

SUPPORT Tools for evidence-informed health Policymaking (STP)

13. Scaling up policies and programmes

Susan Munabi-Babigumira¹
Andrew D Oxman²
John N Lavis³
Atle Fretheim⁴
Simon Lewin⁵

1. Norwegian Knowledge Centre for the Health Services, P.O. Box 7004, St. Olavs plass, N-0130 Oslo, Norway. Email: sub@nokc.no
2. Norwegian Knowledge Centre for the Health Services, P.O. Box 7004, St. Olavs plass, N-0130 Oslo, Norway. Email: oxman@online.no
3. Centre for Health Economics and Policy Analysis, Department of Clinical Epidemiology and Biostatistics, and Department of Political Science, McMaster University, 1200 Main St. West, HSC-2D3, Hamilton, ON, Canada, L8N 3Z5. Email: lavisj@mcmaster.ca
4. Norwegian Knowledge Centre for the Health Services, P.O. Box 7004, St. Olavs plass, N-0130 Oslo, Norway. Email: atle.fretheim@nokc.no
5. Norwegian Knowledge Centre for the Health Services, P.O. Box 7004, St. Olavs plass, N-0130 Oslo, Norway and Health Systems Research Unit, Medical Research Council of South Africa. Email: simon.lewin@nokc.no

Corresponding author:

Dr Susan Munabi-Babigumira
Norwegian Knowledge Centre for the Health Services
P.O. Box 7004, St. Olavs plass
N-0130 Oslo, Norway

Email: sub@nokc.no

Abstract

Background: This article is number 13 in a series of 21 articles on tools for evidence-informed health policymaking. Due to the challenges faced in scaling up programmes, some populations do not currently receive essential healthcare that has been shown to be cost-effective. While policymakers often need to scale up effective programmes to benefit larger populations they may lack the necessary tools to guide this process.

Objectives: In this article we suggest five questions that can be considered when rolling out or scaling up a policy.

Key messages:

- These five questions are:
 1. How complex is the intervention and does complexity have implications for scale up?
 2. What are the requirements that the intervention imposes on government capacity, managers, healthcare professionals and users, and what are the implications for scale up?
 3. Is the widespread implementation of the intervention likely to have important impacts on other segments of the healthcare system or other sectors and, if so, what are the implications for scale up?
 4. What are the likely cost considerations of expanding coverage of the intervention and sustaining it, and what are the implications for scale up?
 5. Is the intervention likely to be difficult to sustain or are its effects likely to change over time?
- Managers may require training, avenues for communication and networking, as well as incentives for work done
- The users of services should be engaged throughout the scale up process. The physical, financial and social barriers to the uptake of services by users need to be identified and addressed in order to generate sufficient demand for the services provided
- Widespread implementation may affect the delivery of services in other segments of the healthcare system or other sectors providing public services. Policy makers need to be mindful of these effects and may need to make contingency plans for alternative healthcare delivery arrangements
- The geography of the setting, human resources, state of the existing infrastructure and management of the process, are some of the broad areas that should be considered when estimating costs. Additional costs could be incurred when attempting to provide better quality services or increasing the level of coverage
- An ongoing focus on the sustainability of programmes, starting in the planning phase, is necessary

Background

This article is number 13 in a series of 21 articles on tools for evidence-informed health policymaking [1]. It is also the second of three articles in this series about planning implementation, scaling up and monitoring and evaluation strategies. Its purpose is to suggest ways to identify and address issues that can arise in scaling up policies and programmes.

Despite the available evidence related to cost-effective interventions, many populations still lack health services or the quality of care they need [2, 3]. Many effective interventions have not been translated from the research setting into the ‘real’ world, or progressed from the pilot project stage into widespread use. In settings where some interventions have been shown to work, there is often a need to expand coverage to serve a larger population so as to widen the benefits obtained. Occasionally, there is a need to transfer the positive experiences implemented in one programme area into policy. This enables wider implementation and therefore provides care to people who may not otherwise have received it.

Several interrelated terms have been used to describe the process of scaling up. These have related to improving or expanding access to health services to previously underserved groups; expanding, adapting and sustaining successful policies [4]; or increasing the impact of innovations successfully tested in pilot or experimental projects to benefit more people [5]. Catch phrases such as ‘bridging the gap’ or ‘close to client’ or ‘rollout’ have also been used to describe this process. In some situations, scaling up has also been referred to as ‘implementation’.

In this article, we use the term *scaling up* to refer to those processes or actions taken to “magnify the impact of health service innovations successfully tested in pilot or experimental projects so as to benefit more people and foster policy and programme development” [5].

The terms *intervention*, *programme* and *policy* are used interchangeably in this article with reference to services that are to be scaled up. Further discussion on how to identify barriers to implement changes on the ground, and strategies to overcome these can be found in Article 14 of this series.

Questions to consider

1. How complex is the intervention and does this complexity have implications for scale up?
2. What are the requirements that the intervention imposes on government capacity, managers, healthcare professionals and users, and what are the implications for scale up?
3. Is the widespread implementation of the intervention likely to have important impacts on other segments of the healthcare system or other sectors and, if so, what are the implications for scale up?
4. What are the likely cost considerations of expanding coverage of the intervention and sustaining it, and what are the implications for scale up?
5. Is the intervention likely to be difficult to sustain or are its effects likely to change over time?

1. How complex is the intervention and does this complexity have implications for scale up?

An intervention is said to be complex when it contains several interacting components related to the way it is delivered, the behaviour of the recipients and those delivering it, the levels of the system or group it is targeting, and the degree of ease in tailoring the intervention at the time of implementation [6]. It is therefore not easy to tease apart the individual ‘building blocks’ of an intervention or to identify the particular combination of factors that leads to success.

However, in attempting to scale up a programme it is important, where possible, to *understand* the component building blocks that make up these interventions. This entails understanding the theory that has informed the processes through which a programme is able to achieve the intended outcomes. By understanding the relevant theory, one can then consider how similar (or different) these individual components are to those within the setting in which a programme is to be scaled up. If many similarities exist, such settings may provide opportunities for the replication of a programme. In instances where there are differences, or interventions that cannot be generalised, or where components of the intervention are not clearly understood, a pilot study could be considered. This may help to provide a better understanding of one or more of the components and better define the effect that could be anticipated in a new setting.

When a pilot study has already been undertaken, findings from process evaluations in particular could provide insight into the particular local circumstances that lead to positive outcomes. Such information may reflect, for example, the unique preferences of the population, and should be taken into account when considering scaling up programmes. Occasionally, one may need to consider different methods of achieving a similar outcome by taking into account the unique characteristics or preferences of a particular setting in which the policy is to be implemented [7]. Doing this may potentially create variations between programmes but may be important as a way to create demand for services or as a way of ensuring that those services are accessible. Box 1 provides an example of how a complex intervention like providing antiretroviral therapy in populations with limited access was rolled out from the global to the national level.

2. What are the requirements that the intervention imposes on government capacity, managers, healthcare professionals and users, and what are the implications for scale up?

Governments form part of the environment within which a scaling up process is implemented [5]. The way governments are organised will tend to differ widely with some countries operating under centralised systems, and others operating at regional/provincial and district levels. This has implications for the level of control of government core functions, including priority setting, the allocation of resources, the training of personnel, and quality control. It is therefore important to understand the political/governmental context within which scaling up takes place. Policymakers need to identify the level(s) at which capacity is needed and to identify those key players involved in this process. It is important that the planned services, and therefore the resources for the scale up process, are within government priorities so that they can be implemented in the short-term and to ensure long-term sustainability. Since government priorities, policy windows and funding opportunities sometimes change, it is

important to remain mindful of the key actors, their priority areas and potential funding sources. Box 2 provides an example of the scaling up of reproductive health services under a decentralised governmental system in Brazil.

Managers and healthcare professionals form part of the resource team responsible for the implementation of policies and are therefore key actors in the scaling up process. It is important that they understand the intervention, are committed to bringing it to scale and are able to convince others to work with them [4]. This may require training (or retraining) to provide up-to-date information on the planned services and building the networks necessary to carry this forward. Meetings and other avenues of communication between stakeholders are also useful ways to generate ideas, address challenges that may arise, and share experiences as part of an ongoing process [8].

Once a scale up process is underway, it is important to ensure that the quality of the initial intervention is maintained in order to obtain similar positive outcomes. This may place an additional workload on managers responsible for supervision and quality control at the different levels. Box 3 provides an example of the efforts to maintain quality care as part of the process of establishing stroke care units in Canada.

Additional human and financial resources may be required not only at the start of a programme but throughout, in order to ensure continuity in the implementation of activities. When existing staff are required to take on additional activities related to a programme that will be scaled up, this may stretch already-limited resources. This may result in a lowering of the quality of existing services and could even worsen inequities which the scale up process was intended to address in the first place [9]. It is important therefore to be aware of the risk of overloading already overstretched teams and to identify ways to maintain staff motivation using options such as performance and incentive schemes [10].

In a decentralised system, the technical resources for quality control at the lower levels may be limited [11]. There may be need therefore for training or retraining, the identification of alternative strategies, or the dissemination of guidelines in order to build up the technical expertise required.

The overall purpose of scaling up of a programme is not only to bring a service closer to the population it is intended to serve, but also to encourage uptake. The intervention must be cost-effective, culturally acceptable, and the population convinced about its benefits in the short- and long-term. The physical, financial and social barriers to its uptake must therefore be identified and addressed in order to generate sufficient demand for the services provided.

Demand can be created in various ways. A systematic review by Oliveira and colleagues [10] reported positive effects from community participation in overcoming the constraints limiting effective health service delivery at the community and household level. Community participation, they reported, was obtained using various approaches including health education (e.g. meetings, group teachings), encouraging a participative approach (mobilising leaders and stakeholders to understand and buy into the intervention), using an outreach strategy (targeting households and high-risk groups), and the training and supervision of providers (e.g. nurses and/or mothers). These interventions resulted in increased health-related knowledge and community empowerment and improved coverage in immunisation and sanitation practices. Box 4 illustrates how the process of participation enabled a community to identify problems and to suggest and implement solutions for establishing improved quality of

care for mothers and children in Makwanpur district, Nepal. Although these activities were implemented as part of a cluster randomised trial, activities continued after the end of the trial. Some of the concepts from this trial have been utilised for subsequent community-based neonatal work in Nepal.

Social marketing, an intervention that uses commercial marketing strategies to create demand at the population level, has provided conflicting results [10]. On one hand this strategy may result in increased ownership and familiarity with the goods supplied. On the other, because the goods must be paid for, these strategies may widen imbalances in access according to who can afford to pay.

Occasionally, users are required to participate actively in a service before it is scaled up. For example, in the rollout of antiretroviral therapy (ART) in some low- and middle-income countries, users were required to be registered, and to have received a clinical follow-up, in order to receive ART. This strategy, among others, was used to ensure patients attended clinics for appropriate monitoring of both adherence and drug resistance.

It is important to engage the population throughout the scaling up process (see Article 19 in this series for a discussion of strategies for involving the public). At the start of the scaling up process, public engagement helps to identify local circumstances and cultural preferences. It also enables managers to understand the potential barriers to the uptake of an intervention and to provide suggestions on how to overcome them. *During* the scale up process, engagement ensures that a population's needs are being met and that the quality of the service is acceptable. This helps to provide a channel for feedback on any areas that may need improvement.

3. Is the widespread implementation of the intervention likely to have important impacts on other segments of the healthcare system or other sectors and, if so, what are the implications for scale up?

Sometimes the scale up process may have other widespread and unintended effects on other segments of the healthcare system or on other sectors. In some countries, for example, additional activities implemented as part of the scale up of previously underutilised vaccines in low- and middle-income countries (such as micro-planning, social mobilisation, and vaccination campaigns) meant that many health professionals were taken away from their core routine activities. The outcome of this was that other key activities within the healthcare system were negatively affected by the implementation.

The scale up of a service may also place an additional workload on human resources and this may, in turn, result in demands for salary increases. Other associated professionals in the public sector, such as teachers, may also demand similar increases.

The effects of the scale up of a service, however, are not always negative. Most often the effects are positive because health services are provided to a larger population and provide indirect benefits to other sectors. Rolling out antiretroviral therapy, for example, enables more people to return to work and potentially reduces the number of sick days taken by employees.

Policy makers need to be aware of the effects, both positive and negative, that a scaling up process may have on a healthcare system and other sectors. This is important in instances

where other healthcare delivery arrangements have to be made for the short-term and because of the broader impacts that such changes may have.

4. What are the likely cost considerations for expanding coverage of the intervention and sustaining it, and what are the implications for scale up?

A systematic review by Johns and colleagues [8] documented four broad areas that should be considered when scaling up interventions: the geography of the area affected, human resources, fixed costs from existing infrastructure, and the management of the process.

The geography of the setting and the state of the existing infrastructure will determine the cost of a scale up. Higher costs will often be incurred in scaling up interventions in rural rather than urban areas due to the usually greater complexity of the geography and often poor or non-existent infrastructure. Alternative delivery strategies may need to be considered and a lower population size served, and this may result in higher costs for providing care.

Human resources are vital to delivering interventions. If these are in short supply, strategies should be used to increase their availability (e.g. through training or recruiting) or to redistribute available staff (e.g. through task shifting or outreach services), or to utilise previously unutilised capacity (e.g. community workers). However, this may lead to additional costs being incurred.

Some additional costs may be minimised by increasing access to already functioning health units. However, there is a risk that by doing this, one may reach a tip-over point at which the increased utilisation of a facility results in diseconomies of scale. For example, vaccination against the human papilloma virus in several high-income countries could be provided by utilising existing facilities and personnel e.g. through school health services. However, this would require extra visits by personnel, additional due attention and sufficient time to properly inform girls and their parents, as well as monitoring and education programmes about the importance of cervical cancer screening. These additional activities would mean that the providers of care would have limited time for the provision of other services.

The management of a scale up process includes attention to communication costs, initial training of providers or managers, monitoring and supervision, and the generation of demand through the use of the mass media. These activities, too, could result in additional cost considerations.

Victoria and colleagues [11] have suggested that it is important to define the *level* of quality, the *anticipated coverage* of the service that would be acceptable, and the *intended means* of delivering the intervention. Improving the quality or coverage of a service provided may necessitate additional funding, particularly when utilising different delivery strategies to ensure access to previously underserved communities, or when improving the quality of existing services.

Scaling up an intervention therefore requires an exploration of already available opportunities that could be utilised with only minimally additional resources. Costs may also be minimised by adding a proposed service onto other initiatives which already have funds earmarked. Box 5 provides an illustrative example of the Reach Every District (RED) strategy designed to improve immunisation coverage in the African Region. In this example, countries are shown

to utilise various strategies to provide routine immunisation and other healthcare services to populations that were hard to reach or had difficulty accessing routine primary healthcare.

5. Is the intervention likely to be difficult to sustain or are its effects likely to change over time?

Simmons et al [5] identified a focus on sustainability as one of the key characteristics of a successful scaling up strategy. It is important to identify ways to achieve a sustainable programme from the start of the planning process. A systematic review by Gruen and colleagues [12] identified the following factors that need to be considered as part of sustainable programmes:

- Design and implementation considerations e.g. the long-term financing and delivery arrangements of a policy. For instance, will the costs be incurred by a government (and therefore the tax payers), or are different financing strategies possible? Future budgets need to reflect the additional costs of the scaling up process, and the amount required will be dependent on the funding options and delivery strategies chosen
- Attributes of the organisational setting e.g. integration with existing programmes. Victora and colleagues [11] noted that horizontal approaches to delivery of healthcare (which attempt to provide several interventions as part of comprehensive primary care and are usually delivered through government health facilities) tend to emphasise long-term service strengthening. These, they noted, tend to be more sustainable than interventions that are delivered vertically. (Definitions of horizontal, vertical and diagonal approaches used in healthcare delivery are provided in Box 6)
- Factors in the broad environment e.g. community participation. Participatory approaches (as opposed to ‘top down’ approaches) may involve leaders, various stakeholders and users in the planning, development and even the implementation of interventions. This helps to create a sense of programme ownership and can facilitate demand for the services provided
- Interaction between all programme stakeholders e.g. tailoring an intervention to an issue, a context, and to both users and providers
- Planning for the evolution of interactions over time e.g. integrating programmes into existing structures, and working to strengthen institutions

It is important that a programme is able to provide the same, or improved, quality of care over time. This necessitates a continued focus on the essential components of a programme that are associated with initial positive outcomes. Periodic supervision, monitoring and evaluation (see Article 15 in this series for a discussion on how to monitor the implementation of programmes and evaluate their impacts) are useful to assess the quality of a programme and to identify areas in need of particular attention. Such areas can then be the focus of additional training efforts and support in order to ensure better quality of care.

Resources

Links to websites

Management Systems International

- <http://www.msiworldwide.com/files/scalingup-framework.pdf>, accessed 1 April 2009

Provides a field-tested framework and a set of guidelines and tools for managing the scale up process.

Box 1. Example of the rollout of antiretroviral therapy (ART) in low- and middle-income countries

The WHO and UNAIDS launched the ‘3 by 5’ initiative [13] in order to increase access to antiretroviral therapy (ART) in low- and middle-income countries (LMIC). The aim of this initiative was to increase access to treatment among populations hardest hit by the HIV/AIDS epidemic. At the time of its launch in 2003, an estimated 400,000 people living in LMIC were receiving ART. In order to achieve the set target to treat 3 million people living with HIV/AIDS by the end of 2005, 14 strategies with a focus on five key areas were developed. The five key areas were: leadership, financing, delivery systems, mobilising demand, and health and information systems for ART. Each of these key concerns was linked to several specific actions through which WHO, partner agencies and the countries involved, would seek to reach the set target. Although this programme was new, and many managers had no previous experience in administering complex interventions, each country adopted strategies for their treatment rollouts, each appropriate to their unique local circumstances. By the end of 2007, close to 3 million people in LMIC were receiving ART [14].

Box 2. Scaling up reproductive services in a decentralised system

Diaz J and colleagues [15] describe their experiences of attempting to expand access and improve quality of care for family planning in Brazil, within a decentralised system. Several activities were implemented through an NGO working in one of the pilot municipalities, including: quality of care training, reorganising provider roles to manage the limited human resources, the improvement of the management process, creating a referral process, creating a programme for adolescents, and the provision of some services such as outpatient vasectomies, and community participation.

After two years of implementation, an evaluation revealed improvements in the quality of care and in the family planning services offered through public health units in the pilot municipality. These services were consequently expanded to three additional municipalities. However, scaling up this programme to cover the 5,500 municipalities in Brazil was challenging given that only one NGO was providing training and support. Strategies that were used to overcome this constraint included the training of trainers, networking, and the active use of information technology to encourage information sharing. During this phase of the scale up process, challenges were experienced when the focus of control changed from the central to municipal level. These challenges included job insecurity on the part of those recruited by the municipalities, rivalries that undermined the potential of the strategy of trainers at the municipal level, and irregular delivery of programme from the central government.

Box 3. Stroke units in Canada

Stroke units which consist of a team of multidisciplinary providers when compared to conventional care, have been shown to improve outcomes in patients after strokes of varying severity [16]. In several developed countries, a number of strategies have been used to form stroke care units. In Canada, a stroke care programme with the following interventions was rolled out:

- Health promotion and primary prevention e.g. stroke prevention by primary care providers, and health promotion integrated with chronic disease prevention in all communities
- Pre-hospital and emergency care e.g. implementing best practices for physicians, nurses, and heightened emergency responses
- Acute care/treatment e.g. the establishment of stroke units with multidisciplinary teams, and timely diagnosis by experienced clinicians and using neuro-imaging
- Stroke rehabilitation e.g. subacute stroke rehabilitation units and timely access to experienced rehabilitation teams
- Secondary stroke prevention e.g. stroke prevention by primary care providers, and strategies to prevent recurrence
- Community re-engagement/reintegration e.g. regular follow-up for stroke survivors, and community care by health professionals and caregivers

After six years, significant gaps in implementation were noted by physicians, nurses, physiotherapists and other professionals involved in the care of stroke patients [17]. For example, there was considerable variation in the time to admission to hospital and the stroke unit, and in the administration of acute thrombolytics and anticoagulants. Variations were also evident in stroke care according to geographic location, with only a few rural hospitals implementing guidelines and practice choices among attending physicians. In order to address these gaps in knowledge translation, the Canadian Stroke strategy developed further guidelines for health professionals. Existing guidelines were synthesised into a set of recommendations that emphasised: a coordinated approach for public awareness, patient and family education, how to prevent strokes, acute stroke management and stroke rehabilitation. The recommendations included performance measures as well as system implications that described the resources and processes for the implementation of the guidelines. Recommendations were disseminated through consultations with clinicians and political decision makers at the provincial and local levels. Teaching tools were developed for use in clinical settings.

The stroke strategy is regularly evaluated and audited using the standardised process measures. This enables the monitoring of activities to be ongoing and aims to minimise disparities in the quality of care for stroke patients in Canada. Several provinces have adopted these recommendations and some facilities have widened the scope of their stroke practices.

Box 4. Community participation as part of maternal and infant research in Makwanpur District, Nepal

Against a backdrop of high neonatal mortality rates, the Mother and Infant Research Activities group (MIRA) evaluated the effect of a community-based participatory intervention in reducing neonatal deaths [18]. A female facilitator was recruited from the community for each of the intervention clusters. The facilitator's role was to act as a knowledge broker for women's groups that met every month to identify problems and suggest strategies to overcome these problems. These group meetings for women included the following activities:

Phase	Meeting	Aim
Introduction	1	<ul style="list-style-type: none"> To introduce the study to the group
	2	<ul style="list-style-type: none"> To discuss why mothers and newborn infants die and how the intervention will work in the community
Problem identification	3	<ul style="list-style-type: none"> To ascertain how women understand maternal and neonatal problems
	4	<ul style="list-style-type: none"> To find out about maternal and neonatal problems
	5	<ul style="list-style-type: none"> To understand the frequency of maternal and neonatal problems and identify strategies to obtain information in the community
Problem prioritisation	6	<ul style="list-style-type: none"> To share information from other women in the community and prioritise three important maternal and neonatal health problems
Planning together	7	<ul style="list-style-type: none"> To discuss possible strategies for addressing priority problems
	8	<ul style="list-style-type: none"> To discuss the involvement of other community members in developing strategies
	9	<ul style="list-style-type: none"> To discuss the preparation of a meeting for community members
	10	<ul style="list-style-type: none"> To hold a meeting of other community members to discuss the activities of women's groups, the priority problems identified by the groups, and possible strategies and to reach consensus

Source: Manandhar and colleagues [18]

After the first year, women then implemented the agreed strategies and met regularly to assess them. Some of the strategies implemented included stretcher schemes, community funding for mother and child care, the production and distribution of clean delivery kits, and awareness-raising through discussions, films, and card games that addressed the prevention and management of typical problems for mothers and children. The health systems were further strengthened through health worker training related to essential care for newborns, the provision of equipment for neonatal units (including equipment for resuscitation), and the restocking of essential drugs for newborns. Community health volunteers were provided with newborn care kits.

Over a two year period, neonatal mortality rates declined by 30% and there was a change in home care practices and healthcare seeking for mother and child illnesses. By the end of the trial, 95% of the women's groups were still active. Communities were able to participate in

identifying their problems and suggesting solutions which they were able to implement. This generated interest at a community level which continued after the trial was completed. Subsequently, components of this intervention have been utilised for other community-based neonatal work.

Box 5. The Reach Every District approach in scaling up immunisation coverage

The Reach Every District (RED) approach was developed due to the need to revitalise the declining performance of immunisation systems in the African Region [19]. This approach was developed by WHO and partners and its central focus was on the district as the main operational level for delivery of immunisation. Financial and technical support was provided for the five main components of the RED approach: planning and resource management, support supervision, outreach, linking with communities, and monitoring. Since 2002, several countries have introduced and scaled up the RED approach, each placing emphasis on some or all of the five components of this strategy. Madagascar, for example, scaled up the RED approach from 32% of districts in 2003 to 68% of districts by 2005. As part of the activities to improve coverage, costed annual work plans were developed, and cold chain equipment and other supplies for vaccination were made available in most districts. Outreach activities were also implemented as mini-campaigns to supply vitamin A. Mother and Child Health Weeks were held twice a year, in which communities were involved. Activities included infant population counts and the tracking of defaulters.

An evaluation of nine countries implementing the RED approach indicated that funding came from several sources. These included government health budgets for recurrent costs (health worker salaries, outreach, supervision, district review meetings), and locally generated resources (for instance cost recovery), and donor support (World Bank, Global Alliance for Vaccine Initiatives (GAVI), WHO, UNICEF and JICA). Between 2001 and 2005, GAVI funding was used for the following: personnel, transport, training, information education and communication, cold chain equipment, vehicles, surveillance, supervision, monitoring and evaluation and outreach.

Box 6. Definitions of horizontal, vertical and diagonal programmes

Horizontal programmes

Horizontal approaches to the delivery of healthcare attempt to provide several interventions as part of comprehensive primary care, and are usually delivered through government health facilities [11]. These programmes tend to emphasise long-term service strengthening. They are also referred to as *horizontal approaches* or *integrated health services* [20]. Examples include the provision of family planning services, immunisation, and other mother and child care services provided at the same clinic.

Vertical programmes

Vertical programmes often provide one specific intervention with separate mechanisms to implement the intervention, manage the programme and deliver logistics [11]. These services tend to be provided in parallel with other interventions for the same population. They are also referred to as *stand-alone*, *free-standing* or *categorical* programmes [20]. Tuberculosis clinics in some settings, for example, may have separate budgets, management and service delivery channels.

Diagonal programmes

Diagonal approaches use specific intervention priorities or disease specific outcomes to drive general health system improvements which may include human resource development, financing, facility planning, and drug supply [21]. The management of AIDS is one example of a diagonal programme that has led to improvements in general health services through the training of health workers, the strengthening of laboratory networks, and improved logistics management and forecasting.

References

1. Oxman A, Lavis JN, Fretheim A, Lewin S. **SUPPORT Tools for evidence-informed health policymaking (STP). 1. What is evidence-informed policymaking.** Health Res Policy Syst, In Press.
2. Jones G, Steketee RW, Black RE, Bhutta ZA, Morris SS: **How many child deaths can we prevent this year?** *Lancet* 2003, **362**: 65-71.
3. Haines A, Jones R: **Implementing findings of research.** *BMJ* 1994, **308**: 1488-1492.
4. Hartman A, Linn JF. Scaling up: A framework and lessons for development effectiveness from literature and practice. 1-62. 2008. Brookings, Wolfensohn Centre for Development at Brookings.
5. Simmons R, Shiffman J: **Scaling up Reproductive Health Service Innovations: A framework for Action.** In *Scaling up Health Service Delivery: From pilot innovations to policies and programmes.* Edited by Simmons R, et al. Geneva: World Health Organization; 2006:1-30.
6. Craig P, Dieppe P, Macintyre S, Michie S, Nazareth I, Petticrew M: **Developing and evaluating complex interventions: the new Medical Research Council guidance.** *BMJ* 2008, **337**: a1655.
7. Pokhrel S: **Scaling up health interventions in resource-poor countries: what role does research in stated-preference framework play?** *Health Res Policy Syst* 2006, **4**: 4.
8. Johns B, Torres TT: **Costs of scaling up health interventions: a systematic review.** *Health Policy Plan* 2005, **20**: 1-13.
9. Oxman A, Lavis JN, Fretheim A, Lewin S. SUPPORT Tools for evidence-informed health policymaking (STP). 9. Incorporating equity considerations. Health Res Policy Syst, In Press
10. Oliveira-Cruz V, Hanson K, Mills A: **Approaches to overcoming constraints to effective health service delivery: A review of the Evidence.** *J Int Dev* 2003, **15**: 41-65.
11. Victora CG, Hanson K, Bryce J, Vaughan JP: **Achieving universal coverage with health interventions.** *Lancet* 2004, **364**: 1541-1548.
12. Gruen RL, Elliott JH, Nolan ML, Lawton PD, Parkhill A, McLaren CJ *et al.*: **Sustainability science: an integrated approach for health-programme planning.** *Lancet* 2008, **372**: 1579-1589.
13. WHO. Treating 3 million by 2005: making it happen. The WHO strategy. 2003. Geneva, World Health organization and UNAIDS.
14. WHO, UNAIDS, UNICEF. Towards Universal Access: Scaling up Priority Interventions in the Health Sector. Progress report 2008. http://www.who.int/hiv/pub/towards_universal_access_report_2008.pdf . 2008.
15. Diaz J, Simmons R, Diaz M, Cabral F, Chinaglia M: **Scaling up Family Planning Innovations in Brazil: the influence of politics and decentralization.** In *Scaling up Health Service Delivery: From pilot innovations to policies and programmes.* Edited by Simmons R. Geneva: World Health Organization; 2007:135-56.
16. Kalra L, Langhorne P: **Facilitating recovery: evidence for organized stroke care.** *J Rehabil Med* 2007, **39**: 97-102.

17. Lindsay P, Bayley M, McDonald A, Graham ID, Warner G, Phillips S: **Toward a more effective approach to stroke: Canadian Best Practice Recommendations for Stroke Care.** *CMAJ* 2008, **178**: 1418-1425.
18. Manandhar DS, Osrin D, Shrestha BP, Mesko N, Morrison J, Tumbahangphe KM *et al.*: **Effect of a participatory intervention with women's groups on birth outcomes in Nepal: cluster-randomised controlled trial.** *Lancet* 2004, **364**: 970-979.
19. WHO, UNICEF, CDC, USAID. In-Depth evaluation of the REACHING EVERY DISTRICT APPROACH in the African Region. 2007.
20. Atun R, Bennett S, Duran A. Policy Brief: When do vertical (stand-alone) programmes have a place in health systems? 2008. Copenhagen, World Health Organization on behalf of the European Observatory on Health Systems and Policies.
21. Ooms G, Van Damme W, Baker BK, Zeitz P, Schrecker T: **The 'diagonal' approach to Global Fund financing: a cure for the broader malaise of health systems?** *Global Health* 2008, **4**: 6.