Strengthening Health Systems to Improve Maternal, Neonatal and Child Health Outcomes: A Framework
A "How To" Guide

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In response to a request by the Maternal and Child Health Integrated Program (MCHIP), funded by the U.S. Agency for International Development, and building on existing health systems frameworks, we developed a new framework that positions maternal, neonatal and child health (MNCH) interventions, including family planning interventions, within the broader health system (see Figure). The new framework complements other work undertaken by MCHIP on the promotion of approaches to the scaling-up of high-impact MNCH interventions (Hodgins, forthcoming). This brief document illustrates how the framework can assist professionals working in the field in the design and implementation of initiatives aimed at improving MNCH. We refer the reader to the full document1 for a detailed description of the various elements of the framework and the relationships that exist between them.

Positioning MNCH Interventions in the Broader Health System

Initiatives aimed at improving MNCH tend to focus on specific elements of the health system. Their success, however, depends to a large degree on two factors:

- Whether the broader health system was taken into consideration in their design
- Whether they have the capacity and flexibility to respond adequately to changes in the broader health system during implementation

The framework can be used in the design phase of the initiative to identify potential health system barriers and challenges that might jeopardize its implementation. Going systematically through each element of the framework, those designing the initiative should seek to answer the following questions:

- What role does the element play in enabling the health system to deliver the health interventions that the initiative aims to improve?
- Are there major issues and challenges with that element, which are likely to seriously hamper the initiative's progress in that area?
- Are these issues and challenges equally prevalent throughout the country?
- Is the country taking steps to address these issues and challenges and if so, when could changes be expected?

Based on the assessment, those designing the initiative might need to revisit its scope, its geographical focus and/or its timing. This can be illustrated with the following examples:

[1] Ergo A, Eichler R, Koblinsky M and Shah N (2011). Strengthening Health Systems to Improve Maternal, Neonatal and Child Health Outcomes: A Framework. Washington, D.C.: MCHIP, USAID.

Training of nurses/midwives

The role of basic and comprehensive emergency obstetric care (BEmOC and CEmOC) in reducing maternal mortality is well understood. Building BEmOC and CEmOC capacity typically involves, among many other things, the provision of training for nurses/midwives. Imagine MCHIP is planning to provide such training in a number of districts of a given country. The scope of this planned activity is therefore narrow. It focuses on one aspect, namely the skills, of one particular category of health workers. In this example, they would be nurses/midwives. This is captured by the *health workforce* element in the framework. Even if MCHIP does an excellent job technically and it manages to considerably enhance the skills of the targeted health workers, other health systems elements needed to enable this newly trained workforce to deliver quality obstetric care and for the population to access these improved services are not guaranteed. We could provide numerous examples of health system challenges affecting other elements of the framework that, if not properly taken into consideration from the onset of the initiative, might hamper such results. Here are a few of them:

- Freshly graduated medical staff with little or no training in management and with limited leadership skills may be assigned to key positions within the District Health Management Team (DHMT) or the hospital, potentially leading to poorly run BEmOC or CEmOC facilities (*leadership; organization*).
- Poor governance may translate into widespread corruption, including practices of unofficial payments that create important financial barriers to access BEmOC or CEmOC services (*oversight*).
- Financial resources may disproportionately flow to tertiary-level hospitals, resulting in inadequate funding for the recurrent costs of facilities expected to provide BEmOC or CEmOC (*financing*).
- Staff motivation may be low due to lack of incentives, financial or other, leading to high levels of absenteeism and poor performance (*provider payment*).
- The supply chain may be dysfunctional, leading to frequent stock-outs of essential drugs such as oxytocin (*medical products*).
- For a health facility to be considered a BEmOC or a CEmOC facility, specific staffing norms typically need to be met. If the country is going through a severe crisis in terms of human resources for health, these norms may be extremely difficult to meet (*health workforce*).
- The majority of pregnant women may prefer to give birth at home with the assistance of traditional birth attendants (*social/cultural characteristics; behavioral factors*).

Community mobilization

Imagine a country where most pregnant women still give birth at home, without any assistance from a medically trained person. MCHIP may get involved in the creation of community action groups to promote facility-based deliveries (*organization* under the *social environment* sub-component of the framework). Here again, MCHIP's initiative may be effective when looking at its immediate effects, e.g., the number of action groups created or the number of pregnant women going to a health facility to give birth. What is of greater importance, however, is whether the initiative also contributes to improved maternal and neonatal health. Whether this is the case or not depends to a large extent on whether other elements of the health system were taken into consideration during the design phase of the initiative. Examples of how challenges elsewhere in the health system might get in the way include the following:

- Health facilities may not have the capacity—i.e., physical and/or human resources—to accommodate an increase in the demand for maternal and neonatal health services (*infrastructure* and *health workforce*).

- Distances to health facilities (*infrastructure* and *physical environment*) and road conditions (*other sectors*) may be such that the risk for pregnant women to die on their way to the health facility is high.
- The communication between health centers and district hospitals may be inadequate, resulting in an inefficient referral system (*organization*).

Clearly, the increased demand for maternal and neonatal services generated through the initiative is unlikely to be sustained in the presence of such health system challenges.

Implications

These two examples illustrate how initiatives conducted in isolation, i.e., that do not take the broader context of the health system into account, may end up having little or no impact on MNCH. Obviously, MCHIP cannot be expected to address each and every problem of the health system. A thorough assessment of the health system during the design phase will nevertheless help determine whether the planned initiative is likely to generate the expected results. Following this assessment, MCHIP may need to revisit a number of assumptions and adjust the design of the initiative so as to overcome some of the challenges revealed by the assessment. These adjustments may take various forms, including the following:

- Implementation of the initiative may be postponed in order to allow planned actions that are expected to affect other elements of the health system to first take place.
- The geographical focus of the initiative may be moved to another area where conditions are more conducive, i.e., where some of the identified health system challenges have already been or are being addressed.
- The scope of the initiative may be broadened to also address one or more of the identified health system challenges.
- MCHIP may form partnerships with other organizations that are able and willing to take concurrent actions that would mitigate some of the identified health system challenges.

Promoting Health System Strengthening Through an MNCH-Related Initiative

Not all measures labeled as *HSS initiatives* will strengthen the system to the same extent. The extent to which an initiative will strengthen the health system depends mainly on three criteria:

- Its *scope*: is the primary purpose of the initiative related to the health system or is it disease-specific or purely clinical, for example?
- Its *scale*: is the initiative implemented nationwide or is it taking place in only one particular community, health facility or district?
- Its degree of *institutionalization*: has the initiative been integrated with a national policy or is it totally dependent on short-term funding from a nongovernmental organization?

Clearly, this is a gradient and the distinction is not always clear-cut.
Many initiatives fall in some kind of gray zone between the two extremes. Also, initiatives may gradually move along this gradient. An initiative addressing a weakness in the health system may very well start off as a small-scale project run by a local community or nongovernmental organization, thereby having limited effect on the health system as a whole, but gradually be scaled up and institutionalized, with an increased health system strengthening effect. This can be illustrated by the following example:

Imagine MCHIP launches an initiative in two districts of a country, which involves a change in the role of community health workers (CHWs). As part of the family planning activities they already undertake during home visits, CHWs are now trained to also offer/provide injectable contraceptives. Community leaders and existing community groups in the two districts are actively involved, both during the design and the implementation of this initiative. They support and help promote healthy spacing of pregnancies. Two years after the launch of the initiative, MCHIP is able to demonstrate a substantial uptake in contraceptive prevalence in both districts, which is not matched in any other district of the country, and a reduction in neonatal deaths resulting from better pregnancy spacing. Thanks to the strong monitoring and evaluation (M&E) element built into the design of the initiative, MCHIP can also show that the increase in contraceptive prevalence is to a large degree attributable to the changed role of CHWs and that this initiative contributed to a reduction in the socio-economic inequality in contraceptive use. In this example, a disproportionately large number of new users came from the two lowest wealth quintiles. Through MCHIP's advocacy efforts, policymakers are made aware of this success. A detailed strategy is developed to adopt the approach throughout the country. This strategy involves the use of tools under each of the four control knobs: *financing* (through changes in the way resources for family planning are allocated), *organization* (changes in the delivery strategy of injectable contraceptives), *regulation* (changes in responsibilities of CHWs) and *communication* (efforts to involve community leaders and organizations).

The initiative leads to changes in several elements of the framework: under the *service delivery* sub-component of the framework, elements directly affected include *organization* (changes in who-does-what strategies), *health workforce* (development of new skills for CHWs), *information* (adjustments in the health management information system to capture this new service provided at community level) and *medical supplies* (new mechanisms to calculate required quantities and to distribute Depo-Provera). Under the *community* sub-component, this initiative has immediate effects on the *leadership* and the *organization* elements (through the involvement of community leaders and community-based organizations in advocating healthy spacing of pregnancies) and under the *households* sub-component on the individual's *behavioral factors* (availability of Depo-Provera during CHW house visits changes family planning behaviors) and possibly the *intra-household power relations* (through increased involvement of men in the decision process relating to the uptake of contraception).

Figure 1. Strengthening Health Systems to Improve MNCH Outcomes—a Framework