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WHO GETS HEALTH CARE?

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ABSTRACT

Around the world, as in the United States, concern is growing about who gets health care. Individuals from different socioeconomic backgrounds face distressingly different prospects of living a healthy life. Disparities in various measures of health between the privileged and the deprived still remain wide, despite the long-term tendency toward a healthier society. Some investigators believe the shift in the health care system in industrial countries from the principle of universal access to a more market-oriented system may be one cause of the growing disparities; rising income inequality is another potential culprit. Policy makers worldwide speak of more efficiently delivering "essential" health care---but disagree on what counts as essential and on the optimal mix of private and government components of service. After reviewing the economic and epidemiological literature on disparities in health and health care systems, the question of how to define "essential" health care is considered. The paper concludes with a discussion of the policy implications of the analysis.

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Who Gets Health Care?¹

Around the world, as in the United States, concern is growing about who gets health care. Individuals from different socioeconomic backgrounds face distressingly different prospects of living a healthy life. As numerous studies confirm, the disparities in various measures of health between the privileged and the deprived still remain wide, even in rich countries, despite the long-term tendency toward a healthier society.

Some investigators believe that the disparities are actually increasing. They suggest that the shift in the health care system in advanced industrial countries from the principle of universal access to a more market-oriented system may be one cause of the growing disparities they observe; rising income inequality is another potential culprit.

Policy makers worldwide meanwhile speak of more efficiently delivering “essential” health care, but nobody is certain what this means in practice.

What counts as “essential” in health care? What is the optimal mix of private and government components of health care services?

It is these questions that we wish to explore in more detail. After reviewing the economic and epidemiological literature on disparities in health and health care systems, we will tackle directly the question of how to define “essential” health care—and then explore the policy implications of our analysis.

* * *

In the United States, substantial socioeconomic differences in illness and death rates have been observed.² Pappas et al. found that these disparities not only vary widely by the level of education but that they increased between 1960 and 1986 for both men and women.³

Growing inequalities in well-being and access to health care have been reported for other

nations, too. In Britain, recent surveys of individuals have provided extensive evidence of socioeconomic disparities in the prevalence of illness, the probability of long-term limiting illness, perinatal deaths, low birth weight, and stillbirth risk.⁴ In Denmark, it was observed that illness and death due to cardiovascular disease was promoted by inequalities in income. Moreover, this disparity rapidly increased between the early 1980s and 1990s.⁵ Socioeconomic differences in death rates in Rome rose during the early 1990s.⁶ In China, Liu et al. found that gap in levels of health between urban and rural residents widened between 1985 and 1993 in spite of rapid economic growth.⁷ Disparities have also increased in less serious conditions. Thus, while overall oral health had improved in Norway, the disparities in the treatment of cavities by socioeconomic group had increased from 1983 to 1994.⁸

In recent years, with growing public attention to the problem of health inequalities, a huge literature has accumulated regarding the link between socioeconomic factors and health. Among various lines of recent research, the influence of income inequality on health is perhaps the most popular area. Over the last decade, a series of studies have provided evidence that the extent of income inequality in society is negatively associated with the health status of citizens, based on cross-sectional comparisons between and within countries.⁹

These empirical findings led to a controversy over the pathway through which income inequality affects individual health status. Wilkinson and his collaborators largely focus on the negative effect of psychosocial stress resulting from the perceptions of relative deprivation and the disruption in social cohesion that are more prevalent in unequal societies.¹⁰ This hypothesis is substantiated by the finding that more egalitarian societies exhibit more cohesion, less violence, lower homicide rates, more trust, lower hostility scores, and more involvement in community life.¹¹ On the other hand, Lynch and his colleagues emphasize that the effect of income

inequality on health reflects a combination of high levels of exposure to disease, combined with systematic underinvestment in education, housing, income, and public and private sanitation.¹²

A number of studies have raised concerns about the validity of the empirical relationship between income inequality and health.¹³ Deaton recently suggested that there is no evidence that income inequality affects individual health.¹⁴ According to his study, previous evidence on international comparisons is weakened by the lack of adequate data on health for some countries and of comparable data for others. The link between income inequality and health that is observed in cross-sectional U.S. data becomes insignificant once various effects of population composition, especially the effect of race, are considered. Deaton argues that it is the level of a country's income, rather than the degree of inequality, that is crucial.

Inequality in health care is regarded as another potential determining factor of disparities in health status. Many blame the rising inequality in health care for the trend toward a greater inequality in health. A large number of studies suggest that the extent of inequalities in access to and quality of health care is large. Gabel notes that the coverage of job-based health insurance in the U.S. declined between 1977 and 1998, particularly among low-skilled, marginal workers, because of the decline in real wages among low-skilled workers, a 2.6-fold real increase in the cost of health insurance, and a 3.5-fold nominal increase in the cost of health insurance.¹⁵ A survey by Fiscella et al. suggests that, even among those with health insurance, lower socioeconomic position is associated with receiving fewer mammograms, childhood and influenza immunizations, and diabetic eye examinations, later enrollment in prenatal care, and lower quality of ambulatory and hospital care.¹⁶

Inequality in health care is also widely observed outside the United States. In Britain, doctors serving poor populations had significantly lower rates of utilization of more advanced

technologies such as angiography and revascularization in coronary artery surgery.¹⁷ There is substantial inequality of access to Occupation Health (OH) service provisions in the National Health Service (NHS).¹⁸ In Australian dentists' offices, uninsured patients and those visiting for emergencies had less favorable service patterns, such as higher rates of extractions but lower rates of preventive and crown and bridge services.¹⁹ In eight developing countries, including Burkina Faso, Guatemala, Kazakhstan, Kyrgyzstan, Paraguay, South Africa, Thailand, and Zambia, Makinen et al. found that richer groups were more likely to obtain care when sick, to be seen by a doctor, and to receive medicines when they are ill, than poorer groups.²⁰ An interesting exception to these usual patterns of health care disparities is New Zealand, where the poor were found to receive either appropriate or slightly excessive use of services given their estimated health needs. This may be explained by the effects of a continued restructuring of the New Zealand public health system that focuses on providing decent minimum care.²¹

Some investigators believe that disparities in health delivery are increasing.²² Since the demand for health care has a relatively large income elasticity (defined as the percentage increase in health expenditures brought about by a 1-percent increase in income), a widening of the income gap between rich and poor would produce an even greater disparity in expenditure on health delivery. Additionally, as implied by the finding of Shi et al., a rise in income inequality in a locality may undermine primary healthcare provisions, especially for its poorer residents.²³ Finally, advances in medical technologies could produce a greater extent of inequalities in health care as well as health status. Because more educated people tend to take better care of themselves and more shrewdly utilize the health care system, according to a recent study by Goldman and Lakdawalla, reductions in the price of health care or expansions in the overall demand for health inputs may disproportionately benefit the well educated.²⁴

* * *

As this review of the literature on health reveals, economists and epidemiologists are primarily focused on empirical issues: establishing the facts on differences in health and health care by socioeconomic status, and measuring the impact of inequality on health outcomes. Discussions of such normative issues as how much of national resources ought to be devoted to health care or how these resources ought to be distributed within the population are left largely to legislatures and to various specific-interest organizations and think-tanks.

International organizations such as the World Health Organization (WHO) and the Organization for Economic Co-operation and Development (OECD) have called on all countries to guarantee delivery of “high-quality essential care to all persons, defined mostly by criteria of effectiveness, cost and social acceptability.”²⁵ Cost has become a controlling issue since the health care systems established in most OECD countries after World War II, which sought to guarantee complete health care for all through government-run health or insurance systems, have become too expensive, and now threaten the fiscal stability of governments. As incomes rose, the public demand for health services increased much more rapidly than income (because of the high income elasticity of the demand for health care), making the cost of operating such systems unsustainable.

The new systems of “essential care,” now in the course of construction in OECD countries, recognize the necessity of explicitly establishing priorities among health interventions (rather than unlimited coverage), which means that it has become necessary to ration health care services much more tightly than was previously conceded. In order to guarantee that the health of the poor is not neglected under the new system, WHO proposes three principles: health care services should be prepaid (i.e., taxes for health care should be collected throughout the working

life, even though the need for services is relatively low during young adult and middle ages); those who are healthy should subsidize those who are sick (which means that taxes should not be adjusted to reflect differential health risks, as policy rates often are under private insurance); and the rich should subsidize the poor (which means both that the rich should pay higher health taxes than the poor and that the quality of service in government-run programs should be no better or more comprehensive for privileged groups).²⁶

This recommended standard explicitly recognizes that privately funded health programs and private insurance will need to provide a major part of a nation's health services. Since persons in the upper half of income distributions tend to spend more on health services than poorer people do, the distribution of health services is bound to be unequal. In fact, all OECD countries currently have mixed private and governmental systems, ranging from about 85 percent of total expenditures made by the government in Great Britain to about 45 percent in the United States.²⁷ It is likely that the reforms now in progress will generally increase the private share of health care services.

There is no clear agreement currently on the optimal mix of private and government components of health care services? There is not much of a literature on this question, nor is there a consensus on the criteria that should be invoked to resolve the issue. Moreover, conditions vary so much from country to country that the optimal mix cannot be the same for all countries.

In very poor countries, where the need for health care services is great, the average annual level of per capita expenditures from both sources is shockingly low. In such countries as Ethiopia, Haiti, Indonesia, and Nepal, annual per capita expenditures range between \$20 and \$56 (using international dollars, which adjust exchange rates for the domestic purchasing power of a

country's currency). In India, the figure is a still a very low \$84 and in China it is \$74. By contrast, the figures for the five largest countries of Western Europe are: France \$2,135, Germany \$2,365, Italy \$1,824, Spain \$1,211, and the United Kingdom \$1,193. Annual per capita expenditures in the United States on health care, \$3,724, are more than three times the British figure and more than 1.5 times the German figure. The spending of the typical American in 10 days exceeds the average *annual* expenditures of people living in countries with more than three-fifths of the world's population.

The fact that the Europeans spend so much less on health care than Americans has led some critics to argue that the American system is wasteful. This contention is often buttressed by the fact that American disability-adjusted life expectancy at birth is less than that of France, Spain, Italy, the United Kingdom, and Germany. If all those extra dollars spent by Americans are not buying better health and longer lives, what are they buying?

It is not yet possible to provide an adequate answer to that question. It is often assumed that the increase in longevity over the past two or three decades is due primarily to the increased amount and quality of health care services. There is no doubt that medical interventions have saved many lives, especially in such areas as infectious diseases, cancer, and heart disease. However, we cannot yet say how much of the six or so years of increase in life expectancy since 1970 is due to medical interventions and how much is due to better levels of education, improvements in housing, and other factors that contribute to the increase in life expectancy.

Some recent findings suggest that most of the huge increase in life expectancy since 1900 is due to the large investment in public health programs between 1880 and World War II that cleaned up the water and milk supplies, developed modern waste disposal systems, reduced air pollution, and improved nutritional status.²⁸ Of course these public health programs were made

possible by advances in medical knowledge. But the research behind these public health advances represents a relatively small part of what is included in the category of “health expenditures.” In the United States, for example, medical research (not including R&D of drug companies and providers of medical equipment and supplies) adds up to just 1.7 percent of U.S. national health expenditures.

Since deaths due to infectious diseases are now a small proportion of total deaths, it might seem that environmental improvements that were so important in reducing health risks before 1950 have been exhausted. Such a conclusion is premature. A series of recent studies has reported a connection between exposure to stress (biological and social) in early life, including insults *in utero* and during infancy, with the onset of chronic diseases at middle and late ages, and with life expectancy. The strongest evidence for such links that has emerged thus far is with respect to hypertension, coronary heart disease, and type II diabetes.²⁹ A review by Law and Shiell of 32 papers dealing with the relationship between birthweight and hypertension showed a tendency for middle-aged blood pressure to increase as birthweight declined.³⁰ Evidence of a connection between birth size and later coronary heart disease has been found in England, Wales, Sweden, India, and Finland.³¹ The volume of studies confirming the impact of insults during developmental ages on health in later life has increased substantially since 1994.³²

One of the strongest recent confirmations of the impact of early life events on longevity is a study reporting a statistically significant relationship between longevity after age 50 and week of birth for cohorts born between 1863 and 1918. In the northern hemisphere, average length of life is shortest for those born in the second quarter of the year and longest for those born in the fourth quarter. In Australia, the relationship between birth month and longevity exists but the peak and trough are the mirror image of that in the northern hemisphere.³³ This

result, which is apparently related to seasonal variations in nutritional status, has also been found in the Union Army data for cohorts born between 1820 and 1850.³⁴ Consequently, we cannot rule out the proposition that one of the biggest factors influencing the prevalence rates of the chronic diseases among the elderly in 2001 (and which accounts for a huge slice of national medical expenditures), was their exposure to environmental insults half a century, or more, ago.

These new scientific findings are directly relevant to the problem of how to define “essential” health care and how to divide the national budget for health (regardless of how it is financed) among competing needs. It may well be that a very large increase in expenditures on antenatal care and pediatric care in infancy and early childhood is the most effective way to improve health over the entire life cycle, by delaying the onset of chronic diseases, alleviating their severity if they do occur, and increasing longevity.

Whatever the virtues of such a strategy, it raises the issue of intergenerational bias. This strategy gives a preference to the unborn and the very young over the immediate needs of the elderly. It is a kind of double blow to needs of the elderly, who are now suffering from the early onset of chronic conditions and premature disability because of environmental insults they incurred *in utero* and early childhood. Yet, under a strategy that emphasizes antenatal and early childhood care, in order to make new generations better off throughout their life cycles, the elderly of today will be asked to restrain their demand for relief.

It is much easier to define “essential care” in the impoverished nations of the world, because their alternatives are so stark. They are still suffering from deadly killers and cripples, virtually eliminated from OECD nations, that can be vanquished at quite modest costs compared to the expensive procedures routinely used to deal with more moderate complaints in rich countries. The prospects of the poorest billion in the Third World can be “radically improved by

targeting a relatively small set of diseases and conditions.”³⁵

The urgent needs include the distribution of drugs to combat tuberculosis, malaria, and acute gastrointestinal and respiratory infections; vaccines to prevent measles, tetanus and diphtheria; and improved nutrition in order to revitalize immune systems, reduce perinatal deaths, lower death rates from a wide range of infectious diseases, and improve the functioning of the central nervous system. The Commission on Macroeconomics and Health (CMH) of the World Health Organization has estimated that 87 percent of deaths among children under age 5, 71 percent of deaths between ages 5 and 29 and 47 percent of deaths between ages 30 and 69 can be avoided by making use of available drugs and vaccines, by the delivery of vital nutrients, and by public health programs aimed at producing safe water supplies, improved sanitation, and improved health education. CMH estimates that donations from private and public sources in OECD countries, amounting to just 0.14 percent of their combined GDP, will be enough to realize these opportunities rapidly.

Defining “essential care” for the United States is more problematic because the technologies needed for rapid and dramatic improvements in health and longevity are still on the drawing board, in contrast to poor countries where the problem is how to deliver effectively known health technologies. To clarify the issue of “essential care” in a country where per capita expenditures on health exceed those of poor nations by 50 to 150 times, it is necessary to consider exactly what it is that our luxurious (even by European standards) expenditures are buying.

Saving lives, as important as it is, and as effective at it as modern medicine has become, is not the main activity of physicians and other health professionals. As I have already indicated, it is likely that past public health reforms, improvements in nutrition and other living standards,

and the democratization of education have done much more to increase longevity than has clinical medicine. The main thing that physicians do is to make life more bearable: to relieve pain, to reduce the severity of chronic conditions, to postpone disabilities or even overcome some of them, to mend broken limbs, to prescribe drugs, and to reduce anxiety, overcome depression, and instruct individuals on how to take care of themselves.

Europeans are much more willing than Americans to stint on “unnecessary” services, on procedures that are “optional” rather than “vital,” on conveniences rather than necessities, on small rather than large reductions in risk, and on wide choice rather than limited choice or no choice (take it or leave it). Consider the issue of queuing, one of the principal devices employed by public health systems in Europe to keep demand from exceeding politically negotiated budgets. Americans are unwilling to wait two years or more for a hernia operation, as is now the case in Britain, but demand that such a service be available quickly, in a few weeks in most cases. Americans chafe at another favorite European device to control costs: rationing. They do not want to be told that they are too old or too fit or not fit enough to be eligible for some course of treatment. Nor are they willing to have their access to specialists sharply curtailed, and so the ratio of specialists to primary care physicians is much higher in the U.S. than elsewhere. They also resist hasty impersonal examinations and denial of access to inpatient hospital care.³⁶ And the rich insist on being allowed to spend as much on health care as they desire, even if some of these expenditures are wasteful.

And so the United States has some 6,000 hospitals, while Britain’s National Health Service has only 430 very large hospitals (beds per capita are similar in both countries).³⁷ Every substantial suburban community in the U. S. demands its own facility with a wide range of services. Today, not just research hospitals, but many community hospitals have on staff

physicians who specialize in heart bypass surgery and other high-tech procedures. Since Americans like to save a buck as much as Europeans, they are willing to join HMOs, but HMOs have found that to be competitive they have to offer numerous options on co-payments, access to physicians outside of the primary network, and self-referral to specialists. Americans also demand the option to change health plans if they are dissatisfied. Such options cost money, among other things because they increase the cost of administration, even if they do not improve health outcomes.³⁸

The American passion for such individually tailored health services may be attributed to American culture: the wide-open spaces, evangelical religion, and hostility to government. But it also reflects income. The average American, after all, is fifty percent richer than the average British person. Hence, it is not strange that they are willing to consume services that are too expensive for poorer people. Americans are no more self-indulgent in their purchases of health care than they are in their purchases of appliances or cars.³⁹

And so, what is viewed as “essential” health care in the United States includes items that in other cultures would be regarded as wasteful luxuries. This misunderstanding of the American system is relevant to the proposition that 15 percent of Americans are “uncovered” by health insurance. “Uncovered” does not mean that they are untreated. The uninsured see doctors almost as frequently as the insured. Nor is it clear that the effectiveness of their care is always less than those who have insurance. The uninsured are treated in public clinics and in emergency rooms, which (although they lack the conveniences of insured care and may have long queues) provide competent services, both standard and high tech.⁴⁰

Although access to health care matters, insurance does not guarantee adequate access. Moreover, while some of the uninsured in the U. S. system are in poorer health than the insured,

others are in prime ages, have relatively good health, and prefer to self-insure. An important but poorly addressed issue is how different attitudes toward risk influence the insured and the uninsured in deciding when and where to seek health care. This issue is important when considering solutions to those who are under-served in health care, since under-service of the poor also exists in countries with universal health insurance.⁴¹ If the poor and the young are willing to accept higher health risks than are the rich and the elderly, merely extending entitlements may not be adequate. An aggressive outreach program, targeted at those who fail to take advantage of entitlements, may be required.

* * *

The most effective way to improve the health system for the poor is by identifying their most urgent needs and designing an effective way of ministering to those specific needs. This goal will not be met merely by equalizing the annual number of visits to doctors (since the rich often waste medical services) or the annual expenditures on drugs (since the rich often overmedicate). Focusing on the specific needs of the poor may not save money but it will insure that whatever is spent is properly targeted.

In this spirit, the most cost-effective way to help the poor would be an expansion of prenatal and postnatal care targeted particularly at young single mothers. The priority is suggested by the new evidence that proper nutrition, including supplements of such key nutrients as folate and iron, can reduce perinatal deaths and birth defects, including damage to the central nervous system. This would include counseling pregnant women on the dangers to the fetus from smoking and consumption of alcohol, on the benefits from proper diets, regular and early examinations, and exposing the fetus to a stimulating environment (music and conversation). A focus on young, single mothers makes sense not only because they are among the most needy,

but also because there is now persuasive evidence that insults *in utero* that reduce birth weight and length, as well as inadequate weight gains in infancy, greatly increase health risks throughout the life cycle.

A second priority is improved health education and mentoring to enable poorly educated people, both young and old, to identify their health problems, to be able to follow instructions for health care, to properly use medication, and to involve them in social networks conducive to good health. It not enough to wait for such individuals to seek out available service. Outreach programs can be developed to identify the needy individuals and this can be done in the most cost-effective way by organizations already experienced in outreach, so that they can include health screening and counseling among their services. Systems for monitoring the effectiveness of such community organizations also need to be established.

Another priority is the reintroduction into public schools, particularly those in poor neighborhoods, from nursery school through the twelfth grade of periodic health screening programs, using nurses and physicians on a contract basis. Personnel could be employed to insure that parents understand the nature of their children's problems and who can direct the parents to public health facilities that can provide appropriate services.

A fourth initiative is the establishment of public health clinics in underserved poor neighborhoods that can supplement the emergency rooms of regular hospitals, which are a frequent source of routine health care services for the poor and near poor.⁴² Convenient access is a key issue, because even individuals with insurance, such as those on Medicaid, fail to take advantage of available facilities because they are inconvenient. Time is a cost to the poor as well as the rich, and lack of convenient facilities may cause individuals to accept higher health risks than they would otherwise choose. The mission of community clinics could include health

education in addition to treatment. Community clinics need to be regularly monitored to insure their effectiveness. Basements of churches, and space in public schools after normal teaching hours can be good locations for community clinics both because they help to stretch available funds and because they provide familiar settings.

Readers may be surprised that we have not emphasized the extension of health insurance policies to the 15 percent of the population not currently insured. The flap over insurance has more to do with taxation than with health services. Keep in mind that a large portion of the poor are already entitled to health care under Medicaid and that the near poor often receive free health care through county or city hospitals and emergency rooms. What they do not do is pay taxes for those services. Most proposals for health insurance imply the taxation of their wages for services they already receive. Such insurance may relieve the pressure on the public purse but it will not guarantee better health care. We believe that health screening in schools and community clinics has a better chance at success than unexercised theoretical entitlements.

Finally, any consideration of how to reduce health inequality must involve a reconsideration of America's obligation to increase its contribution to the international campaign to bring vaccines and other products to children and adults whose lives can be saved, if there is the international will to do so. The lack of access to such products in the poorest fifty or so countries is the most glaring instance of inequality in the global health system and a lingering threat to the health of those in rich countries.

The large advances in life expectancy in China and other emerging economies show that it is not necessary to wait for industrialization to be completed before making major advances in health and longevity. Modern methods of sanitation and other public health programs can be introduced at modest cost. Cleaning up the water supply, improving the distribution of basic

nutrients, draining swamps and otherwise disrupting vectors of disease, and improvements in waste disposal can be achieved quickly and cheaply, as has been demonstrated by China, Indonesia, and Malaysia.⁴³ OECD nations can help speed up the process in countries still lagging behind by training public health officials, helping to supply vital nutrients to pregnant mothers and infants, and by helping to supply antibiotics and other vital drugs and vaccines.

A particularly urgent issue is posed by the worldwide pandemic of HIV/AIDS. Although death rates from AIDS have recently declined in the United States and other OECD nations, AIDS is ravaging Africa.⁴⁴ Of the three million individuals worldwide who died of AIDS in 2000, more than two million lived in Sub-Saharan Africa. Although rates of infection are still relatively low in India and China, they are at risk of a rapid escalation in the spread of the infection. Public campaigns to inform the populations of these countries of the threat of this disease, of means of reducing the odds of infection, and of available treatment for those already infected can be effective. OECD and international agencies can provide both money and skilled personnel to confront AIDS and other deadly infectious diseases, and to help provide vaccines and other drug therapies to those who need them. One important way to help is by increasing the R&D budgets of the OECD nations into diseases that afflict the poor countries of the world. It is not only morality but also self-interest that argues for these measures. Epidemics in the Third World can spread to OECD nations.

NOTES

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