

Improving health care system-wide

A publication in the German Health Practice Collection



Acronyms and Abbreviations

BMZ	Germany's Federal Ministry for Economic	INAS	National Institute for Health Administration
	Cooperation and Development	KfW	KfW Entwicklungsbank
CDTMR	Centres for Diagnosis of Tuberculosis and	MDG	Millennium Development Goal
	Respiratory Disease	MoH	Ministry of Health, Royal Kingdom of Morocco
DHS	Demographic and Health Survey	MoPHP	Ministry of Public Health and Population,
DHSA	Department of Hospitals and Ambulatory Care,		Republic of Yemen
	Ministry of Health	PADRESS	Programme to Decentralize the Health System
EFQM	European Foundation for Quality Management		with Focus on Reproductive Health
EU	European Union	PDCA	Plan-Do-Check-Act
GDC	German Development Cooperation (including	QA	Quality Assurance
	BMZ, GIZ and KfW)	QC	Quality Control
GIZ	Deutsche Gesellschaft für Internationale	QIP	Quality Improvement Programme
	Zusammenarbeit ¹	SQI	Systemic Quality Improvement
GPHC	German Health Practice Collection	TQM	Total Quality Management
GTZ	Deutsche Gesellschaft für Technische	UN	United Nations
	Zusammenarbeit (now GIZ)	UNDP	United Nations Development Programme
HMRTI	Health Management Research and Training	WHO	World Health Organization
	Institute	YG-RHP	Yemeni-German Reproductive Health Programme
IMF	International Monetary Fund		

¹ The Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH was formed on 1 January 2011. It brings together the long-standing expertise of the Deutscher Entwicklungsdienst (DED) gGmbH (German development service), the Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH (German technical cooperation) and InWEnt – Capacity Building International, Germany. For further information, go to www.giz.de.

Improving health care system-wide

Approaches in Morocco and Yemen

Acknowledgements	4
The German Health Practice Collection	5
Executive summary	6
Quality improvement in health care systems	8
Morocco's Concours Qualité	12
/emen's Quality Improvement Programme (QIP)	28
Achievements and challenges	32
essons learnt from Morocco and Yemen	33
Peer review	34
References and further reading	35

Acknowledgements

The German Federal Ministry for Economic Cooperation and Development (BMZ) would like to thank Morocco's Ministry of Health (MoH) and Yemen's Ministry of Public Health and Population (MoPHP) for welcoming Germany's technical cooperation in the design and establishment of Morocco's *Concours Qualité* ('Quality Competition') and Yemen's Quality Improvement Programme (QIP). For their contributions to this publication, BMZ would like to thank:

For the sections on *Concours Qualité*:

- Dr Abdelali Belghiti Alaoui, Director of the Department of Hospitals and Ambulatory Care (DHSA), Ministry of Health (MoH); Dr Meziane Bellefquih Abdelkrim, Regional Director of Health, Tanger Tétouan; Dr Abdelwahab Cherradi, Regional Director of Health, Meknès Tafilalet; Dr Abdelilah Kasri, Acting Regional Director of Health, Grand Casablanca; Dr Nejoua Belkâab, Concours Qualité Coordinator; Driss Bessar, Concours Qualité Statistician, and all other staff in the MoH's Rabat and Regional and District offices who sat for interviews
- Directors and staff of L'Hôpital Baouafi (Grand Casablanca), L'Hôpital Mohammed V (Grand Casablanca) and L'Hôpital Mohammed VI (Tétouan) and Chief Medical Officers and staff of Centre Santé Mers Sultan (Casablanca), Centre Santé Moulay El Hassan (Tétouan) and Centre Santé Riad (Meknès)
- Tilman Herberg, Director, GIZ-Morocco; GTZ staff and consultant who provided technical support to *Concours Qualité*: Dr Ulrich Knobloch, Dr Anselm Schneider, Friedeger Stierle, and Sati Sayah; Prof Dr Bruno Dujardin, School of Public Health, Université Libre de Bruxelles
- Sabine Ablefoni, Systemic Quality Improvement Network (SQI)/GIZ and Saâdia Aglif, Technical Advisor for coordinating inputs and supporting the writer's mission to Morocco; Jolanda Sattler, Communications Officer, GIZ-Morocco for translation services.

For the sections on QIP:

- QIP's core team: Saleh Nagi, Component 2 (QIP)
 Manager; Dr Ali Jahhaf, former Component 1
 (Health Sector Reform) Manager; Rashad Mokbel,
 QIP Technical Advisor in Management;
 Mohammad Al-Jaberi, QIP Technical Advisor in
 Hygiene; Polina Steinborn, former QIP Technical
 Advisor in Hygiene; Christiane Gebhardt, QIP
 Technical Advisor in Midwifery; Soha Saqqaf and
 Reem Al-A'nsi, Component 2 (QIP) Administration Officers
- The Directors General of Governorates, QIP Sadiqs, Evaluators, Management Trainers, Reproductive Health Trainers, and Hygiene Trainers who sat for interviews
- Dr Jamila Al-Raiby, Deputy Minister, Population Sector of the MoPHP; Rajaa Al-Masabi, Director, Quality Unit, Curative Care Sector of the MoPHP
- Dr Martin Kade, Health Policy Advisor, GTZ;
 Dr Bruno Dujardin, School of Public Health,
 Université Libre de Bruxelles
- Dr Kai Stietenroth, Programme Coordinator, YG-RHP; Dr Regine Meyer, former Programme Coordinator, YG-RHP, who coordinated inputs and supported the writer's mission to Yemen.

Itziar Larizgoitia and Manfred Zahorka for their independent peer reviews.

Anna von Roenne, Managing Editor of the German Health Practice Collection, EPOS Health Management, for coordinating the production of this publication.

Stuart Adams, Consultant Social and Health Researcher and Writer, for researching and writing this publication; Andrew Wilson, Consultant Editor/Writer, for editorial assistance.

German Health Practice Collection

Objective

In 2004, experts working for German Development Cooperation (GDC)² and its international and country-level partners around the world launched the German HIV Practice Collection and, in 2010, expanded it into the German Health Practice Collection (GPHC). From the start, the objective has been to share good practices and lessons learnt from BMZ-supported initiatives in health and social protection. The process of defining good practice, documenting it and learning from its peer review is as important as the resulting publications.

Process

Managers of GDC-supported initiatives propose promising ones to the Managing Editor of the GHPC at ghpc@giz.de. An editorial board of health experts representing GDC organizations at their head offices and in partner countries select those they deem most worthy of write-up for publication. Professional writers then visit selected programme or project sites and work closely with the national, local and GDC partners primarily responsible for developing and implementing the programmes or projects. Independent, international peer-reviewers with relevant expertise then assess whether the documented approach represents 'good or promising practice', based on eight criteria:

- Effectiveness
- Transferability
- Participatory and empowering approach
- Gender awareness
- Quality of monitoring and evaluation
- Innovation
- Comparative cost-effectiveness
- Sustainability

Only approaches meeting most of the criteria are approved for publication.

Publications

All publications in the GHPC describe approaches in enough detail to allow for their replication or adaptation in different contexts. Written in plain language, they aim to appeal to a wide range of readers and not only specialists. They direct readers to more detailed and technical resources, including tools for practitioners. Available in full long versions and summarized short versions, they can be read online, downloaded or ordered in hard copy.

Get involved

Do you know of promising practices? If so, we are always keen to hear from colleagues who are responding to challenges in the fields of health and social protection. You can go to our website to find, rate and comment on all of our existing publications, and also to learn about future publications now being proposed or in process of write-up and peer review. Our website can be found at www.german-practice-collection.org. For more information, please contact the Managing Editor at ghpc@giz.de.

² GDC includes the Federal Ministry for Economic Cooperation and Development (BMZ) and its implementing organizations Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH and KfW Entwicklungsbank (KfW).

Executive Summary

This publication looks at separate initiatives aimed at improving health system quality in two countries, Morocco and Yemen. Their similarities and differences are examined, and a number of "lessons learnt" are drawn from the two experiences.

Quality improvement approaches

Improving health system quality is an essential part of helping developing countries to meet healthrelated Millennium Development Goals. A variety of quality improvement strategies exist, including the Systemic Quality Improvement (SQI) methodology developed by German Development Cooperation (GDC) on behalf of BMZ. Since 2002, Germany has supported a SQI-based approach called Concours Qualité (in English, 'Quality Competition'), which has now been applied in national health care systems in Guinea, Morocco and Cameroon and at provincial level in the Democratic Republic of Congo. The Concours Qualité approach encourages all organizations in a system (or clusters of organizations within it) to work together in order to continuously define and adjust standards and objectives, measure results, learn, introduce change, and improve results.

Morocco's Concours Qualité

Between 2004 and 2010, GTZ worked on behalf of BMZ with the Moroccan Ministry of Health to design and run a uniquely Moroccan Concours Qualité, which would support the country's ambitious efforts to decentralize and reform health services, with an emphasis on improving maternal health and reducing child mortality. The Concours Qualité itself was designed to undergo continual quality improvement so its effectiveness would be evaluated after each of its editions and revised for the next one.

The *Concours Qualité* can be summarized as proceeding in seven steps:

Step 1. Recruitment and preparation of participating health facilities

- Step 2. Self-assessment using questionnaires
- Step 3. Analysis of self-assessments by the Concours Qualité evaluation unit
- Step 4. Peer evaluations by two specially trained senior health professionals or officials, who visit each health facility and work with the staff to refine their self-assessment
- Step 5. Preparation of Improvement Plans by the facility staff at the end of the peer evaluation visit
- Step 6. Meta-analysis and awards, in which the central *Concours Qualité* evaluation unit analyses the results across the whole health system
- Step 7. Implementation of Improvement Plans by participating facilities.

The 1st (2007) edition of the *Concours Qualité* was launched in January 2007 and participants were given roughly a month to finish their self-assessments. A total of 188 institutions volunteered from all Regions and included Health Districts, hospitals and health centres. The 2nd (2008) edition of the *Concours Qualité* was launched in March 2008, when a total of 212 institutions volunteered.

The Ministry of Health decided to make participation in the 3rd (2010) edition of the *Concours Qualité* mandatory for Health Districts and hospitals. It also extended the *Concours Qualité* to cover maternity wards (as participants on their own, not just as part of hospitals) and Centres for Diagnosis of Tuberculosis and Respiratory Disease (CDTMR), and to establish technical taskforces in Regions and give them responsibility for covering health centres.

Yemen's Quality Improvement Programme (QIP)

The QIP was launched in mid-2006 by the Yemeni-German Reproductive Health Programme (YG-RHP) and has had three "batches" (editions) since then. (In the fall of 2010, the YG-RHP published *Quality improvement for health care providers: With friendly*

guidance and support. This can be consulted by readers wishing more information equivalent to the level of detail provided in this publication on Morocco's Concours Qualité.)

There are a number of ways in which Yemen's QIP differs from Morocco's *Concours Qualité*. For example, participation in QIP remains voluntary, and depends on the health facilities seeing the value in participation to their own staff and operations. Health facilities can leave at any time without penalty or sanction. QIP limits participation to small batches of health facilities each year and this allows it to provide more intensive support from the *Sadiqs* (Arabic for "friends") who are its equivalent of the *Concours Qualité* peer evaluators. In addition, QIP has a strong on-site training component, where specially trained experts in health facility management, hygiene and reproductive health provide training that helps staff address the issues specific to their health facility.



The Moroccan and Yemeni approaches to quality improvement give high priority to maternal health and education, one aim being to produce healthy, well-nourished children like these three Yeminis.

Results

To date, both of the initiatives described have been able to provide only "process results" rather than the results of rigorous evaluations of their impacts on the countries' health systems (though such an evaluation is soon to begin in Morocco). One positive process result has been rapid expansion to cover ever more

health facilities. In Morocco, the *Concours Qualité* has expanded from 188 health facilities in the 2007 edition to 665 in the 2010 edition and has become the country's main mechanism for the continual monitoring, evaluation and improvement of its health care system and institutions. Qualitative evidence from different facilities and different levels of the Moroccan health system indicate that the *Concours Qualité* has succeeded in implanting the culture of quality improvement in institutions that have participated from one *Concours Qualité* edition to the next.

In Yemen, QIP guidance and support has been successfully extended to a total of 209 health facilities. Results have included significant increases in uptake of family planning services, skilled birth attendance, and antenatal and other services and this had meant increased revenue.

Lessons Learned

Despite their differences – which reflect differences in the health systems, cultural traditions and economic conditions in the two countries – a number of common lessons can be drawn from the experiences of the *Concours Qualité* and QIP. In particular, both experiences suggest that a staff team approach to quality improvement can be highly effective in any health care institution, and that as the culture of quality improvement spreads and takes root, it develops momentum and tends to become sustained by team spirit.

Accelerating quality improvement to achieve ambitious goals (e.g., the MDGs), however, may require substantial front-end investment in what are usually the weakest institutions in a health care system, those that serve low-income, rural and especially vulnerable populations. Finally, experience shows that competition, certification and other rewards should never discourage weak institutions from doing their best to improve. This is especially so since the weakest institutions are usually the ones serving the populations in greatest need of improved health care.

Quality improvement in health care systems

Article 25 of the Universal Declaration of Human Rights states that all people have a right to the health and social care they need to maintain their own and their family's health and well-being in the event of illness, disability and old age. Ever since it was adopted by the UN General Assembly in 1948, fulfilling its promise of universal access to essential health and social care has been a top priority of developing countries and international partners.

In 2000, the UN General Assembly established eight Millennium Development Goals (MDGs) for 2015. Three of them – Goal 4 to improve children's health and reduce child mortality, Goal 5 to improve maternal health and reduce maternal mortality, and Goal 6 to combat HIV/AIDS, malaria and other diseases – became key indicators against which developing countries measure their progress towards universal access.

The World Health Organization (WHO) used its World Health Report 2000 to focus on improving the performance of countries' health care systems so they can do their utmost to accelerate progress towards the three health-related MDGs (WHO, 2000). It and subsequent WHO reports (e.g. WHO, 2010) provide guidance on how countries can find their own answers to three questions:

- How can they finance a health care system with the capacity to deliver essential health care to everyone?
- How can they protect people from the financial consequences of serious and debilitating injury and disease?
- How can they make optimal use of available resources, no matter how limited those resources may be?

Quality improvement strategies can provide some of the answers to all three of the above questions, especially the third. In the case of a village or neighbourhood health centre, for example, the question might be restated as follows: Given the financial, human and other resources you already have at hand, how can you deliver health care of the best possible quality to everyone in your community?

Defining "quality of care"

A 2006 WHO publication identifies six criteria that must be met before an entire health care system or an institution within that system (for example, a health authority, hospital or health centre) can be said to be providing health care of the highest quality (Bengoa et al., 2006). It must 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 patients' and their families' needs, preferences and social and cultural sensitivities
- Equitable providing essential health care to all regardless of their age, gender, income, social status, ethnicity, place of domicile, or other characteristics
- Safe delivering health care in a way that minimizes risk and harm.

At the same time, any attempt to improve the quality of care provided by a health care system or one of its units should look at it from the perspectives of all the main stakeholders, including health care users, health care providers and public health authorities. Each has different needs, interests and expectations which must be taken into account if quality is truly to be improved.



"Acceptable/patient-centred" care requires community consultation and, in Yemen, people are often more comfortable when this is done gender-by-gender.

Common quality improvement strategies

There is a vast body of literature describing many possible quality improvement strategies but these are three of the more commonly used ones:

- 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) is more dynamic and responds to continual change. Often applied to a large system and organizations within that system, it has been described 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" (Creel et al., 2006).
- Total Quality Management (TQM) puts not just managers but everyone who works for a system or organization at the decision-making centre of the quality improvement process. Rather than

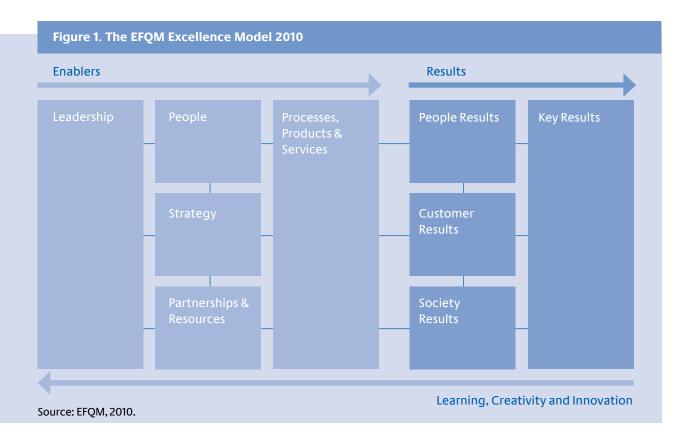
providing them with established standards and methods for achieving them, it asks them to develop their own standards and methods. Highly participatory, it can strengthen enthusiasm and commitment and lead to long lasting systemic or organizational change.

Visualizing quality improvement

The literature also suggests many different models for visualizing quality improvement. One of the most widely used of these is the Donabedian model (Donabedian, 1980), a flow chart showing the three "pillars" of quality improvement: *inputs* (resources), *processes* (activities) and *results* (outputs and outcomes). Another model now used by many large organizations with branches in many different locations is the European Foundation for Quality Management (EFQM) model. Based on the Donabedian model and implying a TQM strategy, it asks everyone who works for an organization to collaborate in continual observation, recording and sharing of information, learning, creativity, and innovation.

Figure 1 shows a recent version of the EFQM model. In Donabedian terms:

- Inputs (in the first two columns of Enablers) include Leadership, People, Strategy, Partnerships & Resources.
- Processes (in the third column of Enablers) are grouped with Products & Services.
- Results (in the last two columns) include People Results, Customer Results, Societal Results and Key Results. Key Results are ones an organization uses to measure its progress and are equivalent to the indicators (e.g., the MDGs) used by cooperative development programmes and projects to measure their progress.



GDC's contribution: Systemic Quality Improvement (SQI)

Quality improvement for whole systems

When the MDGs were established in 2000, developing countries and their international partners all recognized they faced a daunting challenge. Achieving the MDGs would require massive transformation and strengthening of agricultural, education, health care and other systems so they could rapidly scale up production and delivery and improve the quality of their products and services.

Systemic Quality Improvement (SQI) is one of German Development Cooperation's contributions to meeting that daunting challenge. SQI does not pretend to be entirely new and original. Instead, it builds on the experience gained from applying strategies such as TQM and models such as EFQM. It is a learn-as-you-go approach to quality improvement

that is so flexible that it can work in any setting and, most especially, in resource-limited settings. Moreover, SQI is an approach that can work not just for single organizations but for whole systems, for clusters of organizations within those systems or even for two or more closely related systems or clusters within them.

Tailoring SQI to fit each country's unique circumstances

German technical cooperation began supporting development of SQI in Guinea in 2002 with an approach known as *Concours Qualité* or, in English, Quality Competition. By 2008, it was supporting the *Concours Qualité* approach in the health care systems at national level in Guinea, Morocco and Cameroon and at provincial level in the Democratic Republic of Congo. It had also supported establishment of the Systemic Quality Improvement Network.

The *Concours Qualité* approach encourages all organizations in a system to work together in order to continuously define and adjust standards and objectives, measure results, learn, introduce change, and improve results. It also encourages them to compete in constructive ways so they can learn from each other and can improve the whole system more comprehensively and at greater speed than if each of them were working in isolation. Ultimately, it aims to mobilize a whole system and achieve a critical mass for change. It involves self-assessment by each organization, peer evaluation, and participation of all organizations in drafting and approving Improvement Plans

► The Systemic Quality Improvement (SQI) Network's website

Located at www.gtz.de/sqi, the SQI Network's website provides information on the SQI approach, documentation on how it is being applied in different countries and some of the tools they use. During 2012, the website will be moved from GTZ to GIZ. It will have new documentation (now being developed) and will be kept up-to-date in future.

Morocco's Concours Qualité

The context

Morocco and its development challenges

Home to 32 million people, Morocco is a constitutional monarchy with a King, a prime minister and an elected bicameral parliament. Morocco's central government retains the authority to tax, budget and set overall policy but, since 1997, it has been engaged in administrative decentralization to its 16 Regions and their 70 Provinces and Prefectures.

From 2000 to 2010, Morocco's economy grew at an annual average of 4.6 percent (IMF, 2011). By 2009, its Gross National Income per capita was \$US 2,770 and only nine percent of its population was living below the country's official poverty line (World Bank, 2011). The UN's Human Development Report 2010 names Morocco as one the world's top ten countries for progress in human development over the past 40 years (UNDP, 2010). It gives the country a Human Development Index score of 0.567 (where 1.0 is ideal), placing it at 114 out of 169 countries and well within the Medium Human Development category. In addition, it gives Morocco a Gender Inequality Index score of 0.69 (where 0.0 is ideal) and ranks it at 104 out of 138 countries for gender inequality.

Morocco's single greatest challenge may be to reverse the damage done to its water quality by rapid urbanization, erosion and salinization.

Another major challenge is to raise the country's levels of education and adult literacy: With literacy levels of 68.7 percent among men and 43.2 percent among women, Morocco has the lowest levels of adult (>15) literacy in the Middle East and North Africa (UNDP, 2009).

Morocco's health care system and its challenges

Morocco's health care system is divided into two sectors: public and private. The Ministry of Health oversees the public sector which provides a hierarchy of 137 District, Regional and university hospitals and provides more than 2,200 other health care institutions including Centres for Diagnosis of Tuberculosis and Respiratory Disease (CDTMRs) and local health centres (Ministère de la Santé, 2010b). The private sector provides another 280 or so hospitals and health centres, mostly in Casablanca and other major cities. Many of these are associated with health insurance schemes and serve households where the main breadwinners work in the formal sector of Morocco's economy and pay for health insurance through payroll deductions (WHO, 2006a).

The entire health care system provides one doctor per 1,611 people but many divide their time between sectors; only 56 percent work mainly in the public sector. As a general rule, quality generates revenue and people prefer to work where they can have a good income. The shortage of all medical personnel is especially acute in rural areas.

The MoH has been on a course of reform since the mid-1990s. Under its last two five-year strategic plans (for 2003-2007 and 2008-2012) it has been building the capacity of the Ministry of Health to plan and administer health care and of Regions to share responsibility; building the capacity of hospitals and other health care facilities to make optimal use of their resources in order to improve the quality of their services and extend them to more people.

Morocco's last demographic and health survey (DHS) took place in 2003-04 and found there had been major improvements in health conditions and health care over the past 40 years but there were still significant weaknesses and inequalities (Ministère de la Santé et al., 2005b). For example:

 The maternal mortality rate was a very high 227 per 100,000 live births, more than 20 times the rates found in Western European countries.

- The infant (under one) mortality rate was a very high 40 per 1,000 live births countrywide and ranged from 33 in urban areas to 55 in rural area.
- Respiratory infections among children (under five) were common and spread fairly evenly across the population. When infected, 34.5 percent of all children received treatment by a health care professional but this varied from 43.3 percent in urban areas to 24.5 percent in rural areas and from 50.7 percent in the richest quintile of the population to 18.0 percent in the poorest.

As the following discussion will show, there has been significant progress since then and the evidence suggests that Morocco's new *Concours Qualité* approach to quality improvement has made significant contributions to that progress.



Dr El Aounia Benhouddou, Chief of Medicine at Centre Santé Moulay El Hassan in Tétouan holds examples in her hand as she explains how nursing students do surveys helping them identify how they can serve their community better.

Establishing Morocco's Concours Oualité

Starting with advocacy and consultation

GTZ (now GIZ)3 has been working in Morocco since 1975 and has had an office in the country's capital, Rabat, since 1999. In early 2004, it began partnering with the Ministry of Health on a five year (2004-2009) Programme to Decentralize the Health Care System with Focus on Reproductive Health (PADRESS). PADRESS was aligned with the Ministry's strategic plans (2003-07 and 2008-12) and was Germany's principle contribution to achieving three of the plans' objectives: to build capacity at central and Regional levels to plan and administer the health care system; to build the capacity of hospitals and health centres to plan and deliver services of good quality; to accelerate progress towards the three health-related MDGs, with emphasis on improving maternal health and reducing child mortality.

In May 2004, PADRESS began supporting a process of advocacy for Systemic Quality Improvement (SQI) and of consultations involving the National Institute for Health Administration (INAS) and representatives from Regional Health Offices, Health Districts, hospitals, and other health institutions to determine if and how the SQI approach could be adapted to fit Morocco. This process resulted in a December 2004 decision to design and launch a uniquely Moroccan *Concours Qualité*.

Laying the foundations

In January 2005, many of the same people who had participated in the advocacy and consultation process attended a seminar which developed the guiding principles of a *Concours Qualité* for Morocco:

³ GIZ was formed on 1 January 2011. It brings together the long-standing expertise of DED, GTZ and InWEnt. For further information, go to www.giz.de.

- Focus on processes. Better processes lead to better results.
- Engage the whole system. A system's weakest units undermine its strongest units. All units perform better when part of a well-integrated whole.
- Keep participation voluntary. Volunteers are motivated, and others will join in when they see what the volunteers are achieving.
- Reward improvement. Even the last in a competition should be congratulated for volunteering to participate and rewarded for improving performance. Participants should never be punished or discouraged for achieving less than the best results.

They also agreed on processes and supporting mechanisms, decided which institutions in the health care system should participate, and approved a plan of action to put everything in place for the 1st edition of the *Concours Qualité* in 2007.

Developing objectives and evaluation tools

Following the seminar, a technical taskforce developed the *Concours Qualité's* objectives and tools through consultations that included workshops and field-tests in institutions typical of those expected to participate in the 1st edition.

The six WHO criteria that define "quality of care" (described earlier in this publication) were restated as the *Concours Qualité's* six general objectives. These served as the basis for defining nine dimensions of quality along which participating institutions would do their self-assessments, as shown in Table 1.

Table 1. Dimensions of quality by type of institution participating in the Concours Qualité					
Dimension	Health District	Hospital	Health Centre		
Satisfaction (of community, staff)	X	X	X		
Ethics (of institution, staff)	X	X			
Accessibility, timeliness, continuity	X	X	X		
Rationalization of resources	X	X	X		
Safety, responsiveness	X	X	X		
Leadership, partnership	X	X	X		
Continuous improvement		X	X		
Technical capacity		X	X		
Functionality			X		

Source: GIZ/Ministry of Health, Kingdom of Morocco

The nine dimensions were broken down into "aspects." For example, one aspect of the "leadership, partnership" dimension might be "team work is established." Self-assessment guides were developed for each type of institution and they asked four questions pertaining to each aspect listed for institutions of that type. Each question related to one stage of the Plan-Do-Check-Act (PDCA)⁴cycle to emphasize that quality improvement should be a continual, cyclical process. The first three columns of Table 2, illustrate what a typical page in a self-assessment guide might contain.

The technical taskforce also developed guides for the experienced professionals who would be trained as peer evaluators and who would:

- assign scores based on answers to the four questions;
- add up these scores for an over-all quality score;
- use over-all quality scores to measure improvement from one quality competition to the next; and
- rank participating institutions from highest to lowest over-all score and from most to least improved and thus identify winners in each edition of the Concours Qualité.

Table 2 illustrates what a scoring sheet used by peer evaluators might look like.

Table 2. Example of questions and scoring used in self-assessment					
Aspect	Stage	Question	Score		
Teamwork is established	Plan	What methods has your health centre put in place to involve all staff in decision-making?	 0 - No methods 1 - Ad hoc team meetings 2 - Regular team meetings 3 - Written record of decisions taken 4 - Shared responsibility 		
	Do	How do you make sure information is distributed and shared among all staff?	 0 – No sharing 1 – Posting of information 2 – Systematic circulation 3 – Thematic meetings 4 – Feedback on information received from external sources 		
	Check	How do you evaluate staff satisfaction with their jobs and working conditions?	 0 – No evaluation 1 – Implicit observation 2 – Explicit observation 3 – Spoken communications 4 – Written surveys 		
	Act	What measures have you taken to motivate staff?	 0 – No measures 1 – Information sharing 2 – Team dynamic and spirit 3 – Involvement in decisionmaking 4 – Incentive system 		

Source: Concours Qualité

 $^{^4}$ Plan-Do-Check-Act is a widely used management approach; for a basic description, see Dale et al., 2007.

The understanding from the outset was that the *Concours Qualité*, itself, would undergo continual quality improvement. Each tool would be evaluated after each edition of the *Concours Qualité* and then revised so it would be more effective in the next edition, and also reflect new priorities set by Ministers of Health.

Establishing support mechanisms

Initially, three administrative bodies were established:

- The Concours Qualité steering committee, with senior representatives from the Ministry of Health and partner organizations (e.g., donors)
- The Concours Qualité technical support unit, based in the Ministry's Department of Hospitals and Ambulatory Care and providing administrative and technical support to the Concours Qualité
- The Concours Qualité evaluation unit, responsible for recruiting, training and supporting peer evaluators and for monitoring the Concours Qualité's impacts on the health care system.

In practice, the technical support unit and the evaluation units overlap and work closely with the National Institute for Health Administration (INAS) on curriculum and training.

Before launch of the 3rd (2010) edition of the *Concours Qualité*, **Regional** *Concours Qualité* technical taskforces were established to support decentralization of decision-making and more support for Health Districts. (Note that in most cases, the boundaries of Health Districts – délégations in French – correspond to the boundaries of Provinces or Prefectures.) In addition, Health District Concours Qualité focal points were given responsibility for liaising with Regional *Concours Qualité* taskforces and providing more direct hands-on support for district hospitals and health centres.

The two Concours Qualité units mentioned above, the INAS and, now, Regional Concours Qualité taskforces collaborate on the recruitment, training and support of a pool of well-qualified professionals who serve as peer evaluators (in French, "auditeurs/analystes"), while continuing to do their regular jobs. Initially, new recruits were drawn from among directors of hospitals, chief medical officers of health centres, managers of the Ministry of Health, Regional Health Offices and Health Districts and experts from cooperative development partners such as GTZ. As peer evaluators, they visit participating institutions to help their staff teams strengthen their selfassessments and develop Improvement Plans. Later in the Concours Qualité process, they do metaanalyses that result in the final scores and ranking required to identify winners.

As well as providing peer evaluators with training and the latest version of the peer evaluator guide, the evaluation centre also supports them with computers, software and a data entry and analysis team.

Called *Concours Qualité Pro*, the software is based on *Epi info* (v.6) and has electronic versions of the scoring sheets illustrated in Table 2.

Concours Qualité in action, step-bystep

The *Concours Qualité* approach can be summarized a cyclical process where each cycle – called an "edition" – consists of seven steps:

- Step 1. Recruitment and preparation of participating health facilities
- Step 2. Self-assessment using questionnaires developed especially for different types of health facilities
- Step 3. Analysis of self-assessments by the Concours Qualité evaluation unit

- Step 4. Peer evaluations by two specially trained senior health professionals or officials, who visit each health facility and work with the staff to refine their self-assessment
- Step 5. Preparation of Improvement Plans by the facility staff at the end of the peer evaluation visit
- Step 6. Meta-analysis and awards, in which the Concours Qualité evaluation unit analyses the results across the whole health system and identifies winners in various categories
- Step 7. Implementation of Improvement Plans by participating facilities

These steps and how they have evolved from one edition to the next – as the *Concours Qualité* itself undergoes continuous quality improvement – are described in detail below.

Step 1. Recruitment and preparation of participants

By November 2006, the required tools and mechanisms were in place, and an awareness campaign was launched that month. The first and subsequent awareness campaigns (one before each edition of the *Concours Qualité*) have included posters placed in Ministry of Health and Regional and Provincial/Regional health department offices, hospitals, health centres and other locations plus press conferences and other efforts to raise the interest of the media and get them to carry stories. They have also included Regional awareness sessions for the staff of institutions invited to participate in the *Concours Qualité*.

How this step has developed over time
The 1st (2007) edition of the *Concours Qualité* was launched in January 2007 and participants were given roughly a month to finish their self-assessments. A total of 188 institutions volunteered and they came from all Regions and included 39 Health Districts, 47 hospitals and 102 health centres. The 2nd (2008) edition of the *Concours Qualité* was launched in March

2008, when a total of 212 institutions volunteered, including 33 Health Districts, 53 hospitals and 126 health centres. Of those, 24 (62 percent) of the Health Districts, 39 (83 percent) of the hospitals and 37 (36 percent) of the health centres had participated in the 1st edition.

The PADRESS ended in 2010 and so ended GTZ/ GIZ's presence on the Concours Qualité technical taskforce in the Ministry of Health. The Ministry of Health decided to make participation in the 3rd (2010) edition of the *Concours Qualité* mandatory for Health Districts and hospitals. It also extended the Concours Qualité to cover maternity wards (as participants on their own, not just as part of hospitals) and Centres for Diagnosis of Tuberculosis and Respiratory Disease (CDTMRs) and established technical taskforces in Regions and give them responsibility for covering health centres. There were four waves of the Concours Qualité in 2010: in May/June, 68 Health Districts and 96 hospitals did their self-assessments; in July/August 52 CDTMRs did theirs; in August/September, 255 health centres; and in September/October, 92 maternity wards did their self-assessments.

Step 2. Self-assessment

The self-assessment step is based on written guides containing questionnaires designed especially for different types of health facility. These are filled out by staff teams in participating institutions, who have been trained for this in the initial awareness campaign. The 1st (2007) edition self-assessment guides asked participating Health Districts to answer 84 questions, participating hospitals to answer 132 questions and participating health centres to answer 105 questions.

How this step has developed over time

An assessment in November 2009 found that most participants found the guides and the self-assessment process very useful and emphasized, in particular,

how the process had helped draw staff together into teams, infuse them with team spirit and implant the culture of quality improvement.

Participants said the guides asked too many questions, some of which were difficult to understand because they used vague or unfamiliar technical terms, but they also felt there was need for additional questions that asked, for example, about things

institutions were doing on their own to improve the quality of their services.

The self-assessment guides were revised those for the $3^{\rm rd}$ (2010) edition had only 47 questions for Health Districts, 71 for hospitals, 57 for health centres, 50 for maternity hospitals, and 66 for CDTMRs. The fourth (2011) edition guides have been further revised, with the number of questions substantially reduced to 54 for hospitals.

Box 1. How Centre de Santé Riad has increased uptake of its maternal health services

Dr Souad Saâdi is Chief Medical Officer of Centre de Santé Riad in a poor neighbourhood of Meknès. She says participation in the *Concours Qualité* has taught her staff to keep good records, spot problems and find practical solutions. An early result was that they became more aware that young women often came to make appointments but then did not show up. Staff began going to homes to ask why and the young women said, when making their appointments, they saw men and women sitting at different desks but in the same room consulting with doctors. They did not come back because they were afraid they might be overheard when talking about very private matters.

To overcome problems, the staff asked local residents to help plan improvements to the building. Once a prosperous merchant's house, it had been converted to a health centre many years ago but had become badly run-down. The residents became so enthusiastic while planning that they offered to donate most of the labour and material needed to reconfigure the building (with separate consultation rooms for men, women and children), repair and repaint the walls, and install comfortable seating. Now proud of their health centre, the residents keep it well stocked with children's books and toys; one woman volunteers to come every day to find out who missed their appointments and to go to their homes and find out why.



While his pregnant mother gets a health check-up, a boy chats to Dr Souad Saâdi in the women's waiting area – made comfortable by women of the neighbourhood.

In late 2009, they introduced maternity classes using a curriculum developed by the Ministry of Health. These classes have contributed to sharp increases in women's uptake of the centre's maternal health services. In 2007, less than 40 percent of pregnant women came for consultations in their first trimester of pregnancy. Now, 100 percent come not only once during their first trimester but at least four times during their whole pregnancy. The staff's goal is to see 100 percent at least twice soon after they give birth and they are already up to 86 percent and expect to reach 100 percent within a year.

Step 3. Analysis of self-assessments

Completed questionnaires are collected by the *Concours Qualité* evaluation unit, where two analysts go through each one independently and assign scores of 0-4 for each answer. Two different analysts then compare the scores assigned by the first two and agree on the final scores that are entered into the *Concours Qualité Pro* software. There are various checks at the data entry and analysis stage to ensure accuracy.

How this step has developed over time

The November 2009 assessment found that the scoring system was not well-understood or accepted by representatives from some participating institutions. In particular, they felt it was not fair for a wide variety of institutions within each category (urban and rural, big and small, old and new, well-resourced and not-so-well resourced) to be given scores and then ranked from highest to lowest when some of them could not possibly be expected to have achieved the same standards that others had achieved. This was addressed in three ways in the 3rd (2010) edition:

- by assessing institutions on the basis of what they were doing to continually improve quality within their PDCA cycles;
- by placing more emphasis on how institutions were improving from one edition to the next; and
- by breaking down maternity wards into four categories according to the size and type of hospital they were in.

Step 4. Peer evaluation

Peer evaluators work in teams of two. One is the medical peer and, in his regular job, typically plays a senior role in an institution similar to the ones he is assigned to evaluate. The other evaluator is usually a manager or technical expert from the central offices of the Ministry of Health or from one of the Ministry's partner organizations or, in recent editions, from a Regional Health Office.

A team of two peer evaluators spends one day in each participating institution and divides that day into a logical sequence of four tasks. The first task is an introductory meeting with the institution's staff team to introduce and discuss the day's agenda. The second task is the peer evaluators' survey of the institution and its records, as well as interviews with staff members, all so the peer evaluators can make their own observations and compare them with answers in the staff team's self-assessment. The third task is to provide feedback to the staff team and work with them on refining their self-assessment. The final task is to work with the staff team on developing an Improvement Plan with which all agree. From the 2nd (2008) edition of *Concours Qualité* onward, while performing the four tasks, the peer evaluators also assessed the degree to which any institutions that had participated in previous editions had implemented their Improvement Plans and improved the quality of their services.

To make sure each team of two peer evaluators is performing well, it is supervised at least once during each edition of the *Concours Qualité* by an expert in evaluation from the Ministry of Health or one of its partner organizations. Peer evaluators are sometimes removed from the pool if supervisors find them unsuitable and unlikely to improve with further feedback.



Dr Mina Lahrech, Chief of Medicine at Centre Santé Mers Sultan in Casablanca tells an auditor what her staff team is doing to meet targets laid out in their improvement plan.

How this step has developed over time

A pool of 80 experienced health care professionals with three days of training and their own guidance manuals were ready to perform the peer evaluations for the 1st (2007) edition of the Concours Qualité. The pool of peer evaluators was increased to 90 for the 2nd (2008) edition and all 90 were put through a new training course (with more emphasis on practical teamwork) and given a revised guidance manual. These made it more clear that their role was not to inspect and pass judgement on participating institutions but, rather, to assist them in the careful review and refinement of their self-assessments and in preparation of their Improvement Plans. The pool was increased to 133 for the 3^{rd} (2010) edition and included 25 qualified to evaluate maternity hospitals and 18 qualified to evaluate CDTMRs.

The November 2009 assessment and the August 2011 interviews for this publication found that, while everyone agreed that the peer evaluation is an essential step and, for the most part, peer evaluations were proving successful, many felt that one day was not nearly enough for peer evaluators to perform all four of the tasks assigned to them. The November 2009 assessment also found that many questioned the qualifications of peer evaluators, their objectivity and way they conduct themselves. For the most part, these concerns reflected fears that peer evaluators would pass judgement and report their findings to Health District managers.

For the 3rd (2010) edition, measures to address such concerns included further enhancement of peer evaluator training sessions and the guidance manual. An effort was also made to ensure that peer evaluators were external – if not from outside the public health system at least from outside the Region where they were doing peer evaluations, and particularly not from institutions competing in that edition of the *Concours Qualité*.



At Centre Santé Mers Sultan in Casablanca, a map of the neighbourhood, the pledge "Médecine Solidaire" and objectives to improve its services are posted at the reception desk.

Step 5. Preparation of Improvement Plans

The final task is the preparation of an Improvement Plan, after the two peer evaluators and the staff team have agreed on an institution's strengths, weaknesses, problems and opportunities. The staff team should take the lead, while peer evaluators facilitate and offer comments and suggestions. For budgeting and other purposes, most institutions already have annual plans which the Improvement Plans should build on. The Improvement Plans of any institutions that have participated in previous editions should also build on previous Improvement Plans. Improvement Plans are also an important opportunity to implement new government policies and to target investments in a timely manner. (For examples, see Box 1 on how Centre de Santé Riad has increased uptake of its maternal health services and the later Box 4 on helping to reduce child mortality.)

How this step has developed over time

Many of those interviewed during the November 2009 assessment expressed concerns that these Improvement Plans were produced too quickly, as the fourth task in a one-day peer evaluation, and about the results. Some said that peer evaluators had been too assertive and more or less drew up the Improvement Plans themselves, while others said the Improvement

Plans were not well aligned with their annual plans or had significant gaps. The August 2011 interviews and site visits for this publication found, however, that the culture of quality improvement was taking root and that institutions that had participated in one or more editions of the *Concours Qualité* were doing self-assessments and developing and refining Improvement Plans on a continual basis and that these were becoming well-aligned with annual plans.

Box 2. Improvements at Hospital Mohammed V

Dr Ahmed Didane is Chief of Medicine and also the *Concours Qualité* focal point at Hospital Mohammed V in Hay Mohammadi-Aïn Sebaâ, near Meknès. While guiding a tour, he explains how they are doing a gradual upgrade of their building, furnishings, equipment and services and how it is all informed by what they are learning from the *Concours Qualité*. Along the way, he points out how hospitals and health authorities are learning from each other and making many of these improvements standard right across Morocco.

For example, right outside the front entrance they have posted the Ministry of Health list of standard charges for common procedures. Inside the entrance, they have placed the admissions booth on one side and the payment booth on the other. Everything is computerized, so no one can ask for anything more than the standard charge.

All wards are being refurbished with patient comfort and privacy in mind, including screens or draw curtains around beds or consultation areas and little touches to make them more homelike. The hospital has a new pharmacy with an IT system and everything else required to manage procurement, storage and distribution of medicines; new trolleys for instruments and supplies staff need for surgeries and other procedures; new procedures and equipment to make sure everything on these trolleys is sterilized after use and that medical waste is safely disposed. And so the tour went, with staff gathering around to explain, with apparent pride, everything they were doing to make their hospital as good as it can be.

Displayed in the lobby, waiting areas and elsewhere are lists and charts outlining plans and targets and monitoring results and one chart shows significant month-after-month increases in the number of patients coming to the hospital. Dr Didane points out that more patients mean more revenue and the capacity to pay for even more improvements.



At Mohammed V Hospital, the staff team has given careful attention to improving pharmaceutical procurement and management.

Step 6. Meta-analysis and awards

The scores assigned during the Analysis (Step 3) are adjusted during the peer evaluation (Step 4). Using the *Concours Qualité Pro* software, analysts enter the adjustments in the electronic scoring sheets for each institution.

When all calculations are done, the *Concours Qualité* technical support unit in the Ministry of Health produces a comprehensive report for internal use by the technical support and evaluation unit and other neutral parties. It provides the scores and ranks (overall, for each dimension and aspect and for improvement within PDCA cycles and from one *Concours Qualité* edition to the next) given to all participating institutions; Regional lows, highs and averages; and the top ranking ten in each category of institution. Public announcements name only the top ranking ten and the same should be true of any parts or summaries of the comprehensive report that go to non-neutral parties. Health District managers and staff, for

example, should not be able to see the scores and ranks given to any but the top ranking ten.

The Concours Qualité also gives awards for the top performers at ceremonies that receive considerable press attention (see text box). The ceremonies are attended by several Moroccan cabinet ministers, walis (heads of Regions), Provincial and Prefecture governors, directors of hospitals, chief medical officers of health centres, and also by representatives of the European Union (EU) and other major donors.

How this step has developed over time

From the 2nd (2008) edition of the *Concours Qualité* onward, the software has included a calculation of changes in scores from one edition to the next. It then transfers the results into scoring grids for all institutions in the same category and ranks them from highest to lowest for improvement in each dimension, aspect and overall quality.

Box 3. Recognizing winners but also everyone else who participates

Dr Abdelwahab Cherradi, currently Regional Director of Health in Meknès-Tafilalet, was working in Agadir and served as a peer evaluator for the 1st edition of the *Concours Qualité*. When he took up his new post he learned that the staff of some of the Region's health care institutions felt discouraged because they had scored so low by comparison to ones in some other Regions. They had to be convinced that the whole point of the *Concours Qualité* was not to be the best from the start but to aspire to be the best over time and to improve from one edition to the next. By the 3rd edition, some of these same institutions were winning awards for being among the best in their categories. He believes that all institutions should be warmly congratulated for participating in the *Concours Qualité* and strongly encouraged to keep trying.

Dr Abdelali Belghiti Alaoui, Director of the DHSA, makes the point that the *Concours Qualité* awards are important vehicles for promoting the *Concours Qualité*. He notes that the first-, second- and third-place winners are proud of the press clippings and framed certificates they can display in the lobbies or waiting rooms of their institutions.

To date, the senior managers of winning institutions have been awarded with study tours to Germany, Tunisia and Canada and they or their staff teams have been provided with additional training in leadership, management of pharmaceuticals, hygiene, and staff and patient safety and also been given new IT equipment. Some believe that awarding managers instead of staff teams goes against the spirit of the *Concours Qualité*. Dr Abdelali Belghiti Alaoui explains there is an on-going struggle to find some way of providing good awards to everyone who deserves them. He and others also say, however, that as the culture of quality takes root staff teams are finding that the pride they take in improving the quality of care they provide is reward enough.



Mme Imane Rajii (with shoulder bag), Concours Qualité focal point in Gran Casablanca Region, makes regular visits to health centres and hospitals to learn how they are progressing and if they need any help.

Step 7. Implementation of Improvement Plans

The final step is for participating facilities to actually implement their Improvement Plans. Each facility does this in its own way. The *Concours Qualité* technical support unit, Regional *Concours Qualité* technical taskforces and Health District *Concours Qualité* focal points are able to provide a certain amount of guidance and support for implementation of Improvement Plans but they don't have the capacity to provide all of the support many institutions would like. Otherwise, the most significant technical support for implementation of Improvement Plans comes from the INAS, which extends appropriate training to those institutions most in need, as indicated by their

self-assessments and peer evaluations. To date, hospitals and their maternity wards have been the main beneficiaries of such training.

Achievements

A recent analysis by Morocco's High Planning Commission found that Morocco is on track not only to achieve the MDG Goal 5 target by 2015 but to far surpass it. Maternal mortality per 100,000 live births declined from 332 in 1985-91 to 227 in 2003-04 and then declined steeply to 112 in 2010 (Ministry of Health, 2011). In the absence of a formal evaluation study, it is difficult to say how much the *Concours Qualité*, by itself, has contributed to the steeply declining rate of maternal mortality, but highly placed health officials believe that its contribution has been essential.

Increased participation

To date, most of the data regarding the initiative's success have come from process rather than impact indicators, as well as qualitative data. One achievement has been the increase in participation by different types of health facilities, as is shown in Table 3. The largest increase, of course, was achieved when participation became mandatory for the 3rd edition; this, in itself, was a measure of the value ascribed to it by the Moroccan government.

Table 3. Increase in facilities participating in the Concours Qualité, 2007-2010					
	1 st edition 2 nd edition 3 rd edition 2007-2010 P				
	(2007)	(2008)	(2010)	increase	increase
Health Districts	39	33	68	29	174%
Hospitals	47	53	96	49	204%
Health centres	102	126	357	255	350%
Maternity wards			92	92	
CDTMRs			52	52	
Total	188	212	665	477	353%

Source: Concours Qualité

Increased performance scores

A second achievement is the improvement in scores by participating facilities, an achievement that reflects not only the self-assessment of facilities but also the validation of the peer evaluation and metaanalysis process. Table 4 shows improvements in average scores (the numbers reflect the average % of maximum score) along each dimension for all Health Districts and hospitals that participated in the 1st (2007) and 3rd (2010) editions of the Concours Qualité and for all health centres that participated in 1st and 2nd (2008) editions. The comprehensive report of the 3rd edition does not make this calculation for health centres but it adds something new for all institutions, scoring performance in each of the four stages of a PDCA cycle and then ranking centres according to their on-going quality improvement efforts.

Instilling a culture of quality improvement

The interviews carried out for this publication at different facilities and different levels of the Moroccan

health system provide evidence that the *Concours Qualité* has succeeded in building team spirit and implanting the culture of quality improvement in institutions that have participated from one *Concours Qualité* edition to the next. For these, the actual quality competition is becoming less important as staff teams become highly motivated to continually monitor, evaluate and improve the quality of health care their institutions provide.

Becoming the main mechanism for quality improvement

The *Concours Qualité* has gone beyond the proofof-concept stage and shows promise of becoming firmly established and sustained as Morocco's main mechanism for the continual monitoring, evaluation and improvement of its health care system and institutions. This achievement owes much to the strong leadership and commitment of the Minister of Health and senior managers and their staff within the Ministry at Rabat headquarters, some Regional

Table 4. Changes in scores (% of maximum score) by different facilities, 2007-2010						
Dimension	39 Health Districts		47 Hospitals		37 Health Centres	
	1 st ed.	3 rd ed.	1 st ed.	3 rd ed.	1 st ed.	2 nd ed.*
Satisfaction (of community, staff)	55	58	51	60	63	70
Ethics (of institution, staff)	52	57	45	50		
Accessibility, timeliness, continuity	60	64	47	53	62	67
Rationalization of resources	55	63	49	56	55	64
Safety, responsiveness	55	62	47	58	53	59
Leadership, partnership	50	60				
Continuous improvement			47	49		
Technical capacity			47	60		
Hospital leadership			44	55		
Leadership/continuous improvement					57	62
Partnership					51	58
Functionality					62	65
* See text for explanation of why 2 nd , rather than 3 rd , edition figures are given for health centres.						

Source: Concours Qualité

Health Offices and some Health Districts and, also, to the enthusiasm and dedication of managers and staff in certain hospitals, health centres and other health care institutions that now serve as outstanding examples of good practice.



Staff at Centre Santé Moulay El Hassan in Tétouan have learned that good patient records make it possible to track progress towards objectives laid out in Ministry manuals.

Recognition by the Ministry of Finance and donors

The European Union (EU) has been supporting reform and decentralization of Morocco's health care system since 2001. With EU financing of €20 million, the first phase (2001-2008) of the EU-Moroccan agreement focused on introducing the reforms and establishing the mechanisms. With EU financing of €40 million, the second phase (2008-2012) agreement focuses on consolidating gains and extending basic health care to the most disadvantaged segments of the population. The second phase agreement has conditions requiring: (1) a "mechanism" to continually improve the performance of the whole health care system and of institutions within it, (2) continual improvement of access to health care and (3) continual improvement of care. The EU and Morocco's Ministries of Finance and Health all recognize that the "mechanism" mentioned is the Concours Qualité.

There is similar recognition that the Global Fund's Round 10 grant agreement with Morocco assumes that improving the quality of services provided by all Centres for Diagnosis of Tuberculosis and Respiratory Disease (CDTMRs) will be achieved in large part by having them participate in the *Concours Qualité*.

Challenges

The undoubted achievements of the *Concours Qualité* must not obscure several important
challenges, in addition to the issues noted earlier
in the step-by-step descriptions.

Resources and time constraints

At time of writing, the 4th (2011) edition of the Concours Qualité is underway but not covering Health Districts. The first three editions had shown that it often takes six months from the start of a self-assessment to agreement on an Improvement Plan and, if there is a *Concours Qualité* every year, there is not enough time to implement the plan and produce significant results. Also, most Regions still fall far short of having the capacity to promote and support the Concours Qualité in all of their health institutions every year. The August 2011 interviews for this publication found that, even with the decision to include Health Districts only every second year, most still feel the Concours Qualité does not have all the human resources it needs (especially in Regions) to prepare and support institutions during Steps 1 and 2.

Narrowing the gaps in quality

The comprehensive reports on each edition of the *Concours Qualité* provide a wealth of information on where weaknesses lie in Morocco's health care system and institutions and in the *Concours Qualité* itself. It is early days for the *Concours Qualité*, but these gaps support an opinion offered without prompting by almost everyone interviewed for this publication: the *Concours Qualité* is an effective

mechanism for improving the quality of health care but it could be much more effective.



Posting fee schedules, placing registration and payment desks together and computerizing all transactions has stopped anyone from charging unauthorized fees at this Moroccan hospital.

Challenges identified by participants

In keeping with the underlying principles of continuing quality improvement, the following are some of the main challenges – and in some cases, solutions – identified by participants in the *Concours Qualité* initiative:

- 1. Finding a well-respected, independent entity to provide technical support. Dr Abdelali Belghiti Alaoui, Director of the DHSA, says that GIZ gained more recognition by introducing the Concours Qualité than for anything else it had ever done in Morocco. GIZ's high profile, technical expertise and independence (e.g., with no vested interest in how institutions are scored and ranked) gave the Concours Qualité a high level of credibility. A challenge now is to find or establish some other entity that gives the Concours Qualité what it was getting from GIZ but on a permanent, sustainable basis. One possibility is a consortium of European universities and other research institutions working in concert with their Moroccan counterparts, thus transferring knowledge to Morocco.
- 2. Reviewing the originally agreed principles and other elements of the *Concours Qualité* and finding the best answers to these questions:

- a) Should participation be mandatory or voluntary? The decision to make participation in the 3rd (2010) edition mandatory was informed by the fact that the *Concours Qualité* had become recognized as an effective mechanism for implementing Ministry of Health policies and achieving MDG-related and other targets. However, some participants worry that mandatory participation may be undermining motivation and commitment.
- b) How important is competition? There are mixed feelings about the competitive aspects of the *Concours Qualité*. While it recognizes success it can also discourage low-ranking participants and some feel it becomes increasingly unnecessary as the culture of quality improvement becomes more widespread and deeply rooted.
- c) How important is confidentiality? In interviews, people commonly emphasize that only the names of the top ten scorers are meant to be made public or revealed to anyone in positions of authority over lower scoring institutions. However, there are obvious practical reasons for identifying low scorers in each edition (e.g., to identify their needs for training).
- d) Should peer evaluators be external to the system or internal? In the first two editions of the Concours Qualité, there were concerns about the competence and impartiality of peer evaluators chosen from among senior managers of the institutions being evaluated. However, in the 3rd edition, there seemed to be even more concerns about the competence of outsiders who relied on facilitators to explain things to them. Some participants believe that the earlier concerns about peer evaluators really came down to growing pains and that health facility staff are now coming to understand that peer evaluators bring a fresh pair of eyes to their staff teams. Having chief medical officers evaluate each

- other's health centres contributes to the sense that everyone in the health care system is part of one team, striving to improve the quality of the whole system.
- e) How often should institutions participate in a quality competition? The emerging consensus seems to be that there should be a rotating schedule where each category of institution enters the competition only once every two years. This would give them time to implement Improvement Plans developed in one competition and produce significant results before entering the next competition. It would also allow the *Concours Qualité* to use its limited resources more efficiently, with continual activity rather than peaks and troughs.
- 3. Aligning or integrating the *Concours Qualité* with certification mechanisms and any other quality assurance mechanisms would eliminate the duplication and waste that causes hospital and health centre managers and staff to complain about repeated and time-consuming assessment by peer evaluators and others, all requiring

- preparation and follow-up. The *Concours Qualité* might become the main mechanism for monitoring and evaluating institutions, bringing them up to acceptable standards, certifying them, and ensuring that they maintain acceptable standards to keep their certifications up to date.
- 4. Producing more accessible public reports summarizing the *Concours Qualité* 'scomprehensive reports could increase general awareness of its achievements. Many readers would find it useful to know how the *Concours Qualité* may be improving results (e.g., percentage of all pregnant women taking up the offer of maternal health services) and outcomes (e.g., reductions in maternal and infant mortality).

Many interviewees agreed that **commissioning a comprehensive evaluation of the** *Concours Qualité* **by independent consultants** would be highly desirable after the 4th (2011) edition of the *Concours Qualité* was completed. As this publication went to press, plans were announced for such an evaluation by a Moroccan expert in collaboration with the School of Public Health at the Université Libre de Bruxelles.

Box 4. Helping to reduce maternal mortality



Making mothers feel at home in maternity wards has been one of the keys to achieving rapid declines in Morocco's rates of maternal and infant mortality.

Dr Katra Ennada Darkaoui, Head of the Ambulatory Care Division of the DHSA, explains that the 2008-2012 strategic plan for health and the current Minister of Health give top priority to achieving the MDG Goal 5 target for 2015: to have reduced maternal mortality by three quarters from a 1990 baseline. From the outset, the *Concours Qualité* self-assessment guides for hospitals and health centres have urged them to pay careful attention to their maternal health services. In her opinion, the *Concours Qualité* has been the single most effective intervention in these services she has seen in her long career working in Morocco's health care system.

Yemen's Quality Improvement Programme (QIP)

In the fall of 2010, the Yemeni-German Reproductive Health Programme (YG-RHP) published Quality improvement for health care providers: With friendly guidance and support (YG-RHP, 2010). It provides information on Yemen and its QIP which is similar in level of detail to information provided in this publication on Morocco's Concours Qualité. In this section we summarize some of that information in order to show the similarities and differences between the two approaches.

Finding a quality improvement approach suitable for Yemen

Housed in Yemen's Ministry of Public Health and Population (MoPHP), the Yemeni-German Reproductive Health Programme began promoting and supporting the design and launch of the Ministry's Quality Improvement Programme (QIP) in mid-2006. The design process involved careful consideration of the SQI and the lessons learned from experience with the *Concours Qualité* in other countries, but, also, careful consideration of the unique challenges facing Yemen's MoPHP in everything it does.

One such challenge is that Yemen's 21 Governorate Health Offices are largely responsible for setting health care policy and allocating resources and can opt in or out of MoPHP initiatives as they choose. Also, hospital and health centre managers and staff do not respond well to criticism or to any but the most tactful and friendly advice, instruction or direction. In addition, hospitals and health centres are often seriously under-resourced, lack secure supplies of clean water, and have reputations for corruption and incompetence such that local residences often prefer ineffective and sometimes dangerous remedies offered by local shops or traditional healers.

In light of those challenges, the design team decided that a quality improvement programme that worked for Yemen would have to be less systemic, at least at the outset, and less competitive than the *Concours Qualité*. It would also have to be introduced more gradually and cautiously, with more resource-intensive support for fewer, more carefully selected participants until it proved itself.

Process and outcomes in brief

Innovation in design

Several innovations emerged in the process of designing the QIP, chief among them the creation of a new type of process facilitator: the *Sadiq*.



Holding his notes, a QIP *Sadiq* shares his observations with the assembled staff of a small hospital.

Traditionally, in Yemen as elsewhere, organizations are hierarchical and supervision is top-down. 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 the *Sadiq* (Arabic for "friend"). As a facilitator of the QIP process, the *Sadiq* is conceived as someone who is an expert but also a good friend to every member of staff, who will listen to them, respect their opinions, make tactful observations, and offer them friendly quidance and support.

Like the *Concours Qualité*'s peer evaluators, the QIP's *Sadiqs* are chosen from among senior managers of hospitals, health centres and health authorities (i.e., MoPHP and Governorate and District Health Offices). However, greater care is taken to choose them on the basis of personality, attitudes and communication skills and then give them additional training that enables them to establish mutual trust and good rapport with both the managers (i.e., their peers) and the staff of participating institutions.

Voluntary participation

Health facilities 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. The application is made to their respective Governorate Health Offices upon the announcement of a new batch of the QIP, which is intended to occur annually. There is no penalty for leaving the QIP. The relationship between a *Sadiq* and the QIP team is one that can be terminated either by the health facility or by the *Sadiq* and the QIP team if they feel the relationship is not proving worthwhile. This has become known as the *Maasalama* Principle (or Bye-bye Principle in English).

The process

The key elements of the QIP process include the following:

Visits by *Sadiqs*. A maximum of four visits are carried out during the roughly 18-months it takes for a batch of health facilities to complete the QIP process. Unlike staff teams in the *Concours Qualité* process, staff teams in the QIP process are not asked to do self-assessments prior to *Sadiq* visits. Instead, *Sadiqs* gather information about a participating institution before visiting it for the first time. After an initial meeting with the staff team to explain the proceedings, they tour the institution making observations and asking questions structured according to six categories: leadership, planning, resources,

processes, staff satisfaction, and patient satisfaction. Next they meet with the staff team for feedback during which they ask their questions, share their hypotheses and facilitate agreement on the institution's strengths and weaknesses and, finally, on an improvement plan. During subsequent visits, the *Sadiqs* review progress with staff, and may agree to alter the Improvement Plan if both sides agree it is necessary.

On-the-job training and material support. Typically, a *Sadiq* helps a staff team identify its training needs on the second visit and then arranges a training schedule that works for all concerned. The facility receives training provided by experienced experts in three areas: management of health facilities; hygiene and sterilization; reproductive health services. These experts have themselves attended specialized courses in training methodologies, with emphasis on interpersonal skills so they can offer guidance and support in a non-threatening manner. Based on the advice of the Trainer, equipment may be provided if the Trainer feels assured that the health facility will use the equipment properly.



A QIP reproductive health trainer demonstrates how to give women explicit instruction on the correct use of a family planning device and make sure they have understood.

Evaluation and certification. When the *Sadiq* and the health facility agree that the health facility 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).

There are opportunities for Health facilities with negative evaluations to participate again.

Ongoing support. After certification, participating facilities receive twice yearly *Sadiq* visits for ongoing advice and support. The process also includes yearly re-evaluation and re-certification.

Outcomes



By asking women why they stay away, Yemen's hospitals and health centres have learned they must have female staff and separate women's waiting and consultation areas.

Thirty-seven health facilities were selected for participating in **Batch One** of QIP at the beginning of 2007.

A further 116 participated in **Batch Two** starting at the end of that year. **Batch Three** got underway in 2009, and although it experienced some delays, it had enrolled 95 health facilities by mid-2010.

To date, QIP guidance and support has been extended to a total of 209 health facilities in which it is judged to have been successfully applied or is now being applied with expectations of success. These include 185 health facilities in the seven Governorates covered by YG-RHP (see Table 5) and an additional 24 participating health facilities in three other Governorates. (To put this in context, Yemen currently has 3,073 health facilities, including 2,258 Health Units, 635 Health Centres and 180 Hospitals, spread across 21 Governorates.)

Over the years, some health facilities have discontinued their participation in QIP, either through application of the *Maa-salama* principle (described above) or by failing their evaluations. Others are not sufficiently well advanced to be included in the total of 209 health facilities in Yemen where the QIP approach is judged successful or on its way to success, as measured by achievement of QIP accreditation.

Table 5. Public Health Facilities that have participated in QIP and have been or are ready to be evaluated and certified, July 2010

Governorate	Number of Public Health Facilities	Number with Reproduc- tive Health Services (RHS)	Number with RHS & QIP certified or ready to be
Abyan (YH-RHP)	125	44	23
Al-Mahweet (YH-RHP)	145	103	23
Amran (YH-RHP)	132	105	12
Hajjah (YH-RHP)	190	112	43
Ibb (YH-RHP)	229	165	35
Mareb (YH-RHP)	95	61	26
Sana'a (YH-RHP)	197	114	23
Sub-total (YH-RHP)	1,113	704	185 (26%)
Other (non-YH-RHP)	n/a	n/a	24
Total, all of Yemen	3,073	1,714	209 (12%)

Note: Sana'a Governorate includes the suburban and rural areas surrounding Sana'a City, which is a Governorate in itself. Source: GIZ/Ministry of Public Health and Population, Yemen

Box 5. A winning formula: better services = more patients = more revenue = more capacity to keep improving services

Saleh Al-Sormi is Director of Shibam Hospital in Al-Mahweet Governorate. Shibam Hospital was one of the 30 Batch One QIP participants that achieved certification in March 2008. In May 2010, Dr Al-Sormi shared his "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 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.



A QIP hygiene trainer showed Shibam Hospital staff how to sterilize equipment properly and stop unnecessary patient infections.

Now working as a team, the 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. Patient numbers have increased from 120 per month before QIP to more than 1,700 per month today. Core funding from the Governorate 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. 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.

Achievements and challenges

Assessments of the impacts of the QIP on Batch One and Two participants have found a number of indications of its success, both internal to individual facilities and in comparison to non-participating facilities. For example, significant increases were observed in the uptake of family planning services, skilled birth attendance and antenatal coverage, in large part because QIP hospitals and health centres were setting targets and then doing everything they could to achieve them. In addition, staff and patient satisfaction have increased in facilities where QIP has been successfully implemented (YG-RHP, 2010).

Recently, QIP was extended to all Primary Health Care services in the seven YG-RHP Governorates, rather than just Reproductive Health services.

Outside of the seven YG-RHP Governorates, health officials and health facilities are well aware of QIP and its achievements and have been asking if they can participate, too. As mentioned above, 24 facilities in three other Governorates have found their own funding, entered the QIP process, and either received certification or been judged to be on the way to successful certification.

The demonstrated impacts of the QIP were such that, by mid-2010, the MoPHP and YG-RHP had stated their intention to engage partners at all levels (including international donors) in a three year process to establish QIP as the main mechanism through which Yemen improves and sustains the quality of health care through regular certification/re-certification of health care facilities that meet minimum standards.

At time of writing, moving forward with that agenda has been delayed by the country's on-going political crisis. This, rather than any deficiencies in the programme design, is currently the main challenge facing QIP's further implementation.

How the QIP differs from the ${\it Concours Qualit\'e}$

There are a number of ways in which Yemen's QIP is significantly different from Morocco's *Concours Qualité*. They include the following:

Participation in QIP remains voluntary. Unlike in Morocco, where the *Concours Qualité* has now become mandatory, QIP depends on the health facilities seeing the value in participation to their own staff and operations. Health facilities can leave at any time without penalty or sanction.

The QIP's Sadiqs are a significant innovation. Although they resemble the Concours Qualité peer evaluators in being chosen from among senior managers of hospitals, health centres and health authorities, greater care is taken to choose them on the basis of personality, attitudes and communication skills and then give them additional training that enables them to establish mutual trust and good rapport with both the managers (i.e., their peers) and the staff of participating institutions.

The QIP technical and organizational support

is more structured and detailed than that in the *Concours Qualité*. In Morocco, health facilities are more on their own in finding resources to carry out their Improvement Plans. The Yemeni programme is more intensive and consistent over time in its support of quality improvement.

Lessons learnt from Morocco and Yemen

Despite their differences – which reflect differences in the health systems, cultural traditions and economic conditions in the two countries – a number of common lessons can be drawn from the experiences of the *Concours Qualité* and QIP.

A staff team approach to quality improvement can be highly effective in any health care institution.

As the team approach is scaled up, becomes system-wide and involves more institutions in a health care system, it begins to achieve the critical mass for change that SQI aims to achieve. This is another way of saying that as the culture of quality improvement spreads and takes root, it develops momentum and tends to become sustained by team spirit.

To become highly effective, a staff team needs guidance and support and the support should include training in areas where the staff is deficient. The need for guidance and support is especially great at the front end.

Those providing the guidance and support need to be carefully selected, trained and supervised to ensure that staff teams trust them and feel comfortable communicating with them openly.

When resources to devote to quality improvement are limited, it may be best to focus them, first, on stronger institutions and turn them into models of good practice.

Accelerating quality improvement to achieve ambitious goals (e.g., the MDGs), however, may require substantial front-end investment in what are usually the weakest institutions in a health care system, those that serve low-income, rural and especially vulnerable populations.

Voluntary participation may ensure that participants are highly motivated and committed but mandatory participation may be appropriate when accelerating quality improvement to achieve ambitious goals. Weighing the pros and cons of voluntary versus mandatory participation may call for careful study in some environments.

The pros and cons of more or less competition in a quality improvement programme may also call for careful study. Staff pride and satisfaction in a job well done may be sufficient motivation in some cases but public recognition and more tangible awards may increase staff pride and satisfaction.

Certification that an institution meets minimal standards is the best possible motive for quality improvement and quality maintenance.

Competition, certification and other rewards should never discourage weak institutions from doing their best to improve. This is especially so since the weakest institutions are usually the ones serving the populations in greatest need of improved health care.



This Yemeni doctor has learned that treating every patient with courtesy, compassion and respect is essential to providing good health care.

Peer review

Based on the information provided in this publication, two independent peer reviewers have assessed the Moroccan and Yemeni approaches to quality improvement against the eight criteria for getting published in the German Health Practice Collection (GHPC) and have found both approaches to be "good or promising practice."

Both reviewers commented favourably on the comprehensiveness of both approaches despite their considerable differences, and on their flexibility as adaptive, self-learning processes. One reviewer noted that, "The combination of self-evaluation, peer review, benchmarking and a competitive element [in the case of the *Concours Qualité*] is certainly an interesting combination to foster change."

As for effectiveness, both reviewers said it is too early to judge the initiatives' overall impacts on the two countries' health systems and encouraged full evaluations to be carried out (as will soon be done in Morocco). They judged transferability to be high, with one reviewer noting that "through their dynamism and openness to integrate with the community, the experiences also seem flexible enough to be transferrable to comparable settings." They found both approaches to be participatory and **empowering** and they mentioned the use of peer evaluators and participatory development of tools and indicators as strong assets. They noted that neither initiative had a direct focus on gender awareness, although one reviewer commented that the team approach to evaluation involving staff at all levels had the potential for some positive impact on gender equality within health facilities. The reviewers did not comment on the criteria of quality of monitoring and evaluation and cost-effectiveness but, instead, reserved judgment pending the results of formal evaluations. However, both reviewers judged the two approaches to be innovative, with one describing the efforts of the

Concours Qualité to take into account both national priorities and practical implementation issues using a Plan-Do-Check-Act (PDCA) approach as "quite an innovation."

As for the final criterion, **sustainability**, the reviewers found both approaches to have good prospects for the long term. One said that the flexibility of the approaches was key to their sustainability, citing the ability of the *Concours Qualité* to change the frequency of editions as an example. By responding to operational limits, this change safeguards both the effectiveness and the integrity of the initiative in the future, and "might also [...] increase acceptability and cost-effectiveness."

References and further reading

- 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.
- Dale, B. et al. (2007). *Managing Quality*, 5th ed. Malden, MA, Wiley-Blackwell.
- Donabedian, A (1980). Explorations in Quality Assessment and Monitoring. Ann Arbor, Michigan, Health Administration Press.
- Dujardin B et al. (2008). Values behind Systemic Quality Improvement (SQI). Eschborn, Systemic Quality Improvement Network, Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ).
- Dujardin B et al. (2010). Pour une évaluation de l'ASAQ-Concours Qualité au Maroc: Document de référence pour le protocole de recherche. Eschborn, Systemic Quality Improvement Network, Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ).
- EFQM (2010). Introducing the EFQM Excellence Model 2010. Brussels.
- GIZ (2007). How to initiate and steer Systemic Quality Improvement: An advisor's guide for the health sector and other social sectors. Eschborn, Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ).
- 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).
- IMF (2011). World Economic Outlook. Washington DC, International Monetary Fund (IMF).
- Ministère de la Santé et al. (2005a). Document de Project du Concours Qualité. Rabat, Royaume du Maroc, Ministère de la Santé, Direction des Hôpitaux et des Soins Ambulatoires; Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ); l'organisation Mondiale de la Santé (OMS).
- Ministère de la Santé et al. (2005b). Enquête sur la Population et la Santé Familiale (EPSF) 2003-04. Rabat et Calverton, Royaume du Maroc, Ministère de la Santé, Direction des Planification et des Ressources Financières; Le Caire, ORC Macro et Projet PAPFAM Ligue des Etats Arabes.
- Ministère de la Santé et al. (2007). *Concours Qualité: Edition* 2007. *Rapport Global*. Rabat, Royaume du Maroc, Ministère de la Santé, Direction des Hôpitaux et des Soins Ambulatoires; Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ).
- Ministère de la Santé et al. (2008a). *Concours Qualité: Edition 2008. Principaux Résultats.* Rabat, Royaume du Maroc, Ministère de la Santé, Direction des Hôpitaux et des Soins Ambulatoires.
- Ministère de la Santé et al. (2008b). Manuel de formation de Auditeurs/Analystes. Concours Qualité. Rabat, Royaume du Maroc, Ministère de la Santé, Direction des Hôpitaux et des Soins Ambulatoires; Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ).
- Ministère de la Santé et al. (2010a). *Concours Qualité: Edition* 2010. *Rapport Global*. Rabat, Royaume du Maroc, Ministère de la Santé, Direction des Hôpitaux et des Soins Ambulatoires; Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ).

- Ministère de la Santé (2010b). Santé et chiffres 2009. Rabat, Royaume du Maroc, Ministère de la Santé, Direction des Planification et des Ressources Financières.
- Ministère de la Santé et al. (2011). Systemic Quality Improvement in the Moroccan Health Care System: Operational guide. Rabat and Eschborn, Ministère de la Santé, Direction des Hôpitaux et des Soins Ambulatoires, and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ).
- Ministry of Health (2011). Reducing maternal mortality in Morocco: Sharing experience and sustaining progress.
 Rabat, Ministry of Health, Directorate of Hospitals and Ambulatory Care.
- Ministry of Public Health and Population et al. (1998). Yemen Demographic and Maternal and Child Health Survey 1997. Calverton (Maryland), Ministry of Public Health and Population and Macro International Inc.
- Ministry of Public Health and Population et al. (2004). Family Health Survey 2003. Sana'a, Ministry of Public Health and Population, and Pan-Arab Project for Family Health (PAPCHILD).
- Ministry of Public Health and Population Ministry 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).
- Morocco Coordination Committee to Fight AIDS and TB. Round 10 Proposal to the Global Fund to Fight AIDS, Tuberculosis and Malaria (2010). Rabat, Management Unit, Global Fund Support Programme, Department of Epidemiology and Disease Control, Ministry of Health.
- UN (2011). *World Population Prospects: The 2010 Revision*. New York, United Nations, Department of Economic and Social Affairs, Population Division.
- UNDP (2009). Human Development Report 2009. Overcoming Barriers: Human Mobility and Development. New York, United Nations Human Development Programme.
- UNDP (2010). Human Development Report 2010. The Real Wealth of Nations: Pathways to Human Development. New York, United Nations Human Development Programme.
- World Bank (2011). *Gross national income per capita 2009: Atlas method and PPP.* World development indicators database. Washington, World Bank, 14 April 2011.
- WHO (2000). The world health report 2000. Health systems: Improving performance. Geneva, World Health Organization (WHO).
- WHO (2006a). *Health System Profile: Morocco.* Cairo, World Health Organization (WHO), Regional Office for the Eastern Mediterranean (EMRO).
- WHO (2006b). Health System Profile: Yemen. Cairo, World Health Organization (WHO), Regional Office for the Eastern Mediterranean (EMRO).
- WHO (2010). The world health report 2010, Health Systems Financing: The path to universal coverage. Geneva, World Health Organization (WHO).
- WHO (2011). *National Health Accounts, March 2011.* Geneva, World Health Organization (WHO).
- YG-RHP (2010). *Quality improvement for health care providers:* With friendly guidance and support. Sana'a, Yemeni-German Reproductive Health Programme (YG-RHP).

Published by

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

German Health Practice Collection

Programme to Foster Innovation, Learning and Evidence in HIV and Health Programmes of German Development Cooperation (PROFILE)

Registered offices

Bonn and Eschborn, Germany

 Friedrich-Ebert-Allee 40
 Dag-Hammarskjöld-Weg 1-5

 53113 Bonn, Germany
 65726 Eschborn, Germany

 T +49 228 44 60 - 0
 T +49 6196 79 - 0

F+49 228 44 60 - 17 66 F+49 6196 79 - 1115

ghpc@giz.de

www.german-practice-collection.org

In cooperation with

Ministry of Health, Royal Kingdom of Morocco Ministry of Public Health and Population, Republic of Yemen

Managing Editor

Anna von Roenne

Writer

Stuart Adams

Design

www.golzundfritz.com

Photographs

Cover, pp. 7, 9, 28, 29, 30, 31, 33, © GIZ Yemen / Linda Shen pp. 13, 18, 19, 20, 21, 23, 25, 26, 27, © GIZ Morocco

As at: January 2012

GIZ is responsible for the content of this publication.

On behalf of

Federal Ministry for Economic Cooperation and Development (BMZ); Division of Health and Population Policies

Addresses of the BMZ offices

Bonn Office Berlin Office

 Dahlmannstraße 4
 Stresemannstraße 94

 53113 Bonn, Germany
 10963 Berlin, Germany

 T+49 228 99 535 - 0
 T+49 30 18 535 - 0

 F+49 228 99 535 - 3500
 F+49 30 18 535 - 2501

poststelle@bmz.bund.de

www.bmz.de