Mr. Chairman, my name is Jeffrey Harris. I thank you for inviting me to testify today. I am a primary-care physician at the Massachusetts General Hospital in Boston and a tenured member of the economics faculty at the Massachusetts Institute of Technology. For your reference, I have attached a short biographical sketch to my written testimony.

While a tobacco industry-wide settlement is attractive in principle, the Draft Proposed Resolution of June 20, 1997[2] contains a number of provisions that warrant careful scrutiny and possible revision. My comments today, while critical of Proposed Resolution, are intended to be constructive.

The proposed industry-wide payments may cover the future smoking-related costs of the Medicaid program. However, they do not appear to cover the past costs incurred by Medicaid as a consequence of smoking-related illness. Nor do the proposed industry-wide payments appear to cover the smoking-related health-care costs incurred by private parties or by other Federal programs including Medicare and the Veterans Administration.

It has been widely reported that U.S. cigarette manufacturers will be required to pay a total of $368.5 billion during the first 25 years of the Proposed Resolution.[3] This reported 25-year total, however, overstates the real value of the industry's payments. Taking into account the

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[1] The opinions expressed in my testimony today do not necessarily represent those of the Massachusetts General Hospital, M.I.T., or any other organization.

[2] "Proposed Resolution: For Settlement Discussion Purposes Only. 6/20/97, 3:00 p.m. DRAFT." 68pp.

[3] The Proposed Resolution (Title VI, B3, at p. 34) calls for an initial industry-wide payment of $10 billion, followed by payments of $8.5 billion in year 1; $9.5 billion in year 2; $11.5 billion in year 3; $14.0 billion in year 4; and $15.0 billion annually thereafter.

critical "*adjustment for volume*" provision of the Proposed Resolution,[4] I have calculated the face value of industry-wide payments to be only $304.3 billion over 25 years.[5] Based on an interest rate comparable to the long-term rates on corporate bonds and U.S. Treasury obligations, I have estimated that the present discounted value of volume-adjusted industry payments would be only $194.5 billion over 25 years.[6]

During Federal fiscal year 1995, nation-wide Medicaid vendor payments amounted to $120.14 billion, of which approximately $95 billion were spent on recipients aged 18 years or more.[7] Based upon my research, I estimate that 7.9 percent of Medicaid spending on adults in a given year is attributable to cigarette smoking, with an uncertainty range of 5.4 to 10.2 percent.[8] For

[4] "Proposed Resolution… Title VI, B5," at p. 34.

[5] Harris JE. *Prepared Remarks at the American Cancer Society's Press Conference on the Proposed Tobacco Industry-Wide Resolution*, Washington DC, July 24, 1997; Harris JE. *Comments on Proposed Tobacco Industry-Wide Resolution*, Commissioned by the American Cancer Society, June 26, 1997.

[6] In all present discounted value calculations, I used a long-term interest rate of 7%. My calculations of the present discounted value of industry payments also took into account the "inflation protection" provision (Title VI, B.4) of the Proposed Resolution.

[7] See the spreadsheet entitled: MCD95T28.WK1: "TABLE 28. MEDICAID RECIPIENTS OF MEDICAL CARE BY AGE AND BY REGION AND STATE: FISCAL YEAR 1995," which can be downloaded in the compressed archive at http://www.hcfa.gov/medicaid/mcd95int.exe. See also the Health Care Financing Administration www page at http://www.hcfa.gov/medicaid/mstats.htm.

[8] On average, a person who has ever smoked cigarettes spends 10 to 20 percent more on health care services than a nonsmoker as a result of his or her smoking. While some studies report an excess spending ratio as high as 30 percent, the midrange is closer to 15 percent. See: Harris JE. "Estimates of Smoking-Attributable Medicaid Expenditures in Florida." Expert report submitted in *The State of Florida, et al. v. The American Tobacco Company, et al.*, April 15, 1997. See also: Manning WG, Keeler EB, Newhouse JP, Sloss EM, Wasserman J. *The Costs of Poor Health Habits*. Cambridge MA: Harvard University Press, 1991. Tables 4-8, 4-11, E-6; Brink SD. *Health Risks and Behavior: The Impact on Medical Costs. A preliminary study by Millman & Robertson, Inc. and Control Data*. Brookfield WI: Millman & Robertson, Inc., 1987; Anderson D, Brink S, Courtney TD. *Health Risks and Their Impact on Medical Costs: A study by Millman & Robertson, Inc., StayWell Health Management Systems, Inc. in conjunction with the Chrylser Corporation and the International Union, UAW.* Brookfield WI: Millman & Robertson, Inc., 1995; Rice DP, Hodgson TA, Sinsheimer P, Browner W, Kopstein AN. The economic costs of the health effects of smoking, 1984. *Milbank Quarterly* 1986; 64:489–547; Bartlett JC, Miller LS, Rice DP, Max WB, et al. Medical care expenditures attributable to cigarette smoking– United States, 1993. *Morbidity and Mortality Weekly Report* 1994a; 43:469–72; Penner M, Penner S. Excess insured health care costs from tobacco-using employees in a large group plan. *Journal of Occupational Medicine* 1990; 32:521–3; Hodgson TA. Cigarette smoking and lifetime medical expenditures. *Milbank Quarterly* 1992; 70:81–125.

Based on data from the 1987 National Medical Expenditure Survey, I estimate that 57% of adults eligible for Medicaid are current or former smokers. See Fox K, Merrill JC, Chang H, Califano JA. Estimating the costs of substance abuse to the Medicaid hospital care program. *American Journal of Public Health* 1995; 85:48–54, Table 1. (In this computation, I assumed that 26.7% of adults eligible for Medicaid were male, while 73.3% were female. See and MCD95T31.WK1 and MCD95T32.WK1 in http://www.hcfa.gov/medicaid/mcd95int.exe, cited in note 7.)

1995, this would amount to $7.51 billion, with an uncertainty range of $5.13 to $9.70 billion. There are a number of reasons why this estimate is conservative.[9] Nonetheless, if I project Medicaid costs to increase at a nominal rate of 5% annually, then the present discounted value of smoking-attributable expenditures, beginning in 1997 and extending for 25 years, would come to $178.3 billion, with an uncertainty range of $121.9 to $230.3 billion. Thus, the payments in the current draft of the Proposed Resolution may cover future smoking-related costs to the Medicaid program.[10]

The payments required by the Proposed Resolution, however, do not appear to cover past smoking-related costs to the Medicaid program. During Federal fiscal years 1991–1995, I calculate the present discounted value of cumulative smoking-related Medicaid costs to equal $40.4 billion, with an uncertainty range of $27.6 to $52.1 billion.[11] While I have yet to analyze data on smoking rates and Medicaid spending prior to 1991, it is fair to say that total past smoking-attributable costs since the inception of the Medicaid program in the 1960's would amount to hundreds of billions of dollars.

In mathematical symbols, let r denote the ratio of smoker's to nonsmoker's spending. Let p denote the proportion of person who have ever smoked. Then the proportion of all spending attributable to smoking is given by the formula: $s = (r-1)p/(rp + 1-p)$. Applying this formula, I obtain:

Range	Spending Ratio (r)	Proportion Ever Smoked (p)	Smoking-Attributable Fraction (s)
Low	1.10	0.57	0.054
Mid-Point	1.15	0.57	0.079
High	1.20	0.57	0.102
High End	1.30	0.57	0.146

[9] If the high-end value 1.30 for the spending ratio r had been used (see note 8), then smoking-attributable expenditures for fiscal 1995 alone would be an estimated $13.88 billion. These estimates of smoking-attributable costs among adults do not take into account the effects of maternal smoking on the risks of low birthweight and other complications of pregnancy, as well as the effects of maternal smoking on the risks of respiratory infections among children under the age of 6. In the state of Florida, the latter increased total smoking-attributable Medicaid costs by about 9%. See Harris JE. "Estimates of Smoking-Attributable Medicaid Expenditures in Florida." Expert report submitted in *The State of Florida, et al. v. The American Tobacco Company, et al.*, April 15, 1997, cited in note 8.

[10] If the high-end value of the spending ratio r had been used (see note 8), then the present discounted value of Medicaid costs would come to $329.6 billion, a value that would substantially exceed the $194.5 billion present discounted value of settlement payments.

[11] I used the same methodology as outlined in note 8. If the high-end value of the spending ratio r had been used, the present discounted value of cumulative 1991–1995 smoking attributable costs would come to $74.6 billion.

During fiscal 1995, the Health Care Financing Administration expended $176.9 billion in Medicare payments. Medicare outlays for fiscal 1996 are estimated to be $193.9 billion. My research indicates that the proportion of health-care spending attributable to cigarette smoking among Medicare recipients may exceed that for Medicaid recipients. Nonetheless, if I assume that only 5% of Medicare expenditures are attributable to smoking– which is the low-end estimate in my analysis of Medicaid expenditures– then the average Medicare expenditures attributable to smoking during 1995–1996 would amount to $9.3 billion per year. Projected over a 25-year period, the present discounted value of such expenditures would come to $192.3 billion. These additional smoking-attributable expenditures are not covered by the payment scheme in the Proposed Resolution.

In my testimony before the House Ways and Means Committee in November, 1993, I estimated that in the year 1995 alone, the adverse health effects of cigarette smoking would be responsible for $88 billion in health-care spending.[12] In my analyses today, I have used the same basic methods of estimation, although I have been intentionally more conservative. Based upon my results, I find it difficult to avoid the conclusion that the total payments mandated by the Proposed Resolution fall far short of the economic value of the private and public costs imposed upon our society by smoking-related illness.

[12] Harris JE, *Testimony Before the Committee on Ways and Means, U.S. House of Representatives, In Public Hearings on the Financing Provisions Of the Administration's Health Security Act.* Washington DC, November 18, 1993.

JEFFREY E. HARRIS: Biographical Sketch

Jeffrey Harris, M.D., Ph.D. is a physician and an economist. He is a primary-care internist at Massachusetts General Hospital and a professor at M.I.T, where he teaches health economics and a freshman seminar entitled “AIDS in the 21st Century.”

Dr. Harris has testified before the House Ways & Means Committee on financing health-care reform, and before the Massachusetts legislature on public disclosure of cigarette ingredients. He has advised numerous public and private agencies on health-care policy and health economics, including the Consumer Product Safety Commission, Centers for Disease Control, National Cancer Institute, Congressional Budget Office, American Cancer Society, Federal Trade Commission, Massachusetts Department of Public Health, and the Robert Wood Johnson Foundation. He has served on National Academy of Sciences committees on AIDS, low birthweight, diesel emissions, and most recently on the Academy's committee on risk characterization. He was on the National Advisory Research Resources Council at the N.I.H.

Dr. Harris wrote the seminal chapter in the 1989 *Surgeon General's Report*, in which he estimated that smoking caused nearly 400,000 deaths annually. In a 1990 article in the *Journal of the American Medical Association*, Dr. Harris was one of the first researchers to document that AIDS victims were surviving longer. He authored *Deadly Choices: Coping with Health Risks in Everyday Life* (1993), a book that addressed such issues as sex and HIV, weight control, exercise, quitting smoking, cholesterol screening, and breast cancer detection. Last year, he published an evaluation of the impact of the Massachusetts anti-smoking campaign. He is now starting work on a new textbook on health economics and health policy.

JEFFREY E. HARRIS:
Recent Presentations and Publications Concerning the Tobacco Industry

(Available at http://web.mit.edu/jeffrey/harris/)

Prepared Remarks at the American Cancer Society's Press Conference on the Proposed Tobacco Industry-Wide Resolution, Washington DC, July 24, 1997

Comments on Proposed Tobacco Industry-Wide Resolution, Commissioned by the American Cancer Society, June 26, 1997

What Can the Cigarette Industry Afford? Structuring a Long-Term Settlement. Remarks at the 12th Annual Conference of the Tobacco Products Liability Project, Northeastern University School of Law, Boston, May 11, 1997

"American cigarette manufacturers' ability to pay damages: overview and a rough calculation," *Tobacco Control* Winter 1996; 5:292-294.

"Cigarette Smoking Before and After an Excise Tax Increase and Antismoking Campaign – Massachusetts, 1990-1996," *Morbidity and Mortality Weekly Report* November 8, 1996; 45(44):996-970.

Testimony Before the Mass. Dept. of Public Health Concerning Proposed Regulations to Implement Massachusetts General Laws chapt. 94, section 307A (Cigarette Ingredient Disclosure), Boston, January 30, 1997.

A Working Model for Predicting the Consumption and Revenue Impacts of Large Increases in the U.S. Federal Cigarette Excise Tax. National Bureau of Economic Research, Cambridge MA, July 1, 1994.

Testimony Before the Committee on Ways and Means, U.S. House of Representatives, In Public Hearings on the Financing Provisions Of the Administration's Health Security Act. Washington DC, November 18, 1993.

PREPARED ORAL TESTIMONY OF
JEFFREY E. HARRIS MD PhD

SENATE JUDICIARY COMMITTEE HEARINGS ON
"The Proposed Global Tobacco Settlement: Who Benefits?"
Washington DC, July 30, 1997

Mr. Chairman, my name is Jeffrey Harris. Thank you for inviting me to testify today. I am a primary-care doctor at the Massachusetts General Hospital in Boston and a member of the economics faculty at the Massachusetts Institute of Technology. The views I express today are mine; they are not necessarily endorsed by M.I.T., the Massachusetts General Hospital, or any other organization. While a tobacco industry global settlement is attractive in principle, the current draft proposal contains a number of provisions that warrant careful scrutiny.

First, the proposed global payments may cover the *future* smoking-related costs of the Medicaid program. But they will not recover the *past* costs incurred by Medicaid as a consequence of smoking-related illness. Nor will the proposed industry-wide payments recover the past or cover the future smoking-related health-care costs incurred by private parties or by other Federal programs including Medicare and the Veterans Administration.

The proposed settlement has been described as a plan to pay a total of $368.5 billion over 25 years. I have calculated, however, that the payment plan's real market value is approximately $195 billion. This total dollar amount may cover future smoking-related costs to the Medicaid program over the next 25 years, whose present value is, conservatively, $178 billion.

But the proposed settlement payments would not recover past costs incurred by Medicaid as a result of smoking-related illness. For the fiscal years 1991–1995 alone, the past

Medicaid costs have a present value of approximately $40 billion. Total past costs from smoking-related diseases since the inception of the Medicaid program in the last 1960's would run in the hundreds of billions of dollars. Neither does the proposed settlement cover *past* or *future* smoking-related Medicare costs. Future Medicare costs attributable to smoking, I conservatively estimate, have a current market value of another $192 billion over the next 25 years.

Second, the draft settlement sets 5- and 10-year targets for the proportion of 13- to 17-year-olds who smoke cigarettes every day. While economic research shows that teenagers' smoking rates may be especially responsive to price, the increase in cigarette price anticipated from the proposed global settlement would be insufficient by itself to reach the specified targets.

I expect that cigarette manufacturers will pass the costs of the settlement along to their consumers by raising cigarette prices. By the fifth post-settlement year, the real price increase will be about 62 cents per pack. This increase in price will bring the percentage of 13- to 17-year-olds who smoke every day from its current level of 18.2 percent down to about 15 percent. The anticipated reduction in underage smoking, however, would go only about one-third of the way toward the five-year target rate of 10.6% that is implicit in the draft settlement's provisions. To reach the target teenage smoking rate, I calculate that the price of a pack of cigarettes would need to rise by $1.50.

Third, the financial penalties (or "look back" surcharges) contained in the proposed global settlement do not provide sufficient incentives for tobacco manufacturers to reduce underage smoking.

The draft settlement specifically pegs the “look back” surcharge to the profit that manufacturers would attain for each new teenager who becomes a life-long tobacco consumer. Such a penalty, however, simply permits the tobacco industry to break even on teenage sales. If a “look back” surcharge is to provide adequate incentives for tobacco manufacturers to reduce underage use, then the financial penalty must *exceed* the profit attained from a new underage customer. That way, tobacco sellers will incur a net *loss* if their products are used by underage smokers.

Under the currently drafted “look back” provision, industry-wide payments are apportioned according to each firm’s *overall* market share, not according to each firm’s share of the teenage smokers. This means, for example, that Philip Morris Companies, with an *overall* 1996 market share of 47.8%, would pay nearly half of the surcharge regardless of its efforts to reduce teenagers’ use of its own brands.

To avoid these problems, it would be preferable to levy charges on individual manufacturers in direct proportion to the estimated number of packs of their brands that consumed by underage youth. Such a penalty, I suggest, would not be subject to the complex provisions of the current draft proposal. There would be no annual payment cap, no required complex profit calculations, and no need to make special mathematical provisions for double-counting of teenagers.

I thank you again, Mr. Chairman, for allowing me this opportunity to speak before the Judiciary Committee. I hope my comments have been constructive, and would be pleased to answer questions.