

# Achieving universal coverage with health interventions

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Cost-effective public health interventions are not reaching developing country populations who need them. Programmes to deliver these interventions are too often patchy, low quality, inequitable, and short-lived. We review the challenges of going to scale—ie, building on known, effective interventions to achieve universal coverage. One challenge is to choose interventions consistent with the epidemiological profile of the population. A second is to plan for context-specific delivery mechanisms effective in going to scale, and to avoid uniform approaches. A third is to develop innovative delivery mechanisms that move incrementally along the vertical-to-horizontal axis as health systems gain capacity in service delivery. The availability of sufficient funds is essential, but constraints to reaching universal coverage go well beyond financial issues. Accurate estimates of resource requirements need a full understanding of the factors that limit intervention delivery. Sound decisions need to be made about the choice of delivery mechanisms, the sequence of action, and the pace at which services can be expanded. Strong health systems are required, and the time frames and funding cycles of national and international agencies are often unrealistically short.

## Choice of priority interventions

In this article we build on the issues raised in preceding reports,<sup>1–3</sup> examining how health programmes known to be effective in low-income countries can be taken to scale. Scale has become a popular word, as evidence mounts that available, affordable, and effective interventions are not reaching many of those who need them.<sup>4,5</sup> As documented in the first article of this series<sup>1</sup> and elsewhere,<sup>6</sup> people not receiving services are disproportionately from among the poor. Our emphasis will be on going to scale, defined as a policy that builds on one or more interventions with known effectiveness and combines them into a programme delivery strategy designed to reach high, sustained, and equitable coverage, at adequate levels of quality, in all who need the interventions.

We assume for our aims that the priority interventions being taken to scale are limited to those known to be feasible, affordable, and effective for implementation in low income countries,<sup>7,8</sup> although certainly these assumptions are not always correct. Examples of going to scale in the absence of known population or programme effectiveness, affordability, and feasibility include plans to achieve high national coverage in very poor countries with antiretroviral drugs for individuals with AIDS,<sup>9</sup> or with nevirapine to prevent mother-to-child transmission of HIV.<sup>10,11</sup>

Often, too little thought is given to the selection of interventions to be implemented at scale in a specific setting. Availability of donor support sometimes seems to have a larger role in determining the choice of interventions than considerations related to burden of disease, effectiveness, or sustainability. Preventive child survival interventions offer a good example. Most countries have many governmental or non-governmental organisation driven programmes aimed at providing several vaccines, micronutrients (vitamin A, iron, and iodine being the most common), insecticide-treated materials in malarious areas, skilled delivery

attendants, breastfeeding promotion, and growth monitoring, among others. Additionally, curative interventions for child survival often include oral rehydration therapy, antibiotics for pneumonia and sepsis, and antimalarials. Little attention is given to whether or not countries have the management capacity to implement these interventions at high coverage. Even in high quality programmes, mediocre coverage can be achieved with several interventions,<sup>7</sup> and few if any programmes are delivered at near universal coverage.

Would it not be preferable to have universal coverage with a few effective interventions, rather than low coverage with many? In particular, children from the upper socioeconomic strata tend to receive several life-saving interventions simultaneously, whereas many of the poorest children fail to receive even one intervention.<sup>12</sup> Piggy-backing approaches to intervention delivery, such as adding micronutrient distribution to national immunisation days, might seem to be cost-effective, but unless coverage is very high, combining different interventions within one delivery mechanism might contribute to inequity—in the extreme case in which all interventions are delivered by the same mechanism, either a child receives the whole package or nothing at all. Such equity considerations have to be balanced against the efficiency gains that might arise from combining interventions, but as Gwatkin and colleagues<sup>1</sup> argue, there is no clearcut justification for prioritising efficiency relative to equity.

External benefits, or the benefits of interventions for individuals who do not receive them (eg, the herd effect in vaccination programmes,<sup>13</sup> and growing evidence that the use of insecticide-treated nets in a community provides part protection to non-users by reducing malaria transmission<sup>14</sup>) should be considered when selecting the set of interventions or programmes that can be taken to scale in a specific setting. The appropriate number of interventions to be scaled up will also depend on training of staff and resources available,

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and on the local epidemiological profile, and could be expanded as health systems are strengthened and new interventions become available.

Enhanced public health attention to achieving full, sustained, and equitable coverage is a welcome change, and one that needs to be nurtured. At the same time, the issue of quality should not be forgotten. Ideally both quality and coverage should be set at high levels, but trade-offs are often made in practice that compromise public health benefits. Reported work offers many examples. Integrated management of childhood illness (IMCI) is a delivery strategy that was first promoted by WHO and UNICEF. Training health workers in this strategy has led to improved performance in Tanzania,<sup>15</sup> Bangladesh (Arifeen SE, personal communication,) and elsewhere.<sup>16,17</sup> (Pariyo GW, personal communication) As a consequence, many governments including the government of Uganda committed themselves to implementing the IMCI strategy throughout their countries within 2–3 years. Working under pressure, managers and donors took shortcuts that had negative effects on the quality of case management training and efforts to strengthen needed health-system supports, such as supervision and district-level management. The reductions in quality curtailed the expected effects of IMCI on the health and nutritional status of children, even in areas where reasonably high proportions of health workers had been trained.<sup>18</sup>

### Health delivery issues

A proportion of the failure to achieve adequate and equitable population coverage with good public health programmes can be attributed to weaknesses in health delivery systems. Alternative strategies for strengthening the delivery of interventions have received little attention.<sup>19</sup> This lack is largely attributable to the fact that effectiveness studies have often failed to separate the health impact of a specific intervention (eg, a vaccine), from the delivery strategy used to reach the target population—for example, making the vaccine available in health facilities, with outreach posts, delivering it through community health workers, or organising national immunisation days. Many efficacy trials and effectiveness assessments use methods of service delivery that are ill-suited to scaling up within available resource constraints, because they are concerned with measuring impact in situations that maximise the chance of a positive effect.

The choice of delivery strategy can affect quality, coverage, cost, sustainability, and equity. To what extent do choices about how to deliver programmes within one geographical or managerial setting result in synergies or antagonisms between different interventions and how these can be addressed? Delivery strategies should be subjected to the same rigorous effectiveness and cost-effectiveness assessments as the interventions themselves, with a conceptual framework and research

designs that will yield results with known generalisability.<sup>4</sup>

The growing number of publications on implementation of study findings and promotion of the uptake of effective interventions can contribute in important ways to the evidence base on delivery strategies for public health programmes.<sup>20,21</sup> One review summarised evidence of effectiveness across various approaches to implementation of findings by policy makers, the public, and health-service providers. The contributors identified the low priority accorded health services and systems research as one reason for the shortfall of evidence in this area, and called for interdisciplinary and meta-institutional efforts to strengthen work on implementation strategies and the uptake of research findings.<sup>20</sup>

There is an urgent need for more rigorous assessments of alternative delivery strategies for specific public health interventions. One study compared the performance of social marketing versus unassisted commercial sector delivery of insecticide-treated materials for the prevention of malaria in southern Tanzania.<sup>22</sup> The results showed substantially greater gains in coverage through social marketing than through the commercial sector alone, for the study population as a whole and for the poorest income quartile, households with children or pregnant women, and households located on the edge of participating villages where access to the social marketing activities was assumed to be lowest (figure 1). SB Coutinho and colleagues (Coutinho SB, personal communication) have investigated the effectiveness of adding postnatal home visits to the recommended activities of the baby friendly hospital initiative, and shown that in the absence of follow-up visits at home, baby friendly hospitals have only a short-lived effect on breastfeeding practices. Examples of assessments of alternative delivery mechanisms for public health interventions and programmes include those examining community-based health workers for continuous delivery of family planning services,<sup>23</sup> descriptive evidence of lessons learned from efforts to expand coverage with treatment for multidrug-resistant tuberculosis,<sup>24</sup> or the use of national days versus facility-based services and outreach for the delivery of immunisation services.<sup>25</sup> Combination of the delivery of one intervention with existing successful delivery mechanisms is receiving heightened attention, for example the delivery of drugs to prevent malaria within national immunisation campaigns,<sup>26</sup> or as a part of antenatal services,<sup>27</sup> but as discussed above these combined delivery approaches might have a detrimental effect on equity unless coverage is near universal.

### Type of programme

The debate between proponents of vertical and horizontal approaches to health delivery is not new.<sup>28–32</sup> Horizontal approaches tend to incorporate several health

interventions as part of a comprehensive primary care approach, usually delivered through government health facilities. Vertical programmes, on the other hand, tend to deliver selected interventions, often independently, with specialised management, logistics, and delivery mechanisms. These services could be delivered parallel to, or even outside, other essential interventions targeting the same populations.

This debate has been blurred by an absence of conceptual clarity, as a result of failure to separate the vertical or horizontal administrative organisation of a programme from whether the programme is selective (covering one or a few diseases or conditions) or comprehensive (covering many diseases or conditions). Although there is a tendency for vertical programmes to be more selective, and for horizontal approaches to be more comprehensive, this is not always the case.

The term integrated is often used to refer to comprehensive programmes. We will reserve it for programmes that, in addition to being comprehensive, likewise attempt to combine the management and prevention of several conditions at the individual level. A good example is IMCI, which takes advantage of clinical attendances motivated by a specific disease to diagnose other conditions and to deliver preventive interventions.

Comprehensiveness reached a high point in the Declaration of Alma-Ata in 1978,<sup>33</sup> when primary health care was adopted, at least in principle, as the approach for achieving health for all by 2000. However, the difficulties of providing comprehensive care were recognised almost immediately, and resulted in the development of the selective primary health-care strategy in 1979. This strategy encouraged the delivery of a few key interventions “by either fixed or mobile units”.<sup>34</sup> Throughout the 1980s, interventions aimed at improving child survival were delivered through largely vertical and selective programmes such as WHO’s Expanded Programme on Immunisation and the Control of Diarrhoeal Diseases and Acute Respiratory Infections programmes. In 1993, the World Bank’s World Development Report advocated the delivery of an essential package of key preventive and curative interventions, which is a hybrid between selective and comprehensive approaches.<sup>35</sup> This approach was often viewed as an end in itself rather than a strategy supporting the development of sustainable, functioning health systems in the longer term. In the specialty of child health, the mood swung back to comprehensiveness and integration in 1996 with the launching of IMCI by WHO and UNICEF,<sup>36</sup> a strategy addressing several key illnesses that accounted for most child deaths in poor countries. The international mood now is unclear. At the same time that substantial international funding is being directed to initiatives addressing a single or a few diseases—eg, the Global Fund for HIV/AIDS, Malaria and Tuberculosis,

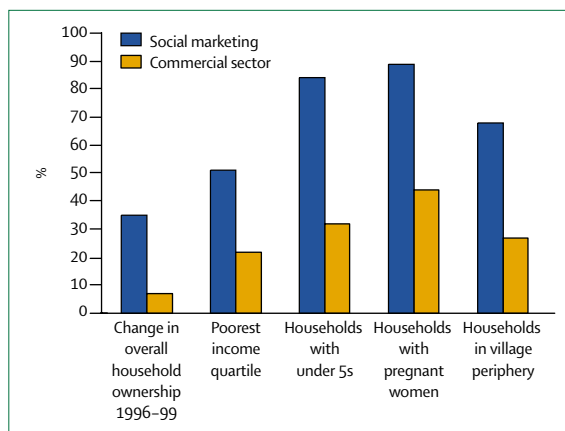


Figure 1: Household ownership of mosquito nets in two districts of southern Tanzania, 1999

or “3 by 5”—the new leadership at WHO is pledging its support to primary health care.

In fact, virtually all intervention delivery strategies in low income countries include a mix of both vertical and horizontal organisation, and of comprehensiveness and selectivity.<sup>32</sup> Vertical programme management—ie, a programme that is institutionalised in a vertical way in terms of policy, programming, and budget, etc, should be separated from vertical delivery strategy, when the programme intervention is delivered on its own—eg, national immunisation days or vector control initiatives. Programmes might consist of the wrong mix. For example, IMCI is definitely a horizontal approach at the point of delivery. First-level health workers, who provide general health care to individuals of all ages, are trained to provide over ten child survival interventions in an integrated way. Nevertheless, IMCI implementation did badly in several countries because the strategy was not sufficiently vertical at the national and district levels.<sup>16,37</sup> The absence of a vertical management organisation meant that there were no full-time coordinators for the IMCI programme, operational plans or specific budget lines, and these shortcomings precluded full implementation at the health facility level.

The political and organisational context is also very important. Essentially, the most appropriate mix of vertical and horizontal organisational structures needs to be established. This mix often varies on the basis of the human and financial resources available, the urgency to achieve results, the organisation of health services, and the natural development of programmes over time (panel 1). In situations with few resources and weak health systems, responses to the new and urgent tend to be vertical and selective. When decentralised health systems are better established and longer-term planning is adopted, horizontal and comprehensive mechanisms tend to dominate. Vertical approaches seem to be more attractive to donors, who want rapid and hard-hitting results to feed back to their

### Panel 1: Situations that might favour vertical or horizontal delivery strategies

#### Horizontal programmes

- Strong, decentralised health systems
- Endemic conditions
- High administrative or management capacity nationally or provincially
- Emphasis on long-term service strengthening and sustainability
- Less likely to obtain external funds
- Integrated programmes covering various illnesses and interventions
- Interventions often technically simple
- Use of health services is high
- More responsive to local needs and community participation

#### Vertical programmes

- Weak or centralised health systems
- Epidemics or rare diseases
- Low management capacity at district or health facility levels
- Emphasis on short-term effects through high coverage levels
- More popular with donors
- Selective programmes restricted to a few key illnesses and interventions
- Interventions are technologically complex
- Low uptake of health services
- Responsive to nationally or internationally defined priorities

constituencies, whereas investment in health-systems strengthening needed for delivering comprehensive programmes is less appealing. Verticality might likewise attract health managers, because the coexistence of several vertical programmes might mean that a larger number of high-level staff have their own discretionary funds, vehicles, drivers, etc. The pressures on national governments to apply for resources from new financing instruments such as the Global Fund to fight AIDS, TB, and Malaria, and for rapid disbursement to show the need for such funds, could further reinforce pressures for verticality and undermine the opportunities that might exist to use these instruments to strengthen health systems. Paradoxically, these pressures are often strongest in the weakest health systems.

In general, as shown by the IMCI example, there might be a need to combine a vertical approach at higher levels (eg, national policies and programme management) with a horizontal approach at lower levels (eg, case management and combined delivery of essential interventions directed at the same population groups). In weighing the balance between vertically and horizontally organised programmes, a temporal perspective should be included. When health systems are weak, vertical programmes are often the only way to circumvent the barriers posed by poorly functioning services. However,

as systems are strengthened, horizontal programmes become more feasible.<sup>31</sup> Much of the discussion in this section is based on personal observations of the contributors and of those cited as references. Oliveira-Cruz and colleagues<sup>31</sup> emphasised the inadequacy of data available for evaluating policies for delivery strategies and for making valid comparisons of different approaches to intervention delivery. In the last article of this series, the knowledge gaps and research priorities in the health systems specialty are emphasised.

### Costs

When faced with the issue of going to scale with a given programme, the first question that many policy-makers will ask is how much will it cost? Experts have estimated the costs of going to scale with specified packages of health interventions, as in the 1993 World Development Report<sup>35</sup> and the Commission for Macroeconomics and Health.<sup>8</sup> The World Bank has estimated the resources needed to achieve the Millennium Development Goals,<sup>38</sup> which extend beyond health to include the full range of development and human rights issues. A report for the Copenhagen Consensus meeting in May, 2004, estimated the cost of addressing the burden of communicable disease by delivering essential HIV/AIDS and malaria interventions and strengthening the basic health system.<sup>39</sup> Although each of these groups has used different approaches and assumptions (table 1), they share the aim of mobilising resources for improving health in poor countries. In general, aggregate estimates should be taken with a grain of salt, as they need huge assumptions in face of severe gaps in information about existing levels of quality, coverage, cost, and effectiveness of interventions.

Global estimates are useful for advocacy goals, but have important limitations as supports for operational decision-making at country level and below. Nonetheless, costing exercises raise two important issues. First, they emphasise the difficulties implicated in estimating the resource requirements for scaling up, and second, they identify some of the operational issues involved, including national absorptive capacity—ie, the degree to which additional funds can be effectively spent.

Estimating the costs of going to scale necessitates specification of the interventions being expanded, the level of quality adopted for their delivery, the means of delivering the intervention, the population targeted (size and other characteristics), the coverage to be achieved, and the full range of financial and physical resources needed. These issues are closely related to one another. Available cost-effective interventions are only reaching a fraction of people who need them, and there are different ways of delivering a specific intervention. The total resources needed will be identified by the choice of delivery strategy, which in turn will be related to the context and to the characteristics of the target

Source of estimate	Type of costs estimated	Services included	Estimated cost
1993 World Development Report <sup>35</sup>	Total	Public health services. Essential clinical package	US\$62 billion per year for all developing countries (\$15/person); \$12/person for low income countries
2001 Commission for Macroeconomics and Health <sup>8</sup>	Total and incremental, including adjustment for process of scaling up	49 priority health interventions to address major causes of avoidable mortality	Incremental cost of \$66 billion per year by 2015 for all low-income countries (\$21/person); total cost of \$34/person
2002 Costing the MDGs <sup>38</sup>	Incremental	Priority preventive and clinical interventions to address: infant mortality, under-five mortality, maternal mortality, HIV/AIDS, malaria, and other diseases	\$20–25 billion per year (health targets) \$54–62 billion per year for all MDGs
2004 Copenhagen Consensus: Communicable Disease Challenge <sup>39</sup>	Incremental	Malaria control (ITNs, IPTp, ACT) HIV/AIDS control (UNGASS package) Strengthening basic health services (WDR 1993 essential interventions)	2003 Int\$2.94 billion* 2003 Int\$7.35 billion 2003 Int\$337 billion (= 2003 Int\$65/person)

\*Int\$ are purchasing-power adjusted US dollars. ITNs=insecticide-treated nets. IPTp=intermittent presumptive treatment of pregnant women. ACT=artemisinin-based combination therapy. WDR=World Development Report.

**Table 1: Global cost estimates for scaling up health interventions and delivery**

population. The resource requirements will likewise be established by several additional issues.

Should the cost include the costs of existing infrastructure and systems, or is the relevant cost the additional (incremental) resources needed? Both approaches are valid, but address different issues. If existing resources are included, double counting should be avoided. Policy-makers are often most concerned with incremental costs because these show how much they will have to invest in the short term.

Once intermediate programme quality and population coverage have both been achieved, the costs of improving quality or reaching more marginal populations might be substantially higher, and might need different delivery approaches. In the absence of better information, most policy studies have ignored these two general issues and assumed a constant marginal cost, but true costs might be underestimated by this assumption. Better information is needed about how costs change with scale.

Most costing efforts have assumed services will be delivered by the public sector, but in some contexts it might be more appropriate to explore alternative providers (such as non-governmental organisations) with potential efficiency savings or greater accessibility in peripheral areas (table 2). People planning the strategies for scaling up need to consider the most appropriate delivery mechanisms in each context, and apply the relevant costs.

Policy reforms that address weak incentives for good performance<sup>4</sup> will be needed in many contexts. For example, civil service reform that addresses both the amount of health worker remuneration and issues of performance assessment might be needed, and quite probably such reforms will have to be applied beyond the health sector. The costs of these transitional measures need to be taken into account.

Most cost estimates assume that the needed resources are physically available. However, in many contexts human resources are likely to be a problem,<sup>3</sup> with severe shortfalls in many countries. Allocating funds for hiring more staff will not solve the difficulty if no one is available to be hired.<sup>40</sup>

These questions all need to be addressed when designing national strategies for going to scale, and assessing the resources needed.

### Operational opportunities and constraints

Irrespective of the technical issues a substantial rise in expenditure is needed to go to scale. But how money is spent will also determine whether additional spending will be translated into effective coverage, especially among the poor. Furthermore, there may also be limits to the ability of systems to spend additional resources efficiently and effectively, sometimes referred to as difficulties of absorptive capacity (panel 2). Work done for the Commission for Macroeconomics and Health reviewed some of these issues<sup>42</sup> and developed a framework for assessing the obstacles or constraints to scaling up. The framework has two dimensions: the level at which a constraint operates (table 2), and the degree to which the constraint can be addressed or relaxed through new funds. On the basis of the framework, empirical analysis was undertaken to classify countries according to their degree of constraint.<sup>43</sup> One or two proxy indicators were identified for each of the main levels of constraint, with data obtained for low income and sub-Saharan African countries. Analysis was undertaken on individual constraints, health-system, and governance variables, and an overall constraints index that took into account data for all seven indicators was derived.

Considerable heterogeneity between countries was shown across all methods of analysis. A few countries consistently fell into the least or most constrained groups. Poor sub-Saharan African countries were most highly constrained, whereas Asian countries were less constrained than this and the two Asian giants, China and India, were consistently above the median. Several countries of the former Soviet Union did well on the health systems variables, probably showing past investment, but less well on governance variables. Only 10% of the total population of countries included in this study live in the most constrained countries. However, these same countries have the most severe

Level of constraint	Types of constraint
Community and household level	Absence of demand for effective and available interventions Barriers to use of effective interventions (physical, financial, social)
Health services delivery level	Shortage and distribution of appropriately qualified staff Weak technical guidance, programme management and supervision Inadequate drugs and medical supplies Absence of equipment and infrastructure, including poor accessibility of health services
Health sector policy and strategic management level	Weak and overly centralised systems for planning and management Weak drug policies and supply system Inadequate regulation of pharmaceutical and private sectors and improper industry practices Absence of intersectoral action and partnership for health between government and civil society Weak incentives to use inputs efficiently and respond to user needs and preferences Reliance on donor funding that reduces flexibility and ownership Donor practices that damage country policies
Public policies cutting across sectors	Government bureaucracy (civil service rules and remuneration, centralised management system, civil service reforms) Poor availability of communication and transport infrastructure
Environmental and contextual characteristics	Governance and overall policy framework - Corruption, weak government, weak rule of law and enforceability of contracts - Political instability and insecurity - Low priority attached to social sectors - Weak structures for public accountability - Absence of free press Physical environment - Climatic and geographic predisposition to disease - Physical environment unfavourable to service delivery

Source: Hanson and colleagues.<sup>42</sup>

**Table 2: Constraints to improving delivery of priority health interventions**

difficulties, including institutional capacity and weak government, and a high proportion are involved in armed conflict.

Understanding the constraints facing individual countries is crucial for estimating the resource requirements for going to scale, and for making strategic choices about delivery methods, the sequencing of actions, and the pace at which services can be expanded. For example, where demand for services is low as a result of poor education and information, specific measures can be taken to address this lack of demand. Investments in planning and management capacity could help enhance the absorptive capacity of very weak health systems. Delivery mechanisms that take

advantage of opportunities outside the public sector, such as social marketing of public health products, might be more effective when public systems are very weak. However, in the longer term, these initiatives should be accompanied by efforts to improve government systems, including capacity to manage and regulate such non-state activity. Constraints analysis helps to identify situations in which investment decisions are outside the direct influence of the ministry of health, for instance where investments in roads and infrastructure are needed to assure service delivery, showing that a broader intersectoral strategy of advocacy in support of health is called for.

Several approaches to overcoming constraints in communities and households, in health-services delivery, and with health sector policy and strategic management, proved to be effective, although in general the evidence base is weak.<sup>44</sup> Positive evidence was noted for approaches that strengthen community participation and establish or improve the use of quality assurance methods. There is some support for the effectiveness of management strengthening interventions and training. However, both need to be part of a broader strategy to enhance autonomy for district-level managers, integrated efforts to improve health worker skills, stronger incentives for better performance, and integrated human resources policies. Integrated drug policies were effective in overcoming constraints in some contexts. Oliveira-Cruz and colleagues<sup>44</sup> have identified priority actions for relaxing or reducing constraints in different contexts (table 3).

## Conclusions

Known, cost-effective interventions with potential for greatly improving global health are still failing to reach a high proportion of the world's population. We have argued that going to scale with these interventions is essential for improving global health, and that strong health systems are essential for reaching this objective in a sustainable way.

Multitrack approaches are needed that address both the need to achieve short-term universal coverage at high levels of quality, and the longer-term goal of system strengthening, rather than forcing competition among the two. Scaling up in most contexts will need innovative delivery strategies that move incrementally along the vertical-to-horizontal axis and along the selective-to-integrated continuum, as health systems gain capacity in service delivery.

Longer time frames are needed for planning, implementing, integrating, and sustaining efforts if going to scale is to be successful. The time lines of governments, donors, and international agencies are often too brief, with funding cycles seldom longer than 5 years. Shorter time frames often lead to prioritising high coverage and impact through vertical approaches, rather than sustainability and building health-system

### Panel 2: Limits to absorption and spending

- Absolute availability of inputs (eg, human resource shortages)
- Systems to allow funds to be channelled effectively, and their use monitored
- Infrastructure to ensure that resources can be delivered to the right place at the right time
- Incentives to use resources more effectively and efficiently
- Values and norms that support the prioritisation of essential services to poor and marginalised populations, which in turn may be related to broader issues of governance
- Macroeconomic arguments about how large inflows of resources are likely to affect the economy as a whole. For example, ministries of finance in some countries have been concerned that large aid inflows distort the exchange rate leaving other sectors of the economy uncompetitive<sup>51</sup>

	Highly constrained countries	Least constrained countries
<b>Constraint</b>		
Community and household	Encourage community mobilisation through NGOs Use social marketing and retail sector to make effective drugs available to households	Use incentives to stimulate demand
Health services delivery	Build up health care delivery infrastructure through public services or agreements with NGO and church providers or both Use outreach services and NGOs where public sector difficult to extend	Improve human resource management policies to ensure better staff performance Strengthen local management
Health sector policy and strategic management	Enhance degree of management decentralisation Strengthen drug supply and distribution system through public and private sector or both Greater donor coordination	Enhance degree of management decentralisation Greater donor coordination Strengthen regulation of private sector Give greater autonomy to health sector
Public policies cutting across sectors		
Environmental characteristics	Prepare for possible scale-up under improved conditions; maintain links with NGOs; support education and training	Encourage more pluralist policy process

NGO=non-governmental organisations. Source: Oliveira-Cruz and colleagues.<sup>44</sup>

**Table 3: Relaxing constraints: priority actions by type of country**

capacity to deliver integrated programmes. A historical perspective is needed, with programmes or projects building on what was developed and learned in the past. Unfortunately, rapid staff turnover in ministries, donor agencies, and technical assistance groups, coupled with rapid changes in funding mechanisms, often contributes to the erosion of institutional memory. Advocacy efforts internationally seem to have a short time span, with policies and programme priorities changing every few years, which can lead to the withdrawal of national or international support before new initiatives have had time to have an effect on health. For instance, the child survival revolution of the 1980s and universal child immunisation are among the best examples of how worthwhile and successful policy initiatives were abandoned before national programmes were completed.<sup>5</sup>

There is an urgent need for better evaluation of the effectiveness and costs of different delivery strategies in achieving and sustaining high population coverage at adequate quality levels. Whenever possible, such evaluation should be undertaken simultaneously in some countries, to support inferences that are generalisable.<sup>45</sup> WHO convened a taskforce that has suggested a research agenda for health policy and systems issues, emphasising important areas in which further evidence is needed.<sup>46</sup>

On the policy and planning side, a first essential step is a plan for country-level priority setting and programming that includes assessments of burden of disease, health system capacity for scaling up, and situation-specific options for delivery strategies for the priority interventions. Uniform strategies may be popular with international organisations and with donor agencies, but they are unlikely to satisfy the needs of most countries, especially the poorer and most constrained ones. Country-specific and contextualised strategies for going to scale are needed to reach the poorest people and to reduce inequalities in health.

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