Quality improvement for health care providers:

With friendly guidance and support

Quality Improvement Programme (QIP)
Ministry of Public Health and Population, Republic of Yemen

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Who should read this publication?

The Ministry of Public Health and Population of Yemen and its partners hope this publication will engage the interest of a wide range of readers but especially:

In Yemen, the management and staff of health facilities and of Governorate and District Health Offices that are already participating in the Quality Improvement Programme (QIP) or may participate in the future. Together with its Toolbox, it serves as a guidance manual and also provides basic material for training courses.

Internationally, current and potential development partners who may be interested in supporting efforts to establish and scale-up QIP so it becomes a permanent mechanism for improving the quality of Yemen's health services and extending good health services to the entire Yemeni population.

In other countries, anyone who may be interested in learning from Yemen's experience and possibly borrowing and adapting elements of QIP as they develop or strengthen their own quality improvement programmes.

Contents

Acronyms

BMZ	Federal Ministry for Economic Cooperation and Development (Germany)
CIM	Centre for International Migration and Development (Germany)
DED	German Development Service
DHO	District Health Office
DHS	Demographic and Health Survey
EFQM	European Foundation for Quality Management
FHS	Family Health Survey
GDC	German Development Cooperation
GDI	Gender Development Index
GHO	Governorate Health Office
GNI	Gross National Income
GTZ	German Technical Cooperation
HDI	Human Development Index
HF	Health facility (hospital, health centre or health unit)
HF/RHS	Health facility with reproductive health services
HIHS	High Institute for Health Sciences
HMRTI	Health Management Research and Training Institute
HSR	Health Sector Review
IUD	Intra-uterine device
KAP	Knowledge, Attitudes and Practices
KfW	KfW Entwicklungsbank (Germany)
MICS	Multiple Indicator Cluster Survey
MoF	Ministry of Finance, Republic of Yemen
MoLA	Ministry of Local Authorities, Republic of Yemen
MoPHP	Ministry of Public Health and Population, Republic of Yemen
MoPIC	Ministry of Planning and International Cooperation, Republic of Yemen
PEER	Peer Ethnographic Evaluation and Research
PPR	Programme Progress Review
QIP	Quality Improvement Programme
SFD	Social Fund for Development
SQA	Status Quo Analysis
SQI	Systemic Quality Improvement
TQM	Total Quality Management
UN	United Nations
UNDP	United Nations Development Programme
WHO	World Health Organization
YG-RHP	Yemeni-German Reproductive Health Programme

Foreword

It is my pleasure to present this document to everyone concerned about Yemen's health services. Improving these services and extending them to all Yemeni people are high priorities for our Government. They are also the main aims of our new National Health Sector Strategy.

The Quality Improvement Programme (QIP) is not the product of theoretical work done by experts sitting in offices. It is the product of learning through practice in Yemeni health facilities and the communities they serve. While developing QIP over the past four years, we have not been re-inventing the wheel. Instead, we have been learning from other people's experiences around the world, adapting their methods and finding solutions that work in Yemen.

The results have been impressive and bode well for the future. That is because they make good use of the most precious of all existing resources in Yemen's health system, the system's staff. QIP has shown that staff becomes strongly motivated to improve the services their facilities provide, when they are provided with friendly on-the-job guidance and support by highly experienced and qualified health care practitioners and trainers.

Over the next three years, we plan to establish QIP as a permanent and sustainable programme that covers health facilities throughout Yemen. QIP will be one of the key mechanisms through which all stakeholders in our health system work towards realizing our vision of quality health services that reach all Yemeni people. With this document, we ask our readers to be inspired by the motivated staff who have brought us this far and to join us in this very important work.

Professor Dr. Abdulkarim Yehia Rasae
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Acknowledgements

Executive Summary

The nine-year (2004-2013) Yemeni-German Reproductive Health Programme (YG-RHP) has four main components: 1) reforming the health sector; 2) improving the quality of front-line health services with emphasis on reproductive health; 3) promoting reproductive health and education among special target populations and 4) social marketing of contraceptives and behaviour change communications.

In 2007, Component 1 began supporting the Health Sector Review (HSR) and, by mid-2010, the review had resulted in approval of a National Health Sector Strategy with a comprehensive set of targets for 2025. These fall under nine headings: leadership, service delivery/processes, staff, planning, management information system, infrastructure, medicines and health technology, health financing, and monitoring and evaluation.

Meanwhile, in 2006, Component 2 evolved into the Quality Improvement Programme (QIP) and this is now recognized as a key mechanism for achieving the service delivery/processes goals by 2025 and then for continuing to increase the number of Yemeni people who have access to health services of good quality. Although it began modestly by targeting health facilities in only seven Governorates covered by the YG-RHP, its results have been so impressive that – with financial support from other donors besides Germany – it is already providing technical support to other Governorates and their health facilities (HFs). QIP is tailored to fit the unique circumstances of Yemen, where the health system is weak at all levels, many people lack ready access to health services of any kind, and many have so little confidence in health services that they prefer not to use them even if they do have access.

Once a year, HFs in the seven Governorates are invited to apply for inclusion in the next batch of QIP participants. Those selected are then provided with the friendly guidance and support they need as their staff members learn how to trust each other and work as teams that identify quality-related problems and opportunities, develop Action Plans and implement those plans. Key elements of this guidance and support include:

- **Visits by quality assessors or Sadiqs** (Arabic for "friends") who work as senior managers of health organizations in other Governorates but not in the ones where they serve as Sadiqs. As Sadiqs, they do not act as traditional supervisors in the health system hierarchy, but as advisors to staff. During their visits, they explain the QIP approach, meet with each staff member separately and listen to what they have to say, make their own observations, and report their findings to meetings attended by all staff. At these meetings, they help staff reach agreement on their HF's unique problems and opportunities for action, assess their own unique needs for training and other support, and draw up unique plans of action tailored to their HF.
- **On-the-job training** within the HF by experienced experts in three areas: management of HFs; hygiene and infection control; reproductive health services.
- **Evaluations** after 14 to 18 months of such guidance and support, usually resulting in certification, valid for one year, that the HFs offer services of good quality.
- **Ongoing support** including: opportunities for HFs with negative evaluations to participate again; upon request by certified HFs, twice yearly Sadiq visits leading to annual re-evaluation and re-certification.

This publication provides readers with a comprehensive look at QIP, from background on Yemen's health conditions through to plans for QIP's future. It ends with a call to action by the many stakeholders – from staff of HFs to international donors – whose strong commitment and engagement will be required to carry QIP into its planned future. It is aimed mainly at those stakeholders but may also be of interest to readers looking to learn from Yemen's experience and apply the lessons in other countries with weak health systems.

Yemen and its development challenges

This chapter provides background on Yemen and its major development challenges and then focuses on challenges in Yemen's health sector.

An old country with a rapidly growing population

Yemen has been at the crossroads of spice routes connecting Africa, the Middle East and Asia for thousands of years and its national capital, Sana'a, is one of the oldest cities in the world. Once two separate countries, North Yemen and South Yemen, it was united to establish the Republic of Yemen on 22 May 1990.

Since unification, the Republic has evolved into a multi-party democracy with an elected President (head of state) and 301-seat House of Representatives (the lower house) and an appointed Prime Minister (head of government), 35-member National Cabinet and 111-member Shura Council (the upper house). Yemen has 21 Governorates with elected Governors and Councils and the Governorates have a total of 333 Districts, more than 2,200 sub-districts, more than 38,000 villages, and tens of thousands of tiny settlements consisting of no more than a few houses.

Roughly 24 million people live in Yemen and 70 percent live in rural areas. The country has narrow coastal plains, upland plateaus and desert but much of it is mountainous. Many Yemeni families live in mountain villages and settlements accessible only by foot, beast-of-burden or all-terrain-vehicle. When it rains, water flows down into the wadis (valleys) where streambeds may fill to overflowing. But rain is rare, streambeds are usually dry, there are no permanent rivers and the Yemeni people are largely dependent on groundwater for drinking, irrigation, sanitation and industrial purposes. Groundwater levels are falling steeply and Yemen has serious and worsening water shortages.

One reason for the mounting water crisis is that Yemen has one of the world's fastest rates of natural population increase. According to UN estimates, Yemen's population grew from 4.3 million in 1950 to 23.6 million in 2009 and could grow to 35.5 million by 2025 if current trends continue.[1] The use of modern family planning methods is on the increase and the birth rate is on the decline but Yemeni women are still giving birth to an average of five children during their child-bearing years.

Another reason for the mounting water crisis is that an increasing share of agricultural land is used for qat. Many Yemenis enjoy chewing the leaves for their narcotic effect but qat is water-hungry and displaces the grains, fruits, vegetables, pulses, coffee, and cotton that farmers have traditionally grown. More than two-thirds of Yemen's food has to be imported and rising fuel and transportation costs have contributed to rapidly inflating food prices and very high prevalence of malnutrition among children.

According to the World Bank, Yemen's gross national income (GNI) per capita equals US$ 960 per year and is far below the GNIs of its oil-rich neighbours.[2] Oil revenues account for a quarter of the country's GNI and two-thirds of its Government income but Yemen's known reserves are nearing exhaustion and its oil production is declining. After agricultural land and oil, Yemen's natural gas is its main natural resource and increases in natural gas revenues are, to some extent, offsetting declines in oil revenues.

Yemen's other natural resources include fish, salt, marble and minor deposits of metals and minerals but the Government and its international partners recognize that Yemen's best hope for economic growth and poverty reduction is to make better use of its human resources by ensuring that its people are healthy and well-educated and by encouraging development of small and medium-sized enterprises (SMEs) that depend less on natural resources.

[1] UN (2009).
[2] World Bank (2010).

With seven of his ten sons (and ten daughters who cannot be photographed) and some of their children, this family illustrates how rapidly Yemen's population is growing.

Human development and health in Yemen

Yemen ranks at 140 out of 182 countries on the UN's Human Development Index (HDI). Low GNI per capita is just one of four factors accounting for this low rank. The low rates of school enrolment and adult literacy are two other factors. Since these rates are lower for girls and women than for men and boys, they also contribute to Yemen's low rank – 122 out of 155 countries – on the UN's Gender-related Development Index (GDI).[3]

Average life expectancy from birth is widely recognized as the single best indicator of the state of a nation's health. Yemen's average life expectancy from birth is 62.5 years and this compares with the global average of 67.5 years, the Arab State average of 68.5 years and Japan's average of 82.7 years. Low average life expectancy is the fourth factor accounting for Yemen's comparatively low rank on the HDI.

Yemen's last Demographic and Health Survey (DHS) took place in 1997[4] and a new one is underway, with the results due in 2011. Meanwhile, in 2003 there was a Family Health Survey (FHS)[5] and, in 2006, there was a Multiple Indicator Cluster Survey (MICS)[6] and, also, a Knowledge, Attitudes and Practices (KAP) survey closely aligned with a Peer Ethnographic Evaluation and Research (PEER) study and summarized in one report.[7] Just a few of the findings will serve to illustrate the need to strengthen the health system:

- The FHS found that only 45 percent of the Yemeni people had access to health services within reasonable distance of where they lived. Of that 45 percent, one-third got their services from private HFs (commercial or non-governmental) and most lived in urban areas. While pregnant and giving birth to their last child, 61.7 percent of rural women received no medical care. Afterwards, 89.3 percent of rural women received no post-natal care.

- The FHS found that 53.2 percent of children under the age of five were stunted, 45.6 percent were underweight and 12.4 percent were wasted (extremely stunted and underweight). The MICS found that, in the five years preceding its survey, 69 out of 1,000 children (roughly one in 15) died before reaching their first birthday and 79 out of 1,000 (almost one in 12) died before reaching their fifth birthday. At the time of the MICS, 68 percent of children less than two years old had not received all of the recommended vaccinations and 13 percent of children less than five years old were suffering from acute respiratory infection. Two-thirds of those were not receiving antibiotic therapy.

[3] UNDP (2009) is the source of all figures in this paragraph and the next one. School enrolment has been increasing and Yemen's Ministry of Education estimates that, in the 2008/09 school year, 84.5 percent of boys and 64.7 percent of girls were in primary school if they were of the appropriate age. With increased schooling, illiteracy rates among men (15+ years old) declined from 29.6 percent in 2004 to 21.3 percent in 2006 while illiteracy rates among women declined from 61.6 percent in 2004 to 60.0 percent in 2006.

[4] CSO et al (1998).
[5] CSO et al (2003).
[6] MoPHP eta al (2008).
[7] Mary Stopes International et al (2008).

- Taken together, the four studies show that large percentages of Yemeni adults have very little knowledge about a wide range of health-related issues. Women are less knowledgeable than men and they are often not empowered to make health-related decisions, two facts that have serious consequences for them and their whole families. The FHS found that even if they are knowledgeable and have access to health services, many women do not take advantage of those services because they worry there will be no female staff and they are afraid to go alone.

The MoPHP supported all of those studies because, while it was already well aware of the need to strengthen Yemen's health system, it was also well aware of the need for more comprehensive and up-to-date evidence on which to base its policies and strategies. The MoPHP is also well aware that the UN report cited at the beginning of this sub-section ranks Yemen low for its public spending on health, in absolute terms and as a percentage of all public expenditures.

The MoPHP has recently completed a Public Health Expenditure Review to take a careful look at trends and needs for public spending on health.[8] The review confirms that in Yemen, as in most other countries, the amount of public money available for health falls far short of the need and the gap is unlikely to be closed any time soon. While one essential strategy is to continue pushing for more public spending, two other essential strategies are: 1) to emphasize prevention and reduce the need for treatment and 2) to make optimal use of whatever resources may be available in order to improve the quality of health services and extend them to more people.

Many Yemenis live in mountain villages, far from health facilities and hard to reach with mobile clinics.

Many Yemeni children are malnourished, yet much of the country's scarce water and agricultural land is used to grow qat.

[8] Al-Lawzi, M N (2009).

Developing friendly quality improvement for Yemen

This chapter describes how the Quality Improvement Programme (QIP) got established in Yemen, and describes its guiding values.

The Yemeni-German Reproductive Health Programme (YG-RHP)

German Development Cooperation (GDC)[9] has been one of Yemen's most important partners since 1969. Down through the years, it has supported many initiatives outside the health sector that have had positive impacts on health. Currently, its two top priorities are to support improvements in water conservation and management and improvements in education, with particular emphasis on girls' education, and those improvements are expected to make major contributions to improvements in health. GDC has also supported a variety of initiatives within the health sector. For example, it supported decentralization of health system management and establishment of the Governorate Health Offices (GHOs) and District Health Offices (DHOs) that now have primary responsibility for allocating resources to public HFs and ensuring those resources are put to good use.

Since 1996, reproductive health has been the main aim of Yemeni-German cooperation on health and, since 2004, the nine-year (2004-2013) Yemeni-German Reproductive Health Programme (YG-RHP) has been the core programme. The first phase (2004-2007) agreements specified that the YG-RHP would have three components. The second phase (2007-2010) had a fourth one added and the four components became:

Component 1: Reform of the health sector and improvement of management at the national level

Component 2: Improvement of the quality of basic health services with emphasis on reproductive health

Component 3: Promotion of reproductive health and health education for special target groups

Component 4: Social marketing of contraceptives together with behaviour change communications.

The third (2010-2013) phase will have a new **Component 5**: Development of a voucher scheme that gives poor women access to family planning, antenatal care and skilled birth attendance when they cannot otherwise afford these services.

Planting the seed for QIP

In 2004, the Yemeni-German agreements establishing the YG-RHP said that Component 2 would aim for "an improved offer of reproductive health services" in seven Governorates – Abyan, Amran,

A nurse form Shibam Hospital visits Al-Ahjir, a village in Al-Mahweet, and talks to women about maternal and infant health and family planning.

A male nurse from the health unit in Noaman, a village in Al-Mahweet, talks to men about family planning and the issues of special conceran to women and girls.

Hajjah, Ibb, Al-Mahweet, Mareb, and Sana'a. At first, Component 2 devoted most of its efforts to improving policy and implementation in GHOs and DHOs. By 2006, it had become clear that this approach was having little impact on the front lines of the health system, where HFs deliver services directly to patients.

An extended meeting of the YG-RHP's Programme Coordinating Group – attended by representatives from GHOs and the MoPHP and other stakeholders with interests in reproductive health – considered Component's 2's disappointing results and various alternative approaches. It concluded by recommending that Component 2 should change direction and henceforth:

1. **Concentrate on improving the quality of primary care services.** The meeting observed that Governorates do not have integrated health systems with hierarchies of HFs and referrals up or down the hierarchies according to patients' needs. Instead, HFs work largely on their own and the majority of Yemeni people get their primary care from small Health Units and somewhat larger Health Centres. Focussing on them first would produce the best results for the most people. By contrast, focussing on Hospitals first would pose the danger of drawing resources away from Health Units and Centres and further weakening Governorate health systems.

2. **Use the Total Quality Management (TQM) approach.** After considering a number of approaches to improving quality of HFs the meeting decided that the TQM approach, using the European Foundation for Quality Management (EFQM) model would have a number of advantages. It would be the most affordable and practical since it would not require building up supervisory systems or hiring consultants from abroad. Best of all, it would give ownership of quality improvement to the managers and staff of HFs and they would become committed to making it a continual process. (See Annex 1 for a discussion of quality improvement concepts, including TQM and the EFQM model.)

3. **Be guided by local conditions to the greatest extent possible.** In general, Yemen has poorly financed and under-performing public HFs and reputedly but only superficially better private HFs. Most health providers work in both and, too often, transfer resources (including their own paid time) from public to private facilities. In addition, HFs vary in the capacity of their staff, facilities and equipment; their capacity to pay for maintenance, repairs and medicines and other supplies; the size and characteristics of the populations they serve. This means that each has its own unique quality improvement needs.

Designing the Quality Improvement Programme (QIP)

Implicit in the three recommendations was that the process of designing a new approach to quality improvement that worked for Yemen would have to be highly participatory. In fact, the process required leadership and training by many experts in various aspects of quality improvement plus participation by hundreds of managers and staff of the MoPHP, GHOs, DHOs, and HFs.

In the YG-RHP agreements, seven of Yemen's 21 Governorates are designated as its priority Governorates. These became the main participants in the current German-supported (2006-2013) phase of QIP. Governorate Health Offices (GHOs) administer most of the public money for health in Yemen and this means the senior officers of

GHOs are in daily contact with DHOs and HFs as they make decisions about how money will be allocated and whether or not it is being spent to best advantage. Thus, they were already involved in assessing the quality of facilities' services and requiring improvements, so it was natural that they became participants in the process of designing and establishing QIP and they continue to be key players in its implementation and refinement.

In fact, the senior officers of the GHOs proved to be instrumental in making the approach as friendly and flexible as possible. They were also instrumental in broadening it so that it improves not only reproductive health services but also overall management and hygiene. This broadening results in comprehensive improvement in the services offered by participating HFs – while also, of course, leaving room for added focus (now or in the future) on improving other components of those services.

Launched in mid-2006, the process of designing and establishing the new approach extended over many months. It can be summarized in terms of logical steps that included:

1. Preparatory meetings and workshops attended by managers, staff and consultants of the MoPHP, YG-RHP and the GHOs of the seven participating Governorates to agree on where to start and whom to involve.
2. Workshops attended by the above-mentioned people and by staff from HFs, where participants learned basic quality concepts (see Annex 1) and identified the areas of greatest need for improvement, guidance and support.
3. Gradual development and refinement, through practice, of the basic elements of the programme. This process involved announcing the launch of QIP, inviting HFs to volunteer as participants, selecting an average of five from each Governorate

for a total of 35, starting to work with two of them in 2006 and starting to work with the others in early to mid-2007.
4. Gradual development and refinement, through practice, of all necessary training courses and tools.
5. Gradual formulation of a set of underlying values on which there was broad consensus (see below).

When asked what makes a health facility good, women often mention female staff, privacy screens and separate waiting areas for women.

When asked what makes a health facility good, health providers often mention medical equipment and supplies, qualified staff and continuing education.

In 2007, YG-RHP's Component 1 began supporting the Health Sector Review which aimed to lay the groundwork for broad Health Sector Reform, and to align the latter with QIP and its basic principles and methods. This step was taken largely because the process of developing QIP heightened awareness of the need to find ways of improving Yemen's entire health system and, also, awareness that QIP was one of those ways.

Sadiqs and the underlying values of QIP

The QIP design process included careful consideration of the values underlying Systemic Quality Improvement (SQI) and gradual expansion and restatement of those values until there was general consensus on the following set of nine underlying values.

1. **Building trust among providers, with work on their self-esteem.** Traditionally, in Yemen as elsewhere, organizations are hierarchical and supervision is top-down. Supervisors define standards and objectives, hand them down to staff and then monitor their performance. A problem with this approach is that supervisors may never learn of problems known to staff (not least because staff worries they might be blamed and disciplined), nor of staff's ideas about how those problems might be solved.

   As participants looked for a way of making better use of staff's knowledge and ideas, they came up with the idea of a quality assessor and advisor who would be like a friend or, in Arabic, a Sadiq. A Sadiq would be an expert but also a good friend to each and every member of staff, someone who would listen to them, respect their opinions, make tactful observations, and offer them

guidance and support. By treating all members of staff in this way, the Sadiq would build self-esteem in each one and trust among them all.

Building trust implies confidentiality, and participants captured the need for this by speaking of an "internal kitchen", meaning that a Sadiq's positive and negative observations are kept confidential between him/her and the HF staff ("the cooks") and not to be reported to the health system hierarchy. What is reported to the hierarchy within the MoPHP, DHOs and GHOs is the agreed Action Plan only.

2. **Working on a voluntary basis, with motivated health teams.** The TQM approach can only work if people really want to participate. In any case, true friends or Sadiqs cannot be individuals who impose themselves on people but must, instead, be individuals whom people choose to relate to because they respect people and earn their trust.

3. **Working on a contractual (mutually agreed) basis.** Participating in QIP on a voluntary basis and choosing to relate to a Sadiq and the QIP team both imply a contractual relationship that can be terminated either by the providers or by the Sadiq and the QIP team if they feel the relationship is not proving worthwhile. This has become known as the **Maa-salama Principle** (or Bye-bye Principle in English). It is based on recognition that quality is a health facility's baby and that the Sadiq and QIP are midwives offering their services to ensure the baby is healthy.

4. **Placing emphasis on team-building, with step-by-step organizational change.** Placing the emphasis on team-building and gradual, joint discovery of problems and solutions without "finger-pointing" (blaming) is consistent

with the TQM approach and provides greater motivation for staff to engage in change.

5. **Starting with the most evident issues.** The statement "Problems are like icebergs. You may only see small parts of them, while the rest is hidden," helped inform the decision to focus on the most obvious and easily solved problems first. Solving such problems helps to motivate staff to look for more problems and solutions and to tackle even the largest, most deeply rooted and serious problems. Focusing on large problems first can be frustrating and discouraging.

6. **Rewarding achievement, with equipment and repairs.** Improving the quality of services offered by health care facilities often requires adding new equipment (e.g., sophisticated sterilizers) and making repairs and other improvements to buildings and furnishings. Offering these things incrementally, as rewards for achievement, helps to motivate staff and is also cost-effective since it ensures that resources are not being squandered on under-performing HFs.

7. **Training on the job, not in the classroom.** This is essential to the success of a fully contextualized TQM approach. It is friendlier, more affordable and more practical and allows Trainers to guide and support staff as they seek to improve how they deal with the real situations they face every day. In addition, it avoids the temporary removal of staff from facilities where they are desperately needed.

8. **Giving equal opportunities to public and private facilities.** Yemen's health care providers typically work in public facilities in the morning and private facilities in the afternoon, so the training they get through QIP benefits both kinds of facility. In any case, both kinds of facility contribute to the health of the Yemeni population and are in need of quality improvement. While both kinds of facility should be allowed to participate in QIP, only public facilities should be allowed to receive on-site training, equipment and repairs financed by money out of the public purse (including donor contributions to that purse). Thus private facilities should pay fees for services and cover any other costs.

Holding his notes, the Sadiq Abdallah Saeedi is discussing the importance of teamwork with the director and his staff, not as the boss but as a Friend to help them learning to trust each other.

9. **Emphasizing sustainability from the outset.** Yemeni-German financial and technical cooperation agreements, like all such agreements, have limited life-spans. They are usually intended to help launch new initiatives and, if they prove successful, get them well established. Ensuring that QIP is sustainable requires being mindful of the costs (these are addressed more fully later in this publication). Whenever possible, QIP relies on Sadiqs, Trainers and Evaluators who have regular jobs elsewhere in Yemen's health system and who thus require only daily allowances (to cover expenses) and fees that are typical of those paid by the MoPHP and GHOs in the normal course of doing their business.

Step by step: how QIP works

This chapter describes how QIP functions, the QIP tools, the QIP actors (Sadiqs, Trainers, and Evaluators), how they are trained, and the stages HFs go through on their way towards evaluation and certification. Typically, it takes from 14 to 18 months before a HF is ready for its first evaluation and certification.

How health care facilities become QIP participants

QIP is voluntary. HFs decide for themselves whether they want to apply to participate in the programme, based on criteria for participation and the benefits that QIP participation can bring to them. They apply to the GHO after it announces that a new batch of QIP participants is due to be selected.

To be selected, HFs must meet three basic criteria:
(a) **Water availability:** capacity to provide a minimum of one bucket of fresh water per room per day.
(b) **Budget to cover running costs:** capacity to buy consumables like cleaning materials and water and to cover the costs of small-scale repairs and building maintenance.
(c) **A minimum of one female nurse or midwife for reproductive health services:** since it is not usually acceptable for women to receive counselling or treatment from a male, at least one female staff must be available.[10]
(d) **Public or private:** both public and private HFs may participate, but private facilities must pay for the services provided by QIP and must repair or replace at their own cost any broken material.

The **benefits** HFs may receive from QIP participation include:
(a) **Assessment visits:** an HF can receive up to four visits from a Sadiq during the quality improvement process.
(b) **Training:** an HF can receive training from an expert Trainer in three fields – management, reproductive health and hygiene.
(c) **Equipment:** based on the advice of the Trainer, equipment may be provided if the Trainer feels assured the HF will use the equipment properly.

(d) **Certification:** when the Sadiq and the HF agree that the HF is ready for evaluation, they can ask for an independent group of experts to evaluate the facility in order to get QIP certification (which is valid for one year).

Total Quality Management (TQM) boxes and other QIP tools

Annex 1 describes the concepts behind the QIP approach to quality improvement. The tools used by QIP Sadiqs, Trainers and Evaluators reflect those concepts. The Toolbox at the very end of this publication contains or has links to the complete set of tools but the most important of these are Total Quality Management (TQM) boxes. TQM boxes take their categories from the EFQM model (see Annex 1) and are used by QIP actors to record and organize information they collect and, also, questions and hypotheses that occur to them during the course of their visits to QIPs.

Figure 1 gives an example, showing how a Sadiq might use a TQM box after a staff member complains that "for weeks there have been no contraceptives to give to patients." The Sadiq confirms this by chatting with a few patients and by observing that the HF has no contraceptives on display or in storage. He then formulates questions he may ask of staff or hypotheses he may share with them, maybe during his meeting with all of the staff at the end of his visit.

The Sadiqs: providing friendly guidance and wisdom

The Sadiq usually has a job in a GHO and is nominated by that GHO's Director General to act as a Sadiq, not in the same Governorate but only in

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[10] Since there are not enough trained women staff members in Yemen currently, especially in the more remote areas, a special QIP methodology for health facilities that do not meet all of the basic criteria needs to be developed.

Figure 1. How a Sadiq might use a TQM box to organize questions and hypotheses about the lack of contraceptives in a HF

EFQM Categories	Sadiq's questions and hypotheses
Leadership	Is the director really interested in finding new ways to solve the problem of lack of contraceptives? Is he nervous about trying something new?
Planning	Is there enough knowledge on how to calculate the kinds and numbers of contraceptives required?
Resources	The management of finances and stocks seems to be poor. What might be the causes? Do we have someone getting hidden benefits from mismanagement?
Processes	The family planning process is obviously incomplete if the patients are going home empty-handed. But if the patients are still coming, have they found another solution I don't know about yet?
Staff satisfaction	The nurse who should be advising women about family planning did not seem very happy in her job or comfortable when talking to patients, but I forgot to ask if she ever gets recognition or encouragement from the director. I must remember to ask later on!
Patient satisfaction	Is the lack of contraceptives the only reason for low usage by patients? Is it possible that the HF provides no contraceptives because patients resist the suggestion they should use them?

others. This puts the Sadiq in a unique position as a person with a great deal of knowledge and experience, yet one who is not in a position to supervise the HF he is guiding as a Sadiq. This means he can be a true friend and advisor, and not part of the official hierarchy that oversees the HF's work.

A SADIQ ONCE DESCRIBED HER WORK THIS WAY

"First I go round the facility, chatting with people and observing, picking up on all the interesting incidents I witness. They are like roses, with nice petals and many thorns. Then I have to sit alone, thinking in which category of the TQM box I will put all these interesting petals and thorns I have collected; the big ones first, the middle ones next but leaving out some of the minor issues that need not be addressed at the moment."

Selection of candidates to become Sadiqs

To become a Sadiq, an individual must:
- be an experienced professional in the field of reproductive health or primary health care
- have a broad understanding of public health issues based on the large number of HFs he or she has worked in, supervised and visited over the years
- have the personal skills and tact to smoothly interact with health staff
- be prepared to do several weeks of training and pass a practical exam
- be prepared to work with an assigned HF for a period of up to 18 months, in order to gain the confidence of the HF's staff.

A Sadiq can only be successful if he or she is able to build a strong and trusting relationship with HF staff. If either the Sadiq or the HF feels that

it is difficult for this relationship to grow, either side is allowed to end the relationship under the Maa-salama Principle.

Training of Sadiqs
Trainees to become Sadiqs are given one week of classroom training where they learn the basic quality improvement concepts outlined in Annex 1, the nine agreed values behind QIP outlined in the previous chapter, and the general objectives and methods of QIP. Then they accompany qualified Sadiqs on their visits to HFs at least six times. The first two times, they observe the qualified Sadiqs as they do their jobs. The next four times, they perform the jobs themselves while the qualified Sadiqs observe and evaluate them. The training of Sadiqs is mostly learning by doing. Every afternoon during a visit, the experienced Sadiq holds reflection and feedback sessions with the new one. The new Sadiq shares his/her feelings about the visit, what he/she feels confident with and what needs to improve. Then the experienced Sadiq gives feedback on what went well and what should be improved – e.g. how the new Sadiq puts questions to the HF staff, how he/she collects information and observations and shares it in feedback to the HF staff, how he/she gives feedback and helps staff draw conclusions and develop an Action Plan.

The Sadiqs' training has two aims. The first one is to give them the necessary skills, including skills at observing and questioning in order to gather information. The second and most challenging one is to give them the appropriate attitudes when thinking about staff and communicating with them.

Sadiqs need to know how to approach HF staff (and sometimes patients) and how to ask the right questions in the right way, in order to draw out their real concerns. They need to know how to

report and share these concerns among all staff in a more or less structured way.

This may require a big change from the approach Sadiqs are used to taking when acting as supervisors in the Governorates where they do their regular non-Sadiq work. The most difficult thing for them to learn may be now **not** to behave as supervisors. While having a great deal of knowledge and experience, Sadiqs are not there to order staff to do anything but only advise them and facilitate their work as teams. They may make suggestions and introduce new ideas or points of view, but whether or not staff accepts this input is up to them.

Sadiqs fully respect the hierarchy or chain of command within the HF, and never put themselves above it in any way. For example, they never make decisions even if directors as them to because directors wish to avoid responsibility for unpopular measures. Directors and other staff members are responsible for their own decisions and actions.

This change in approach may be difficult for some trainees, and the qualified trainers may take them on more than the minimum of three visits before deciding whether or not the trainees are eligible to join QIP's team of Sadiqs. Once they join that team, they continue to learn and improve their skills and contribute to improving QIP. A "quality circle" of all QIP's Sadiqs meets at least three times a year. In the circle, they discuss emerging problems and consolidate and reinforce what they and the programme have been learning.

A Sadiq's skills and tools
Sadiqs use questioning skills, observation skills and TQM boxes to collect information and build a preliminary analysis to be discussed with the staff.

AN EXAMPLE: A SADIQ AND STAFF DISCUSS HOW TO GET FEEDBACK FROM PATIENTS

A Sadiq asks staff how they can learn what patients think of their HF. He proposes installing a suggestion box so people can write down their feelings and complaints and anonymously leave them in the box. Staff members laugh at this idea and say that nobody would use the suggestion box and give a number of reasons: most people cannot write, people would be afraid of being recognized, people would just not take the idea seriously. However, they accept that getting feedback from patients is a good idea and the Sadiq then asks, "Could you not hold some kind of open discussions, talk openly with patients?" One staff member responds, "Well, not in public, not here at the HF. No one will talk." Another staff member suggests, "But maybe we could have talks during the social gatherings with the villagers. Then they will speak the truth." Others start to laugh but the Sadiq responds seriously, "Good idea, I know a nice method called a 'focus group.' Shall I tell you more about that method?" A good discussion begins about how this might be done.

Questioning skills

Reasons for asking questions include: to gain information, resolve conflict or identify possibilities for action. Sadiqs usually ask three kinds of question:

- ones asking for factual information
- ones asking for people's opinions
- ones asking for their ideas or suggestions on how to solve problems to take advantage of opportunities.

These questions are not necessarily asked in a formal way but, rather, during the course of having a normal conversation. Depending on Sadiqs' personal ways of doing things, they may evoke answers with their own remarks ("I'm surprised how nicely you have painted the walls!") or by reframing what staff members say ("If I understood you correctly, you are

saying that…") or by offering their own weaknesses as opportunities for staff to show their strengths ("I'm very bad at mathematics. Could you please help me understand these figures here…"). The latter way of gathering information can help build symmetry in a relationship, since it gives power to the staff member.

Observation skills

Sadiqs enter HFs as experienced and knowledgeable observers who know that seemingly unimportant incidents can provide good clues as to how the HF's staff normally responds to an emergency, a patient's complaints or a director's orders. But Sadiqs should also observe through the eyes of a very sick person, a very old person, a very young person, a person of the opposite sex, a person carrying a baby, a person who is afraid to tell to the staff their problems, a person who is embarrassed, exhausted or even dying. Sadiqs should put themselves in the places of various kinds of patient as they enter a HF and wait to be seen, by a nurse or midwife or doctor, receive treatment, go to the pharmacy and, also, as they eat or drink food or beverages the HF gives them and as they go to the toilet.

In addition to making informal observations, Sadiqs should do more formal checks of a HF's

The Sadiq Jamal Sufan teaches by setting an example of listening and respecting other opinions so staff members learn to do the same with each other.

Figure 2. Typical timetable for a Sadiq's visits

Maa-salama Needed?													
Sadic Visit I			Sadic Visit II				Sadic Visit III				Sadic Visit IV		External Evaluation

Month 1	2	3	4	5	6	7	8	9	10	11	12	13	14

Plan   Plan   Plan   Plan   Interventions
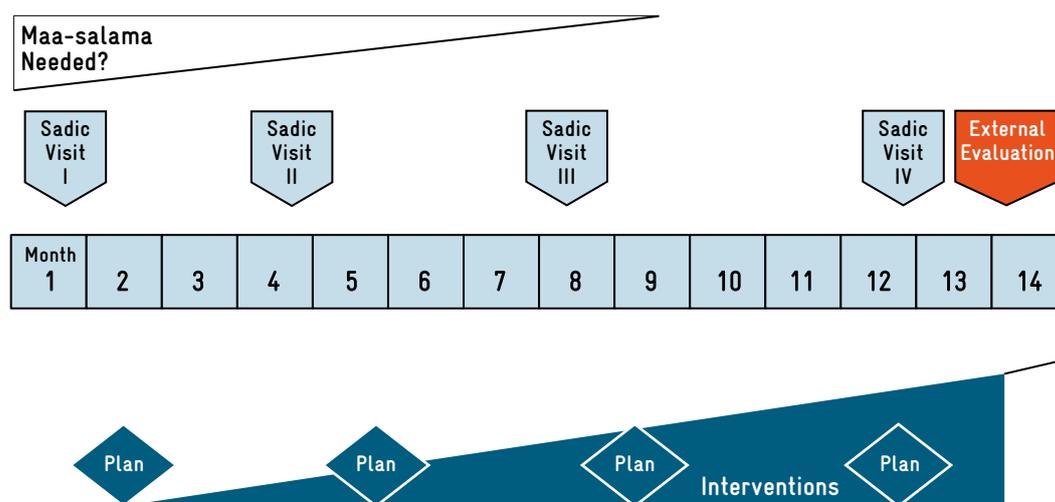
water supply and sewage, waste disposal, security system, maintenance procedures, laundry, kitchen, toilets, provision for transport of patients, financial management and reporting system, and so on.

The Sadiq's visits
A Sadiq makes a maximum of four visits to a HF before it is ready for evaluation and certification and these are usually spread over a period lasting up to 18 months or so (see Figure 2). At the end of each visit, the HF staff agrees on an Action Plan (described later) with specific things that must be done before the next visit.

As described earlier in this publication, the **Maa-salama Principle** is always valid. It means that if HF staff does not show much commitment and if the actions specified in the Action Plan are taken half-heartedly or not taken at all, the Sadiq may confer with the staff and decide whether or not the visits should continue.

Practical organisation of the Sadiq's visits
Before the first visit, a Sadiq gathers basic information about the HF through telephone calls or visits to the core QIP team and other actors involved. The first and subsequent visits then all follow a similar pattern:

1. **Preliminary meetings,** first with the HF's director and others the director may choose to have present and, second, with the whole staff.
2. **Walk around the facility** applying the observing and questioning
3. **Retreat for reflection** on findings, formulate questions and hypotheses and enter them in TQM boxes
4. **Feedback session** with the whole staff to answer or discuss the Sadiq's questions and hypotheses and reach preliminary agreement on an analysis of the situation and on a course of action
5. **Action Plan** formulated by the whole staff with facilitation by the Sadiq.

The preliminary meeting

All Sadiq visits start in the director's office, where discussion focuses on the aims of the visit. This gives a clear signal to the whole staff that the Sadiq respects the director's authority and the organizational hierarchy. The discussion may be with the director alone or, if he chooses, also with other staff members the director wishes to have present. The Sadiq should not decide who will be at this meeting, since the Sadiq is an invited guest and not "the mother of the bride", as they say in Yemen.

The Sadiq will then have an initial meeting with the whole staff, to explain the purposes and the methodology of this QIP visit.

The walk around

After the initial staff meeting, the Sadiq will walk around the facility observing and asking questions. One of the aims is to build trusting relations with all staff during a walk around, since such relations are at the very foundations of the QIP approach to quality improvement.

Ideally, the Sadiq carries a notebook and a camera on the walk-around during each visit and over the course of all visits takes before and after photographs that document changes. However, both tools should be used with sensitivity, in order to not to endanger good relations with staff. In a first visit, the Sadiq also collects baseline data against which to measure progress and this includes data on user numbers with special emphasis on users of reproductive health services. (Additional baseline data may be collected later on a first visit by a QIP Management Trainer.)

A walk-around may take as little as one or two hours in a smaller HF that has already been visited, and up to one or two whole working days in bigger HFs.

The retreat for reflection

After the walk around, the Sadiq will ask for a quiet place to reflect, formulate his questions and hypotheses and enter them in TQM boxes. This may take from 15 minutes to two hours, depending on the size of the facility and whether it has been visited before.

During this retreat, the Sadiq will have to give careful thought to the delicacy of some of his questions and hypotheses because, in the next step, he will have to share them with staff in order to get their feedback. Delicate items are usually those that may hurt feelings or conflict with personal interests. Some examples are: unethical behaviour by some staff members; errors in medical procedures by some staff members; serious communication problems or personality clashes that the Sadiq may have noticed.

Although these delicate items will need to be discussed and dealt with at some point, the Sadiq must think carefully about when to do so. A Sadiq must be careful not to cause unnecessary hostility or conflict or to ask staff to take on too much too soon.

The feedback session

Since quality is the business of every single person on staff, all of them should participate in the feedback session including, for example, doctors, mid-

At the end of each visit, the Sadiq meets with all staff to share what he has learned and helping them reach agreement on problems, solutions and plans of action.

wives and cleaning staff. The feedback session will take place during a time when the workload is normally low, to ensure that people can remain for the whole session.

Some Sadiqs organize feedback sessions according to a list of high-priority problems (e.g. lack of medicines, poor sterilization equipment and procedures) brought to their attention during the walk around. However, most Sadiqs use the TQM boxes they have filled out during their retreat since this helps staff understand that there is methodology to the QIP approach and that it is not based on anyone's personal opinions about where problems exist and which are of highest priority.

The Action Plan
The last part of the feedback session is spent developing and reaching agreement on an Action Plan. The Sadiq facilitates the process and ensures that all staff members have opportunities to participate.

The Action Plan created at the end of the first visit usually addresses the most obvious problems and calls for the easiest actions to undertake. These might include such things as cleaning the premises, changing the layout of furnishings and equipment in rooms, and changing the HF's opening hours so they are more convenient for patients.

During the second visit, the Sadiq checks to see whether the actions in the first Action Plan have been carried out and whether staff wishes to continue participating in QIP. If so, the second Action Plan may address more complex problems and call for more difficult and costly actions. These might include visits by QIP trainers, repair of infrastructure and acquisition of new equipment, supplies or furnishings.

During the third visit, the Sadiq again checks to see whether all or most of the actions in the second

Action Plan have been carried out. If so, the third Action Plan may call for profound changes to working practices, the introduction of costly and maintenance-intensive medical equipment such as sterilizers, laboratory apparatus and medical examination or minor surgery kits.

The Sadiq should make sure HF staff understand that they "own" their Action Plans but that these plans tell them what the Sadiq will be looking for on his next visit. Staff should also know that they can use these Action Plans when approaching the DHO or GHO and asking for financial or technical support to carry out certain actions or when approaching the YG-RHP with requests for Trainers or material.

Trainers and on-the-job training

A HF's second and subsequent Action Plans should cover what it needs in terms of training in the three areas of training offered by QIP: Management, Reproductive Health and Hygiene. The Sadiq then liaises with the QIP core team and the HF director and ensures that the appropriate Trainers are provided on convenient dates for all concerned.

On-the-job training carried out in the HF itself and that takes place in real situations where staff members are carrying out their normal duties is one of the most innovative aspects of QIP. It means that the actual content of the training addresses the real problems staff members encounter in their day-to-day work.

Selection of candidates to become QIP Trainers
Candidates to become QIP Trainers are selected after each has had an interview, filled out a questionnaire and completed a written test with questions that pertain to their particular area of expertise (i.e., in health facility management, reproductive

Management Trainers teach staff how to keep patient records and how to use data to produce charts showing month-by-month changes in patient numbers and progress toward targets.

for many years since. This means that part of their training to become QIP Trainers must refresh and update their technical knowledge and skills and give them opportunities to share their past experiences with each other. However, the main purpose of the training is to familiarize them with the QIP approach and its way of talking about quality improvement and to ensure that they will all be applying the approach and using the language consistently, so they never seem to be contradicting each other when working with HF staff. They also need to acquire the special skills required to train adults who already have training and are working in these areas of expertise.

Training courses for QIP Trainers are divided into four parts and include from four to five weeks of theoretical and practical instruction in classrooms followed by an additional week of practical instruction in the field. The parts are:

Part one: Introduction to QIP (1 week)
This introduces trainers to basic quality improvement concepts (as outlined in Annex 1), the values behind QIP and its general objectives and methods.

Part two: Teaching methods (2 weeks)
In these two weeks trainees acquire teaching skills different from those they are used to seeing used in traditional educational settings in Yemen. Whereas lecturing is the most common method used in Yemeni classrooms, it is not best suited for the on-the-job training of adults. Better on-the-job methods include discussion and demonstration while working, special discussion and demonstration sessions, presentation and discussion of case studies, and role-play, all using a variety of visual aids such as flip charts, hand-outs, wallet-size cards and so on. During these two weeks, trainees learn how to establish training **objectives**, how to create **lesson plans,** how to **evaluate** student performance, how

health or hygiene) and that pertain to mathematical and general knowledge that all Trainers should have. The main qualifications for becoming a Trainer include:
- a solid background in one of he areas of expertise
- practical experience applying their expertise
- awareness that teaching adults requires special skills
- willingness to take on new responsibilities, continuously improve their own skills and contribute to the improvement of QIP
- willingness to travel, work in different Governorates and stay overnight.

Training of Trainers
Candidates to become QIP Trainers have usually received their original training many years ago and have been working in their areas of expertise

to **self-evaluate** their own performance, and how to encourage and gather **feedback**.

The final three days consist of **microteaching** (practice teaching) by the trainees, where they are required to prepare lesson plans and then teach their fellow trainees, evaluate their own performance and get feedback.

Part three: Technical training (1 or 2 weeks)
Those training to become QIP Management, Hygiene or Reproductive Health Trainers get from one to two weeks of technical training. This refreshes and updates their knowledge and skills in their area of expertise and gives them opportunities to pool their experience and agree on the best approaches to their work.

Management is the key to running a HF smoothly and effectively. Technical training to become Management Trainers lasts for one week and covers the preparation of budgets, procurement of supplies, planning and other technical aspects of management and also covers leadership and staff relations. Trainees learn:

- Basic calculations: mapping catchment areas and calculating their population sizes and characteristics; setting targets for covering particular groups with reproductive health, vaccination and other services.
- Management: running meetings, planning, allocating resources, mobilizing actions, monitoring achievements against targets.
- User satisfaction: importance of measuring this, how to conduct simple focus group discussions, how to reflect user satisfaction issues in the plan.

Hygiene is essential because an unclean HF, without adequate waste disposal and sterilization procedures, is itself a health hazard. Technical training to become Hygiene Trainers includes one week in the classroom and four days in HFs. The curriculum includes:

- Introduction: how to work with HF staff, preparation of a training plan, aspects of in-service training and "learning by doing."
- Hygiene in a HF: sterile gloves, hand washing and patient safety; basic mathematics on how to use chemicals; cleaning procedures in different clinical areas.
- Sterilization: different methods; storage and maintenance of instruments.
- Handling of instruments: decontamination, methods of cleaning.
- Waste disposal: types of medical waste, developing a waste management plan.

Reproductive Health Trainers teach nurses and midwives how to make women feel comfortable, while also giving them explicit instructions and asking them to demonstrate what they have understood.

Reproductive health is the main focus of the YG-RHP and improving the quality of reproductive health services is a priority of QIP. In this way, QIP contributes to the achievement of the health-related Millennium Development Goals (MDGs) and especially to the improvement of maternal and child health which, in turn, has far reaching implications for broad socio-economic development. Technical training to become Reproductive Health Trainers lasts for two weeks and its curriculum includes:

- General information: maternal mortality and its causes, responsibilities of midwife and nurse, forms, records and statistics, hygiene and infection control.

Hygiene Trainer Mohamed Al-Jabri shows how to scrub instruments and put them in a sterilizer.

- Counselling and physical examination: differences between counselling for individuals and couples, general physical examination of women, examination of pregnant women, contraceptive methods.
- Equipment: delivery room equipment, delivery emergency kits, oxygen cylinders.
- Emergency Obstetric Care: bleeding in early and late pregnancy, bleeding after delivery, obstructed labour and use of the partograph, eclampsia and pre-eclampsia, management of puerperal sepsis.
- Procedures: stitching, manual removal of placenta, active management of third stage of labour, use of emergency drugs.
- Case studies.

Field work (1 week)
Trainee Trainers go to HFs, perform field trainings for staff and get feedback from qualified and experienced QIP Trainers. This week is of paramount importance, since it is during this week that final decisions are taken on whether trainees will be accepted as QIP Trainers or not.

Evaluation and hiring of Trainers
Each of the Trainer candidates undergoes an evaluation of their technical knowledge and skills and, during the week of field work, of their skills as trainers of adults already working in the candidates' areas of expertise. If their performance is unsatisfactory for any reason (e.g., inability to establish good rapport with staff) then they may not be chosen to act as Trainers.

Successful candidates are offered contracts. These anticipate that a QIP Trainer, who normally has a regular employer (e.g., MoPHP, GHO or a HF) maybe be available to work for QIP for up to 30 days per year, always depending on demand for training from HFs.

It should be noted that the results achieved by QIP Trainers during the programme's four years of operation, so far, have been impressive and there is no reason why there could not be QIP Trainers in additional areas of expertise such as, for example, clinical examination, diagnosis and treatment.

Trainers provide staff with visual aids. This QIP chart shows correct hygiene and sterilization procedures and is posted where staff cannot avoid seeing it whenever they enter and leave the room where babies are delivered.

How health facilities are evaluated and certified

When, after a number of months, HF staff and the Sadiq agree that quality has improved enough to try for certification, they can request QIP to undertake an evaluation. This involves the visit of three independent Evaluators, who are nominated by Ministerial decree. The three always include someone from the concerned GHO where the HF is located (usually a Sadiq), a QIP Reproductive Health Trainer and a representative from the Quality Department, Curative Care Sector of the MoPHP.

An evaluation follows procedures much like those followed by Sadiqs on their visits: preliminary meetings with director and then with whole staff; walk around observing and questioning; retreat for

reflection and organizing information but, in this case, using the Evaluation Tool (see below), and final meeting with all staff. Usually one Evaluator takes the lead (usually the one from the GHO) but all three are free to ask their own questions, make their own observations and organize their own results using the Evaluation Tool.

The Evaluation Tool
Evaluators organize their information using a tool based on the EFQM model described in Annex 1.[11] The tool is divided into three main parts that cover different aspects of a health care facility's operations:

- **Inputs** include leadership, staff, planning, resources and partnerships.
- **Processes** include four reproductive and primary health care activities (family planning, antenatal care, deliveries, and vaccinations) and essential procedures for managing waste disposal, hygiene and sterilization. In the future, other more complex processes may be added (diagnosis, treatment and laboratory services).
- **Results** focus on what has been achieved during the time that the HF has been part of QIP. Topics of evaluation include performance results, staff satisfaction, and user and community satisfaction.

The Evaluators each use the tool to give a score to the HF. They then discuss their individual scores in order to arrive at the final score for the health care facility by consensus.

Certification
If the HF has a successful evaluation, it receives a certificate signed by the MoPHP. The certificate is handed over in a ceremony in the Governorate where HF is located, with all authorities represented (and the Governor often present) and media coverage. Together with the certificates, some individual work-related gifts are presented to all staff.

[11] For the whole Evaluation Tool and information on how to use it, see the Toolbox at the end of this publication.

The certificate expires after one year. Then the HF can apply for a re-certification. This emphasizes that maintaining and improving quality is an ongoing process that requires all staff to continue thinking about what they do and continue striving to improve their own work and the overall functioning of the HF.

One health facility's waste disposal methods before and after training by QIP.

Before and after photos (taken by Sadiqs, Trainers and staff) show how things have improved.
These show before and after set-ups for delivery.

What QIP has achieved so far

This chapter looks at how many HFs within and outside of the seven target Governorates have benefitted from QIP so far. It also summarizes the findings of two assessments that have found significant improvements in the quality of services due to QIP and also significant increases the numbers of people covered by those services.

The raw numbers

In Governorates targeted by the YG-RHP

Every year, the GHOs of the seven Governorates participating in QIP issue announcements that a new batch of QIP participants will soon be selected. They invite HFs to apply if they meet the three qualifying criteria: water supply, budget to cover day-to-day operations, and at least one female staff providing reproductive health services. Financial constraints are only one of the reasons that not all applicants who meet those criteria are selected. Another reason is the practical necessity of building QIP's capacity gradually, improving methods and tools and developing ever larger pools of qualified Sadiqs, Trainers and Evaluators.

Thirty-seven HFs were selected for Batch One in 2006 and 2007. By the end of 2007, thirty-one had proceeded to the stage where they were ready for evaluation. Thirty were found to have services of sufficiently good quality that they were officially certified in March 2008. It is now estimated that from 10 to 15 percent of HFs that begin participating in QIP will either not stay the course (that is, the Maa-salama or Bye-bye Principle will be applied) or else fail evaluations – possibly because they are still doing just one or two things wrong (e.g., disposing of waste improperly) and putting their patients at unnecessary risk. These HFs can apply to participate in future batches or, if they have failed their evaluations, can simply apply for re-evaluation when they feel they are ready.

Towards the end of 2007, a total of 116 HFs were enrolled in Batch Two and, of those, 111 were in the target Governorates while five were in Laheg Governorate (see next section). Of those in the target Governorates, 79 were ready for evaluation and certification by the end of 2009. There have been delays mostly because it is taking time to build up large enough pools of qualified Sadiqs, Trainers and Evaluators to meet the demand but also because the current security situation in Yemen disrupts travel. It is now expected that all Batch Two HFs that have stayed the course will be evaluated later in 2010 and that most will pass their evaluations and be certified.

For the reasons mentioned above, there also have been delays in carrying out the annual re-evaluation and re-certification of the 30 Batch One participants that were certified in March 2008. None of these delays are matters of serious concern but, instead, are simply the kinds of challenges that any new programme can expect to face as it proceeds. The problem comes down to being ambitious and then learning through experience that resources cannot be mobilized quite so quickly.

Due to delays in processing Batch Two, the announcement inviting HFs to apply for participation in Batch Three were not made until late 2009/early 2010. By July 2010, a total of 95 HFs were enrolled in Batch Three and, of those, 76 were in the target Governorates while 19 were in other Governorates (see next section). It is expected that most of these will be ready for evaluation and certification in 2011.

In other Governorates

GHOs, DHOs and HFs in other Governorates are becoming well aware of QIP and its achievements and have been asking if they can participate, too. Under the YG-RHP, QIP is not budgeted for their participation but is able to give them technical support if they are able to cover the costs. Initiatives given technical support by the YG-RHPs QIP team include:

- With financial support from the European Union, five HFs in Laheg are among the Batch Two participants and are well on their way towards evaluation and certification.

- With financial support from the French NGO Aide Médicale Internationale (AMI), 14 HFs in Al-Hodeidah are among the Batch Three participants and have begun taking the QIP approach to quality improvement.
- With financial support from Yemen's Social Fund for Development (SFD), five HFs in Hadramout are among the Batch Three participants and are on their way towards QIP-based quality improvement. In addition, the GHO in Hadramout plans to become a technical support facility for QIP in that Governorate and in neighbouring Al-Maharah and Shabwah and QIP is providing technical support and monitoring progress with a view to learning lessons that might be applied in other cases where GHOs could become technical support facilities. These three vast and sparsely populated eastern Governorates cover more than half of Yemen's territory.
- In 2009, with financial support from WHO, QIP supported technically the quality department at MoPHP to hold two workshops: one of them for four hospitals in the governorates of Aden, Sana'a and Taiz and taught them how to establish quality committees and start a process of quality improvement. The second is for ten HCs in the city of Sana'a using the QIP approach to quality improvement.

Figure 3. Governorates, their populations and numbers of public health facilities with reproductive health services supported by QIP and already certified or well on their way towards evaluation and certification (July 2010)

Governorates	Estimated 2008 population	Number of public HFs[a]	Public HFs with Reproductive Health Services (HF/RHSs)	HF/RHSs certified or on way to certification through QIP
The seven YG-RHP target Governorates:				
Abyan	485,752	125	44	23
Al-Mahweet	555,717	145	103	23
Amran	966,483	132	105	12
Hajjah	1,668,389	190	112	43
Ibb	2,377,501	229	165	35
Mareb	267,291	95	61	26
Sana'a[b]	1,017,256	197	114	23
Subtotal	7,335,379	1,113	704	185 (26%)
Three non-YG-RHP Governorates[c]				24
All 21 Governorates	22,198,000	3,073	1,719	209 (12%)

[a] The 3,073 HFs include 2,258 Health Units, 635 Health Centres and 180 Hospitals.
[b] Sana'a Governorate takes in the suburban and rural areas surrounding Sana'a City, which is a Governorate in itself.
[c] Laheg, Al-Hodeidah and Hadramout.

Figure 4. Health facilities certified or on way to certification by QIP (July 2010)
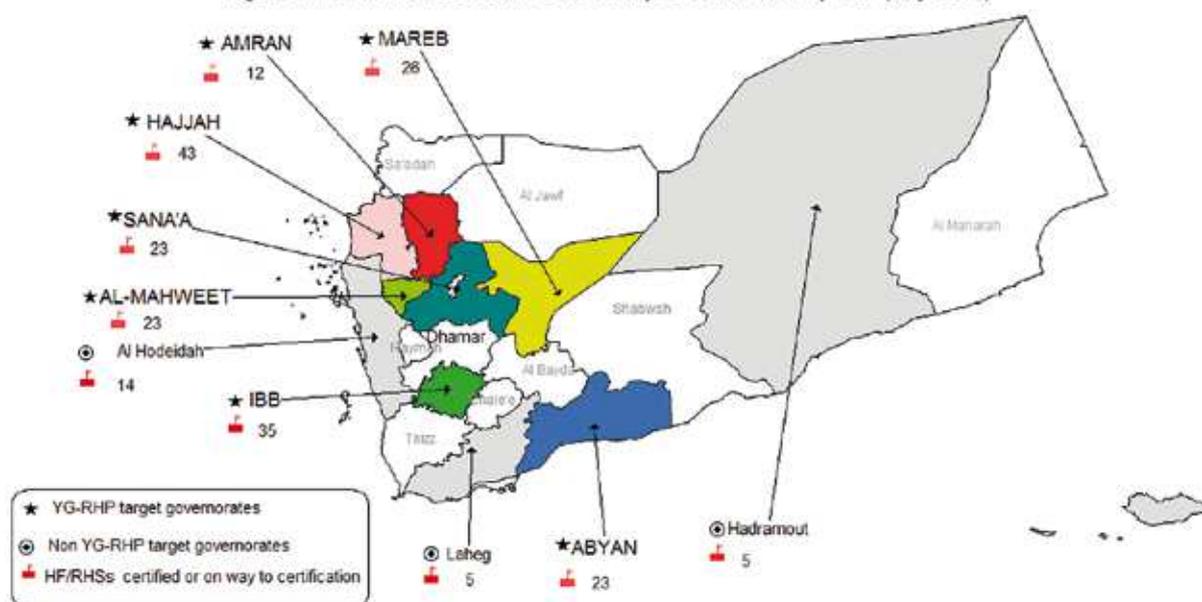
In all Governorates

So far, then, QIP guidance and support has been extended to a total of 248 HFs (37 in Batch One, 116 in Batch Two and 95 in Batch Three) in the seven target Governorates and in three other Governorates. Some have fallen by the way-side – either through application of the Maa-salama principle or by failing their evaluations – and others are not sufficiently well advanced to be included in the total of 209 HFs in Yemen where the QIP approach has been successfully applied or is now being applied with expectations of success.

Figures 3 and 4 summarize the numbers and show how they are distributed across Yemen. In the seven Governorates targeted by the YG-RHP, there are 1,113 public HFs. Of those, 704 (63 percent) provide reproductive health services and, of the latter, 185 (26 percent) have been certified or are well on their way towards evaluation and certification.

Countrywide, there are 3,073 public HFs. Of those, 1,719 (56 percent) provide reproductive health services and, of the latter, 209 (12 percent) have been certified or are well on their way towards evaluation and certification.

Batch One (2006–2008) results

Quantitative results

In 2008, an assessment reviewed user data from the 30 HFs that were certified after participating in Batch One.[12] Comparing 2006 data with 2007 data from Yemen's national health information system, it found:

• Couple Year Protection (CYP) due to family planning services provided by those HFs had increased by 68 percent in Abyan, 63 percent in Al-Mahweet, 68 percent in Amran, 45 percent in Hajjah, 22 percent in Ibb, and 101 percent in

Sana'a. The only exception to that trend of increase was Mareb, where the numbers indicated a CYP decline of 33 percent from 1,799 CYPs to 1,200 CYPs. Later on it was clarified that before QIP, each and every visit was counted as a user while afterwards the number of users and the number of visits per user were correctly differentiated.

- Skilled birth attendance had increased by 59 percent in Abyan, 48 percent in Al-Mahweet, 18 percent in Amran, 20 percent in Hajjah, 39 percent in Ibb, and 8 percent in Sana'a. The only exception to that trend of increase was Mareb, where the attended deliveries declined by 13 percent from 738 to 516 but, again, this was due to errors in record keeping before QIP.
- Antenatal coverage (measured by first visits of pregnant women) had increased by 11 percent in Abyan, 35 percent in Al-Mahweet, 35 percent in Amran, 53 percent in Hajjah, 59 percent in Ibb, 48 percent in Mareb, and 23 percent in Sana'a.

The conclusion was that, in general, QIP was helping HFs to extend their services to far more patients than they had been covering in the past.

Qualitative results

The 2008 assessment included telephone interviews with a number of actors involved in Batch One. They were asked, "Have you noticed any before-QIP to after-QIP changes in the Batch One HFs?" Their answers can be summarized as follows:

- **The Directors General of GHOs and visiting international consultants** (on contract to the YG-RHP and others) said the results had exceeded their expectations and QIP was creating a new culture where health care providers "owned" health care services. This new culture was spreading far beyond the Governorates and HFs that were official participants in QIP. Of equal importance, was growing awareness at higher levels in the health system of the need to aim for "total quality." In fact, "a quite staggering" number of people at all levels of the health system now believed in the QIP approach to quality improvement.
- **Seven Sadiqs** said that, whereas staff of the facilities had worked on their own before QIP, they were now working as teams. As teams, they were proudly setting targets, striving to reach those targets and measuring their achievements. Once passive observers, they had become active problem-solvers. Whereas budgets were once hidden and there was mutual distrust and jealousy among staff, budgets were now transparent and everyone knew what the revenues and expenditures were. Staff knowledge and skills had increased dramatically and, with better budget control, staff more often had the equipment and supplies they needed to do their jobs well. For example, improvements in waste disposal, sterilization and general hygiene had been remarkable. As a result of all those improvements, staff absenteeism had declined substantially while staff trust of Governorate health officials, the Sadiqs and the Trainers had increased. The Sadiqs said that, now, whether working as health officials in their own Governorates or as Sadiqs in other Governorates, "we are constantly getting telephone calls from HFs asking us to do this or that."

"MIDWIVES START GOING INTO COMMUNITIES"

So said one of the Reproductive Health Trainers interviewed for the 2008 assessment. She added, "And people notice and respond very positively. There is more energy for starting new approaches in health education, for example, or for more outreach activities. Even administrative staff are more friendly and interested in the problems of the users."

- **A number of QIP Trainers** mentioned visible improvements in staff performance and transparency and in "directors daring to delegate" to staff. The fact that participation was voluntary was creating the feeling of ownership. As one Trainer said, "they start to ask me questions and bring forward problems I had never heard of."
- **Two Evaluators** made comments similar to those of the Sadiqs and Trainers. From their perspectives as staff of the Quality Department of the MoPHP's Curative Care Sector, they added that QIP was an important MoPHP mechanism for improving quality throughout Yemen's health system. They also said, in particular, that the evaluation and certification components of QIP were increasing health care providers' and the general public's interest in the MoPHP's work.

Costs

The 2008 assessment calculated the average direct cost of providing QIP support to a HF until it qualified for certification and these are shown in Figure 5. These included fees and per diem expense allowances for Sadiqs, Trainers and Evaluators and costs of repairs, equipment, supplies and certification ceremonies. They did not include the costs of administering QIP through the YG-RHP and strengthening its capacity to support HFs through training of Sadiqs, Trainers and Evaluators. The latter costs can be seen as (mainly front-end) investments that strengthen the overall capacity of the MoPHP, GHOs and the High Institute for Health Sciences and give additional training to staff who, when they not are acting for QIP as Sadiqs, Trainers and Evaluators, have other important roles in Yemen's health system.

Figure 5. Estimated average direct costs per HF supported by QIP, 2008

Item	Average	Average cost per item in US$
Sadiq visit	4 to 5 days	480
Trainers (approx. 2 visits by each of the three types of Trainer)	7 to 8 days	1,800
Evaluators	2 days x 3 persons	400
Certification Ceremony and rewards	–	800
SUB TOTAL	–	3,480
Material and equipment	–	2,000
Small repairs	–	1,000
SUB TOTAL	–	3,000
TOTAL		US$ 6,480

A WINNING FORMULA: BETTER SERVICES = MORE PATIENTS = MORE REVENUE = MORE CAPACITY TO KEEP IMPROVING SERVICES

Saleh Al-Sormi is Director of Shibam Hospital (Al-Mahweet Governorate) and Abdulrahman Al-Masna'i is Director of Amran Family Health Centre (Amran Governorate). These two health facilities were among the 30 Batch One QIP participants that achieved certification in March 2008. In a joint interview in May 2010, the two Directors shared their "before QIP" and "after QIP" experiences.

Before QIP there had been no regular staff meetings, no planning and very weak financial controls. Hygiene and sterilization procedures were inadequate and this was leading to unnecessary patient infections. Midwives often had little or no training in family planning and were unable to provide good counselling. Patients were not happy with the services and neither were staff, yet staff had been following the same routines for years.

With guidance and support from QIP, staff began having weekly meetings where everyone's contributions were welcome. Together, they found solutions to problems they experienced or observed during their daily rounds and, once per month, they reviewed the past month's data on patients and revenue and agreed on how to allocate any surplus. They established better systems for recording patient data and they used that data plus demographic and health data from their catchment areas to draw up annual plans.

Now working as teams, staff soon improved hygiene, sterilization and counselling standards and began community outreach. Shibam Hospital established a Community Health Committee (with three of their staff and two school teachers) and it became their ears, eyes and voice in the community. Amran Family Health Centre set aside a comfortable room where women can meet and "health friends" (trained peer educators) can teach them about family planning and reproductive health.

At Shibam Hospital, patient numbers have increased from 120 per month before QIP to more than 1,700 per month today. Core funding from the GHO has remained at YER (Yemen Riyals) 200,000 per month but revenues from user fees have grown from YER 120,000 to YER 750,000 per month. This has allowed them to repair the building and sewage system, add a reception area and operating theatre, increase staff from 32 to 52, and add an afternoon shift. At the March 2008 certification ceremony, Al-Mahweet's Governor presented them with an award as the best HF in the Governorate and it helped them secure a grant from Cyprus to improve emergency delivery services. Their relations with their GHO and DHO are much improved and, recently, when they requested two new doctors' residences, they were built and ready for occupancy within six months. Plans are underway to increase their core operating budget to YER 1.2 million per month and they are talking to Yemen's Social Fund for Development (SFD) about financing for an additional hospital floor.

At Amran Family Health Centre, patient numbers have been increasing month after month and they have used the increased revenue to turn the Centre's grounds into a park that makes visitors feel welcome, to increase their staff from 6 to 30 and (soon) to operate around the clock so they can provide emergency services whenever people need them. Before QIP, they always had difficulty recruiting new staff but, now, they have to turn qualified applicants away. Not only have their own direct relations with the GHO and DHO improved but their patients have become their advocates, approaching the GHO and DHO on their own initiative and asking them to give the centre new equipment.

Both Directors agree, however, that the most important lesson they learned from QIP is how to make the best possible use of what you already have. If you are lucky, that may result in increased revenue. But even without increased revenue you can improve your services and increase staff, patient and community satisfaction.

Batch Two (2008-2009) impacts

A qualitative assessment applying the EFQM model

In May 2010, the Health Management Research and Training Institute (HMRTI) branch in Yemen published the findings of their YG-RHP-commissioned qualitative assessment of QIP. [13] Using the EFQM model as a starting point, it measured results in terms of user satisfaction, provider satisfaction and community satisfaction. It used semi-

Shibam Hospital's new Community Health Committee holds meetings with different community groups to listen to their concerns and suggestions.

QIP-supported health facilities find that meeting with community leaders can turn them into strong advocates who help facilities get the resources they need.

structured questionnaires for one-on-one interviews, guidelines for focus group discussions, and stratified sampling to select 50 HFs to be covered. These included: 15 HFs that had been part of Batch Two and were now ready to be certified; a control group of a comparable 15 that had not participated in QIP; 15 in Batch Three that were just starting to participate in QIP; a control group of a comparable 10 that were not participating in QIP.

User satisfaction

The assessment found that users were more satisfied with the services provided by the 15 facilities that had participated in Batch Two of QIP. They most often mentioned the following things as being of better quality in the Batch Two facilities: reception areas, immunization services, antenatal care, first aid, and treatment of everyday health problems such as coughs, colds and fevers. The vast majority said that the family planning services were better and so were the services for birth attendance. While saying so, they frequently emphasized satisfaction with having female staff available. They often cited better attention to privacy (with screens and curtains), the availability of furnishings and general cleanliness. By contrast, the lack of such things featured prominently in their complaints about other HFs.

It should be noted, however, that users were not fully satisfied with the services provided by any HFs, whether they had participated in QIP or not. Their most common complaints were lack of pharmacies, laboratories, X-ray machines[14] and female doctors (even if there were other female staff) and, also, lack of certain services (e.g., midwifery reaching into the community) that were actually available but of which they were not aware.

Provider satisfaction

Health providers were well aware that users were not fully satisfied with the services they were able to

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[13] HMRTI (2010).

[14] Under YG-RHP, QIP does not intervene in diagnostic or curative services but, as mentioned elsewhere the QIP approach could be applied to all servies and the intention is that it will do so in future.

offer, and this was true whether or not their HFs had participated in QIP. The reasons they most often mentioned were lack of comprehensive medical services and lack of the qualified health professionals, equipment and supplies that would make such services possible.

In general, however, the providers were much more satisfied with services they were able to deliver when working in the Batch Two HFs. The things they mentioned closely matched the things users mentioned when describing what was better about Batch Two facilities. They explained that some of these things were better owing, in part, to the new equipment, supplies and repairs that had been their rewards for results achieved while participating in QIP – for example, chairs, curtains, screens, cupboards, autoclaves, oxygen cylinders, weighing scales, delivery beds, baby cots, repair of doors, and painting of walls. While explaining that, they also made it clear that the guidance and training offered by QIP were the major factors.

Providers working in Batch Two facilities were optimistic that they would be able to sustain the quality of services they were now able to offer owing to QIP. However, they were worried that support from their GHOs and DHOs could weaken if QIP is not sustained. In addition, they hoped that the momentum achieved by QIP might continue to build until users not longer complain that they lack the capacity to diagnosis and treat serious and complicated diseases and injuries.

Community satisfaction
The assessment gave preference to opinion leaders (e.g., sheikhs, imams and teachers) for one-on-one interviews and focus group discussions measuring community satisfaction. Their assessments of the comparative quality of services offered by Batch Two and other HFs closely matched those of the

Now attracting more patients, Dhula'a Hamdan Education Hospital used some of its new revenue to buy a water purification unit and solve a problem with local water quality.

users and providers. They added that the limited capacity of local HFs, whether they had participated in QIP or not, meant that communities had low expectations and used local HFs mostly for antenatal services, immunizations and treatment of everyday ailments. For serious illness, people travelled to HFs (often private) they believed could offer better services.

Community members who had never used local HFs were often wrong in believing that these facilities did not offer certain services or did not have qualified staff even when they did. This reflected the lack of confidence Yemeni people generally have in the health care services available to them. However, it also emphasized the need for more information and outreach services, so people know what is actually available.

"Before" and "after" comparison of service utilization
While the 2010 assessment was largely qualitative, it also looked at reproductive health service utilization numbers for the twelve months prior to the QIP Sadiqs' first visits and the 18 months after

those first visits. Since it generally takes from 14 to 18 months from the first visit to the evaluation that may result in certification, this provided a quantitative measure of QIP's achievements. Figure 6 summarizes the findings by focusing on the sample of 15 Batch Two HFs and comparing only the numbers from the first quarter immediately before the Sadiqs' first visits to the numbers from the sixth quarter after the Sadiqs' first visits.[15]

Recommendations

The HMRTI assessment team concluded their report with recommendations:

- **For QIP:** that it continue to be flexible and address each HF's particular weaknesses and take advantage of its particular strengths; that it provide more monitoring and guidance by increasing the number of visits by Sadiqs; and that it pay more attention to monitoring facilities that have already been through the QIP cycle with a view to ensuring sustainability of the quality already achieved and of staff efforts to continue improving quality.

- **For health facility managers:** even if their facilities are not participating in QIP, that they do more to encourage staff involvement in decision-making; to ensure staff have the training, equipment and supplies they need; and to communicate their facilities' needs to DHOs and GHOs. They should also do more to interact with communities and apprise them of what services their facilities can offer and do more to involve various stakeholders (DHOs, GHOs, local councils and community members) in trying to get pharmacies and laboratories established in or near their facilities.

- **For health facility staff:** even if their facilities are not participating in QIP, that they make greater effort to adhere to the schedules set for their services and to gain more knowledge and skills through additional training; that they interact more with their managers and DHOs and GHOs to make sure they get the training and other support they need; and that they interact more with communities and encourage them to provide their frank opinions and suggestions.

Figure 6. Utilization of services in the sample of 15 HFs participating in QIP's Batch Two, comparing before and after data from the HFs' records

Use in numbers of:	1st quarter before	6th quarter after	Change
Oral contraceptives	3,423	4,257	+24.4%
Condoms	2,303	2,830	+22.8%
Injectable contraceptives	249	437	+75.5%
Antenatal care	233	422	+81.1%
Intra-uterine devices (IUDs)	29	10	−190.0%
Skilled birth attendance	60	342	+470.0%

[15] The HFs reported so little use of IUDs that the figures for them are not sufficiently meaningful to suggest a trend. Since the national figures for IUD use show a similar pattern, this may be due to supply shortages plus a lack of staff trained in IUD insertion. Until 2009 community midwives were not allowed to insert IUDs but now this has been officially added to their job description.

QIP's future

This chapter discusses recent actions taken by the MoPHP and GTZ to lay out the next steps for establishing QIP as a permanent programme that will drive the continual improvement of the quality of health services across Yemen and that will also make significant contributions towards extending services to everyone in Yemen.

The National Health Sector Strategy

In 2007, the YG-RHP's Component 1 began supporting the Health Sector Review (HSR). Key participants included representatives not only from the MoPHP and GHOs but also from the Ministry of Local Authorities (MoLA), Ministry of Planning and International Cooperation (MoPIC), Ministry of Finance (MoF), and many others. This was because the MOPHP is neither the only authority deciding how resources for health are allocated nor the only authority overseeing health providers (staff) and facilities in Yemen.

The HSR began with a Status Quo Analysis (SQA). Using the EFQM model as its framework (see Annex 1), the SQA was a highly participatory, comprehensive and in-depth look at how well Yemen's health system was satisfying users, providers and communities and what strengths or weaknesses in its inputs (leadership, staff, planning, infrastructure, and so on) and processes were causing it to succeed or fail. The SQA concluded with a final report in early 2008[16] and then proceeded, again in a highly participatory way, to define 23 health sector benchmarks or targets.[17] That was accomplished by the end of 2009.

Initially, 2015 was set as the target year but as the HSR proceeded towards development of a National Health Sector Strategy[18] the target year was moved to 2025. The targets are clustered into nine thematic areas, as follows:

Leadership: Mobilizing political commitment; closing gaps and completing legislation and regulations; reorganizing the health system's structure; improving the system's management capacity; strengthening inter-sectoral and inter-partner coordination, harmonization and alignment towards a Sector-Wide Approach (SWAp); strengthening participation by local authorities and civil society in policy development, implementation and service delivery.

Service delivery/processes: Comprehensive primary health care within District health systems; good quality of health services in all HFs and at all levels, with private HFs invited to join in quality improvement and assurance; expanding role of health providers (staff) in improving environmental health and protection; readiness for emergencies; achieving the Millennium Development Goals (MDGs).

Staff: Consensus among relevant educational institutions on manpower strategy; fair policies for staff retention and motivation; a performance evaluation system; unified education curricula; systematic introduction of continuing education, job descriptions and employment criteria; a unified registration and licensing system.

Planning: Standard planning procedures and formats; a unified information system; a continuously updated health map; resource allocation focus on primary health care; regular and periodic monitoring and evaluation; standard criteria for health facility infrastructure.

Management information system: Unified indicators and reporting forms; improved staff capacity to collect and use data; learning from local and partners' experiences; tailoring type of data collected at each level according to the levels' needs; providing useful information to support decision making; inter-sectoral coordination of health and demographic surveys and other research; automation (electronic and over the internet) of management information.

Infrastructure: Using health map data in planning new infrastructure; using District health system guidelines and essential service packages as guiding references; updating and implementing standards for infrastructure and operation of health facilities; comprehensive and sustainable maintenance systems for buildings and equipment.

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[16] MoPHP (2008).
[17] MoPHP (2009).
[18] MoPHP (2010).

Medicines and health technology: Regular updating of national policy on pharmaceuticals; unified organizational and functional structure for pharmaceuticals and medicines; reorganizing the logistics system; review and control of medicines and equipment pricing; prevention and control of the smuggling of medicines; increasing the government budget for medicines and equipment; staff in-service training; list of minimal equipment per health facility and of minimal criteria for maintenance.

Health financing: Increasing government expenditure on health; regulating and smoothing budget flows into the health system; strengthening health system efficiency in utilizing financial resources; encouraging and regulating private investment; strengthening the role of health committees, health development councils and local councils in increasing health financing; institutionalizing health expenditure review and accounting procedures; mechanisms for protecting the poor, including national health insurance schemes; encouraging partners' contributions and initiatives within Yemen's priorities; review of cost sharing mechanisms; introducing taxes to fund health system (e.g., on cigarettes, qat, pesticides, and so on).

Monitoring and evaluation: Regular monitoring of client satisfaction and of health system sub-sector performance; joint annual reviews of strategies and achievements; regular monitoring of health system contributions to national goals.

The National Health Sector Strategy was endorsed by a national workshop of key stakeholders in February 2010 and subsequently approved by the National Cabinet. The QIP is now seen as a key mechanism for achieving strategies in the service delivery/processes cluster of the National Strategy.

ENSURING CONSISTENCY AND COORDINATION AND CONSOLIDATING GAINS

The core QIP team works closely with the Quality Unit, Curative Care Sector, MoPHP. The Unit's Director, Rajaa Al-Masabi, says the four Sectors of the Ministry have a number of donor-supported initiatives with various approaches to quality assurance and improvement. She points to two major initiatives, in particular, each with aims consistent with those of the YG-RPH's QIP:

- Since 2006, USAID has been supporting the Basic Health Services (BHS) project which aims to extend health services to remote communities in the Governorates of Amran, Al-Jawf, Mareb, Sa'adah, and Shabwah. The project is renovating health units, establishing mobile units, providing housing for health providers, providing basic equipment and supplies, and training doctors and midwives in antenatal and postnatal care, emergency obstetric care, counselling, and community education. It uses a "best practices" approach which is less comprehensive but not inconsistent with the QIP approach.
- Also since 2006, the Netherlands and the United Kingdom's Department for International Development (DFID) have been supporting the Maternal and Newborn Health Programme (MNH). Focussing on hospitals, it aims to provide access to midwifery and obstetrics of good quality and uses its own quality improvement approach.

Currently, the Quality Unit does its best to keep well-informed about these initiatives and ensure consistency and coordination. In the months ahead, it will be collaborating with the QIP team and all others concerned to consolidate efforts, establish one mechanism for assuring and improving the quality of health services and for certifying HFs so that users know which ones deliver services of acceptable quality.

GTZ's 2010 Programme Progress Review (PPR)

GTZ's standard practice is to divide longer-term programmes into phases and, near the end of each phase, to conduct a Programme Progress Review (PPR) that concludes with recommendations either to terminate or to continue into the next phase with whatever changes of direction, emphasis or content may be appropriate. Since its second (2007-2010) phase was nearing an end, GTZ commissioned a PPR of the YG-RHP. The PPR mission, headed by an independent consultant, spent two weeks in January 2010 holding meetings, focus group discussions and workshops with a wide range of people involved in the YG-RPH's Components 1, 2 and 3.

Issued at the end of March 2010, the PPR report concluded that Component 2, QIP, had very successfully promoted quality improvement as an essential part of efforts to strengthen Yemen's health system. The Minister had made quality improvement a top priority for the MoPHP and had asked the Director General of the Health Policy and Technical Support Unit to report to him directly on efforts to establish QIP as a permanent programme and scale it up to cover all HFs in Yemen. Meanwhile, the personnel (Sadiqs, Trainers and Evaluators) had been trained, tools and procedures had been tested and found to be effective and assessments had shown that QIP was significantly improving the quality and reach of services provided by HFs.

The PPR report's recommendations for the final (2010-2013) phase of the YG-RHP included that Component 2 support efforts to:

1. Establish a structure in the MoPHP to implement QIP, with participation by the Sadiqs, Trainers, the High Institute for Health Sciences, and others.
2. Develop a strategy for the country-wide roll-out of QIP.

No matter their age or gender, all Yemeni people deserve the best possible health care.

3. Do a cost-effectiveness analysis, with separate elements looking at initial investments and at sustainable operating costs.
4. Establish an independent accreditation body that not only evaluates facilities and issues accreditation certificates but also supports capacity building.
5. Harmonize the various approaches to quality improvement used by the MoPHP and others.
6. Develop and test a QIP approach for facilities that do not meet the current criteria for participation in QIP.
7. Involve QIP facilities in the voucher scheme promoted by Component 5 of the YG-RHP.
8. Look at the feasibility of involving community-based midwives (that is, ones not working as staff of HFs) in QIP.
9. Expand the scope of QIP to cover all health services provided by public HFs.
10. Explore ways of embracing private HFs more fully.

These ten recommendations are all consistent with the recent decision to make QIP a key mechanism for achieving the benchmarks in the processes cluster of the Health Sector Benchmarks for 2015. Together with those Benchmarks, they provide good indications of the directions QIP will be taking over the next three years as it becomes well-established as a sustainable programme and is rolled out to cover all Governorates and all HFs, public and private, within those Governorates.

A call to action

Over the coming three years, the Ministry of Public Health and Population and the Yemeni-German Reproductive Health Programme will be working with partners at all levels to agree on the details. Exactly what structures and processes will be put in place to make QIP a permanent and sustainable programme? Exactly what will be the plan and time-schedule for scaling it up until it covers all Governorates, Districts and their public and private HFs? What would be a realistic target date for ensuring that 100 percent of the Yemeni people have access to health services that meet acceptable standards and are continuing to reach beyond those standards? All of those questions await answers.

Answering them will require strong commitment and engagement from all stakeholders in Yemen's health system: public and private HFs, their staff, their users, the communities in their catchment areas, users and communities not yet served by HFs, health authorities at District, Governorate and national level, health research and training institutions, the Ministries of Finance and of Local Authorities, as well as existing and potential international development partners. The Ministry of Public Health and Population and the Yemeni-German Reproductive Health Programme hereby call on all of them to join us in efforts to realize our vision of excellent HFs that reach all Yemeni people, especially the poorest and those living in the smallest and remotest settlements.
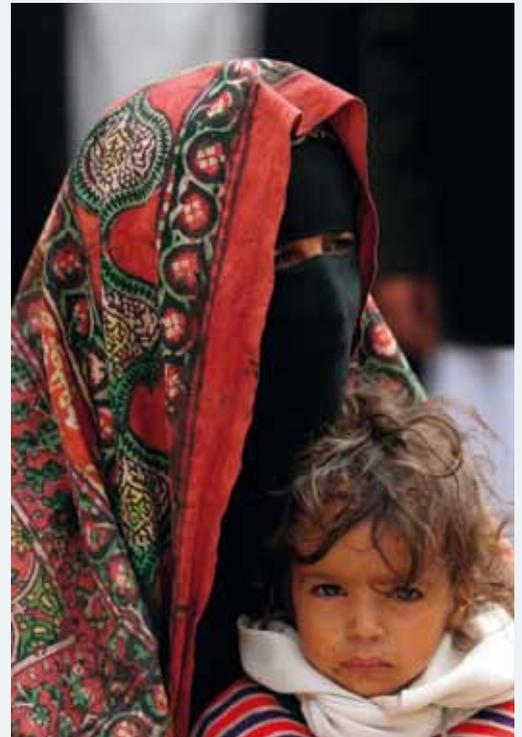
With good health and education for its fathers, sons, mothers and daughters, Yemen's future will always be full of promise.

Annex 1. Quality improvement concepts

This annex summarizes the basic concepts that informed the development of QIP.

Health and its determinants

The World Health Organization (WHO) defines health as "a state of complete physical, social and mental well-being, and not merely the absence of disease or injury."[19] Anyone's health is determined by many factors including their:

Natural characteristics – e.g., age, gender, inherited conditions

Social status – e.g., education, income, job and rank

Behaviour – e.g., hygiene, diet, exercise, risk-taking

Total environment – e.g., availability of safe drinking water, effective sanitation, nutritious food and clean air; safety of roads, homes, schools and workplaces

Health system – e.g., availability and quality of primary health care services

The fact that there are so many determinants of health means that, no matter how good a health system may be, it cannot guarantee that everyone will have a long and healthy life. However, organizations in the health sector can interact with those in other sectors (water, education, transportation and so on) and advocate for measures that prevent injury, disease, disability or premature death. They can also provide health-related information, education and communications to the general public or to particular groups within the public (e.g., young unmarried men and women). For example, they can advocate and educate for public action concerning a minimum marriage age, education of young people on life skills, family life preparation and family planning.

In addition to taking a holistic approach to health and supporting prevention in all sectors of society, a good health system (according to the WHO definition) has three core objectives:

To deliver effective health care with medical and therapeutic measures to preserve and improve the health condition of patients;

To be responsive to patients' legitimate expectations that they will be treated with courtesy, compassion and respect;

To provide fair treatment for all with no barriers (e.g., unaffordable user fees) that deny anyone access to the health care they need.

Three perspectives on the quality of health care

Health care users (patients), health care providers (managers, doctors, nurses, midwives, and other staff of facilities) and public health authorities (who represent or serve the general public at various levels, from national to local) look at health care from three different perspectives. Each of these perspectives has its own logic in assessing the quality of health care:

1. **Health care users' logic** is that patients and their families and communities will make timely use of a health care if they:

 • Know when they may have a health problem that requires medical attention (that is, they are sufficiently well informed to recognize a potential problem)

 • Have sufficient autonomy to make their own decisions (and are not disqualified from doing so due, for example, to their gender or poverty)

 • Are not discouraged by rumour, fear, ignorance, superstition or religious belief from going to health care providers

 • Know the providers will be courteous, compassionate and respectful and provide them with friendly counselling, consultation, treatment and follow-up

 • Know the providers will respect their needs for privacy and confidentiality

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[19] WHO (2000).

- Know the providers have the equipment and supplies (including medicines of good quality) they need to deliver safe and effective diagnosis and treatment
- Know HFs will be hygienic and, also, comfortable from personal, social and cultural perspectives (e.g., with separate waiting areas for women)
- Are not discouraged by such things as a HF's distance from their home, inconvenient opening hours, long waiting lists, long waiting times, obscure or unsafe location, or uninviting or difficult entranceway
- Can afford whatever fees may be charged and are not expected to pay unofficial fees.

2. **Health care providers' logic** is that they will be able to offer good health care if they:
- Are motivated by conviction that their work is well worth doing
- Have or can acquire the technical skills and experience they need
- Have good relations with patients and their families and communities
- Have self esteem, high ethical standards, work well as team members, and are able to give and receive due praise and fair criticism
- Have the equipment and supplies (including medicines) they need
- Have fair wages or salaries and good working conditions
- Are guided by clear and intelligent policies pertaining to professional ethics and discipline, work-life balance and career advancement.

3. **Public health authorities' logic** is consistent with WHO's definition of "quality of care"[20] and asks that a health system or facility be:
- **Effective,** delivering health care based on up-to-date scientific evidence and known to result in improved health

- **Efficient,** optimizing the use of available resources and avoiding waste
- **Accessible,** delivering health care that is timely and convenient for patients in settings where appropriate skills and resources are available
- **Acceptable/patient-centred,** responding to users' needs, preferences and social and cultural sensitivities
- **Equitable**, providing good health care to all regardless of their age, gender, income, social status, ethnicity, place of domicile (e.g., small and remote village or urban neighbourhood), or other characteristics[21]
- **Safe,** delivering health care in a way that minimizes risk and harm to users.

The need for trade-offs and compromise

The three perspectives on quality (or three logics) can also be seen as three competing sets of interests. Any health system has limited resources, so there is always competition and often conflict between and within the sets and, therefore, need for trade-off and compromise. In Yemen, one common area of conflict surrounds the wish to make hospitals accessible, affordable, effective, and safe. Ideally, there might be a hospital in every village but there are more than 38,000 villages, many of them are very small and remote and this would be far too costly and, also, extremely dangerous. If there were a hospital in every village and someone in a village went to its hospital with acute appendicitis, they might find that the doctor had not treated a case of appendicitis for many months and had forgotten the correct procedures.

Following are three scenarios illustrating ways in which there may be conflicts between the interests of health care users, health care providers and public health authorities:

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[20] Bengoa, R et al (2006).

[21] Equitability is of particular concern to health care users and health authorities throughout the world. This is especially true in countries' like Yemen, where the financial and human resources available for health care are limited, there is little or no public health insurance, many people are poor, and the majority live in rural areas and often in remote villages far from facilities with qualified providers and the appropriate equipment and supplies.

Scenario 1, users and providers satisfied, health authorities not. Patients often want costly medicines and procedures, believing they are beneficial. Doctors are often happy to accommodate patients' wishes and collect the fees. Public health authorities, on the other hand, may have evidence that these medicines and procedures are dangerous or ineffective or, at least, not sufficiently effective to justify any costs that must be covered by public spending. Common problems include over-use of sonography to capture "baby pictures" during pregnancy, over-use of hospital beds by elderly patients and over-prescription of "lifestyle drugs" and vitamins.[22]

Scenario 2, providers and health authorities satisfied, users not. A public health authority may encourage family planning and give bonuses to providers who increase the years of contraceptive protection given to couples. This could encourage providers to sterilize patients while failing to explain that the procedure is irreversible and getting only weak consent, thus violating the patients' rights. Common problems include providers insisting on procedures that go against patients' wishes (e.g., delivery in HFs rather than at home by traditional midwives) and on testing for infection (e.g., for HIV) without providing proper counselling and guarantees that the results will be handled in a strictly confidential manner.

Scenario 3, users and public health authorities satisfied, providers not. Measures that may please users and public health authorities, such as round-the-clock opening hours of a Health Unit, often do not please providers. Common problems include resistance to new measures that are proposed by health authorities and welcomed by users, because providers think these measures are not what they have been trained to do and undermine their authority to decide what is right. In Yemen, for

example, it took a long time for doctors to stop performing surgeries for stomach ulcers and tonsillitis even though advances in medical science had rendered those procedures obsolete and they involved unnecessary costs and risks.

Three quality improvement strategies

There is a vast body of scientific literature on strategies to improve the quality of health care but a brief summary of a few key concepts will suffice. A good starting point is WHO's widely accepted definition of "quality of care," already presented in bullet points under "Public health authorities' logic" (two subsections before this one). Based on that definition, **quality improvement has six objectives: effectiveness, efficiency, accessibility, acceptability (by patients), equitability, and safety.**

The literature suggests three main strategies for achieving those objectives:

Quality Control (QC) with monitoring, evaluation and supervision to ensure that managers and staff are performing in accordance with an established set of standards and achieving expected results. Typically, QC involves flow charts, targets and tools for gathering the data necessary for measuring results.

Quality Assurance (QA) takes QC a step further, so it is more dynamic and responds to continual change. It has been defined as "systemic managerial transformation designed to address the needs and opportunities of all organizations as they try to cope with the increasing changes, complexity and tension within their environments."[23]

Total Quality Management (TQM) takes QA a step further by putting the people who run an organization at the decision-making centre of the quality improvement process. Rather than providing them with established standards and

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[22] "Lifestyle drugs" is the term widely used to describe medications for conditions that are non-life threatening and non-painful such as wrinkles, baldness, impotence, and acne.

[23] Creel, L C et al (2006).

mechanisms for achieving them, it asks them to develop their own standards and mechanisms. Highly participatory, it can strengthen enthusiasm and commitment and lead to long lasting organizational change. TQM asks managers and staff to focus on meeting the needs and expectations of their customers, clients or patients and on identifying challenges, building commitment, and promoting open decision-making. It uses processes such as working groups, brainstorming and consensus-building and, also, analytical tools such as flow charts and data gathering sheets.

A fourth strategy: Systemic Quality Improvement (SQI)

Systemic Quality Improvement (SQI) involves a large number of organizations from different levels of an entire system or subsystem (for example, a country's entire socio-economic system, its entire health system or just the health system of one of its regions). It gets them working together in order to continuously define and adjust standards and objectives, measure results, learn, introduce change, and improve the results. It also encourages them to compete in a constructive way so they can learn from each other and improve the whole system more comprehensively and at greater speed than if each of them were working in isolation.

When each organization is applying TQM to its operations and also participating in SQI with other organizations in the same system, the whole system is mobilized and the result can be a critical mass for change. SQI typically includes self-assessment by each organization, outside audit, peer evaluation, and participation of all organizations in drafting and approving improvement plans.

GTZ began supporting development of the SQI approach to quality improvement in 2002. By 2008, it was supporting the approach at national level in Guinea, Morocco and Cameroon and at provincial level in the Democratic Republic of Congo and it had supported establishment of the Systemic Quality Improvement (SQI) Network.[24]

The EFQM quality improvement model

The best known and most used way of visualizing a quality improvement process is a simple flow chart showing inputs (resources) followed by processes (activities) followed by results, with results divided into outputs (e.g., number of children provided with polio vaccinations) and outcomes (e.g., decrease in incidence of polio).[25] Using that simple flow chart as a starting point, as shown in Figure 7, the European Foundation of Quality Management (EFQM) has developed a quality improvement model where:

Inputs (in yellow) include leadership, staff, planning, resources (infrastructure, equipment, material, and finances) and partnerships.

Processes (in orange) refer to the actual operations of an institution. In a HF, for example, processes include such things as running of the administration, delivery of services for pregnant and new mothers and their infants and ensuring that facilities are hygienic, equipment is sterile and so are the hands of staff when operating on patients.

Results (in blue) are expressed in terms of user (patient) satisfaction, provider (staff) satisfaction and community satisfaction.[26]

[24] To learn more about SQI and the Systemic Quality Improvement (SQI), go to www.gtz.de/sqi .

[25] Donabedian, A (1980).

[26] The EFQM model has recently been revised somewhat but, since the previous version was used during the Health Sector Review and development of the QIP, it is retained here. To learn more about the EFQM and the revised model, go to www.efqm.org .

Figure 7. European Foundation of Quality Management (EFQM) model
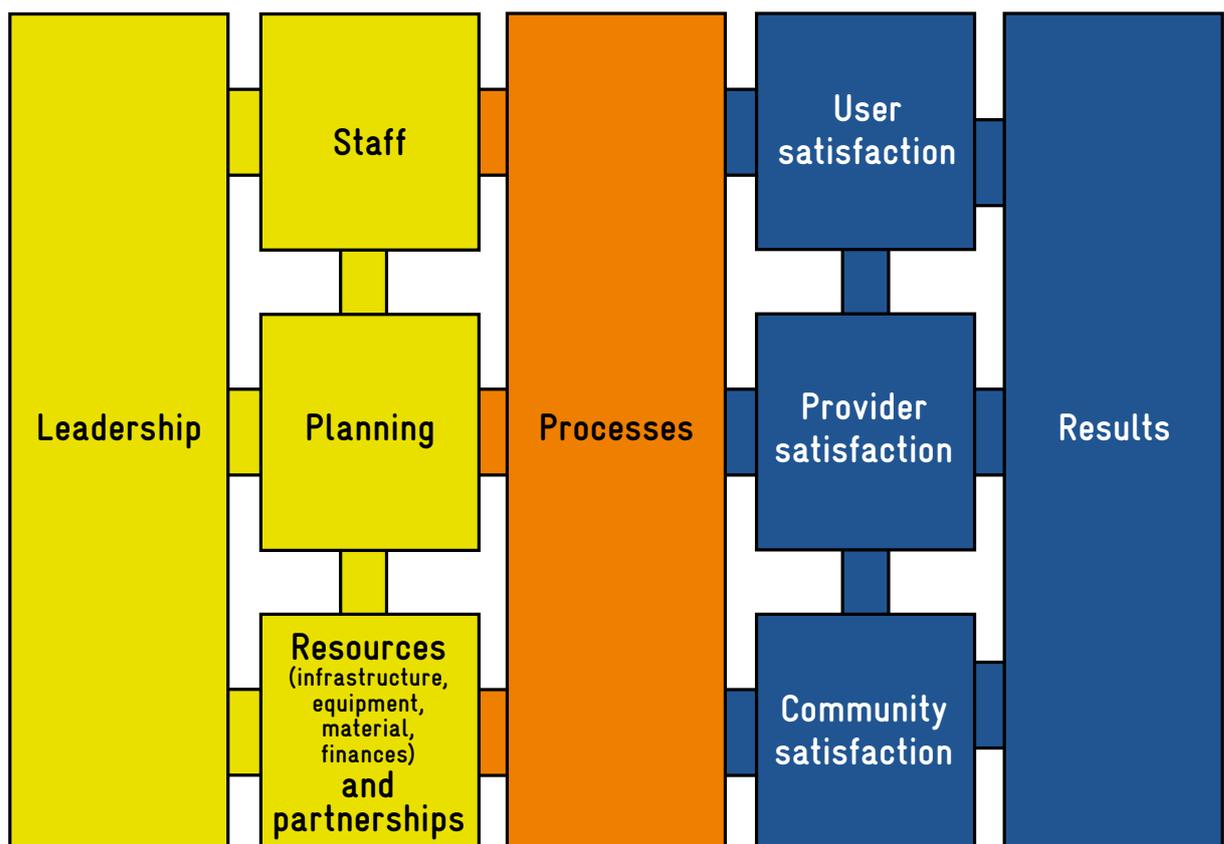
Bibliography

Alkuhlani, A et al (2009). Review of the High Institute of Health Sciences. Sana'a, Ministry of Public Health and Population, Republic of Yemen.

Al-Lawzi, M N (2009). Public Health Expenditure Review for the period from 2004 to 2007. Sana'a, Ministry of Public Health and Population, Republic of Yemen.

Bengoa, R et al (2006). Quality of Care: A Process for Making Strategic Choices in Health Systems. Geneva, World Health Organization.

Creel, L C et al (2006). Overview of Quality of Care in Reproductive Health: Definitions and Measurements of Quality. Washington, Population Council and Population Reference Bureau.

CSO et al (1998). Yemen Demographic and Maternal and Child Health Survey 1997. Calverton, Maryland, Central Statistical Organization (CSO), Ministry of Public Health and Population, and Macro International Inc.

CSO et al (2004). Family Health Survey 2003. Sana'a, Central Statistical Organization (CSO), Ministry of Public Health and Population, and Pan-Arab Project for Family Health (PAPCHILD).

Donabedian, A (1980). Explorations in Quality Assessment and Monitoring. Ann Arbor, Michigan, Health Administration Press.

Dujardin, B et al (2009). Practical guide to building a Quality Improvement Programme. (Unpublished). Sana'a, Ministry of Public Health and Population.

Hinrichsen, I et al (2010). Yemeni-German Reproductive Health Programme (YG-RHP), Programme Progress Review.

HMRTI (2010). Assessing the Effects of the Yemeni German Quality Improvement Programme (YG-QIP) on Utilization of Services, User and Staff Satisfaction. Final Report, May 2010. Sana'a, Health Management Research and Training Institute (HMRTI).

Mary Stopes International et al (2008). Perceptions and Realities: Yemeni men and women and contraception. London, Mary Stopes International, Ministry of Public Health and Population (Yemen), German Development Cooperation (GTZ), Social Marketing for Reproductive Health Services, and KfW Development Bank.

MoPHP (2006). National Reproductive Health Strategy 2006-2010. Sana'a, Ministry of Public Health and Population, Republic of Yemen.

MoPHP et al (2008). Multiple Indicator Cluster Survey 2006 (Yemen, Monitoring the situation of children and women). Sana'a, Ministry of Public Health and Population, Pan-Arab Project for Family Health (PAPCHILD) and United Nations Children's Fund (UNICEF).

MoPHP (2008). The Joint Health Sector Review Status Quo Report. Sana'a, Ministry of Public Health and Population, Republic of Yemen.

MoPHP (2009). Health Sector Review: Health Sector Benchmarks for the Year 2015. Sana'a, Ministry of Public Health and Population, Republic of Yemen.

MoPHP (2010). National Health Sector Strategy. Sana'a, Ministry of Public Health and Population, Republic of Yemen.

UN (2009). World Population Prospects: The 2008 Revision. New York, Population Division, Department of Economic and Social Affairs, United Nations.

UNDP (2009). Human Development Report 2009. New York, United Nations Human Development Programme.

World Bank (2010). Gross national income per capita 2008, Atlas method and PPP. World Development Indicators Database, revised 10 April 2010. Washington, World Bank.

WHO (2000). A Quick Reference Compendium of Selected Key Terms Used in the World Health Report 2000. Geneva, World Health Organization.

Toolbox

1. Assessment tool (used by Friends to guide the advice to the improvement process)
   a) First visit
      - I.   Arabic
      - II. English
   b) Further visits
      - I.   Arabic
      - II. English

2. Management tool (used by Management Teachers to guide
   the advice to the improvement process) (Arabic + English)
   Annexed: target group calculation (Arabic)

3. Hygiene tool (used by Hygiene Teachers to guide the
   advice to the improvement process) (Arabic + English)

4. Reproductive Health tool (used by Reproductive Health Teachers
   to guide the advice to the improvement process) (Arabic + English)

5. Final evaluation tool (used by Evaluators when a Health
   Facility is ready for certification) (Arabic + English)

The documents can be downloaded from the homepage of the Yemeni-German
Reproductive Health Programme: http://www.YGRHP.org
You can also request a CD-Rom with the documents from: YGRHP-info@gtz.de