



RESULTS-BASED FINANCING FOR HEALTH

Ensuring that the Poor Share Fully in the Benefits of Results-Based Financing Programs in Health

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The equity impact of result-based financing (RBF) programs is not predetermined. Rather, it depends upon how the programs are designed and implemented.

If the programs are undertaken without conscious attention to including disadvantaged groups, there are a priori reasons for suspecting that they will favor the better-off, thereby exacerbating inequalities. But such an outcome is far from inevitable. Many plausible approaches are available for directing benefits toward the poor; and several of these have proven effective often enough to deserve serious consideration for application elsewhere. Even when such approaches are applied, however, predicting the equity outcome of any given RBF strategy in any particular setting remains more of an art than a science; and only after the fact, through careful monitoring, is it possible to assess an RBF project's equity consequences with reasonable certainty.

Reaching the Easiest to Reach

The suspicion that RBF approaches might inherently favor privileged groups arises from the broader anticipation that the impact of development activities in general and health projects in particular will be more likely to trickle down than up.¹ In the RBF case, this produces a belief that project benefits will tend to accrue first to those within the eligible population who are easiest to reach; and that these people will usually be better off socially and economically than others.

This is especially the case when RBF benefits go to providers through a supply-side program, under which, the benefits are typically provided on the basis of number of people served or increase in the population coverage achieved, for two reasons. First, without any specification of the characteristics of those to be served, this provides an incentive for program managers to focus on the people who can be reached with the least amount of effort. Such people are rarely likely to be those living in poverty. Poor population groups take much greater effort to serve because of their limited resources and ability to use even heavily subsidized services; their lower understanding of their health problems and what services can do to alleviate them; their distant geographic location; and other factors. So the stronger the incentive simply to serve greater numbers, the less likely the poor are to benefit. Second, the tendency of health services to cluster in better off areas means that any improvements in overall service efficiency produced through RBF initiatives would be likely to flow primarily to those who need them least.

While the incentive factor appears primarily in supply-side approaches, the other considerations just noted also come into play when the benefits are provided to service users through a demand-side initiative. To the extent that poor groups are excluded from society for reasons like those just noted, they will be less likely to know about or come forward for the benefits available.

¹ For an articulation of this argument with respect to health activities, see Cesar G. Victora *et al.*, "Explaining Trends in Inequities: Evidence from Brazilian Child Health Studies," *The Lancet*, vol. 356 (September 23, 2000), pp. 1093-98.

To be sure, the strength of the inegalitarian tendency just described remains to be established empirically.² But even if strong, it is far from insurmountable. Conceptually, overcoming it is simple and straightforward: through an affirmative approach that gives greater weight or restricts eligibility to members of a disadvantaged social or economic group. In practice, implementing such an approach can be much more challenging; and there are no known programs that approach perfection, in the sense of reaching all the poor and delivering all of its benefits to the poor alone. But it is by no means clear that such perfection would be desirable, even if attainable, given the difficulty of defining poverty precisely and the possibility of creating resentment among politically-influential better-off groups. And if one takes as a goal not technical perfection but a significant improvement over the current norm, then notable progress lies well within reach, since there are numerous cases – of national programs as well as of field trials – where the majority of benefits from RBF and other social programs have accrued to the poor.

The approaches responsible for such achievements vary greatly. Among the principal ones have been identifying and limiting eligibility to poor individuals or families, focusing on deprived geographic areas, and using channels that reach the poor. Also instructive are other approaches, such as efforts to improve service quality.

Reaching the Poor by Limiting Eligibility to Poor Families or Individuals

Paradoxically, the approach with the clearest record of success in connection with RBF programs is the one often considered the most difficult: identification of the poor families or individuals who qualify to receive benefits – an approach often referred to as direct or individual targeting. This has been a central feature of the conditional cash transfer programs to carefully-identified poor women in Mexico, Brazil, and elsewhere that have attracted widespread attention and contributed significantly to the rising interest in RBF strategies. A very different form of this same approach of identifying poor individuals has been applied in several projects in Southeast Asia – particularly Cambodia, Indonesia, and Thailand.

Conditional cash transfer programs, found especially in Latin America, incorporate a demand-side RBF strategy by offering cash payments to poor women who ensure that their children attend school, and they and other family members receive basic health services like vaccinations, antenatal care, and periodic general medical examinations. Most are large-scale, ongoing service programs that have moved far beyond the pilot project stage. Many are nationwide and serve millions of people: the two largest, in Brazil and Mexico, reach eleven million and five million families respectively. And the great majority of these families are poor. As can be seen from figure one, over 40% of the benefits in both countries go to the poorest 20% of the population. The highest-income groups receive almost nothing.³

Such programs have clearly overcome whatever inherently inegalitarian tendencies RBF strategies might have. They have done so by limiting benefits to only some members of the population – that is, to people living below a specified poverty line – and through an energetic effort to identify and enroll those people. In the Brazil and Mexico examples, the eligible families were identified through a combination of geographic and individual household approaches. The first involved using census data to identify poor communities or the number of poor people in each community. The second featured surveying households in those communities, to determine income or household characteristics. The findings were used to produce an overall poverty score for each household; and the members of those households falling below some threshold level qualified for program benefits.⁴

² The only two known distributional assessments of supply-side programs without specific mechanisms to enhance participation by the poor have produced inconclusive findings. In Pakistan, a supply-side contracting experiment produced lower participation among the poor than among the better-off. (Benjamin Loevinsohn, "Contracting with Non-State Providers to Deliver Health Services – Can It Improve Equity?" Presentation to a UNICEF Health Equity Consultation, New York, February 2008). The other program, in Afghanistan, showed few differences between upper and lower economic groups. (David H. Peters *et al.*, "A Balances Scorecard for Health Services in Afghanistan," *Bulletin of the World Health Organization*, vol. 85, no. 2 (February 2007), pp. 146-51.

³ Margaret Grosh, Carlo del Ninno, Emil Tesliuc, and Azedine Quergui, *For Protection and Protection: The Design and Implementation of Effective Safety Nets*. Washington, D. C.: The World Bank, 2008.

⁴ David Coady, "Alleviating Structural Poverty in Developing Countries: The Approach of PROGRESA in Mexico," background paper for the *2004 World Development Report*, February 2003 (accessible at: http://econ.worldbank.org/files/27999_Coady.pdf). Kathy Lindert, Anja Linder, Jason Hobbs,

Elsewhere, especially in Southeast Asia, less formal methods have proven capable of identifying poor people and directing benefits toward them, through both supply- and demand-side approaches. Typically, this has been done by delegating responsibility for selecting beneficiaries to local bodies in the belief that their superior knowledge of their communities would allow them to identify the poor effectively. Sometimes, the local bodies in question were health service providers: in a well-known RBF Cambodia supply-side contracting experiment, selected non-governmental health service organizations were told that the amount of their compensation would depend upon how well they reached specified poor population groups, and left on their own to figure out how best to identify and serve such people. Subsequent external monitors

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found service coverage among the poorest fifth of the population had risen from below 15% to over 40%, well over twice the rise experienced by this group in an otherwise comparable area covered by regular government services.⁵ In Indonesia and Thailand, village councils were told the number of poor people in their communities who could be provided exemptions from fees in government health services as an incentive to increase demand, and given the responsibility for both defining poverty and determining who met that definition.⁶ In both cases, especially in Thailand, the benefits flowed disproportionately to people who were subsequently found to qualify according to standard definitions of poverty. Cambodia's health equity fund initiatives took a similar approach, often relying upon Buddhist pagodas and monks to identify the poor, with comparable results.⁷

Other experiences with positive outcomes can also be cited. For example, a recent literature review of nearly 40 programs (dealing with general cash transfers, food subsidies, and employment guarantees as well as health) found that, on average, those that worked to identify poor families and individuals delivered about 50% more benefits to them than they would have received had the benefits been evenly distributed across the population.⁸

Unfortunately, however, outcomes like these are only a small part of the story. For one thing, there was a very wide variation across the 40 programs just noted, with somewhere around a quarter of them delivering fewer benefits to the poor than they would have received through a random distribution approach. Further, the fact that the 40 programs had to have been carefully evaluated in order to qualify for review almost certainly makes them atypical of the many less well-designed efforts undertaken – such as the efforts of health ministries to lessen criticisms of user fee introduction by issuing soon-forgotten circulars exempting poorly-defined indigent groups and expecting local facilities to absorb the resulting loss of income. Experience with measures like these has been singularly unimpressive.⁹

As this quick summary suggests, the outcome of efforts to identify poor individuals and families have varied widely, depending upon the care and effort devoted to their design; upon the characteristics of the societies where they are implemented; and upon the resources made available to support them. Brazil and Mexico (and other Latin American countries), where positive outcomes have been most clearly documented, are primarily middle-income societies with the strong administrative and financial infrastructures. In Southeast Asia, governments have been able to trust community

and Bénédicte de la Brière, *The Nuts and Bolts of Brazil's Bolsa Familia Program: Implementing Conditional Cash Transfers in a Decentralized Context*, Washington, D.C.: Social Development Department of the World Bank (SP Discussion Paper no. 0709), May 2007.

5 J. Brad Schwartz and Indu Bhushan, "Cambodia: Using Contracting to Reduce Inequity in Primary Health Care Delivery," in Davidson R. Gwatkin, Adam Wagstaff, and Abdo S. Yazbeck, *Reaching the Poor with Health, Nutrition, and Population Services: What Works, What Doesn't, and Why* (Washington, D.C.: The World Bank, 2005), pp. 137-62; and J. Brad Schwartz, personal communication.

6 Sirilaksana Khoman, "Health Care Financing in Thailand," in George J. Schieber, ed. *Innovations in Health Care Financing: Proceedings of a World Bank Conference, March 10-11, 1997*, World Bank Discussion Paper No. 365, pp. 183-94. Robert Sparrow, "Targeting the Poor in Times of Crisis: The Indonesian Health Card," *Health Policy and Planning*, vol. 23 (2008), pp. 188-99.

7 Mathieu Noirhomme et al., "Improving Access to Hospital Care for the Poor: Comparative Analysis of Four Health Equity Funds in Cambodia," *Health Policy and Planning*, vol. 22 (2007), pp. 246-62; Bart Jacobs and Neil Price, "Improving Access for the Poorest to Public Sector Health Services: Insights from Kirivong Operational Health District in Cambodia," *Health Policy and Planning*, vol. 26 (2006), pp. 27-39; and Wim Hardeman et al., "Access to Health Care for All? User Fees plus a Health Equity Fund in Sotnikum, Cambodia," *Health Policy and Planning*, vol. 19 (2004), pp. 22-32.

8 David Coady, Margaret Grosh, and John Hoddinott, *Targeting of Transfers in Developing Countries: Review of Lessons and Experience* (Washington: The World Bank, 2004)

9 See, for example, the cases cited in Lucy Gilson, Steven Russell, and Kent Buse, "The Political Economy of User Fees with Targeting: Developing Equitable Health Financing Policy," *Journal of International Development*, vol. 7, no. 3 (1995), pp. 369-401; Steven Russell and Lucy Gilson, "User Fee Policies to Promote Health Service Access for the Poor: A Wolf in Sheep's Clothing?," *International Journal of Health Services*, vol. 27, no. 2 (1007), pp. 359-79; and William Newbrander, David Collins, and Lucy Gilson, *Ensuring Equal Access to Health Systems: User Fee Systems and the Poor*. (Boston: Management Sciences for Health, 2000.)

leaders to be socially responsible as well as knowledgeable, so that those they identify are the genuine poor rather than their own relatives or political supporters. They have also been prepared to provide the considerable volume of resources needed to ensure that service providers are not penalized financially by providing subsidies to those identified as poor. Unfortunately but obviously, such conditions are not to be found everywhere.

Reaching the Poor by Focusing on Deprived Geographic Areas

An alternative, less demanding approach frequently employed in RBF strategies is to adopt only the geographic part of the Brazilian and Mexican strategies described above. That is, the RBF program offers benefits to all people – rather than only to individually-identified people or households – living in specified areas selected because of the high prevalence of poverty within them. Typically, this means limiting coverage of RBF – whether supply- or demand-side -- programs to rural areas or urban slums; to particularly poor provinces or districts; or to some combination of the two, such as rural parts of poor districts.

Such an approach is administratively straightforward. But this advantage is almost always gained at the cost of at least some inaccuracy, since not everyone living in a poor area is poor, and at least some poor people live in areas where the level of overall poverty is low.

The magnitude of any accuracy loss will vary from place to place, depending upon the geographic distribution of poverty. If, for example, all the poor people in a country are located in only one province and if all the people in that province are poor, then an RBF initiative effectively covering that province alone will suffice to reach all the poor without including any of the better-off. On the other hand, if poverty is evenly distributed throughout the country – with the same proportion of people in each community living below the poverty line – then focusing on only a few selected parts of that country will produce no greater accuracy than randomly distributing benefits across all the communities within it.

It seems safe to anticipate that the situation in most, perhaps all, countries will lie somewhere between these two extremes. But the extremes lie so far apart that differences among countries lying at some differences from either one can still be quite large. Just how large cannot yet be judged with any confidence, since efforts to explore fully the geographic distribution of poverty within countries have only recently begun. But such data as have thus far come into existence suggest that while a geographic focus can make enough of a difference to justify its use as an important element in any pro-poor service delivery strategy, it is itself far from a panacea.

Take the examples of Ghana, Mozambique, and Zambia.¹⁰ What would happen if, in each of these countries, one decides to focus on getting services to people below the country's poverty line by introducing an RBF (or other) approach only (or first) to all residents in the poorest 50% or 25% of its districts – that is, to all residents in those districts with the highest percentage of the population under the poverty line? This means providing incentives to service providers or recipients in 36 to 73 districts with populations averaging from about 100,000 (Mozambique) to around 170,000 (Ghana). (The poorest 50% of districts typically contain around 40% of a country's total population; about 15-20% of the country's total population live in the poorest 25% of districts.)

The data available on the geographic distribution of poverty in these countries, as in others, can be addressed from two perspectives. The first is how many better-off people live in poor areas, and thus would benefit from any

¹⁰ Using 2000 data for Ghana presented in Harold Coulombe, "Ghana Census-Based Poverty Map: District and Sub-District-Level Results" (Accra: Ghana Statistical Service, 2005); 1997 data for Mozambique drawn from Kenneth R. Simler and Virgolino Nhate, "Poverty, Inequality, and Geographic Targeting: Evidence from Small-Area Estimates in Mozambique," Discussion Paper 192 of the Food Consumption and Nutrition Division, International Food Policy Research Institute, June 2005; and 2000/2002-3 data for Zambia appearing in Kenneth R. Simler, "Micro-Level Estimates of Poverty in Zambia," International Food Policy Research Institute in collaboration with the Zambia Government Central Statistical Office, April 2007. (Mozambique figures refer to the international poverty line of \$1.00/day in 1986 dollars. In Ghana, the reference is to a national poverty line of approximately \$1.10/day in 1999 dollars.)

service delivery efforts undertaken there (error of inclusion). The second concerns the number of poor people who live outside poor areas, and thus would be missed by any services delivered outside those areas (error of exclusion).

Figure two deals with the first of these two perspectives. On average, around 43% of the people in a district randomly selected from one of these countries would live above the poverty line. This would be the case for only about 29% of people residing in a district chosen from among the poorest half of all districts, and 22% of people in a district selected from the poorest quarter. In other words, a focus on the poorest half of districts can reduce the potential error of inclusion by around a third. Limiting a program initiative to the poorest quarter of districts can lower it by another 15% or so, producing a total improvement on the order of 50%.¹¹

Such greater precision comes at a cost, however. For in each country, a significant portion of the population below the poverty line lives outside the poorest districts. This can be seen from figure three. From 40% (Ghana) to 55% (Zambia) of the poor live outside the poorest half of districts; from 65% (Ghana) to 80% (Zambia) live outside the poorest quarter of districts. These people would be missed by a program taking only a geographic approach to identifying the poor.¹²

So what to make of all these numbers? Two suggestions:

First, a geographic approach to focusing programs in order to make them pro-poor is often an obvious way to start. Its administrative simplicity and acceptability are major advantages, and it frequently has the potential to increase considerably the proportion of total benefits that flow to the poor.

Second, from the perspective of a health policy maker wishing to provide equal access to all of a country's poor people, the fact that so many poor so often live outside poor areas is a major disadvantage of a geographic approach, especially in the longer term.

For logistical reasons, it is rarely possible to launch major new initiatives simultaneously in all parts of a country; and when this is the case, starting in poor geographic areas is a way to increase the proportion of benefits that initially go to the poor. But at some point the initiative will also have to be expanded into areas that are less poor if the majority of the country's neediest groups are to be served; and when this happens, the value of the geographic focus will decline and the likelihood will increase that most benefits will flow to the better-off in the absence of other approaches to ensure that the poor are reached.¹³

Beyond these two suggestions that refer a geographic focus per se, it is worth noting that it need not be introduced in isolation. Rather, it can be – and often is – combined with other approaches as one element of an overall strategy to serve the poor. For example, the Brazilian and Mexican RBF programs covered in the preceding section employed a focus on poor geographical areas as the first stage of a two-stage process that also included the identification of poor households within those areas. Similarly, it is possible to think of developing programs in disadvantaged geographic areas that also take advantage of pro-poor service delivery channels, like those described in the following section, in order to ensure that the poorest people within those areas are not left out.

11 Figures are illustrative, based on unweighted averages of three countries. For Ghana, a focus on the poorest 50% of districts would lower the error of inclusion from 60.5% to 40.1%; the error of inclusion from focusing on the poorest 25% of districts would be 29.5%. For Mozambique, the corresponding figures are 34.1%, 20.9%, and 14.1%; for Zambia, they are 35.3%, 25.3%, and 21.2%.

12 Note, however, that realization of the potential just described requires achieving at least roughly equal levels of service coverage across economic groups within the areas where a program is active. From a national perspective, it would be hard to go too far astray when working in an area with over 80% below the poverty line. Still, in even the poorest parts of the poorest countries, there is likely to be a significant minority of people who are considerably less poor than others; and it is possible to think of some types of service (say, improvements in the quality of district hospital services) where benefits would accrue primarily to these better-off within the areas covered.

13 The recent experience of Brazil's reformed family health program shows how this can be done. The program's ultimate objective was to achieve universal coverage, but to ensure that the poor were not left out, the program was implemented first in poor areas and then expanded into progressively better-off parts of the country. (For an assessment of this program's early stages, see Aluisio J. D. Barros, *et al.*, "Brazil: Are Health and Nutrition Programs Reaching the Neediest," in Davidson R. Gwatkin, Adam Wagstaff, and Abdo S. Yazbeck, *Reaching the Poor with Health, Nutrition, and Population Services: What Works, What Doesn't, and Why*. (Washington, D.C.: The World Bank, 2005), pp.281-306.)

Using Channels that Reach the Poor

A further approach is to pay attention to the channels or mechanism through which benefits are delivered, since some have the potential to reach disadvantaged groups much better than others. The point can be illustrated with reference to two common basic health services: childhood immunizations and institutional deliveries.

Childhood immunizations are typically delivered through two channels: 1) programs that offer services at fixed locations and serve those who appear for them; and, in some cases, 2) supplementary outreach campaigns that take services out into communities through mobile camps usually accompanied by energetic information campaigns. Suppose that an immunization program manager is offered a supply-side incentive – i.e. a bonus – for every additional immunized child living below the poverty line. Which channel should (s)he choose?

Given the difficulties in reaching the poor described earlier, it would seem that the latter strategy could be considerably more effective than the former in raising coverage among excluded groups. Managers of immunization programs in poor countries have long been persuaded that this is the case, and have often employed outreach information and service campaigns to supplement the delivery of vaccines through static health facilities. There is considerable evidence to suggest that such managers have been correct.

One type of evidence lies sharp increases from intermediate to very high overall coverage rates that campaigns have frequently achieved.¹⁴ Intermediate overall rates usually indicate a combination of near-universal coverage among the best-off and low coverage among disadvantaged groups, so that significant increases in overall rates are possible only by raising coverage among the poor. Also, the high overall rates recorded after campaigns are possible only if coverage among all groups, including the poor, are at least reasonably high. Also, and perhaps more significantly, the one campaign known to have been reviewed from an equity perspective has shown that the great majority of the additional children it reached came from the poorer parts of society. This was Kenya's 2002 supplemental measles immunization activity. Before that activity, measles coverage among the children in the poorest 20% of households was over a third higher than among the bottom 20% (89% vs. 65%). After the activity, this difference had been almost completely eliminated, as over 70% of the children reached through it were in the population's poorest 40%.¹⁵

To be sure, such outreach programs have often been criticized, particularly for disrupting routine health service provisions. But whatever the validity of this and other criticisms, the point of interest here remains: the mechanism used to deliver a particular health service can exercise a significant effect on how well it reaches disadvantaged groups.

Institutional deliveries can be promoted in a number of ways through RBF incentives, which can operate on either the demand- or supply side. The demand-side options include: 1) payments to all women arriving at delivery facilities; 2) vouchers distributed at all women coming for their first antenatal visits, to be redeemed for a cash (or in-kind) payment upon arrival at a facility for delivery; 3) distribution of similar vouchers to all pregnant women identified by field workers through regular visits to households in, say, rural areas and/or urban slums. Alternatively, or in addition, clinic staff might be provided a bonus for each delivery performed – either for all women or for only those women presenting a voucher under one of the two strategies just described.

- The first of these three approaches – payments for all women presented at a facility – is perhaps the simplest, but the proportion of total benefits accruing to the poor will be limited by the fact that payments are made not only for additional women attracted to the facilities by the payment prospect of a payment, but also to those women who would have used the facilities anyway. And women in this latter group tend to be concentrated heavily among upper-income groups. For example, nearly 80% of women in the top economic quintile of a typical African country

¹⁴ M. Otten *et al.*, "Public-Health Impact of Accelerated Measles Control in the WHO African Region 2000-03," *The Lancet*, vol. 366 (September 3, 2005), pp. 832-39.

¹⁵ Calculated from data presented in Maya Raghavan *et al.*, "Measles Supplemental Immunization Activities Improve Measles Vaccine Coverage and Equity: Evidence from Kenya, 2002," *Health Policy*, vol.83 (2007), pp. 27-36.

already deliver in a facility, compared with around 25% of women in the bottom quintile. In South Asia, the comparable figures are about 45% and less than 5%, respectively.¹⁶

To be sure, if the payment attracts large numbers of additional women, most of whom are poor, then the “equity drag” just described can be reduced so that the overall outcome of the payment scheme is more egalitarian, especially when therapeutic as well as financial benefits are considered. The number and economic status of these additional women is likely to depend upon the specifics of the incentive’s program design and implementation;¹⁷ and upon the setting.¹⁸

Ghana’s experience with a similar approach, while not necessarily representative of what might happen elsewhere, can serve to illustrate the general point. The approach concerned was the government’s 2003 abolition of user fees for deliveries at government health institutions. A before-and-after study in two of Ghana’s 10 Regions showed that attended deliveries had increase by almost 10 percentage points, from under 50% to around 57%.¹⁹

Figure one shows how these deliveries were divided across economic groups. In this setting, where over 80% of women in the top quintile were already delivering in institutions before the fee abolition, the majority of the increase accrued to people in lower-income groups, especially the moderately poor. The financial outcome, however, was quite different. Even after the fee abolition, the great majority of institutional deliveries continued to occur among upper-income women, and they reaped the greatest financial benefits, with nearly 30% going to the top 20% of women, compared somewhat over 10% benefitting the poorest 20%. So all in all, the equity outcome of Ghana’s experience was mixed.²⁰

- The second alternative – giving vouchers to all women at the time of antenatal care – is of greatest potential interest in countries where most women, including poor women, come for such care. When this is the case, vouchers offering payment for an institutional delivery distributed at the time of the first visit can be a way of taking advantage of a channel with a demonstrated record of reaching the poor as well as the better-off.

Widely varying antenatal attendance patterns across countries means that the potential for the strategy just described also varies greatly. In about a quarter of the 56 low- and middle income countries, 80% or more of women in the poorest quintile of the population attend at least one antenatal care session; and it is here that the strategy’s potential would be greatest. The majority of these countries is in sub-Saharan Africa, where antenatal care attendance tends to be quite high relative to the region’s level of economic development. (On average, nearly two-thirds of women in the poorest quintile of the average sub-Saharan African country receive at least some antenatal care compared with around a quarter of the poorest women in a typical South Asian country.²¹) And because higher-than-average fertility among poor women in such countries, they constitute the preponderance of clients appearing at antenatal care facilities – especially at facilities in rural areas.

Again, figures from Ghana, where antenatal care coverage is high among all economic groups, can illustrate the point. For the country as a whole, around 83% of pregnant women in the poorest quintile of the population receive at least one antenatal examination, a figure that increases steadily across economic groups and reaches 98% in the top quintile. But the poorest women have well over twice as many children on average as the best-off ones. When

16 Davidson R. Gwatkin et al., *Socio-Economic Difference in Health, Nutrition, and Population within Developing Countries: An Overview*. Washington, D.C.: The World Bank, 2007.

17 For example, the size of the payment, and how widely information about its availability is disseminated.

18 Such as the importance of cultural and other non-financial barriers unaffected by the payment, and the proportion of better-off women not delivering in institutions. (For example, any overall increase would seem more likely to accrue to the poor in a country where over 90% of high-income women already deliver in an institution, than in a setting where only, say, 25% of even the best-off women have institutional deliveries.)

19 Suzanne Penfield, E. Harrison, Jacqueline Bell, and Ann Fitzmaurice, “Evaluation of the Delivery Fee Exemption Policy in Ghana: Population Estimates of Changes Delivery Service Utilization in Two Regions,” *Ghana Medical Journal*. vol. 41, no. 1 (September 2007), pp. 100-09. (Figures are unweighted averages from the two regions covered.)

20 Visually, the distribution of new service recipients can be seen as the space between the “after” and “before” lines of figure five. The distribution of financial benefits is represented as the total space below the “after” curve.

21 Gwatkin et al., *Socio-Economic Difference in Health, Nutrition, and Population within Developing Countries: An Overview*.

this is taken into account, women presenting for an initial antenatal visit are almost evenly distributed across income groups. As can be seen from figure five, around 22% of the patients in a typical Ghanaian antenatal clinic are among the poorest quintile of the population, compared with 17-18% in the top quintile.²² If vouchers were distributed to all of these women, the poor would get as many as – in fact, slightly more than – the best-off.

Ghana is also of interest as a case where adding a geographic element can make a difference. By distributing vouchers only to rural women receiving antenatal care, the approach's pro-poor impact would be notably enhanced, since very few of Ghana's upper-income, low-fertility women live in rural areas. Figure five shows this outcome, also: almost 35% of women receiving vouchers would belong to the poorest quintile of the country's population, compared with only 2-3% being in the best-off quintile.^{23, 24}

- The third of the three illustrative possibilities presented above would be for community health workers to distribute vouchers to all pregnant women in the areas that they serve. In a country like Ghana, where most poor as well as better-off women come for antenatal care, such an approach would have the potential to reach the poor only modestly better than the distribution of vouchers through antenatal care services as described earlier. However, there are many places where, unlike Ghana and similar other African countries, antenatal care coverage among the poor is very low. Take the five countries shown in figure six: Bangladesh, Cambodia, Egypt, Guatemala, and Nepal. In each of them, only 20-40% of women in the bottom economic quintile of the population benefit from an initial antenatal care visit, rates well under half those among women in the top quintile.²⁵ In these countries, distributing vouchers through antenatal care workers would reach primarily the upper-income groups who need them least.

In the many countries with this pattern, there would be much greater potential in a nationwide program to distribute vouchers to pregnant women, who are easily recognizable, identified through a special outreach program – perhaps limited to rural areas, in settings where urban-rural economic differentials are large, perhaps accompanied by an incentive payable to the outreach workers upon the woman's presentation of the voucher at a delivery facility. Of course, to say that the potential exists is not to claim that its realization would be easy. It is possible to think of many ways that such a program could go awry: through, for example, a half-hearted effort that stalled after being implemented only in better-off, easier to reach areas of a country. So choosing an approach like this does not obviate the need for effective implementation. However, such an approach does offer the possibility that effective implementation could produce considerably better results than would effective implementation of some alternative strategy.

Monitoring to Determine Whether the Poor Have Been Reached

As noted repeatedly, the effectiveness of approaches like those described in the preceding sections is likely to vary greatly, depending upon the situation and upon design and implementation details. While a priori considerations and scattered experiences like those presented might offer plausible clue about the equity outcome of a given strategy in a given situation, these can safely be considered as no more than clues.

22 Davidson R. Gwatkin et al., *Socio-Economic Difference in Health, Nutrition, and Population within Developing Countries: Ghana*. Washington, D.C.: The World Bank, 2007.

23 *Ibid.*

24 This question of who receives vouchers needs to be distinguished from that of who uses them, which is arguably of greater interest. Figures for voucher use can differ from those for voucher receipt presented in figure five if poor women are notably more or less likely to use them are the higher-income recipients. A priori, it is possible to think of arguments supporting either possibility. On the one hand, given payment represents a larger amount relative to income for a poor women, thus perhaps giving a larger incentive to use the service; on the other hand, poor women might face longer travel distances or more social barriers. Refer to Indonesia experience. The only known empirical study of this issue, for Indonesia's health card, suggests that the poorest families were slightly less likely to use the card than middle-class households but slightly more than the highest-income ones. All in all, the differences were not large enough to make any significant change in the notably pro-poor pattern of card receipt produced by the community-based distribution system employed. (Sparrow, op. cit.) Of course, the relevance of this experience to a different type of incentive program in a country like Ghana is far from clear. Also, to the extent that it is relevant, the problem might possibly be lessened or overcome by providing an incentive to health staff for ensuring that voucher recipients come to a facility for delivery.

25 Gwatkin et al., *Socio-Economic Difference in Health, Nutrition, and Population within Developing Countries: An Overview*.

This gives rise to a central role for distributional or equity monitoring, to see whether or not strategies introduced in the basis of a priori reasoning or experience in some other setting are in fact living up to the hopes of their proponents. While such monitoring usually requires more than routine collection and analysis of health management service data,²⁶ inter-group differences in service use can be normally be tracked using a relatively undemanding technique that requires far less time, money, or expertise than a fuller impact evaluation.

First, a facility-based program in a place where baseline information about the distribution of living conditions of different groups in the population is already available. Suppose that, say, a third of the population is known through some prior survey to live in households with a dirt floor and straw roofs, and get their drinking water from a stream; and that the other two-thirds live under better conditions. Then one can ask a sample of patients at the clinic servicing this area whether their houses have dirt floor and straw roofs, and where they get their drinking water. If significantly more than a third of the patients interviewed respond positively to the first and second questions and indicate a stream as the source of their drinking water, then the clinic can be oriented toward the poor.²⁷

Second, an outreach program being evaluated through a large-scale representative household survey asking people if they have been seen or served by a program worker. In such cases, it is a simple matter to add a few questions about household possessions to the survey questionnaire, and then compare the number of possessions among people who have been seen by a worker with the number of possessions among people in the population as a whole.²⁸

In Closing

What's been said above has no doubt been as frustrating to read as it has been to write.

For only one basic message emerges clearly: that, as indicated in the opening sentence, the equity impact of an RBF strategy is not predetermined. Beyond this, few if any firm rules – especially rules for ensuring that RBF strategies do reach the poor – have been put forward; and the message that “it all depends” has appeared far too often for the administrator understandably hoping for firm, universal, and preferably infallible guidance.

Unfortunately, there are times when such guidance is not possible; and this is one of them. The unfortunate reality is that not enough is yet known to predict confidently just how well a particular strategy for dealing with a particular health problem will deliver benefits to the poor in a particular setting. There is thus no alternative to the challenging task of thinking carefully to come up with an equity-oriented RBF strategy that seems to make sense in a given situation, trying it out, and monitoring it carefully to see how well it lives up to expectations.

Acknowledgments: The author thanks Alex Ergo for preparing the data presented in figures two and three.

26 An illustrative exception: a clinic-based program that routinely records the education status of its users, in a setting where the population is more or less evenly across educational levels. Suppose, for example, that available census data indicate that about half the population of a district has a grade school education or less, and the district hospital collects information about the education status of its patients. In this case, the hospital staff can simply sort its patient data base according to the level education of educational level. If most patients have more than a primary education, it is serving primarily better-off groups (as defined by education, taken either as a proxy for economic status or as a valid poverty measure in itself). If most have less education, then it is oriented more toward the poor.

27 For an example of an assessment done through an approach like this, see William Winfrey, “Willingness to Pay Increased Prices for Reproductive Health Products and Services in Ghana,” April 2003. Winfrey surveyed a sample of pharmaceutical outlets in Ghana, asking a sample of condom purchasers a set of six questions about their personal possessions and the characteristics of their houses. Winfrey was then able to compare the information about the purchasers thus collected with information about those same possessions/housing characteristics gathered through an earlier national survey of randomly-selected households (conducted by the well-known Demographic and Health Survey (DHS) program). The principal finding was that condom purchases belonged overwhelmingly to upper economic groups. Over 90% were in the top quintiles of the population.

28 An illustration of a variant of this approach comes from the Kenyan supplemental immunization program discussed earlier. There, a special nationwide household survey was undertaken to determine who whom the program reached. The survey included several questions about household possessions/characteristics similar to those in the Ghana study described above; a wealth index for each household was calculated from the responses; and the household wealth of immunization recipients was compared with that of the population at large. This permitted production of the outcome figures cited on p.8. (Vijayaraghavan *et al.*, *op.cit.*)

Improved Service Quality: Friend or Foe of Health Equity?

Improvements in health service quality are of obvious central importance, whether for the poor or for anyone else. There is little point in providing services unless they are of adequate quality to produce significant therapeutic value.

It does not follow from this, however, that the benefits of a quality improvement initiative will accrue primarily to the poor. It is also possible for quality improvements to benefit primarily better-off groups, increase disparities, and thus work against health equity.

Conceptual Considerations

In the first instance, the principal beneficiaries of improved service quality are the service's current users, and coverage of almost all health services is higher among the better-off than among lower economic groups. As a result, it is these better-off groups who initially gain most, and the disparity between them and lower economic strategy is increased.

Such an outcome might be mitigated or reversed if the quality improvements attract a large number of additional people to the service, and if most of those people are poor. But it can also be magnified, should most of the additional patients come from upper-income groups.

Empirical Record

These points can be illustrated through reference to assessments of how the benefits from three service quality improvement efforts were distributed across economic groups. In two cases, the poor benefited significantly; in the third, the majority of benefits went to the better-off.

The two programs delivering significant benefits to the poor both provided primary care in rural West Africa that featured improved quality (especially by ensuring the regular availability of essential drugs) in combination with the introduction of user fees. One, a program in Cameroon, resulted in a larger increase in service use among the poor than among the better-off, apparently because the lower cost of the newly-available drugs in public facilities that they had previously bought from private merchants.²⁹ A study of the second, in Niger, found that service use among the poorest quarter of the population more than doubled in the area covered by an improved service program that was financed primarily through a local tax, supplemented by a token user fee.³⁰

The opposite result emerged from an assessment of new outpatient visits at hospitals and health centers operated by the Government of Uttar Pradesh, India, which had received World Bank support for a set of service quality improvements. Relative to the control facilities also covered by the assessment, the improved facilities attracted seven times as many additional patients from among the top 40% of the population as from among the bottom 40%. As the assessment authors observed, their findings "support the hypothesis that wealthier groups are the first to benefit whenever overall improvements are made."³¹

Implications

As these cases indicate, there's an important difference between offering a service enhancement that's relevant for the poor on the one hand, and one that actually reaches and benefits the poor on the other. Relevance is a necessary but not a sufficient condition for the poor to benefit. The beneficiaries of a service enhancement are not all those for whom an enhancement is relevant, but rather those whom the enhancement reaches.

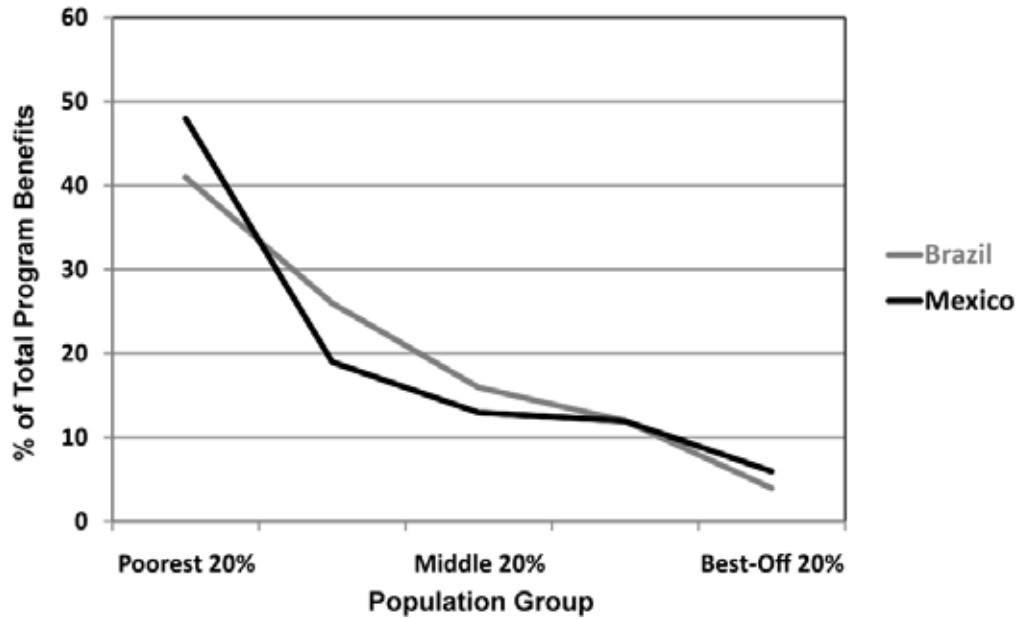
29 Jennie I. Litvack and Claude Bodart, "User Fees Plus Quality Equals Improved Access to Health Care: Results of a Field Experiment in Cameroon," *Social Science and Medicine*, vol. 37, no. 3 (1993), pp. 369-83.

30 François Diop, Abdo Yazbeck, and Ricardo Bitran, "The Impact of Alternative Cost Recovery Schemes on Access and Equity in Niger," *Health Policy and Planning*, vol. 10, no. 3 (1995), pp. 223-40. (Unlike the Cameroon study just cited, this assessment shows simply that there was a large service increase among the poor, without indicating whether or not it was larger among the poor than among the better-off.)

31 David Peters, Krishna Rao, and G.N.V. Ramana, "India: Equity Effects of Quality Improvements on Health Service Utilization and Patient Satisfaction in Uttar Pradesh State," in Davidson R. Gwatkin, Adam Wagstaff, and Abdo S. Yazbeck, eds. *Reaching the Poor with Population, Health, and Nutrition Services: What Works, What Doesn't, and Why*. (Washington, D.C.: The World Bank, 2005), pp. 189-210.

Figure One

DISTRIBUTION OF BENEFITS FROM CONDITIONAL CASH TRANSFER PROGRAMS IN BRAZIL AND MEXICO



Note: Data presented here are approximate, to be replaced in the final version by the more precise figures that have been requested.

Figure Two

**HOW MANY PEOPLE LIVE ABOVE THE POVERTY LINE IN POOR AREAS?
Errors of Inclusion in Three African Countries**

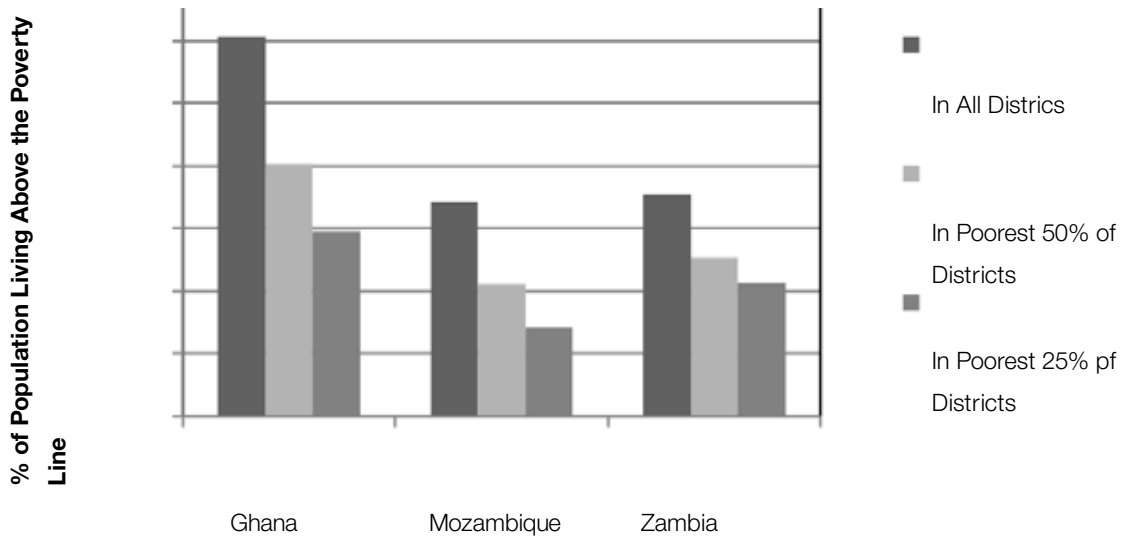


Figure Three

HOW OFTEN DO PEOPLE BELOW THE POVERTY LINE LIVE OUTSIDE POOR AREA?
Errors of Inclusion in Three African Countries

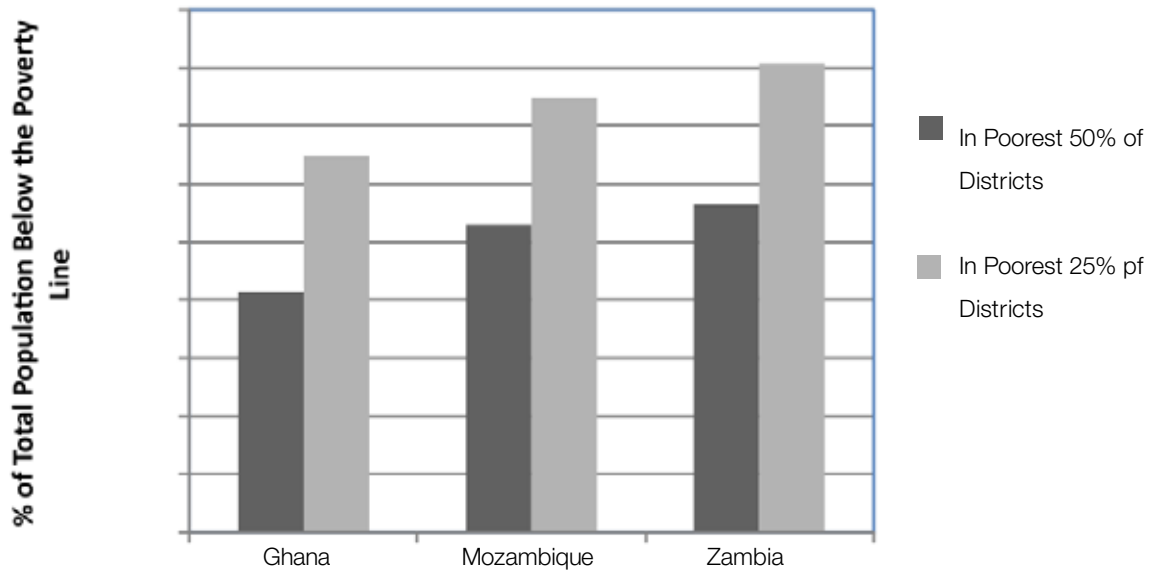
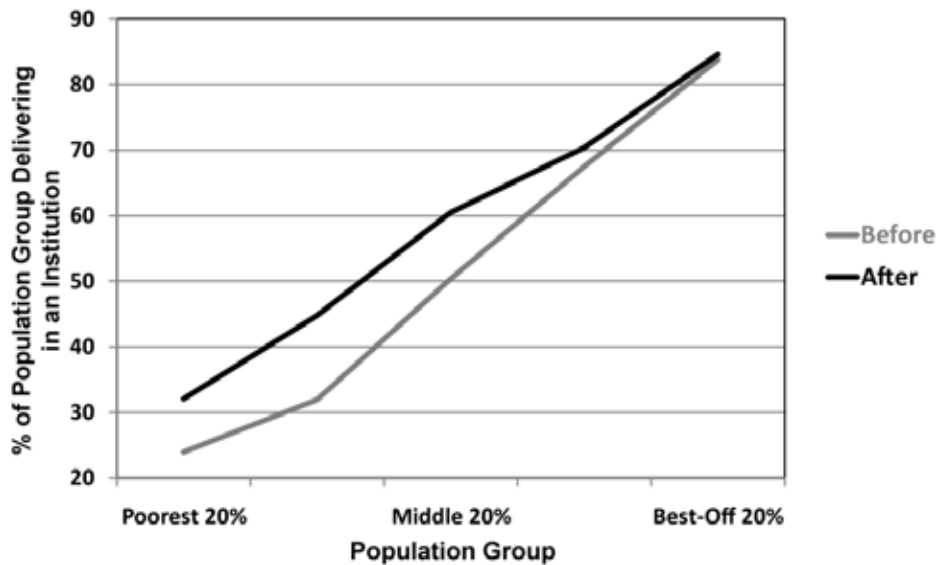


Figure Four

COVERAGE OF INSTITUTIONAL DELIVERIES IN GHANA
Before and After Free Removal



Note: Unweighted Averages of Central and Volta Regions

Figure Five
RECEIPT OF ANTENATAL CARE IN GHANA

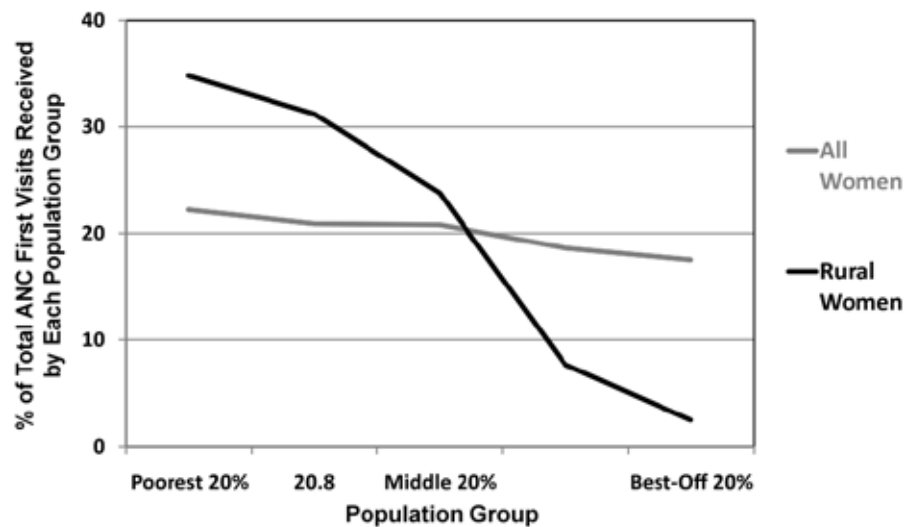
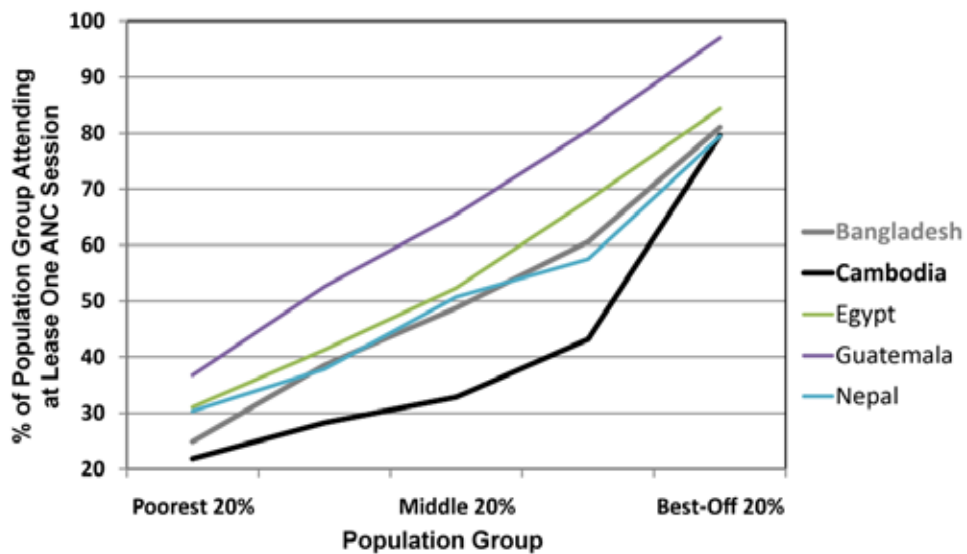


Figure Six
USE OF ANTENATAL CARE IN FIVE COUNTRIES



Note: Figures Not Yet Weighted by Number of Pregnant Women in Each Quintile