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National Strategy for Improving Quality in Health Care

Improving Quality in Health Care Unit,
General Directorate of Curative Medicine,
Ministry of Public Health

ACKNOWLEDGMENTS

The Ministry of Public Health of Afghanistan is pleased to present the Strategy for Improving Quality in Health Care 2011-2015. Given the need for a comprehensive, valid and practical strategy for improving quality in health care, the Ministry of Public Health in close collaboration with numerous colleagues and partners, including funding and implementing organizations, started its efforts last year towards the development of IQHC Strategy. Fortunately, this document has gone through a detailed consultative process and a number of technical forums, including the Core Group and Task Force meetings, Consultative Group on Health and Nutrition (CGHN) meeting, and the Technical Advisory Group (TAG) meeting, as well as the Executive Board of MoPH for final review and approval. Thus, the National Strategy for Improving Quality in Health Care is officially endorsed and implementing partners are instructed to follow it a guiding document.

Preparation of this document was coordinated by the Unit for Improving Quality in Health Care (IQHC Unit) under the leadership of General Dirctorate for Curative Medicine of the Ministry of Public Health.

This strategy is intended to guide both preventive and curative interventions to improve the quality of health services throughout the continuum of care for at least coming five years. It is important to add that specific interventions have been considered to improve the quality of health services provided by the private health sector including private hospitals, pharmacies, and diagnostic centers.

I strongly believe that the implementation of this strategy will, on one side, increase access to quality health services and, on the other side, encourage a healthy competition in using evidence in delivering effective health services.

On behalf of the Ministry of Public Health I would like to express my thanks to USAID, URC (University Research Co., LLC), and all other agencies involved in this work. Special thanks go to the Core Group, Task Force and IQHC Unit functioning under the guidance of General Directorate for Curative Medicine. They were instrumental in developing the strategy, translating it into local languages and printing it. We believe this strategy provides the framework to shape all future quality-related interventions and serves as a blue print for everyone responsible for the provision of health care.

I hope, with the help of Almighty Allah (J), the implementation of this strategy speeds up to meet the expectations of Afghan people.

Sincerely,

Dr. Suraya Dalil
Acting Minister of Public Health
Kabul, Afghanistan
June 26, 2011

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ABBREVIATIONS/ACRONYMS

AHS	Afghan Health Survey
ANC	Antenatal Care
APHI	Afghanistan Public Health Institute
BCG	Bacillus Calmette Guerin
BHC	Basic Health Center
BPHS	Basic Package of Health Services
BSC	Balanced Scorecard
CIMCI	Community based Integrated Management of Childhood Illness
CGHN	Consultative Group on Health and Nutrition
CHC	Comprehensive Health Center
CHW	Community Health Worker
CPD	Continuous Professional Development
CS	Caesarian Section
CSO	Civil Society Organization
DEWS	Diseases Early Warning System
DH	District Hospital
DPT3	Diphtheria, Pertussis and Tetanus
EC	European Commission
EPHS	Essential Package of Hospital Services
EPI	Expanded Program on Immunization
FFSDP	Fully Functional Service Delivery Point
FP	Family Planning
HAART	Highly Active Antiretroviral Therapy
HEFD	Health Economics and Financing Directorate
HBsAg	Hepatitis B surface Antigen
HCI	USAID Health Care Improvement Project
HCV	Hepatitis C Virus
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System
HSC	Health Sub Center
HSSP	Health Services Support Project
IMCI	Integrated Management of Childhood Illness
IQHC	Improving Quality in Health Care
ITN	Insecticide Treated Bednets
JICA	Japan International Cooperation Agency
LDP	Leadership Development Program
LITBN	Long-Lasting Insecticide Treated Bed nets
MICS	Multiple Indicator Cluster Survey
MoPH	Ministry of Public Health
MRRD	Ministry of Rural Rehabilitation and Development
MSH	Management Sciences for Health
NGO	Non Governmental Organization
NRVA	National Risk and Vulnerability Assessment
NTCC	National Technical Coordination Committee
PDQ	Partnership Defined Quality
PQI	Performance Quality Improvement
QA	Quality Assurance
QI	Quality Improvement
SAM	Severe Acute Malnutrition
SBM&R	Standards Based Management and Recognition
TB	Tuberculosis

TBD	To be determined; to be defined; To Be Decided
UN	United Nations
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
VCCT	Voluntary Confidential Counseling & Testing
WB	World Bank
WFP	World Food Program
WHO	World Health Organization

BACKGROUND

INTRODUCTION

The Ministry of Public Health (MoPH) of the Government of Afghanistan has established a clear mission "to improve the health of the people through quality health care services provision and the promotion of healthy life styles in an equitable and sustainable manner". In order to achieve this goal, the MoPH and donors have introduced and implemented a number of different strategies, tools and methodologies aimed at improving the quality of health care services. Some have been established country-wide, others in particular provinces. Whilst much has been achieved to date, little is known about the quality of health care received routinely by citizens of Afghanistan. In addition, attempts to make improvements have not been well coordinated or applied uniformly across the sector.

ANALYSIS OF THE AFGHAN HEALTH SYSTEM - OVERVIEW

Historic Perspective

The MoPH is the central governmental body whose role is to identify health needs and priorities, formulate national polices and strategies, monitor performance, manage and mobilize resources for the public sector and establish and enforce rules and regulations for the private sector. However, its capacity to fulfill this role was initially challenged; years of war and conflict had seriously affected health infrastructure and the country's capability to deliver health services. In response to this, the MoPH, in 2003, decided to establish essential primary health care services as the foundation of its health care system. This approach was supported by the MoPH's international partners and United Nations (UN) agencies. It firstly described and then sought to establish an integrated package of minimum services called the Basic Package of Health Services (BPHS) that it envisaged would be available to the population of Afghanistan regardless of how remotely they were located. This was followed by the development of Essential Package of Hospital Services (EPHS) designed to complement and support the BPHS.

Current Position

BPHS coverage has continued to grow from only 9%[1] accessibility in 2003 to 66%[2] in 2006, whereas the EPHS coverage remains limited to 21 hospitals out of a total

[1] Multiple Indicator Cluster Survey (MICS) 2003

[2] 66% of surveyed households live within 2 hours of the nearest health facility required to walk from the surveyed communities to the nearest Health Facility at national level (AHS-2006). And access to any public health facility within one hour walking is possible for 57 % of the population. The corresponding figure for the rural population is 54%, for urban dwellers 79% for Kuchis only 37% (National Risk and Vulnerability Assessment-2008)

of 34 provinces. Despite the MoPH's best efforts, the utilization of health services remains low e.g., only 32%[3] of women received antenatal (ANC) services.

Generally, health services are delivered at five levels across the health system:

- Community level through volunteer Community Health Workers (CHWs)
- Health Sub Centers (HSCs) and Mobile Clinics
- Basic Health Centers (BHCs), Comprehensive Health Centers (CHCs), CHC+ and District Hospitals (DHs)
- Provincial and Regional Hospitals
- National and Specialty Hospitals

Traditionally the Government of Afghanistan has been constitutionally bound to provide free health and education services to its citizens. However, Afghanistan, post conflict, has not been able to generate enough revenue to fund these services. As a consequence, donors have taken on this responsibility. The United States Agency for International Development (USAID), World Bank (WB) and European Commission (EC) are the three major donors to the MoPH. They tend to focus their funds on primary health care services (BPHS, Expanded Program on Immunization [EPI, and Communicable Disease Control) with limited external resources being applied to secondary health services (EPHS). Tertiary and specialty hospitals receive 26% of the total funds allocated to the MoPH from Government. This leaves most of the tertiary hospitals with poor facility infrastructure, an inadequate workforce, and lack of necessary supplies.

Unlike other countries, health services in Afghanistan are mainly delivered by national and international Non Governmental Organizations (NGOs), overseen by the MoPH. The exception to this are the "Strengthening Mechanism" and "Hospital Reform" Programs where the MoPH has the responsibility for delivering services. Under the "Strengthening Mechanism (SM)" program MoPH is implementing BPHS in Parwan, Panjshir and Kapisa provinces. Besides the SM Program, there are ten hospitals where health service delivery is through the MoPH "Hospital Reform" project. These ten hospitals include: three regional hospitals (Kunduz, Herat and Balkh), and six Provincial hospitals (Takhar, Baghlan, Samangon, SariPul, Ghor and Zabul), plus Khairkhana 102-bed hospital in Kabul city. Different NGOs funded by different donors are obligated to meet slightly different terms and conditions and operate with different flexibilities in applying funds. It is highly likely, therefore, that the services these NGOs deliver have some variation in terms of quality.

The private sector is actively involved in providing a wide array of health services with its main focus being on curative services (tertiary hospitals, pharmacies, diagnostic facilities). Rules and regulations exist to control this quickly emerging sector but the processes by which they are applied are not, as yet, sufficiently robust.

The Human Resources Development Department of the MoPH has been seeking to improve the management of human resources and enhance their capabilities to address the health care challenges facing the country. Human resources play an

[3] Afghan Household Survey (AHS) 2006

important role in enabling greater access to health services and improving the quality of services being delivered. In recognition of this, the MoPH, with the support of partners, established midwifery and community midwifery education programs, revising the basic curriculum and expanding nursing and allied health education. In collaboration with the Ministry of Higher Education, it also set out to improve the quality of pre-service medical education. Concurrently, the MoPH, with the support of the Civil Services Commission, introduced reform programs (Paying and Grading) to recruit, train, and maintain health care personnel. In spite of all these efforts, Afghanistan still needs twice as many midwives and nurses than are currently employed, more female health workers particularly in rural areas and a better educated and skilled workforce operating across all levels of the health care system. The following table shows the ratio of health workers to the population in Afghanistan in comparison to the World Health Organization's (WHO) recommendations:

Category	**Afghanistan** (health worker per 1000 Population [4]		WHO recommendation[5]
Doctors	Generalists	0.15	2.3
	Specialists)	0.07	
Nurses	Professional/Registered Nurses	0.14	2.3
	Auxiliary nurses	0.02	
Midwives	Registered Midwives	0.08	2.3
	Enrolled Midwives	0.006	
Pharmacists	Pharmacists	0.02	
	Pharmacy technician	0.03	

The MoPH has two major responsibilities; firstly, to collect data and information on the services being delivered, and secondly, to provide information to the public in order to facilitate the proper utilization of health services and individual self-management of health. The MoPH established a Health Management Information System (HMIS) in 2003 to continuously review performance and inform decision making. The HMIS regularly collects data on 84 input, output and outcome indicators mainly from BPHS and EPHS health facilities. Other sources of data supplement this basic data set to provide an overview of the performance of the system. Appendix 1 sets out current sources of health-related performance data and indicators.

It should be noted that the lack of integration of tertiary care facilities into the overall health system limits data collection and linkages to information systems.

The MoPH and its partners have also been trying to provide necessary information to the public to improve its awareness and encourage more effective utilization of available services. Despite this, many services at certain levels of the health system remain under utilized e.g antenatal care, obstetric services and family planning whilst other facilities, particularly tertiary hospitals, are overloaded with patients who could be cared for at lower levels of the system.

[4] from the "Human Resources for Health – Afghanistan profile –Draft", 25 November 2009
[5] WHO Global Atlas of the Health Workforce, 2009 update.

Ensuring the quality of pharmaceuticals, medical products and supplies has been another major issue for the MoPH over several years. Lengthy and uncontrolled borders with neighboring countries, lack of infrastructure for quality control, an inadequate pharmaceutical management systems and a poorly regulated private sector open the way for the import of sub-standard medicines and supplies. In addition, poor maintenance and storage affects the quality of already imported pharmaceuticals. It is important to note that the MoPH is committed to enforcing existing rules and regulation and establishing the necessary infrastructure to ensure the quality and safety of pharmaceuticals working with other partners and Governmental agencies e.g the Ministry of Interior, the Ministry of Trade In addition, some progress has been made by NGOs in ensuring quality of essential drugs imported for the BPHS

HISTORY OF QUALITY INITIATIVES IN AFGHANISTAN

A comprehensive summary of quality initiatives run in the Afghanistan health care system is contained in Appendix 3.

STRATEGY DEVELOPMENT PROCESS

In 2009, the MoPH began to clearly articulate its desire to do more to accelerate and expand quality improvement efforts. It was concerned about the perception of poor quality services in some parts of the health system and the lack of focus and coordination of existing activity. To this end, the MoPH proposed the establishment of an Improving Quality in Health Care (IQHC) Unit to be located at the very centre of its national infrastructure with the aim of promoting and driving activity designed to achieve high quality services, coordinating existing quality programs, monitoring their efficacy and scale of impact and overseeing the strategic commissioning of further work.

It was agreed that a framework describing the vision for improving quality in health care and setting out priorities, targets and a support infrastructure was essential for the Unit to operate effectively and with authority. Over time, it was recognized that a National Strategy for Improving Quality in Health Care would be the ideal vehicle to establish such a framework.

In September 2009, MOPH supported by HSSP organized and ran a workshop for stakeholders that helped secure commitment and initiate early discussions about the Strategy's scope and content and the necessary infrastructure for its implementation. This was built upon in January 2010 when HCI-Afghanistan, in conjunction with the MoPH, hosted a USAID-sponsored Round Table meeting

entitled "The National Improvement Strategy and Infrastructure for Improving Health Care in Afghanistan" attended by local and international experts and stakeholders (Hiltebeitel 2010). The meeting explored lessons learned from other countries in developing a culture, infrastructure and activities to improve the quality of health care. Opportunities for the adaptation and application of this knowledge into the Afghanistan context were discussed at length. HCI was then tasked to assist the MoPH in establishing the IQHC Unit and supporting it in developing the National Strategy.

In recognition of the broad base of expertise and experience residing in the wider health care sector, the Unit set out to establish an inclusive, consultative process for the development of the Strategy. Whilst the overall responsibility for the production of the document fell to the Unit, a Taskforce and Core Group were formed to support it in this task.

TASK FORCE AND CORE GROUP

A Task Force consisting of about 36 members representing MoPH departments, partner organizations and hospital representatives (see list of contributors) met regularly and provided inputs. The core group comprising of six members (see list of contributors) had the responsibility for compiling all the inputs, reviewing documents and preparing drafts.

Concurrently, the IQHC Unit in collaboration with some members of the core group was assigned to undertake the following tasks:

DOCUMENT REVIEW

The Unit and selected core group members reviewed a number of key strategic documents developed by the MoPH and its partners. These were supplemented by relevant documents describing other health care systems and papers written by experts in the field of quality. The purpose of this review was to ensure the National Strategy for Improving Quality in Health Care reflected existing work and strategic intentions outlined in other national policies and strategies and was aligned with the collective wisdom of quality experts and practitioners who had embarked upon similar undertakings.

One key text, the World Health Organization's guide "Quality of Care: A Process for Making Strategic Choices in Health Systems" (2006) was particularly influential. It introduces six domains from which it suggests quality interventions should be selected. These include leadership, information, regulations and standards, patient and population engagement, organizational capacity and models of care. The guide advocates that policy makers find a balance between externally driven interventions (rules and regulations) and internally driven approaches (improving motivation, peer review, involving front line workers) in establishing their quality strategy and systems. This advice was subsequently reflected in the strategic initiatives selected and outlined below.

INTERVIEWS WITH PARTNERS

In order to collect all the necessary information about existing quality programs being implemented, key partners were interviewed using a semi-structured questionnaire. This process provided an opportunity to update and validate some of the information provided in written reports outlining their activities.

CONSENSUS BUILDING

The process of developing the strategy included regular consultation with the policy makers, hospital directors, frontline workers and program managers. This was done through meetings, email exchange and requests for comments on drafts of sections of the strategy.

CONSULTATION WITH EXPERTS

A panel of national and international experts (see also list of contributors) in improving the quality of health care wrote the initial drafts, reviewed all inputs, and commented on subsequent drafts. These included: Ms. Cathy Green, Prof. Sheila Leatherman, Dr. M. Rashad Massoud, Mr. Sven-Olof Karlsson, Mr. Jim Heiby, Dr. Mirwais Rahimzai, Dr. Javed Rahmanzai, and Dr. Mirwais Amiri.

SITUATIONAL ANALYSIS

HEALTH STATUS

Health of the people of Afghanistan has improved significantly since the fall of the Taliban regime. This is evidenced by steady improvement in the performance of key process and outcome indicators relating to health. Every year the expanded program on immunization reaches more than five million children across the country. Access to primary health care (BPHS) has increased from 9% in 2003 to 66%[6] in 2006. About one in every three[7] pregnant women now receives ANC services at least once as compared to only 5%[8] in 2003. Skilled birth attendance has increased from 6%[9] in 2003 to more than 19%[10] in 2009.

[6] AHS 2006
[7] 36%, NRVA 2007/2008
[8] 4.6 % in the Multiple Indicator Cluster Survey 2003M
[9] 6% in MICS 2003
[10] 19% in AHS 2006

Furthermore, remarkable progress has been made in reducing infant and child mortality in the last few years. Now the health system is able to save the lives of 100,000 children under the age of five per year[11] who would otherwise die due to preventable diseases. Progress in reducing maternal mortality is generally perceived to have been slower with social, economical and geographical factors playing an important role in mothers' health and well being. Estimates for maternal mortality in 2010 are awaited.

The following table summarizes the progress made from 2003 against key health indicators:

Indicator	2003	2006	2008	2010
Infant mortality rate	165/1000 live births[12]	129/1000 live births[13]	111/1000 live births[14]	
Under 5 mortality rate	257/1000 live births[15]	191/1000 live births[16]	161/1000 live births[17]	
Maternal Mortality Ratio	1600/100,000 live births[18]			Survey ongoing[19]
Full immunization coverage	15.5%[20]	27.1%[21]	37 %[22]	
Access to primary health services (within 2 hours using normal mode of transport)	9%[23]	65%[24]		90% (goal)

In spite of this progress, about 80%[25] of women still deliver at home without the assistance of a skilled attendant, just under two thirds[26] of pregnant women do

[11] Child and Adolescent Strategy
[12] This was a "best estimate" made by UNICEF in 2001and again in 2003 MICS estimated the infant mortality rate in Afghanistan to be 165 per 1000 live births
[13] Using the Brass method, the AHS estimated the infant mortality rate in Afghanistan to be 129 per 1000 live births
[14] The estimates from NRVA 2007/8 data of infant mortality 111/1000live births
[15] In 2001, this was UNICEF's best estimate and in 2003 MICS estimated the under-five mortality rate to be 257 per 1000 live births
[16] Using the Brass method, the AHS estimated the under 5 mortality rate in Afghanistan to be 191 per 1000 live births. In 2007/08 NRVA estimated it as 161per 1000 live births
[17] The estimates from NRVA 2007/8 data of Under- five mortality 161/1000live births
[18] MICS 2003.
[19] *Reproductive Age Mortality Survey-II study is ongoing and the result will be disseminating at March 2011.There isn't update data for year 2010.
[20] Full Immunization coverage 15.5%, MICS 2003
[21] 27.1% AHS 2006
[22] According to NRVA 2007/8, full immunization, consisting of BCG, OPV3, DPT3, and measles vaccinations, among children aged 12-23 months , is estimated at only 37 percent.
[23] MICS 2003 intial coverage of BPHS
[24] High Benchmark and AHS 2006.
[25] AHS 2006.
[26] 64% NRVA 2007/2008

not use/receive ANC services and under 5 and infant mortality, as well as maternal mortality, remain the highest in the South Asian region. There is also a wide variation in the health status of the population across different geographical locations and socio-economic groups[27]. Pregnancy related complications, pneumonia, diarrhea, malnutrition, tuberculosis and malaria remain the primary causes of mortality amongst women and children. Non-communicable diseases including diabetes, cardiovascular diseases and war injuries also contribute to overall mortality statistics.

The pregnancy-related complications of hemorrhage, obstructed labor, pregnancy- induced hypertension and sepsis are known to be the primary direct causes of maternal deaths. This is of particularly concern when access to health services is limited due to challenging terrains, traditional practices, lack of awareness and education, and inability to pay for transport. Hundreds of mothers still lose their lives due to pregnancy-related conditions, putting Afghanistan in the undesirable position of having one of the worst maternal and child mortality rates in the world.

Respiratory tract infections and diarrhea are the most prevalent causes of mortality and morbidity for children throughout the country. Every year more than 1 million children contract and receive treatment for these conditions (HMIS). About 20% of these children are hospitalized. Estimates suggest that 4.4%[28] of these children die after admission due to complications.

Malnutrition is a contributing factor in the majority of deaths and disabilities amongst women and children. According to the National Nutrition Survey of 2004, about 70% of Afghan women suffer from iron deficiency, 20% from chronic energy deficiency and night blindness and in some areas up to 60% of women suffer from iodine deficiency disorders (mainly goiter). The same survey reveals that more than half (54%) of Afghan children under five are stunted, 7% are wasted and more than 75% excrete less than normal iodine in their urine, indicative of low body iodine. This situation is exacerbated by increasing poverty, population displacement resulting from insecurity, continuing drought, recent increases in the cost of basic food items and poor provision and access to quality nutrition services.

In spite of notable progress in reducing morbidity and mortality from communicable diseases such as TB and malaria, thousands of people, particularly in rural Afghanistan, still lose their lives as a result of contracting one of these diseases.

The BPHS, including CHWs, are designed to offer a first line response to people suffering from such diseases and provide a gateway into publically provided EPHS offered by some District, Provincial or Regional Hospitals. Unfortunately, the referral system from primary health care facilities to secondary and tertiary levels does not function well. In addition, horizontal referrals from one specialty hospital to another are problematic. Most of the hospitals are located in urban areas and are overloaded with patients who could be treated at lower level facilities. Despite their essential role in providing more advanced services, some

[27] NRVA 2007/2008
[28] HMIS Estimation about Death Cases due to ARI &CDD per admission

hospital have donated equipment and supplies that are not fully utilized because of lack of skills and money to operate and repair them. Hospitals which are not part of the EPHS receive limited attention from donors.

SWOT ANALYSIS

In order to obtain an up to date perspective from partners on the performance of the health system, the Quality in Health Care Task Force, under the leadership of HE Deputy Minister for Health Service Provision, was invited to do an in-depth analysis of the system and services based on their existing knowledge and compile a list of observations on its strengths and challenges. These were then organized into a SWOT (Strengths-Weaknesses-Opportunities-Threats) Analysis, summarized below:

Strengths:

- Experience in implementing several quality improvement approaches (FFSDP, QA, Partnership Defined Quality (PDQ) and recently QI)
- Existence of some tools, materials and programs to improve quality of care
- Availability of short term training programs, materials and tools covering content knowledge
- A functioning data collection mechanism (HMIS, Diseases Early Warning System (DEWS))
- Better coverage of primary care services as compared to five years ago
- Existence of coordination and advisory mechanisms within the MoPH [Consultative Group on Health and Nutrition (CGHN), National Technical Coordination Committee (NTCC), Technical Advisory Group]
- Existence of regulatory bodies like MoPH technical departments (Riyasat-Qawaneen wa Barrasi), independent associations (Afghanistan Midwifery and Nursing Education Accreditation Board etc)

Weaknesses:

- Problems with interpersonal communications between providers and users
- Low staff commitment, poorly functioning supportive supervision and monitoring systems
- Ownership and responsibility to improve quality remain vague between partners; there is inadequate advocacy for improving the quality of care and poorly functioning reward and recognition mechanisms to support this
- Inadequately skilled hospital administrators and managers and lack of training courses for them
- Tertiary hospitals are not well integrated into the health system; there is no functional mechanism for data collection, utilization and feedback
- A mechanism to ensure clients awareness, engagement and satisfaction does not function well, particularly at the tertiary care level
- Inadequate control over the private sector

- Insufficient coordination between donor agencies and implementing partners when designing an intervention for health care quality improvement/assurance.
- Quality improvement activities, including programs to ensure client and provider safety, have been implemented in a piecemeal fashion with negligible operational research to establish relative advantage and impact
- Emphasis more on inputs and less on processes and outcomes
- Variation in the quality of care in different parts of the country and no system to report errors
- Inadequate checks and controls on the production, importation and safety of pharmaceuticals

Opportunities:

- Will and understanding at the top leadership level to improve quality of care
- Existence of policies and strategies for priority programs that emphasize the importance in improving quality of health services and set out targets and milestones for improvements
- Access to quality related national and international experts
- Availability of donors

Threats:

- Inadequate investment in training, recruiting, and maintaining human resources, particularly female staff
- Primary care services do not cover the entire country and where they exist there are inconsistencies in the services provided and opening hours
- Insecurity
- Donor dependency
- Inadequate support of tertiary care
- Lack of a nationally implemented salary policy

This Strategy intends to build on current strengths within the health system and harness the opportunities that exist for accelerating progress in improving the quality of health care. Wherever possible, the document will also propose strategic initiatives designed to address the weaknesses outlined above.

ACCELERATING PROGRESS IN IMPROVING QUALITY

In spite of very significant challenges, senior leadership within the MoPH remains committed to improving the quality of care as evidenced by national events, speeches, policies & strategies. In addition, many agencies have worked tirelessly on quality-related programs designed to support the MoPH in trying to maximize the potential of a somewhat dislocated and under-resourced system.

Appendix 3 provides a more detailed account of the key methodological approaches that have already been introduced in the Afghanistan health system. In going forward, it is imperative that we pool learning from these varied projects and form a shared understanding about what components have been

effective in what contexts and why. Greater rigor needs to be applied in connecting activities to health outcomes. Curiosity and transparency are needed if we are to quickly adapt and apply learning from national and international best practices to accelerate progress in improving the quality of health care.

With this in mind, some early analysis has been done of our current position, recognizing that this Strategy is building upon an existing body of work and experiences.

Achievements of the quality interventions

- Standards adapted to the Afghanistan context have been produced in a significant number of different domains (management and clinical)
- Introduction of standards to many health facilities throughout the country
- Providers have been trained on the use of standards
- Production of guidelines and tools for monitoring and supportive supervision
- Numerous in-service training events to enhance providers' capacity
- Establishment of QA and QI committees in some provinces and within some health facilities
- Accreditation mechanism being developed for private hospitals
- Safe surgery and infection prevention and control guidelines developed
- Recent establishment of the Improving Quality in Health Care Unit at the MoPH

Current challenges

- Programs tend to drive the agenda for improving quality in care instead of having a national strategy identifying what is needed
- Numerous training courses are conducted to enhance competence of providers but compliance remains an issue
- Referral systems are weak as are mechanisms to document patients' medical history and the care they receive in higher level health facilities, particularly tertiary hospitals. Feedback to referring facilities is limited
- Quality interventions remain piecemeal and focused on certain geographical areas or levels of care (BPHS, EPHS, etc)
- Some interventions to improve the quality of health care are introduced without considering their sustainability.
- Most of the interventions emphasize inputs rather than processes or outcomes. Programs can be overly directive and rely on external assessment to establish progress. Such approaches are difficult to sustain and can be de-motivating to front-line staff.
- There are MoPH-approved mechanisms for regular data collection, monitoring and evaluation, however some of them are either partially followed or not followed at all. As a consequence, available data is not being utilized fully nor is it being fed into the MoPH Monitoring & Evaluation (M&E) system.

INTRODUCING THE NATIONAL STRATEGY FOR IMPROVING QUALITY IN HEALTH CARE

WHY HAVE A STRATEGY FOR IMPROVING QUALITY IN HEALTH CARE?

This strategy is expected to help ensure the rational application of different quality approaches and streamline efforts through the introduction of priorities, targets and milestones. It will also help synchronize measurement to assess progress and improve coordination among partners in the field. Improvement is a continuous process; the MoPH does not have the resources and capacity to improve everything all at once and this process takes time. This document is ambitious and sets out a program of activity that covers a 5-8 year timeframe. However, a shorter-term work-plan covering a five year period has been drawn up. It reflects the biggest and most immediate health challenges and ensures the necessary foundations for quality, measurement, accountability and change are in place to enable further success. .

HOW THE STRATEGY WILL CONTRIBUTE TO ADDRESSING HEALTH CHALLENGES

The National Strategy for Improving Quality in Health Care seeks to contribute to the MoPH's mission, health-related Millennium Development Goals (MDGs) and the health and nutrition sector strategy goals. It will embrace and build upon different quality approaches and methodologies that have had proven success in improving health status in Afghanistan and other emerging health care systems. In addition, the Strategy is intended to help improve coordination of quality initiatives at central and provincial levels.

POLICY STATEMENT

This Strategy is not designed to create a set of priorities and activities that sit outside of the Policy Framework that already exists. It is an underpinning and cross-cutting strategy and as such seeks to support the fulfillment of the following MoPH aspirations:

MoPH Mission
To improve the health and nutritional status of the people of Afghanistan through quality health care services provision and the promotion of healthy life styles in an equitable and sustainable manner.

MOPH Health & Nutrition Sector Strategy (HNSS) Goal
To work effectively with communities and development partners to improve the health and nutritional status of the people of Afghanistan, with a greater focus on women and children and under-served areas of the country.

MoPH HNSS Objectives
To reduce maternal and newborn mortality
To reduce under 5s mortality and improve child health
To reduce the incidence of communicable diseases
To reduce malnutrition
To improve the health system

AIM OF THE STRATEGY

The National Strategy for Improving Quality in Health Care - Aim
To improve the quality of health services and health outcomes in Afghanistan

DEFINITION OF QUALITY IN THE CONTEXT OF AFGHANISTAN

After reviewing internationally accepted definitions of quality of health care, the Task Force agreed upon the following definition and dimensions for quality of health care in Afghanistan:

"A quality health care system is client centered, equitable, available, appropriate, safe, consistent, effective, timely, and efficient; it continuously improves".

It is worth mentioning that all dimensions of quality in the definition are essential for achieving quality in the provision of health services. The definition is expected to help create a common understanding on what quality health care means in the context of Afghanistan. Achieving quality of care as stated in the definition is the ultimate ambition and a long-term goal, which will need continuous effort. This strategy specifically identifies priorities and interventions

for coming five years, achieving of which is intended to significantly improve quality of care.

Definition of Dimensions

Client centered means that the people for whom the service is provided receive the information they need to make informed decisions about their own health, their desires are reflected in the final outcomes and decision making is shared between the client and service providers.

Equitable means that whoever you are and wherever you live in Afghanistan you should enjoy the same range and quality of public health services. Services may be provided in a different way depending on your location. Services should be affordable for all which means people may pay different amounts or not pay at all. Equity does recognize that if someone's clinical need is greater than yours they may access services before you when resources are limited.

Available means that you have the services you need when you need them. In the context of Afghanistan this means having access to basic packages of health services within two hours of travelling using whatever available means of transport and to a higher level facility within a further two hours travel time following referral. Services are provided by appropriately trained staff who have sufficient equipment and supplies to deliver them.

Appropriate means that services reflect evidence-based practice, are delivered in a culturally sensitive way and are tailored to the needs of different clients groups (e.g., children, older people). Appropriate services do not over-deliver nor do they fail to meet the needs of the client.

Safe means doing no avoidable physical, mental or social harm to service users, to the staff providing the care and to the environment.

Consistent means that the standard of services received in facilities providing the same level of care (e.g., basic health centers) is uniformly good. In addition, the range and quality of services provided over time does not diminish, it only improves. Consistency also means that as an individual passes from one part of the system to another, there is continuity of care.

Effective means that the collective inputs achieve the desired outcomes as agreed by the service provider and service user.

Timely means receiving the required services before users suffer avoidable negative health, economic or social consequences.

Efficient means making maximum use of resources and avoiding waste.

Continuously improves means that the system is not stagnant; it continuously responds to its environment and customer needs and adapts to reflect recognized best practice.

TARGETS & MILESTONES

The aim of this Strategy is to "improve the quality of health services and health outcomes in Afghanistan". In order to demonstrate progress in achieving the first part of this aim, a long-list of quality indicators has been developed that reflect the definition and dimensions of quality outlined above. These indicators are set out in Appendix 2. Wherever possible, measures have been drawn from existing data sets (e.g., HMIS, Balanced Score Card (BSC)) to avoid the need for additional work and the creation of parallel monitoring systems.

An early task of the Unit in supporting the implementation of this Strategy will be to streamline the number of indicators, establish the health system's current baseline performance against these indicators and set targets for 2015. Using the existing system such as HMIS, BSC, DEWS, NMC and the like, the Unit will establish a mechanism to gather, collate, analyze and present relevant indicators on regular intervals, preferably monthly basis, to monitor progress. This will be the first time in the history of health care in Afghanistan that the MoPH will be able to routinely assess the quality of services using a broad cross-section or "dashboard" of relevant measures. It must be emphasized that almost all data included in the long-list of dashboard indicators is readily accessible within the current system. The work of the Unit will be to ensure that appropriate processes are established to channel these data to a single point for analysis.

The Strategy also commits to contribute to improving health outcomes. Initiatives and activity will be commissioned/introduced in a number of clinical priority areas as part of the five-year plan. Once this work-plan has been agreed, measurable outcome targets will be set and tracked on a monthly/ quarterly basis. A number of suggested indicators to monitor progress in improving health outcomes are set out below alongside related strategic interventions.

STRATEGIC OBJECTIVES, PRIORITIES AND INTERVENTIONS

This strategy introduces a two-dimensional framework for quality improvement interventions at national level. The horizontal dimension is a set of five strategic objectives designed to achieve broad-ranging improvements in health services in the coming five to eight years. These strategic objectives have two levels of related interventions underneath them, which are called intermediate objectives and activities in the implementation plan. Strategic objectives and related interventions are designed to improve the capacity of the health system to provide high quality services. These strategic objectives include:

- Improving patients safety
- Providing client centered services
- Strengthening data recording and reporting system
- Improving clinical practices
- Building capacity to continuously improve

The vertical dimension of the strategic framework comprises seven strategic priority areas as identified by the Health and Nutrition Sector Strategy. Strategic priorities for improving health outcomes cover:

- Maternal Care
- Neonatal Care
- Child and Adolescent Health
- Nutrition
- Disability
- Mental Health
- Communicable Diseases

It should be noted that the strategic objectives (the horizontal dimension) will improve quality of health services across MoPH priority areas (the vertical dimension) and, hence, prepare the ground for and contribute to improving health outcomes across MoPH priorities.

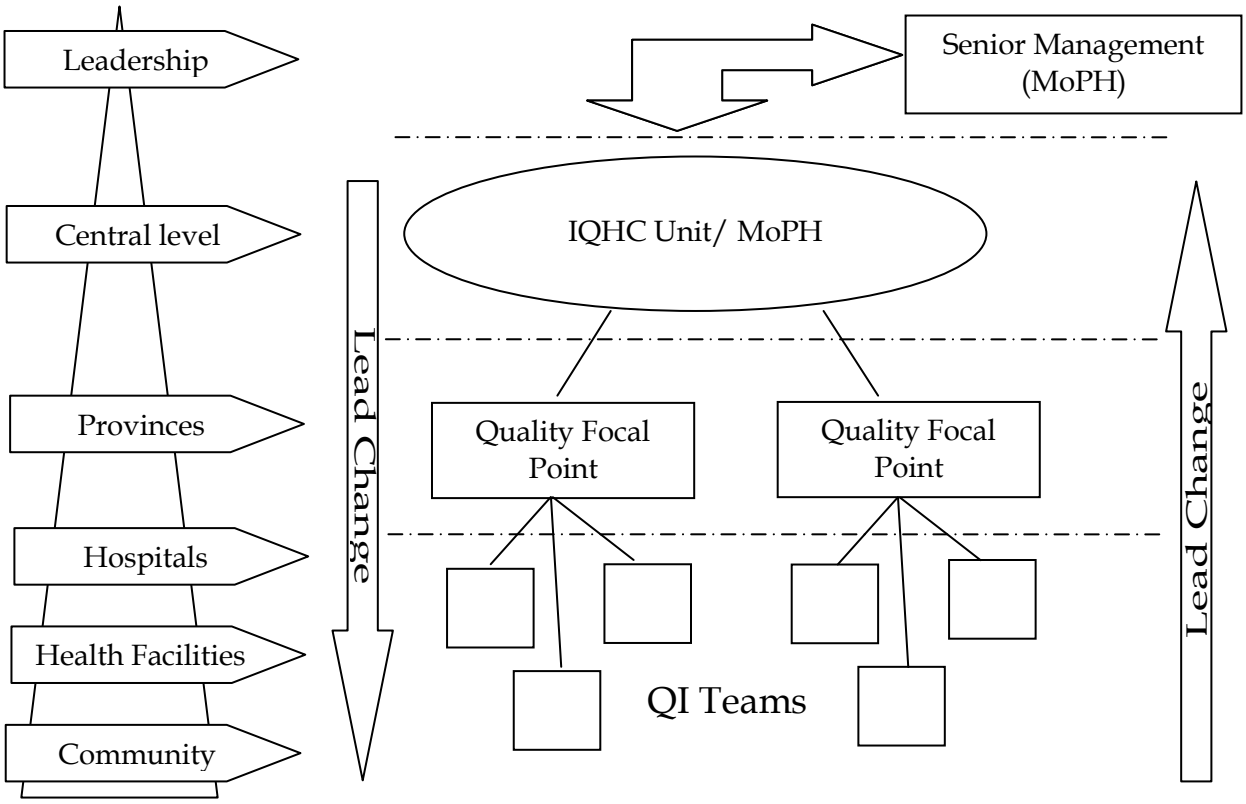
To function effectively and efficiently, the above-mentioned framework requires an environment, which is conducive for the achievement of the aim of this strategy (i.e. "to improve the quality of health services and health outcomes in Afghanistan"). Such environment can be achieved through policy level support, communication/advocacy, training/ capacity building, and the development of sustainability and monitoring & evaluation mechanisms.

Mechanism of Implementation of the Strategy:

The Strategy will be operationalized through a five-year implementation plan (2011 – 2015) and it will go hand in hand with other MoPH strategies. The Unit for Improving Quality in Health Care (IQHC Unit) of the Ministry of Public Health is the lead entity for the overall process and assumes the task of coordination of all efforts related to improving quality of health services by different MoPH departments and other stakeholders. As the lead oversight agency for improving quality of health services at national level, the IQHC Unit provides technical support and coordinates the implementation of various components of the Strategy at national and provincial level. Different MoPH departments and other stakeholders involved in quality of health care each plan and implement that part of the Strategy directly relating to their area of focus in a manner which best achieves the objectives of the overall Strategy.

The Strategy if further explained by a five-year implementation plan. Given the changing environment, needs, priorities and opportunities prevailing during each year, the IQHC Unit will review and revise the plan detailing various activities intended to be implemented over the course of the year.

This Strategy draws a roadmap for the future of quality in health care in Afghanistan and, hence, requires a support system, resources and necessary infrastructure for its effective implementation. The following structure is proposed to coordinate all implementation activities intended to achieve objectives of the Strategy.



MONITORING AND EVALUATION

Progress in implementing the National Strategy for Improving Quality in Health Care will be monitored through three distinctive processes. The first will be through the review of performance of the whole system against the "dashboard" of quality indicators described under "Targets and Milestones" (for long list of indicators see Appendix 2). The second will be a monthly/quarterly review of progress against pre-defined outcome indicators for all quality initiatives operating to improve clinical outcomes in the priority areas outlined in the vertical strategies. Impact against these indicators will be formally reviewed on an annual basis and recommendations may be made to modify approaches if insufficient progress has been achieved. Finally, a detailed annual progress report will be developed and submitted to the Taskforce and other relevant forums including the CGHN and Results Conference, describing activity and achievements against the detailed five-year plan outlined above.

ROLES AND RESPONSIBILITIES FOR STRATEGY IMPLEMENTATION

As described in the Strategic Objectives, quality is the responsibility of everyone working in the health sector. It is important therefore not to build a parallel supporting process that gives the impression this work can and is being done by someone else. Although roles and responsibilities are not necessarily owned

within the system as yet, the following action plan is proposed to create awareness and commitment within the existing infrastructure to help implement the strategy. Ultimately, it will be the Improving Quality in Health Care Unit who will drive and coordinate the activity outlined in the five-year plan and report on progress. However, this ambitious and broad-ranging program cannot and should not be implemented by the Unit. Members, with the continued support of HCI, will work very closely with other Departments within the MoPH, implementing NGOs and those providing technical support and donors to make this possible. Formal agreements as to roles and responsibilities of the respective parties will emerge as these alliances have been forged.

Action Plan for Establishing Infrastructure to Implement Strategy:

- Reconstitute the Taskforce established to help develop the Strategy as a body that oversees its implementation. Review terms of reference and current membership to ensure they are compatible with the new role. Review the functions of the now defunct National Quality Assurance Committee and incorporate any components that are still important and co-opt members keen to continue in this role.
- Organize a launch event to promote the final, approved version of the Strategy and secure commitment from a broad constituency to assist in its implementation.
- HCI, in its capacity as technical advisor to the national MoPH on all issues relating to quality in health care, will work with other respected partners in the field to help develop capacity across the system such that individuals, facilities and support organizations are equipped to start taking responsible for the quality of health care
- Create a network of individuals formally or informally tasked to work to improve health care at national, provincial and health facility level. Initially this will include Provincial and hospital QA/QI teams. Establish systems to enable the sharing of knowledge, experiences and joint problem-solving. Start to utilize these systems to cascade and secure information and to seek volunteers to pilot activity outlined in the five-year plan. Over time, it is envisaged this network will become more formal with much more work being channeled through these teams.
- The Unit will work particularly closely with other Departments within the MoPH to ensure there is shared responsibility for activity that has a direct relevance to their own agendas. As an underpinning Strategy much of the work outlined in the five-year plan will align closely with others plans and/or intentions
- Working close with the Health Economics and Financing Directorate (HEFT), the Unit will review current contractual arrangements with implementing NGOs to establish what formal responsibilities already exist for improving quality. The Strategy may provide a mechanism through which these organizations can achieve existing obligations and in doing so assist in the Strategies implementation.

Strategic Objectives and Interventions To Build Capacity To Provide High Quality Services

Strategic Objectives	Intermediate Objectives	Description of Activities
Improving patient safety	Establishing an adverse events and near-miss reporting system, that includes analysis, distilling of lessons learned, dissemination of findings and action to reduce further risk	Definitions of what constitutes an "adverse event" and "near miss" need to be agreed. Standard documentation needs to be developed for the recording of both types of incidence. A named senior leader within each national, provincial, regional and district hospital needs to be trained and held accountable for the process of notification (adverse events only), investigation, identification of lessons learned and taking appropriate action to mitigate against further risk. A central/provincial body within the MoPH will need to be assigned responsibility for; a) receiving notifications of adverse events, b) supporting hospital leaders in managing the immediate consequences, c) collating and analyzing data, d) reporting quarterly on the numbers and types of incidents, general lessons learned and recommended actions for the wider hospital sector, and e) following up on progress against action plans with facilities reporting serious incidents. Frontline staff, supervisors and leaders need to be sensitized to the importance of reporting incidents and managers need to ensure that those who do so do not experience negative consequences as a result of these actions. The establishment of an adverse and near miss reporting system will initially be introduced in the hospital sector. This will be expanded to include CHCs and BHCs over time
	Establishing a risk management system in all facilities	Each health facility needs to undertake an annual risk appraisal covering all aspects of potential risk for clients, visitors, members of staff and property. Risks need to be assessed for their severity and the likelihood of them occurring. Actions plans should then be developed to help reduce the probability of these risks taking place. Guidance and templates will be developed to support this process along with training as required.
	Establishing the safe surgery checklist in all national, provincial and regional hospitals	The WHO's safe surgery checklist is a set of evidence-based safety procedures that, if performed in an operating room prior to surgery, help reduce adverse surgical outcomes (morbidity and mortality). Specifically the checklist addresses inadequate anesthetic safety practices, avoidable surgical infection and poor communication among team members. Planning for the introduction of the checklist is already underway. Lessons need to be learned from initial piloting and the tool, along with any necessary modifications, rolled out to all tertiary level facilities. If successful, this program will be expanded to all facilities performing surgery.

Strategic Objectives	Intermediate Objectives	Description of Activities
Improving patient safety (continued)	Strengthening infection prevention and control mechanisms	Policies, procedures and standards abound in this area but levels of adherence are unclear. The BSC has only one indicator (e.g., sharps disposal) that measures performance of health facilities in preventing infection. Performance appears to have deteriorated from 2007 to 2008. The first action required is to establish current performance and practices, identify any barriers to compliance with guidelines and pilot locally generated ideas for improvement that are sustainable. Measures need to be developed to monitor progress. Where improvements have been achieved through the application of standards, these need to be rolled out to other districts and provinces
	Introducing continuous professional development and revalidation and strengthening staff appraisal	Introduce a formal and structured annual appraisal system for all staff. The obligation for conducting and documenting the appraisal will fall with the organization that employs the individual or contracts their services. The responsibility for gathering evidence for an appraisal will fall to the appraisee. This evidence will comprise: • clinical audit results, • activity demonstrating continuous professional development (CPD) in line with previously agreed development needs, • changes in practice arising from serious incidents, complaints, CPD and peer review and • documentation to show compliance to recognized professional standards The requirement to conduct appraisals will be written into the job descriptions of senior professionals within every health care organization. For doctors, this process will be standardized allowing some variation to reflect differences in medical practice. The outcome of annual appraisals will form the basis for medical revalidation. Further work is necessary to establish how practitioners who have no direct clinical oversight (e.g., working privately) will be appraised and revalidated. During the appraisal, development needs will be identified and these will determine on-going CPD. A process for recognizing and giving weight to different types of development opportunities needs to be established. A simpler arrangement needs to be established for nurses and midwives

Strategic Objectives	Intermediate Objectives	Description of Activities
Improving patient safety (continued)	Improving pharmaceuticals safety	Develop a system for the identification and control of high hazard medication (e.g., narcotics and anti coagulants). Put in place appropriate processes and systems to help reduce errors in prescriptions, inappropriate use of medication and adverse effects. This will include: • consumer & provider awareness • checking procedures to ensure the correct dispensing of medication with information to patients on dosage, route & frequency of administration and duration • use of medication reconciliation sheets • review and improve core processes for the administration of medication within health facilities • safety labeling for high hazard medications • develop a nationally recognized list of high hazard or high alert medication • involving patients, families and health workers in understanding high alert medication • develop pharmaceuticals safety tools at community and health facility levels • develop necessary guidelines • ensure pharmacists spend enough time explaining drug use to consumers • develop treatment guidelines for common conditions • develop appropriate interventions to prevent the sale of expired medicine.

Strategic Objectives	Intermediate Objectives	Description of Activities
Providing client centered services	Establishing and raising awareness of a patient charter (rights and responsibilities) and code of ethics tailored to local circumstances	Review all relevant materials already produced by MoPH. Compare with other national charters and code of ethics. Distil the best and most applicable. Produce a draft patients' charter to include rights and responsibilities and a code of ethics framework. Consult widely across all constituencies including service users and staff. Finalize and agree both documents. Ensure copies of the patients' rights and responsibilities are accessible in every health care facility. Identify media through which messages can be cascaded to those unable to read. Require every health facility to produce a list of commitments relevant to local services and describing staff behaviors that reflect all elements of the code of ethics framework. These commitments will constitute a set of simple rules that facility staff commit to abide by. This exercise will need to be led by facility supervisors. Training will be available for those who need assistance in undertaking this work
	Establishing a client complaint system	Develop a standardized process through which patients' complaints are carefully documented, investigated by a senior, designated manager from the facility against which the complaint has been made, the outcome is communicated to the complainant within an agreed amount of time and there exists a mechanism of appeal to a higher authority. Ideally, complaints will be investigated and resolved locally, however, patients need to be able to have recourse to an "Ombudsman" who is seen as independent and judicious and will review cases where local resolution is not possible. Once a process has been designed and tested, it will be rolled out across BHCs, CHCs and hospitals. Provider NGOs, facility and MoPH staff will need time, support and training to put the necessarily processes in place prior to the wide-scale promotion of the service.

Strategic Objectives	Intermediate Objectives	Description of Activities
Providing client centered services (continued)	Introducing a national patients' satisfaction survey	There are two existing processes through which patient satisfaction can currently be gauged in the health system. Firstly, the BSC includes a score for patient satisfaction based on a very basic rating scale applied by previous users of the service and the community. The second is a number of standards and a sample questionnaire contained in HSSP's Behavior Change Communication section of their BHC, CHC and DH standards. These advocate that levels of patient satisfaction be canvassed, findings assessed and cascaded to staff and action is taken as necessary. Work needs to be undertaken to establish to what extent these standards are already being adhered to, whether the sample questionnaire is being used and how effective the process is in informing facilities of their success in meeting their customers' needs. This work will be built upon and extended until there is country-wide coverage and results for a basic set of questions can be compared for the purpose of benchmarking and learning.
	Increasing clients' participation and engagement in the design and management of health services delivery	Develop mechanisms through which health service delivery points at all levels of the system ensure client participation in determining how services are provided. This will draw heavily on learning from the Partnership Defined Quality initiative. Enhance the role and relationship with health Shura and Family Action Groups. Promote the active participation of patient representatives in the development of national policy and strategy using the Global Fund Program as a potential model. Encourage quality assurance and improvement teams at national, provincial and health facility levels to coop a patient representative onto their group.
	Developing and implementing informed consent mechanism for specified health conditions	Under the principles of medical ethics, the patient has the right to be fully informed about their condition, treatment options and to choose or refuse treatment. Work needs to be undertaken to establish the extent to which these principles are followed for common interventions (e.g., surgical procedures). Processes, documentation, training and supervision will need to be instituted if current performance falls short of what is deemed to be acceptable practice. This activity could be piloted as part of a quality initiative seeking to address specific health outcomes (e.g., improving Caesarian Section rates)

Strategic Objectives	Intermediate Objectives	Description of Activities
Providing client centered services (continued)	Improving staff satisfaction	There is a widely-held assumption that levels of health worker satisfaction in Afghanistan are correlated to the quality of care provided particularly where day-to-day work is not closely supervised. The MoPH cannot hope to improve the quality of health care whilst neglecting the needs and therefore motivation of health care providers. The BSC includes an assessment of staff satisfaction which is compiled from measures across 18 different dimensions. Scores for only 7 of these dimensions are currently reported individually. The MoPH, working closely with the Johns Hopkins University and the Indian Institute for Health Management Research, will seek to develop this existing tool such that it can be used as a stand-alone staff satisfaction questionnaire in facilities not covered by the BPHS. Ultimately, the goal will be to combine data from both sources to provide a comprehensive, service-wide perspective. Data gathered in previous years needs to be analyzed and action agreed to try and address those areas contributing most to dissatisfaction amongst staff.
Strengthening data recording and reporting systems	Improving medical records, data collection and promote its proper utilization across all levels of the health sector	Work with health facilities to ensure essential information about patients, their history, condition and treatment are systematically recorded in documents that are easy to complete and review. Where necessary, streamline data capture tools such as registers. Develop protocols for the classification, recording, presentation and analysis of medical data. Develop and pilot medical record storage and retrieval systems that ensure confidentiality of personal data. Assess organizational information requirements and processes for recording and reporting routine information for internal and external use. Develop guidelines for the use of data at clinical reviews meetings. Work with human resources to develop a job description/specification for a Medical Record Administrator post.
	Improving reporting systems and feedback mechanisms	Develop improved data collection tools. Working with other relevant MoPH departments, establish accountabilities and responsibilities including timeframes for regular reporting of performance and clinical data. Identify the human resources required to enable and oversee this work. Develop terms of references and recruit necessary staff. Produce a training manual and train staff on how to process and analyze data. Ensure sufficient MoPH time is allocated to interpreting data, providing routine feedback, and using findings to guide improvement activities.

Strategic Objectives	Intermediate Objectives	Description of Activities
Strengthening data recording and reporting systems (continued)	Collecting/collating high level performance indicators that demonstrate the quality of health care services	Identify and agree high level performance indicators that collectively measure the "vital signs" of the health sector in relation to the quality of care as defined in this document. Wherever possible these measures will be drawn from existing indicators. Ideally measures will be available at least quarterly. (See Appendix 3)
	Streamline existing data collection systems and improve validity	Identify current data collection systems and review against the needs of the MoPH for performance and clinical data across all levels of the health care system. Agree mechanisms to revise existing systems to meet these data requirements whilst placing as minimal demands as is possible of frontline staff. Develop systems to track completion, timeliness, accuracy and validity against an agreed set of indicators.
	Strengthen systems for the collection and analysis of hospital performance data	Develop consensus amongst all tiers of the hospital sector and the MoPH on information required from all public hospitals. Introduce a minimum, mandatory reporting system for EPHS facilities. Once refined, explore what , if any, legislation is required to include all private hospitals. Ensure reporting is linked to plans for the accreditation of private hospitals.
Improving clinical practice	Improve knowledge and skills in priority areas	Training and skills development will be included in all improvement activity undertaken in support of the "Strategic Objectives and Interventions to Improve Health Outcomes" where an absence of knowledge is contributing to poor performance
	Establishing a culture and infrastructure that supports the improvement of quality in health facilities	Work with the MoPH to ensure that leadership styles and emphasis, supervisory activity, contracting processes, data collection, collation and feedback, learning, messaging, patient engagement and recognition and reward systems all work together to support a culture of improvement. In addition, front line staff will need to be equipped with some basic analysis, problem-solving and improvement skills to enable them to make changes that enhance the quality of services they provide. (Also see section on "Building Capacity to Continuously Improve").

Strategic Objectives	Intermediate Objectives	Description of Activities
Improving clinical practice (continued)	Strengthening the capture, utilization and sharing of essential clinical information within and across health facilities	Incorporate analysis and improvement of clinical record keeping and the transfer of essential data between caretakers both within and across health facilities into a wider initiative to improve health outcomes under one of the priorities outlined in the "Strategic Objectives And Interventions to Improve Health Outcomes". The clinical topic area selected would need to be one in which improvement in outcomes would require, amongst other interventions, continuity in the transfer of patients from one part of the system to another (e.g., referrals between a CHC and DH). The learning would then be adapted for more wholesale application.
	Strengthening referrals systems	Identify the natural and/or official population catchment areas for hospitals providing a range of specialist services, starting with emergency obstetrics and pediatrics. Research current procedures for referral from BHC/CHCs to higher level facilities including the transfer of essential clinical information from the referring site to the hospital and back following treatment. Work to improve and/or develop these systems so that patients experience continuity of care. Build systems that ensure public sector transportation, where it exists, is prioritized for the most serious conditions. Review the benefits of the United Nations Children's Fund's (UNICEF's) Maternity Waiting Home and the Urban Health Services Support Project run by Japan International Cooperation Agency (JICA) to establish their contribution to strengthening the referral system and work to expand and replicate activity that has high impact.
	Ensuring the quality of pharmaceuticals	See activities under " improving pharmaceuticals safety"
	Improving management and leadership at the health facility level	Establish plans for the continuance and roll-out of the Hospital Reform Project and Leadership Development Program (LDP). Work with colleagues supporting these programs and implementing NGOs to identify a core curriculum of essential management and leadership skills for senior staff working at BPHS and EPHS level facilities. Design an integrated, project based training program that could be provided as a stand-alone course (similar to LDP) or part of other quality improvement projects. Pilot the program in areas not already served by similar training.

Strategic Objectives	Intermediate Objectives	Description of Activities
Improving clinical practice (continued)	Strengthening supportive supervision	Identify current position reviewing: • the nature of the supervision provided by the MoPH and managers from implementing NGOs • the frequency and continuity of visits • staff satisfaction • relevant training materials and training needs Identify best practice, gaps and challenges in current arrangements. Seek to address shortfalls as part of a broader initiative designed to help establish a culture and infrastructure that supports the improvement of quality in health facilities. Work closely with the Reproductive Health Directorate and JICA, amongst other, to incorporate lessons learned from their own work in this area.
	Introducing licensing and accreditation for private hospitals	The MoPH, with technical support from TechServ, has already drawn up a comprehensive proposal for the licensing and accreditation of hospitals within Afghanistan. This work will initially be piloted in the private hospitals. Further consideration will need to be given to: • the establishment of a licensing and accreditation board, • the drawing up and approval of any necessary legislation, • the harmonization of hospital standards across this and other quality assurance initiatives, • the routine reporting of performance under the HMIS system as a requirement of licensing and the utilization of these data in accreditation decisions and • the re-licensing/accreditation process.
	Improving availability, consistency and equitability of services	Establish a number of pilots that seek to address issues of poor access due to the limited opening hours of some BHCs and/or providing outreach services for difficult-to-reach communities
	Improving effectiveness and timeliness of the services	Include as a component of one of the improvement initiatives developed to improve health outcomes described below under "Strategic Objectives and Interventions to Improve Health Outcomes" This is likely to be in the clinical area of HIV/AIDS or childhood illness where the timeliness of interventions can have a significant impact on mortality

Strategic Objectives	Intermediate Objectives	Description of Activities
Improving clinical practice (continued)	Clinical audit and peer review	Clinicians have a duty to provide the best possible care to their patients allowing for unavoidable resource limitations experienced in their place of practice. In order to meet this duty they will be required to initiate and participate in clinical audit to review the extent to which their own and their team's practice meets agreed standards/guidelines and users expectations and their clinical outcomes are comparable or superior to those of colleagues. Where shortfalls exist, improvements will be expected. On-going review and monitoring will be necessary to demonstrate sustainability. This requirement should be underpinned by legislation and written in to contracts of employment. The employing organization will be obligated to support clinician participation in audit activity. This support will come in the form of time, resources and access to expertise and data. NB - this strategic objective will be implement after the introduction of a serious incident and near miss reporting system, improved capture of clinical data in the form of medical records, routine monitoring of patient satisfaction and better clinical outcomes reporting. Clinical audit and peer review are both important in enabling a clinician to demonstrate his/her fitness to practice. As such, both will need to be established before the on-going registration of health care practitioners can be introduced
Building capacity to continuously improve	Ensuring quality and quality improvement is understood to be the responsibility of everyone working in the sector	This will entail a multi-pronged approach that begins with clear and consistent messages from leaders throughout the health care system, performance management and/or contractual monitoring that expects and looks for evidence of improvement, the equipping of health care staff to make improvements and job descriptions that identify this as a fundamental part of every individual's role. Supervisory meetings and annual appraisals will include a review of improvement activity.

Strategic Objectives	Intermediate Objectives	Description of Activities
Building capacity to continuously improve (continued)	Guiding leaders and supervisors in how they can enable and sustain continuous improvement	There are some principals governing the way leaders and supervisors behave that can either encourage or inhibit activity that leads to improvement. Behavior that supports improvement includes: • setting clear, consistent, unifying and measurable aims and inviting all to participate in realizing them; • attending to improvement activity that supports these aims; • ensuring frontline health care worker are equipped with basic improvement skills to initiate and monitor changes; • enabling subordinates the freedom within boundaries to experiment with new ways of working; • monitoring progress utilizing process and outcome data; • fostering transparency and the sharing of learning; • encouraging the scanning of other health care organizations and systems for evidence of best practice; • benchmarking to create mild peer pressure and learning; • scrutinizing the organization and system, to identify and address patterns of behavior, processes and structures that inhibit innovation and improvement activity • celebrating achievement and recognizing those who are working to improve services in line with stated aims • finding ways to introduce the experiences and ideas of patients into the system Leaders and supervisors will need to be taught and apply these principles
	Introducing a national awards program to recognize local best practice	• Teams working within the health care system will be invited to apply for one of a number of high-profile awards for innovation and excellence. They will need to be able to demonstrate sustained improvements in health care through changes introduced at some point in the preceding 5 years. Interventions should be replicable and require little or no additional resources. • Sponsorship will be sought for monetary prizes that can be used to enable further improvements in health care and/or staff well-being. The awards will be announced during an annual gala evening where the work of all short-listed projects would be publicized and celebrated. National and international media will be invited to cover the event. Learning from all short-listed applications will be captured, published and widely distributed across the health care system

Strategic Objectives	Intermediate Objectives	Description of Activities
Building capacity to continuously improve (continued)	Teaching health care workers throughout the system the basic tools needed to continuously improve	Work will be undertaken to achieve consensus and then document what core knowledge and tools are required for health care workers to improve and sustain individual, team and organizational performance. These will be developed into a curriculum and training materials that will initially be taught to Provincial MoPH and provider NGO trainers. They, in turn, will be mandated to cascade the training across all health care facilities within their geographical areas and domains of responsibility. Targets for the quality and coverage of training will be built into contracting arrangements with provider NGOs. Written materials will be produced to support this training and made widely available to frontline workers. All health facilities that have participated in improvement training will be encouraged to undertake an improvement project enabling them to apply and develop their knowledge. Teams will have access to expert mentors who can assist them if they encounter difficulties and/or require further knowledge. Discussions will commence to embed the curriculum into pre-registration programs for doctors, nurses and midwives. The Improving Quality in Health Care (IQHC) Unit will be responsible for overseeing this work.
	Encouraging the presentation and use of data for learning and improvement, not punishment	Misinterpretation and overreactions to performance data occur frequently when routine fluctuations in performance (known as "common cause variation") are not visible nor understood. Similarly, the "massaging" of data inputs can arise when the transparent sharing of performance leads to blame and punishment. As part of the strengthening of leadership, management and supportive supervision proposed above, leaders across all parts of the health care system will be taught how to interpret and respond to performance data so that only genuine changes in outputs are highlighted and poor performance is seen as an opportunity for learning and improvement. In support of this, the IQHC Unit will work closely with the HMIS Department to ensure that as much performance data as possible is presented in the form of run or control charts.

Strategic Objectives	Intermediate Objectives	Description of Activities
Building capacity to continuously improve (continued)	Developing and/or sustaining an infrastructure that encourages, supports and coordinates improvement activity	Individuals, teams and committees already exist across the health care system that have some responsibility, experience or interest in improving and/or assuring quality. Currently, however, the formal and informal links between them are weak, if indeed, they exist at all and their focus and brief is poorly defined. In order to deliver up an exciting and demanding work plan to improve quality, we need to identify, connect, strengthen and work through this infrastructure. An early task of the IQHC Unit will be to map the key components of this fragile network and start to strengthen it through workshops, communications, facilitating linkages around common interests and through agreement within the MoPH of more formal links, roles and responsibilities as required.
	Ensuring mechanisms are in place to continuously scan national and international information systems, including research for evidence of best practice, selecting appropriate means for spread	For high quality health care to be sustained, it must continuously adapt in response to customer demand, changes in resource levels, developments in and access to technology, changes in the environment, research findings and emergent best practice. A senior expert in each national MoPH department needs to be assigned the responsibility to scan national and international data/ literature across their Department's field of expertise (e.g., reproductive health, TB, Information Technology) in order to ensure that the MoPH is always operating with up-to-date knowledge. The IQHC Unit will offer advice on the feasibility of adapting, piloting and then spreading changes likely to have the greatest impact on health outcomes, patient and staff satisfaction.

Strategic Objectives and Interventions to Improve Health Outcomes

Priority area	Leading causes of mortality and morbidity	Prevention	Highly recommended interventions (evidence based)	Potential Quality Improvement Interventions	Potential Indicators
Maternal Care	Ante partum Intrapartum and postpartum hemorrhage	Antenatal check up according BPHS and EPHS facilities Iron/Folate during antenatal, active management of third stage of labor, post natal care Community awareness about danger sign of pregnancy -Functionalized referral system	Manual extraction of placenta, removal of retained products, bleeding, hypovolemic shock management, blood transfusion	Competency based training (initial and refresher) Reliable provision of standard equipment, supplies and medicines Job aids/monitoring checklists Maternal death reviews Training on monitoring of signal function Adoption of related standards (e.g., standards based management & recognition) Spread of successful changes from maternal & neonatal improvement collaboratives Infection prevention committees Improve referral systems, including transportation. Good record-keeping and clinical audit. Review of performance (e.g., utilization of UNICEF quality assessment for Emergency Obstetric Care services) Partnership defined quality	Maternal mortality ratio % of pregnant women who received at least 1 ANC sessions by skilled attendant % of pregnant women who received 4 ANC sessions by skilled attendant % deliveries attended by a skilled birth attendant % of women who received a post natal visit within 48 hrs of the birth Proportion of Caesarian section rates Prevalence of anemia in pregnant women Unmet need for FP % of pregnant women who received TT 2 plus % of women knowing at least 3 danger signs of pregnancy related complications
	Sepsis	Tetanus Toxoid immunization, community awareness of risks, clean delivery kit, use of prophylactic antibiotics as indicated, observance of infection prevention procedures	Diagnosis, isolation & treatment initially with broad spectrum antibiotic therapy, management of septic shock		
	Pregnancy-induced hypertension	Checking blood pressure & urine during antenatal visits, community awareness of danger signs	Anticonvulsants and antihypertensive drugs, induction or caesarian section		
	Obstructed labor	Delay in onset of first pregnancy, birth spacing, calcium & vitamin D supplementation, exposure to sunlight, identification of risks during antenatal care, birth preparedness, community awareness	Skilled birth attendance, reduced delay in seeking care, Partograph use, assisted delivery, caesarian section		
	Unsafe abortion	Family planning (FP), community awareness	Management of shock, hemorrhage and infection as indicated (including removal of retained products of conception) Post Abortion Care Post Abortion Family planning/BS		

Priority area	Leading causes of mortality and morbidity	Prevention	Highly recommended interventions (evidence based)	Potential Quality Improvement Interventions	Potential Indicators
Newborn care	Newborn asphyxia	Partograph use, immediate newborn care	APGAR to assess management, up-to-date resuscitation skills and availability of necessary supplies	Competency based training (initial and refresher) on assessment of neonate, resuscitation of asphyxia newborn (e.g., Helping Babies Breathe), essential newborn care and Kangaroo Mother Care Reliable provision of standard equipment, supplies and medicines Job aids/monitoring checklists Adoption of related standards (e.g., standards based management & recognition) Spread of successful changes from maternal & neonatal improvement collaboratives Improve referral systems, including transportation. Good record-keeping and clinical audit Review of performance (e.g., utilization of UNICEF quality assessment for Emergency Obstetric Care services) Neonatal death reviews	Neonatal mortality rate Perinatal mortality rate % of neonatal deaths due to asphyxia % of neonatal deaths due to sepsis % of neonatal deaths due to low birth weight Caesarian section rates
	Newborn sepsis	Tetanus Toxoid vaccination of mother, clean delivery & appropriate cord care, immediate newborn care, isolation of infected babies	Antibiotic and shock therapy, post-natal monitoring, mother's awareness of danger signs		
	Low birth weight	Antenatal care, micronutrients supplementation	Early breastfeeding, Kangaroo Mother Care		
	Birth trauma	Reduced delay in seeking and accessing care, skilled deliveries, staff competence, caesarean section as indicated, careful handling of the newborn	Advanced newborn care		

Priority area	Leading causes of mortality and morbidity	Prevention	Highly recommended interventions (evidence based)	Potential Quality Improvement Interventions	Potential Indicators
Child and Adolescent Health	Diarrhea with severe dehydration	Exclusive breast feeding, clean drinking water & community-wide sanitation, hand washing with soap, measles and rotavirus immunization, low osmolarity oral rehydration salts, zinc & vitamin A supplementation, early care-seeking, community education	Resuscitation as required, rehydration therapy, zinc, feeding	Competency based training (initial and refresher) on Integrated Management of Childhood Illness (IMCI) & community based IMCI (CIMCI). Expansion of Hospital Pediatric Initiative including establishment of emergency triage, assessment and treatment system Reliable provision of standard equipment, supplies and medicines. Emergency supplies and medicine kits located at all areas in a health facility where resuscitation may need to be performed Protocols/Job aids /monitoring checklists Adoption of related standards (e.g., SBM&R) Improve referral systems, including transportation Training to enable basic assessment of common conditions by school teachers	% of girls under 24 yrs who have received TT2 plus vaccination % children receiving oral rehydration salts and zinc when presenting to CHW or health facility with severe diarrhea % babies fed exclusively with breast milk until 6 months old % babies receiving complementary food and breast milk after 6 months of age % of pregnant women receiving iron and folate supplementation % of households using iodized salt # of under 5s admitted for severe acute malnutrition (SAM) treatment in in-patient and/or out-patient setting
	Severe pneumonia	Exclusive breast feeding, zinc supplementation, measles vaccination	Resuscitation as required, antibiotic therapy, oxygen, antipyretics		
	Severe malnutrition	Antenatal care including Tetanus Toxoid immunization and iron/folate, insecticide treated bednets, exclusive breast feeding of infants from birth to six months, immunization of infants, iron & vitamin A fortification and supplementation, universal iodized salt, hand washing with soap, community-wide sanitation & nutrition education	Resuscitate as required, vitamin A and antibiotics for corneal ulceration, glucose or sucrose, warming, regular feeding, antibiotics, rehydration solution for malnutrition (ReSoMal) orally or via a nasogastric tube, magnesium, potassium, zinc and copper supplements, multivitamins, folic acid and iron		
	Trauma	Community education	Resuscitate as required, treatment as per type of injury		

Priority area	Leading causes of mortality and morbidity	Prevention	Highly recommended interventions (evidence based)	Potential Quality Improvement Interventions	Potential Indicators
Nutrition	Severe acute malnutrition (SAM)	Exclusive breastfeeding , promotion of balanced complementary feeding and knowledge of feeding practices , Promotion and utilization of diversified food practices	Management of facility and community based treatment of SAM cases Promotion of excusive breast and complementary feeding	See "child and adolescent health"	Prevalence of SAM Prevalence of iron and vitamin A deficiency in <5s & women of reproductive age # of inpatient cases of SAM discharged after achieving target weight gain. # of inpatient cases of SAM who defaulted % of BPHS providing nutrition services
	Diarrhea	See "severe diarrhea with dehydration" under "child and adolescent health"	See "severe diarrhea with dehydration" under "child and adolescent health"		
	Micronutrient deficiency	Micronutrient fortification and supplementation	Micronutrient supplementation		
Disability	Lack of access to health care services War/Trauma Poverty Lack of physical rehabilitation services Poor nutrition		Early identification and intervention, inclusive health care strategy that responds to the needs of person with disabilities, implementation of community based rehabilitation strategy, inter-sectoral coordination	Capacity development of health and rehabilitation staff Improve coordination and cooperation between the government and NGOs working in disability Networking with neighboring countries Strengthening a bottom up approach to involve beneficiaries and communities Partnership defined quality	% of people with a disability attending a health facility # of health facilities providing rehabilitation services # of health workers that have received training on the disability component of BPHS

Priority area	Leading causes of mortality and morbidity	Prevention	Highly recommended interventions (evidence based)	Potential Quality Improvement Interventions	Potential Indicators
Mental health **Severe Mental Disorder**	Schizophrenia Depression	Promotion of good mental health	Mental health awareness at community and health facility level, counseling, psycho-social support, psychotropic medication (antipsychotics, antidepressants)	Competency based training (initial and refresher) on therapeutic counseling , recognition & treatment of priority mental health conditions Reliable provision of standard supplies and medicines Use of treatment protocols & mental health service delivery checklist Partnership Defined Quality	# of CHWs trained on recognition, referral and follow up of mental health problems • # of BPHS-level health facilities providing mental health services as defined in BPHS including psychosocial care (basic counseling in BHCs & professional counseling in CHCs and DHs) • Availability of minimum range of psychotropic drugs • # of patients presenting with mental health problem attend follow up appointment
Common Mental Disorders	Anxiety Acute situational reaction	Promotion of good mental health, early detection	Mental health awareness at community and health facility level, cognitive behavioral therapy, supportive counseling, stress management techniques, benzodiazepine therapy		
Substance abuse	Infection Trauma/injuries Malnutrition Withdrawal syndrome	Promotion of good mental health	Needle replacement schemes, methadone & buprenorphine therapy, psychosocial support		

Priority area	Leading causes of mortality and morbidity	Prevention	Highly recommended interventions (evidence based)	Potential Quality Improvement Interventions	Potential Indicators
Communicable diseases Tuberculosis (TB)	Pulmonary TB smear+ Treatment failure (poor patient compliance, co-morbidity) Relapse Multi-drug resistance Late detection Domestic overcrowding	Community awareness, early TB case detection through direct smear sputum microscopy & treatment, bacillus Calmette-Guérin (BCG) vaccination, preventive therapy, contact screening	directly observed therapy, using second/third line medication in cases of resistance,	SOPs and guidelines Provision of standard equipment, supplies and high quality medicines Access to quality assured laboratory services Systems for active surveillance and follow-up for TB Treatment guidelines Adoption of related standards (e.g., SBM&R) Competency based training (initial and refresher) for health staff and those involve in malaria control Supportive supervision and monitoring Collaboratives to help develop new models for PMTCT & HIV services Multi-sectoral approach	TB smear positive case notification rate Slides rechecking TB treatment success rate Default rate Treatment completion rate
Malaria	Late detection Non-standard treatment	Early diagnose and prompt and effective treatment, vector control (including insecticide treated and long-lasting insecticide treated bednets (ITNs) & (LITNs) and curtains, indoor residual spraying, larvae control), intermittent preventative treatment for pregnant women	Parasitological diagnosis, anti-malaria drugs as indicated by parasite and severity of illness		# of malaria confirmed cases per 1000 population per year Proportion of laboratory-confirmed malaria cases Proportion of malaria patients received Rx according to guidelines % of <5s who slept under ITN last night
HIV/AIDS	Late case detection and initiation of treatment Low awareness High number of injecting drug users	Community awareness, use of condoms, needle exchange schemes, Prevention of Mother to Child Transmission (PMTCT), Voluntary Counseling and Testing (VCT)	VCT, targeted interventions for HIV most at risk population, treatment with highly active antiretrovirals (HAART)		Prevalence rates #/% eligible patients receiving HAART % pregnant women receiving VCT

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Following documents were consulted during the development of the National Strategy for Improving Quality in Health Care:

- A Basic Package of Health Services for Afghanistan—2009/1388 (July 2009)
- Afghan Household Survey (AHS) 2006
- Health and Nutrition Sector Strategy 1387—1391 (2007/08—2012/13)
- Health Strategy Development—a Developer's Guide, Ministry of Public Health (February 2009)
- Hiltebeitel S, Green C, Goodrich E. 2010. Round Table Meeting on the National Improvement Strategy and Infrastructure for Improving Health Care in Afghanistan. *Proceedings*. Published by the Health Care Improvement Project.
- HMIS, Estimation about Death Cases due to ARI &CDD per admission
- Human Resources for Health – Afghanistan Profile –Draft, 25 November 2009
- Multiple Indicator Cluster Survey (MICS) 2003
- National Child and Adolescent Health Strategy 2009—2013 (July 2009)
- National Reproductive Health Strategy 2011-2015 (Draft, May 2011)
- National Risk and Vulnerability Assessment (NRVA)-2007/2008
- Quality of Care: A Process for Making Strategic Choices in Health Systems, World Health Organization (2006)
- Reproductive Age Mortality Survey (RAMOS), 2002
- WHO Global Atlas of the Health Workforce, 2009 update.

APPENDIX 1

SOURCES OF HEALTH-RELATED PERFORMANCE DATA AND INDICATORS

Source of Information	Purpose	Where Data Comes From	Who Collects Data	Frequency	What Happens to Data	Indicators
Health Management Information system (HMIS)	To Routinely measure progress of health services in a health facility	BPHS and EPHS facilities	Health care providers	Monthly/ Quarterly	Analysis, decision-making	HMIS indicators (BPHS and EPHS)
Balanced Score Card (BSC)	To evaluate the quality of service performance at primary care facilities	Primary care facilities	Third party	Annually	Analysis, general feedback, decision-making	29 indicators that are measured across the six BSC domains
Health strengthening system (HSS)	To measure progress of MoPH priority indicators	Community	BPHS implementer	Baseline, midterm and end of project	Analysis, feedback, establish baseline/set new targets	MoPH priority indicators
National Monitoring Checklist (NMC)	Monitoring	Health facilities	Monitoring officers/ consultants	Quarterly	Analysis, feedback, decision-making at health facility level	NMC Indicators
Diseases Early Warning System (DEWs)	To detect, investigate and control outbreaks of serious communicable disease	Community	Health facility staff	Weekly	Analysis, feedback, decision- making at health facility level	DEWs indicators
Expanded program on immunization (EPI)	To establish the extent to which the population has been immunized against life-threatening and disabling conditions	Health facilities	Health facility staff	Monthly	Analysis, feedback to NGOs	EPI Indicators

Source of Information	Purpose	Where Data Comes From	Who Collects Data	Frequency	What Happens to Data	Indicators
Reproductive Age Mortality Survey (RAMOS).	To document the magnitude of maternal mortality, the causes of death, risk factors and barriers to health care access	Community	Third party	Initially conducted in 2002 & normally repeated in 5> years	Strategic decision making	RAMOS indicators
(Multiple Indicator Cluster Survey) MICS	To show the extent to which children' s rights have been upheld around the country	Community	Third party	So far, only conducted once (2003)	Decision-making, fundraising	Priority maternal and child health indicators.
National Risk and Vulnerability Assessment Survey (NRVA)	To provide up-to-date information for situational analysis & furnish data needed for monitoring progress toward development goals. To provide key indicators of socio-economic development in Afghanistan,	Communit/ households (cross section analysis) nation-wide multi-purpose household survey	Central Statistics Office, Ministry of Rural Rehabilitation and Development (MRRD) (including the World Food Programme and World Bank	Biennial 2003, 2005 and 2007/2008	Decision-making, fundraising	Multi-purpose – including socio-economic development indicators, Millennium Development Goals (with a focus on priority maternal and child health indicators).
Afghanistan Health Survey (AHS)	To provide information on maternal and child health, child survival, family planning, health care utilization and related expenditures in rural Afghanistan	Community	Third party	Every three years	Analysis, decision-making	MoPH priority indicators

APPENDIX 2

DASHBOARD OF QUALITY

Quality Dimensions	Indicator	Numerator	Denominator	Data source	Frequency of Reporting	Type of Indicator
Client Centered: means that the people for whom the service is provided receive the information they need to make educated decisions about their own health, their desires are reflected in the final outcomes and decision making is shared between the client and service providers.	Time spent with the patient (>9minutes)	Amount of time (in minutes) that health care providers spent with their patients during the patient provider interaction	Total number of patients observed	BSC	Annually	Output
	Patient perception of quality index • Explanation of illness • Explanation of treatment	Number of outpatients provided with an explanation of illness and their treatment	Total number of patients observed during patient provider interaction.	BSC	Annually	Outcome
	Patients have trust in the skill and knowledge of health workers	Total of number of new outpatients exit interviewed who said that they had trust in the skills and knowledge of health care providers	Total number of new outpatients exit interviewed during annual health system performance assessment	BSC	Annually	Outcome

Quality Dimensions	Indicator	Numerator	Denominator	Data source	Frequency of Reporting	Type of Indicator
Client Centered (continued)	Patient counseling index	Composite score of patient counseling: • Doctor explained to patient the name of their illness • Doctor explained cause and course of illness • Precaution the patient needs to take at home • Explained the name of the medicine • Explained how and when to take the medicine • Explained the adverse effects of the medicine • Explained what signs and symptoms should prompt a return to clinic • Doctor mentioned to the patient the date to come for follow up • Doctor asked the patient if they had any queries/questions.	Total number of patients being counseled during patient provider interactions.	BSC	Annually	Process
	Clients involved as much as wanted to be in decisions regarding treatment	Total number of inpatients/outpatients interviewed who indicated that they had been involved as much as they wanted to be in decisions regarding treatment	Total number of inpatients/outpatients interviewed to explore their opinions regarding their involvement in decisions regarding treatment	TBD	Quarterly/ Annually	Outcome

Quality Dimensions	Indicator	Numerator	Denominator	Data source	Frequency of Reporting	Type of Indicator
Equitable: means that whoever you are and wherever you live in Afghanistan you should enjoy the same range and quality of public health services. Services may be provided in a different way depending on your location. Services should be affordable for all which means people may pay different amounts or not pay at all. Equity does recognize that if someone's clinical need is greater than yours they may access services before you when resources are limited	Consultations per person per year	Number of new patients attended BPHS health facilities to seek care by province	Total number of population at province	HMIS	Monthly	Output
	Number of households being visited by a CHW	Number of households visited by a CHW in each month/quarter	Target household (100-150 household to be visited by each CHW)	HMIS	Monthly/ Quarterly	Output
	Outpatient visit concentration index	Composite score for outpatient concentration. This indicator measures equity by wealth status of users of BPHS facilities. Scores range from -1 to +1, zero equates to utilization, -1 indicates higher utilization by the poor and +1 indicates higher utilization by the wealthy. Assessment of wealth include the following considerations: • Main source of income • Main source of lighting • Main source of drinking/cooking water • Main type of toilet • Ownership of various assets including, sewing machine , clock, gold jewelry, pressure cooker, radio, TV, bicycle, motorbike, car , tractor and generator	Total number of outpatients exit interviewed and their assets recorded and classified	BSC	Annually	Output

Quality Dimensions	Indicator	Numerator	Denominator	Data source	Frequency of Reporting	Type of Indicator
Equitable (continued)	Patient satisfaction concentration index	Composite score for patient satisfaction concentration. This indicator measures equity by wealth status of users of BPHS facilities. Scores range from -1 to +1, zero equates to satisfaction, -1 indicates higher satisfaction by the poor and +1 indicates higher satisfaction by the wealthy. Assessment of wealth include the following considerations: • Main source of income • Main source of lighting • Main source of drinking/cooking water • Main type of toilet Ownership of various assets including, sewing machine , clock, gold jewelry, pressure cooker, radio, TV, bicycle, motor bike, car , tractor and generator	Total number of outpatients exit interviewed and their assets recorded and classified and their satisfaction determined	BSC	Annually	Outcome
	Number of skilled birth attendants per 1000 population.	Total number of nurses, midwives and female doctors	Total population/1000	HMIS/RH Reporting System	Monthly/ Quarterly	Input
	Number of facilities with functional comprehensive essential obstetric care per 500,000 population	Number of comprehensive emergency obstetric care facilities	Total population	HMIS/RH Reporting System	Quarterly/ Annually	Input
	ANC coverage (percentage of pregnant women who attend at least one ANC visit)	Number of pregnant women who attended at least one ANC visit	Total number of pregnant women (4% of population)	HMIS	Monthly/ Quarterly	Output

Quality Dimensions	Indicator	Numerator	Denominator	Data source	Frequency of Reporting	Type of Indicator
Equitable (continued)	DPT3 coverage (percentage of children <1yrs of age who received DPTx3 vaccination)	Number of children<1yrs of age who received three doses of DPT3.	Total number of children<1years of age (4% of population)	HMIS	Monthly/ Quarterly	Output
Available: means that you have the services you need when you need them. In the context of Afghanistan this means having access to basic packages of health services within two hours of travelling using whatever available means of transport and to a higher level facility within a further two hours travel time following referral. Services are provided by appropriately trained staff who have sufficient equipment and supplies to delivery them.	Percentage of BPHS health facilities with drug stock outs during last month.	Number of BPHS health facilities that reported drug stock outs in last month	Total number of BPHS health facilities	HMIS	Monthly/ Quarterly	Input
	Percentage of EPHS health facilities with drug stock outs during last month.	Number of EPHS health facilities reported drug stock out during last month	Total number of EPHS health facilities	HMIS	Monthly/ Quarterly	Input
	Laboratory functionality index	Number of health laboratories capable of conducting the following laboratory tests: • Complete blood count • Malaria test • TB Smear • Gram staining • Blood type cross match • Urine test • Liver function test • HIV, HBsAg, HCV • Syphilis • Pregnancy	Total number of laboratories at BPHS health facilities	BSC	Annually	Process
	Family planning availability Index	Number of BPHS health facilities with the following family planning commodities: • Condom • Oral contraceptive pills • Depot medroxyprogesterone acetate • Intrauterine devices	Total number of health facilities assessed for their family planning commodity availability	BSC	Annually	Input

Quality Dimensions	Indicator	Numerator	Denominator	Data source	Frequency of Reporting	Type of Indicator
Available (continued)	Equipment functionality index (BPHS health facilities)	Number of health facilities with functional equipments (children scale, height measures, adult scale, blood pressure cuff , thermometer, stethoscope, otoscope, aspiration device, vision chart, surgery kit, sterilizer, delivery kit, vaccine refrigerator	Total number of BPHS health facilities assessed for equipment functionality	BSC	Annually	Input
	Equipment functionality index (EPHS emergency room)	• Number of EPHS emergency rooms with functional equipment (timer or clock with second hand, patient's scale, oxygen source, electrograph, blood pressure set, suction machine, defibrillator, ostoscope/opthalmoscope, ambu- bag with mask , examination torch, relax hammer, wash basin with soap, stretcher, drip stand)	Total number of EPHS health facilities assessed for emergency room equipment functionality	BSC	Annually	Input
	Staff received training during last year	Number of health workers who received training during last year	Total number of health workers	BSC	Annually	Output
	Staffing index (meeting minimum staffing guidelines)	Number of BPHS health facilities meeting minimum staffing guideline: • BHCs - 2 • CHCs -6 • District Hospitals (DHs) -21	Total BPHS health facilities functional	HMIS/BSC	Quarterly/ Annually	Input
	Is it convenient to travel from home to your nearest health facility?	Number of patients attending health facility who reported it was convenient for them to travel from home to health facility	Total number of patients attending health facilities and were asked about its convenience	BSC	Annually	Process

Quality Dimensions	Indicator	Numerator	Denominator	Data source	Frequency of Reporting	Type of Indicator
Available (continued)	Percentage of people who can access their nearest health facility within two hours using any means of transport	Number of people who reported that they live within two hours journey time of a health facility	Total number of people interviewed about their journey time to the nearest health facility.	TBD/BPHS implement-ers	Annually	Process
	Average travel time between health facility and nearest referral center	Total number of hours spent by patients travelling one way from the transferring to receiving health facility	Total number of patients referred	TBD	Annually	Output
	Health provider knowledge score	Number of health workers, nurses, midwives and doctors who pass knowledge test	Total number of health workers, nurses, midwives and doctors who took the test	BSC	Annually	Outcome
	Availability of accommodation for person on call in BPHS health facilities	Number of health facilities that have accommodation for person on –call (doctors, midwives, nurses).	Total number of health facilities evaluated	BSC	Annually	Input
	Infrastructure index	Number of health facilities having separate waiting rooms	Total number of health facilities evaluated	BSC	Annually	Input

Quality Dimensions	Indicator	Numerator	Denominator	Data source	Frequency of Reporting	Type of Indicator
Appropriate: means that services reflect evidence-based practice, are delivered in a culturally sensitive way and are tailored to the needs of different clients groups (e.g., children, older people). Appropriate services do not over-deliver nor do they fail to meet the needs of the client.	You had enough privacy during your visit.	Number of patients reporting that they had enough privacy during their visit	Total number of patients exit interviewed	BSC	Annually	Outcome
	Provider knowledge score	Number of health workers, nurses, midwives and doctors who pass knowledge test	Total number of health workers, nurses, midwives and doctors who took the test	BSC	Annually	Outcome
	Caesarian section rate (5-15%)	Number of pregnant women who attended a health facility and received a Caesarian Section	Total number of pregnant women who delivered at the health facility	HMIS	Monthly/ Quarterly	Output
	Clinical guidelines availability	Number of health facilities have clinical guidelines: • IMCI guideline • TB • Malaria • Family planning • Health education materials • HMIS • Immunization guidelines/schedule • Oral rehydration therapy Corner • Growth monitoring	Total number of health facilities evaluated	BSC	Annually	Input
	Rational drug use (percentage of prescription including antibiotics)	Number of prescriptions administered with at least one antibiotic included	Total number of prescriptions checked for administration of antibiotics	TBD	Quarterly	Output

Quality Dimensions	Indicator	Numerator	Denominator	Data source	Frequency of Reporting	Type of Indicator
Appropriate (continued)	Health staff are courteous and respectful	Number of patients interviewed who reported that health care providers were courteous and respectful during contact	Total number of patients interviewed	BSC	Annually	Outcome
	Overall patient satisfaction Index	Score of patients asked about their satisfaction with the services they received at the health facility	Total number of patient exit interviewed (Composite Index)	BSC/Annual Satisfaction Survey	Annually	Outcome
	Percentage of BPHS health facilities with at least one trained female health worker (doctor, midwife, nurse)	Number of BPHS health facilities with at least one trained female health workers	Total BPHS facilities	HMIS	Annually	Input
Safe: means doing no avoidable physical, mental or social harm to service users, to the staff providing the care and to the environment.	Proper sharps disposal index	Number of health facilities having closed containers (safety boxes), incinerator, and burial pits	Total number of health facilities evaluated	BSC	Annually	Input
	Post operative wound infection rate	Number of patient operated on who developed post operative infections	Total number of patient operated on	TBD/HMIS	Monthly/ Quarterly	Impact
	Obstetric major complication case fatality rate	Number of deaths arising from obstetric complications occurring within a health facility	Total number of obstetric complications referred in or arising within a health facility	HMIS	Monthly/ Quarterly	Impact
	Percentage of patients who reported that doctors always washed or cleaned their hands between touching patients	Number of patients interviewed who reported that doctors always washed/cleaned their hands between touching patients	Total number of patients interviewed	TBD	Quarterly/ Annually	Outcome

Quality Dimensions	Indicator	Numerator	Denominator	Data source	Frequency of Reporting	Type of Indicator
Safe (continued)	Patient counseling index • Doctor explained what precautions the patient needed to take at home • Doctor explained the name of medicine • Doctor explained how and when to take the medicine • Doctor explained the adverse effects of the medicine • Doctor explained what signs and symptoms should prompt a to return to clinic	Number of patients for whom specific elements of clinical counseling were observed during patient/provider interaction	Total number of patients observed.	BSC	Annually	Process
	Active program to control hospital-acquired (nosocomial) infections	Number of hospitals reporting having an active infection control program	Number of hospitals reporting	Hospital Checklist (M&E)	Quarterly/ Annually	Process
	Training session of infection prevention conducted for hospital employees	Number of hospitals providing training sessions on infection prevention for hospital employees	Total number of hospitals reporting	Hospital Checklist (M&E)	Quarterly/ Annually	Process

Quality Dimensions	Indicator	Numerator	Denominator	Data source	Frequency of Reporting	Type of Indicator
Consistent: means that the standard of services received in facilities providing the same level of care (e.g., basic health centers) is uniformly good. In addition, the range and quality of services provided over time does not diminish, it only improves. Consistency also means that as an individual passes from one part of the system to another, there is continuity of care	Delivery of care according to BPHS. • Facilities assisting normal deliveries (DHs, CHC, BHC, HSCs) • Facilities providing Caesarian Sections	BPHS health facilities capable of managing deliveries/normal/assisted and complicated. • Number of BPHS facilities able to offer support for normal and assisted deliveries • Number of DH providing Caesarian Sections	• Total number of BPHS facilities (BHCs, CHCs and DHs) • Number of DHs	HMIS	Monthly/ Quarterly	Process
	Staffing index, meeting minimum staffing guidelines	Number of BPHS health facilities meeting minimum staffing guidelines • BHCs - 2 • CHCs - 6 • DH - 21	Total BPHS health facilities	HMIS/BSC	Quarterly/ Annually	Input
	Percentage of normal deliveries taking place at the BHC that were referred by CHWs	Number of normal deliveries taking place at the BHCs that were referred by CHWs	Total number of normal deliveries taking place at the BHCs	HMIS	Monthly/ Quarterly	Output
	Percentage of severely ill children seen in a BHC who were referred by CHWs	Number of severely ill children referred by CHWs to BHCs	Total number of severely ill children treated at BHCs	HMIS	Monthly/ Quarterly	Output
	Percentage improvement in provincial average score on BSC	Sum of the scores for each indicator in the BSC following the annual assessment	Maximum possible score in BSC	BSC	Annually	Outcome

Quality Dimensions	Indicator	Numerator	Denominator	Data source	Frequency of Reporting	Type of Indicator
Consistent (continued)	Percentage of districts achieving >80% of DPT3 coverage for children under one year of age	Number of districts reporting > 80% DPT3 coverage for children under one year of age	Total number of districts in Afghanistan	HMIS	Monthly/ Quarterly	Outcome
	Average number of people referred by CHWs per quarter	Number of people referred by CHWs in each quarter	Total number of CHWs	HMIS	Monthly/ Quarterly	Output
	Average number of visits per person per year to a facility providing BPHS	Number of new patients visiting BPHS Health Facilities in a year	Total number of the population	HMIS	Monthly/ Quarterly	Output
	National DPT3 Coverage for children <1yr of age at provincial level	Number of children vaccinated for DPT3 in each province	Total number of children <1years of age (4% of total population) in each province	HMIS	Monthly/ Quarterly	Output/ Outcome
	Institutional delivery coverage at provincial level	Number of deliveries conducted at BPHS/EPHS health facilities	Total number of pregnant women (4% of populations) in each province	HMIS	Monthly/ Quarterly	Output/ Outcome
Effective: means that the collective inputs achieve the desired outcomes as agreed by the service provider and service user	TB treatment success rate	Number of new smear-positive pulmonary TB cases registered in a specified period that were cured plus the number that completed treatment	Total number of new smear-positive pulmonary TB cases registered in the same period	TB Program Reporting System/ HMIS	Quarterly/Annually	Outcome
	Number of hospitalized patients recovered/ improved as a proportion of total admissions and referred in (all ages)	Number of patients recovered/improved in reporting hospitals	Total number of patients admitted/referred in by reporting hospitals	HMIS	Monthly/ Quarterly	Output/ Outcome

Quality Dimensions	Indicator	Numerator	Denominator	Data source	Frequency of Reporting	Type of Indicator
Effective (continued)	Major complications case fatality rate	Number of major complications admitted/developed within the hospital who subsequently died in the hospitals (DH/Provincial Hospital (PH)) during specified period of time	Number of major complications admitted/developed within the hospital (DH/PH) that occurred over a specified period of time	HMIS	Monthly/ Quarterly	Impact
	Rate of inpatient readmissions within 28 days	Number of patients readmitted as an emergency within 28 days of discharge from inpatient facility over specified period	Number of inpatient discharges for same period	TBD	TBD	Outcome
	Percentage of pregnant women who attended a second ANC visit during pregnancy	Number of pregnant women who attended a second ANC visit	Total number of pregnant women attending a first ANC visit	HMIS	Monthly/ Quarterly	Output
	Percentage of pregnant women giving birth with the support of a skilled birth attendants (nurse, midwife, doctor)	Number of pregnant women given birth supported by a skilled birth attendant	Total number of pregnant women (4% of total population)	HMIS	Monthly/ Quarterly	Output
	Percentage of women of child bearing age using family planning methods	Number of women of child bearing age using any family planning method	Total number of women of child bearing age (16-17% of population)	HMIS	Monthly/ Quarterly	Output

Quality Dimensions	Indicator	Numerator	Denominator	Data source	Frequency of Reporting	Type of Indicator
Timely: means receiving the required services before users suffer avoidable negative health, economic or social consequences	Percentage of health facilities operating a triage system	Number of health facilities with an established triage system	Total number of BPHS and EPHS facilities	TBD	Monthly/ Quarterly	Process
	Average time patients wait to receive care at BPHS Health Facilities	Sum of the wait times of patients seeking care at a BPHS Health Facilities	Total number of patients whose waiting time is recorded	BSC	Annually	Output
	Case notification rate—new smear positive pulmonary TB cases	Number of new smear-positive pulmonary TB cases reported * (100,000) (TB case notification per 100,000 Population)	Total population in the specified area/Countrywide	Quarterly reports on TB case registration, census statistics	Annually	Outcome
	Percentage of health facilities with oral rehydration salts	Number of BPHS health facilities that report no stock outs for oral rehydration salts	Total number of reported BPHS health facilities	HMIS	Monthly/ Quarterly	Input
	Percentage of pregnant women who attend their first ANC visit before 16 weeks gestation	Number of pregnant women attending 1st ANC appointment before 16 weeks gestation in a specified period	Total number of pregnant women attending 1st ANC appointment for same period	ANC Register/ HMIS	Monthly/ Quarterly	Output
	Percentage of health facilities with uteri-tonic drugs	Number of BPHS facilities that report no stock outs for uteri-tonic drugs	Total BPHS health facilities	HMIS	Monthly/ Quarterly	Output
	Coverage of DPT3 at district level	Number of children < 1yr of age vaccinated for DPT3 in each district	Total number of children < 1yr of age at each district	HMIS	Monthly/ Quarterly	Output

Quality Dimensions	Indicator	Numerator	Denominator	Data source	Frequency of Reporting	Type of Indicator
Efficient: means making maximum use of resources and avoid waste	Percentage of diarrheal cases treated with oral rehydration salts at community level.	Number of diarrheal cases treated by CHWs with oral rehydration salts	Total number of diarrheal cases managed at community level by CHWs	HMIS	Monthly/ Quarterly	Output
	Average length of stay for inpatients at DH/ Provincial hospitals	Sum of patients' individual length of hospital stay over specified period	Total number of patients discharged, referred out or died over same period	HMIS	Monthly/ Quarterly	Process/ Output
	Bed occupancy rate at DH/Provincial Hospitals.	Sum of patients' individual length of hospital stays over specified period	Number of available beds multiplied by the number of days in the same time period	HMIS	Monthly	Output
	Average number of patients seen in a consultation by health professionals (doctor, midwife, nurse) at BPHS/EPHS facilities	Number of patient consultations performed by professional health care providers at BPHS/EPHS facilities	Total number of health care professionals deployed at BPHS/EPHS facilities (different category of doctors)	HMIS	Monthly/ Quarterly	Output
	Staff turnover rate at BPHS/EPHS level facilities	Number of employees who left their job during a specified time period	Average number of staff working over the same period (sum of no. of staff working at the beginning and end of time period divided by 2)	HRMIS/ HMIS	Monthly/ Quarterly	Output

Quality Dimensions	Indicator	Numerator	Denominator	Data source	Frequency of Reporting	Type of Indicator
Efficient (continued)	Equipment functionality index	Number of health facilities with functional equipment (children's scale, height measures, adult scale, blood pressure cuff , thermometer, stethoscope, otoscope, aspiration device, vision chart, surgery kit, sterilizer, delivery kit, vaccine refrigerator	Total number of health facilities assessed for equipment functionality	BSC	Annually	Input
	Drug waste index (% of drug items expired/wasted at BPHS health facilities)	Number of drug items randomly checked that were found to be expired	Total number of drug items randomly checked	BSC	Annually	Output
	Ratio of average cost per capita spent/average cost per capita allocated	Average cost per capita spent	Average cost per capita allocated	Quarterly Financial Report	Monthly/ Quarterly	Output
Continuously Improves: means that the system is not stagnant; it continuously responds to its environment and customer needs and adapts to reflect recognized best practice	Availability of minutes of meetings of performance quality improvement (PQI) teams available for the last six months	Number of sets of minutes of meetings of PQI Team available for the past six months	Total number of meetings PQI team convened during last six month	BSC	Annually	Output
	Availability of a system for collecting opinions or complaints about hospital services from patients or community members	Number of hospitals with a system for collecting opinions/complaints about hospital services from patients or community members	Total number of hospitals reporting	Hospital Checklist (M&E)	Quarterly	Process
	Provider knowledge score	Number of health workers, nurses, midwives and doctors who pass knowledge test	Total number of health workers, nurses, midwives and doctors who took the test	BSC	Annually	Outcome

Quality Dimensions	Indicator	Numerator	Denominator	Data source	Frequency of Reporting	Type of Indicator
Continuously Improves (continued)	Overall patient satisfaction index	Score of patients asked about their satisfaction with the services they received at the health facility	Total number of patient exit interviewed (Composite Index)	BSC	Annually	Outcome
	HMIS reporting index	Number of health facilities that have HMIS report on file (MIAR, FSR, Notifiable Disease)	Total number of BPHS health facilities assessed	BSC	Annually	Output
	Percentage of health facilities receiving supervision (monitoring visits) using national monitoring checklist	Number of health facilities that received one or more supportive supervision visits using national monitoring checklist in specified period	Total number of BPHS health facilities	NMC Data Base/ Monitoring Department Quarterly Report	Quarterly	Process
	Percentage improvement in provincial average score on BSC	Sum of the scores for each indicator in the BSC following the annual assessment	Maximum possible score in BSC	BSC	Annually	Outcome
	Percentage improvement in district hospitals' average score on BSC	Sum of score for each indicator in BSC measured by District Hospital	Total possible score for all indicators in BSC	BSC	Annually	Outcome
	Percentage improvement in CHCs' average score on BSC	Sum of score for each indicator in BSC measured by CHC facility	Total possible score for all indicators in BSC	BSC	Annually	Outcome
	Percentage improvement in BHCs' average score on BSC	Sum of score for each indicator in BSC measured by BHC facility	Total possible score for all indicators in BSC	BSC	Annually	Outcome

APPENDIX 3

MAJOR PARTNERS AND THEIR WORK TO IMPROVE THE QUALITY OF CARE

A significant number of projects and methodological approaches have been introduced and implemented since 2003 all of which were intended to improve the quality of care across different geographical locations. Some interventions became well established and were spread to a wide range of provinces whilst others have had a less durable impact. Set out below is a brief introduction to each intervention that includes its duration, the organization that introduced and implemented it and, where available, key indicators developed to measure impact.

Fully Functional Service Delivery Point (2003 - 2006)

The Fully Functional Service Delivery Point (FFSDP) was introduced by Management Sciences for Health (MSH) under the REACH program. It was designed to provide technical assistance to strengthen essential management support systems at BPHS level health facilities. Its scope extended to those community health workers and communities that fell within the facilities catchment area. It focused on improving infrastructure, equipment, essential drugs and supplies, personnel, training, management, community support, community approach and quality. The program provided health facility staff and their supervisors with the means to evaluate their current performance against set standards along with support materials and tools.

The program was originally piloted in nine BPHS facilities operated by three implementing NGOs based in two provinces. It was later rolled out more extensively to cover 18 provinces. The project reportedly achieved positive results. Key components of the work were assimilated into HSSP's health facility management standards for BPHS.

Balanced Score Card (2004 - to date)

The Ministry of Public Health (MoPH) of Afghanistan, with technical support from Johns Hopkins University and Indian Institute for Health Management Research has adopted the Balanced Score Card (BSC) as its primary performance measurement and management tool. The BSC summarizes the performance of each province in delivering primary health care services (Basic Package of Health Services). It does not cover other parts of the health care sector (e.g., secondary, tertiary and specialty care services).

Annually about 600 households are surveyed, 6000 observations of client-provider interactions observed and about 1500 providers are interviewed. Data are collected for 29 indicators organized into six domains (recently reduced to 26 indicators). The domains include patient and community, staff, capacity for service provision, service provision, financial systems (recently omitted) and the overall vision of the MoPH. A full list of domains and indicators is set out below.

Domains	Indicators
Patient and community	Overall patient satisfaction Patient perception of quality Shure Sehi activities in community
Staff	Health workers' satisfaction Salary payments current
Capacity for services provision	Equipment functionality Drug availability Family planning availability Laboratory functionality Staffing levels Provider knowledge score (omitted) Staff received training in last year HMIS use Clinical guidelines Infrastructure Patient record keeping Monitoring of TB treatment
Services provision	Patient history and physical exam Patient counseling Proper sharps disposal Average new outpatient visits per month (BHC> 750 visits) Time spent with patient (>9min) Provision of ANC Provision of delivery care
Financial system (omitted)	Facilities with user fee guideline Facility with exemption for poor patients
The overall vision of the MoPH	Equity of services delivery Equity for patient satisfaction Females as % of new outpatients

Hospital Standards for Essential Package of Hospital Services (2005 - to date)

Hospitals are the most complex component of the health system and can be "a hazardous industry" if not managed well. The MoPH, with the support of Techserv, has developed 617 standards focused on governance, clinical care, nursing services, ancillary support services, and administration and management. These standards relate to a combination of inputs and processes and were developed to define a minimum expected level of performance required of all hospitals. For more detail on these standards see Appendix 2.

Work to improve compliance against these standards has been undertaken in 5 provinces

Hospital Reform Project (2006 - to date)

The Hospital Reform Project is a MoPH initiative designed to improve the quality of health care in targeted hospitals through the implementation of EPHS and integration of BPHS to enable effective referral systems and improve management and leadership at hospital level. Initially the project was introduced into five provincial hospitals (Takhar, Kunduz, Baghlan, Ghor and Zabul). Later in 2007, two additional provincial hospitals (Samangan & Saripul) were added followed by Herat Regional and Khayer Khana hospitals in 2008.

- This project runs alongside the Strengthening Mechanism wherein the MoPH provides hospital services "in-house" and receives funds from the donor via the Ministry of Finance.

The selection criteria for the Hospital Reform project are:

- few beds in relation to the size of the catchment population
- high maternal mortality rates
- poor performance in providing obstetric care, pediatrics, surgery and internal medicine
- lack of infrastructure
- donor support.
- security is conducive to project implementation

Standards Based Management and Recognition (2006-2011)

Quality Assurance methodology was applied to improve the performance of individual health providers and health facilities offering the Basic Package of Health Services (BPHS).

Using a model known as Standards Based Management and Recognition, Health Services Support Project (HSSP), working with the MoPH, helped to develop evidence-based standards covering antenatal care, postnatal care, normal labor, complications in delivery, family planning, integrated management of childhood illnesses, sick newborn, tuberculosis, infection prevention, behavior change communication, gender, facility management, drug management and expanded program on immunization.

Once standards have been introduced to an individual facility, a baseline assessment is undertaken by external assessors to establish where shortfalls exist. Health facility staff members are then invited to identify areas for improvement based on these gaps. After root causes have been agreed, action plans are drawn up. Progress is monitored through

a series of internal and external assessments. Teams are recognized by their communities and MoPH for their achievements. Facilities are encouraged to institutionalize the process.

The QA process has been introduced in 17 out of 34 provinces.

In addition to the above, standards for nutrition, mental health, cesarean section, malaria and blood transfusion have been developed and are being field tested.

Leadership Development Program (2006-2011)

The Leadership Development Program (LDP) is designed to develop people at all levels in the organization. Participants are taught leadership and management practices and are encouraged to apply these within the context of their own work teams to address challenges. Success is demonstrated through measurable results. Participants are encouraged to share what they learn with co-workers. LDP facilitators and local managers provide feedback and support throughout the process, which lasts about six months.

This approach differs from traditional leadership training programs in that it not only introduces leadership theories, values, and behaviors in a course setting but offers a process for teams to use this learning to produce measurable organizational results.

The LDP is based on several key elements:

- guiding principles for developing managers who lead
- a simple tool—the Challenge Model—applied in the context of a shared vision
- focus on challenge, feedback, and support
- experiential learning in teams

The LDP Facilitator's Guide contains a complete curriculum that organizations can use to develop local facilitators to implement, sustain or scale up the program.

The program has been introduced in 13 provinces and 5 national hospitals. Limited support has been made available to non USAID-supported provinces and some private organizations (e.g., the Afghanistan Private Hospitals Association and Afghan Midwifery Association) on request

Quality Improvement in Rabia Balkhi Hospital (2004- to date)

The Centers for Disease Control and Prevention, USA in association with the Indian Health Services and International Medical Corps has applied quality improvement tools at Rabia Balkhi Hospital, Kabul to promote clinical and managerial standards designed to ensure quality of care for all patients

Pediatric Hospital Initiative (2007 - 2011)

An estimated 10-20% of all sick children seen in primary health care are referred for hospital care. In 1997, the WHO conducted a study of 21 hospitals in 7 countries in Africa and Asia that showed more than half of the children they saw were under-treated or inappropriately treated with antibiotics, fluids, feeding or oxygen. The main factors contributing to this deficiency were lack of triage and inadequate assessment, late treatment, inadequate drugs supplies, poor knowledge of treatment guidelines and insufficient monitoring of sick children. These finding were subsequently confirmed by similar studies.

In 2007, a rapid review of the management of sick children in Afghanistan was undertaken as part of a situation analysis conducted for the revised Child and Adolescent Health Policy and Strategy. It revealed the urgent need to improve the quality of care for children in hospitals.

In response, BASICS/Techserv was invited to introduce the PHI in 7 provincial and regional hospitals (Nangarhar, Paktya, Herat; Bamyan, Takhar, Balkh and Kunduz) and three national tertiary pediatric hospitals (Inderagandihi, Attaturk and Maiwand). The objectives of the initiative are:

- to improve the quality of care for hospitalized children with serious infections and severe malnutrition through the application of evidence based standards
- to improve recognition and management of emergency conditions in children under 5 years
- to decrease hospital death rates of children under 5 years as well as hospital case fatality rates in common condition

As part of this activity, the project has reviewed and translated the Pocket Book of Hospital Care for Children, adapted the generic Assessment Tool for Hospital Care for Children and piloted it in district and provincial hospitals and provided training to MoPH and hospital staff on Emergency Triage Assessment and Treatment.

Progress is measured through improved performance in nationally adopted standards for hospital care and quality assurance standards for hospitals.

Partnership Defined Quality (2007 – to date)

Partnership Defined Quality (PDQ) is a methodology designed to improve the quality and accessibility of services through greater involvement of the community in defining, implementing and monitoring the quality improvement process. It links quality assessment and improvement with community mobilization, providing community members and health facility providers with the skills and systematic support they need to undertake this work.

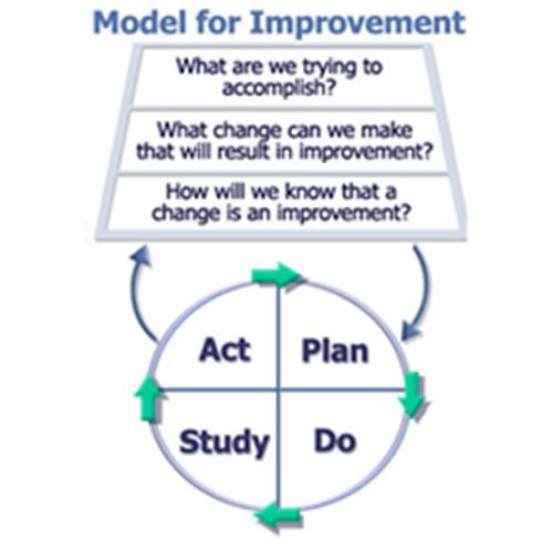
Because of its close engagement with the community, PDQ can help address underlying causes of health problems such as discrimination, socioeconomic, cultural, and organizational challenges.

PDQ is led by Save the Children and HSSP in Afghanistan. They provide technical support for BPHS-implementing NGOs in 18 provinces. PDQ is designed to be an on-going process with progress being measured through facilities' performance in meeting a subset of QA standards and national indicators against an original baseline assessment. Further work is being undertaken to develop indicators to measure the program's impact at national level.

Collaborative Methodology (2009 - to date)

The goal of the USAID Health Care Improvement (HCI) Project is to develop improvement capability in the health sector in Afghanistan. HCI works with counterparts in the MOPH, Provincial Public Health Offices (PHOs) and non-governmental organizations (NGOs) to adapt and apply the science of health care improvement to achieve significant and rapid improvements in health outcomes.

Figure 1



Associates for Process Improvement

The HCI Project has, to date, focused mainly on maternal and newborn health. It teaches and applies quality improvement methods within a framework of learning networks known as improvement collaboratives. Collaboratives bring together multidisciplinary teams to work together on a specific area of care to achieve significant improvements in processes, quality, and efficiency with the intention of spreading these improvements to other sites.

Teams of local providers are invited to analyze the performance of their own systems and processes of care, identify and test changes that may lead to improvements and assess these using data collected before, during and after testing using the Model for Improvement (see figure 1) A range of process and outcome indicators are selected to track the programs impact on performance over time. Baseline assessments are undertaken at the outset and indicators recorded monthly thereafter.

Patient Safety (2009 - to date)

Patient safety is a serious global public health issue. Estimates show that in developed countries as many as one in 10 patients is harmed while receiving hospital care. It is believed that the risk of health care-associated infection in some developing countries is as much as 20 times higher than in developed countries

Patients Safety has become a WHO initiative. It has several components:

- Safe Surgery Checklist
- infection control
- safe use of medicines
- equipment safety
- safe clinical practice and
- safe environment of care

The initiative's aim is to improve the quality of care for hospitalized patient in order to avoid infections and decrease patient stay in the health facility. Success can be measure through a reduction in average length of patients stays.

In 2009, WHO conducted training for 5 tertiary hospitals in Kabul. A baseline assessment is to be undertaken to determine the nature of the interventions required

Minimum Required Standards for Private Hospitals (2009 - to date)

The MoPH, with support from Constella Futures and the Afghanistan Private Hospitals' Association, helped develop a minimum set of standards for licensing private hospitals providing maternity, surgical and medical services. These standards mainly specify the quality of inputs expected. Minimum standards are set for the following areas:

- Functional programs - standards for first aid, general medicine, general surgery, maternity, pathology, radiology, electrocardiography, health education, ambulance, medical records, diet, universal biosafety, and more specialist services such as dentistry, eye care, etc.
- Human Resources - qualifications, numbers, duty shifts and availability of professionals during different shifts
- Instruments and equipment - list of all the basic instruments and equipment required for the abovementioned functional areas
- Space requirement - for services provided by the functional programs
- Building engineering standards including environment safety

These standards have to be met for the approval of newly established private health facilities

Results-Based Financing (2007- to date)

The MoPH, in conjunction with the World Bank, has been exploring different forms of results based financing for some time. Recently, a more formalize pilot has been introduced in 10 World Bank Funded provinces. The main objective of the RBF pilot is to increase key maternal and child health outputs (skilled birth attendance, ante natal care, post natal care, family planning and Diphtheria, Pertussis and Tetanus vaccination (DPT3)) through the creation of monetary incentives for health workers and their managers. Up to a maximum of 10% of the BPHS contract value will be provided to NGOs if they achieve a specified level of performance. Ninety percent of the bonus will be given to health care providers to distribute amongst themselves and the remaining 10% will go to the NGO and senior management. The project aims to increase patients' and communities' involvement and their level of satisfaction with the publicly financed services.

Hospital Accreditation System (2010 – to date)

Techserv, working with the MoPH has developed proposals for a hospital accreditation system in Afghanistan to ensure all hospitals provide at least an agreed basic standard of care. Whilst still in its planning stages, the hospital sector strategy has recommended as a minimum the accreditation of every private hospital with reaccreditation after a period of 33-39 months.

Hospital Standards for Accreditation in Afghanistan

Section	Standards
Governance	Standards on community hospital board
Clinical Care	Pediatric care Surgical care Surgical emergencies Anesthesia and post anesthesia care Obstetric care Infection prevention Internal medicine
Nursing Services	Patient wards Operation theater/room Central service and sterilization
Ancillary support services	Laboratory Blood bank Hospital pharmacy management Radiology/X Ray
Administrative and management	Hospital maintenance of facilities and equipment Human resource management in hospitals Medical records Housekeeping Catering/food service Laundry Purchasing/medical stores Business office and administration