



Upjohn Institute Press

Universal Health Insurance Coverage Through a Single Public Payer

Andrew J. Hogan
Michigan State University

John Henry Goddeeris
Michigan State University



Chapter 3 (pp. 51-76) in:

Improving Access to Health Care: What Can the States Do?

John H. Goddeeris, and Andrew J. Hogan, eds.

Kalamazoo, MI: W.E. Upjohn Institute for Employment Research, 1992

DOI: 10.17848/9780880995733.ch3

Copyright ©1992. W.E. Upjohn Institute for Employment Research. All rights reserved.

3

Universal Health Insurance Coverage Through a Single Public Payer

Andrew J. Hogan
John H. Goddeeris
Michigan State University

Support for a universal health insurance through a single payer grew in the United States during the 1980s (Blendon 1991), especially among public health professionals and labor unions. Recently a number of large corporations have expressed support for the “Canadian Model” of universal health insurance, largely out of their frustration with private efforts to control health care costs (Califano 1989). The two principal motivations for interest in a Canadian-style universal health insurance plan are: (1) to provide access to basic health services as a right of all citizens; and (2) to control health care costs.

This chapter will focus primarily on the first issue of providing access to basic health services for all citizens. The implications of a single-payer public health insurance program for cost containment will be discussed, though not in great detail. It should be noted that the Canadian health insurance system was not designed principally to bring about health care cost containment (Evans 1988), and that the claim that Canada has been significantly more successful than the United States in restraining health expenditure growth has been called into question (Neuschler 1990, pp. 37-46; Goodman and Musgrave 1991, pp. 2-9; for a pro-Canadian view, see Barer, Welch and Antioch 1991). There is no doubt that Canada spends much less on health care than the United States by any measure, or that since the full implementation of universal coverage in the early 1970s health care spending as a share of GNP has grown more slowly there. But this latter result is to some degree due to slower GNP growth in the United States. In *per capita* terms, real personal health expenditures have grown at about the same rate in the two

countries during the time that Canada has had universal coverage. Further, Canada enjoys the luxury of using the U.S. health care system as a safety valve when demand exceeds planned capacity.

The U.S. health system is highly decentralized and consumer-driven. For those who can afford health insurance, the system provides very easy access to the latest technology in settings with excellent amenities. While the U.S. health system may not appear rational from a public health perspective, it is highly responsive to the needs of privately insured consumers.

The U.S. health system is clearly undergoing financial distress. Because of the system's decentralized, consumer-driven nature and because poverty, illness, and lack of health insurance tend to cluster in the same population groups, this financial distress is manifested in an increasingly noncompetitive performance in achieving public health objectives compared to other industrialized nations (Bodenheimer 1989, p. 10). Although the causes are undoubtedly complex and go beyond the reach of medical care alone, much of the poor public health performance can be attributed to the lack of ready access by one-quarter to one-third of the population to routine preventive health services and primary medical care. This lack of access is due largely to a lack of personal financial resources, expressed most often as a lack of adequate health insurance coverage (Pepper Commission 1990, pp. 33-35). Included in this subpopulation are those covered by Medicaid, which in most states pays providers such low rates that recipients frequently encounter difficulty in finding providers who will accept them, particularly in specialties like obstetrics (Pepper Commission 1990, pp. 30-31). Growth in the number of uninsured results from reduced health insurance coverage rates by both private employers and by Medicaid (Piacentini and Cerino 1990, pp. 246, 352).

Reductions in insurance coverage for the working poor may be a reflection of the fact that their real incomes have not increased while health care costs have soared (Piacentini and Cerino 1990; Peterson 1991). The working poor may have accepted a lack of health insurance in preference to further wage cuts. And as both the willingness and ability of many working class households to increase tax contributions waned

during the 1980s, funding of public health insurance programs (Medicaid, Medicare, Veterans Administration) has not kept pace with increases in health care costs or with the growth of the poverty and near-poverty populations. The combination of large numbers of uninsured and underfunded public programs has shifted much of the burden for the sizable real growth in personal health expenditures onto private insurers and self-insured employers and union trusts. Consequently, employers and workers have experienced disproportionately large increases in health care costs (Levit and Cowan 1990). This has, in turn, engendered risk-avoidance maneuvering in the private insurance market, especially the market for individual and small business policies. These markets constantly churn as insurers and insureds attempt to shift risk onto each other, illustrating some of the classic symptoms of insurance market failure described by Rothschild and Stiglitz (1976).

Thus, while we may be skeptical that a single-payer universal health insurance plan could by itself retard the growth of health care costs due to population aging, technological change, or the deeply held predilection of the American public for medical miracles, such a plan could reduce the administrative and transaction costs associated with the current health insurance market and could provide a mechanism through which public health goals could be given some ascendancy over individual medical consumerism. It goes without saying that a universal health insurance plan would alleviate problems of access to basic health care that arise from the lack of financial resources at the household level.

This chapter briefly discusses the implications for health care costs of a state-initiated program of universal coverage. There are many open questions here, but it is not realistic to expect such a program to substantially slow the growth of costs in the near future. The heart of the analysis considers the likely redistributive effects of a move to universal coverage, including illustrative quantitative estimates for Michigan. A Canadian-style system is likely to redistribute income toward the currently uninsured poor and away from those in the upper tail of the income distribution. When initiated by a single state, it would also risk losing significant subsidies built into the federal tax system. Even a state plan providing only basic coverage and financed in a way that retains federal subsidies would have important redistributive effects.

Universal Health Coverage and Health Care Costs

Comparisons with Canada and other countries around the world have raised hopes in the United States that a state system of universal coverage could improve public health outcomes while actually reducing the total cost of health care. There are three main arguments for this view: (1) a single-payer system would substantially reduce administrative costs; (2) a single payer could exert greater control over fees for services and impose a more rational pattern of investment in capital and equipment on the industry; and (3) universal coverage would lead to a more efficient utilization of services by the currently uninsured that would reduce the total cost of their health care. With regard to the last point, it is tempting to think that better coverage for the uninsured would lead to healthier lifestyles, greater use of preventive care, and earlier treatment when acute problems arise, and that all of these things would translate into lower, not higher, total health care costs. The available evidence indicates, however, that the uninsured use less care than those who are insured and have similar characteristics (Long and Rodgers 1990). The natural inference is that improving their access to care will, on net, increase their consumption.

While each of these arguments for the cost-saving potential of universal coverage is important and merits continued research, it is unlikely that a move to such a system in the United States would reduce the growth of health care spending in the near term, particularly if enacted by a single state rather than the national government. Let us consider arguments (1) and (2) in somewhat more detail, focusing particularly on how they apply to a state-initiated system.

Administrative Costs

One appealing argument for a system of universal coverage is the potential for enormous savings in administrative costs. It has been suggested that more than half of the difference in *per capita* costs between the American and Canadian health care systems may be accounted for by higher administrative cost in the United States (Evans et al. 1989; Himmelstein and Woolhandler 1986). A single public payer has no need to incur many of the costs that competing private insurance plans must

bear. These include all of the costs of marketing, of screening potential enrollees in order to set appropriate premiums, of determining appropriate differentials in premiums for different risk classes of enrollees, of determining eligibility when claims are paid, of coordination of benefits when members of the same household are covered by more than one plan, as well as the additional costs arising when individuals change their coverage. Even the collection of premiums is likely to be much less costly when carried out as part of a state tax system already in place than when spread across many competing insurance firms.

More important are the additional costs related to administration of the health care system incurred by health care providers and consumers. Doctors and hospitals bear a heavy burden of administrative cost in dealing with large numbers of different insurers, in determining the eligibility of patients, and in direct billing and collections. Consumers and their employers incur costs associated with comparison of plans in making decisions about which to choose. The considerable resources devoted in the current system to the zero-sum game of cost-shifting would presumably be saved in a universal system.

It is important to understand, however, that Canada's system has a number of features that contribute to its very low level of administrative cost, and that elimination of any of these features would correspondingly reduce administrative cost savings. The Canadian system provides the same coverage to everyone in a province through a single payer, with minimal cost-sharing by patients, no balance-billing by providers, and no supplemental private insurance coverage for services covered under the public system.

With the federally funded Medicare program already in place and providing health coverage to the elderly and disabled in the United States, it is unlikely that a state would want to displace that coverage and lose federal funds. Thus, at least Medicare (and other federal health care programs through the Department of Defense and Veterans Administration) would remain in place, as would private insurance coverage supplemental to Medicare, unless it is included as part of the state program. If individuals are to be allowed a choice among competing plans, or if the universal plan provides only basic coverage that may be supplemented privately, or if consumer cost-sharing is relied upon (as a way

to limit use of services or to reduce the central plan's share of cost), administrative cost savings would fall considerably.

Administrative costs are also lower in Canada because less attempt is made in that system to track the costs of individual patients or to monitor the appropriateness of care (Neuschler 1990). Unless these efforts are abandoned in the United States (which seems unlikely even if a system of universal coverage is adopted), they will remain a source of greater administrative overhead. Finally, it should be understood that to realize administrative savings would require the elimination of existing jobs in the health insurance industry and elsewhere in the health care system. Canada and other countries have never had the enormous commitment of resources to health insurance administration that the United States has, and thus did not face the problem of scaling it back.

Fees, Budgets, and a Single Payer

Undoubtedly, some of Canada's success in keeping health care costs below those in the U.S. derives from the ability of a single payer to control physicians' fees and hospital budgets. These are determined by a process of negotiation involving medical societies, provincial hospital associations, and departments of health (and ultimately the provincial legislatures). In contrast to the very decentralized and open-ended U.S. system, this process does place limits on total health spending, but it does so in a rather unsophisticated way. There is no guarantee that the total level of spending is in any sense socially optimal, or even that the limited resources going to health care are used in the most efficient way possible.

How well the Canadian system of budgeting would work in the United States, and particularly for a single state on its own, is an open question. As Victor Fuchs (1986) has emphasized, total health care expenditures may be viewed as the product of costs per service and volume of services, and both elements must be controlled to contain expenditure growth over the long run. With regard to physicians' services, Canada has had less success limiting volume of services than controlling fees. Total hospital budgets are set, but as a result some health services are apparently not as readily available to middle-income and upper-income

Canadians as to their U.S. counterparts (Goodman and Musgrave 1991, pp. 17-18; Rublee 1991).

It is often said that U.S. consumers will not tolerate the waiting or denial of services which the Canadians are said to have learned to accept. If that is so, the potential for constraining the use of medical services through a single payer may be limited. A single state would also have much less monopoly power in dealing with physicians than would the U.S. government or even a Canadian province. Physicians' fees (or, more important, physicians' total incomes) could not be kept far below those in other states without prompting extensive out-migration of doctors and consequent access problems due to physician shortages.

Political Concerns

Whether resources devoted to health care would increase or decrease in the aggregate with the establishment of state-financed universal coverage depends to a great extent on the political willingness to constrain costs. Under any reasonable cost-containment scenario, it seems certain that the distribution of resources would be greatly affected. The current U.S. health care system is oriented to satisfying the demands of the privately insured employee or retiree, with the needs of public-pay-only patients being met for the most part as either volume filler or as part of a social mission. Under a single-payer system, all patients provide an equal opportunity for financial gain or loss. Barring large copayments which the poor would be unable to pay, some resources now devoted to serving the privately insured would shift toward population groups that are currently underserved. This would be especially true if the universal health insurance plan prohibits private rivals or supplements, as is the case in Canada. If the benefit plan is reasonably comprehensive with minimal copayments and if private health insurance for services covered in the national health plan is prohibited, then a significant redistribution of resources would likely take place. If the national health plan resembles the U.S. Medicare program, where Medicare-only coverage is tantamount to being underinsured and where most middle-income and upper-income retirees have supplemental private insurance, then the redistribution would be considerably moderated.

If cost containment were a sustainable political goal in a universal health plan, then we could expect those who are now well-insured to see a reduction in their real coverage (access to services on demand) over time. Depending on the financing mechanism used, that same group of upper-middle and upper-income voters is likely to be asked to bear a larger share of the cost than it currently does. The political feasibility of simultaneously reducing coverage and increasing the cost burden for a large block of relatively affluent voters seems dubious and casts doubt on the potential of a state-initiated universal health care system to truly contain costs.

Given the fate of the Medicare Catastrophic Coverage legislation with its redistributive premium structure, the political feasibility of a single-payer universal health plan which also truly constrains the normal growth in personal health expenditures is doubtful.¹

Distributional Effects of Universal Coverage An Illustration Using Michigan Data

Any universal health care plan implemented by a state may create major changes in the distribution of health care use and in how the costs are borne. In this section we analyze the distributional effects of two illustrative approaches to universal health care, using data from Michigan. Our analysis requires us to make a number of assumptions, which could be tested more carefully against empirical data. More study is clearly desirable before implementation of any plan. At least some of the patterns we identify are strong enough, however, that we doubt that they would be substantially altered in a more comprehensive study.

The two approaches to universal coverage we consider are: (1) a Canadian-style system, with a single public payer supported by income taxes, excluding all forms of private coverage, and with minimal copayments; and (2) a mixed public-private option in which there is limited universal coverage similar to that provided in the current U.S. Medicare program, with possible private supplementary insurance. Both approaches exclude populations currently receiving health care coverage through federal programs (Medicare, the Departments of Defense and Veterans Affairs). Our rationale is that a state would not want to forgo

federal funding and would therefore expect such individuals to retain their current coverage.

Our main focus is on the distributional implications of alternative financing mechanisms, and we downplay other possible effects of a system of universal coverage. We do assume some increase in utilization of care for the currently uninsured, but no effects for others. Costs per unit of care are treated as the same under all options, and no administrative savings are incorporated. Proponents of universal coverage may perceive this as biased against their view, but we consider the cost-containment potential of a universal system to be sufficiently uncertain that our assumptions are a reasonable baseline.

The Current System

To provide a background for the analysis, we begin by describing the distributional impacts of the current system in Michigan. Data on population, income, and insurance coverage are taken from the 1988 Current Population Survey and its supplement on health insurance. These data refer to conditions in 1987. We divide the population into family “insurance units”² and array the families by income as a percent of the federal poverty standard. Income is gross money income before taxes and including transfer payments. It does not include the value of fringe benefits, such as employer-provided health insurance. For the value of health care utilized we use 1987 national *per capita* personal health care expenditures (Piacentini and Cerino 1990, p. 160) of \$1,726. This *per capita* expenditure is adjusted by a factor of 1.2142 for adults or 0.7041 for children, reflecting relative *per capita* expenditures in the Michigan Medicaid Program for its Aid to Families with Dependent Children population. We adjusted health expenditures by uninsured households to 42 percent of the level of insured households based on data from the Survey of Income and Program Participation (Long and Rodgers 1990; CBO 1991). We also identify as “underinsured” those whose family income was less than 200 percent of the poverty standard and who purchased nongroup health insurance or a group plan for which no employer made a contribution. Our expectation is that insurance coverage is usually quite limited in these cases. We treat consumption of the underinsured

as midway between the uninsured and the insured. Lacking sufficient data to do otherwise, we make the simplifying assumptions that medical care use among the other insured does not vary with the type (public vs. private) or comprehensiveness of coverage. In reality, private coverage tends to be less extensive for those at lower incomes and this probably restrains their utilization relative to those with more complete coverage.

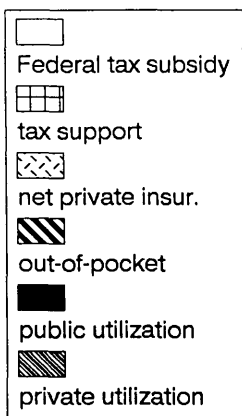
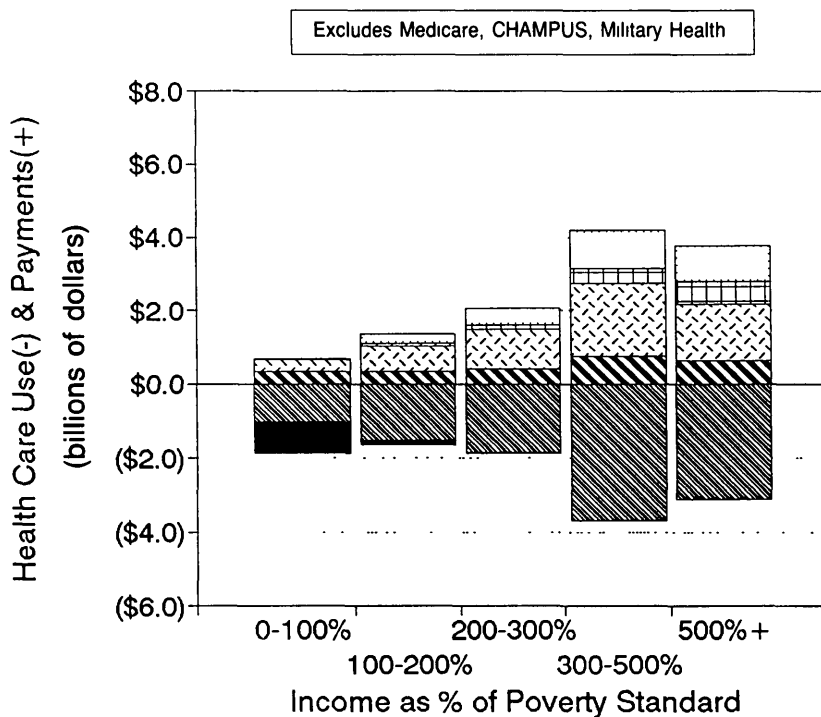
In Figure 1 we summarize how the use of health care and the burden of paying for it are currently spread across income classes in Michigan. The bottom (negative) half of the figure depicts health care use. The height of the bar for each income group reflects the amount of health care utilized by the income group, which is determined by the size of the population in the group, the percent who are children, and the percent who are uninsured. We have distinguished public and private utilization. Public utilization is care paid by the Medicaid program. Not surprisingly, it is concentrated at the low end of the income distribution. It may be more surprising that even in the group below the poverty line, less than half of care used is provided by Medicaid.

The top (positive) half of Figure 1 shows how much health care is paid for in each income group. A group may not pay for all the care it uses because some is publicly financed, and some is “uncompensated.” We mean by uncompensated any excess in the cost of providing care over the direct payments made by the recipient or any third party. In our analysis uncompensated care is generated by Medicaid, which is assumed to reimburse for only 75 percent of the cost of care for its beneficiaries, and by the uninsured and underinsured. Of course, it is possible that some groups pay for more care than they use, if they pay taxes to support Medicaid or if costs of uncompensated care are shifted to them. Some costs of care are also shifted to out-of-state taxpayers through federal tax subsidies.

In allocating the cost of care, we attribute to each family:

Out-of-Pocket Costs: Out-of-pocket costs were calculated for all as 18 percent of the value of total health care utilized, based on data from the national health accounts (Levit and Cowan 1990). It is likely that this percentage varies with insurance coverage and

Figure 1
1987 Michigan Health Use and Payments
by Income Class and Payment Source



Tax Support = State/Federal
 Medicaid Taxes + Redistributed
 State Tax Subsidies

income, so that this is an area where better data could improve the precision of the estimates. The remaining care used by the uninsured is uncompensated. For the underinsured, we assume that half of care is covered by insurance, and the remainder after out-of-pocket payments is uncompensated. The broad income groupings that we use also mask the fact that out-of-pocket payments are highly variable within these groups (particularly for the uninsured), depending on the need for care.

Net Private Insurance: This is the cost of its private health insurance, excluding any amount of subsidy through the tax system. Even if insurance is employer-provided, we treat it as though it substitutes for higher wages, so that its cost is borne by the employee. This assumption is standard in the health economics literature, and is discussed in chapter 8 of this volume. For an insured family, the gross cost of health insurance is taken to be the value of health care used but not paid for out-of-pocket (half the value of health care used for the underinsured), plus an imputation for the cost of uncompensated care. In effect we assume that if there were no uncompensated care, insurance premiums in the aggregate would be lower by the current cost of that care.

To deal with the tax subsidy, we compute the taxes an employee *would have paid* on the gross value of employer-provided health insurance if it were treated as taxable income. This includes all FICA³ taxes, and state and federal income taxes. Tax subsidies for health insurance and health services are calculated based on the family's 1987 marginal tax rate: 14.3 percent FICA (for earnings under \$43,000), 0 – 38.5 percent federal income tax,⁴ 4.6 percent state income tax. The marginal rate appropriate to the family's taxable income and earnings was multiplied by the value of the family's private health insurance coverage to produce a tax subsidy.⁵ The net cost of health insurance is the value of the premium minus the reduction in taxes that results from taking compensation in this form rather than as taxable wages.

Tax Support: Medicaid is tax-supported, with state and federal dollars. The costs of tax subsidies for health insurance are also

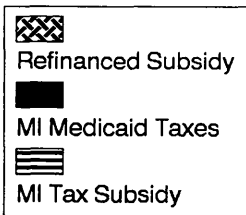
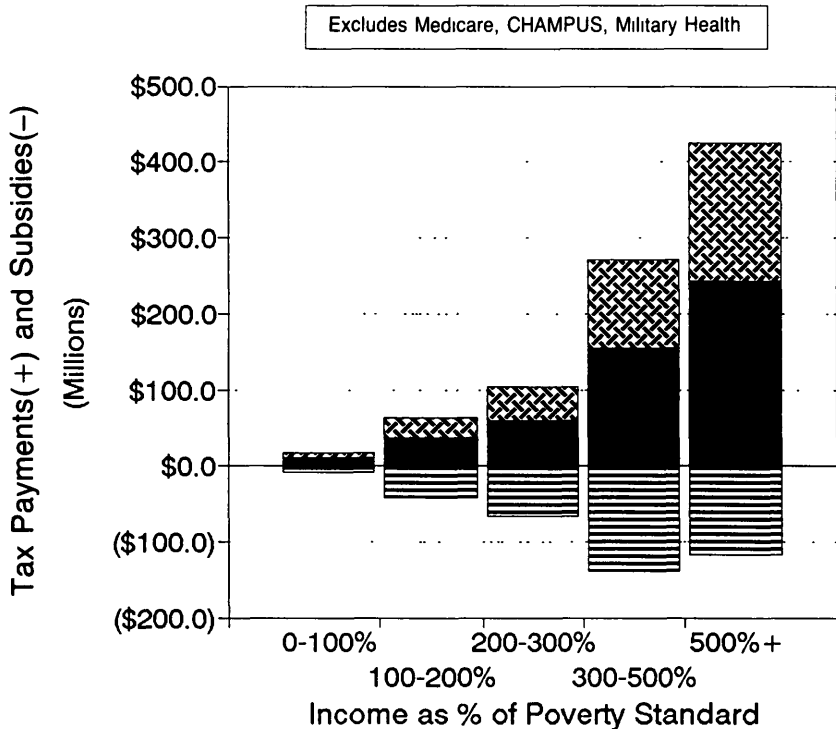
borne by taxpayers. State Medicaid dollars and state tax subsidies must be paid by Michigan taxpayers, so these costs must be distributed back to Michigan households. State contributions to the Medicaid program and the costs of financing state income tax subsidies for employer-sponsored health insurance were allocated equally to the state sales tax (assumed to be proportioned to total family income) and the state income tax, based on state taxable family income. Federal contributions to the Medicaid program were raised from federal taxable family income at the average marginal rate of 20 percent. The costs of federal spending and tax subsidies, however, are borne by taxpayers throughout the United States. We attribute the federal share of Medicaid to Michigan taxpayers, but treat the federal tax subsidies as shifted to out-of-state taxpayers.⁶

Out-of-pocket costs, net private insurance, and tax support correspond to the first three segments of the top bars in Figure 1. The last segment allocates by income class the federal tax subsidy for employer-provided health insurance. We regard the burden of the subsidy as being borne by out-of-state taxpayers.

Figure 1 shows that the value of health care utilized exceeds the amount paid for at all levels of income. Federal tax subsidies make this possible. The subsidies are unimportant for low-income households, but the poor receive more care than they pay for because of Medicaid coverage and uncompensated care. Higher-income taxpayers must support this care for the poor, but what they pay is not as large as the federal subsidies they receive for their own care. The current system is progressive in the sense that the ratio of payments to health care use rises somewhat with income.

Figure 2 breaks apart the components of tax support in Figure 1 and allows us to look more closely at Michigan's subsidies to health care and financing of Medicaid. Subsidies through the state income tax system must be borne by state taxpayers. Figure 2 shows that these have relatively little redistributive effect across income classes, because those who receive the subsidies to a large degree also pay to refinance them.

Figure 2
Tax Support for Personal Health Care
Michigan 1987



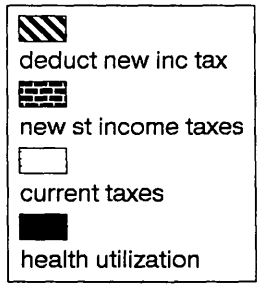
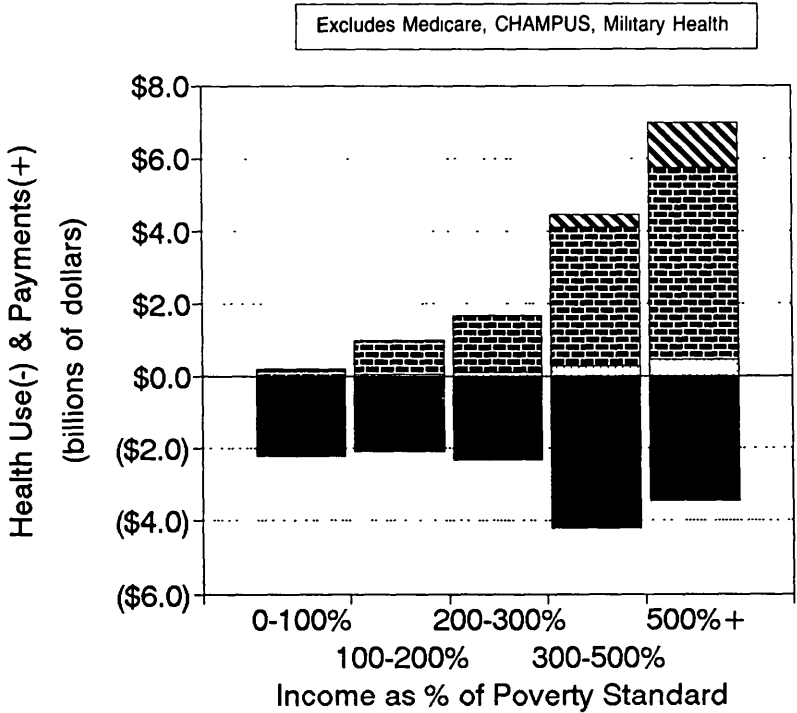
Among families at the same income, the subsidies do favor those with employer-provided health insurance over others. Not surprisingly, tax support for Medicaid comes heavily from households with relatively high incomes.

The Canadian Model

In analyzing a Canadian-style state health plan, we assume that the state is able to retain current federal Medicaid dollars, but that the remaining health care utilization is financed entirely through a nearly threefold increase in the state's flat rate income tax. Health care utilization (displayed in the bottom half of Figure 3) changes from the current system only for those currently uninsured or underinsured. Health care use increases for the uninsured to the level of the rest of the population, more than doubling their medical care consumption. Even this increase in use may understate the benefit of the state plan to the uninsured, as the state plan ends their dependence on uncompensated care, the availability of which is always uncertain and for which quality may be low. In modeling the current system, the underinsured had been treated as consuming medical care at a level half way between the uninsured and the insured. Health care use by the underinsured is therefore also assumed to increase somewhat under the state health plan. In all, these changes represent a 15 percent increase in total health care utilization.

The top bars in Figure 3 show the distribution of the costs of care under this plan. The Canadian-style plan eliminates health insurance as an employee benefit, and we assume that for those with employer-provided coverage wages rise by the employer cost of that coverage (this is implied by the assumption that the cost of health insurance is borne by the worker). However, families now bear a cost through the taxes they pay to finance the state health plan. The bars are divided into three segments. The first is labeled "Current Taxes" and reflects taxes that support the current Medicaid program. We allocate these to income classes exactly as we did for the current system. The second segment shows new state income taxes needed, allocated to taxpayers in each income class.

Figure 3
Health Expenditures and Income Taxes
Canadian-Style Public Health Insurance



From a state's perspective, a major drawback to an income tax-financed universal health plan is the increase in federal tax liabilities for state residents, as the federal subsidies to employer-provided coverage are forgone. Not all federal subsidies would be lost, however. For those who itemize deductions on their federal returns, higher state taxes are deductible from federal taxable income. In effect, the federal treasury bears a share of each itemizing family's state income tax, equal to the federal marginal tax rate.

The third segment in the top of Figure 3 indicates in each group the portion of higher state taxes shifted to out-of-state taxpayers via deductibility. We calculate this by taking into account federal marginal tax rates and the share of taxpayers in each group who are itemizers (using national averages on itemizing by income in 1987, from U.S. Department of Treasury 1989, Table 1). This segment is small enough to be imperceptible in the figure up to 300 percent of poverty (in the 200-300 percent group it reaches only \$48 million).⁷ It grows much larger in the highest-income groups, even in relation to new state taxes, for two reasons: higher-income taxpayers face higher marginal tax rates, and they are much more likely to be itemizers.

Compared with the current system, the distribution of the cost is borne more heavily by the higher-income groups under the Canadian-style plan. The Michigan income tax is a flat rate tax, with a personal exemption of \$1,600 per member of the household. The exemptions make taxes paid a smaller share of income for those of the low end of the distribution. Because of low tax contributions and the elimination of out-of-pocket payments for their own care, those at the low end of the distribution bear a much smaller portion of the cost than they do currently. For those with incomes up to 200 percent of the poverty level, the ratio of contributions to health care use is significantly lower under the Canadian model than under the current system. The two systems are approximately the same between 200 and 300 percent of poverty, and the ratio becomes much larger for the Canadian model at higher incomes. The higher overall ratio for the Canadian model reflects the loss of federal subsidies, a point to which we will return.

Of course, a state system providing this type of coverage does not have to be financed in this way, and other financing mechanisms (for example, income-based premiums) could have different distributional consequences. Any system that effectively exempts those at low incomes from bearing the costs of their care will, however, involve significant redistributions.

Limited Public Coverage With Private Supplementation

Our alternative version of universal coverage is rather different from the Canadian-style plan. We assume that all are guaranteed limited coverage along the lines of the federal Medicare program (coverage for hospital and physician care, with some limits and cost-sharing), which may then be supplemented with private coverage. Roughly in keeping with Medicare, we assume that the public insurance covers half of the cost of care for a typical household. This coverage is financed through a flat-rate payroll tax on the earnings of all workers, with a ceiling on the amount of payroll tax owed by any individual. The particular form of the payroll tax used in our analysis is an 8.5 percent tax on the first \$30,000 of earnings. This combination is sufficient to raise the needed revenue. A higher ceiling would make it possible to reduce the rate somewhat.

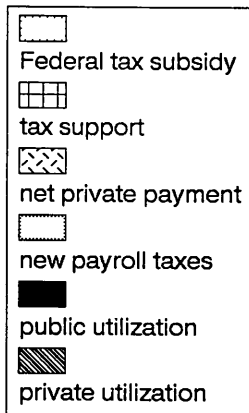
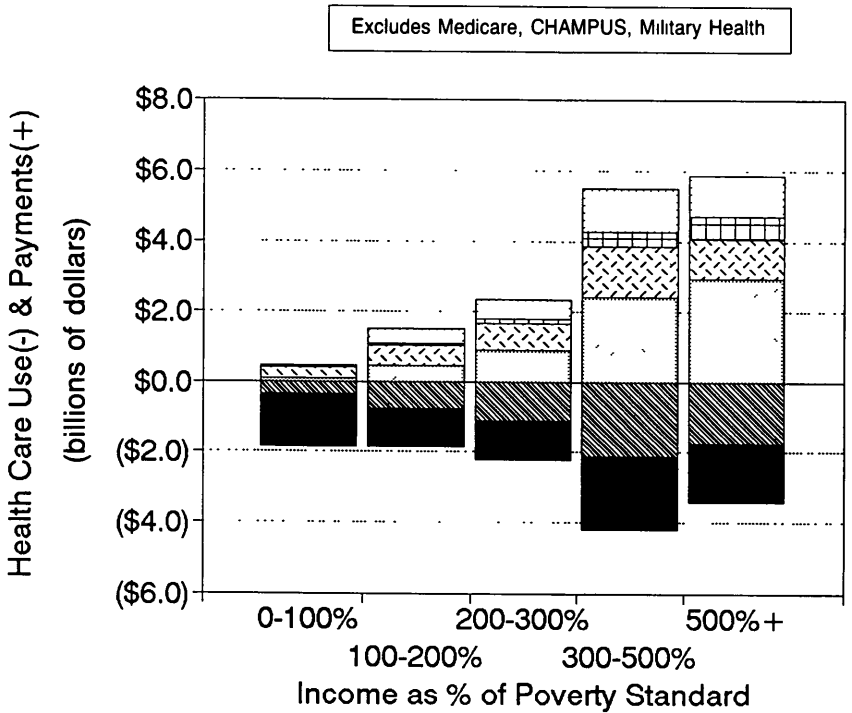
To analyze the distribution of health care use and costs under this approach, we must make some additional assumptions concerning whether or not basic public coverage is supplemented with private insurance. We assume that persons currently eligible for Medicaid would be covered fully (basic plus supplemental coverage) through the state/federal Medicaid program. Anyone currently covered by private insurance is assumed to retain it to supplement the public program and cover the other half of medical costs. The supplemental private coverage is assumed to be of the same type as is currently held: group or individual, employer-provided or individually purchased. Those who are currently uninsured do not supplement, and therefore are responsible for half of their health care expenses out-of-pocket. Those in this group with incomes below 200 percent of poverty pay out-of-pocket for 18 percent of what insurance does not cover (as we assume they do in the

current system) and default on the remainder. Some uncompensated care thus remains in the system. Its cost is borne in the premiums of supplemental private insurance. As for the payroll tax, it is assumed to be borne by workers. For those who had not been receiving a health benefit in 1987, this means that their earnings fall to offset the amount of payroll tax paid by the employer. Most of the earnings are lost to workers in households with incomes below 200 percent of the poverty standard, roughly 7 percent of the current earnings of workers without employer-provided health insurance.

Figure 4 presents the distribution of health care expenditures and supporting state payroll taxes (8.5 percent) under a mixed public-private state health insurance plan. Redistribution under the mixed plan is not as marked as in the single-payer income tax-supported approach. However, a significant amount of redistribution of health resources would take place, and in a form similar to that of mandated benefits for all employers (see chapter 4 in this volume). Payroll tax financing, as proposed for our second approach, has one distinct advantage over the use of an income tax. The payroll tax would be treated as a business expense and not part of an employee's taxable income. The practical advantage of the payroll tax approach becomes evident when it is recognized that, without federal cooperation, the increase in federal taxes due to the rise in taxable income occasioned by the loss of employee health benefits under a Canadian-style health plan could be 10 percent of total personal health care costs.

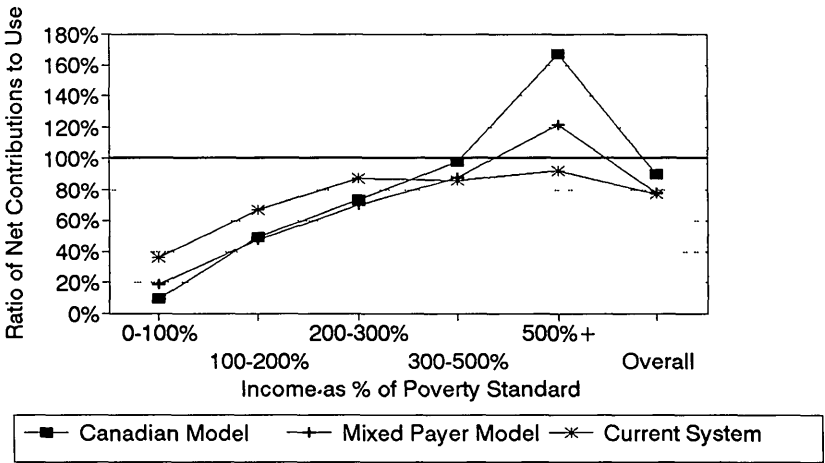
Figure 5 summarizes the distributional effects of the current system as compared with the two versions of universal coverage we are considering. For each system and each income class it shows the ratio of net contributions—all payments for health care, netting out subsidies and including taxes—to use of health care. Figure 5 clearly shows that both versions of universal coverage would redistribute resources from the top of the income distribution (primarily those at more than 500 percent of poverty) to those at or near the bottom. In both universal systems those in poverty pay very little for the care they receive, while high-income families pay for more than the cost of their care. The Canadian model, with the open-ended income tax financing we have assumed, is the most redistributive.

Figure 4
Michigan Health Expenditures and Payroll Taxes
Mixed Public-Private Health Insurance



Net Private Payment =
 Private Health Insurance -
 State/Federal Tax Subsidy +
 Out-of-Pocket Expenses.

Figure 5
Redistributive Effects of Health Care Financing Systems
by Income Category



Net Contribution = Private Health Insurance + State/Federal Medicaid Tax Payments + Costshift + Out-of-Pocket - State/Federal Employee Health Insurance Tax Subsidies + Redistributed State Health Insurance Tax Subsidies

At the right end of Figure 5 is the overall or average ratio of net contributions to use for each system. It is less than 100 percent in each case because of federal tax subsidies. The overall ratio is the same for the mixed-payer model and the current system at about 75 percent, but the Canadian model sacrifices substantial federal subsidies and the ratio rises to 85 percent. Not shown in Figure 5 is an overall increase in health care expenditures from about \$12.4 billion under the current system to \$13.8 billion under the mixed model to \$14.3 billion under the Canadian system, due to the increased access to care by the uninsured and underinsured.

Concluding Remarks

Clearly, if a state must go-it-alone in a noncooperative federal environment, the mixed-payer system discussed here, along with the mandated-benefit approach discussed in chapter 4, has significant cost advantages. While the mixed-payer and mandated-benefit approaches have been identified as having weak cost-containment potential (Aaron 1991), even the most optimistic proponents of the Canadian-style single-payer health plan will probably be hard pressed to argue that their plans can expand access and reduce costs while overcoming a 10 percent federal income and payroll tax surcharge. Without some cooperation from the federal government on recovery of additional federal income and FICA payroll tax revenues, state-sponsored, income tax-supported health plans appear to be too costly.

Even the modest level of redistribution of health resources involved in the mixed-payer model could make this approach infeasible in the current political climate (Blendon 1991). For those with incomes greater than five times the poverty level, the mixed-payer scenario looks precariously like the Medicare Catastrophic Coverage debacle, where wealthy Medicare beneficiaries were asked to pay actuarially unfair premiums to pay for increased coverage for low-income beneficiaries. Even though the catastrophic coverage still left the wealthy beneficiaries with an overall net subsidy for their full Medicare coverage, they rebelled and successfully forced Congress to repeal the legislation. This lesson will not be lost on state legislators considering either the mixed-payer or the single-payer model.

Examination of the consequences of the single public payer health plan enacted by an individual state brings into sharp contrast the contradictory health care tax and expenditure policies adopted and maintained by state and federal governments in the United States. At a time when state and federal governments have searched ever more aggressively for effective cost-containment strategies and have faced dire fiscal restraints leading to substantial underfunding of major public health insurance programs (and increasingly destabilizing cost-shifting onto private payers), these same units of government are providing ever more subsidies to middle-income and upper-income health insurance policyholders, effectively blunting the demand-side discipline of the market.

Ironically, inaction at the federal level maintains in place a federal tax code which is a formidable obstacle for any state wishing, through a Canadian-style public health insurance model, to bring its population face-to-face with the complete cost of health care, to be paid with highly distasteful income taxes. In the policy experiments reported here, a state government wishing to go-it-alone would almost certainly choose against creating an income and payroll tax windfall for an uncooperative federal government and would probably choose the mixed public-private payer model (or the mandated-benefits approach discussed in chapter 4). However, the mixed-payer model has the effect of increasing total health care tax subsidies,⁸ diluting any discipline the demand side of the market might bring to bear on the gap between the growth of *per capita* income and the growth of *per capita* health expenditures. It appears then that fundamental reforms may require the federal government to reassess the *ad hoc* and perhaps outdated policy implemented after World War II of treating employer-provided health insurance as a business expense and not part of taxable compensation.

NOTES

1. Blendon (1991) provides background on American preferences for redistributive health care financing policies and the failure of Medicare catastrophic coverage legislation.
2. Households can contain individuals who cannot be covered under a typical family health insurance policy, i.e., adult children of the head of household or spouse. Households with these kinds of members were broken into insurance units, i.e., familial groups which could be covered by standard health insurance policies.
3. FICA payroll contributions are not considered by all as a tax because, in principle, social security benefits are linked to individual contributions. However, the pay-as-you-go financing used for both social security payments and Medicare means that most current contributions are spent in the same year they are collected and almost always before the individual contributor could make a claim on them. Payment of current FICA payroll taxes may create a moral obligation on a future generation of workers to provide an adequate level of contributions toward the retirement of the current cohort of workers. Nonetheless, we consider the marginal FICA contributions which workers would make on the value of their health benefits, were they to become taxable, to be unrelated for all practical purposes to future social security income, i.e., we consider them to be a tax.
4. Here we calculate the federal marginal income tax rate that would apply if the household did not itemize deductions. This overstates the marginal rate for some itemizers, but we expect this to be a relatively minor source of error. This analysis takes no account of the medical deduction on the federal income tax. That deduction can reduce the price of medical care by a percentage equal to a family's federal marginal tax rate, but only for those who itemize deductions, and only for that portion of medical expenses in excess of 7.5 percent of income. The income restriction severely limits the use of the deduction. Nationally in 1987, only 5 percent of returns claimed the deduction at all, and the total amount deducted was only .6 percent of all income reported (U.S. Department of Treasury, 1989).
5. This treatment of tax subsidies ignores the fact that medical care is excluded from the base of the state's sales tax. This sales tax exclusion encourages consumption of medical care relative to other goods, although it is by no means the only major exclusion from the sales tax base in Michigan or most other states. See chapter 7 in this volume for further discussion.
6. Of course, Michigan taxpayers bear, in an analogous way, some of the costs of health care in all other states. But these costs cannot be controlled by state policies, and therefore are unchanged under any of the options we consider. As we will show, a move to a state health care system could forfeit federal subsidies to Michigan, but Michigan taxpayers would continue to subsidize health care in other states.
7. The increase in the state income tax would surely induce some nonitemizers to switch to itemizing, so our analysis understates to some degree the share of cost shifted out-of-state.
8. While the net contribution to use ratio is the same under the mixed payer model, total use rises, 25 percent of which is financed by state and federal tax subsidies.

References

- Aaron, H.J. 1991. "The Worst Health Care Reform Plan Except for All the Others," *Challenge* 34(6): 61-63.
- Barer, M., W.P. Welch and L. Antioch. 1991. "Canadian/U.S. Health Care: Reflections on the HIAA's Analysis," *Health Affairs* 10: 229-36.
- Blendon, R.J. 1991. "Health Services Research: Implications for Policy, Management and Clinical Practice." Presidential Address to the Eighth Annual Meeting of the Association for Health Services Research, San Diego, CA, June.
- Bodenheimer, T.S. 1989. "Payment Mechanisms and a National Health Program," *Medical Care Review* 46(1): 3-43.
- Califano, J.A. 1989. "Billions Blown on Health," *New York Times*, April 11.
- CBO (Congressional Budget Office). 1991. *Selected Options for Expanding Health Insurance Coverage*. Washington, DC: U.S. Congress.
- Evans, R. 1988. Presentation at Summer Meeting of the Board of Trustees of Blue Cross and Blue Shield of Michigan, Harbor Springs, MI, July.
- Evans, R. et al. 1989. "Controlling Health Expenditures: The Canadian Reality," *New England Journal of Medicine* 320: 571-77.
- Fuchs, V.R. 1986. "Has Cost Containment Gone Too Far?" *The Milbank Quarterly* 64(3): 186-196.
- GAO (U.S. General Accounting Office). 1991. *Canadian Health Insurance: Lesson for the United States*. GAO/HRD-91-90, June.
- Goodman, J.C. and G.L. Musgrave. 1991. *Twenty Myths About National Health Insurance*. Dallas, TX: National Center for Policy Analysis, Policy Report No. 128.
- Himmelstein, D.V. and S. Woolhandler. 1986. "Cost Without Benefit: Administrative Waste in U.S. Health Care," *New England Journal of Medicine* 314: 441-45.
- Leibowitz, A., W.G. Manning, E.B. Keeler, et al. 1985. "The Effect of Cost Sharing on the Use of Medical Services by Children." Santa Monica, CA: Rand Corporation Report R-3287-HHS.
- Levit, K.R. and C.A. Cowan. 1990. "The Burden of Health Care Costs: Business, Household, and Governments." *Health Care Financing Review* 12(2): 127-137.
- Long, S.H. and J. Rodgers. 1990. "The Effects of Being Uninsured on Health Care Service Use Estimates from the Survey of Income and Program Participation." Survey of Income and Program Participation (SIPP) Working Paper No. 9012, Bureau of the Census.
- Neuschler, E. 1990. *Canadian Health Care: The Implications of Public Health Insurance*. Washington, DC: Research Bulletin of the Health Insurance Association of America.

- Pepper Commission (U.S. Bipartisan Commission on Comprehensive Health Care). 1990. *Final Report: A Call for Action*. Washington, DC: U.S. Government Printing Office.
- Peterson, W.C. 1991. "The Silent Depression," *Challenge* 34(4): 29-34.
- Piacentini, J.S. and T.J. Cerino. 1990. *EBRI Data Book on Employee Benefits*. Washington, DC: Employee Benefit Research Institute.
- Rothschild, M. and J. Stiglitz. 1976. "Equilibrium in Competitive Insurance Markets: An Essay on the Economics of Imperfect Information," *Quarterly Journal of Economics* 4: 629-650.
- Rublee, D.A. 1991. "Can We Develop an Equitable System in an Era of Limited Health Care Resources." In *The Future of Health Care: Public Concerns and Policy Trends*. Boston: Health Data Corporation.
- Scheiber, G.J. 1990. "Health Expenditures in Major Industrialized Countries, 1960-87," *Health Care Financing Review* 11(4): 159-167.
- U.S. Department of Treasury, Internal Revenue Service. 1989. *Statistics of Income Bulletin*, Publication 1136.