A new approach to national health insurance

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A new approach to national health insurance is urgently needed. Our present system of financing health care provides inadequate protection, encourages inefficient use of resources, and accelerates the inflation of medical costs. Unfortunately, the proposals for national health insurance that are now being discussed will not remedy this situation. I propose to outline a different approach to national health insurance that would avoid the major shortcomings in the present system and in the previously suggested alternatives.

Any proposed system for financing health care should be judged by the following six objectives:

(1) Prevent deprivation of care. No individual should be deprived of medical care because of inability to pay, just as no individual should go hungry or lack adequate housing because of low income. Moreover, no one should be encouraged to delay care because his insurance will not pay for preventive or ambulatory care but only for hospitalized treatment of the more serious illness that may ensue.

(2) Prevent financial hardship. No family should suffer substantial financial hardship because of the expense of unpredictable illness or accident.

(3) Keep costs down. A financing system should both encourage
efficient use of resources and discourage medical care price inflation. Whenever possible, patients should use relatively low-cost ambulatory facilities rather than high-cost in-hospital care. Hospitals should be induced to moderate the forces that raise the cost of care: increased personnel, unnecessary pay raises, and a proliferation of technical facilities and services. Physicians should not be encouraged to increase their fees by the knowledge that, because of insurance, the cost to their own patients will rise little if at all. In short, the financing method should encourage cost consciousness in the decisions of patients, doctors, and hospital administrators.

(4) Avoid a large tax increase. High taxes distort the supply of work effort and cause inefficient use of resources in the economy as a whole. Therefore, a national health insurance program that raises substantial funds from taxpayers and returns it in the form of health insurance has a large hidden cost in lower national income. The magnitude of our total spending on health care makes this an important consideration. In fiscal year 1968-69, government spent nearly $19 billion on personal health care; private expenditures then approached $34 billion. Transferring this private spending to the public sector would require a very large increase in tax rates. For example, if it were to be financed by an increase in the individual income tax, collections would have to rise more than 30 per cent. If the social security payroll tax were used, its rate would have to be doubled.

(5) Be easily administered. The administration of a health care system should not require complex procedures, which are costly and inconvenient, or arbitrary decisions, which imply that resources are not used appropriately.

(6) Be generally acceptable. Any new method of financing should be acceptable to physicians and to hospitals as well as to the general public. A system that is disliked by either would encounter substantial political opposition and, if instituted, would be hampered by lack of cooperation and an inadequate supply of new personnel in the long run.

The current system

Although almost every American is enrolled for some form of health insurance, the current coverage is typically rather "shallow." That is, families incurring large medical bills often find that their insurance pays only a relatively small portion. A 1963 National Opinion Research Center survey found that the average annual expenditure for medical care among survey families was $370 and
that approximately one-fifth had expenses exceeding $500.\textsuperscript{1} Among the insured families that spent more than $500, only one-third received benefits exceeding half of their expenditures while another third received benefits of less than one-fifth of their expenditures. Today, as in 1963, most hospital insurance pays a relatively high proportion of small and moderate bills but imposes a variety of ceilings on use and an effective overall ceiling on benefits; the less restrictive major medical insurance policies cover less than half of the population under 65.

The absence of deep coverage leaves a large residue of financial hardship and may also prevent many people from seeking potentially expensive care. Moreover, the fact that hospitalization (including surgical) insurance is much more complete than insurance for nonsurgical physician care discourages patients from seeking preventive care and induces them to gamble with their health in the knowledge that, should untreated minor symptoms become severe, a short stay in hospital is likely to be relatively costless.

The current system of financing medical care has also contributed to the high and rapidly increasing costs of such care. A substantial body of research has shown that, because of the structure of insurance coverage, patients obtain expensive (but covered) in-hospital care when much less expensive (but uncovered) ambulatory care would have been as effective. Insurance has also accelerated the rising cost of in-hospital care. Ironically, although the hospital patient with a large bill often finds his insurance grossly inadequate, the average patient stays a relatively short time (the 1968 mean stay in community hospitals was 8.4 days) and has almost his entire hospital bill paid for by insurance. For most days of care, therefore, the hospital does not sell its services to individual patients but collects its costs from an insurance company or Blue Cross plan. Of the approximately $9.9 billion of private expenditure on hospital care in 1968, more than 73 per cent was covered by insurance. Since 1966, the problem has been exacerbated by Medicare and Medicaid; government now purchases nearly half the total hospital care. Because hospitals are able to pass almost all cost increases on to insurance companies and the government, there is neither internal incentive nor external pressure from patients to moderate cost increases. Finally, the growth of medical insurance has accelerated physician fee inflation not only by increasing demand, but also, as noted above,

\textsuperscript{1}This survey of 2,367 families containing 7,803 individuals is reported in Anderson, R. and O. W. Anderson, \textit{A Decade of Health Services} (Chicago: The University of Chicago Press, 1967).
by allowing the physician to raise his fee without imposing an equal extra burden on his own patient.

**Subsidy-credit plans**

Thus, our current system of financing health care provides inadequate coverage while inducing substantial cost inflation. Judged by the first three criteria, this system has failed badly.

The combination of inadequate coverage and rapidly rising costs has stimulated a variety of proposals for national health insurance. All plans are of two basic types: one involves direct subsidies or tax credits for the purchase of the current type of health insurance from private insurance companies; the other is universal comprehensive public health insurance.

The proposals to give subsidies and tax credits to purchasers of voluntary insurance differ only in detail. Each provides a maximum level of tax credit or subsidy that would be paid to purchasers of insurance in the lowest income group and a schedule of lower subsidies to higher income groups. The proponents of these schemes have concentrated their attention on the method of government finance for the program (general tax revenue and payroll taxes) and the costs of the particular schedules of subsidies. The maximum premium subsidies have varied between $200 per family and $500 per family in the different proposals; these numbers should be compared with an estimate\(^2\) of $850 per family of four for a fully comprehensive health insurance in 1968 (including dental care and drugs as well as hospitalization and physicians' services) and the actual 1968 average premium per family of four of $304.\(^3\)

These subsidy proposals have two major objectives: to encourage the purchase of more health insurance and to replace Medicaid. However, a subsidy would have no effect on the purchase of insurance by families that already spend as much as their maximum subsidy for insurance. As the estimate of $304 for the average actual premium indicates, proposed subsidies of $200 or $300 are likely to have little effect on the total purchase of insurance, except perhaps among relatively low-income groups. (Surprisingly, there has been no estimate of the extent to which subsidies or credits would exceed current expenditures on insurance by families at different income levels.) As for the second objective—the replacement of Medicaid—

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it is true that these plans might remove a substantial burden from state and local governments. But it would also replace the current relatively comprehensive insurance coverage that Medicaid provides in many states for low-income families with more limited coverage. The major effect of the subsidy-credit plans would be an income transfer, generally in the form of tax reduction, from higher income groups to middle- and lower-middle income groups. For many such families, there would be no incentive to purchase more health insurance—their current policies costing as much as the maximum subsidy which they would be entitled to receive—but only a welcome reduction in taxes.

Because the subsidy-credit plans rely on current forms of health insurance, they perpetuate all the weaknesses of our present system. Some individuals would still be deprived of care because of prohibitive costs. The danger of financial hardship would remain. The forces that encourage medical care price inflation would not only remain but would be intensified to the extent that insurance coverage grows. Moreover, the program would require a substantial tax increase, estimated at between $10 billion and more than $15 billion; expenditure increases resulting from such a program would probably make the actual tax increases much greater.

It is worth emphasizing that because a large proportion of the government expenditure on these programs would simply redistribute income without increasing health insurance, they should be compared to the negative income tax and other programs for welfare reform. In terms of its ability to alleviate real poverty, the subsidy-credit health insurance schemes are much less effective per dollar of tax increase than more direct redistributive programs.

There is, in short, little to recommend these proposals as a way of improving our health care system, or of containing costs, or of increasing protection. They are an inefficient way of redistributing income and an inappropriate way of assisting state governments currently burdened with Medicaid expenditures.

**Uniform comprehensive health insurance**

The proposals for uniform comprehensive health insurance generally advocate something like an extension of Medicare to the entire population. More comprehensive programs would abolish the small deductible and co-insurance features of Medicare, eliminate its limit on the length of covered hospitalization, and extend coverage to drugs and dental care.
There is no doubt that under comprehensive insurance no one would be deprived of needed care because of inability to pay or suffer any financial hardship because of unpredictable illness. In terms of our other criteria, however, such plans must be judged unacceptable.

Although comprehensive insurance would remove the current incentive for patients to use in-patient rather than ambulatory care, it would not introduce any positive incentives for the efficient use of resources. Whatever cost consciousness still exists among patients, doctors, and administrators would be removed. There would be no incentive to limit the rising cost of hospital care, to use paramedical personnel more widely, or to produce physicians’ services more efficiently. With all bills paid by the government, nothing would limit the rise in hospital wage rates and physicians’ incomes. In such a situation the government would be forced to introduce direct controls and producer incentives in an attempt to contain costs.

Detailed controls, fee schedules and limits on hospital charges might, of course, prevent rising costs, but the experience of Canada, Britain and Sweden suggests that health costs rise very rapidly even in government health programs with extensive direct controls. Such controls would not achieve, and might actually work against, an efficient use of health resources. They would certainly require a large number of arbitrary policy decisions and engender the hostility of the basic providers. Such arbitrary decisions pose a more serious problem than may be generally recognized: What is a “reasonable” level of hospital daily cost? At what rate should hospitals improve facilities, add staff, raise the level of amenities? How many beds should there be per thousand population? How much should different medical specialists earn? These are not technical questions that can be answered “objectively” if only enough research were done—they involve tastes and value judgments about the relative desirability of different goods and services.

Finally, even if expenditures were not to rise, the provision of comprehensive insurance would require a substantial tax increase: over $20.5 billion to replace current private expenditure on physician and hospital services and an additional $13.3 billion, if drugs and personal health care were to be included.

Comprehensive insurance would thus shift the problem of the health care sector to a conflict between cost inflation and controls. No matter where the balance between these was struck, there would be no natural incentive to efficiency and a large government expenditure to be paid for by higher taxes.
A new approach

My proposal is extremely simple: major risk insurance (MRI) and government guaranteed postpayment loans. Every family would receive a comprehensive insurance policy with an annual direct expense limit (i.e., deductible) that increased with family income. A $500 "direct expense limit" means that the family is responsible for the first $500 of medical expenses per year but pays no more than $500 no matter how large the year’s total medical bills. Different relations between family income and the direct expense limit are possible. For example, the expense limit might start at $300 per year for a family with income below $3000, be equal to 10 per cent of family income between $3000 and $8000, and be $800 for incomes above that level. The details of the schedule are unimportant at this point. The key feature is an expense limit that is large in comparison to average family spending on health care but low relative to family income. The availability in addition of government guaranteed loans for the postpayment of medical bills would allow families to spread expenditures below the expense limit over a period of a year or even more.4

Major risk insurance is the most important type of health care insurance for the government to provide. It concentrates government effort on those families for whom medical expenses would create financial hardship or prevent appropriate care. Because relatively few families have such large expenditures in any year, MRI need not be a very costly program. Moreover, as explained below, MRI is likely to help limit the inflation of medical costs. In terms of our six criteria, these are the advantages of the MRI plan:

1. Deprivation of care. If the maximum annual expenditure on health would be limited to ten per cent or less of family income, no family would be deprived of care because of inability to pay. (If it is believed that certain preventive care and early diagnostic tests would not be done as much as is desirable, the MRI policy could be supplemented by specific coverage for these activities at relatively little additional cost.)

2. Financial hardship. MRI would also prevent financial hardship by limiting the financial risk to ten per cent or less of annual income. The availability of government guaranteed postpayment loans would permit bills to be spread more comfortably over the year.

3. Cost inflation. An increase in insurance coverage generally

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4For a detailed discussion of postpayment, see Robert Eilers, "Postpayment Medical Expense Coverage: A Proposed Salvation for Insured and Insurer," Medical Care (May-June 1969).
exacerbates the inflation of hospital costs. However, the universal provision of MRI might reduce hospital cost inflation by eliminating or at least decreasing the current use of shallow coverage insurance. Families would have little to gain from such insurance when MRI had removed the risk of major expense. The cost of an insurance policy would be high relative to the upper limit on expenses guaranteed by the MRI. The ensuing reduction in ordinary insurance would help to check inflation by reintroducing cost consciousness and incentives to efficient resource use.

Some figures and an example will clarify these ideas. The table below, which is based on a 1963 survey updated to 1968-69 prices, shows the distribution of family expenses for medical care.

<table>
<thead>
<tr>
<th>EXPENSE</th>
<th>PER CENT OF FAMILIES</th>
<th>CUMULATIVE PER CENT</th>
</tr>
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<tbody>
<tr>
<td>$ 0-79</td>
<td>17.8</td>
<td>17.8</td>
</tr>
<tr>
<td>80-159</td>
<td>11.7</td>
<td>29.5</td>
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<tr>
<td>160-319</td>
<td>18.7</td>
<td>48.2</td>
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<tr>
<td>320-479</td>
<td>12.8</td>
<td>61.0</td>
</tr>
<tr>
<td>480-639</td>
<td>9.5</td>
<td>70.5</td>
</tr>
<tr>
<td>640-799</td>
<td>6.3</td>
<td>76.8</td>
</tr>
<tr>
<td>800-1199</td>
<td>10.0</td>
<td>86.8</td>
</tr>
<tr>
<td>1200-1599</td>
<td>5.1</td>
<td>91.9</td>
</tr>
<tr>
<td>1600-3199</td>
<td>6.5</td>
<td>98.4</td>
</tr>
<tr>
<td>3200+</td>
<td>1.6</td>
<td>100.0</td>
</tr>
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The average family spending was $600, but half the families spent less than $320. This uneven distribution—with a high percentage of the costs falling on a relatively small proportion of the families—suggests why MRI would reduce the use of ordinary shallow coverage. An $800 MRI policy would lower the average uncovered expenditure to approximately $400. Although a family could, therefore, buy comprehensive insurance for somewhat more than $400, why should they pay for insurance protection when the maximum difference between the benefits and the premiums is a relatively small amount—less than $400?

The effect is even stronger for families with a lower MRI limit. An MRI policy with a $320 limit would reduce average uncovered expenditure to $230. There would be little for a family to gain by paying a premium of at least $230 for an insurance policy against a maximum risk of only $320, especially if postpayment loans are available to spread the expense.

The primary virtue that makes health insurance attractive today is its protection against the risk of larger expenses; when this feature is pre-empted by the MRI policy, additional coverage should cease to be attractive. The demand for additional insurance would there-
fore come only from those families that expected to have higher than average medical bills—by the families for which the expected benefits were larger than the premium. But such a process of self-selection would raise premiums, further limiting the demand for insurance. The result would be to reduce and perhaps eventually eliminate the current shallow coverage.

This reduction implies that although individuals would be protected by MRI against major expenses for health care, the vast majority of payments for physician and hospital services would not be covered by insurance. Because most physician and hospital care would be paid for directly by the patient, the inflationary forces inherent in our current insurance system would be checked. The current tendency to use insured hospital care instead of relatively less expensive ambulatory services would be replaced by an incentive to choose the most efficient combination of resources to obtain care: ambulatory care, paramedical personnel, etc. Although patients often do not have the technical information to make such choices, the prospect of substantial cost differences would induce them to seek their physician's advice.

The potential impact on hospital costs is substantial. In 1968 the average daily cost in short-term voluntary hospitals was approximately $70 and the average stay was about eight days, implying a total cost of $560. Under MRI, most families would find a high proportion of their bill not covered by insurance. Patients and doctors would, therefore, become more careful in selecting a hospital. Hospital administrators would become more cost conscious in order to maintain demand for their beds and to reduce the burden on their patients. The doctors affiliated with a hospital would become less interested in cost-increasing acquisitions with little impact on patient health and more concerned to keep costs down and obtain high value for money spent on new equipment; high costs would encourage patients to seek a physician who could provide care in another hospital and in addition would impose an extra burden on the patients who remain with them.

Patients' desire to substitute ambulatory care for the more expensive hospital services would increase the demand for physicians' services and therefore tend to raise their fees. This would be somewhat offset by a second shift in demand—from physician care to care by supervised paramedical personnel. Moreover, to the extent that physicians have been raising fees not merely in response to the pressure of demand but because doing so imposes little or no burden on insured patients, future fee inflation could be expected to decrease.
For families that exceed their expense limit, MRI would be equivalent to comprehensive insurance. They would therefore have no incentive to limit their spending for medical care. But the basic cost per day in hospitals would not be determined by the willingness of those relatively few families to spend but rather by the preferences of the far larger number of patients who would not be reimbursed. MRI insurance carriers could prevent excesses in physicians' fees and hospital durations of stay by requiring that the same care be given and fees be charged to these patients as to those who are paying for their care. Because most medical services would be paid for directly, the standard of "customary charge" and "customary care" would provide a meaningful reference standard as they currently do not.

In short, MRI would introduce a cost consciousness and a basis for cost comparison that could improve efficiency and contain medical care inflation.

(4) **Tax burden.** The cost to taxpayers for an MRI program would not be large relative to the benefits conferred. The exact amount would depend on the particular schedule of deductibles and the overall impact of the program on utilization and unit costs. I estimate that the cost per family with an $800 limit MRI policy would be $186; with a $300 policy limit, the cost would be $355. By 1968-69, more than half the households had incomes over $8,000 and would therefore receive $800 limit MRI policies. If we assume that 55 per cent of households receive $800 limit policies and that the remaining 45 per cent are distributed evenly among $640, $480 and $320 limit policies, the total cost of MRI for the population below 65 years of age would be $13 billion. Against this figure would have to be offset savings from Medicare and Medicaid. Moreover, the universal provision of MRI would suggest ending the income tax deduction for medical expenses, further reducing the net cost of MRI.

(5) **Administrative simplicity.** The MRI insurance would be relatively simple and inexpensive to administer. Survey data indicate that less than 25 per cent of the families with $800 limit policies would make any claim. Even among families with $300 limit policies, only 52 per cent would make claims. Each family that exceeds its MRI limit would submit only one claim in a year. Additional families could, of course, apply for postpayment loans.

Reduction in the use of shallow insurance plans with their vast number of small claims would permit a substantial saving in admin-

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5The next section describes a way of modifying the MRI principle to include a co-insurance feature that would substantially reduce the number of families that exceed their expenditure limit without any increase in the maximum financial burden for each family.
istrative costs. In 1968-69 private expenses for prepayment and administration exceeded $1.7 billion. Because MRI would act to contain cost inflation and to increase efficiency, there would be no need for detailed controls or essentially arbitrary policy decisions. Planning efforts could be concentrated on those problems that cannot be solved by the natural forces of supply and demand.

(6) General acceptability. An MRI scheme should be acceptable to physicians, hospitals, and the general public. It would have the virtue of providing full protection against serious financial hardship without the controls or fee schedule that would accompany other forms of insurance. The current freedom of physicians and hospitals would be preserved. If MRI were administered by the same insurance companies that currently provide health insurance, the net effect would be a small increase in their total premium.

Co-insurance

MRI could be improved by introducing a co-insurance feature above a basic deductible. This would make consumers cost sensitive over a wider range of expenditures without increasing the maximum risk to which they are exposed.

For example, the annual direct expense limit of 10 per cent of income could be replaced by a basic deductible of five per cent of income followed by 50 per cent co-insurance for an additional 10 per cent of income. A family with a $6000 income would thus be fully responsible for the first $300 of medical expenses and half of the next $600, implying a maximum total payment of $600. The maximum total expenditure is thus the same as for the MRI plan described above.

Although the family's maximum payment would be unchanged, the co-insurance would make families cost conscious over a much wider range of expenditures. With an income of $8000 or more, the family pays half of the bills for expenditures from $400 to $1200. Fewer than one family in seven has expenses exceeding this amount. For lower-income families the effect is equally great: although a $4800 income family would have a 40 per cent chance of exceeding a $480 expense limit, there is only one chance in four of exceeding the $720 limit implied by the 50 per cent co-insurance plan.

The co-insurance variant of MRI would not only have the advantage of increasing cost consciousness without raising the maximum risk; it would also reduce the chance that the family would be required to spend the maximum amount. For families with incomes of
$8000 or over, the risk of incurring net costs of $800 is reduced from one chance in four to one chance in seven. For families with incomes of $4800, the risk of spending $480 is reduced from 40 per cent to 25 per cent.

There is only a slight extra cost to the government for this extra protection and the added cost consciousness of co-insurance. The average cost per family of MRI with co-insurance is $249 compared to $233 without it. There would be a small increase in the cost of administering additional claims. But these extra costs would be more than justified by the much greater cost consciousness that would be obtained.

Some questions, some answers

The MRI and postpayment proposal raises a number of questions. What would happen to Medicaid and Medicare? How would group practice, the increased use of paramedical personnel and other improvements in efficiency be encouraged? Would preventive care be neglected? What would be the role of area-wide planning? This section answers these and related questions.

MRI would make Medicaid unnecessary. "Medical indigency" for families above the poverty line ($3300 in 1969 for a family of four) would be eliminated by the provision that health care spending not exceed 10 per cent of income. Families below the poverty line who are currently covered by Medicaid could be given in addition to the MRI policy a cash grant equal to their expected health spending; as noted above, with a $320 deductible this would be approximately $230. This would leave the family with little risk of unsubsidized and uncovered expenditure (a maximum of about $90 per year for the family), would remove the distinction between welfare patients and others, and would encourage these families to have the same cost consciousness in health spending as the rest of the population. This method of replacing Medicaid is consistent, both in spirit and in administrative machinery, with the new approaches to welfare policy such as the Family Allowance Plan and Negative Income Tax, advocated by members of both political parties. It could alternatively be administered within the framework of our current welfare system but without the complex details of the Medicaid program.

Because of the special economic and health problems of the retired aged, it would probably be best to continue Medicare in its current general form as part of the Social Security program. In the spirit of the MRI proposal, the deductibles in parts A and B of Medicare could be increased and compensating amounts added to the
Social Security retirement benefits. Even if Medicare is left essentially unchanged, its future cost levels would be restrained by the cost-conscious environment that MRI would create.

A related issue is raised by those conditions, such as total chronic kidney failure, in which treatment costs several thousand dollars per year and tens of thousands of dollars during a single illness. MRI might either include these or, by imposing a ceiling, leave their financing to special public programs and private health insurance as at the present. The appropriate solution to this delicate social problem lies outside the scope of this essay.

Organizational changes that might increase the efficiency with which medical care is produced, such as group practice and the use of paramedical personnel, would be encouraged under MRI by the natural pressure from patients to obtain care at lower cost. A specially trained pediatric nurse or other paramedical worker, capable of providing the same quality of care currently rendered by physicians but at lower cost, would be easier to incorporate into our system of medical care if patients have an incentive to keep costs down than if, because of comprehensive insurance, they can request the more expensive physician care at little or no cost to themselves. Similarly, if group practice is a more efficient way to produce medical care, demand for this type of service would grow as lower costs are passed on to patients in the form of lower fees. Comprehensive prepaid group practice could easily be incorporated into an MRI system by allowing families to apply the actuarial value of their MRI policies against the annual charge of the prepaid group.

The increased reliance on individual preferences and the market mechanism made possible by MRI would not completely eliminate the need for area-wide planning. A variety of decisions—the location of expensive diagnostic and treatment equipment, the investment in long-lived hospital facilities, the training of specialized personnel—might still be improved by such coordination. But the behavior of patients who are paying for a large portion of their medical care would help to guide these planning decisions and would act as a long-run check on their appropriateness. Moreover, the MRI system would leave to the market those decisions that planners would have to make if a high proportion of expenses were reimbursed by insurance: What is the “right” level of hospital cost per patient day? What is the “appropriate” charge for different doctors’ services? How much “should” doctors in different specialties earn? In short, area-wide planning would be able to concentrate on the problems that cannot be solved by the natural forces of supply and demand.