

Chapter 6

Evidence-based scaling up of health and family planning service innovations in Bangladesh and Ghana

James F. Phillips^a, Frank K. Nyonator^b, Tanya C. Jones^c, Shruti Ravikumar^d

Summary

This chapter describes two initiatives that have utilized research to guide the development and scaling up of community-based health and family planning programmes. In Bangladesh and Ghana, evidence was accumulated in stages, beginning with an exploratory investigation, followed by an experimental trial testing potential interventions and a replication phase for validating research results in a non-research programme setting. The process concluded with research-guided programme expansion. Each stage was associated with shifts in generations of questions, mechanisms and outcomes as the process unfolded. Large-scale health systems development was achieved in both countries, not because the scaling-up strategies were alike but because similar research approaches led to different strategies adapted to contrasting societal and institutional contexts.

^a Senior Associate, Policy Research Division, the Population Council, New York, USA. Dr Phillips is Senior Adviser to the Navrongo Experiment, and has extensive collaborative involvement with the Community-based Health Planning and Services (CHPS) monitoring and evaluation and communication activities.

^b Director, Policy Planning, Monitoring and Evaluation Division (PPMED), Ghana Health Service, Accra, Ghana. Dr Nyonator was formerly Regional Director of Medical Services, Volta Region, where he sponsored initial exchanges between Volta district teams and the Navrongo Health Research Centre that set the stage for the CHPS initiative.

^c Staff Associate, Policy Research Division, the Population Council, assigned as resident adviser to the PPMED, Ghana Health Service, Accra, Ghana. Ms Jones collaborates on organizational research and the administration of grants and awards to districts participating in the CHPS programme.

^d Shruti Ravikumar is a student at the Yale Law School and an intern at the Population Council. She conducted the literature review for this study.

Introduction

Over the last three decades, successive international initiatives have focused on the problem of making reproductive and child health services accessible to the poor: Alma-Ata's "Health for All" in the 1980s, the Integrated Management of Childhood Illness in the 1990s, the 1994 International Conference for Population and Development, in Cairo, and more recently the Millennium Development Goals. National implementation of these initiatives has typically been pursued through central policy directives rather than based on evidence from the communities to be served. As a consequence, low-cost effective technologies that could substantially reduce reproductive and child health morbidity and mortality remain inaccessible to the rural poor (1, 2). Promising health service models are sometimes demonstrated by research, but the relevance of research-based success to large-scale action is often brought into question by researchers' access to special resources and flexibility to manage and lead small-scale projects.

This chapter compares two community health and family planning case-studies where major health system changes used research as a tool for developing national reform as bottom-up rather than top-down initiatives: the Matlab and Extension projects in Bangladesh and the Navrongo and Community-based Health Planning and Services (CHPS) projects in Ghana. These initiatives introduced important systems changes that were tested at the community level, found to work and then scaled up in an evidence-guided process of national reform.

The application of a similar process in contrasting settings

The Bangladesh and Ghana cases addressed the challenging question of how to deliver maternal health and family planning services in settings where service provision and utilization were constrained by social, geographical and economic factors. Both instituted a multi-year process using a similar evidence-based approach for resolving debate about policy options, and for guiding programme development and scaling up. Research was crucial to this process, with four successive phases designed to focus on policy and programme development. First, preliminary qualitative appraisal was used to diagnose problems and develop strategies for experimental trial. Second, experimental trials were organized to test the demographic impact of strategic change. Successful trials generated questions about the broader relevance of results leading to the third phase of investigation that tested transferability of experimental operations to the national programme. Evidence from this third phase was used to build consensus for national reform and strategies for implementing scaling-up activities. The fourth and

final phase utilized research for monitoring the progress of scaling up, the coverage of changed operations, and problems hampering change and reform. In these settings, the generation and utilization of evidence was an integral component of programme development rather than an end in itself. The consistent focus on evidence enabled policy-makers and programme managers to develop service strategies that were appropriate for the social and institutional context. Since contexts varied, this similar process generated very different programmes and scaling-up approaches in the two countries.

The Bangladesh case

In the early 1970s, at the time of Bangladesh's independence, prospects that health services could reduce fertility or mortality were the subject of international debate. The clinical efficacy of various technologies, such as childhood immunization, was well known. Pervasive economic, health and nutritional adversity at the time of independence, however, led to synergistic disease risks that could offset the benefits of specific technologies (3, 4). High fertility was the consequence of pronatalist social institutions (5, 6). There was no evidence that family planning services would reduce fertility in this context. Yet the newly constituted Government of Bangladesh assigned priority to developing a national family planning programme, a policy that was met with considerable international scepticism and debate (7).

In 1975, the International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B), now known as the Centre for Health and Population Research, launched investigations designed to guide national population policy. ICDDR,B's Matlab field station was chosen for these investigations because it was located in a traditional, rural and isolated locality where the demographic transition had not begun, and where challenges confronting effective family planning service delivery were typical of vast areas of deltaic Bangladesh. Matlab's comprehensive demographic research system had been used to study a wide range of social, demographic and epidemiological issues (8). Owing to the availability of these unique research resources in a challenging social, health and economic context, the site was ideal for resolving policy debate on whether family planning services could work in this society.

Initial experimental research, launched in 1975 as the Contraceptive Distribution Project, focused on testing the demographic impact of distributing oral contraceptive supplies through doorstep outreach to married women. No attempt was made to assess social perceptions of family planning, the acceptability of oral contraception, or health

needs more generally. There was also no attempt to provide other contraceptive options, counselling or quality safeguards. When the project failed to have impact (9), Matlab managers, supervisors and researchers launched a series of qualitative studies to diagnose the reasons for failure. This investigation noted strong adverse community reactions to the project's focus on oral contraceptives and its lack of maternal and child health services. It also identified poor worker training and poor interactions with clients and communities more generally. Discussion of results provided a crucial source of social learning about community preferences and needs (10).

In the subsequent Family Planning and Health Services Project, evidence generated by the appraisal was used to develop strategies for correcting deficiencies of the failed initial project. Uneducated traditional birth attendants were replaced by educated, young married women who were locally recruited. These field workers visited married women every two weeks to consult with them about their family planning needs and their health. They were provided with on-the-job training in basic health and family planning care and referral services, and had medical backup and support from supervisors when problems arose. Contraceptive choice was expanded so that couples selecting a contraceptive method had multiple options. Child health and basic primary health services were developed, ensuring that outreach and referral covered the most extensive range of services the programme could provide, including treatment for febrile illnesses, management of diarrhoeal diseases and referral to paramedical care at nearby health centres. This broadened provision of care led researchers to extend the scope of enquiry to include questions about the impact of community health services on child survival.

Providing women with expanded contraceptive choices and quality services increased their satisfaction and contraceptive prevalence. By 1980, the early fertility impact of the Matlab Project was pronounced (11) and the health service components of the project improved child survival (12). These findings – disseminated in meetings and professional papers – suggested that national health goals could be achieved with community-based approaches if staffing, training and deployment schemes in the national programme were modelled on the Matlab Project.

Despite its demographic success, and widespread discussion of the results, the Matlab Project had no immediate policy impact. During a 1981 tripartite review sponsored by the United Nations, the Bangladesh Government rejected the proposition that Matlab results could be taken at face value as a model for the national programme. They argued that the experiment had more service delivery staff, more financial re-

sources and a different service regimen than the national programme. Replicating its operational design on a large scale would require major organizational change. Following this review, policy debate shifted from the question about whether the Matlab service system could succeed to the question of whether successful strategies were replicable within the national programme.

To resolve policy debate, senior government officials proposed a validation study that would test the transferability of Matlab's comprehensive integrated health and family planning approach to localities where service delivery was conducted with usual government health sector staff, mechanisms and resources. Such a study, known as the Maternal and Child Health and Family Planning Extension Project, was organized by the ICDDR,B in districts located in regions distant from the Matlab field station. In two districts, Matlab scientists, supervisors and other ICDDR,B staff served as a resource team that provided training and technical support to the government staff (13, 14). Matlab primary health-care staff and supervisors were assigned to the intervention areas to work for three months as counterparts to government workers. Two neighbouring districts served as comparison areas.

Research results soon demonstrated that there were major obstacles to implementing the Matlab approach within the government programme. For example, longitudinal survey data showed that Matlab effects were replicated when client-worker exchanges occurred. The frequency of these encounters in Extension Project areas was low, however, because the catchment population for a given worker was six times larger than that of a fieldworker in Matlab (15). Thus, initial results from the Extension Project suggested that existing Ministry of Health and Family Planning staff density and work arrangements were insufficient for replicating the Matlab service model. Additional financial and staff resources would be needed to achieve similar results in Extension Project areas. Projections showed that implementing Matlab's fieldworker-to-population ratio within the national programme would require the hiring and deployment of at least 10 000 additional workers throughout Bangladesh (16). Other changes were required to institute the Matlab approach in government service areas, such as a unified health and family planning administrative system, and well-paid and highly committed supervisors. Research documenting the problems with the transfer of Matlab operations to Extension Project areas provided evidence that replicating Matlab was feasible if resources were mobilized for making the programme work.

This conclusion had direct bearing on a 1983 dialogue between the Ministry of Health and Family Planning and the World Bank about the contents of forthcoming loan agreements. Deliberations succeeded

in mobilizing financial support from the five-year World Bank Third Population and Health Project for recruitment, training and deployment of 12 000 additional female workers as well as for other crucial elements of the Matlab approach that were missing in the national programme. Community workers were trained to provide injectable contraceptives at the doorstep, management information systems were reformed, and training was instituted to broaden the health service capabilities of family planning workers. Some structural features of the Matlab system were not scaled up, such as an integrated health and family planning supervisory system and target-free work assignments. Nonetheless, substantial Matlab-inspired operational changes were instituted, all of which were specified in detail in national planning documents and funded by a US\$ 2 per capita per year credit from the World Bank agreement (17). Thus, research showing a lack of impact on the volume of service encounters, contraceptive use and health indicators of the initial Extension Project became a resource for mobilizing external funding for scaling up (18).

With the launching of the World Bank Third Population and Health Project, research priorities shifted from assessing Extension Project impact to generating evidence for guiding national reforms in training, supervision and management (13). The scaling-up process that ensued was driven by plans, policies, resources, directives and actions specified in the agreement between the Bangladesh Government and the World Bank. Each new ingredient, such as the procedures for recruiting additional fieldworkers as well as the implementation of doorstep provision of injectables, was first tested in the Extension area before being used more widely. The World Bank funded national policy conferences, newsletters and other activities for building momentum for change. Government directives were used to communicate evidence, progress and policies to all relevant health officials in the country. Evidence used in this communication process was based on Matlab research, studies of the replication effort in Extension Project areas, and national surveys for monitoring fertility and childhood mortality reduction trends. Findings from this monitoring programme showed that demographic transition over the period 1980–1995 ranked among the most rapid ever recorded, with patterns of variance consistent with the hypothesis that scaling up community-based services contributed to rapid demographic change (19, 20).

The Ghana case

In 1978, the International Conference on Primary Health Care convened in Alma-Ata, USSR (now Almaty, Kazakhstan) declared

“Health for All” as a priority for all countries by the year 2000. Yet as the Millennium approached, poor access to primary health-care services explained much of the excess mortality and unwanted fertility throughout Africa. Ghana exemplifies the health-care accessibility problem. In the 1990s, 70% of the population resided in communities that were 8 km or more from the nearest health facility (21). In these areas, mortality was 40% higher and family planning use was considerably lower than in communities located closer to service points. Fertility and mortality remained high and unchanging, despite two decades of commitment to developing effective services.

In 1991, the Government of Ghana had launched a national community health programme in which volunteers were deployed to communities, and paid professional nurses were stationed at district and sub-district health centres. This community health programme reflected international advocacy for two strategies. One emphasized the potential value of community-based volunteer health services for extending affordable primary health care to all households. Advocates of volunteer programmes argued that vibrant social institutions for organizing daily life could be marshalled for organizing community-based management, financing and leadership of health services. Reliance on existing social institutions would reduce costs, sustain services and generate social acceptance of health and family planning services (22, 23). A contrasting strategy emphasized the value of existing clinical resources and the need to increase communities’ access to professional health service providers. In this view, nurses could be trained and stationed in communities to offer a range of health interventions and technologies that volunteers would not be competent to provide. These two approaches were implemented on a national scale without carrying out research to guide operational planning.

Evaluations of the Ghana community health programme in the early 1990s showed that neither the volunteer approach nor community health nursing services were working. Volunteer turnover was high, supervision was lax and organizational deficiencies constrained programme progress. Nonetheless, reliance on volunteers remained an appealing policy option, since community deployment of professional workers appeared to require unsustainable investment in facilities, equipment and personnel (24). The Community Health Nurses programme also faced serious obstacles. By 1992, nearly 2000 nurses had been hired, trained for 18 months and posted to districts throughout Ghana. Because community facilities where nurses could work and live were lacking, however, the programme posted all nurses to sub-district health centres that were located over 10 km, on average, from the rural households they were serving. Communities were not

connected with the initiative and contributed little to its sustainability. Case-loads were low and demographic indicators were not improving, bringing into question prospects that community nurse deployment could contribute to community health (25).

In response to the need for evidence to guide health policy, the Ministry of Health established a research centre in Navrongo Town of Kassena-Nankana District of the Upper East Region to investigate the causes and consequences of the health problems of northern Ghana (26). The economic, social and health circumstances of the study area paralleled conditions that prevailed in Matlab. Kassena-Nankana District is located in a remote, impoverished, traditional area where social norms sustain high fertility and impede progress with health interventions (27). Baseline mortality, and especially childhood mortality, in the locality was well above national levels. Contraceptive use was rare owing to complex social, gender and economic barriers to fertility regulation (27). The economy in the study area was dominated by subsistence agriculture and near-famine conditions each year; literacy was low (particularly among women); and traditions of marriage, kinship and family-building emphasized the economic and security value of large families. Health-care decision-making was strongly influenced by traditional beliefs, animist rites and poverty. Placing experimental research in such an unpromising locality ensured that any project success arising from interventions could not be dismissed as a by-product of favourable trends and circumstances.

The Navrongo experiment was initially launched as a pilot project in 1994. The pilot was designed to avoid the potential pitfalls of importing an operational design inappropriate to local conditions, and of organizing a large and complex experiment which then fails. The pilot trial was conducted in three villages. Focus groups with local leaders, women of reproductive age, married men and community health nurses were convened to assess perceived health service needs and ways to alleviate known deficiencies of the national community health programme. These discussions clarified sustainable ways to engage communities in the construction of facilities that would end nurse isolation, support nurse operations, promote culturally acceptable means of providing family planning, and develop and sustain leadership. Focus group discussions were followed by posting nurses in the three pilot communities with the intent of launching community-based preventive, curative and referral health services. Follow-up focus groups gauged community and worker reactions to the pilot programme. Recommendations were used to modify implementation plans for training and deploying nurses, fostering volunteer support and sustaining community engagement with the programme (28).

After 18 months of the pilot trial and continued dialogue, an experimental study was launched in 1996 to assess the impact of these pilot strategies. The experimental phase used the two strategies corresponding to domains of the policy debate: one arm of the experiment tested the impact of mobilizing traditions to ensure sustainable volunteer participation in the programme and community involvement in supervising and managing volunteer operations. Chiefs, lineage heads and women's social networks were approached and then trained to build Community Health Compounds where nurses could be posted. Once this task was completed, this arm of the experiment focused on organizing the work of community health volunteers and building community participation for the management of their work.

The second arm of the experiment tested the impact of relocating nurses from sub-district clinics to community locations. Once nurses had been trained in community liaison methods and provided with motorbikes, basic drugs and primary health-care equipment, they were posted to Community Health Compounds where they offered vaccination services, treatment of common ailments (including malaria, acute respiratory infections and diarrhoeal diseases) and reproductive health and family planning services. Family planning options included the provision of injectable contraception, oral contraceptives and condoms in homes, and referral services for clinical methods, such as the five-year sub-dermal implant (29). Taken together, the two dimensions of the experiment comprised a four-cell design, since each dimension could be implemented independently, jointly or not at all (26). In the combined cell of the experiment, community liaison was directed to building community leadership of both volunteer and nurse service operations.

Early Navrongo research showed that relocating nurses to communities increased the service volume, family planning prevalence and immunization coverage, and expanded the range and quality of reproductive health care. Health services provided by a single nurse exceeded the typical case-load of a sub-district health centre. By 1999, district-wide experimental results showed that the total fertility rate had declined by one birth relative to comparison area levels; childhood mortality among 1-5-year-olds was reduced by over a third in the initial three project impact years that began in 1997 (30) and by two thirds by the end of 2003. Thus, the Navrongo project achieved the child survival Millennium Development Goal in six years (31, 32).

The Navrongo resource team presented its findings to senior Ministry of Health officials in early 1998, leading the Ministry to adopt the Navrongo model as the guide for community health services nationwide. To build consensus for this policy, in 1998 the first in a se-

ries of National Health Forum conferences was convened for all 110 District Health Management Teams in Ghana. Key Navrongo results were presented and discussed in an open forum to elicit reactions from district and regional managers from all 10 regions, the heads of directorates responsible for planning, human resources, finance, public health and logistics, as well as the Minister and the Vice President of Ghana. Despite clear support from senior officials, responses from District Health Management Teams closely paralleled reactions to the Matlab experiment in Bangladesh: most of their discussion questioned the relevance of the Navrongo experiment for national policy on grounds that research stations have unique resources and capabilities that the typical district could not replicate. Debate about service strategies thus shifted from questions about the potential impact of the Navrongo model to new questions about the feasibility of replicating the approach in non-research settings.

Responding to this debate, the Ministry of Health arranged for national, regional and district officials to observe Navrongo operations first hand. These exchanges showed that experimental research was insufficient for building policy consensus, because Navrongo's unique resources were widely viewed as nonreplicable. A new phase of work was therefore needed in response to new policy questions about the replicability and sustainability of the Navrongo system.

In 1998, the Volta Regional Health Administration and the District Health Management Team from Nkwanta District took on this validation task and began by completing a six-week Navrongo field orientation on implementing and managing the model. The replication project in Nkwanta tested the means of establishing the Navrongo model services in two communities. Dialogue with community members produced advice on ways to adapt the model to local circumstances. Experience with this replication effort was carefully documented and presented at senior staff meetings and national health policy conferences.

Replication results from Nkwanta clarified mechanisms for implementing the Navrongo approach and established its credibility (33). Conferences convened to interpret the continuing research outcomes of Navrongo and the operational success of Nkwanta led to a 1999 decision to create the Community-based Health Planning and Services (CHPS) initiative, a national programme for fostering the scaling-up of the Navrongo community health service model. The policy initially focused on the need for "lead districts" in each of Ghana's 10 regions, where Navrongo-like services could be adapted to local realities and could then guide development of community-based care in neighbouring districts in the manner of replication and adaptation that Nkwanta had demonstrated. This new policy recognized the need to mobilize

a process that would encourage the diffusion of innovation, demonstration and peer leadership at the local level. Attention focused on sustaining district-level implementation rather than developing a centrally directed operational plan.

As the scaling-up phase took hold, the value of sustaining experimental research for the duration of the process was demonstrated. To enhance Ministry of Health ownership of the project, the Navrongo resource team collaborated with senior officials of the Ministry on the use of results. Project protocol details were agreed upon prior to donor involvement. The Navrongo Centre reports to the Health Research Unit in Accra, which in turn reports to the Ghana Health Service's Policy Planning, Monitoring and Evaluation Division (PPMED). Its finances and staffing, however, are independent of the public sector bureaucracy, in order to maximize flexibility and leadership. The integration of Navrongo into the policy system facilitates links between Navrongo research dissemination activities and routine Ghana Health Service internal communication, conferences and meetings. Thus, Navrongo continues to contribute to scaling up by shifting its service operation from a district for an experimental trial to a field site for demonstration and counterpart training for District Health Management Teams.

Scaling-up activities outside of Navrongo and Nkwanta are stimulated and sustained through peer exchanges. District teams composed of two community nurses, their supervisor, the public health nurse and the Director of Medical Services are prepared to implement the programme after a 10-day orientation to routine community-based service work in Navrongo. Once redeployed to their home districts, teams develop community-based planning activities in one or two pilot zones. After strategic planning and trial, each team scales up operations within its respective district, according to the availability of staffing and resources (34). Navrongo and Nkwanta disseminate newsletters which report community reactions to project activities. Thus the experience of community participants contributes to the consensus among health officers in Ghana that going to scale is feasible and desirable. Scaling up is therefore highly decentralized and peer directed.

Despite the focus on decentralization and peer leadership, scaling up in Ghana has had strong commitment from the central government. The programme has experienced operational problems and delays that have required policy responses and directives (for a discussion, see 29, 34). While there have been problems, by the end of 2005 scaling-up activities had been launched in all of the 110 districts of Ghana and full implementation of the programme was underway in 20 districts.

A shared model for evidence-based reform

The sequence of actions, changing generations of questions, and roles of research in Bangladesh and Ghana followed a common evidence-based reform process in four phases.

Phase 1: participatory planning

Beginning with the question, “What type of services are appropriate?” a Phase 1 programme of adaptive development of strategies was used to configure a service model with operational details that were informed by continuous evaluation and participatory planning. In Matlab, the failed Contraceptive Distribution Project provided the focus for participatory qualitative appraisal of the reasons for failure and implications for configuring a follow-on experiment. In Navrongo, participatory pilot appraisal provided a similar function. Participatory planning represents a tool of “open systems” organizational development: social institutions, traditions and organizational norms are tapped to improve the efficiency and functioning of formal organizations (35).

Phase 2: factorial trial

Matlab and Navrongo had advanced institutional capabilities for conducting vaccine trials and epidemiological research. Just as health technologies could be evaluated, community health service systems could be tested, with health and demographic outcomes as the variables of interest. Experimental research provided credible evidence that the approaches tested actually helped the population served. Putting debate to rest was crucial to health reform. Both Matlab and Navrongo provided definitive evidence that if services were designed to be sensitive to women’s needs they would lead to increased contraceptive prevalence, greater satisfaction and fertility decline as well as improved child survival. These results could be achieved with affordable and simple procedures for reaching families in need.

Phase 3: validation research

The scientific rigour of Matlab and Navrongo required advanced scientific capabilities that were complex and expensive to manage. The greater the rigour of trials, the greater the tendency of researchers to isolate operations from the user system and to deploy resources that are difficult to replicate. The penchant for elegant research designs sometimes precipitates questions about the “Hawthorne effect” - reference to a classic study showing that results were related more to the effect of being observed than to the intervention under trial (36). More recently, this term is applied to research conducted with non-replicable human and financial resources. Disproving the Hawthorne effect re-

quires unobtrusive and low-cost research on the replicability of experimental findings and the sustainability of the scaling-up process (14, 33). Therefore, in both Bangladesh and Ghana, a beyond-the-experiment phase was launched to bridge the gap between field trials and large-scale programmes by shifting research from questions about the health and demographic impact of operations to questions about the feasibility and sustainability of innovations in non-research settings.

Phase 4: monitoring the scaling-up process

The dissemination of credible evidence of project impact on fertility and mortality, and validation that service innovations could be replicated under normal programme conditions, motivated decisions to scale up operations. In Ghana, the process is still emerging and its national demographic impact is unknown, but research systems permit continuous appraisal of the pace, coverage and content of operational change. In Bangladesh, research shifted from impact assessment to monitoring the change process as a component activity of the World Bank's lending agreement that funded scaling up. In both settings, research provided evidence on whether scaling up was occurring, what was working well and what required change. Thus, as scaling up accelerated, the questions guiding research shifted from feasibility and consensus building to the challenge of refining the scaling-up process.

Adapting scaling-up strategies to contrasting settings

Common features of projects that foster the utilization of research for national policy and programme development are well known (37–42). Less is known about ways in which scaling-up efforts in contrasting settings should differ. The Bangladesh and Ghana cases demonstrate that the effective utilization of evidence in contrasting settings generates divergent scaling-up strategies.

Social organization

While the two countries are predominantly agrarian and share similar levels of economic development, they have markedly different patterns of social organization and land tenure customs. Although Bangladesh is rapidly urbanizing, until recently it was a peasant society in which economic opportunity is linked to inherited social status. Ghana, by contrast, is an ethnically diverse society in which land is communal and held in trust by chiefs, and economic opportunity is less linked to inheritance than to achievement that derives from individual effort facilitated by kindred, clan or ethnic network affiliation. In the Bangladesh case, the Bengali homogeneity of society permits a

degree of centralization and standardization of scaling-up policy that would be dysfunctional in the heterogeneous Ghanaian societal context. Organizing collective action and communication through kindred groups is facilitated by Ghanaian social institutions, provided that actual organizing activities are adapted to local tradition. Collective community action strategies are less compatible with Bangladeshi society, and strategic adaptation is less essential than in Ghana.

Leadership traditions

Community leadership and social structure is well defined in Ghana, and village governance is associated with traditions that define roles in decision-making, consensus-building and collective action. Bangladeshi community governance is less structured and relatively diffuse. Leadership and authority are defined by wealth and patronage derived from land holding, relative economic standing, power alliances and ad hoc social networks that lack permanence across generations or predictability across localities. In Bangladesh, community organization was relatively less important to the scaling-up process than was the case in Ghana, where the spread of community health services has been a natural product of local traditions of communication and collective action. Gatherings, networks and other traditions that foster exchanges among communities and groups also have disseminated the benefits of community services in implementing districts. In this manner, communication traditions amplified the spontaneous diffusion of Navrongo innovations. Such mechanisms were relatively unimportant in Bangladesh.

Because scaling-up design in these settings was the product of locally gathered evidence on how best to proceed, societal differences led programme planners to pursue different strategies for organizational development. For example, social organization is diffuse in Bangladesh but relatively structured in Ghana. Community organizational resources were therefore a minor component of the scaling-up strategy in Bangladesh, but a major factor in Ghana. Sustaining the change process in Bangladesh depended upon continued commitment of external, top-down bureaucratic processes. The change process is more appropriately instituted in Ghana as lateral networks for spreading consensus through the diffusion of social support for innovation. In Bangladesh, volunteerism is more difficult to implement and sustain than in Ghana, where corporate community values are engrained and vibrant, and volunteer accountability to community leaders is socially grounded.

Leadership in Bangladesh is more likely to emerge from formal organizations than community institutions; in Ghana, organizational change derives from grassroots partnerships between traditional

leaders, politicians and health professionals. While establishing such partnerships is challenging, it is sustainable with minimal external investment once the health system engages traditional leaders in respectful and culturally appropriate ways. In contrast, instilling leadership for sustaining change in Bangladesh is relatively dependent upon external resources, government orders or rank in the civil bureaucracy.

Scaling up in Ghana spreads by peer demonstration, diffusion and teamwork rather than by central order and fiat. Moreover, in the multicultural context of Ghana, adapting strategies to local conditions is more important than in Bangladesh, where national models are likely to have more relevance owing to the uniform cultural context. Therefore, in Ghana, strategies for decentralization have a prominent role in scaling up; whereas in Bangladesh, scaling up has been a relatively centralized function of the national programme.

Bureaucratic traditions

Other institutional contrasts had major effects on generating contrasting approaches to scaling up. The institutional histories of public sector organizations in Bangladesh and Ghana vary in ways that explain differences between their scaling-up programmes. In the colonial era, British India – which included areas that now constitute Bangladesh – was administered through direct control of the civil bureaucracy. Even in the Pakistan era, the public bureaucracy was externally controlled, with well-articulated mechanisms for the promulgation of top-down directives, narrow spans of authority and limited scope for decentralization. By contrast, civil bureaucracy is a relatively recent historical development in Ghana. British colonial rule was indirect, allowing traditional authorities to retain their customary powers, de-emphasizing the authority of the central bureaucracy by maintaining order through traditional governance of communities. Thus, a Bangladeshi villager in the British era routinely interacted with district representatives from ministries responsible for agriculture, education, health and public order. In contrast, a Ghanaian villager seeking to resolve a dispute in the colonial era would turn to a native court or a chieftaincy council, led by a traditional authority figure, to resolve minor disputes and grievances or launch community dialogue about all matters of collective interest. In this manner, local traditional communication and governance systems were sustained by colonial authorities, providing historical grounding for decentralization in Ghana and not in Bangladesh.

Features of the institutional legacy of large-scale organizations, combined with the contrasting social environments, define fundamen-

tally different contexts for scaling up programmes. Of these, the most prominent difference between the Bangladesh and Ghana case-studies is the relative importance of the diffusion of innovation versus planned organizational change. In Bangladesh, planned organizational change and formal orders have played a more important role in scaling up than the spontaneous diffusion of innovation at the district level.

The role of external resources

The contrasting revenue circumstances of Bangladesh and Ghana scaling-up examples amplify these contrasts. In Bangladesh, demonstration of the Matlab system in two replication sites was followed by official pursuit of donor resources for the incremental costs of large-scale programmatic change. Earmarked World Bank funding permitted officials to plan and finance the expansion of hiring, construction and worker training. Training, in turn, was focused on developing front-line worker technical skills rather than competency in community mobilization. Although community work was essential to the Bangladesh programme, and doorstep services were crucial to its success, instituting change to that end was less a grassroots effort than a top-down bureaucratic initiative financed from afar. Clinics, salaries, pharmaceutical costs and other resources were line items in national budgets that were heavily financed by the World Bank and other donors. Thus, even without local political engagement or grass-roots mobilization, the Bangladesh scaling-up programme worked.

In contrast, Ghana has relied less on international resources than on local financing and community resource leveraging. This has slowed implementation because incremental resources for essential drugs, equipment and staff are lacking. Where the CHPS initiative has worked well in Ghana, demonstration of the community-based model in pilot areas has led neighbouring communities to press district authorities for local resources to finance programme expansion. This process has an element of guided direction, however. A national training programme has developed staff capacity for implementation, focusing resources on training supervisors in community mobilization and other activities that are needed for sustaining the scaling-up process. However, while these national activities are crucial, community-based health care has been developed mainly through locally tailored and indigenously funded adaptations of the Navrongo service system that emerge from district pilot trials. Rather than providing a rigid blueprint for districts to replicate, Navrongo and Nkwanta demonstration activities are designed to catalyse the process of operational change, providing visiting teams with general ideas that require local testing, adaptation and trial. Scaling up depends upon local resources,

volunteerism and district assembly commitment. Success required more initiative and leadership at the periphery than was the case in Bangladesh (34, 43).

In Ghana, dependence on local resources was a matter of necessity rather than design, however. External assistance for health is merged with Government of Ghana revenue through health sector reform policies that are collectively termed the sector-wide approach. World Bank and European funding of this approach is extensive, but revenue for the health sector is planned as a common fund. Scaling up in Ghana has had no independent budget line for incremental costs, or donor earmarking of revenue for specific components of the programme. Foreign assistance has been directed to sustaining external technical support for CHPS training, communication and research activities rather than revenue for financing the direct costs of implementation. As a result, progress with scaling up in Ghana has been much slower than was the case in Bangladesh, where revenue was earmarked for direct programme costs. Thus, scaling up in Ghana depends upon financing and priority setting that is integrated into the general administrative processes of the Ghana Health Service; external support for the current overall health revenue budget is about half the level of funding provided to the health sector in Bangladesh in the 1980s and 1990s. Ghana has been forced by circumstances to sustain its programme with less external backing and greater reliance on community support.

Conclusion

The examples reviewed in this chapter are relevant to the organizational development needs of health programmes in the world's poorest regions. Their experience indicates that problems impeding programme reform and development can be surmounted and that large public programmes can be guided by research, even in resource-constrained settings. The Bangladesh and Ghana examples attest to the importance of integrating research into the process of scaling up that begins with the development and testing of innovations and proceeds to expansion of successful pilot and/or experimental projects. This is preferable to conducting research as a stand-alone activity to be utilized and scaled up as an afterthought. While adopting international best practices for designing national reforms, strategies must not be isolated from social and institutional realities, which must form the basis for policy and programme development. Overly internationalizing programme strategy, without guidance from locally grounded research, can isolate plans from social and institutional reality, fostering top-down planning when practical bottom-up guidance is badly

needed. As the Bangladesh and Ghana cases demonstrate, the content, change process and scaled-up programme can be adapted to the local context. This process of adaptation benefits from the integration of research into the organizational reform programme.

New health technologies are often proposed as the answer to problems when, in fact, it is a malaise of the service system that deprives families of access to technologies. Projects in Bangladesh and Ghana demonstrate an approach to organizational development that addresses the need for strategies to improve programme performance. The initiatives succeeded not because they followed a common agenda for scaling up. They succeeded because similar research approaches steered the development of the innovative service packages and the scaling-up agenda in ways that adapted directions to indigenous realities and needs. Their success demonstrates that large-scale organizational change in reproductive and child health programmes is neither impossible nor unaffordable in resource-constrained settings.

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Chapter 7

Scaling up family planning service innovations in Brazil: the influence of politics and decentralization

Juan Díaz, Ruth Simmons, Margarita Díaz, Francisco Cabral, Magda Chinaglia^a

Summary

The principles of strategic management suggest that a major step in ensuring effective scaling up is to understand the diverse environments in which health service innovations are expanded. When service innovations are expanded in the public sector, the political and administrative institutions, as well as the health sector setting constitute major environmental influences. This chapter analyses these factors in Brazil, using the experience of a project which sought to enhance equitable access and improve the quality of care in public sector family planning services. Nongovernmental organizations acted as the resource team that facilitated the testing of the original service innovations in one municipality and then assisted with their expansion to others. The chapter shows that scaling up is influenced by an ongoing process of decentralization and by the politics of family planning. Scaling up family planning innovations faces special challenges, which would not be encountered in other areas of reproductive health in Brazil.

Introduction

The principles of strategic management suggest that a major step in ensuring effective scaling up is to understand the diverse environments in which health service innovations are expanded (1). These environments, or contexts, shape the opportunities and constraints that proponents of scaling up must navigate (see Chapter 1). When service innovations are expanded in the public sector, the political and administrative institutions, as well as the health sector setting constitute major environmental influences. This chapter analyses these factors

^a The authors of this chapter are members of the nongovernmental team that facilitated the scaling up of reproductive health services in the public sector. They belong to the following institutions: Reprolatina (a Brazilian nongovernmental organization), the Population Council office of Brazil and the University of Michigan.

in Brazil, using the experience of a project which sought to enhance equitable access and improve the quality of public sector family planning services. Nongovernmental organizations (NGOs) acted as the resource team that facilitated the testing of the original service innovations in one municipality and then assisted with their expansion to others. We show that scaling up is influenced by an ongoing process of decentralization and by the politics of family planning. Scaling up family planning innovations in Brazil faces special challenges that would not be encountered in other areas of reproductive health.

In Brazil, an estimated 75% of the population depend on the public sector for their health care (2), which at the primary level is provided through health posts, health centres or community-based family health outreach services (3). Clinic-based family planning services are provided by gynaecologists, assisted by auxiliary and technical nursing personnel, on contract with the public sector for a specified number of hours. These services are free of charge to the users. The community-based family health service is supposed to include contraceptive care, but lack of contraceptive supplies is a major barrier. The Sociedad Civil Bem-Estar Familiar, an NGO, has provided extensive support to the public sector family planning programme, maintaining agreements with 1001 municipalities predominantly in the north-east of the country for the provision of technical assistance, training and evaluation (4). Although public sector responsibilities have been established and some services are indeed available, overall access to family planning care is extremely constrained and the care that is provided tends to be of poor quality (5-7).

In 1995 a project in the municipality of Santa Barbara d'Oeste (referred to in this chapter as Santa Barbara) in the State of São Paulo in southern Brazil initiated a systematic process of dealing with these weaknesses in access and quality of care. Interventions in the pilot municipality focused on:

- upgrading all elements of quality of care through training;
- restructuring providers' roles and service delivery patterns so as to maximize the use of scarce medical personnel;
- improving the management process in order to ensure accountability and supportive supervision;
- creating a referral centre where regular availability of contraceptive care would be assured;
- establishing a participatory process including representation from the community (8);
- introducing outpatient vasectomy services (9);
- developing a programme for adolescents.