

Economic Consequences of Being Uninsured:
Uncompensated Care, Inefficient Medical Care Spending, and Foregone Earnings

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Thank you for inviting me to appear before the Committee this morning. I am a Principal Research Associate at The Urban Institute, and a Senior Fellow with the Center for Studying Health System Change, which are independent, nonprofit, research institutions here in Washington. Most of my research over the last two years has concentrated on economic analyses of the costs and consequences of being uninsured.¹ Based on this research and reviews of other studies done over the last 25 years, my presentation focuses on some of the broad economic costs associated with a large uninsured population.

I have three major points.

- First, as a nation we already spend a substantial amount of money to pay for care received by uninsured people.
- Second, much of this money is spent inefficiently, going to hospitals for emergency room and inpatient care to treat people who probably would have been treated earlier, more cheaply, and more effectively if they had insurance.
- Third, lack of insurance reduces the health of the nation, and as a result, also reduces the wealth of the nation.

1. We already spend a substantial amount of money on care to the uninsured.

In a study published earlier this year, we estimated that in 2001 the nation spent about \$35 billion on uncompensated care received by the uninsured, both those who are uninsured for a full year and those who lack coverage for part of a year.² (Figure 1) About two-thirds of uncompensated care, almost \$24 billion, was provided by hospitals caring for uninsured people in emergency rooms, outpatient departments, and as inpatients. (Figure 2) We also estimated that a substantial portion of uncompensated care, perhaps as much as \$30 billion, is already being financed by taxpayers (Figure 3) through programs such as: Medicare and Medicaid Disproportionate Share Payments; Medicaid Upper Payment Limit payments; state and local tax appropriations, primarily to public hospitals and clinics; Federal grants to community health centers; and Federal direct care provided by the Department of Veterans Affairs and the Indian Health Service.

For people who are uninsured all year, uncompensated care covers about 60% of the care they receive.³ However, in spite of what appears to be a substantial subsidy, uncompensated care is not a substitute for insurance, nor are the uninsured free riders who are taking advantage of everyone else. On average, the uninsured receive about half as much care as people insured all year, roughly \$1,250 compared to about \$2,500 per person for someone covered by private insurance. (Figure 4)

Moreover, in spite of receiving about half as much care as the privately insured, the uninsured actually pay about the same amount out-of-pocket for the care they receive,

and what they do pay out-of-pocket represents a bigger burden on their family incomes. Being uninsured represents triple jeopardy: you receive less medical care than the insured, you pay about as much out-of-pocket, and what you pay represents a bigger burden on your family's resources.⁴ (Figures 5 and 6)

2. Much of the money we currently spend on uncompensated care is spent inefficiently.

Being uninsured is like playing Russian roulette with your health. Research clearly shows that compared to the insured, the uninsured are more likely to delay seeking care and to have unmet health needs.⁵ If they're lucky, they'll get better without any care. But if they're not, the uncompensated care they eventually receive from the safety net can wind up costing much more than if they had been treated when symptoms first appeared or if their illness were diagnosed before symptoms become apparent.

Studies have shown that the uninsured are more likely to be hospitalized for preventable conditions, i.e., medical conditions that can be adequately treated on an outpatient basis and should not require hospitalization. One study estimated that about 12% of the uninsured's hospital stays were for preventable conditions, compared to about 8% for the privately insured.⁶ (Figure 7) Another study of avoidable hospitalization estimated that the extra cost associated with preventable stays was \$105 million in only nine states.⁷ (Figure 8) Studies also suggest that the expansions of insurance coverage for children through Medicaid and SCHIP have led to reduced rates of avoidable hospitalizations for children, by as much as 22%.⁸

Other studies show that uninsured people with cancer are more likely to be diagnosed at an advanced disease stage, which is strongly related to reduced survival.⁹ (Figures 9 and 10) Numerous other studies have found that the uninsured are less likely to receive screening and diagnostic tests known to lead to early detection of cancer, heart disease, and diabetes – diseases with high mortality rates and high levels of disability and diminished activity status.¹⁰ (Figure 11) Even among people who know they have hypertension or diabetes, use of appropriate medications and routine follow-up care is lower for the uninsured compared to the insured.¹¹ In sum, a large body of research provides convincing evidence that the uninsured receive less preventive and diagnostic care, receive less therapeutic care even after being diagnosed, and, as a result, die earlier and experience greater limitations than otherwise similar people with insurance coverage.

Moreover, as I noted earlier, access to the safety net is not a substitute for insurance. In an ongoing study, we compared the effects of expanding insurance coverage versus expanding the safety net on low-income people's access to care.¹² Simulations suggest that a 10% increase in insurance coverage, would reduce the proportions reporting an unmet medical need or putting off care by 25-30%. Spending a comparable amount of money on expanding the safety net would reduce unmet need and putting off care by one-third to half as much. If insurance coverage were universal, the percentages with an unmet need or delaying in seeking care would fall to 4-9%, roughly the same levels we observe among people with full-year coverage through their employers.

3. Reduced health is associated with lower earnings and educational attainment, and probably with higher payments from public programs.

Lack of insurance reduces health, which has adverse effects on adults' work and earnings. Evidence also suggests that poor health in children affects their educational attainment. Unfortunately, social science studies of the relationships between health and work, earnings, and educational attainment are all hampered by the difficulty of sorting out what is causation and what is association. We don't have the ability to randomly assign people to excellent, good, or poor health and then see how it affects their education, work, and earnings. Nevertheless, there is enough presumptive evidence, I believe, that suggests that poor health among adults leads to lower labor force participation, lower work effort if in the labor force, and lower earnings. While it is difficult to put precise numbers on these effects, it appears that a person in fair or poor health might earn from 15-20% less on an annual basis than an otherwise similar person in very good or excellent health.¹³ (Figures 12 and 13.)

Poor health of a family member also affects the ability to work. Studies have shown that family caregivers, parents caring for sick children or a spouse caring for a sick partner, work less and earn less.¹⁴ This lost work time and lost earnings represent foregone productive activity that would contribute to our national economy, and to tax revenues collected.

Studies of children's health and educational achievement suggest that children in poor health have poorer school attendance and lower school achievement and cognitive development.¹⁵ However, a number of these studies focus on comparisons of children who were born at low birthweight. The research is more ambiguous in showing that insurance coverage improves birthweight, although it is much more clear that insurance leads to higher infant survival.

While there is still much that needs to be done to develop more precise estimates of exactly how much health would improve and what the quantitative impact would be on earnings and public program payments, I can provide more detail about a piece of the puzzle from recent studies of health insurance, health, and medical use by older middle-aged adults. These studies show that lack of insurance increases the probability of disability or major health deterioration in older middle-aged people, roughly between the ages of 50 and 65.¹⁶ Disability at this age leads to early coverage by the Medicare program and transfer payments made through the DI and SSI programs.

A highly relevant question to this Committee's deliberations is whether complete insurance coverage in late middle age would improve people's health at age 65 and, if it does, what are the implications for Medicare and Medicaid spending on people after they turn 65. Another ongoing study suggests that lack of insurance during late middle age does in fact lead to significantly poorer health at age 65 – fewer people survive and those who do have an increased incidence of being in fair or poor health with a disability.¹⁷ Our analysis simulates how much health would improve if this cohort had complete insurance coverage and whether Medicare and Medicaid spending would increase or decrease after age 65.

We find that more people survive to age 65, and those who survive are in significantly better health. As a result of the health improvement, and in spite of the fact that more people survive, our simulation suggests that Medicare and Medicaid would

save about \$10 billion a year on care to 66-68 year olds. Our calculations also suggest that these savings would cover about 50% of the cost of expanding coverage to this cohort of older middle-age people.

SUMMARY

The debate on whether to expand health insurance coverage to all Americans will inevitably emphasize the cost of providing insurance. It must also include the benefits of having insurance. While more work needs to be done to develop precise quantitative estimates of the magnitude of these benefits, I believe that the research is quite clear in demonstrating that lack of insurance leads to poorer health, and that poorer health is associated with less educational attainment, lower labor force participation, and lower earnings. These consequences undoubtedly lead to lost tax revenues and higher public program payments for both medical care and income support payments.

Finally, I've focused only on the dollar and cents issues around the question of the consequences of being uninsured. However, poor health and premature death obviously have significant subjective effects on one's own and on family members' sense of well-being. The total value of good health goes beyond, possibly well beyond, a narrow accounting of financial consequences.

¹ The following three studies were supported by a grant from the Kaiser Commission on Medicaid and the Uninsured's Cost of Not Covering the Uninsured Project made to the Urban Institute: Hadley J., "Sicker and Poorer: The Consequences of Being Uninsured," (available at www.kff.org/content/2002/20020510) and *Medical Care Research and Review* (Supplement to Vol. 60, No. 2, June 2003); Hadley J. and J. Holahan, "How Much Medical Care Do the Uninsured Use and Who Pays for It?" *Health Affairs* web exclusive, February 12, 2003; Hadley J. and T. Waidmann, "Health Insurance and Health at Age 65: Implications for Medicare and Medicaid," The Urban Institute, April 2003. The Robert Wood Johnson Foundation supported the following work through a grant to The Center for Studying Health System Change: Cunningham P. and J. Hadley, "Expanding Care vs. Expanding Coverage: Alternative or Complementary Approaches for Improved Access for Low-income Persons?" Center for Studying Health System Change, May 2003.

² Hadley and Holahan 2003, op cit.

³ Ibid.

⁴ Merlis M. 2002. "Family Out-of-Pocket Spending for Health Services," Commonwealth Fund Pub. 509 (www.cmwf.org).

⁵ Center for Studying Health System Change, www.hschange.org/CONTENT/421/?supp=1 and www.hschange.org/CONTENT/421/?supp=4

⁶ Kozak LJ, Hall MJ, Owings MF. Trends in Avoidable Hospitalizations. *Health Affairs* 2001 March/April; 20(2): 225-32.

⁷ Hoffman C, Gaskin DJ. The Costs of Preventable Hospitalizations among Uninsured and Medicaid Adults. Washington DC: Kaiser Family Foundation, 2001.

⁸ Dafny L, Gruber J. Does Public Insurance Improve the Efficiency of Medical Care? Medicaid Expansions and Child Hospitalizations. NBER Working Paper Series, Working Paper 7555, February 2000: 1-43.

⁹ Ayanian JZ, Kohler BA, Abe T, Epstein AM. The Relationship Between Health Insurance Coverage and Clinical Outcomes Among Women with Breast Cancer. *The New England Journal of Medicine* 1993 July 29; 329:326-31; Roetzheim RG, Gonzalez EC, Ferrante JM, Pal N, Van Durme DJ, Krischner JP. Effects of Health Insurance and Race on Breast Carcinoma Treatments and Outcomes. *Cancer* 2000 December 1; 89(11): 2202-13; Roetzheim RG, Pal N, Gonzalez EC, Ferrante JM, Van Durme DJ, Krischer JP. Effects of Health Insurance and Race on Colorectal Cancer Treatments and Outcomes. *American Journal of Public Health* 2000 November; 90(11): 1746-54; Roetzheim RG, Pal N, Tennant C, et al. Effects of Health Insurance and Race on Early Detection of Cancer. *Journal of the National Cancer Institute* 1999 August 19; 91(16): 1409-15.

¹⁰ Ayanian JZ, Weissman JS, Schneider EC, Ginsburg JA, Zaslavsky AM. Unmet Health Needs of Uninsured Adults in the United States. *JAMA* 2000 October 25; 284(16): 2061-9.

¹¹ Families USA Foundation. *Getting Less Care: The Uninsured with Chronic Health Conditions*. Families USA Foundation. Washington DC, 2001. 1-49; Huttin C, Moeller JF, Stafford RS. Patterns and Costs for Hypertension Treatment in the United States: Clinical, Lifestyle and Socioeconomic Predictors from the 1987 National Medical Expenditures Survey. *Clinical Pharmacoeconomics* 2000 September 20; 20(3): 181-95; Beckles GL, Engelgau MM, Narayan KV, Herman WH, Aubert RE, Williamson DE. Population-Based Assessment of the Level of Care Among Adults with Diabetes in the U.S. *Diabetes Care* 1998 September; 21(9): 1432-8.

¹² Cunningham and Hadley 2003, op. cit.

¹³ Chirikos TN, Nestel G. Further Evidence on the Economic Effects of Poor Health. *The Review of Economics and Statistics* 1985; 67:61-9; Fronstin P, Holtmann AG. Productivity Gains from Employment-Based Health Insurance. In: Fronstin P, editor. *The Economic Costs of the Uninsured: Implications for Business and Government*. Washington D.C.: Employee Benefit Research Institute, 2000: 25-39.

¹⁴ Boaz R, Muller C. Paid Work and Unpaid Help by Caregivers of the Disabled and Frail Elders. *Medical Care* 1992; 30:149-58; Ettner S. The Impact of 'Parent Care' on Female Labor Supply Decisions. *Demography* 1995(32): 63-80; Stern A. Measuring Child Work and Residence Adjustments to Parent's Long-Term Care Needs. *Gerontologist* 1996; 36:76-87; Wolfe BL, Hill SC. The Effect of Health on the Work Effort of Single Mothers. *The Journal of Human Resources* 1995; 1(42-62).

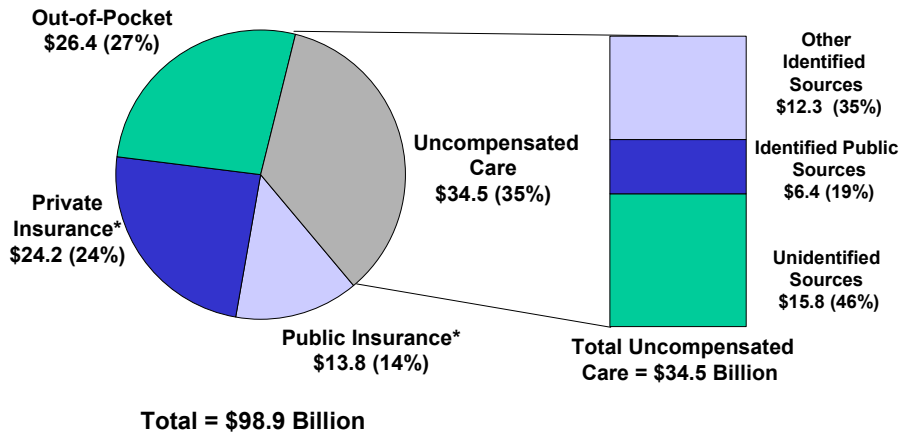
¹⁵ Currie J, Madrian BC. Health, Health Insurance and the Labor Market, Chapter 50. In: Ashenfelter O and D Card, editor. *Handbook of Labor Economics, Volume 3*, 2000: 3309-415; Grossman M. The Correlation Between Health and Schooling. In: N.E. Terleckyj, editor. *Household Production and Consumption*. Columbia University Press, 1975: 147-211; Grossman M. and R. Kaestner, Effects of Education on Health. In Behrman J. and N. Stacey, eds., *The Social Benefits of Education* (Ann Arbor: U. of Michigan Press, 1997): 69-122; Perri T. Health Status and Schooling Decisions of Young Men. *Economics of Education Review* 1984; 3:207-13; Wadsworth M. Serious Illness in Childhood and its Association with Later-Life Achievement. In: Wilkinson R, editor. *Class and Health*. London: Tavistock, 1986; Wolfe BL. The Influence of Health on School Outcomes: A Multivariate Approach. *Medical Care* 1985 October; 23(10): 1127-38.

¹⁶ Baker DW, Sudano JJ, Albert JM, Borawski EA, Dor A. Lack of Health Insurance and Decline in Overall Health in Late Middle Age. *The New England Journal of Medicine* 2001 October 11; 345(15): 1106-12; Baker, D.W., J.J. Sudano, J.M. Albert, E.A. Borawski, and A. Dor. 2002. Loss of Health Insurance and the Risk for a Decline in Self-Reported Health and Physical Functioning *Medical Care* 40(11): 1126-31.

¹⁷ Hadley and Waidmann 2003, op. cit.

Figure 1: Amount and Sources of Payment for Care Received by Full-Year and Part-Year Uninsured

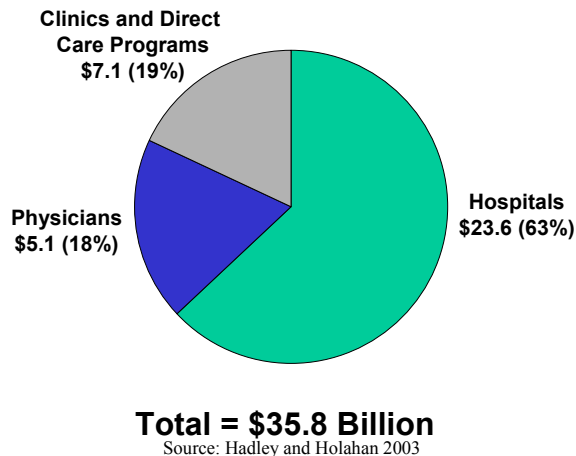
In Billions of Dollars (2001)



Note: Includes payments for people uninsured all-year and for only part of the year.
 * Payments for part of year when part-year uninsured have coverage
 SOURCE: MEPS, from Hadley and Holahan, 2003

Figure 2: Provider-Based Estimate of Uncompensated Care

In Billions of Dollars (2001)

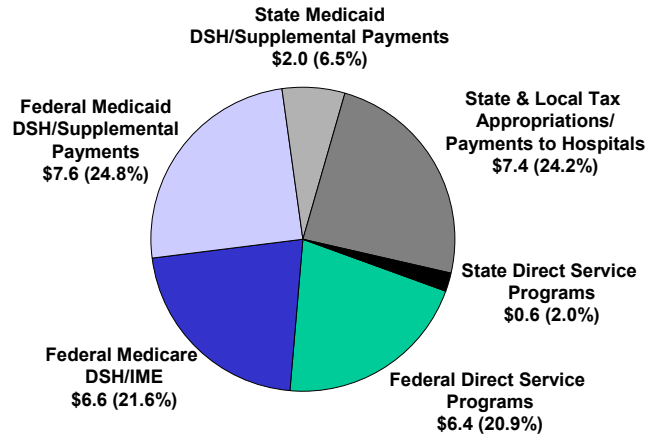


Source: Hadley and Holahan 2003

Figure 3: Total Government Spending

Programs and Payments for the Uninsured, 2001

(In Billions of Dollars)



Total = \$30.6 Billion

Source: Hadley and Holahan 2003

Figure 4: Estimates of Per Capita Spending

(includes uncompensated care)

- Full-year uninsured **\$1,253**
- Part-year uninsured **\$1,950**
- Full-year privately insured **\$2,484**

Source: Hadley and Holahan 2003

**Figure 5: Economic Burden of
Out-of-Pocket (OOP) Spending**
(Percent Non-Medicare Families, 1996)

	OOP > 5% of Income	OOP > 10% of Income
Insured Families	8.8%	3.0%
Uninsured Families	15.4%	8.0%

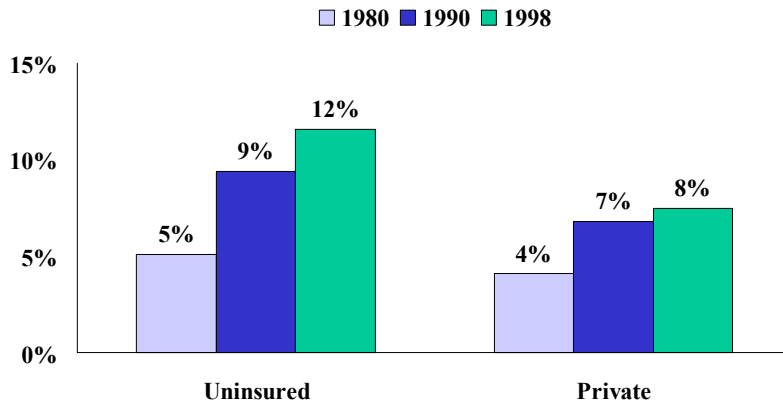
SOURCE: Merlis 2002, p.8

**Figure 6: Low-Income, Non-Medicare
Families with Health Problems, 1996**

Insurance Status	Average Spending	Average Out-of- Pocket (OOP)	OOP as % of Spending	% Fams. w\ OOP > 5% of Income
Insured All Year	\$5,380	\$636	11.8%	26.3%
Uninsured All Year	\$1,396	\$541	38.9%	32.9%

SOURCE: Merlis 2002, p.9

Figure 7: Hospitalization Rates for Avoidable Conditions, by Health Insurance Status, 1980-98



SOURCE: Kozak, L.J. 2001.

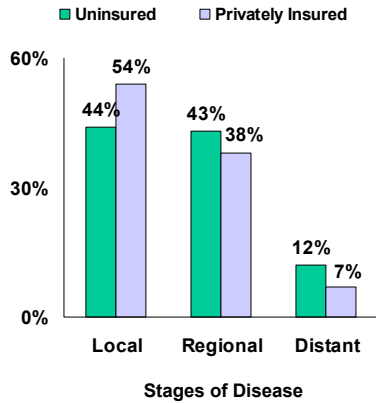
Figure 8: Do the Uninsured Use Medical Care Less Efficiently than the Insured?

- The uninsured are 30-50% more likely to be hospitalized for an avoidable condition.
- The average cost of an avoidable hospital stay in 2002 is estimated to be about \$3,300.
- Total extra cost of uninsureds' avoidable hospitalizations in nine states was \$105 million.

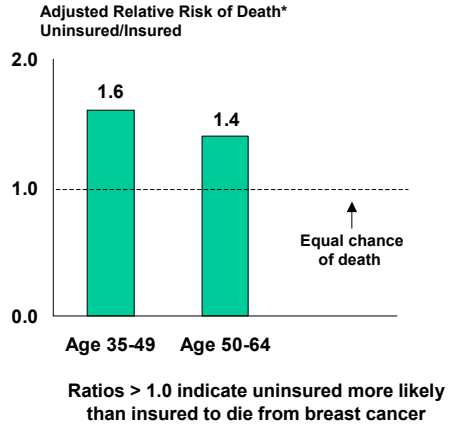
Source: Hoffman and Gaskin 2001

Figure 9: Stage of Breast Cancer at Time of Diagnosis by Insurance Status

Distribution of Women with Breast Cancer by Disease Stage at Time of Diagnosis



Relative Risk of Death from Breast Cancer by Age and Insurance Status



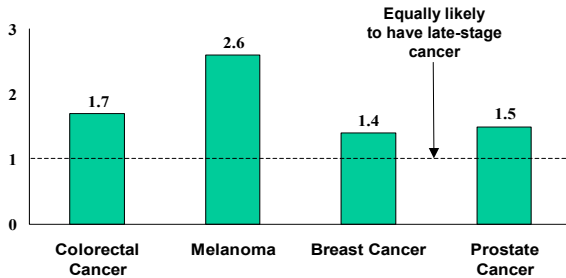
Note: Distant stage is most advanced disease.

* Differences are statistically significant after adjusting for age, race, marital status, income, and number of co-existing diagnoses

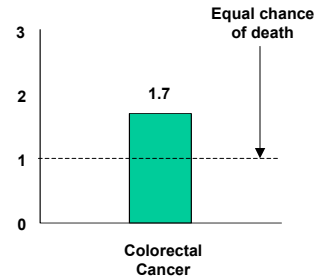
SOURCE: Ayanian JZ, Kohler BA, Abe T, Epstein AM, 1993

Figure 10: Diagnosis of Late-Stage Cancer, Uninsured Compared to Privately Insured,* 1994

Ratio of the Probability of Diagnosis of Late vs. Early Stage Cancer, Uninsured/Privately Insured



Ratio of the Risk of Death,** Uninsured/Privately Insured



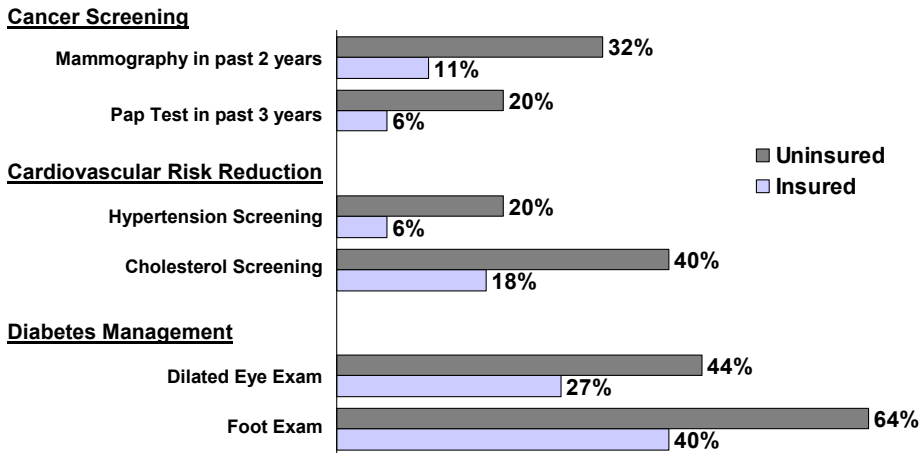
* Privately insured all had commercial indemnity plans.

** Among cancer cases identified in 1994; mortality follow-up through 1997.

All differences are statistically significant after adjusting for age, sex, race/ethnicity, comorbidity, marital status (when appropriate), smoking status, socioeconomic status, education, stage at diagnosis, and treatment

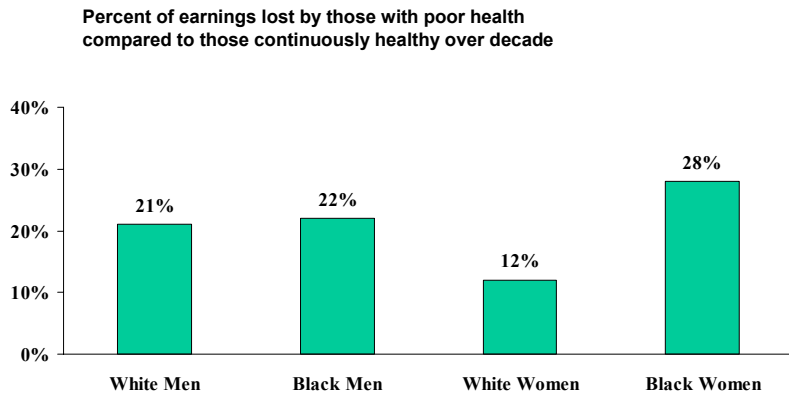
SOURCE: Roetzheim RG, et. al., 1999, 2000

Figure 11:
Percentage of Adults NOT Receiving Preventive Services,
Uninsured (for a year or longer) vs. Insured, 1997-98



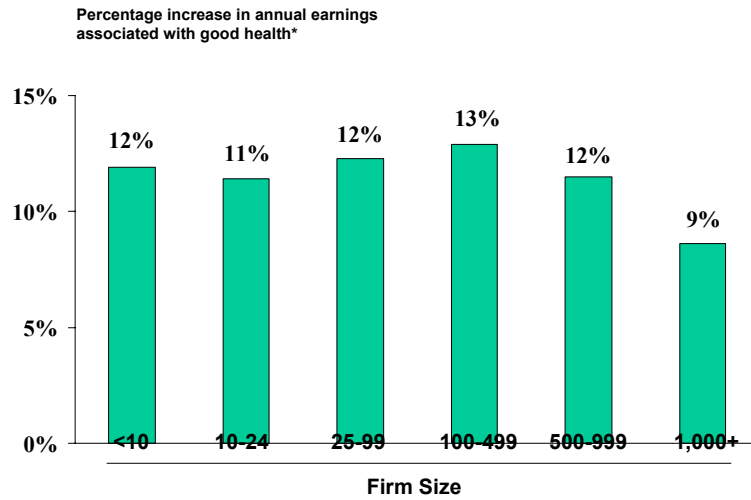
Note: All differences are statistically significant after adjusting for age, sex, race/ethnicity, region, employment, education, and income.
SOURCE: Ayanian, 2000.

Figure 12: Effect of Poor Health History on Annual Earnings,
45-64 Year Olds over a Ten Year Period
(1966/67 – 1976/77)



SOURCE: Chirikos, TN and G Nestel, 1985

Figure 13: Effect of Poor Health on Workers' Annual Earnings, by Firm Size, 1998



* Among full-time, full year working men; good health compared to those less healthy.
SOURCE: Fronstin, P and AG Holtman, 2000.