

INEQUALITIES IN PRIVATE AND PUBLIC HEALTH SYSTEMS: THE UNITED STATES, FRANCE, CANADA AND GREAT BRITAIN*

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Introduction

Over fifteen years ago, in a comparative study of the United States, Sweden and England, Odin Anderson characterized the quest for greater equity in health as an "endless search for the dream."¹ The validity of this statement depends not only upon empirical evidence, but also upon one's concept of equity. It will be argued here that it is possible to attain what may be called a "weak concept" of equity. The search for what may be termed a "stronger concept" of equity, however, so far has proved elusive—at least in the United States, France, Canada and Great Britain.

Inequalities in health—both in relation to outcomes (health status) and to the availability and use of medical care—have been studied quite thoroughly.² There is extensive work on alternative concepts of equity,³ and there is a large number of empirical studies which document inequalities in health status and measure access to medical care in relation to various concepts of equity.⁴ One gap in this literature, however, is the absence of a standard of comparison by which to assess the extent of health inequalities in the United States.

This chapter will attempt to assess the extent of health care inequalities in the United States as compared to the situation in other, more "public" health care systems. It is not possible to make systematic comparisons because each country relies on different categories in defining such concepts as socioeconomic status and health status. Never-

theless, since the comparative approach is not well developed, it is possible to make a modest contribution in this direction.⁵

The initial presumption was that problems of inequality are more severe in the relatively private, market-based health care system of the United States than in the more publicly controlled systems with a national health service, such as in Great Britain, or with national health insurance, such as in Canada and France. This turns out to be true when grounded in the weak concept of equity. However, regarding a stronger concept of equity, the evidence suggests that inequalities are pervasive in all of these systems.

On the Concept of Equity in Health Care

Enough able minds have addressed the concept of equity in health care so as to make all but the most ignorant or courageous analysts hesitate to take on the subject anew.⁶ For purposes of this discussion, it is sufficient to begin with three well-known distinctions: first, between equity and equality; second, between equity in levels of health or health care and equity in financing; and third, between the weak and the stronger concepts of equity—both of which will be relied upon to interpret the empirical evidence presented subsequently.

Equality means "the same" in the sense that George Orwell played with the concept in *Animal Farm*.⁷ Many would probably support the ideal of promoting measures to make health status equal among all. For example, there should be no strong objections to making life expectancy between the sexes, or even between social classes, equal. Few, however, would expect such efforts to succeed given the differences among groups and individuals in their genetic makeup, income and educational levels. No one, not even the most fanciful utopian, would presume that the use of health care services should be equal among individuals. People who are sick should receive more medical care services than those who are well. How much more they should receive is not merely a technical issue. To the extent that this question raises issues of social justice, it becomes an issue of equity.

The second distinction, between equity in levels of health or health care and equity in financing, involves the interrelationships between costs and benefits. Attitudes and perspectives, of patients, providers and/or taxpayers, often vary. From the point of view of financing, it is crucial to distinguish the distribution of costs between those who actually receive services and the larger set of all who pay for them.⁸ But this discussion is concerned only with equity in achieving levels of health and in receiving health care services.

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A weak concept of equity in health care would suggest that everyone is entitled to, and actually receives upon request, a basic minimum of health care services. Norman Daniels associates this concept with the presuppositions about equity which underlie Alain Enthoven's Consumer Choice Health Plan for national health insurance in the United States.⁹ Such a notion also resembles the view advocated by the President's Commission for the Study of Ethical Problems in Medicine, which concluded that equitable access "requires that all citizens be able to secure an adequate level of care without excessive burdens."¹⁰

A stronger concept of equity presupposes far more ambitious aims. For example, in the best of all possible worlds, one might wish that despite severe inequalities in income and wealth, an ideal health care system would somehow provide sufficient remedial effects so as to make death (mortality) and disease (morbidity) independent of an individual's socioeconomic status. Likewise, one might want the use of services by consumers and the diagnostic procedures and therapeutic treatment provided by health care professionals (and even the *manner* in which these are provided) to be related only to the patient's medical condition, not to his or her ability to pay. Such a concept of equity assumes an equitable distribution of health care services—"one in which illness is the major determinant of the allocation of resources."¹¹

Both the weak and the stronger concept of equity in health care can be applied to outcomes (health status) as well as to inputs (use of health care resources). The weak concept of equity justifies a range of inequalities based on differences in income and preference. The stronger definition, however, suggests that *with respect to health status*, equally situated individuals should be treated equally (horizontal equity) and unequally situated individuals should be treated unequally (vertical equity). Also, the stronger equity concept suggests that there should be equal access to health care services, i.e., that the ways in which patients differ in their geographic residence or socioeconomic status should not lead to systematic differences in their use of services or treatment.

Both concepts of equity mirror a set of values; both will be used as criteria by which to evaluate the health care systems in the United States, France, Canada and Great Britain. After distinguishing between public and private health care systems and classifying health systems along a public/private continuum, the nature of health inequalities in these systems from the perspective of the weak and the stronger concepts of equity will be assessed.

Public Versus Private Health Systems

Health care systems vary in the public/private mix of their financing and organization.¹² The United States, for example, is known to differ from Canada and Western Europe because it is at the private end of the public/private spectrum.¹³ In comparison to France, Canada and Great Britain, the United States is the highest health care spender (public and private combined), but it has the lowest share of public expenditures on health as a percentage of its gross domestic product (GDP). (See Table 1.) As to sources of financing, the United States health system relies the most on direct consumer payments and private health insurance, and the least on public insurance and government revenues. The United States has the most "private" system in still another respect, for it spends the smallest share of health expenditures in government-administered institutions.

At the opposite extreme, Great Britain is the lowest health care spender (public and private combined), yet it retains a relatively high share of public expenditures on health care as a percentage of GDP. Great Britain also has the smallest role for direct consumer payments and, in spite of recent growth, a very small private health insurance industry.¹⁴ Direct government financing plays the largest role. In terms of organizational structure, Great Britain is the most "public" system: It is, after all, a national health service (NHS).

France and Canada represent two models of national health insurance (NHI). Both fall midway between the extremes of the United States and Great Britain. Canadian NHI is financed largely by government revenues, and health services are provided, for the most part, in private, fee-for-service practices and private, not-for-profit hospitals. French NHI, by contrast, is financed largely by social security payroll taxes, and health services are provided in private, fee-for-service practices and in a mix of public and private, for-profit hospitals, which is dominated largely by the public ones. In contrast to France, Canada and Great Britain, the United States is the only industrially advanced nation that lacks a system of compulsory and universal entitlement to health insurance. As a consequence, roughly 15 percent of the population is uninsured for health care services.¹⁵

France established a system of NHI covering all industrial workers in 1928. In a spirit of solidarity, the system was extended to all salaried workers following World War II, followed by agricultural workers in 1961 and the self-employed in 1975. By 1978, virtually all of the population was covered under a compulsory universal NHI scheme.¹⁶ Benefits include the services of general practitioners and specialists in office-

TABLE 1
THE PUBLIC/PRIVATE MIX IN HEALTH CARE FINANCING AND ORGANIZATION

	<u>Expenditures as Percent of GDP</u>		<u>Health Expenditures by Source of Funding (Percent)</u>					<u>Percent of Total Expenditures Spent in Government-Administered Institutions</u>
	<u>Total Expenditures on Health</u>	<u>Public Expenditures on Health</u>	<u>Direct Payments by Consumers</u>	<u>Private Insurance</u>	<u>Insurance</u>	<u>Government/Social Security</u>		
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	
United States	10.6	4.5	27.1	25.0	11.0	31.0	19.0	
France	9.3	6.6	19.6	3.0	69.0	7.0	37.2	
Canada	8.2	6.1	19.5	2.0	9.0	66.0	20.7	
Great Britain	5.9	5.2	5.8	1.0	5.0	87.0	73.3	

Sources: The data in columns (A) and (B) are for 1982, from Organization for Economic Cooperation and Development, *Measuring Health Care* (Paris: OECD, 1985). Data in columns (C) through (G) are for 1976, from Robert J. Maxwell, *Health and Wealth: An International Study of Health Care Spending* (Lexington, MA: Lexington Books, 1981). The magnitudes have not changed significantly since then.

based practices as well as in hospitals, laboratory tests and diagnostic procedures, prescription drugs, dental services, coverage for work accidents, sick days, and maternity leave and care. Beneficiaries are reimbursed substantially, but not in full. Although there are no deductibles, patients must contribute a small copayment for each day spent in a hospital and a coinsurance payment allowable for outpatient services—roughly 20 percent of the negotiated fee. Approximately one-fourth of French physicians have opted to engage in “extra-billing,” which drives up the level of coinsurance beyond 20 percent.

Canada passed federal legislation which encouraged its provincial governments to adopt hospital insurance in 1957 and insurance for medical care (outside the hospital) in 1966. By 1970, all Canadian provinces had established a system of health insurance which provided universal coverage for Canadian residents and a comprehensive benefit package comparable to that provided in France, with the exception of prescription drugs.¹⁷ In France, coverage for drugs is far broader than Canada, but Canadian NHI provides first-dollar coverage: there are neither deductibles nor out-of-pocket copayments for patients. What is more, in contrast to France, extra-billing is more restricted and patients are not required to advance payment for ambulatory care and then wait for reimbursement. Providers are reimbursed directly by the provincially-controlled health insurance funds.

The British NHS was enacted in 1946 and established in 1948. The 1944 white paper preceding its enactment proclaimed that “everybody in the country should have an equal opportunity to benefit from medical and allied services.”¹⁸ Thus, the NHS entitles all British subjects and legal residents to receive “needed” medical care free of charge at the point of consumption. The health system is organized as a tripartite structure. Hospital care is provided within districts which receive budgets from regional health authorities. General practitioner services, as well as dental and ophthalmic services, are organized by family practitioner committees who contract with these professionals to take responsibility for providing services to a designated population. Finally, public health services and certain categories of home care and social services are provided by local authorities. The system is almost entirely financed through general revenue taxation, and the physicians and hospitals must meet the demand for health care services within clearly defined budgetary constraints.

The Weak Equity Criterion

According to this criterion, all citizens should be able to secure a basic minimum of health care services or, to reiterate the expression used by

the President's Commission, an "adequate level of care without excessive burdens."¹⁹ The United States is the only country in this comparison that fails to pass this test.

In France, Canada and Great Britain, the entire population is entitled to use medical care services. There is no category equivalent to the American term "uninsured." There are occasionally coinsurance requirements in France and occasional copayments in Great Britain, such as for drugs. Occasionally there are problems in obtaining access to more specialized services in France, Canada and Great Britain, but such problems are systematic only in the latter where rationing of certain specialized services such as kidney dialysis is standard practice.²⁰ Furthermore, there are never any financial barriers to receiving primary care services (on both an outpatient and an inpatient basis) in the three countries, and one would be hard pressed to find examples of hospitals "dumping" patients to other facilities on financial grounds.²¹

Of course, it is difficult to define what constitutes an "adequate level of care." Given some definitions, it is entirely possible—even probable—that France, Canada and Great Britain do not provide adequate levels of care to certain segments of their populations. But only the United States has a health care system in which a significant portion of the population is uninsured and, because of this status, contains systematic differences in patterns of medical care use. What is more, only the United States has experienced a recent trend where the percentage of the uninsured has been rising, and the gap in patterns of medical care use between the insured and the uninsured has been widening.

These characteristics disclose the existence of a two-tiered health care system in which the adequacy of the care provided for the bottom tier appears to be eroding. The argument that the United States fails to meet the weak equity criterion rests on the proposition that the uninsured, a lower tier in the American health system, receive less than an adequate level of care. A less than adequate level of health care in this context is a relative judgment: first, in relation to the level of care received by those in the higher tier; and second, to the level of care received by the lower tier over time. On both grounds, recent studies in the United States suggest that the uninsured are receiving less than an adequate level of health care services.

In a comparison of health services received by the uninsured with those received by the publicly insured (under Medicaid), Robert Blendon and his colleagues have shown that the level of care is significantly different.²² Their survey data (collected before Arizona became the only state with no Medicaid program) indicated that low-income people received substantially less medical care from physicians if they resided in Arizona or in other states with only limited Medicaid pro-

grams. In Arizona, poor children saw physicians 40 percent less frequently, and poor rural residents saw physicians 22 percent less frequently than poor residents of states with Medicaid programs. Moreover, the proportion of poor Arizona residents who were refused care for financial reasons was almost double that in states with Medicaid programs.

These findings are consistent with an earlier study which analyzed data from the 1977 National Medical Care Expenditure Survey. In this study, Karen Davis and Diane Rowland demonstrated that lack of health insurance matters: Financial access to ambulatory care, in comparison to physical and racial barriers, was the most important factor affecting use. They showed first, that the insured received 54 percent more ambulatory care (visits to clinics, doctors' offices or hospital outpatient departments) than the uninsured; second, that adjusting for health status, the insured in poor health saw a physician 70 percent more often than the uninsured in poor health; and third, that the same differentials applied to hospital care—the insured received 90 percent more hospital care than the uninsured.²³ This last point reinforces similar findings by Gail Wilensky and Marc Berk.²⁴

A recent study by Kenneth Thorpe and Charles Brecher indicates that the uninsured poor in cities with public hospitals receive significantly more hospital care than the uninsured poor in cities without such facilities.²⁵ This conclusion could be used to argue that public hospitals, and perhaps other health care facilities as well, may serve to attenuate the disparities in access to medical care. However, it does not deny the findings by Blendon and his colleagues, nor those by Davis and Rowland, that public facilities and programs for the poor do not eliminate the systematic differences in the use of medical care by the insured and uninsured.

When one compares the care received by the uninsured over time, the evidence appears to support the argument that the uninsured are receiving less than an adequate level of care. Such a conclusion is all the more significant when one considers that between 1975 and 1983, following changes in Medicaid eligibility requirements, the proportion of Americans under the poverty level who were insured by Medicaid fell from 63 to 46 percent, and the number of Americans with no insurance increased by more than 20 percent.²⁶

In the most recent report on the access of Americans to health care, Harold Freeman and his coauthors compare the results of their surveys between 1982 and 1986. They note that the gap between the uninsured and the insured in average number of physician visits increased from 19 to 27 percent during this period. While the gap in receipt of hospital care narrowed, there is still a 19 percent difference in admission rates

between the uninsured and the insured. Although between 1982 and 1986 the overall use of medical care (physicians and hospitals) by Americans declined, these surveys indicate that low-income individuals and minorities in poorer health were affected disproportionately.

To underscore the above, physician visits for low-income individuals in poorer health declined by 8 percent, while visits for the nonpoor of similar health status increased by 42 percent. Also, the average number of physician visits for low-income adults under age sixty-five declined by 30 percent, but there was no such change for the nonpoor. Minorities experienced similar relative declines. In 1982 the gap between physician visits by blacks and whites in fair and poor health was 12 percent, with whites having a higher number of visits. In 1986, probably as a result of cutbacks in Medicaid expenditures and eligibility criteria, this gap increased to 33 percent.

Freeman, et al. also note that 13 percent of the uninsured claimed they did not receive medical care for economic reasons. The equivalent percentage for the entire population was six, and for low-income individuals, blacks and Hispanics respectively, 9 percent, 9 percent and 7 percent. Finally, the 1986 survey uncovers significant "underuse" of medical care. For example, of the total population surveyed, 41 percent who had serious symptoms did not contact a physician. The equivalent figure for the uninsured was 67 percent.²⁷ (See Table 2.)

What must be emphasized about the uninsured is who they are. Predominantly, they are poor. Thirty-two percent of the poor compared to 10 percent of the nonpoor have no public or private coverage.²⁸ The percentage of whites with private insurance was eighty compared to fifty-seven for blacks. This is not surprising since private insurance is, for the most part, provided by employers, and the unemployment rate is significantly higher among blacks. Disproportionately more blacks (20 percent) than whites (12 percent) had neither public nor private health insurance.

Although, as will be pointed out, there has been great improvement in the United States in reducing the disparities in use of medical care by socioeconomic status, the evidence presented above suggests that serious gaps remain. Moreover, the uninsured have systematically different patterns of health care use in comparison to the insured. Assuming the insured receive an adequate level of care, the contrast suggests that the uninsured most likely receive less than an adequate level. Even if the level of care received in 1982 were defined as adequate,

TABLE 2
INDICATORS OF POTENTIAL UNDERUSE OF MEDICAL CARE,
1986

Problem	Percent of Population Groups with Problem				
	Total U.S.	Low Income	Black	Hispanic	Uninsured
Individuals with chronic illness without physician visit in a year	17	18	25	22	20
Among individuals with one or more physician visits in a year, those with serious symptoms who did not see or contact a physician	41	42	39	53	67
Pregnant women without prenatal care during first trimester	15	30	17	27	20
Individuals with hypertension without blood pressure check in a year	20	15	30	30	22
Individuals with no dentist visit in a year	38	57	50	47	—

Source: Adapted from Howard E. Freeman, Robert J. Blendon, Linda H. Aiken, Seymour Sudman, Connie Mullinix and Christopher R. Corey, "Americans Report on Their Access to Health Care," *Health Affairs* 6: 1 (Spring 1987): 6-18.

the data from surveys taken since then which have been summarized here suggest that what the uninsured are receiving today is less than adequate.

The Stronger Equity Criterion

According to the stronger equity criterion, an equitable health care system should achieve sufficient remedial effects such that health outcomes, as well as patterns of medical care use, would be independent of an individual's socioeconomic standing. By this criterion, neither the United States, France, Canada nor Great Britain comes close to

achieving equity. Let us review the evidence, first concerning health outcomes, and next in relation to the use of medical care.

Inequalities in Health Outcomes

Whether health outcomes are measured in terms of mortality, morbidity or health status, and whether socioeconomic status is measured by income, occupation or level of education, much the same picture emerges in all of these countries: Those at the bottom are worst off. They have the highest rates of death, disease and functional disability. Consider, for example, infant mortality rates.

In the United States, there is no routine data collection procedure linking infant mortality to the income of the infant's parents. Several studies, however, provide strong indications. For the period 1964 to 1966, Philip Hauser and Evelyn Kitagawa showed that infant mortality rates were highly correlated to family income.²⁹ Another study, comparing poverty and nonpoverty areas of nineteen large American cities from 1969 to 1971, suggests that infant mortality rates were 50 percent higher in the poverty areas.³⁰ Often, since there are no data by socioeconomic status and since it is well known that poverty rates among blacks are higher than among whites, race is used as a proxy for income. When this occurs, the differentials appear even more pronounced. Between 1950 and 1980, the ratio of infant mortality rates of blacks to whites increased from 1.6:1 to 1.9:1.³¹

In France, demographers have a long tradition of documenting disparities in infant mortality rates among occupational groups. Although the disparities have narrowed—at least during the period between 1950 and 1970—the mortality rate of infants whose fathers are manual workers is still more than twice that of infants whose fathers are professionals or upper-level managers.³² Moreover, the ratio of the mortality rate of infants whose mothers are Algerian to that of infants whose mothers are French was 1.7:1 during the period from 1966 to 1970, a decrease of only .2 compared to the period 1956 to 1960.³³ This disparity is not limited just to Algerians and to infant mortality. The immigrant or nonimmigrant status of the mother also is highly correlated with premature births and perinatal mortality.³⁴

Canada, as in the United States, has no routine data collection on infant mortality rates by income or occupational group. Once again, though, a number of studies provide reasonably strong indications. For example, in Toronto, Ursula Anderson found that the lower-income population had infant mortality rates two-and-one-half times higher than the higher-income population.³⁵ In Montreal, there are no studies

of infant mortality by socioeconomic group, but Russell Wilkins showed that the average life expectancy was significantly lower in poorer neighborhoods than in wealthier ones.³⁶ For the entire province of Quebec, it seems clear that infant mortality rates are related to the income as well as to the ethnic origin of the parents. For example, Nouveau Quebec, one of the poorest regions in the province and one which is populated largely by Inuits (Eskimos), has infant mortality rates that exceed the average for the province by a factor of three.³⁷

In Great Britain, data on infant mortality by social class have been collected since the beginning of this century. As in France, the disparities in infant mortality rates by social class have narrowed considerably.³⁸ Nevertheless, from 1970 to 1972 the infant mortality rate of those in the lowest class was over twice that of those in the highest class.³⁹ Moreover, from 1930 to 1972 the overall percentage decrease in neonatal mortality rates was higher for the two highest classes than for the two lower ones.⁴⁰

Such patterns of differential health outcomes by socioeconomic status can be shown for a variety of indicators such as standardized mortality rates, age-specific mortality rates and life expectancy. What is more, there is a range of health status indicators which are also highly correlated socioeconomically. For example, measures of various activity limitations such as "restricted activity days" or "bed disability days" indicate that the poor tend to suffer disproportionately—at least in the United States, Canada and Great Britain where such data, based on surveys, are readily available.⁴¹

Inequalities in the Use of Medical Care

As in the case of health outcomes, whether the use of medical care is measured by physician visits, hospital admissions or length of stay, and no matter how socioeconomic status is measured, there are common patterns of inequality in the United States, France, Canada and Great Britain. The use of physician services is an example.

Following the establishment of Medicare and Medicaid in the United States, NHI in France and Canada and the NHS in Britain, there was evidence of redistribution of ambulatory care services. Those in the lower-income brackets increased significantly their use of physician services; those in the upper-income brackets slightly decreased theirs.⁴² In interpreting these changes, however, given that the poor tend to be sicker than upper-income groups, it is crucial to adjust the data on physician visits for differential health status.⁴³ In all four countries, although the poor tend to visit physicians more frequently

than those with more income, once these adjustments are made, there is still evidence of significant inequalities.

In the United States, based on the 1969 Health Interview Survey, Karen Davis adjusted data on physician visits for differences in need and found that all persons with family incomes under \$5,000 made 3.7 annual adjusted visits to physicians, while those with family incomes over \$15,000 made 5.2.⁴⁴ In a later study based on the 1976 to 1978 Health Interview Survey, Joel Kleinman, Marsha Gold and Diane Makuc adjusted data on physician visits for differences in health status and found similar inequalities. Depending on the measure used to assess health status, they found that the poor have between 7 percent and 44 percent fewer physician visits than those with income above twice the poverty level. Moreover, they found that the poor are far more likely to use hospital clinics and less likely to use private physicians' offices.⁴⁵

In France, similar findings based on survey data reveal the extent of inequalities under NHI. Although there are no data available on physician visits by socioeconomic status that are adjusted for levels of health status, Georges Rösch and his colleagues used an indicator of morbidity to so adjust data from a survey of medical care consumption patterns in the Paris region.⁴⁶ They found that, holding morbidity constant, upper-level managers had a consumption index equal to over twice that of manual workers. Subsequent studies have not updated this work, but the 1970 and 1980 French national surveys of medical care use reveal strikingly different patterns by socioeconomic standing.

For example, both in 1970 and in 1980, manual workers made significantly more visits to general practitioners than upper-level managers. Conversely, upper-level managers made far more visits than manual workers to specialists, radiologists, dentists and physical therapists.⁴⁷ Such differentials in patterns of medical care use are also found between ethnic groups in France, even for such basic services as prenatal care. Only 9 percent of French women do not complete their required four prenatal visits, but this figure reaches 20 percent for all immigrant women and 25 percent for all North African women living in France.⁴⁸

In Canada, also, there are indications that NHI does not meet the stronger equity criterion regarding the use of physician services. In a study of the universal and comprehensive medical insurance plan in the province of Saskatchewan, Robin Badgely and others concluded that although use of medical services by all groups had increased, there was little change in the relationships between one's socioeconomic position and the use of medical services.⁴⁹ Subsequently, for the period 1963 to 1968, Beck found considerable inequalities in access to physicians' services by income class, particularly for specialist services, complete ex-

aminations and laboratory testing.⁵⁰ Although the disparities were reduced over the time of the study, they were not removed.

In a study of the use of physician services in the metropolitan area of Montreal, Philip Enterline and his colleagues noted the change from a positive correlation of use with socioeconomic status a year before Medicare, to a negative correlation a year after its introduction.⁵¹ Similarly, in a national study of medical and hospital use, Statistics Canada noted that lower-income people had a higher incidence of medical care use than those in higher-income groups.⁵² Neither of these studies, however, adjusted for health status between these groups.

The one Canadian study that has made the adjustment for health status provides mixed results.⁵³ For those patients who had reported being sick in the past four weeks, a higher percentage of patients in the low economic class reported seeing a doctor than in the high economic class. Conversely, for those patients who reported not being sick in the past four weeks, a higher percentage of patients in the high economic class reported seeing a doctor than in the low economic class. Moreover, a significantly higher proportion of patients in the high economic class (85 percent) reported seeing their doctor in a private office than those in the low economic class (60 percent). Nearly all those who did not see their doctor in a private office went to hospital clinics or emergency rooms.⁵⁴

In Great Britain, as in the United States, France and Canada, data from the General Household Survey, reported in *The Black Report*, generally confirm that use of general practitioner services is higher for groups with a lower socioeconomic status than for those with a higher one.⁵⁵ After adjusting these data for differential health status, though, with the exception of one important study by Elizabeth Collins and Rudolf Klein, most of the evidence suggests that the higher classes make more use of general practitioner services than the lower classes.⁵⁶ But even this evidence probably underestimates the disparities because, as Richard Titmuss argued, the well-to-do know how to make better use of the system.⁵⁷ They know how to get through the "gatekeeper" to confer with hospital-based consultants, i.e., specialists.

In addition to knowing how to use the system, *The Black Report* emphasizes that the higher socioeconomic groups make more use of preventive and health promotion services.⁵⁸ For example, Ann Cartwright notes that there are clear class gradients in the proportion of mothers receiving prenatal care.⁵⁹ Similar gradients apply for the provision of dental services.⁶⁰ *The Black Report* also notes that hospital outpatient departments and emergency departments are used more by the working class than by the middle class. Furthermore, the lower so-

cioeconomic groups receive less consulting time than do the upper ones.⁶¹

Such patterns of differential socioeconomic use of physician services can also be shown for hospital admission rates and lengths of stay. As a general rule, the poor tend to have higher admission rates and lengths of stay—not only in the United States but in France, Canada and Britain, as well.⁶² This relatively high use of hospital services no doubt reflects the poorer health status of lower-income groups and their different patterns of using ambulatory care services.

Methodological Problems in Comparing Inequalities

In applying the stronger equity criterion to the evaluation of health care systems, it is tempting to draw conclusions about the extent of health inequalities in the United States as compared to France, Canada and Great Britain. Such a cross-national approach would attempt to compare the extent of inequalities across each system at approximately one point in time. An alternative, longitudinal approach would compare rates of change within each system toward or away from equality. Both approaches, along with the methodological problems they engender, are called out in Table 3 pertaining to infant mortality, and in Table 4 with respect to physician visits.

The problem in working with data derived from national surveys is the risk related to sampling errors and the validity of the instrument itself. The problem in relying on local studies, on the other hand, is whether any valid inferences can be drawn for the whole country. The more overwhelming problem, however, in assessing the extent of health inequalities across countries is the unavailability of comparable data. Each country and each study has its own way of measuring socioeconomic status, and since studies of health inequalities are not done with great frequency, it is difficult to find comparable studies that focus on the same point in time.

The problem of comparing different measures of socioeconomic status is particularly vexing. It is difficult enough to develop measures which reflect levels of income, wealth, occupational status, education and a host of other factors. What makes cross-national comparisons so problematic is that each country has either developed or explicitly not

TABLE 3
DISPARITIES IN INFANT MORTALITY BY SOCIAL CLASS AND ETHNICITY
(Rates for lowest class compared to rates for highest class)

	Social Class or Proxy Thereof		1950	1964	1970	1974-78	1980	1983
	Lowest	Highest						
USA	Income Below \$3,000	Income Above \$10,000		1.61 (32.1:19.9)				
	Black	White	1.64 (43.9:26.8)	1.84 (42.0:22.8)	1.83 (32.6:17.8)	1.80 (26.2:14.2)	1.94 (19.6:10.1)	1.97 (19.2:9.7)
France ^a	Manual Laborers	Professionals/Executives	2.76 (61.7:22.3)	2.46 (36.2:14.7)	2.49 (30.4:12.2)			
Quebec ^b	Inuits (Eskimos)	French				3.80 (89.5:10.2)		
Britain ^c	Class IV & V	Class I & II	1.74 (83.5:19.2)	1.64 (20.8:12.7)	1.63 (17.8:10.9)			

Sources: U.S. data: Income data are from the United States Public Health Service, National Center for Health Statistics, Series 22, No. 14, cited by Evelyn Kitagawa and Philip Hauser, *Differential Mortality in the United States: A Study in Socioeconomic Epidemiology* (Cambridge, MA: Harvard University Press, 1973). Data by race are also from NCHS; see U.S. Department of Health and Human Services, Public Health Service, National Center for Health Statistics, *Health: United States 1986* (Washington, D.C.: U.S. Government Printing Office, Pub. No. (PHS) 86-1232, 1985), p. 54.
 French data: Marcel Corzé, "Mortalité infantile des générations 1950-1951 et 1965 à 1980, suivant le milieu social et la résidence," *Études et Documents Démographiques*, No. 9 (Paris: INSEE, 1965); Solange Hémy and Marie-Claude Gérard, "Mortalité infantile en France selon le milieu social," in *International Union for the Scientific Study of Population, Proceedings: International Population Conference 1973* (Lisieux: IUSSP, 1973), Vol. 3, pp. 171-184; and adapted from Ministère de la Santé, *Propositions pour une Politique de Prévention: Rapport au Ministre de la Santé* (Paris: Les Presses du Palais-Royal, 1982), p. 33.
 Quebec data: Robert Pampalon, *Géographie de la Santé au Québec* (Québec: Government of Québec, Ministry of Health and Social Services, 1985, pp. 369 and 391).
 British data: J. A. Headly and M. A. Heasman, *Social and Biological Factors in Infant Mortality*, Studies on Medical and Population Subjects No. 19 (London: HMSO, 1966), cited in Sir Douglas Black, et al., and Peter Townsend and Nick Davidson, eds., *Inequalities in Health: The Black Report* (New York: Penguin, 1982), Table 3.9.

^aThe data listed under 1964 are for the period 1961-1965; those listed under 1970 are for the period 1966-1970.

^bThese infant mortality rates are for two regions in Québec, Nouveau Québec and Canton de l'Est. Ninety-six percent of the population in Nouveau Québec are Inuits; 85 percent of the population in Canton de l'Est is French. The poverty index, calculated by Robert Pampalon, is 2.25883 for Nouveau Québec (the poorest region in the province) and 0.61456 for Canton de l'Est.

^cData are for England and Wales.

TABLE 4

ANNUAL PER CAPITA PHYSICIAN VISITS BY SOCIAL CLASS AND ETHNICITY
(Rates for highest class compared to rates for lowest class)

	Social Class or Proxy Thereof		1964	1970s	1980
	Lowest	Highest			
USA	Income	Income	1.3	.84 ^a	.83
	Below \$7,000	Above \$25,000	(5.2:3.9)	(5.0:5.9)	(4.6:5.5)
	Black	White	1.3	.96 ^a	
			(4.7:3.6)	(4.9:5.1)	
France	Manual Laborers	Professionals/ Executives		1.16	1.08
				(3.6:3.1)	(5.1:4.7)
	North African Immigrants	French			1.6
					(5.3:3.3)
Canada					
	Income	Income	.8	.61	
	Below \$3,000	Above \$15,000	(5.3:6.6)	(4.8:7.8)	
Saskatchewan	Zero	Income	.21 ^b		
	Income	Above \$15,000	(10%:47%)		
Britain	Class V	Class I		.5 ^c	
				(69:138)	

Sources: **U.S. data:** National Health Interview Survey, cited in U.S. Department of Health and Human Services, Health Resources and Services Administration, National Center for Health Statistics, *Health Status of Minorities and Low Income Groups* (Washington, D.C.: U.S. Government Printing Office, Pub. No. (HRSA) HRS-DV85-1, 1985), p. 239, Table 1. **French data:** INSEE-CREDOC Survey (1970), cited in J. Devouassoux, B. Morel and D. Polton, "Recours aux Soins et Inégalités de Santé," *Santé Sécurité Sociale—Statistiques et Commentaires* 3 (Mai-Juin 1982), Tableau 9; INSEE Survey (1980), in A. Charraud and P. Mormiche, "Disparités de Consommation Médicale," in *Enquête Santé 1980-1981*, Les Collections de l'INSEE, Série M, No. 118 (1981), Tableau 5.13 and Tableau 5.19. **Quebec data:** Philip E. Enterline, Vera Salter, Alison D. McDonald and J. Corbett McDonald, "The Distribution of Medical Services Before and After 'Free' Medical Care—The Quebec Experience," *New England Journal of Medicine* 289: 22 (November 29, 1973), Table 2: 1174-1178 at 1175. **Saskatchewan data:** R. G. Beck, "Economic Class and Access to Physicians' Services and Public Medical Care Insurance," *International Journal of Health Services* 3: 3 (Spring 1973): 341-355. **British data:** Sir Douglas Black, et al., and Peter Townsend and Nick Davidson, eds., *Inequalities in Health: The Black Report* (New York: Penguin, 1982), p. 96.

^aThese data are for 1975.

^bFor the period 1963-1968. Data are not visits but percentage of highest and lowest income classes who received no physician visits.

^cThese figures represent physician consultations per 1000 population over a two-week period.

developed its own unique national taxonomy. For example, in Great Britain the General Household Survey uses five occupational groupings: Class I consists of high-level professional and administrative occupations—5 percent of the population; Class II consists of employers in industry and retail trades and the lower-level professions—18 percent of the population; Class III is comprised of skilled workers—50

percent of the population; Class IV is made up of partially skilled workers—18 percent of the population; and Class V encompasses unskilled workers—9 percent of the population. In France, the Institut National de Statistiques et Études Économiques (INSEE) classifies socioeconomic status according to ten categories: high-level professionals and executives; middle-level managers; business and commercial proprietors; skilled workers; specialized workers; manual workers; employees; agricultural workers; salaried agricultural workers; and miners. What is important to observe here is that some nation's studies rely on occupational groupings; others on educational attainment; and still others on income categories such as "poor" and "nonpoor."

Given these differences in socioeconomic groupings, even after measuring health inequalities, for example, by calculating the ratio of the lowest to the highest group, it would be misleading to draw any conclusions on the relative degrees of inequality at any given point. It would also be misleading to draw any inferences about the relative rates of progress toward equality, which are shown in Tables 3 and 4. The reason is that the relative size of each socioeconomic grouping has changed at different rates within each country, and calculating these rates gets very problematic due to different rates of inflation and different methods of calculating real income.

With regard to the stronger equity criterion, one of the more promising areas for comparison would be to examine the extent of inequality among socioeconomic groups in physician visits adjusted for health status. Yet, once again, there are not only the methodological problems related to cross-national and longitudinal analysis, but also the problem of developing valid indicators of need. Each country has relied on different data and methods for adjusting their figures on physician visits. This means that the British "use/need" ratios are really not comparable to the various American calculations of adjusted physician visits and to the limited number of French and Canadian studies.⁶³ This explains why Table 4 displays only physician visits with no adjustments for health status.

Concluding Observations

On the basis of the weak equity criterion, the United States is the least equitable health care system in comparison to France, Canada and Great Britain, because it is the only country where a significant portion of the population is uninsured. This status, which unquestionably affects the patient's ability to pay, means that providers are at risk for what has come to be known as "bad debt" or "uncompensated care."

From a private, office-based physician's perspective, there is no obligation to serve such patients. From a private hospital's perspective, as a general rule it is best to minimize such risk and ration costly resources either by transferring patients or by providing fewer services to them.

In France, Canada and Great Britain, since almost all hospitals are reimbursed on the basis of global budgets, there is also an incentive to ration costly resources, and problems of patient dumping do occur. This affects the elderly, the mentally ill, alcoholics and other, less desired patients. British consultants, for example, refer to "bed blocking" when such patients take up badly needed space. The United States, however, is the only country in this comparison where there exist systematic inequalities, based on ability to pay, in the health services received by the uninsured as compared to the insured. Although the uninsured usually receive some basic minimum care, as noted earlier, the evidence suggests that what they receive is *less* than adequate.

Regarding the stronger equity criterion, the extent of inequalities—both in relation to health outcomes as well as to the use of medical care—is clearly significant and pervasive. It appears to make little difference whether a health system is public or private or, for that matter, anywhere between the two ends of this continuum. In an insightful book which compares the health systems in the United States and Britain, J. Rogers Hollingsworth compares a number of measures of inequality and asserts that "if class inequalities in access to care still exist in England and Wales, they are substantially less than in the United States or at earlier times."⁶⁴

However, the methodological problems of comparing inequalities in health make it extremely difficult to compare the degree of inequality between different health care systems. Indeed, in his concluding observations, Hollingsworth admits that "[t]he data here do not permit any definitive conclusions about the relationships between changes in the organization and technology of medical care services and changes in health across social classes and regions. . . ."⁶⁵

What, then, may one conclude from this analysis of inequalities in public versus private health systems? Certainly, evaluating health systems on the basis of the stronger equity criterion appears to resemble what Odin Anderson called "an endless search for the dream." In this sense, this criterion is an elusive goal, which makes it a "weak test" of a health system's capacity to achieve equitable access to medical care services. In contrast, the weak concept of equity is a "strong test"—at least with regard to the health care system in the United States—because it has been achieved in France, Canada and Great Britain.

NOTES

¹Odin W. Anderson, *Health Care: Can There Be Equity?* (New York: Wiley & Sons, 1972), Part IV, p. 161.

²For a review of this literature, see Diana B. Dutton, "Social Class, Health and Illness," in Linda Aiken and David Mechanic, eds., *Applications of Social Science to Clinical Medicine and Health Policy* (New Brunswick, NJ: Rutgers University Press, 1986), pp. 31-62.

³See, for example, Norman Daniels, "Equity of Access to Health Care: Some Conceptual and Ethical Issues," *Milbank Memorial Fund Quarterly* 60: 1 (Winter 1982): 51-81.

⁴See, for example, LuAnn Aday and Ronald Andersen, "Equity of Access to Medical Care: A Conceptual and Empirical Overview," *Medical Care* 19: 12 (Supplement 1981): 4-27.

⁵The only other attempts to study these issues in a cross-national perspective of which I am aware are: Pranlal Manga and Geoffrey R. Weller, "The Failure of the Equity Objective in Health: A Comparative Analysis of Canada, Britain and the United States," *Comparative Social Research* 3 (1980): 229-267; and Sir Douglas Black, et al., and Peter Townsend and Nick Davidson, eds., *Inequalities in Health: The Black Report* (New York: Penguin, 1982), chapter 5 (hereinafter, *The Black Report*). I have benefited greatly from both studies.

⁶A comprehensive survey of recent thinking on this issue may be found in the three volumes of the President's Commission for the Study of Ethical Problems in Medicine: Biomedical and Behavioral Research, *Securing Access to Health Care: A Report on the Ethical Implications of Differences in the Availability of Health Care Services* (Washington, D.C.: U.S. Government Printing Office, 1983).

⁷George Orwell, *Animal Farm* (New York: Harcourt, Brace & Co., 1946).

⁸For a helpful conceptual framework in analyzing equity in school financing, see Robert Berne and Leanna Stiefel, *The Measurement of Equity in School Finance* (Baltimore: The Johns Hopkins University Press, 1984).

⁹Daniels, op. cit. note 3; and Alain Enthoven, *Health Plan: The Only Practical Choice to the Soaring Cost of Medical Care* (Reading, MA: Addison-Wesley, 1980). See Enthoven's description of the Consumer Choice Health Plan at pp. 114-144.

¹⁰President's Commission, op. cit. note 6, Vol. 1, p. 4.

¹¹LuAnn Aday, Ronald Andersen and Gretchen V. Fleming, *Health Care in the U.S.: Equitable for Whom?* (Beverly Hills, CA: Sage Publications, 1980), p. 41.

¹²See, for example, Vicente Navarro, "The Public/Private Mix in the Funding and Delivery of Health Services: An International Survey," *American Journal of Public Health* 75: 11 (November 1985): 1318-1320; or Gordon McLachlan and Alan Maynard, eds., *The Public/Private Mix for Health* (London: The Nuffield Provincial Hospitals Trust, 1982).

¹³Victor Rodwin, "American Exceptionalism in the Health Sector: The Advantages of 'Backwardness' in Learning from Abroad," *Medical Care Review* 44: 1 (Spring 1987): 41.

¹⁴Alan Maynard and Alan Williams, "Privatization and the National Welfare State," in Julian LeGrand and Ray Robinson, eds., *Privatisation and the Welfare State* (London: George Allen and Unwin, 1984), pp. 95-110.

¹⁵Estimates of the number of the uninsured range from 15 to 20 percent of the population. In 1984, the *Current Population Survey* of the U.S. Bureau of the Census estimated that 35.1 million people, 17.1 percent of the population under age sixty-five, were without insurance. The percentage increases if one broadens the definition to include the underinsured and those otherwise medically disadvantaged. See Margaret B. Sulvetta and Katherine Swartz, *The Uninsured and Uncompensated Care: A Charitbook* (Washington, D.C.: National Health Policy Forum, George Washington University, 1986).

¹⁶For an overview of the French NHI system, see Victor Rodwin, "The Marriage of National Health Insurance and *La Médecine Libérale*: A Costly Union," *Milbank Memorial Fund Quarterly* 59: 1 (Winter 1981): 16-43.

¹⁷For an overview of Canadian national health insurance, see Spyros Andreopoulos, ed., *National Health Insurance: Can We Learn From Canada?* Sun Valley Forum on National Health (New York: John Wiley & Sons, 1975).

¹⁸*A National Health Service* (London: HMSO, 1944, Cmnd. 6502).

¹⁹President's Commission, op. cit. note 6, Vol. 1, p. 1.

²⁰Henry J. Aaron and William B. Schwartz, *The Painful Prescription: Rationing Health Care* (Washington, D.C.: Brookings Institute, 1984).

²¹Dumping patients has become a major public issue; at the time of this writing, a congressional committee is investigating allegations that some hospitals engage in this practice.

²²Robert J. Blendon, Linda Aiken, Howard Freeman, Bradford L. Kirkman-Liff and John W. Murphy, "Uncompensated Care by Hospitals or Public Insurance for the Poor: Does It Make A Difference?" *New England Journal of Medicine* 314: 18 (May 1, 1986): 1160-1163.

²³Karen Davis and Diane Rowland, "Uninsured and Underserved: Inequities in Health Care in the United States," *Milbank Memorial Fund Quarterly* 61: 2 (Spring 1983): 149-176.

²⁴Gail R. Wilensky and Marc L. Berk, "The Health Care of the Poor and the Role of Medicaid," *Health Affairs* 1: 4 (Fall 1982): 93-100.

²⁵Kenneth Thorpe and Charles Brecher, "Improved Access to Care for the Uninsured Poor in Large Cities: Do Public Hospitals Make A Difference?" *Journal of Health Politics, Policy and the Law* 12: 2 (Summer 1987): 313-324.

²⁶Blendon, et al., op. cit. note 22.

²⁷Howard E. Freeman, Robert J. Blendon, Linda Aiken, Seymour Sudman, Connie Mullinix and Christopher R. Corey, "Americans Report on Their Access to Health Care," *Health Affairs* 6: 1 (Spring 1987): 6-18.

²⁸Ronald Andersen, Meei-Shia Chen, LuAnn Aday and Llewellyn Cornelius, "Health Status and Medical Care Utilization," *Health Affairs* 6: 1 (Spring 1987): 136-156.

²⁹Evelyn M. Kitagawa and Philip M. Hauser, *Differential Mortality in the United States: A Study in Socioeconomic Epidemiology* (Cambridge, MA: Harvard University Press, 1973).

³⁰U.S. Department of Health, Education and Welfare, *Health of the Disadvantaged: Charitbook* (Washington, D.C.: U.S. Government Printing Office, Pub. No. (HRA) 77-628, 1977).

³¹U.S. Department of Health and Human Services, Public Health Service, National Center for Health Statistics, *Health: United States 1985* (Washington, D.C.: U.S. Government Printing Office, Pub. No. (PHS) 85-1232, 1985), p. 54.

³²Marcel Crozé, "Mortalité infantile des générations 1950-1951 et 1955 à 1960 suivant le milieu social et la résidence," *Études et Documents Démographiques*, No. 9 (Paris: INSEE, 1965); and Solange Hémery and Marie-Claude Gérard, "Mortalité infantile en France selon le milieu social," in International Union for the Scientific Study of Population, *Proceedings, International Population Conference 1973* (Liege: IUSSP, 1973), Vol. 3, pp. 171-184.

³³Data are based on a survey of eleven thousand births published by IN-SERM in 1980. See *Système de Soins et Solidarité: Les Inégalités Sociales et Géographiques et Quelques Contradictions dans le Fonctionnement Actuel du Système* (Paris: Documentation Française, 1981), p. 23.

³⁴Ibid.

³⁵Ursula M. Anderson, "Infant Survival Differentials in the City of Toronto: A Challenge to Health Planning and Research," *Canadian Family Physician* 16 (1970): 45-50.

³⁶Russell Wilkins, *L'Espérance de Vie Par Quartier À Montreal, 1976: Un Indicateur Social pour la Planification* (Montreal: Institute for Research on Public Policy, April 1979).

³⁷Robert Pampalon, *Géographie de la Santé au Québec* (Quebec: Government of Quebec, Ministry of Health and Social Services, 1985), pp. 287, 361 and 369.

³⁸See Avedis Donabedian, Solomon J. Axelrod and Leon Wyszewanski, eds., *Medical Care Charitbook*, 7th ed. (Washington, D.C.: AUPHA Press, 1980).

³⁹*The Black Report*, op. cit. note 5, p. 52.

⁴⁰Ibid., Table 10, p. 71.

⁴¹Data on the United States are routinely collected in the National Health Interview Surveys. For a thorough analysis of these data, see Paul Newacheck, Lewis Batler, Aileen K. Harper, Dyan Piontkowski and Patricia Franks, "Income and Illness," *Medical Care* 18: 12 (December 1980): 1165-1176. Data for Great Britain are routinely collected in the General Household Survey. See *The Black Report*, op. cit. note 5, Table 12, p. 73. For an analysis of similar data from Canada, see Russell Wilkins and O. Adams, *Healthfulness of Life: A Uni-*

fied View of Mortality, Institutionalization, and Noninstitutionalized Disability in Canada (Montreal: Institute for Research on Public Policy, 1978).

⁴²See Donabedian, et al., op. cit. note 38, for data on the United States (p. 35), England and Wales (p. 51) and Quebec (p. 53).

⁴³There is a wide range of methods for adjusting data on physician visits for differential health status. Each country has relied on its own. For example, in Great Britain, data from the General Household Survey on rates per thousand people of general practitioner consultations in a two-week period are divided by the prevalence rate per thousand people of chronic handicapping illness. In the United States, the National Center for Health Statistics collects data for a use-disability index that summarizes the ratio of mean physician visits to mean disability days for respective age and income groups.

⁴⁴Karen Davis, "Medicaid Payments and Utilization of Medical Services by the Poor," *Inquiry* 13: 2 (June 1976): 122-135.

⁴⁵Joel C. Kleinman, Marsha Gold and Diane Makuc, "Use of Ambulatory Care by the Poor: Another Look at Equity," *Medical Care* 19: 10 (October 1981): 1011-1029.

⁴⁶The survey was conducted in 1965 and 1966. See J. Devouassoux, B. Morel and D. Polton, "Recours Aux Soins et Inégalités de Santé," *Santé Sécurité Sociale—Statistiques et Commentaires* 3 (Mai-Juin 1982): 27-48; see especially Tableau 11, p. 39. Also see Michel Magdelaine, Andree and Arié Mizrahi, and George Rösch, "Un indicateur de la Morbidité appliqué aux données d'une enquête sur la consommation médicale," *Consommation* 14: 2 (Avril-Juin 1967): 3-41 (Centre des Recherches et de Documentation sur la Consommation).

⁴⁷Devouassoux, et al., op. cit. note 46, Tableau 9, p. 37.

⁴⁸Marc Gentilini, Gilles Brücker and Robert de Montvalon, *Le santé des migrants: rapport au ministre de Affaires sociales et de la Solidarité nationale, et au secrétaire d'Etat chargé de la Santé* (Paris: La documentation française, 1986), p. 42.

⁴⁹Robin B. Badgley, Robert W. Hetherington, V. L. Matthews and Marjorie Schulte, "The Impact of Medicare in Wheatville, Saskatchewan, 1960-1965," *Canadian Journal of Public Health* 58: 3 (March 1967): 101-108.

⁵⁰R. G. Beck, "Economic Class and Access to Physicians' Services and Public Medical Care Insurance," *International Journal of Health Services, Planning, Administration, Evaluation* 3: 3 (Spring 1973): 341-355.

⁵¹Philip E. Enterline, Vera Salter, Alison D. McDonald and J. Corbett McDonald, "The Distribution of Medical Services Before and After 'Free' Medical Care—The Quebec Experience," *New England Journal of Medicine* 289: 22 (November 29, 1973): 1174-1178.

⁵²Statistics Canada, *Distributional Effects of Health and Educational Benefits in Canada, 1974* (Ottawa: Queen's Printer, 1977).

⁵³Jack Siemiatycki, Lesley Richardson and Ivan Barry Pless, "Equality in Medical Care under National Health Insurance in Montreal," *New England Journal of Medicine* 303: 1 (July 3, 1980): 10-14.

⁵⁴Even after Medicare, the emergency room remains the usual source of care for a disproportionate share of the lower social classes in Montreal. See Nicholas Steinmetz and John R. Hoey, "Hospital Emergency Room Utilization in Montreal Before and After Medicare," *Medical Care* 16: 2 (February 1978): 133-199.

⁵⁵*The Black Report*, op. cit. note 5, p. 96.

⁵⁶Elizabeth Collins and Rudolf Klein, "Equity and the NHS: Self-Reported Morbidity, Access and Primary Care," *British Journal of Medicine* 281 (October 25, 1980): 1111-1115. The other studies include J. Brotherston, "Inequality: Is It Inevitable?," in C. O. Carter and John Peel, eds., *Equalities and Inequalities in Health: Proceedings of the 12th Annual Symposium of the Eugenics Society* (London and New York: Academic Press, 1976); and D. P. Forster, "Social Class Differences in Sickness and General Practitioner Consultations," *Health Trends* 8: 2 (May 1976): 29-32. See also *The Black Report*, op. cit. note 5, Table 13, "Use/Need Ratios by Social Group," p. 77.

⁵⁷Richard Morris Titmuss, *Commitment to Welfare*, 2nd ed. (London: Allen & Unwin, 1968).

⁵⁸*The Black Report*, op. cit. note 5, pp. 81-84; and Margaret Bone, *Family Planning Services in England and Wales: An Inquiry Carried Out on Behalf of the Department of Health and Social Security* (London: HMSO, 1973).

⁵⁹Ann Cartwright, *Parents and Family Planning Services* (London: Routledge & Kegan Paul, 1970).

⁶⁰See John S. Bulman, et al., *Demand and Need for Dental Care* (Oxford, England: Oxford University Press, 1968); and P. G. Gray and the Department of Health and Social Security, *Adult Dental Health in England and Wales in 1968* (London: HMSO, 1970).

⁶¹Ann Cartwright, *Human Relations and Hospital Care* (London: Routledge and Kegan Paul, 1964); Ann Cartwright and Maureen O'Brien, "Social Class Variations in Health Care and in the Nature of General Practitioner Consultations," in Margaret Stacey, ed., *The Sociology of the National Health Service*, Sociological Review Monograph No. 22 (Keele, England: University of Keele Press, 1976), pp. 77-98.

⁶²For data on the United States, see Joel Kleinman, "Medical Care Use in Nonmetropolitan Areas," in U.S. Department of Health and Human Services, Public Health Service, National Center for Health Statistics, *Health: United States 1981* (Washington, D.C.: U.S. Government Printing Office, Pub. No. (PHS) 82-1232, 1981), pp. 55-61.

⁶³See endnote 43.

⁶⁴J. Rogers Hollingsworth, *A Political Economy of Medicine: Great Britain and the United States* (Baltimore: The Johns Hopkins University Press, 1986), p. 191.

⁶⁵*Ibid.*, p. 215.