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LESSONS FROM PRIVATE HEALTH INSURANCE

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All across the country there is a sense of urgency, and even of crisis over what is happening in the health industry. Of special concern are the rapid rate of increase in the cost of health care services and the increasing national expenditures for health care. For fiscal year 1976, the total U.S. spending for health care reached $149.8 billion, or a per capita expenditure of $638. Expressed as a percentage of the gross national product (GNP), the national spending for health care reached a record-breaking 8.6 percent.[1] From the early 1960s--except during the period from August 1971 through April 1974, when the prices of medical care services were controlled--these prices have risen about two times faster than those of non-health-care services. Thus the differential between the prices of these two types of services has increased markedly during the period. Especially disturbing is that the cost of hospital care services, expenditures for which comprise the largest proportion (40 percent) of total national health care expenditures, are increasing faster than any other type of medical care services.[2]

Another concern is that government expenditures for health care services are becoming a large proportion of total health care expenditures. In 1976 it was 42.2 percent compared with 25.7 percent only a decade ago.[3] The government's share of personal health care expenditures reached 40 percent in 1975 compared with 21.8 percent in 1966.[4] The growth in public outlay for health care services is due in part to the enactment in 1965 of Medicare and Medicaid. The federal government traditionally has been involved in a broad range of public health services, and medical care for special categories of people: veterans, native Americans, and merchant seamen. In recent years, it has been subsidizing costs for the development and administration of neighborhood health centers. But government expenditures for health are growing rapidly without explicit national intent or direction.

The public's concern over health care services is reflected in a long list of national health insurance bills of various types introduced in Congress every year. The common denominator of these bills is that the thrust of each is based on some type of group interest and on the experience that a particular group had in the past. For example, the bill sponsored by the American Medical Association (AMA), called "Medicredit," sounds much like a nationalized version of Blue Cross plans. Such group influence on proposed legislation is understandable since

American politics is characterized by compromises between different interest groups and by incrementalism. In short, it is likely that any national health insurance plan enacted in the future will incorporate various features of private insurance plans. If this is the case, it is important to understand the levels of performance of existing private insurance plans. Relevant questions include the following: Which type of health insurance is a good buy for the money? Which type of plan facilitates the redistribution of resources to segments of the insured population that are relatively less healthy or poorer? Which type of plan simplifies administration, thus cutting the cost of running the program.

This paper presents (1) theoretical and empirical arguments for government intervention in health care; (2) a review of the development of three types of private health insurance plans, vis., commercial insurance plans, provider-sponsored insurance plans (Blue Cross and Blue Shield), and prepaid group practice plans; and (3) recent research findings on the performance of these three types of private insurance plans. Finally, some policy implications will be drawn based on the arguments advanced.

ARGUMENTS FOR GOVERNMENT INTERVENTION[5]

One of the grounds for government intervention in health care services is that these services differ in many respects from the usual goods and services sold and bought in the market.

First, the incidence of illness and disease requiring health care services is for the most unpredictable and uneven among people and over time, and those afflicted suffer disproportionate hardship especially when the illness or disease is catastrophic. If the community wishes to transform the effects of the costly illnesses that are sure to strike some individuals into predictable and calculated risks to be dealt with by the community as a whole, then establishing some kind of insurance becomes necessary. To go one step further, if the assurance of health care services to all those in medical need is desired as a public good, then the society must institute some type of social insurance or a direct social provision for health care services. This reasoning legitimates government intervention in health care services.

Second, providing personal health care services has a relatively greater external effect than providing other types of economic services or commodities. External effects are those effects flowing from one's own behavior that involve good and bad results from other people. An example of health care services that have positive external effects is the immunization against communicable diseases. Economists suggest that, when individuals are immunized against a communicable disease, the social benefits of preventing epidemic are greater than the individuals' private benefits of being less likely to be inflicted with the disease. Thus the

community sees it as more beneficial to provide free immunization to all than to hope that all individuals will decide to pay for their own immunizations. Other types of health care services also have positive external effects in the long run. Weisbrod, for example, performed a cost-benefit analysis of prevented deaths from cancer, poliomelitics, and tuberculosis, in which he showed the extent of economic productivity that would have been maintained.[6]

Third, it is believed increasingly that health care services should not be considered as a commodity for the privileged but as a need that should be satisfied for everybody. Such is the rationale behind the increasing involvement of the government in health care services for certain groups of people who presumably cannot pay the full costs of these needed services on their own. Before Medicaid, physicians also implemented the idea that health care services were a need, regardless of patient income, by charging fees based on a sliding scale to help their poor patients.

Fourth, health care services differ from economic services or commodities bought in the marketplace, because consumers have little or no knowledge of the kinds, qualities, and quantities of the health care services they are buying for a given amount of medical fees. Furthermore, the questions of what kind of services and how much of it should be bought are answered by the physician (the seller), not by the patient (the buyer). When making other purchases, the buyer normally has more information on what he is getting.

Various empirical evidence argues for government intervention in health care services. One meaningful indicator showing that persons of different income backgrounds have different degrees of access to health care services is the distributive pattern of health insurance coverage. A government study shows that in 1968, a person between 45 and 64 years of age with a family income of less than $3,000 was nine times less likely to be insured for health care services of any kind than a person in the same age bracket with a family income of more than $15,000.[7] Furthermore, there is an uneven rate of insurance coverage, depending on the type of health care services. For example, in 1974 only 16 percent of the population in the United States was insured for dental care, 60 percent for a physician's office and home visits, and 67 percent for out-of-hospital prescription drugs.[8]

Another disturbing fact is that under private insurance a socially adverse selection takes place as a result of economic forces: that is to say, those who are physically weaker and often economically more helpless are forced to pay a higher price for insurance premiums. In insurance terminology, such a differential is called "experience rating," meaning that one who has a high risk of becoming ill pays for his own misforturne. To aggravate the situation, these helpless people tend not to be steadily employed and thus have to buy the more expensive individual

policies rather than the less costly group policies. The high cost of individual policies stems from the fact that such policies involve a high rate of "operating expenses"--as high as 47 percent of premium income in 1974, compared with 13 percent for group policies.[9] Thus, those who are illness-prone and who are without steady employment have to pay higher insurance premiums because of the high-risk factor and higher operating expenses incurred by commercial insurance companies. The economic determinant dictates that this kind of adverse selection is an inevitable element in the survival of such a private enterprise.

DEVELOPMENT OF PRIVATE HEALTH INSURANCE PLANS[10]

Broadly speaking, private health insurance in the United States has followed three patterns in its development: (1) plans offered by commercial insurance companies, (2) provider-sponsored non-profit health insurance plans, such as Blue Cross and Blue Shield, and (3) prepaid group practice plans, such as the Kaiser Foundation Health Plan on the west coast.

Plan offered by commercial insurance companies: Plans of this type go back to the 1890s when commercial companies started selling "sickness insurance." In those days, the companies were not sure whether they were selling economically viable insurance by covering the risk of sickness. For one thing, they thought that the hazard of illness differed from the hazards of fire, disability, or death; it was considered difficult to draw a line between those who were ill and those who were not. For another, they suspected that health care expenditures were often under the control of the insured. These two factors and others made insurance companies feel uneasy about selling sickness insurance. Despite this cautious beginning, commercial insurance companies were well into the business of selling health insurance by the 1930s.

During the 1930s, commercial insurance companies introduced group insurance policies to employees of large corporations, and by that time they had firmly established the principle of "experience rating." That is, they offered variable insurance premium rates depending on the level of calculated risk involved with the insured group. Group policies also enjoyed a low level of "expense loading" that insurance companies incur in selling and managing insurance.

As competition for selling health insurance policies became keener after World War II, commercial insurance companies used their marketing skills to capture the market for group insurance policies for large unions and corporations. Sometimes insurance companies sold health insurance at a loss, making up that loss by selling life insurance as part of a "welfare package" to unions and corporations. Sometimes premium rates for group policies were unduly low, too low in fact to be based on a strict experience rating, and individual policy holders were at times charged premiums higher than their experience ratings warranted.

In spite of, or perhaps because of, the use of experience ratings and the practice of cutting premium rates for group policy holders, commercial insurance companies have steadily expanded their share of the market for health insurance business since World War II. As of December 1974, they commanded 55.5 percent of the insurance enrollment for hospital care, 54.0 percent for surgical services, 57.9 percent for X-ray and laboratory examinations, 54.8 percent for in-hospital doctor's visits, and 68.9 percent for doctor's office and home visits.[11] These proportions were greater than the shares of insurance enrollment under Blue Cross, Blue Shield, or independent plans.

The success of commercial insurance companies is related to their scale of business, and their marketing and management skills. First, experience ratings tend to facilitate the selection of the fittest who are to pay the lowest premiums. Such people are as a rule steadily employed by large organizations with good fringe benefits. In short, those who have economic power and physical health (the two are related) pay relatively less for health insurance than those without these assets. Here, we see interests coverage between large commercial insurance companies on the one hand and on the other large unions and corporations that represent the healthy. Second, large-scale commercial insurance companies possess sophisticated computer technology and managerial skills to facilitate convenience for their clientele by, for example, offering uniform benefits, consolidated monthly billings, centralized claim administration, and one-year assurance of the same rate. Third, commercial companies are willing to offer insurance in comprehensive packages that include group life, accident, and disability insurance, and insurance for income replacement when stipulated hazards are encountered,--all in addition to insurance against hospital, surgical, and medical expenses. Such comprehensive coverage of "welfare benefits" offers the commercial insurance companies a high degree of marketing flexibility. For instance, they can offer group health insurance policies at a low rate, sometimes even at a loss, and still yield profits as long as other types of insurance in the package make up for the loss in health insurance. For union leaders and corporate executives, a comprehensive package is attractive for its convenience in providing various fringe benefits through a single purchase.

Provider-sponsored health insurance plans (Blue Cross and Blue Shield): Blue Cross plans were originally developed during the 1930s. The major reason for establishing such plans was to assure an income flow to hospitals, which was important in view of mounting uncollectible accounts at that time. Aside from this pragmatic motive, there was an almost missionary zeal to implement the social objective of offering insurance coverage based on "community average rates," implying that both the healthy and the less healthy in the community pay the same premium. Another socially desirable objective of Blue Cross plans was to provide hospital care, not through indemnity payments as commercial

insurance companies customarily did, but directly to the patient.

Blue Cross organizations, like the Blue Shield ones that were to be developed later, were granted non-profit status for tax purposes. Both Blue Cross and Blue Shield later received the AMA blessings as a viable alternative to any kind of government plan--and AMA resisted all government plans.

The original features of Blue Cross plans were as follows: They provided 21 days of semi-private accommodations at a flat premium rate for an individual and at another level of flat premium rate for a family. The plans insured only those who were employed. When a person left employment, Blue Cross plans typically assured continuous coverage at a slightly higher rate to cover extra administrative costs.

By the 1950s Blue Cross faced tough competition from commercial insurance companies. First of all, commercial insurance companies offered experience ratings, while Blue Cross did not. Second, the aggregate cost of hospital services increased because more medical services came to be provided in hospital settings as medical technology advanced, and at the same time, hospital utilization increased as the population in the United States grew older. Third, when the Blue Cross organization attempted to increase its insurance enrollment, it had to look for potential clientele among individuals who were not in the labor force and who generally had a high risk of illness.

Blue Cross thus faced a grave dilemma: if it did not cover these individuals, it would be critized for not living up to the social principle of serving both the healthy and the less healthy at the same cost, as originally planned. On the other hand, if it did cover these high-risk people, Blue Cross--a non-profit organization--had to act according to the same principles as commercial insurance companies.

Faced with this dilemma, Blue Cross developed its own brand of experience rating. For example, it set different rates for individual and group policy holders, and different rates for families of various sizes, as well as making indemnity payments in some communities.

Blue Shield plans were first developed in the 1940s as a companion to Blue Cross plans. They were to cover physicians' services and related services in the hospital. Although conceived as a companion to Blue Cross, Blue Shield plans have never been strongly committed to the direct provision of services as Blue Cross. Blue Shield plans were designed to pay for physicians' services in the hospital; however, they were to pay only a stipulated sum that was usually set below actual charges. In short, although Blue Cross demonstrated its commitment to the direct provision of

services at least in principle, Blue Shield took the indemnity approach in providing for the insured.

Prepaid group practice plans: The first prepaid group practice plan was developed by the Ross Loos Clinic of Los Angeles in 1921. The best-known prepaid group practice plan is the Kaiser Foundation Health Plan. The Kaiser plan originally was developed to serve shipyard workers in California during World War II. Since then, the plan has spread throughout the West Coast and eastward as far as Denver and Cleveland. Another well-known prepaid group practice plan is the Health Insurance Plan of Greater New York (HIP). Both the Kaiser plan and HIP are consumer-sponsored non-profit plans. These two plans alone serve more than three million people.[12] Under typical prepaid group practice plans such as these, all health services, with minor exceptions, that are provided within a plan's context are presumed to be prepaid as long as the insured makes monthly capitation payments. Physicaians usually receive salaries for their services. Insurance enrollment is usually tied to the place of employment. The original intent in developing prepaid group practice plans was to make it feasible for physicians to bring together their varying expertise and to share space, equipment, ancillary personnel, and income. As specialization in practice intensified with the advancement of medical technology, this original objective appears to have become even more relevant to the efficient use of medical resources.

Intensified specialization in practice has made it increasingly difficult to coordinate medical services, thus creating a serious problem of fragmentation of services. Therefore, some students of medical care have come to believe that the only way to benefit from medical advances and simultaneously guard against fragmentation of services is for physicians to practice in prepaid group practice settings.[13]

There is some evidence that prepaid group practice helps prevent the need for hospitalization and thus contributes to more efficient use of hospital beds. A study by Klarman indicates that the rate of hospitalization under HIP is 20 percent lower than under other types of health insurance plans.[14] Prepaid group practice plans should also facilitate efficient use of physicians' time, because they make available ancillary personnel, up-to-date equipment and facilities for diagnosis and treatment, and a centralized system of filing patients' charts.

Consumer satisfaction with prepaid group practice plans seem to be high, but their rate of expansion has not been as great as expected.[15] This may be partly due to AMA's long traditional opposition to prepaid group practice. Some states have laws that specifically prohibit physicians from practicing in group practice settings.[16]

RECENT RESEARCH FINDINGS ON PERFORMANCE

Hetherington, Hopkins, and Roemer conducted a comparative study of three types of private health insurance plans: plans of commercial insurance companies, provider sponsored plans (Blue Cross and Blue Shield), and prepaid group practice plans. The study further breaks down the three types into large commercial plans, small commercial plans, hospital-sponsored plans, physician-sponsored plans, large prepaid group practice plans, and small prepaid group practice plans. The study confirms the notion that prepaid group practice plans excell in performance other types of private health insurance plans in many respects. This section of the paper presents the highlights of its research findings. Data for the study were collected in California in 1968, and findings were published in 1975.[17]

Administrative efficiency: The study of Hetherington et al. found that the greatest degree of administrative efficiency was achieved by large prepaid group practice plans. They used only three percent of premium income for administration. This contrasts with ten percent used by physician-sponsored plans. The basic reason that the researchers mention for the efficient administration of prepaid group practice plans is that such plans can use simple administrative structure and process to implement the program. For example, billing and paying are much less frequent under this type of plan. In contrast, administering the other two types of plans is inevitably complex. The amount of communication necessary for processing claims, checking eligibility and calculating co-insurance levels, and checking medical procedures and prices is enormous.

Comprehensive coverage: Prepaid group practice plans offered the most comprehensive coverage of services. Under large prepaid group practice plans, for example, as much as 88 percent of total family medical bills were paid by the plans, compared with 24 percent paid by large commercial insurance companies--the least comprehensive type. A larger proportion of family medical bills is paid by prepaid group practice plans because most services and supplies are prepaid with the exception of initial fees ($1 or $2 to be paid for each visit to a doctor) and the cost of prescription drugs. In contrast, commercial insurance plans tend to pay a small proportion of family medical bills because the plans normally incorporate deductibles and co-insurance, and they exclude certain types of medical care such as expenditures for long-term illness.

Costs: The study found that prepaid group practice plans, on the average, charged a relatively high rate of premium. However, since the enrollees of such plans incurred much smaller out-of-pocket expenses for hospital and physicians' services than did the enrollees of other types of plans, they incurred lesser total health care expenditures. This

is all the more remarkable since a relatively larger number of sickness-prone people were enrolled in prepaid group plans.

Doctor's visits and hospitalization: Prepaid group practice plans ranked relatively high in terms of the number of physician's visits made by insured persons during the year, reflecting their first-dollar insurance coverage for physician's services. A disturbing finding was that under all types of plans low and moderate-income families (with income of less than $11,000) paid a visit to a physician less frequently than middle-income families. In contrast to the relatively high frequency in physician's visits among those who were insured by prepaid group practice plans, the rate of hospital admissions were much lower under these plansthan under commercial insurance or provider-sponsored plans. The following inferences can be drawn from these facts: (1) Under a prepaid group practice plan, insured persons tend to visit a physician at an early stage of illness, thus preventing illness from becoming severe enough to require hospitalization. (2) Prepaid group practice plans tend to have built-in incentives to encourage preventive medicine and also to minimize unnecessary hospitalization.

Preventive medicine: Within the medical context, preventive medicine involves such procedures as annual physical checkups, pap smears and pelvic examinations for female adults, rectal examinations, and immunizations. In all these areas, prepaid group practice plans surpassed other types of plans.

POLICY ANALYSIS AND IMPLICATIONS

Based on the foregoing arguments and additional empirical evidence, social policy implications will be drawn along the issues of (1) prepayment vs. free-for-service, (2) deductibles and co-insurance, and (3) multiplicity vs. singularity.

Prepayment vs. fee-for-service: The custom of charging the client on a fee-for-service basis is an important ingredient of the American entrepreneurial psyche of physicians as well as other types of professionals. It is believed that charging on a fee-for-service basis is the cornerstone of healthy competition and offers the assurance of quality care. Indeed, in horse-and-buggy days when a single physician could meet the needs of a patient, the idea of fee-for-service was both practicable and congruent with the free enterprise ideology of the time. However, in these days of high technology and intensified specialization, the fee-for-service principle seems to impede the orderly coordination of services and the efficient utilization of physicians and other health care manpower. The superior performance of prepaid group practice plans has a great deal to do with the methods of financing these programs and of payment for physicians' services: They are financed through monthly capitation payments

by the insured, and physicians receive salaries for their services.[18] The economic efficacy involved in prepaid group practice plans is also related to relatively low overhead costs for and the efficient use of technical equipment, buildings, and ancillary personnel.

It is generally agreed, although pertinent research findings are scarce, that prepayment as a way of financing a health insurance plan prevents overutilization of health care services for curative purposes and encourages preventive medicine. For example, physical checkups are included in the coverage under a prepayment plan, but not under a provider-sponsored or a commercial insurance plan. Furthermore physicians paid by salaries may find it advantageous to prevent the insured from becoming ill, but physicians paid by fees-for-service may find it an advantage for the person to become ill.

Another important point in comparing the plan relates to the distributive effect on the high-risk population. As mentioned earlier, the experience rating that is incorporated in commercial insurance plans and often in provider-sponsored plans is detrimental to the well-being of sickness-prone segments of population, but the experience rating is often justified on the grounds of actuarial equity. Prepaid group practice plans do not adopt this insurance principle, thus facilitating an efficient internal redistribution of premium income from the healthy to the less healthy.

Deductibles and co-insurance (co-payment):[19] It is often said that deductibles and co-insurance prevent the abuse of health care services by the insured. However, reality seems more complex than such logic. For example, deductibles and co-insurance influence behavior differently, depending on the individuals' income background. One study shows that imposing co-payments under the Supplemental Medical Insurance (SMI) component of Medicare creates economic hardship on enrollees who have low-to-moderate family income. This study also reports a higher incidence of unmet needs among such enrollees. On the other hand, co-payments did not have much effect on those receiving public assistance, or on those with high family income.[20] Since medical expenses are reimbursed only after deductibles are paid up to the stipulated ceiling, high-income families who have the economic capacity to pay up to the ceiling tend to be reimbursed more often with a larger payment than low-income families. A study shows that in 1968 the average reimbursement under SMI was $79 per enrollee with family income of $5,000 or less compared with $160 per enrollee of $15,000 or more.[21]

The hurdle of deductibles is more easily overcome if a person has a relatively high income. With such an income, the effect of deductibles is substantially reduced, although the co-insurance feature takes over thereafter. With respect to both deductibles and co-insurance, the economic

effects that prevent overutilization are felt less by those with a high level of income. In addition, federal income tax regulations allow deduction for (1) one-half of health insurance premiums up to $150; (2) expenses in excess of three percent of adjusted gross income (AGI) for the remainder of the premium and for medical, dental, hospital, and other related services; and (3) expenses in excess of one percent of AGI for medicine and drugs.[22] Because of the progressivity in the federal income tax, such tax regulations subsidize high-income families more than low-to-moderate-income families. A study shows, for example, that 16 percent of insurance premiums were subsidized for families in the $15,000-$24,000 bracket of AGI in contrast to only 9 percent for families in the $3,000-$3,999 bracket.[23]

In addition to the adverse economic impact of deductibles and co-insurance on low-to-moderate-income families, it is important to be aware of the following factor: beyond the initial contact with a physician, the decision as to the kind and extent of health care services that should be provided rests not with the patient but with the provider. Furthermore, even without deductibles and co-insurance low-to-moderate income families seem to underutilize health care services at early stages, as shown by research findings by Hetherington et al.

In summary, deductibles and co-insurance may not merely prevent overutilization buy may also encourage underutilization of health care services by those who can least afford to pay. On the other hand, deductibles and co-insurance may not help prevent overutilization by those who can pay for them.

Multiplicity vs. singularity: Numerous and various types of plans have been developed in the United States to insure people against health care expenses. It is often argued that multiple plans foster competition and experiment. However, the merit of economic competition needs to be evaluated with due consideration to its social effects. The point can be made by comparing the development of commercial insurance plans with Blue Cross plans. The noble idea of Blue Cross's commitment to provide health insurance coverage at community average rates had to be given up in the face of economic competition with commercial insurance companies that implemented the principle of experience rating to, in effect, select groups of people with low risk. If Blue Cross had continued its commitment, it would have ended up with only adversely selected groups--the sick and the poor--with the eventual result of bankruptcy. In the same way, the multiplicity of health insurance plans forced the U.S. government to serve through Medicare and Medicaid the high-risk segments of population--that is, the elderly, the disabled, and the poor. The point is that a multiplicity of health insurance plans does not effectively redistribute health care resources from the healthy to the less healthy and from the economically powerful to those less powerful economically.

If health care services are conceived as a right and are to be provided solely on the basis of medical need, not on the basis of ability to pay, social compulsion is inevitable for implementing their provision. Implementation can be more effective through a single national plan than through multiple plans. For only in such a single plan can enough resources be pooled to meet equitably the health needs of everyone.

NOTES

[1]"National Health Expenditures Highlights, Fiscal Year 1976," Research and Statistics Note, No. 27, U.S. Department of Health, Education, and Welfare, Social Security Administration, Office of Research and Statistics, December 22, 1976, p. 1.

[2]Executive Office of the President, Council on Wage and Price Stability, "The Problem of Rising Health Care Costs," Staff Report, April 1976. (Mimeographed)

[3]"National Health Expenditures Highlights, Fiscal Year 1976," Research and Statistics Note, No. 27, op. cit. Table 1, p. 2.

[4]Nancy L. Worthington, "National Health Expenditures 1927-74" Social Security Bulletin, February 1975, Table 6, p. 16; and Marjorie Smith Mueller and Robert M. Gibson, "Age Difference in Health Care Spending, Fiscal Year 1974," Social Security Bulletin, June 1976, Table 1, p. 19.

[5]For detailed discussion, see Herbert E. Klarman, Economics of Health (New York: Columbia University Press, 1970), pp. 10-19; and Kenneth J. Arrow, "Uncertainty and the Welfare Economics of Medical Care," American Economic Review, Vol. 53, 1963, pp. 941-973.

[6]Burton A. Weisbrod, Economics of Public Health: Measuring and Economic Impact of Diseases (Philadelphia: University of Pennsylvania Press, 1961).

[7]U.S. Department of Health, Education, and Welfare, "Hospital and Surgical Insurance Coverage, United States, 1968," Vital and Health Statistics, Series 10, November 6, 1972, Tables 3 and 17.

[8]Marjorie Smith Mueller and Paula A. Piro, "Private Health Insurance in 1974: A Review of Coverage, Enrollment, and Financial Experience," Social Security Bulletin, March, 1976, Table 1, p. 4.

[9]Ibid., p. 17.

[10]For more detailed illustration of the development of health insurance plans, see Duncan M. MacIntyre "Pricing Health Insurance," in Economics of Health and Medical Care, Conference on Economics of

Health and Medical Care, 1962 (Ann Arbor, Michigan: University of Michigan, 1964); for discussion of how AMA resisted national health insurance proposals, *see* Daniel S. Hirshfield, *The Lost Reform* (Cambridge, Mass.: Harvard University Press, 1970).

[11]Mueller and Piro, *op. cit*. Table 3, p. 6.

[12]"Independent Health Insurance Plans in 1974," *Research and Statistics Note*, No. 21, U.S. Department of Health, Education and Welfare, Office of Research and Statistics, November 30, 1976, p. 1.

[13]Klarman, *op. cit*., p. 127.

[14]Herbert E. Klarman, "Effect of Prepaid Group Practice on Hospital Use," *Public Health Reports*, Vol. 78, No. 11 (November 1963), pp. 955-965.

[15]For example, during 1970-74, the rate of growth of insurance enrollment under prepaid group practice plans was only between one and two percent. *See* "Independent Health Insurance Plans in 1974," *op. cit*., p. 2.

[16]For detailed discussion, *see* Klarman, *Economics of Health*, *op. cit*. pp. 126-131.

[17]Robert W. Hetherington, Carl E. Hopkins, and Milton I. Roemer, *Health Insurance Plans: Promise and Performance* (New York: John Wiley & Sons, 1975).

[18]Not all prepaid group practice plans pay the physician based on a salary basis. Some, such as Group Health Insurance, Inc., of New York City, pay the physician on a fee-for-service basis.

[19]"Co-payment" is a generic term for deductibles and co-insurance.

[20]Evelyn Peel and Jack Scharff, "Impact of Cost-Sharing on Use of Ambulatory Services under Medicare, 1969," *Social Security Bulletin*, October, 1973, pp. 3-24.

[21]Karen Davis and Roger Reynolds, "Medicare and the Utilization of Health Care Services by the Elderly," (Washington, D.C.: The Brookings Institution, December, 1973), Table 1.

[22]The effect of the progressivity in income tax rates on the degree of government subsidies for health care expenses is somewhat offset by the reduction of income deductibility by the stipulated percentages of AGI (3 percent for medical, dental, and hospital expenses

and 1 percent for medicine and drugs). The higher the AGI, the higher the reduction of income deductibility for health care expenses. Thus, in the case of a relatively small amount of health care expenses, the government subsidizes low-to-moderate income families more than high income families. However, the deductibility of the first one-half of health insurance premium not in excess of $150 always results in a greater amount of tax savings for high income families than for low-to-moderate income families.

[23] Bridger M. Mitchell and Ronald J. Vogel, Health and Taxes: An Assessment of the Medical Deduction. The Rand Corporation, R-1222-OEO (August 1973), Table 4, p. 12.