Making health systems more equitable

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Health systems are consistently inequitable, providing more and higher quality services to the well-off, who need them less, than to the poor, who are unable to obtain them. In the absence of a concerted effort to ensure that health systems reach disadvantaged groups more effectively, such inequities are likely to continue. Yet this situation need not be accepted as inevitable, for there are many promising measures that might be pursued: establishment of goals for improved coverage in the poor, rather than in entire populations, and use of those goals to direct planning toward the needs of the disadvantaged; use of one or more of the several techniques that seem to have been effective in at least some of the settings where they have been tried; and empowerment of poor clients to have a more central role in health system design and operation.

If access to health services were distributed according to need, the poor would come first. But they do not. Rather, the "inverse care law",¹ initially described in this journal more than 30 years ago, remains alive and well, and, as a result, "the availability of good medical care tends to vary inversely with the need for it in the population served".¹

The greater health needs of the poor than of the rich have been amply documented over the years, through studies on health status differentials between disadvantaged and well-off population groups. Best known are the differences between poor and rich regions of the world eg, the nearly 30-fold differences in under-5 mortality between Africa and Europe.² But important differences between well-off and disadvantaged groups also exist within countries: death rates are twice as high in black than in white working-age adults in the USA,³ almost three-fold as high in unskilled workers as in professionals in the UK,⁴ and nearly twice as high, on average, in infants and children in the lowest economic 20% than in the highest 20% of the population in the 56 developing countries covered by a recent review.⁵

Disparities with respect to access to health systems are in the opposite direction, with the well-off faring far better than the disadvantaged. Disparities in regions are indicated by per person health expenditure figures, which were well over 100-fold as high (US2736 vs 21) in the 960 million people in the world's high-income countries than in the 2.5 billion living in low-income nations.⁶ Within the developing countries that are of principal interest here, disparities are less pronounced, and they vary greatly from place to place and from sector to sector within the health system. However, these disparities are almost always regressive, or pro-rich. This fact can be seen from the information available about the public and private components of health systems, and about specific services that health systems deliver.

Public and private components of health systems

The growing attention paid to government services of developing countries over the past few years has produced a set of findings that indicate clearly that such services usually favour the better-off. The record of private services has not been nearly so well established, but they seem to be even more oriented toward higher-income groups.

The attention given to government services has focused especially on curative care provided through government facilities supported by general tax revenues. Performance in this part of the health system has attracted interest not only because of its size, but also because of the equity rationale often used to justify government involvement. As can be seen from table 1, rationale and reality usually diverge-ie, although governments may claim that they provide services to ensure that the poor are reached, their health service subsidies tend to provide considerably greater benefits to the welloff. The situations in 21 countries (or areas within countries) were covered in a 2003 review (Argentina; Armenia; Bangladesh; Bulgaria; Colombia; Costa Rica; Côte d'Ivoire; Ecuador; Ghana; Guinea; Honduras; India; Uttar Pradesh state, India; Indonesia; rural Kenya; Madagascar; Nicaragua; South Africa; Sri Lanka; Tanzania; and Vietnam).⁷ The top 20% of the population gained on average over 26% of total financial subsidies provided through government health expenditures, compared with less than 16% in the lowest 20% of the population. Only four of these countries-all in Latin America-show a progressive pattern of subsidies through government-provided curative services. But in that region, government-provided services are usually accompanied by a large, highly regressive, governmentsponsored social security system that provides services to formal sector employees and their families.

The record with respect to preventive services that are publicly supported is less clear. However, with the dominant role of government in immunisation programmes, the notable rich-poor differences with respect

	Percentage of total subsidy to		Number of countries or regions where subsidy to lowest 20% of population is			
	Lowest 20% of population	Highest 20% of population	Less than subsidy to highest 20%	Same as subsidy to highest 20%	More than subsidy to highest 20%	
All health expenditures	15.9%	26.4%	15	2	4	
Primary health care expenditures only	18.8%	19.7%	12	0	9	
Source: Data for 21 developing or transitional countries, or regions within countries (reference 7).						

Table 1: Subsidies from government health services accruing to highest and lowest 20% of a country or

region's population

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Figure 1: Coverage of public and private health services in lowest wealth quintile in developing and transitional countries (A) and ratio of coverage levels between highest and lowest wealth quintiles (B) Vertical bars=unweighted averages for 51–56 countries, dependent on service. Source: reference 5.

to immunisation coverage, discussed below, suggest a regressive pattern in at least this component of prevention.

Information about the private component of country health systems is sparse, and such information that does exist deals mainly with specific services rather than with the record of the private component as a whole. This information points to considerably greater inequalities in private than in government services. Figure 1 shows data for four basic maternal and child health services in around 50 developing and transitional countries, separated by type of service provider. For each of the four services, private facilities or providers treat far fewer cases in the poorest segment of the population than do public facilities (figure 1 A). The most extreme example is facility-based deliveries: the few women in the poorest 20% of the population who deliver in medical establishments are about ten-fold more likely to use government than private facilities. Also, the distribution of people using private facilities or providers is heavily skewed toward the well-off (figure 1 B). For all four services, the ratio between the highest and lowest 20% of the population is over twice as high for private than for public providers.

However, these data refer to only the higher, possibly non-representative, part of what is a heterogeneous sector. Private services are provided not only through the advanced facilities or providers covered in figure 1, but also through other very different private sources such as traditional healers, pharmacies, and untrained village midwives. Although the quality of care supplied by such providers can be questioned, their clients might well be more concentrated in disadvantaged groups.

Further, the data in figure 1 do not distinguish between private profit-making entities and non-profit providers, and the latter are often much more concerned with reaching the poor than are profit-making entities. The non-governmental, not-for-profit sector is often assumed to be much more progressive than government services. This may well be the case, for at least part of the not-for-profit sector. Yet firm evidence is sparse, and there are many capital cities in the developing world with large, advanced medical facilities registered as non-profit institutions oriented mainly toward upper-class clienteles. In at least two countries, Tanzania and Zambia, this type of facility seems prominent enough to make the overall coverage pattern of non-governmental facilities (ignoring possible differentials in the fees charged to the well-off and the poor) notably more regressive than that of the country's governmental services.89 How typical this is cannot be established without a more careful and systematic look at non-governmental services, which have hitherto been largely exempt from the careful scrutiny given to governmental services through studies like those in table 1.

Specific services delivered through health systems

Maternal and child health services, for which the most detailed information is available, are usually regressive. This also seems to be the case for most chronic disease programmes. Primary care, although regressive in most countries, generally seems less so than higher-level services. The most complete set of information about the use of maternal and child health services is summarised in figure 2. The data presented show the coverage rates, from public and private programmes together, for six of these services in about 50 countries in Africa, Asia, eastern Europe, and Latin America. All are basic services directed toward issues of importance for the poor, and that thus typically feature prominently in health programmes intended for disadvantaged population groups. Yet all are regressive, with fuller coverage in the best-off than in the poorest 20% of the population. (Sex differences are less obvious. Coverage rates for boys and girls in most regions are within two to three percentage points of one another, with rates in boys being usually, but not always, higher than in girls.)

Only patchy information exists about coverage rates attained by programmes directed against diseases in adults; however, that information suggests, or at least hints, that the pattern for those programmes is similar to that of the maternal and child health initiatives just described. For instance, men and women in the poorest 20% of the population in about 15 developing/transition countries with available data are on average only around a third as likely to have received counselling or testing for HIV/AIDS as men or women in the population's best-off 20%.5 Results from studies of five adult health programmes in Pelotas, Brazil, showed that three (Pap smear, mammography, and breast examination by a doctor) were highly regressive, one (influenza immunisation for people aged over 60 years) reached people in all socioeconomic groups about equally, and coverage of a fifth (diabetes screening) was higher in middle groups than in either high or low ones.10 Findings from a study in South Africa showed that people in the highest socioeconomic 30% of the population with hypertension were more than twice as likely to have received the treatment needed to control this condition than people in the lowest 40% (although the rate of control was very low in even the highest group).¹¹

Whatever the type of disease concerned, all levels of care-primary and secondary and higher-are usually regressive. However, poor-rich differences seem much larger for higher-level than for primary care. At least, such is the case with respect to the government services covered in table 1. In the 21 countries/areas described, the top 20% of the population received on average only a marginally higher share of benefits from primary care expenditures (20% vs 19%), whereas, as noted earlier, the share of benefit from total expenditures was notably greater in the highest than in the lowest 20% of the population (26% vs 16% of benefits). This finding implies that the distribution of health care expenditures on services other than primary care-mostly higher-level services-would be even more skewed toward the best-off than total expenditures.



Figure 2: Use of health services by lowest and highest wealth quintiles in developing and transitional countries

Vertical bars=unweighted averages for 51–56 countries, dependent on service. Source: reference 5.

The nature of the challenge

Judged by the standard definition of health service equity, which suggests that access to services should correspond to the need for them, the situation just described is clearly inequitable. So inequitable, some might plausibly argue, that drastic measures are called for to redistribute existing health services to right the imbalance-perhaps by closing down government hospitals in high-income urban areas and applying the recurrent cost savings to the distribution of free basic pharmaceuticals in poor rural communities. Valid as such an argument might sound in principle, however, its viability is questionable, since few politicians seem likely to risk anything so extreme. A less radical, but still ambitious approach would be to focus more on changing the future than the present, in order to ensure that most of any increment in health services flows to the poor, thereby producing a shift over time in a more equitable direction.

The nature and magnitude of the challenge that this approach means can be seen by looking at how much the poor might benefit from an expansion in one particular type of service widely thought essential for the poor, which is deliveries assisted by a suitably trained medical attendant.



Figure 3: Possible outcomes of increasing overall population coverage of attended deliveries from 52% to 75%. A, pro-rich pattern; B, pro-poor pattern.

In the late 1990s, around 52% of deliveries in the 56 countries covered by the data presented in figure 2 were attended by a doctor, a nurse, or a nurse-midwife. How much would the poor benefit from increasing this average rate of coverage to by approximately one-half, to, say, 75%?

The range of possibilities is presented in figure 2 A and B. In each figure, the baseline is the distribution of coverage as it existed when the overall population average stood at 52%. At that time, coverage varied from 33% in the poorest 20% of the population to 82% in the best-off 20% of the population. The outcome shown in each figure refers to the coverage rate that would exist in each 20% of the population on attainment of 75% coverage in the population as a whole, assuming no decline in any population subgroup.

Figure 3 A shows the outcome produced by the most regressive possibility, under which all additional services go first to the highest 20% of the population until 100% coverage is attained there, then to the next-highest 20% of the population until it is fully covered, and so on. Figure 3 B illustrates the outcome resulting from the most progressive feasible scenario, produced by reversing the procedure just described and starting with deliveries in the poorest women. The very different outcomes show how the same overall change may have very different equity implications. Under the outcome shown in figure 3 A, the increment in services would be adequate to provide full coverage to the top 60% of the population, with less than 15% of the total being left over for the population's poorest 40% and none at all for the poorest 20%. In figure 3 B, on the other hand, nearly 70% of the service increase would accrue to the poorest 20% of the population, with 100% going to the poorest 40% of the population.

The range of possibilities is very broad, and the poorest 40% of a typical developing or middle-income country's population could receive as little as 10-15%, or as much as 100%, of the benefit from an increase of about 50% in the total number of attended deliveries. Although one cannot know beforehand just where in this range the actual outcome might fall, history suggests that, in the absence of special efforts to reach the disadvantaged, a less extreme version of the regressive outcome outlined above is at least as likely as anything resembling the alternative, progressive outcome presented there. In view of the power of the inverse care law as shown in figure 1 and table 1, a more probable result is some variation of the pattern found in Latin America, where "... new public-health interventions and programmes reach those of higher socioeconomic status and only later affect the poor . . . inequities only improve later when the rich have achieved minimum achievable levels for morbidity and mortality, and the poor gain greater access to the interventions."12

If this were the case, the poor would begin receiving most benefits from any health service expansion only in the final stages of progress toward universal coverage probably well after the target of a 75% overall average coverage rate is achieved. Universal coverage cannot be fully achieved without including the poor, and in that important sense, universal coverage constitutes an inherently egalitarian goal. But in assessing its suitability as an equity objective, at least two questions arise.

First, what is the likelihood of achieving universal coverage? Until now, this goal has seldom been approached, let alone reached in any but the best-off developing or transitional countries, despite such vigorous initiatives as the WHO Health for All movement and the UNICEF Child Survival Revolution of the 1980s and 1990s. Most global health service initiatives carefully stop short of promising universal coverage, at least any time soon. So it is at best an open question whether any moves toward universal coverage will, in the foreseeable future, reach a point at which most benefits will begin flowing to the poor. At least equally plausible is initially rapid progress that dies out before that point is reached, leaving even larger disparities than exist at present.

Second, why, even if the goal of universal coverage can be eventually approached, should the poor have to wait and be the last to benefit from progress toward this aim? It is difficult to see why the timing, in addition to the magnitude of the gains given to different social and economic groups should not be regarded as a substantial dimension of equitable health systems development.

	Current objective	Reformulated, poverty-relevant objective		
Bangladesh—measles	Raise coverage in children in entire population:	Raise coverage in children in the 50% of population below national poverty line:		
immunisation	 To: 85% in 2004–05 	• To: 85% in 2004–05		
	 From: 65% in 2002 	 From: 60% in 1999–2000 		
Bolivia—treatment of	Raise coverage in infants with pneumonia in the entire	Raise coverage in infants with pneumonia in the 62% of population below		
infant pneumonia	population who receive treatment in health services:	national poverty line:		
	• To: 23% in 2006	• To: 23% in 2006		
	• From: 17% in 2000	• From: 15% in 1998		
Tanzania—attended	Raise coverage in women in entire population:	Raise coverage in women in the 48% of population below national poverty line:		
deliveries	• To: 80% in 2010	• To: 80% in 2010		
	• From: 50% in 2000	• From: 37% in 1999		
Left-hand column contains objective as currently stated for each health service indicated, and right-hand column provides an illustrative revised objective, constructed by applying the national target level for the service concerned to portion of population living below poverty line of country in question. Sources of information about current objectives: Ministry of Health and Family Welfare. Health, nutrition and population sector programme, July 2003–06. Dhaka: Ministry of Health and Family Welfare, Government of Bangladesh, 2003. Government of Bolivia. Estrategia Boliviana de reduccion de la pobreza. La Paz: Government of Bolivia, 2001. Government of Tanzania. Poverty reduction strategy paper. Dar es Salaam: Government of Tanzania, 2000. Sources of information about national poverty lines in reformulated, poverty-relevant objective: Ministry of Finance, Economic Relations Division. A national strategy for economic growth, and social development. Dhaka: Ministry of Finance, Government of Bolivia, 2003. Government of Bolivia. Strategia Boliviana de reduccion de la pobreza. La Paz: Government of Bangladesh, 2003. Government of Bolivia, 2001. Government of Bolivia, 2001. Government of Bolivia. Strategia Boliviana de reduccion de la pobreza. La Paz: Government of Bolivia, 2001. Government of Bolivia, 2000. Approximations of baseline coverage and years calculated from Demographic and Health Survey data as presented in reference 5.				

Table 2: Illustrative health service goals in national health and development plans

Ways to meet the challenge

If one accepts the proposition that it will be a substantial challenge to ensure that the poor receive the highest possible proportion of increased services made available through progress toward national health development objectives, what can be done to meet the challenge? Thus far, this question has been asked so infrequently that there is no complete or fully satisfying answer. However, several initial steps can be suggested that, if not entirely proven, are at least plausible on the basis of such evidence as exists. Some, such as improved health financing, will be covered in later articles in this series. But there are three other steps that also deserve careful attention. One is to establish national health system objectives that are more relevant to conditions in the poor than the objectives currently in use, and to develop plans and monitor progress in terms of those modified objectives. The second is to apply the lessons learned from the promising experiences of several innovative efforts to reach the poor more effectively than through the traditional approaches discussed above. The third is to empower poor potential clients of health systems to play a more central role in the design and operation of systems.

Health system objectives

Typically, such health system output objectives as exist have been stated in terms of raising population average coverage rates. Since overall coverage can be raised through coverage increases in any subgroup of the population, whether well-off or poor, progress toward an increased average does not necessarily mean that the poor are benefiting substantially. In fact, as illustrated in figure 3 with respect to an increase in average attended delivery coverage, the better-off could well be the principal beneficiaries of rises in average coverage rates.

An obvious way to start orienting health systems toward the poor is to establish objectives of which the achievement necessitates the poor benefiting fully from the services provided, and to monitor progress in terms of those goals. For example, targets could be set in terms of progress, not in all people in the population, but in those people within the population who live in poverty.

This is the approach that has been followed in setting economic development goals, which are now rarely stated in terms of national average per head income growth, the measure that was previously predominant. Rather, the standard approach has become to express goals in terms of reductions in the percentage of the population below some specified poverty line. The first of the eight well-known UN Millennium Development Goals, for example, is to reduce by 50% the number of people with per head consumption of less than a dollar per day. Many national governments have adopted the same approach: for instance, the objective of Bangladesh's poverty reduction plan is to lower the proportion of the population below its national poverty line from 50% to 25% by 2015,13 Bolivia aims to reduce the percentage of the population living in poverty from 62% to 41% between 1999 and 2015,14 and Tanzania's goal is a 50% reduction by 2010 in the proportion of its population that is poor.15

Table 2 shows what such an approach might look like when extended to health services in these three countries. With the approach taken in table 2, or any of the many possible variants of it, goals would be established in terms of progress accomplished in the poor alone. Any gains in the well-off would be judged collateral benefits that would not count in assessing progress.

An objective expressed in terms of coverage in a specific economic group would not provide clear and immediate operational guidance, in view of the difficulty of identifying and serving poor people or groups. It might also heighten the challenge of monitoring progress of at least some health system goals. But both these obstacles have been largely overcome in overall economic development, in which the measurement challenges are arguably far greater than in health service development. Figures about rates and trends in the percentage of a country's population below the poverty line have become routinely featured in reports on economic progress,¹⁶ and, more importantly, have helped to shift the focus of policy makers from promoting overall growth toward finding ways of improving conditions in the disadvantaged.

Applications of lessons learned

Important as revised objectives and monitoring might be for focusing attention, revising them does not in itself change the proportion of service programme benefits that accrue to the poor. A change in the distribution of benefits, which is what counts, needs modified service delivery approaches.

Efforts to find modified approaches have begun to accelerate, and these have produced growing numbers of instances where services delivered through health and other systems are considerably more pro-poor than the more traditional services described in table 1 and figure 2.

A global conference on reaching the poor with effective health, nutrition, and population services featured presentation of 36 case studies covering well over 100 programmes assessed from the perspective of how their benefits had been distributed across economic classes within the countries concerned.¹⁷ The case study experience indicated that it is feasible to monitor the distribution as well as the overall magnitude of programme benefits, through simple modifications in existing evaluation techniques, and the study findings pointed toward several promising approaches for reaching the poor more effectively than in the past.

Figure 4 shows the record of an illustrative sample of the studies presented.17 The record can be assessed from two perspectives. One is with respect to the proportion of a programme's benefits that are gained by the poor, defined in figure 4 as the population's poorest 20%. (This is often referred to as the programme's benefitincidence or focus.) As shown on figure 4's horizontal axis, the poorest 20% of the population received over 20% of the benefits provided by 18 of the 27 programmes covered, making those programmes pro-poor. In the case of seven of the programmes, the poorest 20% of the population gained more than 40% of the benefits. The other perspective concerns the programme's coverage in the poor. This is measured on figure 4's vertical axis. 14 of the 27 programmes covered or served over half the population's poorest 20%.17

Mexico's Progresa cash transfer programme, which pays rather than charges poor families for clinic and school attendance, serves 20 million people, and provides 20% of the income to participating families. Almost 60% of the people reached belong to the poorest 20% of the country's population; 80% of beneficiaries

are in the poorest 40%. Colombia's use of a refined individual targeting technique to provide subsidised health insurance to the disadvantaged raised insurance coverage in the poorest quintile of the population from well under 10% in the early 1990s to nearly 50% 4 years later. 35% of the total programme subsidy went to the poorest 20% of the population; 65% to the poorest 40%. Cambodia experimented with contracting with non-governmental organisations to operate governmental rural primary health services, under contracts that called for attainment of specified coverage levels in the poor. During a 4-year experiment, the coverage in the poorest 20% of the population of eight basic services rose from an average of less than 15% to over 40% in two experimental districts with a total population of about 200 000. This increase was nearly 2.5-fold as large as that experienced in two control districts that continued to receive standard government services. Distribution of insecticide-treated bednets was through measles immunisation campaigns in Ghana and Zambia, and through social marketing in Tanzania. In Ghana, the Red Cross and the government's health service raised, from 3% to nearly 60%, the rate of treated bednet use in children in the poorest 20% of people in a northern district with a population of about 90 000. A similar programme in Zambia produced comparable results: an increase in insecticidetreated bednet coverage from 18% to 82% in the poorest 20% of the population in five rural districts with a total population of 450 000. In Tanzania, the Ifakara Health Research and Development Centre developed and implemented a social marketing programme in two southern districts with a total population of about 60 000, which over 5 years raised the ownership of bednets in the poorest 20% of households from 20% to 73%. In all these three cases, the increase in bednet use/ownership was higher in the poor than in the well-off.

Experiences that seem to have reached the poor effectively have varied greatly in scope and approach. For instance, in the programmes described here, some (Ghana, Tanzania, and Zambia) were small experiments with initiatives against specific diseases, whereas others (Mexico and Colombia) represented country-wide reforms that touched on many fundamental aspects of national health systems. Some programmes (Cambodia, Ghana, Tanzania, and Zambia) featured a change in service delivery organisation or strategy or both, whereas others (Colombia and Mexico) focused on modifying the way services are financed. Although some (Ghana and Zambia) focused only on communicable diseases in children, several others (Cambodia, Colombia, and Mexico) were much broader, dealing also with adults and chronic diseases.

The range of techniques featured in the apparently successful projects and programmes was wide. Among the techniques were: improved means of identifying poor individuals (Colombia and Mexico), cash payments for use of services (ie, negative user fees, referred to as conditional cash transfers, in Mexico), services provided by non-governmental organisations working under contracts with carefully specified pro-poor performance indicators (Cambodia), mass campaigns (Ghana and Zambia), and social marketing (Tanzania).

These data are being examined to identify whether successful programmes like those just cited share common features that cut through this apparent diversity and provide straightforward, clear guidelines about what does and does not work. Whatever the outcome of these examinations, experiences such as those mentioned earlier at the very least point clearly to the existence of many approaches that, when implemented by dedicated and competent policy makers, have the potential to bring about substantial improvements in how well health systems reach and serve disadvantaged groups.

Empowering poor clients

Most if not all of the experiences described above were mainly supply-driven—eg, designed and initiated mainly by those who operate health systems and supply health services. An alternative, complementary approach is to focus on creating an effective demand and pressure for relevant health services on the part of the poor, to counterbalance the influence of well-off groups that traditionally define priorities and design programmes.

A prominent illustration of the empowerment approach is the People's Charter for Health of the People's Health Movement,¹⁸ a global coalition of grassroots organizations. The charter begins by stating "Health is a social, economic and political issue and above all a fundamental human right This Charter builds on perspectives of people whose voices have rarely been heard before, if at all. It encourages people to develop their own solutions and to hold accountable local authorities, national governments, international organizations and corporations."18 The charter then goes on to list about 60 recommendations, ranging from scope from advocacy of universal, comprehensive primary health care and the central participation of people's organisation in health programmes, to support for campaigns for peace and disarmament.18

Substantial elements of this approach have also begun to work their way into the thinking of institutions often believed to have a very different overall orientation. An example is the World Bank, whose 2000/2001 World Development Report: Attacking poverty put forward empowerment of poor people as one of the three core areas for action in its framework for poverty reduction.¹⁹ This report was followed even more forcefully by the bank's 2004 World Development Report: Making services work for poor people, which emphasised the importance of enabling poor people to hold service providers accountable, both directly and indirectly through influence on policy makers.²⁰

Thus, the importance of empowering the poor has been gaining acceptance in a wide range of professional



Figure 4: Record of modified approaches in reaching the poor Source: reference 17.

groups and institutions. There is thus far little empirical evidence solid enough to satisfy a serious epidemiologist that the empowerment approach can work; that it is feasible to empower an adequate number of poor clients to the point where they can bring about a substantial improvement in how health systems operate. But although further such evidence is clearly needed, its dearth cannot be equated with the presence of evidence proving that empowerment of poor clients is not feasible. Firm evidence casting doubt on empowerment's potential effectiveness is even scarcer than that in its support.

Conclusion

In brief, health systems are consistently inequitable, providing more and higher quality services to the well-off who need them less than the poor who are unable to obtain them. In the absence of a concerted effort to ensure that health systems reach disadvantaged groups more effectively, such inequities are likely to continue. Yet these inequities need not be accepted as inevitable, for there are many promising measures that can be pursued: establishing goals for improved coverage in the poor, rather than in entire populations, and use of those goals to direct planning toward the needs of the disadvantaged; use of one or more of the several techniques that seem to have been effective in at least some of the settings where they have been tried; and empowering poor clients to have a more central role in health system design and operation. Through the application of these and other measures, it is quite feasible to give equity considerations the central place that they deserve in the plans and policies for health and related sectors.

Admittedly, the menu of options is long, and many remain to be fully tested. Further, there is no guarantee that any one of those options will work well in settings other than those in which it has been already tried. Health policy makers will wish to experiment with a wide range of possibilities, monitor progress carefully to see how well they work, and retain those that prove effective, while replacing those that do not. Although one cannot be completely certain that this process will produce substantial improvements for service coverage in the poor, it is far more promising than the continuation of present approaches, which have been clearly shown to produce notably inequitable coverage patterns.

Even less certain is whether the process would in the end lead to more or less efficient health systems, in the sense of heightening or reducing the improvement in a society's overall disease burden brought about per unit of resources invested. On the one hand, reaching the poor might prove difficult and thus expensive, in which case diverting resources from more cost-effective programmes to initiatives seeking to reach the poor could reduce overall efficiency. But the case is far from clearcut, since there are important countervailing considerations. One is the much higher prevalence of ill health in disadvantaged population groups: even if poor people should prove more expensive to serve than those who are well-off, higher prevalence of treatable disease in the poor could result in an increased overall health benefit from programmes that serve them, thereby resulting in increased efficiency. Also, there are many components of current health systems whose efficiency is open to serious question-the oft-cited case of curative services for terminally ill patients in higher-level institutions, for example. Diversion of resources from expensive activities like these toward far less costly ones like outreach programmes in poor villages would seem at least as likely to produce gains as losses in overall health system efficiency.

However, firm evidence one way or the other is largely absent. So it would not be legitimate either to advocate or to oppose reorienting health systems toward the needs of the poor on efficiency grounds. But suppose it turns out that there is in fact a tradeoff between equity and efficiency in health system design. Who is to say that efficiency considerations should necessarily prevail? Equity in coverage is obviously by no means the only objective that health systems should seek to achieve, but what is the basis for regarding equity as any less important than efficiency?

Contributors

All authors have actively participated in the development of this article, which was drafted by D R Gwatkin on the basis of extensive inputs from and discussions with A Bhuiya and C G Victora.

Conflict of interest statement

Davidson R Gwatkin is a former employee of the World Bank. At the time of preparing this paper, he was a part-time consultant to the Bank and to the Rockefeller Foundation. However, his work on the paper received no financial support or substantive input from either institution; nor were the paper's contents subject to either institution's review and approval procedure. Neither Abbas Bhuiya nor Cesar Victora currently has any institutional affiliation that could potentially represent a conflict of interest with respect to the material presented.

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