expansion of interventions but also the constraints and obstacles that might impede advances, outlining ways to overcome the latter. Key measures required in national strategic plans to scale up the packaged interventions outlined in the previous section include:

- Identify and remove health-system bottlenecks.
- Monitor progress and problems in coverage.
- Phase in intervention packages and health-system strengthening.
- Address the human resource crisis in health care.
- Develop health systems for outcomes.
- Strengthen health systems at the district level.

Identify and address health-system bottlenecks

Functional service delivery networks are necessary to provide a continuum of care, based on the three levels of service delivery outlined in the previous section: family and community; decentralized, close-to-client primary services; and facility-based referral care and specialized preventive services. An initial step involves gathering data and qualitative information on all existing service providers (public, private and informal) and organizations (including non-governmental organizations) that can be mobilized in support of the scaling-up effort.

One example of this process is provided by upper eastern Ghana, where there are many non-governmental organizations supporting different health interventions. Collaboration between the Ghana Red Cross Mothers Clubs, the national health services and UNICEF under the Accelerated Child Survival and Development programme has succeeded in integrating the efforts of all these organizations and focusing their support on scaling up an evidence-based package of high-impact, low-cost interventions.9

Other important steps are to identify and analyse system-wide bottlenecks and constraints and to formulate strategies to remove or overcome them.9 These may originate at the level of facilities, outreach or communities and household owners, or from the strategic and bureaucratic apparatus that sets policies, controls logistics and supplies, and drafts and implements regulations. Figure 4.2, page 69, illustrates the main potential bottlenecks to service delivery at each level of a country’s health system, and the policy and governance context in which it operates. A new tool for analysing these constraints is Marginal Budgeting for Bottlenecks, outlined in the panel on page 70.

Many bottlenecks will demand a specific solution that involves addressing constraints at various levels of service delivery. For example, low demand for quality health services among community members or the limited capacity of health facilities and extension workers to deliver essential services may restrict the coverage of intervention packages, as may financial, social and physical barriers to access. Here, appropriately, the community partnerships elaborated in Chapter 3 can play a unique and vital role in enhancing contact between dedicated health workers – including community health workers – and services, and households and communities that are currently lacking essential interventions. But facility-based care and outreach workers will be required both to support community health workers and to provide services for many health interventions that require more specialized assistance.11

Improving the performance and motivation of health workers and ensuring that facilities are adequately equipped and drugs are readily available are essential second-line requirements to support community partnerships in health and nutrition and to enhance the quality of service delivery. Part of the solution to improving service delivery undeniably involves increasing resources – human, financial and managerial – and providing training, but other incentives and better human resource management may also be needed.

Higher-level determinants of health-system performance – policy and strategic management, multi-sectoral public policies and environmental and contextual change – are among the most complex challenges for health-system development, for they form part of a political and institutional context that may not change readily or easily.9 Nonetheless, sound leadership, advocacy, technical assistance and partnerships can help to prompt change.

Monitor progress and constraints in expanding coverage

Regular monitoring, feedback and adaptation of programmes on the basis of evaluation and evidence are widely recognized as integral components of a well-functioning health system. Without these, rigorous assessment of programmes’ effectiveness is not possible. Sound, evidence-based public health calls for a solid knowledge base on disease frequency and distribution, on the determinants and consequences of diseases and conditions, and on the safety, efficacy and effectiveness of interventions and their costs. Health surveys and research on the impact of approaches and strategies are imperative to collating essential evidence, learning key lessons and developing best practices.

Monitoring coverage is also vital to enabling rapid adjustments in policies and interventions to be made. Measurements of the health-based MDGs depend considerably on such large-scale instruments as Demographic and Health Surveys (DHS) and Multiple Indicator Cluster Surveys (MICS). The MDG indicators provide core parameters by which progress towards the health-related goals can be measured. Many of these are provided as part of the minimum set of high-priority indicators for child survival that have been agreed upon by UNICEF and WHO in collaboration with partners in the context of the Countdown for Maternal, Newborn and Child Survival process. MICS and DHS provide periodic data for determining effective coverage with the minimum package of essential interventions. To enhance surveillance, the interval between these surveys is being reduced from five to three years. In addition, national, subnational and community-based monitoring processes are pivotal to analyse progress and problems in scaling up high-impact interventions.

Several developing countries are using innovative measures to monitor the impact of health programmes on populations and collate vital health information. One such country is Bolivia, where a census-based approach was used to identify the entire programme population through biannual visits to all homes. This census was then used to target selected high-impact interventions to those children at greatest risk of mortality. As a result of this approach, the mortality level of under-fives in areas where health programmes were

**Figure 4.2** Ways of addressing bottlenecks in health-service delivery

<table>
<thead>
<tr>
<th>ACTION</th>
<th>IMPACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select proven interventions.</td>
<td>Improve quality of health-care provision (effective coverage).</td>
</tr>
<tr>
<td>Supervise training.</td>
<td>Improve the range and extent of health-care provision (adequate coverage).</td>
</tr>
<tr>
<td>Track defaulters and conduct home visits.</td>
<td>Enhance initial utilization of services (enhanced demand and affordability).</td>
</tr>
<tr>
<td>Mobilize families and communities.</td>
<td>Broaden geographic access to services.</td>
</tr>
<tr>
<td>Implement health extension and micro-planned outreach.</td>
<td>Increase availability of human resources in health-care provision.</td>
</tr>
<tr>
<td>Implement training and deployment of new staff by community promoters.</td>
<td>Bolster availability of drugs and other essential medical supplies.</td>
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</tbody>
</table>