

# Health and nutrition services

## chapter 8

Poor people in most countries have the worst health outcomes. They are pushed further into poverty due to ill health. And they are often excluded from support networks that enhance the social and economic benefits of good health. Unlike education, health and nutrition outcomes of poor people are produced by households—with contributions from many services. And health and nutrition services contribute to other aspects of human welfare, such as protecting people from catastrophic health spending. They should thus be judged by the way they contribute to the poor's health outcomes, to protecting citizens from impoverishing health expenditures, and to helping the poor break out of their social exclusion.

Throughout history, poor people have often paid health providers directly. But this short route from client to provider is blunted by asymmetries of information and conflicts of interest. Another problem: poor people lack the money for market transactions. A variety of market failures—disease-related externalities and fragmented insurance markets—and concerns for equity justify public intervention in financing health and nutrition services. But governments find it difficult to monitor the performance of health workers, especially those delivering highly discretionary services, such as clinical care. And since insurance-market failures affect everybody, the non-poor often capture public financing of health care.

Health services are failing poor people not because of lack of knowledge for preventing and treating illnesses but because health systems are trapped in a web of failed relationships of accountability. To break out of this trap, service delivery arrangements can be tailored for three classes of services:

- Getting highly transaction-intensive and discretionary **individual-oriented clinical** services to poor people is most challenging. To influence quality, poor clients should have greater power—through third-party payments, information, and greater oversight of health workers and facilities. Organized citizens can exert this power by contributing financial resources and co-producing and monitoring the services. But insurance market failures, asymmetries of knowledge, and conflicts of interest mean that governments need to invest in purchasing key services to protect poor households and foster a pro-poor professional ethos.
- **Population-oriented outreach** services—standardized services that can include vector control, immunization, or vitamin A supplementation—are easier for policy-makers to monitor. Even governments with limited capacity can provide these services—or write contracts with public or private entities to provide them. Building coalitions to strengthen poor people's collective voice is essential to ensure adequate public resources for those services.
- For community and **family-oriented services that support self-care**—such as information and social support for promoting breastfeeding or safe sex—community and civil society organizations and commercial networks are often well placed to provide services close to poor households. Governments can establish partnerships and provide information and targeted subsidies.

Policymakers need to be accountable for health outcomes—which means greater investment in monitoring and evaluation mechanisms that capture disparities in health.<sup>359</sup>

### BOX 8.1 Ethnicity and health

In the United States, according to 2000 data, indigenous Americans and Alaskan Natives have a life expectancy five years lower than that of the general population. Australia's Aboriginal Health Service notes that in 1996 life expectancy was 20–25 years lower for aborigines than for their non-aboriginal counterparts. In Chocó, Colombia, where 90 percent of the population is of African descent, the male infant mortality rate is more than 90 per 1,000 live births, while the national average is 25 per 1,000. In Guatemala people born in the capital have a life expectancy 10 years higher than those born in the department of Totonicapán, where more than 96 percent of the population is indigenous. The ratio of stunting prevalence in indigenous versus nonindigenous populations is more than double in Colombia, Peru, and Ecuador. The 1996 South African Census reveals that despite the government's systematic efforts, the infant mortality rate was 5.5 times greater among the black population than among the white population, a significantly larger disparity than would be predicted based on income differences.

Source: Torres Parodi (2003).

## The health of poor people

Health outcomes improved in the second half of the 20th century, a trend likely to continue in many countries. But hopes for an ever-improving trend are fading as progress slowed down in the 1990s. At the current pace most regions of the developing world will not reach the Millennium Development Goals for health by 2015 (figure 8.1). Infant mortality rates are increasing in Central Asia. Under-five mortality is on the rise in 22 countries in Sub-Saharan Africa. Stunting is rising in many African countries and remains high in South Asia. In 1995, 500,000 women died worldwide as a result of complications associated with pregnancy, mostly in developing countries. The AIDS epidemic is expanding in Africa, India, China, and Russia, along with a resurgence of tuberculosis.<sup>360</sup> Adult mortality rates have worsened in the Russian Federation and some of its neighbors.

The outcomes are consistently worse among the disadvantaged. In low- and middle-income countries, under-five mortality rates are 2.3 times higher among the poorest fifth of the population than among the richest fifth. Stunting rates are 3.4 times higher (figure 8.2).<sup>361</sup> The rich fare well in absolute terms. In Pelotas, Brazil, infant mortality for the richest 7 percent of the population in 1993 was comparable to the average for the Netherlands in 1998.<sup>362</sup>

Communicable diseases, malnutrition, and reproductive ailments account for most of the mortality gap between high- and low-income countries and between the rich

and poor.<sup>363</sup> The poor also often suffer from higher rates of noncommunicable diseases such as depression and cardiovascular diseases in North America or alcohol-related ailments in the Russian Federation. Malnutrition is a double burden: poorest groups have both high rates of malnutrition and diabetes and obesity.<sup>364</sup>

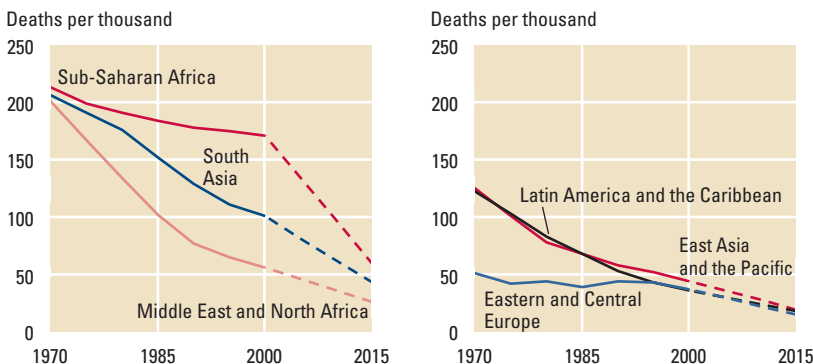
Improving health outcomes for the poor is a complex task. In addition to income, other household factors influence health outcomes: age, social status, religion, residence (chapter 1), ethnic background (box 8.1), and gender—particularly in South Asia. Girls in India are 30 to 50 percent more likely to die between the age of one and five than boys.<sup>365</sup> Maternal mortality depends mainly on health services while nutrition and under-five mortality depend on many other services, such as education, water, food security, communication, electrification, and transportation. The AIDS epidemic has particularly challenged policymakers and providers to look at links with other sectors and focus more on behavior and societal values.

### Health services can work for poor people

Experience from Brazil, Chile, Costa Rica and Cuba (spotlight), Iran (box 8.2), Nepal, Matlab (Bangladesh), Tanzania, and several West African countries (spotlight) shows that health services, if delivered well, can improve outcomes for even the poorest groups. A health program in the Gadchiroli district in India reduced neonatal mortality rates by 62 percent. Midwifery services and community hospitals are linked to dramatic reductions in neonatal and maternal mortality in Sri Lanka and Malaysia. In Uganda and Thailand government efforts changed sexual behavior, reducing the prevalence of HIV. In low- and middle-income countries services promoting oral rehydration therapy led to a decrease in diarrhea-related child mortality.<sup>366</sup>

Health services also help protect the income of the poor. Locally managed financing schemes in Niger, contracted-out services in Cambodia, and insurance schemes targeting poor people in Thailand and Indonesia helped reduce out-of-pocket spending and extended the reach of the safety net among the poor.<sup>367</sup>

**Figure 8.1 Reaching the MDGs in health: accelerate progress**  
Trends in under-five mortality by region



Source: World Development Indicators database (2003).

Health services, when they work, can also contribute to greater self-reliance and social inclusion of poor people. They have been used as entry points to broader development activities, as in the Democratic Republic of Congo, where community health financing schemes triggered the emergence of cooperatives to commercialize agricultural products.<sup>368</sup>

### *But those who need the most often get the least . . .*

Despite these successes the availability of good health services tends to vary inversely with need.<sup>369</sup> Poor groups and regions have less access to sanitation and vector control.<sup>370</sup> An analysis of 30 countries shows that the use of health care interventions is consistently lower among people living on less than \$1 a day than among richer groups (figures 8.3 and 8.4).

### *. . . pay the most . . .*

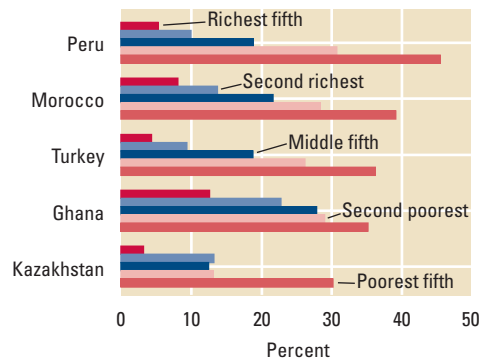
Illness pushes households into poverty, through lost wages, high spending for catastrophic illnesses, and repeated treatment for other illnesses. The share of household non-food expenditures spent on health is higher among poorer than richer groups. Patients sell assets to finance health care, as 45 percent of rural patients do in the Kyrgyz Republic.<sup>371</sup> Health expenses are estimated to have pushed almost 3 million Vietnamese into poverty in 1998. Out-of-pocket spending pushes poor households deeper into poverty, but it also pushes households that were not poor into extreme poverty. The poor seldom enroll in voluntary insurance schemes and rarely benefit from compulsory schemes. Even when they do, they still incur significant direct health care costs in the form of insurance premiums, copayments, and payments for noncovered services.<sup>372</sup>

### *. . . and lack the power to produce good health*

Poor nutrition practices, careless handling of water and waste, and inadequate care for illness are major contributors to poor health. Illiteracy, women's ignorance of health issues, and lack of decisionmaking power are often the causes (figure 8.5).<sup>373</sup> Studies of the rich-poor gap in health outcomes show that the poor and the non-poor may respond to the same level of inputs differently.<sup>374</sup> In Senegal

**Figure 8.2 Reaching the MDGs in health: focus on poor households**

Stunting prevalence among children 3–5 years old, by wealth group



Source: Analysis of Demographic and Health Surveys, 1990–2002.

the poor are 39 percent less efficient than the rich at translating drinking water, sanitation, and health services into better health. In Mali, the poor are only 16 percent less efficient, but the gap has been widening over time: while the availability of inputs is increasing, poor households' ability to transform those inputs into health is lagging behind.

### **BOX 8.2 Making health services work for poor people in the Islamic Republic of Iran**

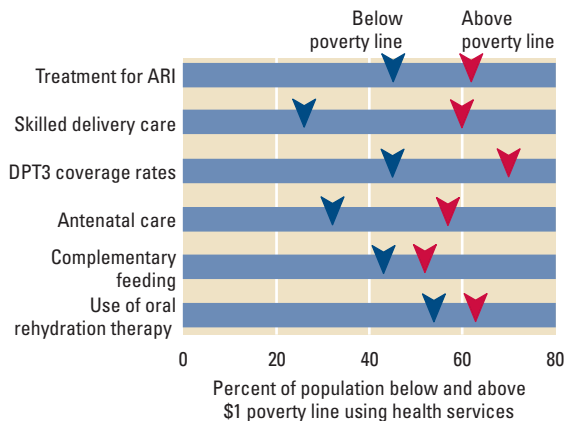
In 1974 the infant mortality rate in Iran was 120 per 1,000 live births for rural areas and 62 in urban areas. By 2000 it stood at 28 for urban areas and 30 for rural areas. Maternal mortality rates dropped in rural areas from 370 per 100,000 to 55 between 1974 and 1996. Immunization rates, treatment of child illnesses, and antenatal care increased dramatically and are now at comparably high levels in rural and urban areas, although skilled attendance for deliveries remains lower (75 percent) in rural areas than in urban (95 percent). All this, despite the fact that 76 percent of rural children had no health insurance in 1997 and 56 percent of rural women were still illiterate.

How did this happen? In 1980, after the Iranian revolution, a new constitution bound the government to provide basic health benefits to the "disadvantaged" (*mostazafeen*). The most immediate concern was to increase access to care in rural areas. Allocations of resources for rural services increased and today are about a third of the health budget in the rural regions. By March 2002 there were 16,340 rural health houses, each covering about 1,500 people, serving

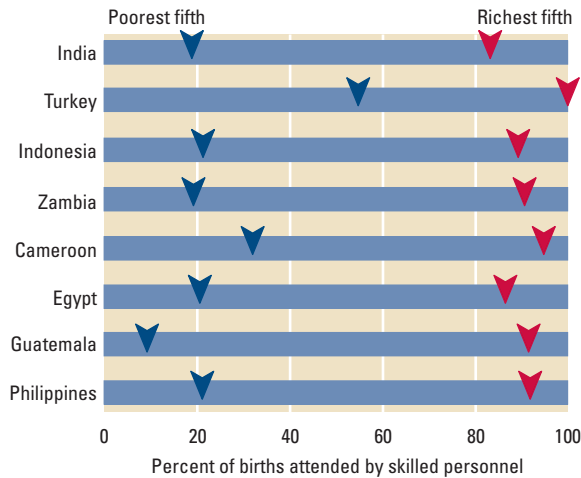
about 84 percent of rural communities. The rest were covered by mobile teams. Health centers offering emergency obstetrical care 24 hours a day (three midwives) and transport for referral were created covering about 20,000 people each.

Despite the large number of medical professionals in Iran, staffing these facilities was a challenge because personnel did not readily accept posting to rural areas. The health houses were therefore staffed by female and male health workers known as *behtarz*. Selected from the villages where they were to be stationed, with the participation of village authorities, the *behtarz* were required to have eight years of formal schooling. Their training lasted two years, was mainly local, and consisted of on-the-job training with supervisors and peer trainers. A simple health information system—the Vital Horoscope—enabled *behtarz* to identify families with child and maternal health problems and link them with health services.

Source: Mehryar, Aghajanian, and Ahmadnia (2003).

**Figure 8.3 Poor people use high-impact services less**

Source: Authors' calculations, based on Demographic and Health Survey data, weighted average for 30 low- and middle-income countries.

**Figure 8.4 Richer groups do well in absolute terms**

Source: Gwatkin and others (2000), Demographic and Health Survey data, weighted average for 30 low- and middle-income countries.

## Market failures and government failures

Market failures and a concern for equity call for some government financing of health and nutrition services. One type of market failure is the underprovision of services to prevent or treat individual illnesses that spill over to the general populace. Another is the breakdown in insurance and credit markets, impoverishing people.<sup>375</sup> The concern for equity is either a social choice or based on the notion that health is a human right (see box 2.2).

Conflicts of interest and the capacity of services to do serious harm also justify government involvement in service provision. Patients find it difficult to attribute their

health status to a specific course of action. This makes them imperfect judges of health providers. Although responsiveness to patients' needs is often better in the private sector, the technical quality of private services varies broadly from very good to very bad (chapter 4). The technical complexity of clinical services confers considerable power on providers to influence the nature and quantity of services they provide—to their own financial benefit. This is well illustrated by recent increases in caesarian sections in both high- and low-income countries.<sup>376</sup>

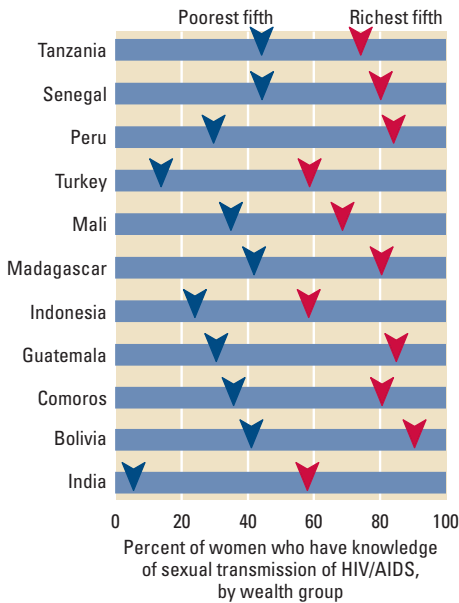
Governments often aim at solving conflicts of interest through direct service provision with tight administrative control and enforcement of a public ethos. But monitoring whether services are actually delivered and of adequate quality may be difficult. These "bureaucratic" failures are particularly high for highly discretionary and transaction-intensive services such as diagnosing and treating an illness. Absenteeism rates in health clinics is high<sup>377</sup> (chapter 1) and although technical quality of services is often slightly better in public than in private services, quality shortcomings are still rampant in the public sector. In Tunisia in 1996 only 20 percent of pneumonia cases were managed correctly and 62 percent of cases received antibiotics inappropriately.<sup>378</sup>

Governments also address failed insurance markets by running "free" public hospitals. The beneficiaries of these hospital services are usually the non-poor in urban areas (chapter 2). They use their political clout to ensure that public spending for these (expensive) hospitals is maintained—often at the expense of services that could have a real effect on poor people.

Many health services are private goods, and all countries have a private health care market. Most industrial countries started with private health systems. In low- and middle-income countries out-of-pocket spending represents a large share of health spending even in countries with well-functioning public systems (figure 8.6). And in the last 20 years there has been tremendous growth in private provision (often uncontrolled) and private spending on health.<sup>379</sup>

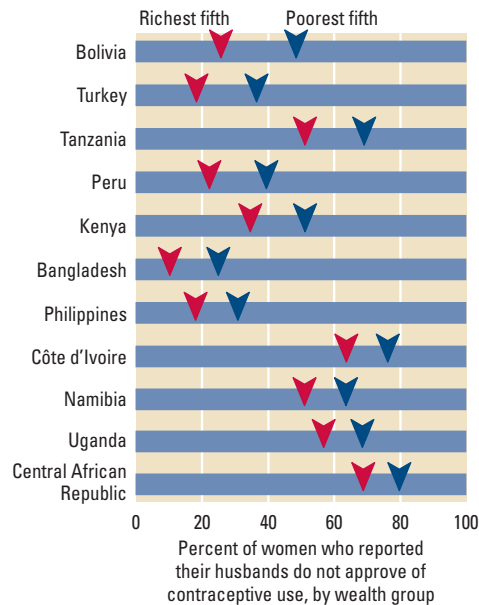
Worldwide, richer groups generally resort more to the private sector, but the sit-

**Figure 8.5a** Poor women do not know much about HIV



Source: Authors' calculations from Demographic and Health Survey data, 1995–2002.

**Figure 8.5b** Husbands say no to contraception



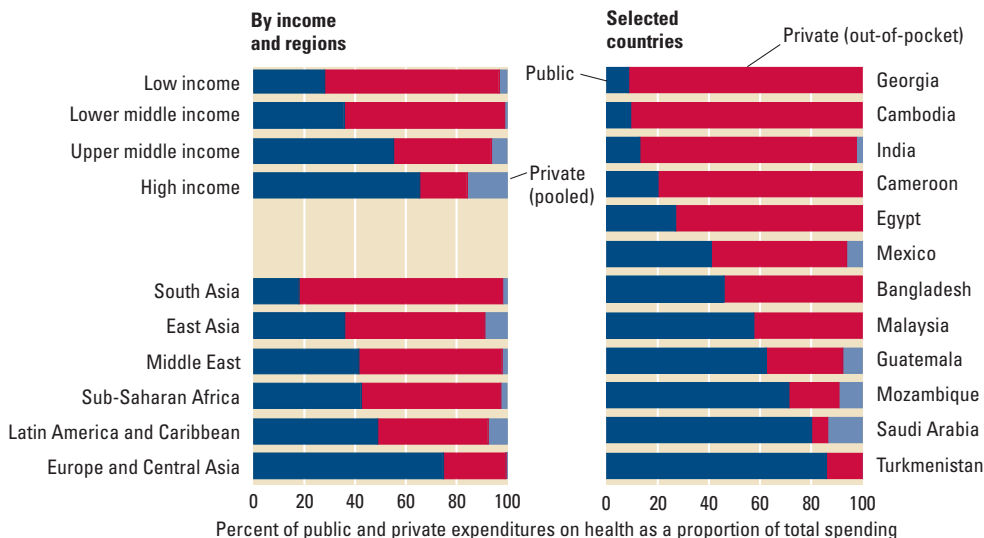
Source: Authors' calculations from Demographic and Health Survey data, 1995–2002.

uation differs by country. Richer groups also use public facilities more—which indicates that subsidies are not well targeted. The public-private mix varies by type of service (figure 8.7). The private sector is involved in many critical services, including disease control and child and reproductive health. But immunizations, family planning, and skilled delivery care are more

often provided by the public sector. Even in India, poor people, who turn mainly to private providers to treat illnesses, rely on the public sector for vaccination (93 percent) and antenatal care (74 percent).<sup>380</sup>

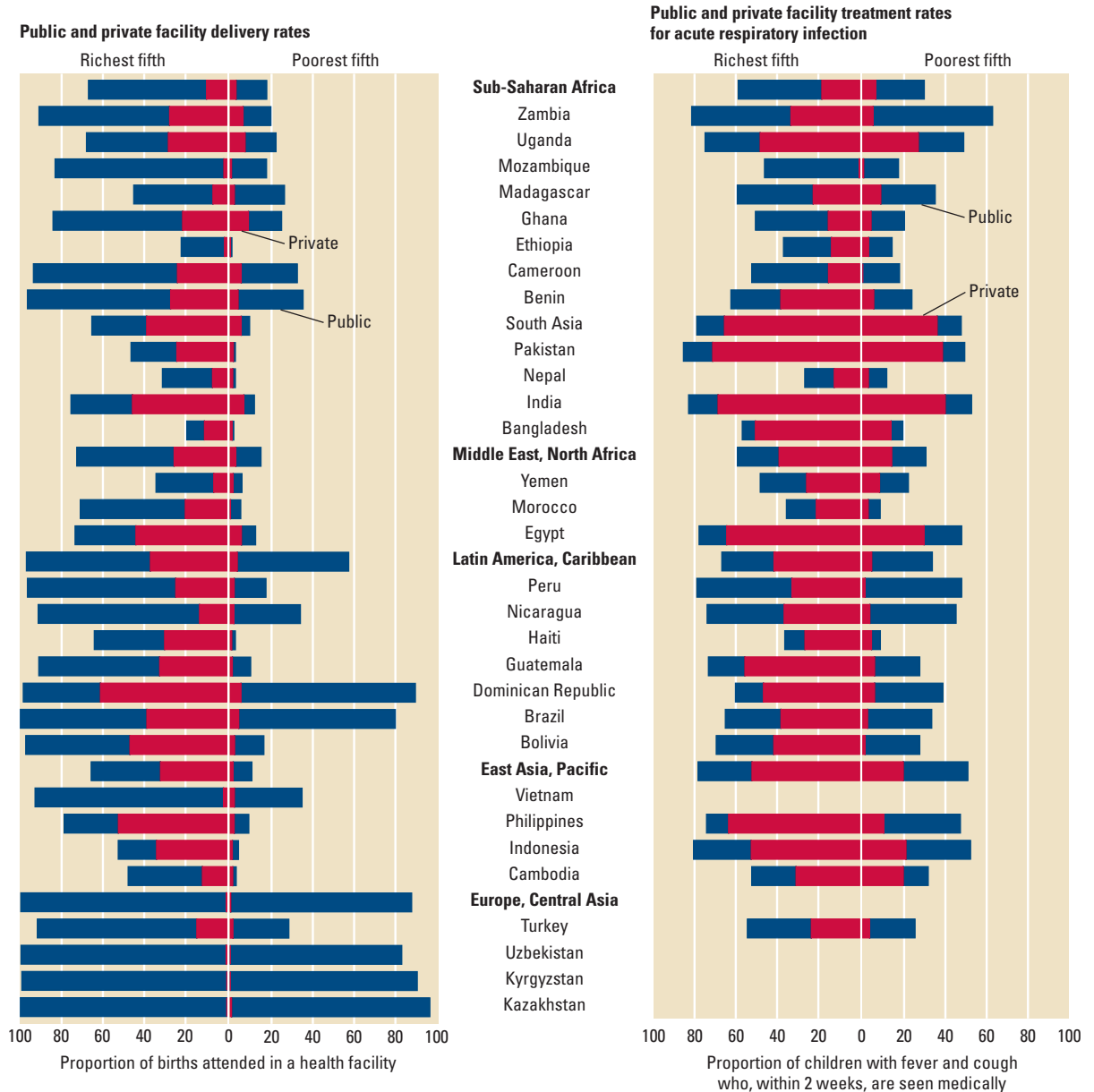
The boundaries between public and private services have blurred. Many governments subsidize privately provided services—all high-income countries do and so,

**Figure 8.6** A public responsibility, but private spending matters



Source: WHO (World Health Organization) (1999), National Health Accounts, updated 2002.

Figure 8.7 The public-private mix differs between poor and rich, and among interventions



Source: Authors, based on Demographic and Health Survey data 1995–2002.

increasingly, do middle- and low-income countries, as in the Thai Social Security Scheme, Poland’s social insurance system, and Uganda’s subsidies to not-for-profit providers. Many public facilities charge user fees, introducing a market-like transaction in the delivery of public services,<sup>381</sup> and poor people spend substantial sums to use them.<sup>382</sup>

There has also been widespread growth in informal payments to public providers in Africa, East Asia, and Eastern Europe,<sup>383</sup> which represents an informal marketization

of public services. Informal payments boost the cost of “free” maternity care in Bangladesh to \$31 for a normal delivery—a quarter of a household’s average monthly income—and to \$118 for a caesarian section.<sup>384</sup>

*Applying the framework: classes of services*

Chapters 3 through 6 developed a framework for analyzing service delivery that identifies two routes for poor people to obtain services. One is the short route, where clients



exert power over providers by dint of their money and ability to enforce discipline. The other is the long route of public accountability from poor clients to policymakers, and from policymakers to providers. For health services, the short route often fails because of conflicts of interest and asymmetries in information. Poor people also lack money for market transactions. But the complexity of services and the heterogeneity of health needs make it difficult to standardize service provision and to monitor performance—a major “bureaucratic” failure of the long route of accountability. Lack of voice of the poor in decisions over the use of the collective purse is another failure of the long route.

*Clinical services* are highly discretionary and transaction-intensive, requiring individually tailored diagnostics and treatments. So one leg of the long route, which requires the policymaker to monitor the provider, is difficult. Yet failures in the insurance market call for government involvement in high-cost services, such as inpatient services or catastrophic illnesses. But often these government-financed, high-cost services benefit primarily the non-poor. So the other leg of the long route (voice) also fails. This means that poor people have to revert to the short route of direct client purchases of a service. But the asymmetry of information between the client and the provider—and the client’s lack of money—cause this route to fail too. A quandary!

The task is slightly easier for services that *support self-care* by families and communities, such as information to support changes in nutritional or sexual behavior. This service is discretionary because it has to be tailored to the family’s social environment, but it requires less intensive professional transaction than services responding to individual illness. Short- and long-route failures are small.

Some professional services, despite being technical and transaction-intensive, are also well standardized and less discretionary. Such services include those that serve homogeneous needs of a population—such as vector control, immunization, supplementation with vitamin A, or screening for diabetes. These *population-oriented* services can be delivered through outreach to the poor. When health interventions have large externalities such as communicable diseases control, the short-market-like route is unlikely to work. If technology allows standardization, this delivery arrangement is then the prime choice as policymakers can monitor performance and tightly control delivery.

Technology is constantly evolving, and no intervention belongs automatically to one category (box 8.3). Service delivery approaches are continually being developed that reduce the need and difficulty of monitoring for both government and citizens. Countries have standardized highly technical interventions into less discretionary services

### BOX 8.3 *The changing mix of cure and care: who treats what, and where?*

Throughout the 20th century, service institutions have responded—albeit slowly—to rapid changes in health technology. Countries choose combinations of “delivery modes” based on costs and international standards but also on country-specific characteristics such as geographic and density constraints, transport and infrastructure capacity, existing health infrastructure inherited from previous technological innovations, labor market characteristics, training and orientation of providers, and so forth. What is delivered as inpatient treatment, outpatient hospital, health center or home visits; and what by lay people, nurses, general practitioners, or specialists is far from being standard across countries.

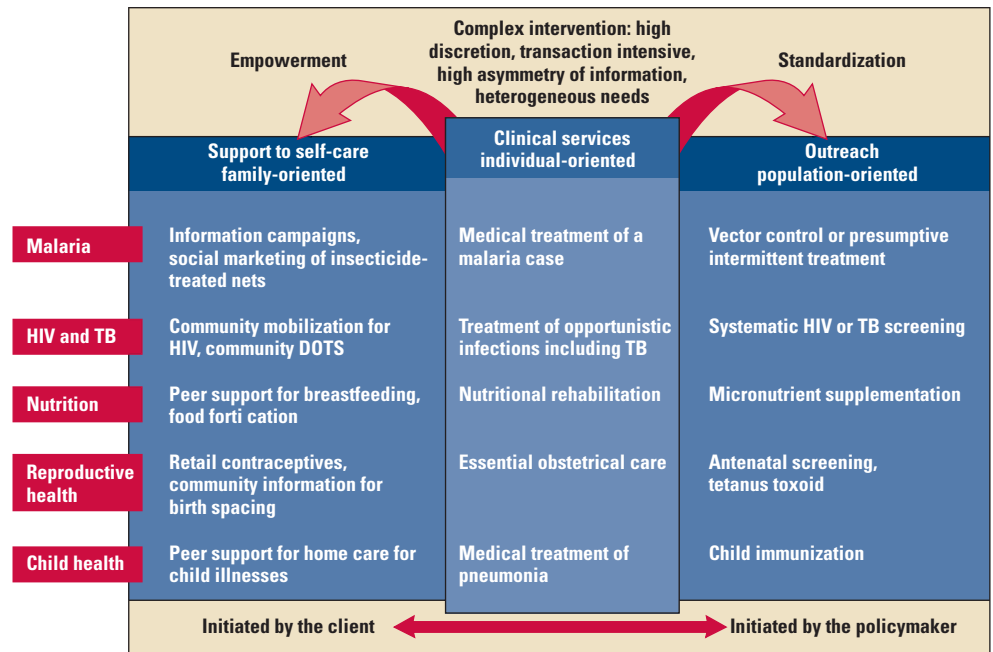
- *Technological progress* triggers modifications in the nature, type, and quantity of services

required. Hospital tuberculosis treatment (the sanatorium) was replaced by outpatient clinical care—thanks to antibiotics. Screening followed by treatment—DOTS (Directly Observed Treatment Therapy)—were later standardized to allow delivery through community outreach. Similarly, new treatments for HIV and cancer cut lengthy hospitalization requirements. The care and cure functions of the hospital also evolve. Hospitals are being transformed into long-term-care centers for the elderly, while complex procedures are increasingly conducted in ambulatory clinics. Home-based nursing care is being revived.

- *At similar levels of technology* countries have opted for different models with comparable lev-

*els of success.* Independent practitioners developed first in Western countries and have been the cornerstone of Western systems. The hegemony of hospitals in the Western world is no older than the 20th century. In contrast, hospitals have played a much larger role in the provision of outpatient care in Eastern Europe and Central Asia, and in Latin America, Vietnam, and Sri Lanka. In Africa health systems developed through hospitals and mobile clinics since the beginning of the 20th century, with primary health care emerging only in the 1980s. Different skill levels are also used for similar interventions. Health technicians and nurses have been successfully used in Mozambique to perform caesarian sections, while other countries use general practitioners or skilled obstetricians.

Figure 8.8 Making health services easier to deliver, through standardization and empowerment



that can be initiated, controlled, and delivered by the government through reaching out to the poor. Such interventions can be addressed to population groups with similar needs. Another way is to reduce the transaction intensity of services—and the need for government monitoring—by empowering poor people to drive services that correspond to their needs and characteristics (figure 8.8).

Table 8.1 presents some of the key obstacles limiting the coverage of the poor with regard to health and nutrition services. Poor access to information and to networks distributing health-related commodities is a major impediment to the use of *community- and family-oriented support to self-care*. Rural populations often have no access to retail condoms, soap, water containers or bed nets. If they do, price remains a barrier. Fewer than 30 percent of the poorest fifth of the population have access to the media in such countries as Bolivia, India, Morocco, and Mozambique. Few poor households receive extension workers, with visits peaking at 20 percent of Indonesian and Peruvian households.

Most countries have had some success in increasing the physical access of poor communities to some *population-oriented ser-*

*vices*—witness the universal childhood immunization, polio eradication efforts, and the elimination of onchocerciasis. Egypt and Mexico have successful itinerant clinics. But sustaining these efforts for the poor is problematic. Low demand and poor quality reduce effectiveness of family planning services in India. Governments can control and monitor such services easily, but they often underinvest in them. In transition countries in Europe and Asia, moving from publicly provided services to social insurance led to confusion about the government's role in health, which led to the neglect of these services and the subsequent re-emergence of communicable diseases.

Low-income countries have difficulty ensuring physical access to *clinical services* for a large part of their population. In Chad only 20 percent of the poorest fifth live less than one hour from a health facility. Middle-income countries have more trouble ensuring affordable and quality care to excluded, vulnerable, and difficult-to-reach segments of the population. Inequitable risk pooling still leaves the poor exposed to the financial risk of illness in most of these countries. Studies report large inefficiencies in the way health facilities are run. In Turkey, a study found that only 54 of 573 general hospi-



**Table 8.1 Selected examples of obstacles for the delivery of health and nutrition services to the poor**

Dimensions of performance of health services	Community- and family-oriented support to self-care	Individual-oriented clinical services	Population-oriented outreach
<b>General</b>			
Knowledge	Low literacy and low knowledge of caring practices among the poor, particularly women	High demand, but large asymmetry of information between people with low literacy levels and providers; low access to technical information	Low demand for key services (e.g., immunization in India)
Empowerment	Intrahousehold allocation unfavorable to women or children, particularly in South Asia	No control over socially powerful providers; no inclusion of the poor in risk pooling schemes	Low decisionmaking power of women in public life, particularly in the Middle East
Affordability	Low affordability of safe water, food, radio, magazines, bed nets, condoms, etc.	Low affordability of insurance premiums as well as service fees and impoverishment due to catastrophic illnesses	High transport and opportunity costs for the poor even when services are free
Social and cultural access	Social and cultural factors affect nutritional and caring practices	Social distance from providers: social class and ethnic minorities, castes in India, Western-educated providers in Africa	Information on benefits of services not tailored to local values and social norms
Physical access	Poor access to safe water, commercial networks, and media	Low geographical access to facilities in Africa mainly, but also in poor areas of other regions	Increased access and demand through mobile strategies but large dropout rates
Availability of human resources	Norm setters, opinion leaders, community elders, peers may resist change	Major poor region–rich region and rural-urban imbalance in qualified human resources	Health workers’ training and remuneration modes do not provide incentives to deliver those services
Availability of consumables	Deficient markets: no bed nets, condoms, contraceptives, etc., in retail	Fake, dangerous drugs mainly in Sub-Saharan Africa and East Asia	Often not very sensitive to market dynamics
Organizational quality	Inappropriate information channels: e.g., information on HIV and condoms in clinics instead of schools or bars	Poor facilities amenities, inconvenient opening hours, poor attitude of staff	Often mainly supply driven, even centrally planned, with little involvement of recipients
Technical quality	Noncomparable standardized information, diffusion of erroneous information	Broad variations in quality of care in private services, poor use of drugs, overprescription	Standardization allows quality assurance, but supervision can be inadequate leading to quality shortcomings
Input/technical efficiency	Technical efficiency of provision of information/community support often not known	Poor input mix: inappropriate investment/recurrent balance, lack of nonsalary recurrent inputs	Integration in clinical services is not effective if use of clinical services is low and there are no incentives
Resource management	Low level of multisectoral coordination	Leakages of drugs, and funds; absenteeism of personnel, moonlighting/informal practices of public servants	Vertical program approaches may have opportunity costs by diverting resources away from other services and creating skewed incentives
Governance	Capture of subsidies by richer groups	Lack of transparency in financing of health facilities, large capture by richer groups	Financing often dependent on donors in low-income countries

Adapted from Claeson and others (2003).

tals—public and private—could be considered to be operating efficiently.<sup>385</sup>

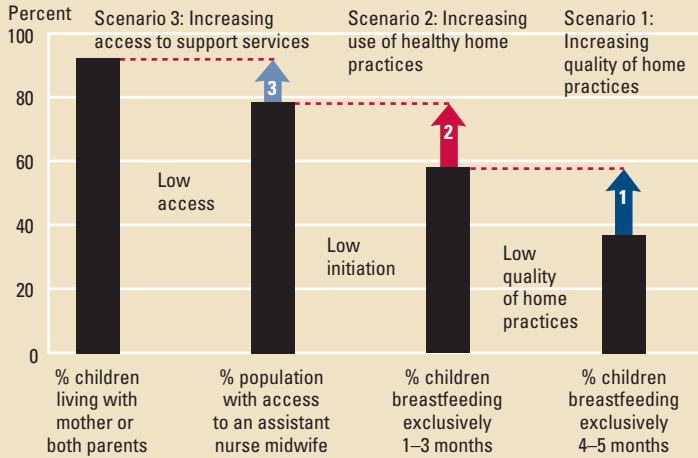
With a broad variety of situations and problems, the key issue is to find a balance in the public-private mix to minimize the consequences of both market and government failures in financing and providing services. Increased resources for health services will translate into better results for the poor only if used to address the country-

specific obstacles to service delivery (box 8.4). This clearly requires defining the accountabilities of those involved and ensuring that there are sufficient resources, information, and enforcement mechanisms to make the relationships work. The mix of client power and government action will need to differ according to the nature of services, the country, its institutions, and its government.<sup>386</sup>

**BOX 8.4** *Buying results to reach the Millennium Development Goals*

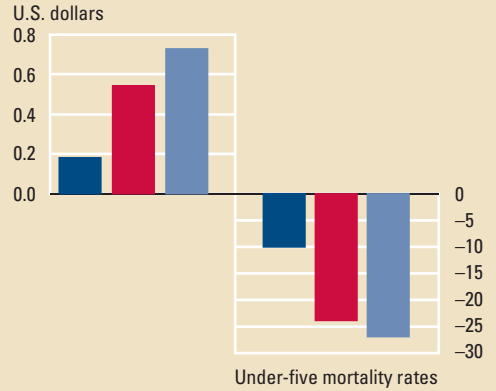
**Where are the bottlenecks?**

**Improving self-care in Madhya Pradesh**

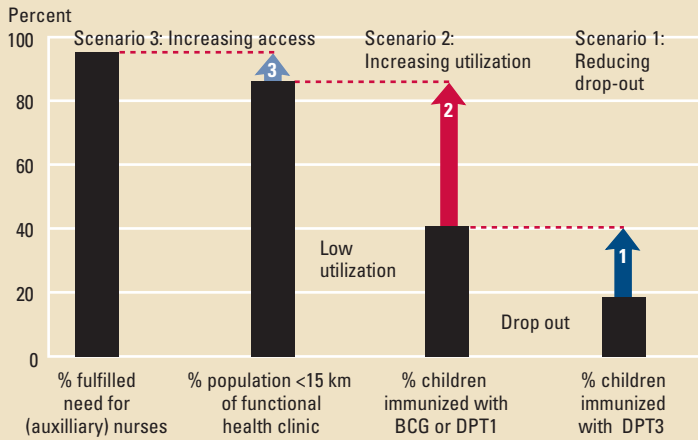


**What would be the cost and impact of removing those bottlenecks?**

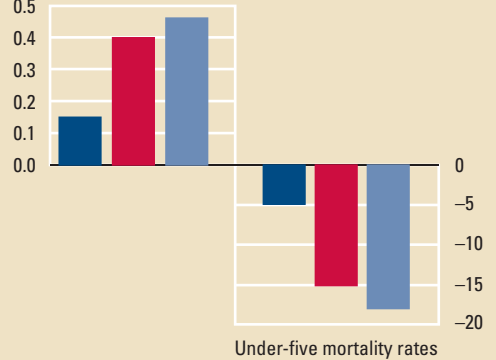
**Cost per capita**



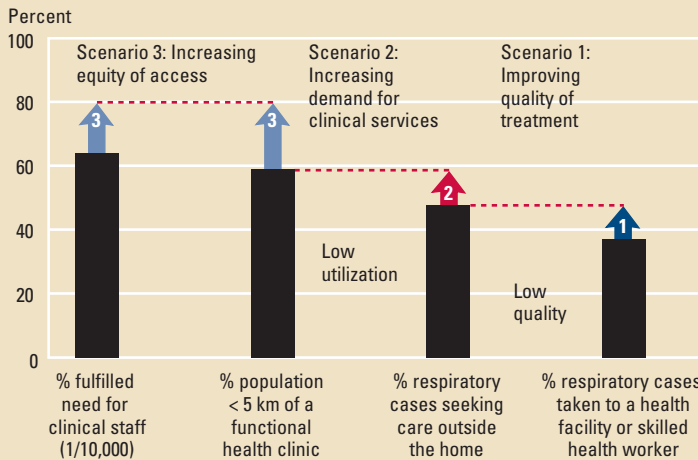
**Outreach services in Ethiopia**



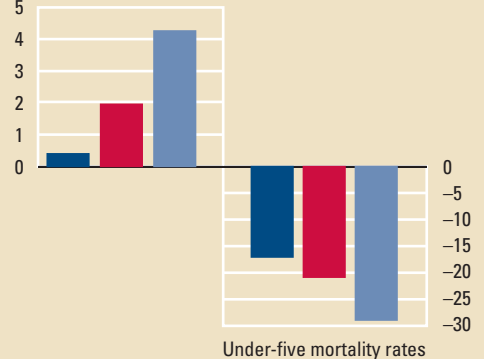
**U.S. dollars**



**Clinical care in Madagascar**



**U.S. dollars**



**Impact on health outcomes (reduction from baseline over 5 years)**

### BOX 8.4 *Buying results to reach the Millennium Development Goals (continued)*

Budgeting approaches often don't link the money spent with the expected results. The impact of public funds invested in health services and their contribution to the Millennium Development Goals are thus difficult to assess. Budgeting the contribution of health and nutrition services to goals should address three questions:

1. *What are the major bottlenecks hampering the delivery of health services, and what is the potential for improvement?*

The analysis of the determinants of the baseline coverage of interventions in terms of availability of critical resources (human and material), physical accessibility, demand (utilization of the services), and continuity and quality of health services helps identify the main constraints to the increase in coverage.

In Madagascar the bottlenecks of clinical care are mainly low quality, utilization, and human resource availability. Increasing the demand for clinical services (scenario 2) especially the use of health facilities or skilled health workers for the treatment of severe respiratory infections (scenario 1) could raise the effective coverage of this intervention to almost 60 percent. The potential for improving the availability of health staff in poor rural areas (scenario 3) is limited, and this

determines a real-life "coverage frontier" (at 80 percent). In Ethiopia the coverage with at least one dose of DPT (diphtheria-pertussis-tetanus vaccine) in relation to the geographical access is the main bottleneck, while the dropout between the first and third dose of DPT constitutes another obstacle to adequate coverage with outreach services. Increasing the use of immunization services through information and communication (scenario 2) as well as defaulter tracking (scenario 1) can increase the adequate coverage to over 80 percent. In Madhya Pradesh in India, late initiation and non-exclusiveness of breastfeeding (BF) are the main bottlenecks identified in self-care. Increasing the use (early initiation of BF, scenario 2) and quality (exclusiveness of BF, scenario 1) of healthy home practices through information and the creation of a supportive environment can increase effective coverage to nearly 80 percent.

2. *How much money is needed for the expected results?*

Once coverage bottlenecks and the potential for improvement (coverage frontiers) have been identified for each mode of health services delivery, the cost of the strategies can be calculated using country-specific data. This allows the

preparation of investment and recurrent budgets that specifically support strategies most likely to improve efficiency of demand (scenario 1), support increased demand (scenario 2), or increase access to health services and availability of health staff (scenario 3). This enables Ministries of Health and Finance to determine the spending needed to support the goals and to encourage policymakers to ensure funding of priority activities that address the major coverage bottlenecks.

3. *How much can be achieved in health outcomes by removing the bottlenecks?*

The increase in coverage in specific interventions achievable through well-targeted strategies and budgets such as those defined above can be converted into measures of improved health outcomes using various epidemiological models. Preliminary analysis can show the reduction in under-five mortality rate that can be expected from removing the bottlenecks of clinical care, outreach services, and self-care in Madagascar, Ethiopia, and Madhya Pradesh, India.

Source: UNICEF and World Bank (2003).

## Strengthening client power

*These are our people. This is our money, you cannot touch it.*

President of Benin's Health Committees, responding to the Ministry of Health's attempt to centralize community-owned health funds and return them to the Treasury

Strengthening client power can improve services for the poor by substituting for or correcting the weaknesses of the long route of accountability. Throughout the world, poor people are engaged as purchasers, co-producers, and monitors of health services. For poor clients to have more control over health providers means:

- Making the income of health service providers depend more on demand from poor clients.
- Increasing the purchasing power of the poor.
- Fostering the involvement of poor people in co-producing and monitoring services.
- Expanding consumer power to use complaint and redress mechanisms.

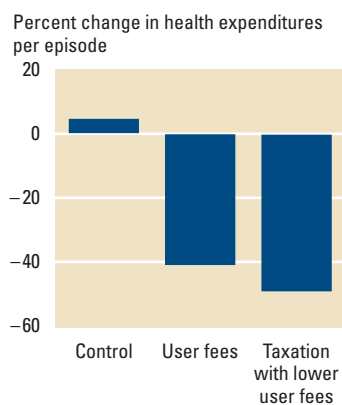
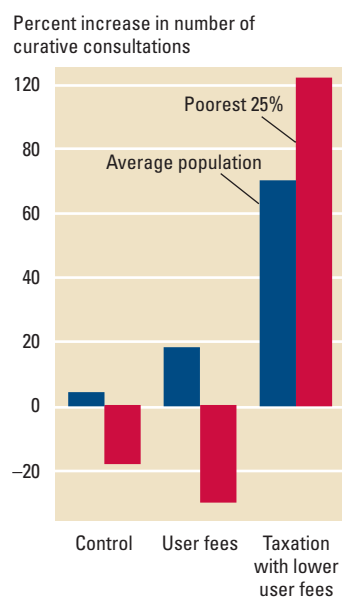
## Paying for services confers power

The poor often first use the commercial sector to purchase key commodities for improving health. In Colombia and Mexico community cooperatives distribute insecticide-treated bed nets. In more than 40 countries social marketing programs have relied on market incentives. They have increased the use of bed nets, condoms, contraceptives, soap, and locally produced disinfectant for water treatment (which has reduced the risk of diarrhea by 44 to 85 percent).<sup>387</sup>

Modest copayments can also provide an entry ticket to clinical services for poor people by reducing capture of supposedly free services by richer groups (box 4.4). Controlled studies in several countries<sup>388</sup> find improvements in the use of services among poor people after copayments increased the transparency and accountability of providers to poor clients (figure 8.9). But to be pro-poor copayments need to be retained locally and tied to performance, and they need to contribute to the income of providers rather than compensate for inadequate public funds (chapter 4).

**Figure 8.9 Community-managed health services increase utilization and reduce spending**

Randomized control study of three districts in Niger, 1992–94



Source: Diop, Yazbeck, and Bitran (1995).

Yet for many services the purchasing power of poor people remains insufficient to overcome price barriers (table 8.2). Marketing programs for condoms are unlikely to be pro-poor in the early stages, and a focus on cost recovery excludes the poorest.<sup>389</sup> Governments can then provide subsidies, as is often done for food to address malnutrition. The subsidies may need to be very high to substantially increase use among poor people, as demonstrated in the programs to distribute free condoms to sex workers<sup>390</sup> and to offer bed nets as part of antenatal care.<sup>391</sup> Market segmentation, tier pricing, and product differentiation can be helpful. In Malawi, highly subsidized bed nets for pregnant women differ in color and shape from regular market-priced nets.<sup>392</sup> Cross-subsidizing preventive and maternal and child health services using the margins on fees for adult clinical care made the first more affordable in Bolivia.<sup>393</sup>

Direct transfers to client households—demand-side subsidies—can also boost client power. Vouchers have a good record in promoting use of some well-defined services. Food stamps can increase food consumption.<sup>394</sup> In Honduras and Nicaragua families receive financial stipends under the condition that they use key preventive health services.<sup>395</sup> Financial support through vouchers for consultations reduced sexually transmitted diseases for sex workers (box 8.5). And poverty funds ensured third-party payments for the poor in China.<sup>396</sup> How the subsidies are managed matters, however. In Tanzania, the poor pregnant women targeted by the bed net program almost never used the vouchers, probably because the subsidies were too low.<sup>397</sup>

A problem with subsidies is how well they reach the poor. Thailand's low-income insurance scheme has used demand-side subsidies—health cards—for clinical services, but about a third of the beneficiaries were not poor and half the poor did not benefit.<sup>398</sup> Demand-side subsidies also have limits if provided in isolation. Even well-targeted food-related transfer programs seldom have measurable impacts on malnutrition unless accompanied by programs to promote breastfeeding, complementary feeding, hygiene, and care of childhood illnesses. In Mexico the success of the Education, Health, and Nutrition Program (Progres—a see spotlight) was made possible by a parallel program of itinerant health teams.<sup>399</sup>

### Coproducing health services

Self-care is a particularly important type of service co-production, relied on by poor and rich alike, and more common in industrial countries than the use of professional services. Support to families and communities can help poor communities reduce malnutrition, as in East Asia where community-based programs were linked to service delivery structures, often village outlets for primary health care. Government employees were trained as facilitators of nutrition-relevant actions coordinated and managed by volunteers selected by local communities. In Honduras the strongly community-owned AIN-C program reduced severe malnutrition by 31 percent. Civil society organizations can serve as intermediaries between clients and providers. Women's support groups have helped spread the practice of exclusive breastfeeding in Africa and Latin America. Other successes include greater use of oral rehydration solutions, better environmental health, and better AIDS interventions.<sup>400</sup>

Communities are often involved in building health facilities. But they have also taken over provision and management of professional health services, as in the more than 500 community-led health clinics in Peru, which cover more than 2 million people.<sup>401</sup> Cooperative pharmacies have sprung up in Haiti, Nigeria, and Singapore. The availability of high-quality drugs has been improved

**Table 8.2 Affordability remains a problem for the poor**

Ratio (in percent) of average annualized price of health services to income

	Russia	South Africa	Brazil	Tanzania
Poorest	11.9	34.6	20.6	4.4
Second poorest	5.3	20.3	11.6	2.7
Middle	3.3	13.3	7.2	2.0
Second richest	2.1	9.2	4.1	1.3
Richest	0.8	3.2	1.2	0.5

Sources: Authors' calculation based on Living Standards and Development Survey from Brazil (1996); South Africa (1993); Tanzania (1993–94); Uganda (1999); and Russia Longitudinal Monitoring Survey (1998).

through client-controlled revolving funds in Mongolia, Vietnam, and West Africa and through Ethiopia's special pharmacies. Particularly resilient to crisis, these efforts can be a source of stability and sustainability. In the Democratic Republic of Congo *zones de santé* continued to provide immunization through community-managed services after more than two decades, without state or donor support.<sup>402</sup>

Client financial and managerial control over health staff—the power to hire and fire—can help ensure that services are actually delivered. In Mali user associations hire and pay professional health staff serving more than 6 million people (spotlight on the Bamako Initiative). There, as in Peru, provider attendance is high, with strong local ownership of community centers. But the approach can have problems. The relationship between communities and health personnel can become antagonistic, requiring state intervention to arbitrate disputes. And the right of local health boards to hire and fire staff may mean little in countries facing severe human resource shortages. In Zambia during the health reform most districts hired the staff already working in the health facilities. In Mali the shortage of nurses made recruitment difficult, loosening the control of clients over frontline providers.<sup>403</sup>

Solidarity mechanisms to protect socially and economically disadvantaged groups by pooling financial resources can strengthen communities in their negotiations with health care providers. Micro-insurance schemes for health have been linked to such traditional modes of self-organization as rotating savings—as with *abotas* in Guinea-Bissau and traditional community schemes in the Philippines.<sup>404</sup> In Germany and the Republic of Korea, small, not-for-profit insurance societies became independent purchasers of health services, contracting with public and private providers.<sup>405</sup> The proximity of these schemes to their insured members allows effective monitoring. But the risk pool's small size makes them very vulnerable. Re-insurance can help,<sup>406</sup> but the added complexity can lead to the same managerial and governance problems in large-scale public

### BOX 8.5 *Vouchers for sex workers in Nicaragua*

A voucher program has been operating in Managua, Nicaragua, since 1995, with the objective of increasing the use of reproductive health services by female sex workers. The vouchers entitle the sex workers to free services at selected for-profit, NGO, and public clinics. The clinic turns the voucher in to the voucher agency, which reimburses the provider at an agreed-upon fee per

voucher. The incidence of sexually transmitted diseases among sex workers who used the vouchers dropped by 65 percent in the first three years of the program. Vouchers are now available to the clients of sex workers and their partners.

Source: Gorter and others (1999).

provision. The transparency of direct community control is lost. Scaling up would then be the kiss of death.

### *Information and monitoring*

One of the strongest levers for strengthening client power is information, a critical instrument for changing self care behaviors. Under government leadership in Thailand, messages on AIDS were broadcast every hour during the peak of the epidemic. But behavior change is possible only when grounded in an understanding of cultural norms and the links between behavior and disease—and when local actors are involved. Community-based nutrition programs have often improved nutritional status through information exchanges, as in Tamil Nadu, India. In addition to giving women greater control over resources, the microcredit programs of the Bangladesh Rural Action Committee also increased knowledge.<sup>407</sup>

Clients can exert more leverage on providers by participating in decisionmaking and by monitoring some aspects of service delivery. Community monitoring of health service performance in Bolivia and Vietnam raises community awareness of key demand-side barriers and helps ensure that services meet community needs. Civil society representatives are also part of health boards in New Zealand. These approaches increase the transparency of management. But these health boards also remain vulnerable to capture by local elites unless institutional mechanisms ensure the representation of disadvantaged clients (chapter 5).<sup>408</sup>

### BOX 8.6 *Making health insurance work for poor people*

Copayments are not always regressive (see chapter 4), and prepayment and insurance are not inherently pro-poor. In Tanzania's Community Financing Funds, poorer groups' copayments subsidized care for wealthier insured groups. The poor enroll in voluntary health schemes in small numbers, as in Cameroon, Ghana, and Rwanda—and in smaller proportions than richer groups, as in the Democratic Republic of Congo, Guinea, and Senegal. Employment-based social insurance systems have been observed to benefit richer groups most in Latin America and Africa. A review of Asian community financing schemes concluded that equity was low. Matching grants for insurance premiums are often captured by the local elites, as in Thailand during the early days of the health card. The grants sometimes simply lead richer groups to substitute private care for public services.

One way for governments to provide income protection to the poor is through progressive taxation or payroll-based social

insurance, with egalitarian benefits. But this is often difficult to implement in developing and transition countries with weak taxation capacity (in China the proportion of gross domestic product collected by the state fell from 30 percent in 1980 to 10 percent in 1999). Taxes in low-income countries are also often regressive.

An alternative is for governments to subsidize insurance for the poor, using income-related sliding scales for premiums and copayments. Income-related contributions were successful in promoting equity in Israel and in the Gomoshasthaya Kendra community financing scheme in Bangladesh. Governments can also develop specific schemes for the poor, as was successfully done in Indonesia and Thailand. Both approaches require some means testing and the adequate and timely compensation of providers. And leakages are to be expected.

Source: Preker and others (2001).

### *Enforcement and regulation*

Legal and other dispute mechanisms—ombudsman services, the judicial system, and pressures on professional associations—can enforce provider accountability. But there is little proof that such mechanisms work in favor of the poor. A study in the United States in 2000 found that 97 percent of people with negligent injury did not sue. Better-off clients went to court, while poor clients did not. In India women from lower castes were less likely to use consumers' courts. Seventy-six percent of Indian doctors believed the Consumer Protection Act to be only moderately effective because of weak enforcement and resistance from professionals. Sanctions are often a weak threat, because health providers tend to protect one another, and accountability channels do not favor poor clients. Rampant corruption in the legal system of many countries also works against poor people.<sup>409</sup>

### **Strengthening poor citizens' voice**

*Simply don't vote for your mayor . . . if he doesn't provide you access to your health program.*

Managers of the Health Agent Program that reduced infant mortality in Ceará, Brazil

Since ancient times, city councils have been involved in curtailing the spread of plague, cholera, and leprosy. But the state as the main actor in health emerged only in the 20th century, starting in centrally planned systems—the Soviet Union and others—and then spreading to Western Europe after World War II, with the government as unchallenged leader of the formal health system. Many developing countries have followed, with health services being part of the social contract between the (often) newly independent states and their citizens. The model was not always successful—witness the remaining health gaps between poor and rich in middle- and low-income countries. But some countries—Brazil, Malaysia, Sri Lanka, and Costa Rica (chapter 1)—have done better than others in making the long route of accountability work for poor people by:

- Channeling collective resources to poor people through multiple allocation mechanisms that combine targeting diseases of the poor, poor regions, service delivery providers close to poor people, and vulnerable groups and individuals.
- Developing coalitions that bring poor people into the policymaking process through both elections and advocacy by civil society.
- Establishing accountability for progress on outcomes, particularly among poor people through increased information and citizen monitoring of health services.

### *Which services and for whom?*

How do we know if voice works for poor people? There is no conclusive evidence that either one of the main resource-generation mechanisms for health services emanating from collective action—social insurance (Bismark model) or general taxation (Beveridge model)—works better for the poor.<sup>410</sup> To be pro-poor they both require some level of cross-subsidy—through either differential premiums or progressive taxes. More than prepayment, third-party payment—whether through insurance or other solidarity funds—is what makes the difference for poor people (box 8.6).

There is also no clear answer on whether providing universal access to a limited set of



**Table 8.3** How do we know whether poor people's voices have been heard?

Key questions	Evidence	Problems
<b>Is there a constitutional or legislative commitment to guarantee some level of health service to all?</b>	<ul style="list-style-type: none"> <li>• Most countries have constitutions that express some commitment to universal access or rights to health care. Few have an expressed commitment to the poorest segments of society. Rights-based arguments such as the Special Session For Children of the United Nations General Assembly can provide legal grounds for claiming access to services.</li> <li>• With the exception of Mexico, Turkey, and the United States, all OECD countries today offer their populations universal protection against the cost of illness.</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of prioritization or targeting gives the non-poor incentives to seek more services or shift from private to public providers.</li> <li>• The distribution of health resources is influenced by more vocal and often urban populations and is concentrated in a highly visible urban hospital infrastructure, as in Nepal. With the exception of a few countries (e.g., Costa Rica, Malaysia), public spending on health care often disproportionately benefits the non-poor (chapter 2).</li> </ul>
<b>Are the diseases that affect the poor priorities for public action?</b>	<ul style="list-style-type: none"> <li>• Cost-effective packages of services addressing the overall burden of disease often overlap with the diseases that affect the poor most.</li> </ul>	<ul style="list-style-type: none"> <li>• Cost-effective health interventions have also been captured to a large extent by richer groups.</li> <li>• Epidemiological profile often polarized between rich and poor.</li> </ul>
<b>Are services that are close to the poor given priority?</b>	<ul style="list-style-type: none"> <li>• Benefit incidence studies show primary health care to be significantly more pro-poor than hospital-level care.</li> </ul>	<ul style="list-style-type: none"> <li>• Primary care also benefits richer groups more in many countries.</li> </ul>
<b>Do disadvantaged areas benefit as much or more than richer areas?</b>	<ul style="list-style-type: none"> <li>• Population and needs-based funding increase the health funding for poor groups. Brazil led richer states such as Parana to have their share reduced to the benefit of poorer states in the Northeast.</li> </ul>	<ul style="list-style-type: none"> <li>• The wealthiest areas often receive larger government subsidies than poorer regions, as documented in Bangladesh, the Kyrgyz Republic, Mauritania, Mozambique, Pakistan, and Peru.</li> <li>• Political resistance to equalization.</li> </ul>
<b>Do children, women, and the elderly benefit from public services?</b>	<ul style="list-style-type: none"> <li>• Thailand's exemption policy for children and the elderly has been largely successful. Mozambique's exemption for treatment of illnesses in children at the primary care level has been partially successful: 65 percent of children were exempted.</li> </ul>	<ul style="list-style-type: none"> <li>• Poor children and poor women may not be reached. And services leave out poor male adults, whose welfare indirectly affects the welfare of children and women.</li> </ul>
<b>Do individual households benefit from specific protection measures?</b>	<ul style="list-style-type: none"> <li>• Exemptions can be effective when funds are available to compensate providers, as in the insurance fund in the Kyrgyz Republic or the Type B scheme in Thailand. Ghana's program of fee exemptions for the poor was initially successful, then faltered when providers were not compensated.</li> </ul>	<ul style="list-style-type: none"> <li>• Exemptions have a poor track record of serving the poor, often benefiting civil servants and their families.</li> <li>• Assessment of individual targeting left to individual providers, which generates a conflict of interest.</li> </ul>

Sources: Pearson and Belli (2003) and Soucat and Rani (2003a).

services or targeting poor people is the way to go. The debate is often not in these terms. Most Organisation for Economic Co-operation and Development (OECD) countries use both approaches. Many middle-income countries are moving gradually, developing multiple programs to protect children, women, and the poor, as in Colombia, Indonesia, Iran, and Turkey. These programs may eventually merge into a national system of universal coverage, as happened in industrial countries and recently in Thailand. Geographical, age, and individual targeting—despite leakages—often reach the poor. But a combination of mechanisms seems necessary, and each country has to assess whether mechanisms in place are successful (table 8.3).

Decentralization has often been implemented with the hope that it would better align spending with local needs, reducing the

information asymmetry between citizens and politicians. But decentralization has had mixed results in health.<sup>411</sup> It has not always meant increased resources for poor areas. Transferring the provision function to local governments has often overwhelmed them, leaving them with little capacity and incentives to develop the policy function and encourage citizen oversight. The transfer of ownership of assets—hospitals and clinics—to local government has also created incentives for rent-seeking by local elites. In Uganda allocations to health services declined when districts received responsibility for service delivery, personnel management, and allocation of health resources. Spending on primary health care fell from 33 percent to 16 percent during 1995–98, and the use of maternal and child health services declined significantly<sup>412</sup> (chapter 10).

### *Pro-poor coalitions*

With widespread capture of health services by the non-poor, building pro-poor coalitions to influence health spending is critical. The democratic process conveys what poor citizens value in health and health care. The extent of health benefits and the financing of health services are an electoral issue in industrial countries—and, increasingly, everywhere. In Thailand access to health services was a key plank in the political platform of the Thai Rak Thai party, and its proposal for universal health insurance, with a single 30-baht copayment, was eventually implemented.<sup>413</sup> Eliminating hunger was a major theme in the recent elections in Brazil.

Beyond the ballot box, poor citizens can communicate their preferences through national consultations, such as those for poverty reduction strategy papers (chapter 11). A review of the consultation process for 25 poverty reduction strategy papers shows that the poor care about health services, especially access, price, and social distance. In the state of Oregon in the United States, tradeoffs in benefit coverage are discussed in consultations with the public. In the Netherlands the Dunning Report, proposing criteria for rationing health services, relied heavily on citizen consultations. Citizen involvement in budgeting is now an avenue for more voice in health service delivery, as in Porto Alegre, Brazil (chapter 5).<sup>414</sup>

Advocacy by civil society organizations can put the interests of groups forgotten or discriminated against on the agenda, as in the campaign and court action to ban the use of quinacrine for chemical sterilization in India. Such organizations can build coalitions for the interests of the disadvantaged. Pressure through self-help groups and NGOs has triggered a productive dialogue on the public response to AIDS in the Philippines and South Africa.

Yet despite years of endorsement of participation, most health systems still resist greater involvement by civil society in influencing health care allocations. Reforms in the health sector often engender opposition by powerful unions and professional associations, which have a much stronger power base than poor citizens and can fight to maintain the status quo, as in New Zealand.

An altruistic vision can nonetheless motivate coalitions between providers and citizens for better services. Associations of rural doctors in Thailand and midwives in Guatemala have promoted alternative modes of health service delivery that better reach the poor.

### *Information and monitoring to increase accountability for outcomes*

Creating policymaker accountability to citizens for delivering health services is a difficult task. A patient dying while waiting in line at a public hospital makes front-page news. But the thousands of children who die of treatable or vaccine-preventable diseases do not get equal time. Politicians find it easier to claim success for building a hospital and providing employment to nurses and doctors than for reducing malnutrition among a nomadic group. Yet with a web of market and government failures affecting those services, policymakers are uniquely placed to create a vision conducive to better outcomes. They need to be accountable for equitably distributed health outcomes, protecting citizens against impoverishing health expenditures and helping the poor escape their social exclusion, and not for the provision of growing quantities of services.

Better informed and educated citizens can make politicians more accountable. Civil society organizations can bridge the asymmetry of information between poor citizens and policymakers. They can bring community participation into research, to ensure that the perspectives of poor people influence policy. Monitoring the performance of government policies, with report cards as in Bangalore and Ukraine (chapter 5), can work well, particularly when income-disaggregated data are available.

Civil society can also serve as a watchdog. A Belgian health publication set in motion six royal decrees of protective legislation by drawing attention to health hazards. In Bolivia a census-based, impact-oriented approach combines pragmatism with quantitative and qualitative approaches.<sup>415</sup> But generating information to support pro-poor coalitions is a challenge. Epidemiological surveys may neglect the needs of peripheral social groups, such as minority groups or those affected by less common diseases.

## Compacts: provider incentives to serve the poor

*As long as men are liable to die and are desirous to live, a physician will be well paid.*

Jean de La Bruyère, 1645–1696

Even when policymakers truly care about health services for poor people, it is not easy to translate policy into reality. Making the compact between policymakers and providers work for the poor implies that governments:

- Benchmark performance for services they can monitor easily;
- Foster autonomous providers for clinical services;
- Establish a strong monitoring function.

### Buying results

Widespread deficiencies in the technical quality and ethics of frontline providers serving the poor—whether public or private—reveal an incentive problem.<sup>416</sup> The solution lies in some form of compact between the policymaker and provider to align the provider's incentives—already acknowledged by La Bruyère in the 17th century—with the policymaker's wishes. How countries can create incentives to make autonomous or dispersed health service providers accountable for outputs and outcomes depends on the nature of services and the capacity to create accountability for public objectives through purchasing and regulation.<sup>417</sup>

Outcome-based contracts are difficult to implement because health outcomes are often slow to change, difficult and expensive to measure, and affected by multiple factors other than health services. Such contracts are especially difficult to write when outcomes are linked to a variety of services, both professional and nonprofessional, as in efforts to reduce under-five mortality or HIV prevalence. But the experience of Madagascar and Senegal with nutrition programs for the poor shows that it is possible, at least for malnutrition (box 8.7).

Less difficult to implement are output-based contracts that specify criteria for disbursing public subsidies—on the basis of increasing immunization rates, for example. Output-based contracting is particularly successful for easily monitorable, single-product,

### BOX 8.7 *The government as active purchaser of health outcomes through strategic contracting*

Community nutrition projects in Madagascar and Senegal contracted out nutritional services. Transaction costs for introducing and maintaining the contracts were 13 percent of total project costs in Madagascar and 17 percent in Senegal. Both projects were well targeted to the poor communities.

Activities included growth monitoring, health and nutrition education services for mothers, food supplementation for malnourished children, and referrals to health centers and home visits when necessary. In Madagascar the project also had a social fund for income-generating activities, and in Senegal an effort to improve access to water.

The frontline providers in Madagascar included women from the targeted neigh-

borhoods selected by the communities and supervised by physicians hired by the projects. Open tendering was used to select the supervising NGOs in Madagascar. Contractual agreements specified the services to be provided and the number of beneficiaries to be served, monitored monthly by the user community and the project.

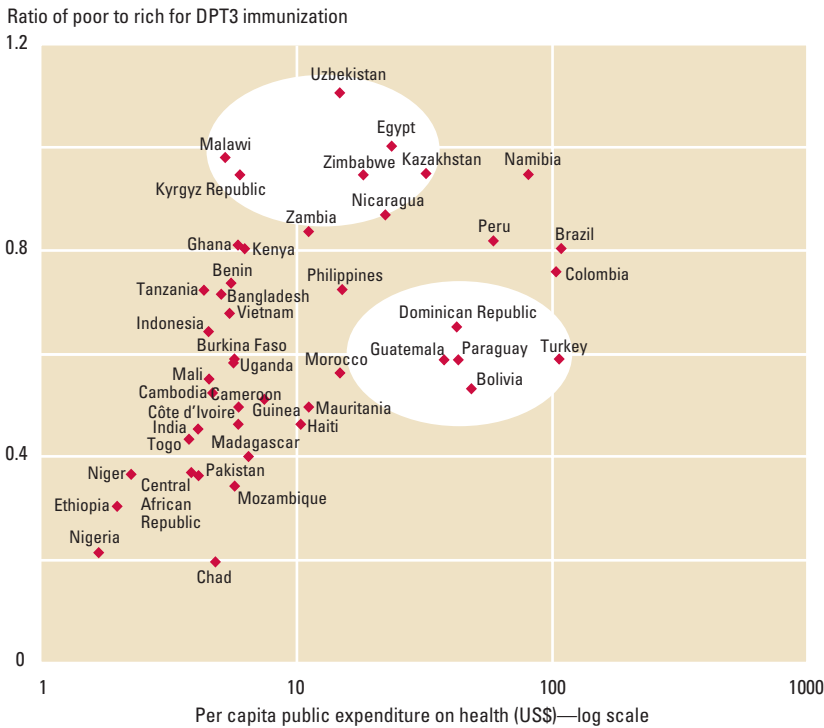
Childhood malnutrition declined significantly in both projects. An evaluation in Senegal after 17 months of project implementation showed almost zero prevalence of severe malnutrition among children aged 6–11 months and a reduction in moderate malnutrition from 28 percent to 24 percent among children aged 6–35 months.

Source: Marek and others (1999).

population-oriented services that can be standardized. Explicit contracts have proven effective in serving poor, hard-to-reach groups.<sup>418</sup> Output-based fees for services can be paid to providers when quantity and quality can be defined, thus contributing to improvements in productivity. In Bangladesh NGO field health workers were paid on the basis of their clients' knowledge of oral rehydration therapy.

Implicit contracts with focus on specific outputs can also work, as demonstrated by the universal childhood immunization campaigns of the 1980s, and the Vitamin A supplementation and itinerant health teams in Egypt, Indonesia, and Mexico.<sup>419</sup> Malawi and Uzbekistan have achieved immunization coverage of more than 90 percent among the poor with very low per capita spending. But Bolivia, Guatemala, and Turkey, with higher levels of spending, are much less successful in providing equitable coverage (figure 8.10).

Performance-based contracts, whether directly with health providers or with purchasers or insurers, need to align money with intent, taking into account the variations in effort required to produce a given output in poor and disadvantaged regions and in better-off communities.<sup>420</sup> Costs of services can be much higher in remote rural areas, and broad variations have been found in the cost of immunization between regions in the same country.<sup>421</sup>

**Figure 8.10 High spending does not ensure more equitable immunization**

Source: Authors' calculations using Demographic and Health Survey data and World Bank data.

Performance benchmarks for more discretionary or multitask services, such as clinical care, are more difficult to establish. Which services for whom, when, where, how, and how much are difficult to specify in advance. Effort and quality are not readily verifiable. Providers have more gaming space.<sup>422</sup> Targeted payments to increase cervical smears in the United Kingdom led to a short-term increase in the number of smears. But in the long term providers reorganized their activities so that they would continue to receive the payments without delivering the services.<sup>423</sup>

Clinical service contracts also take considerable capacity to write and enforce.<sup>424</sup> Purchasing based on output—per visit, per case, per hospital day—causes the quantity of clinical services provided to rise (sometimes mainly among better-off groups) and the costs to escalate. Health reforms often try to contain costs by establishing fixed-price contracts—capitated payments, or prospective global budgets—using caps to keep costs down and shifting risks to the provider. But this leaves to frontline

providers the responsibility for rationing services, opening the possibility for cream-skimming. Providers can lower their standard of care, deny service, or insist on additional informal fees (box 8.8).

Equitable service distribution then requires providers to have both the technical capacity to inform the rationing process and a pro-poor ethos to make this process benefit the poor—a combination often difficult to achieve. High- and middle-income countries are therefore increasingly delegating the undertaking of clinical service contracts to an autonomous—often paratatal—social insurance organization that negotiates agreements for services to be provided. They rely on more sophisticated contracts and monitoring systems using complex payment methods: for example, case-based payments in Georgia or diagnostically related groups in Hungary.

Identifying poor target groups and monitoring results are also more difficult for clinical care, because needs are more difficult to define. Cambodia's contract, which included specific provisions to increase clinical services for the poor, had mixed results (spotlight on Cambodia). Incentives for treating those most in need can be strengthened by calibrating payments to providers on the basis of impact on health outcomes, with higher payments for emergency obstetric care, as in Burkina Faso, or with higher payments for treating the poor, as in the Kyrgyz Republic (box 8.9). To exempt the poor from fees, how-

#### **BOX 8.8** *The risks of capitation payments*

In 1999 in Poland, Mrs. K. contributed a health premium amounting to 7.5 percent of her salary, but was not able to see a public-private insurance doctor "free of charge" even once. Several times she tried to get an appointment with the doctor in the outpatient clinic where she signed in. But she was told every time that "there are no tickets" for that day. In the end she went to the private internal medicine doctor and paid out of pocket.<sup>425</sup>

Source: World Bank (2001d).

ever, providers need to receive timely and adequate compensation.

Contractual arrangements often need to combine soft capacity-building components to meet unserved needs with rewards for performance. Experience with performance-based contracts for immunization as part of the Global Alliance for Vaccines and Immunizations shows that zero-based contracts and the threat of resource withdrawal were not very effective in raising coverage.<sup>426</sup> Variations across communities can be taken into account through a two-tier allocation system. The first tier can be allocated to a local government on a capitation basis—as in Argentina, Brazil, Ethiopia, and Poland—and the second tier to an insurance fund or a purchasing agency in charge of maximizing the efficiency of resources and purchasing an appropriate mix and quantity of clinical services—as in Korea and New Zealand (figure 8.11).

The impact on the poor of the changes in provider payments from input-based to more complex output-based is not conclusive, and there has been little evaluation. But the separation of policymaking from purchasing and service provision creates clearer channels of accountability. Autonomous providers have more flexibility in ensuring the appropriate input mix including hiring and firing, as in Kenya and Zambia.<sup>427</sup> Purchasing bodies are more independent actors, subject to a double line of accountability because they are often financed by governments and households through insurance systems. Governments need to be involved in these agencies to define which services the poor need most, price the subsidy support needed by the poor, and limit providers' conflicts of interest.

### Selecting providers

There is no presumption that one type of provider—public, for-profit, or not-for-profit—is likely to be better than any other. Public health facilities can be remarkably efficient, as in Malaysia, or largely ineffective, as in middle-income Gabon, where immunization levels have stalled at under 30 percent. Nor are NGOs necessarily pro-poor. When contracted by governments, NGOs also tend to get closer to the public

### BOX 8.9 Modulated payments for providers according to income criteria

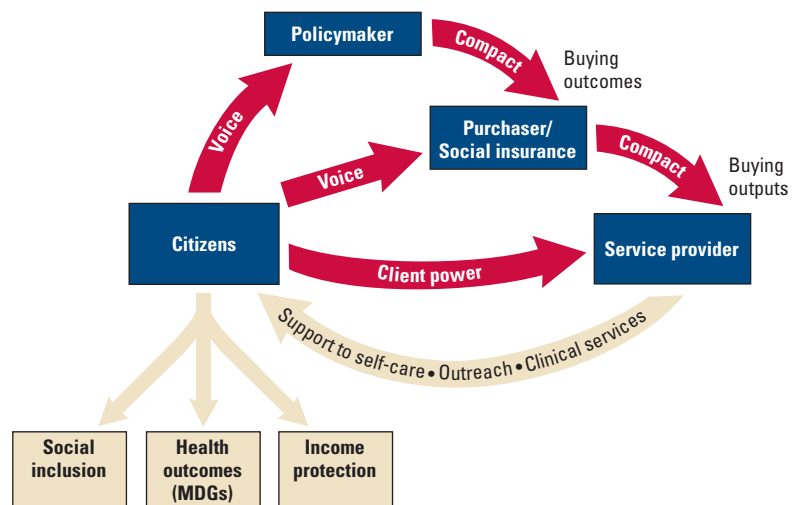
The Kyrgyz Republic created an insurance fund to purchase services from health facilities, compensating them for increased use of services and providing greater financial access to the poor. Facilities charge fees to patients and claim payments from the insurance funds under a sliding scale based on five categories of patients: self-referred, uninsured, insured, partly exempt, and fully exempt. Facilities get higher compensation for clients from the partly exempt and exempt categories, who pay lower fees. Sixty-eight percent of poor patients preferred the copayment system over the previous theoretically free system, which often required “informal” payments. Under the new payment mechanism, many informal payments were replaced by formal copayments. The very poor have access to treatment through a reserve fund.

Source: Kutzin (2003).

sector. An autonomous parastatal hospital in France that enjoys large financial and management flexibility and an NGO hospital under government contract in Canada are not very different.

For population-oriented services that can be standardized, governments can generally write contracts for public or private providers. Policymakers can specify the service

Figure 8.11 Citizens exert power on both providers and purchasers





characteristics and monitor and enforce the contract. Government providers deliver high immunization rates in Tajikistan or Tunisia—but in Cambodia and Haiti so do contracted NGOs. As contractors NGOs can extend service outreach and test new approaches to service delivery.<sup>428</sup>

To support self-care, private services—whether for-profit or not-for-profit—often are most appropriate. Private for-profit providers can be very efficient in providing information and distributing commodities—witness the success of social marketing. For information and social support, grassroots organizations, small private providers, and community-based organizations often do the job better than rigid public organizations. Governments can contract some key services such as information. Yet public services can sometimes be more pro-poor than NGO services. In Ceará, Brazil, “many NGOs delivered services in clinics while the public service sent its workers into households”<sup>429</sup> (see spotlight).

For clinical services the contrast is sharper. Public provision works well when there is a strong public ethos, the politics are pro-poor, and rules are enforced. For-profit providers—qualified or not—are usually in tune with demand, but the inherent conflicts of interest require external control. In Lebanon and elsewhere, expansion of the private sector did not benefit the poor much.<sup>430</sup> In India, private providers serving poor groups are often less than qualified. Governments can then exert control only if they have sophisticated regulation and purchasing functions. When these do not exist, partnerships between government and civil society organizations can compensate by strengthening clients’ power over clinical providers.

Because not-for-profit organizations often benefit from strong intrinsic motivation and professional ethos, government can also write open-ended contracts with them and still expect that providers will do the right thing. Service delivery by NGOs can help repair the link between policymakers and providers for clinical services with significant benefits for the poor. In Guatemala, about a third of the population is now served by NGO providers, significantly increasing access for indigenous poor

populations although management and quality problems have been observed.<sup>431</sup>

### *Regulation and enforcement*

Governments can also use market regulation to counter conflicts of interest. In Hungary accreditation mechanisms have been quite successful in establishing quality criteria for providers. To reduce supplier-induced oversupply and compensate for the lack of investment in poorer settings, most countries use certificates of needs (in United States), planning boards (Australia), or health maps (Spain and most of Africa). But most low-income countries do not regulate their pharmaceutical market successfully, though Cambodia has had some success. When regulation fails, a combination of user education and provider training can yield the greatest benefits.<sup>432</sup> Government involvement through national tendering, price capping, or tariff reduction has also influenced the prices of pharmaceuticals.<sup>433</sup> Overall the enforcement of regulatory controls is often weak, focusing mainly on personnel licensing. The same political and institutional failures hampering health service delivery affect the legislative, administrative, and judicial services needed to make regulation work.

Expanding access to professional health care providers—particularly midwifery, surgical skills for reducing maternal mortality, and clinical skills for reducing neonatal deaths—is a priority to reach the Millennium Development Goals. In many countries the imbalance between rural and urban areas in terms of skilled health workers is extreme. In Turkey, there is one doctor per 266 people in the richest region and one per 2,609 in the poorest. In Ghana and Senegal more than half the physicians are concentrated in the capital city, where fewer than 20 percent of people live. Health workers lack opportunities in rural areas where turnover is high. Rural workers are less likely to be female and educated. Lack of services (school, water) and access to training/education are major incentives to leave rural areas. Undifferentiated salary structures are disincentives to work in areas where the poor live, because it is difficult to supplement low salaries with alternative income from activities such as private practice, teaching, and consulting.<sup>434</sup>



### BOX 8.10 *The human resource crisis in health services*

When the international community set out in 1955 to eradicate malaria, Africa was left out because it lacked adequately trained personnel. Today, Africa still lacks such personnel, and yet it must deal with multiple disease-control efforts. In Burkina Faso, the average number of physicians per 100,000 people was 3.4 in the 1990s compared with 303 for nine industrial countries. In Zambia the already low number of physicians, at 8.3 per 100,000 people in the 1960s, declined to 6.9 in the 1990s. To meet the requirements of the priority health interventions recommended by the World Health Organization, Chad would require a sevenfold increase in health personnel.

High rates of absenteeism reflect disenchantment with working conditions. Studies of health professionals in Ghana, India, Mozambique, Tanzania, and Uganda show that the health work force—nurses and physicians in particular—feel overworked and underappreciated. In Guinea, Mauritania, Poland, and Russia health staff wages have declined in real terms.

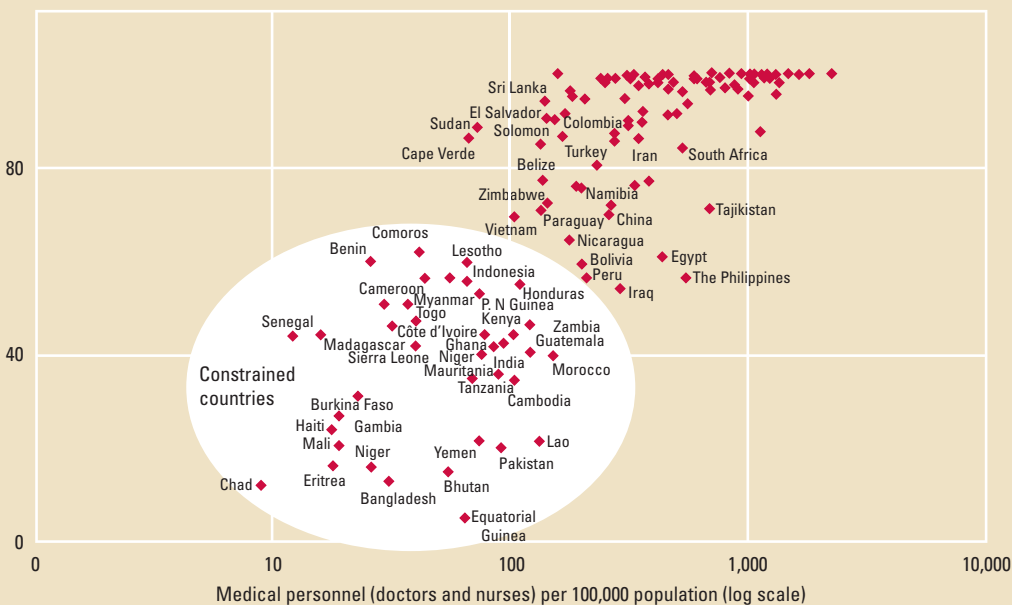
There has been considerable emigration of health professionals from developing countries. More than 600 South African doctors are registered in New Zealand, at a cost to South African taxpayers of roughly \$37 million. An estimated 61 percent of Ghanaian doctors trained between 1985 and 1994 left the country. Nurses are leav-

ing too: in 2001 the United Kingdom approved 22,462 work permits for nurses from developing countries.

To retain internationally marketable health staff, poor countries will have to offer internationally competitive wages and benefits. That requires replacing inflexible civil service policies with more flexible approaches. Training specifically oriented to national markets can also help. Countries that emulate the training standards of industrial countries tend to be more vulnerable to poaching (Ghana). There is evidence from Ethiopia and the Gambia that community nurses and health officers with curricula not internationally certified are less likely to migrate.

#### Human resources constraints for clinical care

Percent assisted deliveries



Sources: Liese and others (2003), Commission on Macroeconomics and Health (2001), Ferrinho and Van Lerberghe (2003), and Reinikka and Svensson (2003b).

Chile, Mexico, and Thailand<sup>435</sup> have used financial and nonfinancial incentives to encourage qualified staff to work in rural areas. In Indonesia doctors were also allowed to supply private services during or after duty hours. Other countries have tried to establish new credentials, as for health officers in Ethiopia, and trained community workers in India and Brazil (spotlight on Ceará). Another approach includes progressively upgrading the skills of traditional providers, such as community midwives in Malaysia, or encouraging the hiring and training of health

workers from underserved areas or social groups as done in Indonesia and Iran. In the Bangladesh Rural Advancement Committee (BRAC) community workers are trained to seek out the extremely poor in need of urgent medical care. But success requires careful design and evaluation. In El Salvador low-skilled health promoters posted in rural villages did little to improve health or health-seeking behavior.<sup>436</sup> The global crisis in the labor market for clinical services also requires innovative strategies to get professional services to rural areas and the poor (box 8.10).

The complexity and dispersed nature of clinical health services and the potential for conflicts of interest make self-monitoring by providers critical for effective service delivery. Historically, peer regulation has been the common response to a conflict of interest. But because of state dominance in many countries, professional bodies are fairly weak. Provider-driven changes in the organization of service provision can yield substantial benefits for clients, as in initiatives such as Health Workers for Change.<sup>437</sup> The German health system is largely self-regulated. Professional associations in Zimbabwe maintain professional ethics and standards among public and private nurses.<sup>438</sup> Associations of midwives in Guatemala and New Zealand develop and promote a pro-poor ethos (box 8.11).

### *Information and monitoring*

Decentralization, devolution, and output-based contracting of services increase the importance of timely and accurate information for monitoring performance. National and international statistics do not yet capture the range of practices or the performance of all health care providers. Most ministries of health know little about the private sector, which makes it hard to develop partnerships or contracts, although countries are attempting to conduct provider surveys as in Poland.<sup>439</sup> Information on access, quality, and efficiency is scarce and often noncomparable. And because many factors outside the health sector affect health status, cross-sectoral monitoring and planning are also required, as Thailand's National Economic and Social Development Board does regularly.

Monitoring of average outcomes or service utilization patterns often does not reveal where change is occurring. Changes in fertil-

ity rates and contraceptive use in most Sub-Saharan countries in the 1990s have been concentrated in the urban, richest population segments. In Tanzania the declining use of skilled delivery care between 1993 and 1999 can be attributed mainly to declining use among the poorest groups. When collecting information on income is difficult, alternative indicators can be used, such as ethnicity, caste, region, gender, linguistic group, or religion. Countries as different as Colombia, Indonesia, Iran, Mexico, and the Philippines use community maps to identify high-risk individuals and households in need of home visits and special attention.<sup>440</sup>

### **Six sizes fit all?**

Which accountability mechanisms should be emphasized to ensure that health resources go where they should? There is no single path. The many things that influence the short and long routes of accountability call for different responses. For health and nutrition services, one size does not fit all. What works varies by country and type of service. A strong command-and-control approach can achieve much if policymakers have a solid mandate or the ideological drive to make tough choices about which health services to deliver and to whom—as in Cuba,<sup>441</sup> Malaysia, or Iran. Greater inclusion of poor people in the political debate can influence policymakers, as in Brazil where the pro-poor orientation of health policies has improved over the past 10 years (spotlight on Ceará). But when the mandate is less clear and implementation levers are weak, the short route of accountability through client partnerships with private and community-based providers gives poor people more control over services.

#### **BOX 8.11** *Developing a professional ethos in midwifery*

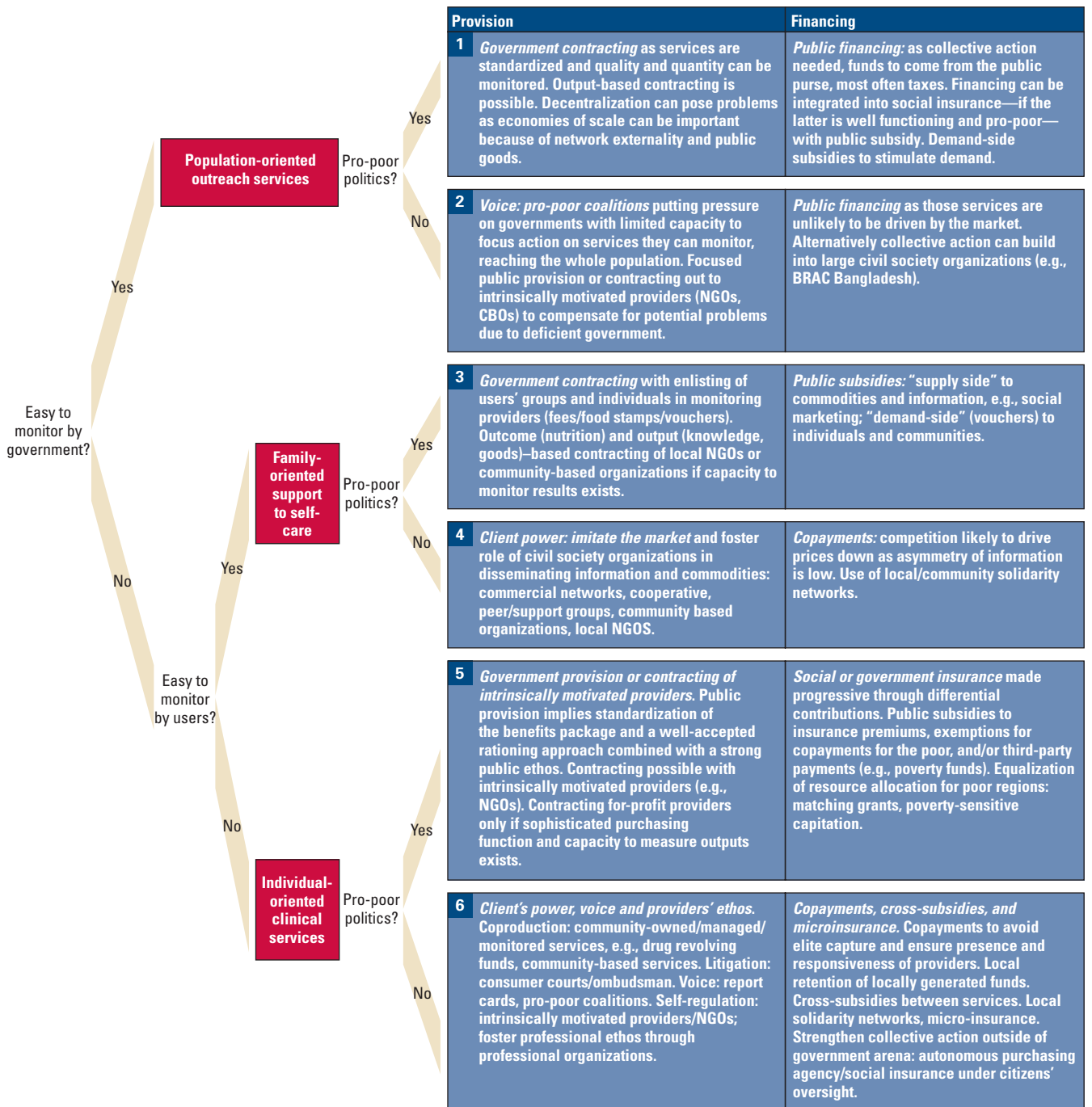
In the words of a professor of midwifery, "Midwives should be able to take on a more enabled, 'for women' role. This then has implications for regulation, which should be 'self regulated' to a point—but should also have input to that process from women themselves, and from fellow professionals.... Midwives should be very involved in the process, ... but if they are the only

ones involved, the danger is that a 'for midwife' culture develops, protecting midwives and perpetuating problems.... The formal process can also be backed up by a less formal process (i.e. peer review) to ensure lots of midwife to midwife contact and learning. This 'with-women/for-women' stance can then form a foundation for what 'professionalism' looks like for midwifery....

We need to be able to form a contract, ... and follow up on it, all the time respecting woman's individuality and the culture in which she lives. This all implies enough education to do this well, and enough power to influence the system. This is what I would describe as 'professional!'"

Sources: ICM (2003) and Davies (2001).

Figure 8.12 Six sizes fit all



So if one size does not fit all, can six sizes? Figure 8.12 attempts to capture some typical situations that could provide guidance. Situations vary according to the homogeneity of the health needs, the nature of services, and the characteristics of the political process.

When the long route of accountability works well for poor people—their concerns are included in the political process—public action benefits them. Governments can provide or contract out standardized population-oriented services (1), and provide

demand-side subsidies to poor families for those and for appropriate self-care (3). Needs for clinical care can be made homogeneous through a technocratic rationing of services based on equal benefits. In this case an integrated service delivery approach—or a universal single payer system—can be appropriate, as in Cuba, Finland, and Vietnam (5).

But these conditions are far from universal. Needs for self-care or clinical services are rarely homogeneous. This heterogeneity can be accommodated in a pro-poor context through decentralization and flexible output-based and outcome-based contracting combined with equalization of subsidies between rich and poor regions (3 and 5). Subsidies for clinical services can be provided to local medical schemes (as in Germany and Poland), to specific schemes for poor people (as in France, Indonesia, and Thailand), or directly to poor groups (poverty funds in China) (5).

The long route of accountability may also not be working—either because richer groups capture the political process or because the bureaucratic process—compact—does not deliver. In these cases more investment in the long route through taxation and strengthened government actions is unlikely to do much for the poor. Instead, more needs to be invested in

making poor citizens' voice heard by fostering civil society groups, and building pro-poor coalitions for services requiring collective action. Governments with limited capacity can then be pressured to focus on contracting population-oriented services, in partnership with intrinsically motivated providers—community or civil society organizations—to make sure the services are delivered (2).

Serving heterogeneous needs where the long route of accountability is not working is common in developing countries and requires enlisting poor people as monitors, investing in client's power. Commercial and media networks, cooperatives, and community-driven development activities are then best used to support self-care (4). Micro-insurance schemes, and community co-managed health services and drug funds are especially relevant for clinical care (6). But this power is not enough to avoid conflicts of interest. Litigation can be of limited help. More importantly, altruistically motivated providers, such as not-for-profits, can help foster a stronger pro-poor ethos supported by professional self regulation (6).

None of the solutions is fast or easy. But success is clearly possible, as hundreds of examples have shown. "It does not matter how slowly you go so long as you do not stop" (Confucius, 551–479 BC).

## Good health at (initially) low income

*Costa Rica and Cuba have both attained very low levels of infant mortality in the last 50 years. For Costa Rica, this is easily explained by rapid income growth and attention to traditional public health and, in recent years, to innovative approaches to publicly funded health care. Cuba, on the other hand, has maintained lower levels of infant mortality than many industrial countries and has eliminated diseases common to developing countries while remaining very poor. The achievements came with a community-based health system with numerous health workers, highly motivated staff, and close monitoring and evaluation of outcomes. Can Cuba's model survive the economic reversals of the 1990s and pressure for a more open and free society?*

Costa Rica and Cuba both have very similar, low infant mortality rates—almost as low as Canada's though at much lower incomes (figure 1).<sup>442</sup> Their routes to this happy circumstance, however, have been quite different

In 1945, infant mortality—measured in deaths of infants under one year per 1,000 live births—was 100 in Costa Rica and 40 in Cuba, respectively. Up to 1960 Costa Rica made progress largely due to economic growth and aggressive public health programs.<sup>443</sup> Hookworm was eliminated with a program starting in 1942, and public health campaigns accelerated after the revolution of 1948. As a result, malaria, tuberculosis, and most diseases that were preventable by vaccines at that time were also eliminated by 1960. In stark contrast, Cuba's admittedly low level of infant mortality stagnated under a particularly corrupt political regime.

Since 1960, progress in Costa Rica has been rapid but not too difficult to explain. Costa Rica's real income per capita increased by 25 percent from 1960 to 1970—the same rate, coincidentally, that infant mortality declined. Income growth of 40 percent by 1980 along with the universalization of coverage for health care saw a further decrease of 60 percent in infant

mortality. After recessions in the 1980s, growth has resumed and progress on health status continues. One way to attain good health from initially low income is surely to stop having a low income.

### The Cuban puzzle—good health without growth

The puzzle is Cuba. How has Cuba managed to maintain an infant mortality rate at least as low as that of any developing country in the Western Hemisphere and quite a few industrial countries as well? The sustained focus of the political leadership on health for more than 40 years surely played a big part. After the revolution, universal and equitable health care was one of the government's top three goals. The government sees good health as a key performance indicator for itself.

Despite low infant mortality before the revolution, rural areas lagged far behind urban areas. The new government, committed to changing this, concentrated on providing health care to rural areas. It required all new medical school graduates to serve for one year in rural areas. It also increased the number of rural health facilities. In 1961 the government nationalized mutual-aid cooperatives and private hospitals, which left the public sector as the sole provider of health services—a feature of the system that remains today. At that time many of the country's medical professionals left the country (as many as two-thirds by one estimate).

In the mid- to late 1960s there were two major innovations in the health system. First was the establishment of policlinics—the basic unit of health services—each staffed by several specialists and nurses and serving a population of 25,000–30,000. This was combined with campaigns to immunize many more people, control vectors (such as mosquitoes), and promote good health practices.

Second was the creation of a community health program, with specialists tending patients in clinics as well as at home, school, or work.

In the mid-1980s this community-based approach was intensified with the Family Doctor Program. The goal: to place a doctor trained in primary health care and a nurse in every neighborhood (serving about 150 families). By 2001 there were more than 30,000 doctors—a ratio of one family doctor for every 365 Cubans.<sup>444</sup> Services are free, although nonhospitalized patients are required to co-pay for medicines.

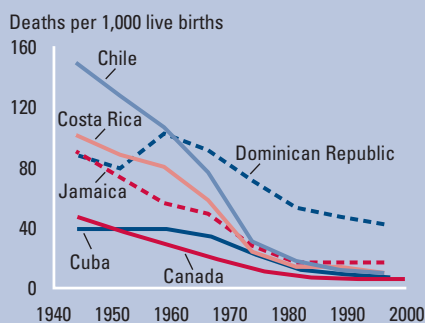
While this approach clearly contributes to better health outcomes, it is also expensive. Indeed, Cuba spends substantially more of its gross domestic product on health than other Latin American countries: 6.6 percent in 2002. (Average public spending on health is 3.3 percent in Latin America and the Caribbean, but some other countries also spend substantial amounts—Costa Rica 4.4 percent and Panama 5.2 percent).<sup>445</sup>

### Specifying what you want—and keeping track of what's going on

The Cuban health model rests on three pillars: giving clear instructions to providers, motivating staff, and monitoring and evaluating the system.<sup>446</sup> Clear guidelines are provided through national specialist advisory groups—which draw up standards and technical procedures (and evaluate the performance of physicians and specialists)—and regulations that standardize activities in the national hospital care system.

Health staff in Cuba typically are highly motivated. Medical training emphasizes the altruism of medical service—often culminating in service of one or two years abroad. This is volunteer service, but there are strong social pressures for it. Serving in poor rural areas in Cuba remains a right of passage for many newly trained doctors. Television programs lauding health workers

**Figure 1 Infant mortality in Cuba: low in the 1950s, even lower by 2000**



Note: 1945 refers to years 1945–1949, 1950 to 1950–1954.  
Source: 1945, 1950 from *United Nations Demographic Yearbook 1961*. Data for 1960–2000 are from UNICEF.

engaged in international solidarity missions raise their profile and contribute to a sense of pride in Cuba's doctors.

Cuba also keeps close track of what's going on in health facilities. Monitoring is strong, with information flowing in many directions. The main elements are:

- An integrated national health statistics system that collects data routinely from service providers. Indicators of particular concern, such as infant mortality, are collected with high frequency—some even daily.
- Regular inspection of, and supervision visits to, health facilities.
- Annual evaluations of health technicians on the technical and scientific results of their work. In addition, a randomly selected sample undergoes external evaluation.
- Annual reports by the Ministry of Public Health and the provincial and municipal health directorates to the People's Power Assembly.

Monitoring and evaluation go beyond statistical and expert assessments. Public dissemination of health indicators, at the end of each year, draws citizens into the process. In addition, citizens can complain

about providers. Their complaints can go through the health system—such as the policlinic that coordinates the local health facilities, the municipal health council, or hospital administrators. Or they can go through political channels—say, to the local representative of the People's Power Assembly, which is required to respond. Despite this monitoring, there is limited direct citizen control: participation in administrative and health councils does not entail much more than setting broad targets.<sup>447</sup> Likewise, citizens play only a small role in setting priorities within the health sector, and between health and other sectors.

### Can Cuba sustain the system?

The 1990s were difficult for Cuba. The collapse of the socialist system in Europe and in the Soviet Union and the tightening of the economic embargo by the United States led to a severe economic contraction. Cuba lost the trading partners that had provided most of its imports of medicines, food, fuel, and equipment used in agriculture and mining. Between 1988 and 1993 imports of medicines fell by more than 60 percent. By 1994 agricultural production had fallen by almost half. Drug shortages persist today.<sup>448</sup>

Government spending on social services, particularly health care, was pro-

tected, with public spending on health exceeding 10 percent of GDP in 2000. But in real terms, spending had gone down. Health outcome indicators worsened in the early and mid-1990s, recovering only somewhat by the end of the decade.

As health infrastructure suffered, so did transport services. Public transport had all but disappeared by the early 1990s, and fuel shortages limited the use of private cars. Cubans resorted to walking miles to work, and the use of bicycles skyrocketed.<sup>449</sup>

The economic reversal also appears to be weakening motivation among staff. Physicians are paid relatively well, earning almost 15 percent more than the average national wage.<sup>450</sup> But their pay is in local currency, with purchasing power declining steadily over the past decade. The legalization of a separate "dollar economy" has made occupations that pay in dollars highly prized. Stories of doctors shirking their formal duties to join this parallel economy—driving taxicabs, for example—are common.<sup>451</sup>

Time will tell whether an approach that relies on a publicly paid doctor for every 150 families can be sustained in times of economic hardship—and with competition from an economy that relies more on the dollar.