Alternative Medicare Financing Sources

STEPHEN H. LONG and
TIMOTHY M. SMEEDING

Departments of Economics and Public Administration and Metropolitan Studies Program, The Maxwell School, Syracuse University; Division of Social Science Research and Department of Economics, University of Utah

MEDICARE'S HOSPITAL INSURANCE (HI) TRUST fund is openly acknowledged to be in serious financial difficulty, while its Supplementary Medical Insurance (SMI) trust fund is quietly absorbing a growing flow of federal general revenues. By 1990 HI revenues, based largely upon the payroll tax, will fall short of outlays by 19 percent. Deficits are projected to grow mightily with each passing year, amounting to 37 percent of outlays by 1995, for a cumulative HI trust fund deficit of $252 billion (Ginsburg and Moon 1984). Subject to demographic, utilization, and health care cost forces similar to those underlying the HI trend, SMI outlays are also projected to rise more rapidly than most other economic aggregates (e.g., covered wages, on which the payroll tax is based; the Consumer Price Index, to which SMI premiums are indirectly indexed). However, the SMI trust fund is designed to receive federal general revenue appropriations to cover the gap between premium income and outlays. Though this arrangement shields SMI from any

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publicly proclaimed crisis, its surging revenue demands are nonetheless worrisome. By 1988 transfers from the general fund for SMI are expected to reach $31.9 billion, almost triple their 1981 level of $11.3 billion (U.S. Senate. Special Committee on Aging 1983). In sum, there is a Medicare financing problem that is of major proportions now and that promises to escalate well into the next century.

Numerous options are available for correcting the course toward increasing program deficits. Eligibility changes taking the program the few remaining steps toward universal enrollment by the elderly would offer short- to intermediate-run surpluses as revenues from newly covered workers should exceed incremental benefit payments. Benefit reductions, particularly through increased beneficiary cost-sharing, would lower future outlays. Reimbursement reform, particularly through prospective payment of hospitals and various physician payment changes, promises to reduce both prices and service quantities paid by Medicare. Finally, revising benefits to provide vouchers for private insurance coverage or enrollment in alternative delivery systems might be used to lower outlays, particularly if the resultant competition among insurers and providers results in lower costs for the same quality services. These options are discussed in other papers prepared for this volume.

Despite the wide array of reforms available to lower projected Medicare outlays, and despite our support for some of these measures, current estimates suggest that expenditure reductions will be inadequate to fully correct for the HI deficit. It seems clear that the long-term trends imply a continuing need for revenue increases. That is, a balanced Medicare reform package is likely to include *both* expenditure reductions *and* revenue increases. This paper was commissioned to provide background on part of such a package; specifically, on the principal alternative financing sources for Medicare in the coming years.

The paper first describes the principal financing sources, carefully distinguishing among taxes that place burdens upon the population in general, and those that burden Medicare beneficiaries in particular. The next section discusses the criteria to be employed in evaluating the alternatives. Then the separate revenue sources are analyzed, with particular attention to their implications for distributive equity. The paper closes with our recommended Medicare financing package.

The Financing Alternatives

There are two broad categories of taxation that can be used to support the Medicare program: (1) taxes on the general population regardless of age or disability status, and (2) taxes on elderly and disabled beneficiaries. Within the first category we examine the following revenue sources:

- Payroll tax;
- General revenues;
- Value-added tax;
- Selected excise taxes.

Within the second category, consisting of taxes on beneficiaries, the following are considered:

- Premiums;
- Personal income tax surcharge;
- Tax on supplementary health insurance premiums.

Throughout the discussion we abstract from whether a particular new source would be earmarked for the HI or SMI trust funds. This seems warranted since nearly all beneficiaries are enrolled in both parts and surely the Congress takes action on financing one fund with a clear awareness of the other.

Taxes on the General Population

One obvious source of Medicare financing is an increase in the current HI revenue source, the payroll tax. Currently employers and employees each pay 1.3 percent of covered earnings to the HI trust fund. The rate is scheduled to increase further, to 1.45 percent in 1986, and to remain at that level thereafter. The burden of the payroll tax falls most heavily on younger workers. Thus, at any point in time, it represents an intergenerational transfer (i.e., from younger workers to older beneficiaries). If, however, workers view the HI payroll tax (or any other social insurance tax) as a down payment on, or contribution to, their own future medical care needs, such contributions may also take the form of an intertemporal transfer (i.e., from the present to

some future time period). For current retirees, however, given the relatively few years of contributions since 1965, there is little in the way of intertemporal transfer in Medicare. At most, a person reaching age 65 in 1983 could have contributed about $4,000 (in 1983 dollars) over his or her working lifetime (calculated from the *Social Security Bulletin* 1982). The present value of expected Medicare benefits is several times this amount.

A second financing source is increased general revenue financing. This option is hardly unprecedented, since SMI benefits are already predominantly financed by general revenues. Further, the 1983 Social Security amendments included several new methods of subsidizing the Old Age and Survivors Insurance (OASI) trust fund from general revenues. However, as noted earlier, SMI demands on general revenues are increasing at a rapid rate, so that placing still further demands on this financing source may be undesirable.

A third source, the value-added tax (sometimes known as VAT), was advocated strongly about six years ago by Representative Al Ullman, the head of the House Ways and Means Committee, and had been proposed from time to time in earlier years. This flat-rate national consumption tax was considered by some as a substitute for the corporate income tax and by others as a substitute for increased payroll taxes. The latter rationale could be employed to justify using a portion of value-added tax revenues for the HI trust fund. The value-added tax also can be supported on the general principle that consumption taxes have potentially beneficial effects on national savings. This is particularly true if the value-added tax is to be a substitute for some portion of the personal income tax.

The final type of tax on the general population to be considered is the excise tax on commodities that affect the general level of health. The commodities considered here are alcoholic beverages and tobacco. Taxes on such products can be viewed as current payments for the higher future medical care costs induced by their consumption (Zook and Moore 1980). The relationship between heavy smoking or alcoholism and health problems is well documented (Fuchs 1974; Cook 1982; Klatzky, Friedman, and Sieglaub 1981; Weeden and Burchell 1982). If added consumption of alcoholic beverages and tobacco (especially cigarettes) leads to respiratory disease, high blood pressure, cirrhosis, melanoma, and related health problems and if these health problems lead to higher Medicare outlays, a strong case for earmarking these

health taxes for the trust funds can be made. Federal excise taxes on alcohol remained constant in nominal terms from 1960 to 1980, during which time the real price of alcoholic beverages fell by almost 50 percent (Cook 1983). Federal excise taxes on cigarettes, which had gone unchanged since 1951, were recently doubled to 16 cents per pack. This increase is scheduled to expire in 1985, however, and the tax will return to 8 cents per pack (U.S. House of Representatives. Committee on Ways and Means 1983). Special excise taxes on these health-endangering commodities are neither onerous nor have they been substantially increased in recent years. As a result, the commodities have lower relative prices which encourages their consumption.

Taxes on Beneficiaries

While the current burden of payroll taxes, general revenue finance, the value-added tax, or health taxes would primarily fall on the younger taxpaying public, several alternative forms of Medicare finance can be directly levied on current, mainly elderly, beneficiaries. In 1965 when Medicare was just beginning, the aged paid 70 percent of their health care bills for all services, including hospital, physician, drug, and nursing home care. In contrast, the elderly pay 37 percent of bills for all medical services today, the decrease due largely to the Medicare program. Proposals to finance the projected shortfall in the trust fund through increased beneficiary payments would reverse this shifting of the medical cost burden, turning it back toward the elderly.

The first, and most direct, method of raising beneficiary payments is through a premium, analogous to uniform premiums paid for voluntary private insurance. Since premiums have fallen from 50 percent of SMI revenues at the program's inception to 22 percent in 1982, a case can be made for increased beneficiary payments in this form. Comparable to an increased premium in its net cost to beneficiaries would be a plan whereby a voucher to purchase health insurance is provided, but in a denomination below the actuarial value of current Medicare program benefits. While premiums result in larger dollar flows through the trust funds, premiums and discounted vouchers can be made equivalent in their burdens on beneficiaries when viewed from a revenue perspective alone. Therefore, while vouchers may offer cost-containment advantages, they are not considered separately in this paper on revenue sources.

A second approach to beneficiary payments is an earmarked surcharge on the personal income tax payments of elderly (and disabled) enrollees. While such a surcharge might be termed a "premium," to highlight the fact that it is a payment from beneficiaries, its "income-related" nature is a move from benefit taxation toward ability-to-pay principles. Another paper prepared for this volume addresses several such options in more detail (Davis and Rowland 1984). Hence, we limit our exploration to the income tax surcharge as a polar case to contrast with the uniform premium per enrollee.

Among the reform options generally classified as a benefit change is increased cost-sharing, though it has clear effects on revenue. The initial impact of cost-sharing is quite different from that of a premium—cost-sharing is only charged for those who become ill and proceed to use medical services, while a premium is spread over all beneficiaries without regard to their actual utilization experience. Cost-sharing is argued to be inequitable, particularly in the case of low-income beneficiaries for whom out-of-pocket costs can be especially burdensome. Yet, owing to the operation of the market in private supplementary insurance (i.e., medigap), the differences in the ultimate burdens of cost-sharing and premiums are not nearly as great as they might appear at first glance. Supplementary insurance premiums paid to avoid increased cost-sharing represent an off-budget counterpart to increased Medicare premiums to support the existing benefit package. About two-thirds of the elderly have supplementary insurance coverage, the proportion varying from 44 percent in the lowest quintile of the elderly ranked by income (the poorest of whom are likely to have Medicaid, regardless of their private coverage status) to between 75 and 79 percent for the higher income half of the elderly (tabulated from the 1978 Health Interview Survey, U.S. Department of Health, Education, and Welfare 1979). Increased Medicare cost-sharing might induce additional purchases of supplementary insurance, further narrowing the apparent difference between cost-sharing and premiums. Nonetheless, there is evidence that those who presently go without supplementary insurance are not only of lower income, but are more likely to be black or of more advanced age (Long, Settle, and Link 1982). These are compelling grounds for preferring premiums to increased cost-sharing. Unfortunately, in addition to paying those expenditures shifted off-budget through cost-sharing, private supplementary health insurance increases the on-budget costs of Medicare by inducing additional utilization. For example, hospital utilization

by those with supplementary coverage has been estimated to be 33 percent greater than that of beneficiaries who pay Medicare cost-sharing out of pocket (Link, Long, and Settle 1980).

A third source of beneficiary payment that might be used for incremental Medicare financing is a tax on supplementary insurance premiums. At a minimum these revenues could be used to compensate the program for the effect of medigap insurance in vitiating Medicare's cost-sharing. Moreover, one preliminary estimate of the price elasticity of demand for supplementary insurance suggests that for a 10 percent increase in the price, the percentage of elderly purchasing supplements will fall by 5 to 6 percent (Long and Settle 1982). A sufficiently large tax on medigap premiums might, therefore, restore the cost-sharing feature of Medicare for a larger share of beneficiaries.

Evaluative Criteria

Four basic criteria will be used to evaluate the various financing methods described above. They are the following:

- Distributive equity;
- Efficiency and behavioral effects;
- Revenue potential and stability;
- Administrative and compliance costs.

The first criterion, distributive equity, will be examined from three perspectives. The first and overriding perspective in this analysis is intergenerational equity: Are the young nonbeneficiaries or the principally elderly beneficiaries to bear the greater burden in closing the financing gap? As many have argued before, this issue of young versus old will continue to increase in importance for social policy decisions as our population ages (Binstock 1978; Hudson 1978). A second perspective is that of vertical equity: Are the rich or the poor to bear the larger burden relative to their income? If the relative burden is to increase with income, a tax is progressive; if the burden is to decrease with rising income, a tax is regressive; and if the burden is to be a constant percentage of income over all income groups, a tax is proportional. A final perspective on distributive equity is that of horizontal equity: Are equals to be treated equally?

The second criterion, efficiency and behavioral effects, has to do

with how imposition of a tax or charge (e.g., a Medicare premium) can change behavior in an economically efficient or inefficient way. The Rand Health Insurance Study has shown that higher direct consumer payments for health care through various cost-sharing arrangements reduce use of health care services, all else being equal (Newhouse et al. 1981). In the context of Medicare, such reduced demand could reduce required outlays. Alternatively, a tax could induce avoidance and undercut its own revenue-producing potential. Different taxing strategies also can affect labor supply behavior, inflationary pressures, or savings among the elderly or nonelderly, all of which must be considered in the design of a tax or package of taxes. In the present analysis, measures that have the dual effect of increasing revenues and reducing excessive demand for health care services are particularly appealing.

The third criterion is revenue potential and stability. Some taxes may not have large enough bases to cover the Medicare deficit alone and may be useful only in combination with other measures. Other taxes, such as one on payroll, may be particularly sensitive to the state of the economy. They may be useful only as part of a portfolio of taxes that balance cyclical impacts. For instance, at present each 1 percent increase in unemployment reduces HI payroll tax income by $1 billion.

The final criterion, administrative and compliance costs, is critical to the practicality of various taxes or charges. An increase in an existing tax, or a new tax to be collected through an existing structure, may have little or no marginal cost. A tax that requires a new or enlarged collection or enforcement structure may cost more than can be justified by its revenue potential.

Analysis of Revenue Sources

Distributive Equity

To illustrate the distribution of financing burdens from each source—particularly their intergenerational and vertical equity—we simulated $5 billion of incremental Medicare payments in 1975. These simulation parameters were chosen for several reasons. First, the general tax

simulator available to us was calibrated for the 1975 income year to employ the unusually rich data from the 1976 Survey of Income and Education.[1] Second, the most recent Consumer Expenditure Survey, upon which the consumption taxes were based, is for 1972–1973, while the supplementary insurance tax is based upon data from the 1978 Health Interview Survey. Rather than age all of the microdata forward, with all the problematic demographic and economic assumptions such a procedure would involve, we proportioned future revenue needs to 1975. Specifically, the 1995 HI trust fund deficit represents 37 percent of program outlays. The $5 billion chosen here is 43 percent of 1975 HI outlays, making the relative burdens approximately equal. Moreover, the $5 billion figure is a round number, easily proportioned by an analyst to reflect any current or future revenue total desired. (Also note that $5 billion in 1975 is approximately equal to $10 billion in 1985 prices.)

Tables 1 and 2 summarize the principal findings for each financing source. Each table displays results for eight revenue sources, first for all families and then separately for families headed by a nonelderly person and those headed by an elderly individual. Separate calculations have been made for quintiles of the all-family income distribution, where "1" refers to the lowest 20 percent of the families. (While data limitations prevented calculation of separate income-quintile-specific

[1] The tax simulations are based upon the following incidence assumptions. Payroll taxes, both the employee and the employer shares, are assumed to be borne by wage earners. Personal income taxes are the burden of the payer. General revenues are a weighted average (based upon historical proportions) of personal income taxes, corporate income taxes, and excise taxes. The burden of corporate taxes was distributed to all forms of property income, while excise taxes were assumed to fall on consumers in proportion to their disposable personal income. The value-added tax burden was allocated in accord with total expenses for current consumption. The selected excise taxes were assumed to be ad valorem taxes, the burden proportionate to consumer spending on the respective commodity. (Present federal excise taxes are specific, but data limitations required this simplifying assumption.) Premiums were allocated in accord with the number of elderly persons in each family and it is assumed that their burden cannot be shifted. Supplementary insurance taxes were allocated in equal amount to each Medicare beneficiary having a supplementary insurance policy. (This is a simplification necessitated by lack of data on premium amounts.) The population base is the civilian, noninstitutionalized population of the United States, where unrelated individuals are included as a separate "family" unit. (Details of these methods and data are described in Johnson and Long 1982.)

TABLE 1
Distribution of $5 Billion Incremental Financing under Alternative Revenue Sources: Dollars per Family by Age of Family Head and Family Income

Family income quintile	Taxes on Wages, Income, or Consumption					Taxes on Beneficiaries		
				Excise Taxes				
	Payroll tax	General revenues	Value-added tax	Alcoholic beverages	Tobacco	Premiums	Personal income tax surcharge	Supplementary insurance tax
				All Families				
All	64	64	64	64	64	64	64	64
1	6	4	27	20	35	104	0*	86
2	27	18	43	42	53	99	11	107
3	62	41	60	59	67	51	37	56
4	96	72	78	81	81	34	64	38
5	130	186	109	117	83	33	208	34
				Nonelderly-headed Families				
All	76	69	70	68	67	7	***	7
1	9	3	**	**	**	3	***	2
2	36	17	**	**	**	5	***	6
3	69	39	**	**	**	6	***	7
4	100	69	**	**	**	8	***	8
5	134	178	**	**	**	10	***	11

				Elderly-headed Families				
All	15	45	38	26	30	306	334	303
1	1	5	**	**	**	264	0	218
2	6	22	**	**	**	332	39	359
3	21	52	**	**	**	335	275	367
4	46	99	**	**	**	334	783	366
5	77	293	**	**	**	340	3039	358

*Less than 0.50.
**Owing to data limitations, the value-added and excise taxes could not be separately computed by income quintile for the two family groups.
***Owing to data limitations, the surcharge was not applied to the small number of beneficiaries in nonelderly-headed families.

TABLE 2
Distribution of $5 Billion Incremental Financing under Alternative Revenue Sources: Burden As a Percent of Family Income by Age of Family Head and Family Income

Family income quintile	Taxes on Wages, Income, or Consumption					Taxes on Beneficiaries		
	Payroll tax	General revenues	Value-added tax	Excise Taxes: Alcoholic beverages	Excise Taxes: Tobacco	Premiums	Personal income tax surcharge	Supplementary insurance tax
				All Families				
All	.48	.48	.48	.48	.48	.48	.48	.48
1	.22	.15	1.00	.72	1.29	4.02	.01	3.33
2	.41	.27	.63	.61	.76	1.49	.17	1.61
3	.56	.37	.52	.52	.59	.46	.34	.50
4	.58	.43	.47	.49	.49	.21	.39	.23
5	.44	.62	.37	.40	.28	.11	.70	.12
				Nonelderly-headed Families				
All	.52	.47	.48	.54	.53	.05	**	.05
1	.37	.13	*	*	*	.11	**	.09
2	.53	.25	*	*	*	.08	**	.09
3	.61	.35	*	*	*	.06	**	.06
4	.60	.41	*	*	*	.05	**	.05
5	.45	.60	*	*	*	.03	**	.04

				Elderly-headed Families				
All	.18	.54	.51	.41	.47	3.67	4.01	3.64
1	.03	.18	*	*	*	9.18	.01	7.60
2	.09	.34	*	*	*	5.14	.61	5.56
3	.20	.48	*	*	*	3.08	2.53	3.37
4	.28	.60	*	*	*	2.04	4.77	2.23
5	.24	.90	*	*	*	1.05	9.37	1.11

*Owing to data limitations, the value-added and excise taxes could not be separately computed by income quintile for the two family groups.

**Owing to data limitations, the surcharge was not applied to the small number of beneficiaries in nonelderly-headed families.

consumption tax burdens for elderly- and nonelderly-headed families, average burdens for all income levels in each family group are shown.) Table 1 measures the absolute dollar burden per family. Table 2 expresses this burden as a percent of family income—that is, as a tax rate on income from all sources.

Table 1 records that $5 billion of incremental Medicare financing represents an average burden of $64 per family. The all-families section of the table reveals the contrast in vertical equity between general taxes on income and consumption, where absolute burdens rise with higher income, and premiums and premium taxes, where burdens fall as income rises. Among the general taxes, consumption levies take about five times as much revenue from the lowest income quintile as do income and payroll taxes, largely because the latter sources do not tax cash transfer income and because of personal exemptions and deductions in the personal income tax.

Comparing burdens for nonelderly- and elderly-headed families provides insight into intergenerational equity issues. While the general taxes on wages and income apply to the wide group of income recipients, their burdens on the elderly are not insubstantial. This is particularly true of general revenues under which the elderly's property income (e.g., interest, dividends, taxable pensions) is taxed. In this case, the average burden on elderly-headed families is $45, or 70 percent of the average for all families. Payroll taxes impose a considerably smaller burden upon the elderly—only one-third that of general revenues—as a consequence of their limited dependence on earned income. The average nonelderly payroll tax burden is five times that of the elderly ($76 versus $13). In contrast to the findings on general taxes, the three beneficiary tax sources weigh almost exclusively on elderly-headed families. Particularly striking is the pattern of burdens under the beneficiary personal income tax surcharge. The variation about the mean burden of $334 becomes nearly confiscatory in the highest quintile. There the average payment of $3,039 is nearly ten times the burden of a uniform premium in the same quintile. The extreme progressivity of this source is not merely the result of a progressive rate structure, but also the result of the large amount of untaxed income in the lower quintile, while incremental income in the higher quintiles is largely taxable. If this extreme burden at high incomes were viewed as undesirable, it could be corrected by setting a ceiling on the income tax surcharge equal to some proportion of the actuarial value of Medicare benefits.

A common approach to evaluating vertical equity is to compare the percent of income taxed away, since family income from all sources is a measure of ability to pay. The $5 billion of incremental financing represents a tax of 0.48 percent (table 2) on the average family's income of about $13,300 in 1975. General revenues and the beneficiary personal income tax surcharge are clearly the most progressive sources, as indicated in table 2, where burdens of .62 and .70 in the top quintile are 130 and 146 percent, respectively, of the average for all families. The payroll tax also reflects progressivity in the lower quintile, where a greater proportion of income is from untaxed nonwage sources. Yet, moving from the fourth to the highest quintile, this tax becomes regressive as its burden falls from .58 to .44 (120 to 91 percent of the all-family mean), reflecting the effects of workers reaching the ceiling wage and the larger proportion of nonwage income among the rich. Displaying a common profile, the value-added tax and the selected excise taxes are clearly regressive. The value-added scheme takes 1 percent of income in the lowest income group and only about one-third as much in the highest quintile. The alcohol tax is relatively less regressive, while the tobacco tax is considerably more so. Yet the greatest regressivity over all sources is displayed by the two premium taxes. The pattern shown by the uniform premium is tempered slightly in the case of the supplementary insurance premium tax, where there is a smaller supplementation rate in the lowest income quintile. This is not to say that all revenue sources should necessarily redistribute income; a strong case can be made for premiums and for taxes on supplementary insurance using benefit grounds.

Table 3 summarizes the above findings on distributive equity for the major financing sources. The remaining portions of this section address the other evaluative criteria and also are summarized in table 3.

Efficiency and Behavioral Effects

In general, it can be expected that increases in general revenue financing or in payroll taxes would have potential impacts on employment, inflation, and savings. In particular, a payroll tax increase could be expected to affect the short-run demand for labor if the burden could not be shifted immediately to employees. Alternatively, the burden might be shifted to consumers in higher product prices, generating inflationary pressure. Increased general revenue financing potentially

TABLE 3
Criteria for Evaluating Revenue Sources

Financing source	Distributive equity			Efficiency/ behavioral effects	Revenue potential and stability	Administration and compliance
	Intergenerational	Vertical	Horizontal			
Payroll tax	Burden falls on all workers—i.e., principally on the nonelderly.	Essentially proportional to wage income, but regressive relative to total income.	Some differences for families with nonwage income and for multiple-earner families.	Potential employment and inflation effects.	Large revenue base; cyclical with employment.	Collection system in place.
General revenues	Burden falls on wide income base, including property.	Progressive.	Adjusts for family size.	Potential effects on labor supply and savings.	Large revenue base; cyclical with employment.	Collection system in place.
Value-added tax	Burden falls on all consumers.	Regressive.	Makes no adjustment for family size.	Consumption taxes potentially encourage savings.	Large revenue base; stable relative to income.	Requires new collection and enforcement structure.
Selected excises	Burden falls on users of taxed commodities.	Regressive: for any level of use, poorer consumers pay relatively more.	Unequal burdens across families, rising with use of taxed commodities.	Taxes those who make high demands on the health system.	Any one alone could meet Medicare revenue needs, but with substantial product price increases.	Collection system in place, but some design problems would need to be faced.
Premiums	Burden falls on elderly and disabled beneficiaries.	Regressive except at lowest income levels, where Medicaid pays the premium.	All beneficiaries are treated the same.	None. Cannot be shifted (avoided).	Large tax base.	Collection system in place.

Income tax surcharge	Burden falls on elderly and disabled beneficiaries.	Highly progressive as the result of rate structure and increasing proportion of income taxable at higher income levels.	Different treatment based on income sources.	Disincentives to work and savings in upper income brackets.	Large tax base.	Straightforward if levied on currently taxable income; some additional costs if applied to a broader base.
Supplementary health insurance tax	Burden falls on elderly and disabled who buy supplemental insurance.	Progressive to the extent that insurance purchases rise with income.	Burden varies according to amount of supplemental insurance bought.	Captures revenues to compensate program for health care demand induced by insurance that covers Medicare cost-sharing.	Reasonable levy may fall short of Medicare revenue needs.	Collection from insurers, possibly through contracts with state health insurance commissions.

could serve as a disincentive to work and savings. Although the incremental demands placed on the payroll tax and on general revenues by Medicare alone are not worrisome, they are only two of several sources of increasing pressure, the combined effect of which is cause for efficiency worries. Incremental impacts could be reduced if either financing method were used as part of a carefully designed portfolio of taxes. For example, there might be no net impact on savings if general revenue financing were combined with a value-added tax, which is assumed to have a stimulating effect on savings. It is important to note one final behavioral impact of a payroll tax increase and to a lesser extent general revenue financing. There has been a growing trend for employees to accept compensation in the form of noncash benefits. Increased taxes on cash wages could intensify this trend (Chen 1981). Such an effect would erode the base of either tax.[2]

Potential behavioral impacts of excise taxes are more significant. Reliance on an alcoholic beverage tax alone to close the Medicare financing gap would have raised the price of alcohol by 28 percent in 1975. Sole use of the tobacco excise tax would have resulted in a price increase of 44 percent. Of course, if each tax were employed to yield half the necessary revenues, the respective price increases would be halved. To the extent that such taxes reduce consumption, they could be expected to both reduce future health care demands by improving health and to increase future demands on Medicare by increasing lifespan. However, even if consumption were to be reduced, health impacts would be realized only in the long run, perhaps not until the next century. More pertinent to the discussion at hand is the principle of benefit taxation. Such taxes place a larger burden on those whose behavior contributes most to increased demands on the

[2] Alternatively, a cap on income tax-free employer health insurance contributions (or certainly full taxation of these benefits) could help Medicare in several ways. First, about one quarter of the elderly's supplementary health insurance policies are paid by current or former employers. Making employer health insurance benefits part of the tax base would, therefore, represent an indirect tax on supplementary health insurance premiums. Second, to the extent that such taxation leads to reduced health insurance coverage among all age groups, lower demand for medical care in general might imply lower prices for Medicare services in particular. Finally, income-taxable employer-paid health insurance premiums would presumably become part of the Medicare HI payroll tax base, thereby directly increasing Medicare revenues.

health care system. Moreover, the tax has a voluntary character; it can be escaped from by a choice to forgo the taxed behavior.

The efficiency and behavioral impacts of the measures that affect beneficiaries only are somewhat more varied. Premiums have no behavioral impact since they affect all beneficiaries identically and cannot be avoided. The income tax surcharge is another matter. Because of its highly progressive character, it could provide disincentives to work and savings—both of which generate taxable income—for elderly taxpayers in higher income brackets.

From the benefit taxation perspective, the supplementary health insurance tax has the advantage of taxing more heavily those who place higher demands on the health care system. To the extent that supplementary health insurance taxes reduce demand for such coverage, they also will expose a larger segment of the beneficiary population to Medicare cost-sharing. This, in turn, could be expected to reduce utilization of health care services and, thus, Medicare outlays. Of course, the cost of any such result in terms of the health status of beneficiaries is an important consideration.

Revenue Potential and Stability

In general, it can be assumed that the bases for payroll tax increases, general revenue financing, the value-added tax, Medicare premiums, and an income tax surcharge on recipients are sufficiently large to handle revenue needs of the magnitude being discussed, either alone or in combination with other revenue sources. However, the sensitivity of general revenues and payroll tax receipts to changes in employment suggest the desirability of using either source as part of a balanced portfolio of taxes. The value-added tax has the advantage of being levied on consumption, which is stable relative to income.

By contrast, either a selected excise tax or a supplementary health insurance tax might present problems as the sole method of closing the Medicare financing gap. The use of any single excise tax to meet Medicare needs would result in an extremely large product price increase, though distributing the burden over two or more unhealthy commodities would have a much lesser effect on any single product price. Any reasonable levy on supplementary health insurance purchases would be likely to fall short of revenue needs.

Administration and Compliance

The simplest and least costly financing methods with respect to administration and compliance are the payroll tax, general revenue financing, selected excises, and Medicare premiums. Well-developed collection systems are already in place. Income tax surcharges for beneficiaries would have similar straightforward administration and low cost if levied only on beneficiaries who currently file income tax returns. If, however, the surcharge were to be applied to the broader category of all Medicare beneficiaries, additional costs would be incurred to bring into the system those who currently do not file. Coordination with state health insurance commissions could simplify administration and reduce the cost of imposing a supplemental health insurance tax. Collection would be from insurers, possibly through contracts with state commissions. The most problematic and costly financing measure from the administration and compliance perspective is the value-added tax, which would require a new collection and enforcement structure. On the other hand, a change to the value-added tax would likely be part of a major restructuring of federal tax policy going far beyond the Medicare financing problem.

A Proposed Medicare Financing Package

It seems clear that the future of Medicare will be one of continual tension between efforts to control ever-rising expenditures, on the one hand, and reluctant imposition of greater revenue demands on taxpayers and beneficiaries, on the other. The estimates provided by Ginsburg and Moon (1984) suggest that stringent hospital reimbursement controls may reduce the cumulative HI deficit in 1995 from $252 billion to $93 billion. Impressive as the prospects for these savings may be, there remains a sizable HI deficit and growing SMI spending pressures. The above sections of this paper have presented a menu of alternatives which, for analytical purposes, are considered one by one from the perspective of several criteria: an à la carte menu of sorts. Yet, in practice no single revenue source is likely to satisfy all evaluative criteria, let alone satisfy all constituencies to the debate. Therefore, Medicare financing policy is more likely to take the shape of packages of options: a menu of the table d'hôte variety. The purpose of this

concluding section is to suggest a combination of sources we prefer and to briefly state some supporting arguments.

The principle guiding the design of this present menu, or package, is that contributions to incremental financing requirements be shared by beneficiaries and the general taxpayers. To merely raise payroll taxes and general revenue contributions, following past practice, seems too heavy a burden on general taxpayers. Since the Medicare program began, the relative share of beneficiary payments through SMI premiums has fallen from 50 to 22 percent of total outlays of that trust fund. Yet over this same period the economic status of the elderly has increased substantially relative to that of the general population (Danziger et al. 1982; Hurd and Shoven 1983; Fuchs 1984). Thus, in general, elderly Medicare beneficiaries can afford to pay more for their health care than they are now paying.

The beneficiary portion of our proposed package comprises two revenue sources: a tax on supplementary insurance premiums, and an increased beneficiary premium. Medicare was initially designed with certain cost-sharing requirements in order to impose some economic discipline on beneficiaries and their providers, a feature common to private insurance plans at the time. The subsequent spread of supplementary insurance (medigap) policies vitiates Medicare cost-sharing requirements and leads to higher program outlays as those with supplementary coverage use higher amounts of covered services. While it is not reasonable to ban supplementary insurance, it is reasonable to tax its purchasers for the spillover costs to the Medicare program. We propose a premium tax on supplementary policies in amounts consistent with these spillover costs. Any remaining revenue requirements of beneficiaries should be met through increased beneficiary premiums. This is consistent with a move toward restoration of the original beneficiary role in Medicare financing. Our preference is for uniform premiums per beneficiary; the lowest income beneficiaries would be exempted through Medicaid payment, of course. While income tax surcharges represent a more progressive alternative, we see no justification for redistribution of this benefit tax burden among the elderly so that those with higher income pay substantially more.

The general taxpayer portion of our proposed package would come from increased federal taxation of alcoholic beverages and tobacco, these revenues earmarked for the HI or SMI trust funds. These taxes

have generally remained constant in nominal terms for too long, thus lowering the relative prices of the commodities and effectively encouraging their consumption. Increasing tobacco and alcoholic beverage prices by about 10 percent each would generate substantial revenue. Those who continue to overconsume these commodities will in effect contribute more now to offset their expected higher future demands on the health care system. Moreover, the taxes are good health policy, to the extent that they discourage consumption of these harmful commodities.

In summary, we have reviewed the potential sources of increased finance to make up the expected future deficits in the Medicare trust funds. Should recently enacted or proposed cost-cutting efforts for medical care in general or for Medicare in particular be successful, less reliance on increased revenues will be needed. We would applaud such changes. However, we do not expect that outlays will be curtailed enough to forestall the need for new Medicare revenues within the next decade. If our expectation is correct, we hope that this analysis will help policy makers in selecting a fair and efficient set of revenue instruments to meet the Medicare deficit.

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Address correspondence to: Stephen H. Long, Ph.D., Metropolitan Studies Program, The Maxwell School, Syracuse University, Syracuse, NY 13210.