Republic of Zambia
Ministry of Health

Guidelines on Quality Improvement for Health Care Workers in Zambia

First Edition 2012

GUIDELINES ON QUALITY IMPROVEMENT FOR HEALTH CARE PROVIDERS IN ZAMBIA

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FOREWORD

The Ministry of Health (MOH) has committed itself to **"providing equity of access to cost-effective quality health care as close to the family as possible"**. In realising this commitment, there has been considerable expansion of health services to try and reach the communities through static, outreach and mobile health services.

In this vein, MOH has moved systematically in employing models to address problems associated with quality of health care. The variety of health care quality improvement models that are being employed by various players within the health sector in Zambia are proving to be a challenge to monitoring and evaluating health care service delivery in the country. Further the multiplicity of quality improvement (QI) models does lead to confusion among health workers as a harmonized presentation is not availed to them. In order to address these challenges, these guidelines have been developed to enhance health worker understanding and to enable the systematic application of QI models along the continuum of the health care delivery system to maximize impact and reduce variation in practice. These guidelines reflect the MOH recommended approaches to health care improvement at each level of health care. It is an expectation of the MOH that the different players in health care service delivery will be guided by and will use the approaches elaborated in this document.

The purpose of these guidelines is to:

- Develop a common understanding of quality of care;

- Systematically elaborate QI approaches that should be Utilised in all health facilities in Zambia by managers and staff at all levels;

- Establish benchmarks against which all health facilities can provide quality health care across all levels;

- Provide the basis upon which service delivery can be assessed, gaps identified and strengths appraised in collaboration with all stakeholders including the community.

It is my considered view that with appropriate levels of commitment and support from all the players, including cooperating partners, these guidelines will significantly improve the quality of health services in Zambia. My Ministry will remain committed to providing leadership, an enabling environment and resources that will ensure the successful implementation of these guidelines.

Hon. Dr Joseph Kasonde, MP
Minister of Health
Ministry of Health

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ACRONYMS

AMTSL	Active Management of Third Stage Labour
CBoH	Central Board of Health
CCO	Clinical Care Officer
CCS	Clinical Care Specialist
CRS	Catholic Relief Services
CSO	Central Statistics Office
DANIDA	Danish International Development Agency
DHO	District Health Office
DIM	District Integrated Meetings
DTSS	Directorate of Technical Support Services
DYSSSY	Dynamic Standards Setting System
ECSA	East Central and Southern Africa
GNC	General Nursing Council
HMIS	Health Management Information Systems
HPCZ	Health Professions Council of Zambia
HRIT	Health Reforms Implementation Team
HSSP	Health Systems Support Programme
IP	Infection Prevention
MOH	Ministry Of Health
NHC	Neighbourhood Health Committee
PA	Performance Assessment
PHO	Provincial Health Office
PIA	Performance Improvement Approach
PIM	Provincial Integrated Meetings
PPH	Postpartum Haemorrhage
PRA	Pharmaceutical Regulatory Authority
QA	Quality Assurance
QC	Quality Control
QI	Quality Improvement
QOC	Quality Of Care
RCQHC	Regional Centre for Quality of Health Care

SADC	Southern African Development Community
SIDA	Swedish International Development Agency
TQM	Total Quality Management
TSS	Technical Support Supervision
TWG	Technical Working Group
USAID	United States Agency for International Development
ZIHP	Zambia Integrated Health Programme
ZISSP	Zambia Integrated Systems Strengthening Programme

ACKNOWLEDGMENTS

EDITORIAL TEAM

Dr. Jubra Muyanga – Ministry of Health

Ms Rachael Lungwebungu – Ministry of Health

Mr. Mulonda Mate – Ministry of Health

Dr. Romakala Mwanza- Banda - Ministry of Health

Dr. Gloria Munthali - Ministry of Health

Mr. Patrick Bwalya Muyana – Ministry of Health

Dr. Beatrice Kafubuluti - Ministry of Health

Ms Vita Banda - Ministry of Health

Ms Agnes Mwela Musonda – Zambia Prevention, Care and Treatment Partnership (ZPCT II)

Ms Edith Lubinda Njekwa – Centre for Infectious Disease Research in Zambia (CIDRZ)

Dr. Jonas Mwale – Centre for Disease Control and Prevention (CDC)

Dr. Nanthalile Mugala- Zambia Integrated Systems Strengthening Programmes (ZISSP)

Dr. Victoria Musonda Daka - Zambia Integrated Systems Strengthening Programmes (ZISSP)

Mr. Daniel Fwambo – Zambia Integrated Systems Strengthening Programmes (ZISSP)

Dr. Msangwa Sinjani - AIDS Relief

Ms Mary Morris - Elizabeth Glaser Paediatric AIDS Foundation (EGPAF

DEFINITIONS

Continuous quality improvement: A system that seeks to constantly improve the provision of services with an emphasis on results.

Effective: Providing services based on current scientific knowledge to all who could benefit and avoiding provision of services to those who do not need them (i.e., will not benefit from them) and further achieving the desired effect/outcome/impact when these services are provided.

Efficient: Avoiding waste of resources including waste of equipment, supplies, ideas and energy.

Equitable: Providing care that does not vary in quality because of personal characteristics such as gender, ethnicity, geographic location, and socio-economic status.

External quality assessment: System of objectively retrospectively checking results by means of an external agency.

Indicator: A quantitative or qualitative factor or variable that provides a simple and reliable means to measure achievement, to reflect changes connected to an intervention, or to help assess the performance of a development actor.

Internal quality control: Is the process that ensures that factors determining the magnitude of uncertainty do not change during the routine use of any procedure over long periods of time.

International Organisation for Standardization: Is an international standard-setting body composed of representatives from various national standards organisations.

Patient-centred: Providing care that is respectful of and responsive to individual patient preferences, needs and values and ensuring that patient values guide all clinical decisions

Performance: Is a measure of the results achieved and with what level of efficiency or put simply a measure of the results achieved; it is the work /tasks that a person does, how s/he does it and the results thereof.

Performance assessment: Is a process by which managers are expected to monitor and review performance levels.

Performance improvement: Is a process for achieving desired institutional and individual results.

Performance indicator (or key performance indicator): Evaluate institutional success or the success of a particular activity; these can be "SMART"[1] but in any event must be understandable, meaningful, and measurable.

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[1] SMART: Specific, Measurable, Achievable, Realistic, Time-bound

Quality assurance: Is the systematic monitoring and evaluation of the various aspects of a project, service or facility to maximize the probability that minimum standards of quality are being attained or a planned set of activities implemented through a quality system that ensures standards of services are met and is based on a quality assurance cycle which has three distinct steps: defining and designing quality, quality control and quality monitoring.

Quality control: is a process by which entities review the quality of all factors involved in production.

Quality improvement (QI): Is the process of engaging appropriate methodologies and quality management tools to close the gap between current and expected levels of quality.

Safety (health care): Avoiding injuries and harm to patients from the care that is supposed to benefit them and also assuring the safety of health workers and visitors to health care facilities.

Small test of change: The definition phase takes preparing for delivering the project from knowing what is wanted and having an outline of what will be delivered to a clear specification of what will be delivered such that a confident estimate can be made of the time, cost and quality of delivery.

Timely: Reducing waiting time and harmful delays for both those who receive care and those who give care.

Total quality management: Total quality management (TQM) is a process and philosophy of achieving the best possible outcomes from the inputs, by using them effectively and efficiently in order to deliver best value for the customer, while achieving long term objectives of the organisation.

SECTION 1. HISTORICAL PERSPECTIVE AND RATIONALE FOR DEVELOPING QUALITY IMPROVEMENT GUIDELINES

1.1 BACKGROUND

Zambia is situated in Southern Africa and has a population of about 13 million people (CSO 2010) and is divided into ten provinces and over 80 districts.

Health care quality improvement efforts began in 1991 using the Quality Assurance (QA) model as part of the health reforms initiated by the Ministry of Health (MOH) with a vision of "providing equity of access to cost-effective quality health care as close to the family as possible." To achieve this vision, the MOH aimed to transform the centralised management of health care services to a decentralised system with a focus on strengthening primary health care delivery that emphasised preventive care.

The QA Unit, formed in 1993 by the Health Reforms Implementation Team (HRIT) was tasked to develop a sustainable approach to improving the quality of health care in Zambia.

The driving forces behind the accelerated move to improve quality of health care through the Quality Assurance Unit of the MOH were that:

- The government demanded that all ministries provide good services to all Zambians.

- Beneficiaries of the health care services were not satisfied with the care that was being given in the health facilities as shown by the 1990 World Bank Assessment Study, which revealed that cost-sharing initiatives had the effect of increasing the demand for value for money by clients[2].

- The national health reforms gave districts some autonomy for planning and implementation of health programmes and required effective management of resources for maximum impact.

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[2] World Bank Assessment Study, 1990

1.2 PROCESS OF DEPLOYING THE QUALITY ASSURANCE MODEL

A bottom-up approach, starting with the primary care level was used to train health workers to the QA concept. The province and district level supervisors were also sensitized in QA concepts. Key activities undertaken to operationalize the QA model are reflected in Table 1.1.

TABLE 1.1: KEY ACTIVITIES UNDERTAKEN TO OPERATIONALIZE QA IN ZAMBIA

Level of Health Care	QA Activities Conducted
District Level	Standard setting using the Dynamic Standards Setting System (DYSSSY) and indicator development Introduction of use of QA for systematic problem solving
Second and Third Level Hospitals	QA and accreditation introduced
Regional Level	Peer learning conferences
National Level	National steering committee formation; developed sensitization materials highlighting importance of quality health care services and the need to address client needs; certified focal persons through training and field work; provided mentorship programme for QA

In addition to these activities, a QA structure from national to district level was established, with all districts and hospitals having QA committees that were energised and able to work as a team. A national QA steering committee was established and by 1998, Zambia had trained QA trainers encompassing all eight provinces of the country. By 2002, provincial clinical care specialists were a constituent part of the QA teams.

Further a health accreditation programme was established for secondary and tertiary hospitals, with the formation of the Zambia Health Accreditation Council in 1998.

The inclusion of QA content in some training institutions/courses, e.g., the integrated competency-based training, nursing curriculum, etc., provided the basis for a sustainable QA system.

1.3 PARTNERSHIPS

The partners in the quality improvement process in Zambia included:

- DANIDA (Danish International Development Agency)

- USAID - (Quality Assurance) QA Project SIDA (Swedish International Development. Agency) QA in hospitals,

- USAID-QA Project and ZIHP (Zambia Integrated Programme on Health),

- RCQHC -Regional Centre For Quality of Health Care,

- HSSP/ZISSP (Health Systems Support Programme/Zambia Systems Strengthening Programme) and

- USAID/East Africa for supporting post graduate training in quality of health care of Zambians.

1.4 CHALLENGES IN INSTITUTIONALIZING QA IN HEALTH CARE DELIVERY

Despite the several achievements highlighted above, some challenges remained namely:

- Lack of integrating QA in all the health care programmes,

- Uncoordinated and weak methods of standards communication,

- Poor measurement of compliance with clinical care standards,

- Constraints on quality improvement teams arising from: rapid staff turnover; lack of a national human resource structure for quality improvement; lack of supervision; perception of quality improvement activities as an additional burden by those assigned to undertake them; brain drain,

- Inconsistent support systems such as supervision, lack of a sustained training programme; lack of mentoring activities; limited finances to support quality,

- Lack of a national QA policy, strategic plan and guidelines,

- Lack of harmonization in ways of bringing about improvement in the quality of health care services delivered in Zambia among the various players in the health care industry.

As a result of these challenges, the Zambian QA programme lost momentum in the late 1990s. This was evidenced by lack of the quarterly national review and facility level meetings. There were also gaps in QA initiatives in the provinces, as very few institutions were reporting on QA activities. Funding for the programme was no longer available from partners and MOH funding for QA was marginal. These challenges were not peculiar to Zambia but were common to other countries in the Southern Africa Development Community (SADC) and East Central and Southern Africa (ECSA) region.

1.5 REVITALIZING QUALITY IMPROVEMENT PROCESSES IN ZAMBIA

Zambia like other countries in the region established links with the Regional Centre for Quality of Health Care (RCQHC) in Uganda in 1999. In the year 2000, four Zambians attended a Post Graduate Diploma in Quality of Health Care (QOC) course at the Makerere University in Kampala. These four health workers were trained in various approaches to improving quality of health care that included the Performance Improvement Approach (PIA), Quality Assurance (QA) and Total Quality Management (TQM) to name a few.

Upon return to Zambia, the RCQHC alumni have been working as a team to put quality back on the agenda through individual projects and collectively in training health workers and managers. The implementation of quality improvement initiatives has shown that QA is a good overall national approach as it addresses issues of licensure, accreditation and certification but at implementation level the Performance Improvement Approach (PIA) is more practical in improving performance. Good health worker performance is a critical element in the delivery of high quality health care services. Having demonstrated promising results from a pilot study in the Central Province of Zambia, PIA was adopted as a tool to adequately solve performance problems in the health sector, especially at the implementation level.

The complex nature of the health care delivery from a national perspective rules out the possibility of one improvement approach being a panacea for solving all quality problems across the spectrum of health care service provision.

The current goal of the MOH is to have, "A society in which Zambians create environments conducive to health, learn the art of being well and provide basic level health care for all". The Mission statement is to firstly implement quality models that take all the functions and essential elements of the entire organisation into account and secondly to foster an environment in which everyone involved supports quality, is alert to problems of performance and opportunities for improvement, and is prepared to take responsibility for setting in motion the needed changes to improve health care services.

Subsequently in 2011, the MOH re-established the QA/QI unit in its structure and included quality improvement as a key element in its policy documents. A National QA/QI Technical Working Group was also formed to give impetus to quality improvement activities in the country. This renewed commitment to quality has given rise to the need to develop guidelines and teaching materials to

support the capacity building process that will ensure the delivery of quality health care services in Zambia.

1.6 PURPOSE OF THE NATIONAL QUALITY IMPROVEMENT GUIDELINES

In 2001/2002, Zambia's Infant Mortality Rate decreased from 95 per to 70 per 1000 in 2007. The under-five mortality rate also decreased from 168 per 1000 in 2001 to 119 per 1000 in 2007. In the same period the maternal mortality ratio was reduced from 729 per 100,000 live births in 2001/2002 to 591 per 100,000 live births in 2007. The national HIV prevalence still remains high at 14.3% (Zambia Demographic and Health Survey 2007). Despite many cooperating partners supporting the HIV/AIDS programmes, the impact of this is not seen; this reflects technical and cost inefficiencies; the referral systems are not well coordinated and there are no feedback mechanisms in place. These QI guidelines will facilitate strengthening of health systems.

This significant drop in these two parameters could partly be attributed to the developmental milestones of the National Quality Assurance Programme and other quality systems such as performance assessment that the country has been implementing.

Recognizing the complexity of health care delivery, these guidelines intend to categorize approaches by level of service delivery and services. The guidelines are general and define the models of approaches recommended in the Zambian health context.

The various quality improvement models that are being applied in the country by various players have caused challenges in monitoring and evaluation of health services and these guidelines seek to:

- Reduce variation in practice since only approaches to improve quality of health care recommended by the MOH will be used in service provision,

- Guide health workers on how to implement quality improvement in their facilities,

- Act as reference materials.

The main purpose of these National Guidelines is to:

- Develop a common understanding of quality of care and introduce quality improvement approaches, which should be Utilised in all health care facilities in Zambia,

- Provide guidance for programme performance assessment, gap identification and appraisal of strengths,

- Provide a national framework to certify health facilities as compliant with standards (accreditation with health professions council and other legal entities),

- Support the monitoring and evaluation process of the health care service delivery in both the private and public sector , and thus support the effective monitoring of the implementation and effectiveness of the Sixth National Development Plan and Vision 2030,

- Improve the quality of life of Zambians through establishment of a high quality health care system that is efficient and effective.

SECTION 2.   GOAL, OBJECTIVES, TARGET AUDIENCE AND CONTENT OF THE QUALITY IMPROVEMENT GUIDELINES

2.1   GOAL OF THE NATIONAL QUALITY IMPROVEMENT GUIDELINES (QI GUIDELINES)

The goal of the QI guidelines for national health services is to provide guidance on how to improve the quality of services in the health sector in Zambia   .

2.2   OBJECTIVES OF THE QI GUIDELINES

The objectives of these national QI guidelines are to:

* To provide a national framework for improving the quality of health care services in compliance with national standards

* Develop a common national understanding of quality of care which should be understood and taken up in all health care facilities in Zambia to guide all health care providers in both public and private facilities providing health care services.

* To reduce inappropriate variation in quality improvement practices

* To provide focus for quality improvement at various levels of health care delivery including training institutions

* To promote efficient and effective use of resources

2.3   TARGET AUDIENCE

The QI guidelines are intended to be used by: MOH policy makers, planners, Provincial Health Office (PHO), District Health Office (DHO), hospitals, health centres, health posts and mobile/outreach service providers, programme managers, teaching/academic institutions, partners in public, private, faith-based organisations, non-governmental organisations involved in health service provision, and community based organisations.

SECTION 3.   CONCEPTS AND DEFINITIONS IN QUALITY AND QUALITY IMPROVEMENT

3.1   PREAMBLE

It is important to understand terms and concepts involved in quality and performance improvement in order to foster a common understanding and speak the same language. Quality is seen and defined from many perspectives and has many dimensions. However from a health care delivery point of view, quality should be defined to take care of the following elements at a minimum: safety; effectiveness; patient-centeredness; timely; efficiency avoiding waste of money, materials, equipment; ideas and energy; equitable. These dimensions show the critical need for quality services particularly in a setting where resources are scarce and the need is great. To achieve the Millennium Development Goals and the national health goals quality must be institutionalized, and this will not happen with only deliberate focused interventions and sustained resources. Poor quality of health care is costly both in human lives and fiscal resources.

It should be understood from the outset that quality of health care has many determinants and these should be kept in mind as we think of addressing quality in health care services. The conceptual framework from the World Bank[3] below highlights the key factors impacting quality of health care.

FIGURE 3.1: QUALITY OF CARE FRAMEWORK
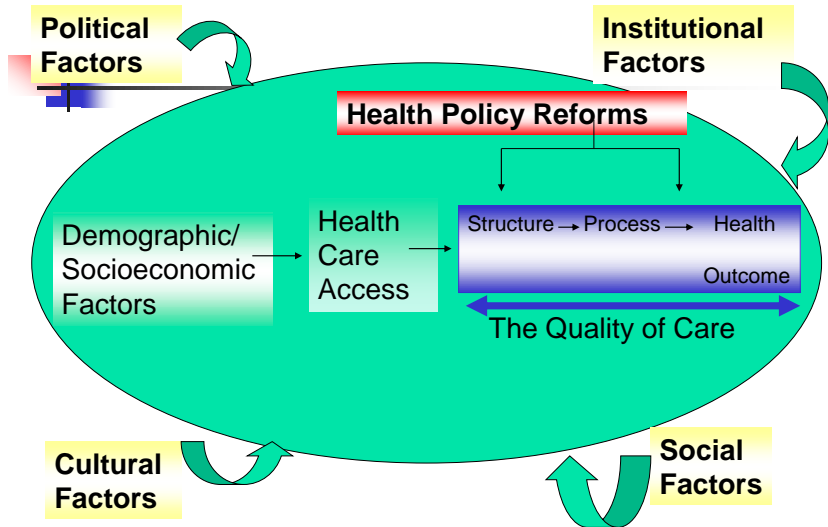
Ref: Peabody et al 1999

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[3] World Bank, (2006) Disease Control Priorities in Developing Countries (2nd Edition)

3.2   DEFINING QUALITY

Defining quality is not a simple task and every quality practitioner defines quality in a different way. This is why it is so important for a group to decide on a common understanding of what they mean by "quality." In defining quality, both the perspective (point of view) and dimensions (element or aspect) being considered must be considered.

Perspectives in Defining Quality

The concept and vocabulary of quality are elusive and there are a variety of perspectives that can be taken into defining quality. For example, in health care, quality might be defined from the patient's perspective or if dealing with hospital machines, you may define quality from a specifications perspective. Attempts have been made to give guidance to the process of defining quality and one process from Harvard University[4] suggests five principal approaches to defining quality:

- Transcendent definition (relative quality): Quality is universally recognizable, in other words, "I cannot define it but I know when I see it."

- Product-based definition: Quality is a precise and measurable variable; measurement is based on defined characteristics, and a difference in quality reflects differences in quantity of some product attribute or characteristic (defined in measurable terms).

- User-based view: Quality is fitness for intended use; this definition means that quality is "meeting or exceeding customer expectations."[5]

- Manufacturing-based view: Quality is "conformance to specifications."[6]

- Value-based definition: Quality is defined in terms of costs and prices; a quality product or service is one that provides performance at an acceptable price or conformance at an acceptable cost.

A modern definition of quality:

Quality is meeting or exceeding customer expectations. In this context "customer" covers both internal (recipient of service within the organisation) and external (recipient of services outside the organisation) customers.

Other definitions include "a measure of how good something is" or "doing the right thing, in the right way at the right time."

As seen above these definitions are not readily measurable and when quality is defined, it has to be broken down so that it can become measurable. To do this indicators are developed to make quality measurable.

Dimensions of Quality

The complexity of defining quality means that important elements (aspects) of what one wants to measure must be identified. These are called dimensions. In the service industry (e.g., health care services, hospitality, etc.), the usual quality dimensions that are taken into consideration are: Time, Timeliness, Completeness, Courtesy, Consistency, Accessibility and Convenience, Accuracy, Responsiveness, Tangibles, Reliability, Assurance, Empathy, Efficacy, Appropriateness, Efficiency, Respect and Caring, Safety, Continuity, Effectiveness, and Availability.

It is important to understand that defining quality in a service industry like health care where the product usually cannot be touched or seen can be difficult, and the important elements (dimensions)

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[4] Garvin D., Managing Quality
[5] Juran, J.M. in Juran's Quality Handbook: The Complete Guide to Performance Excellence
[6] Phil Cosby 1979, Gilmour 1974, Levitt 1972

that must be measured to be able to say this is have to ensure that a quality service be clearly stated and agreed upon.

Cost of Quality

Quality can also be defined in terms of cost. To understand this consider the cost associated with a service where people wait a long time, tests have to be re-done, or treatments have to be repeated because diagnosis, prescriptions or intake of drugs was wrong. All these repeat actions will cost more money than when things are done right the first time. This is what is meant by the high cost of poor quality. In the example given herein a patient has to go through processes twice, then if treating a patient costs Zambia Kwacha 100,000, you will end up spending 200,000 Kwacha because of the mistakes and inefficiencies that could have easily been avoided. This is why sometimes quality is defined in terms of cost. Just as being careless and inefficient can cost money, so being careful and efficient can save much needed money - this is an important aspect of quality services.

In quality improvement two major groups of quality costs are considered:

- Quality control costs (cost to achieve high quality)

    - Prevention costs
    - Appraisal costs

- Quality failure costs

    - External failure costs (what it costs when the error or mistake is discovered after it has reached the customer, for example, a law suit because of malpractice in health care)
    - Internal failure costs (what it costs you when an error or mistake is discovered within the facility before clients are involved)

3.3   DEFINING QUALITY OF HEALTH CARE

The discussion on defining quality has highlighted the need to identify the point of view (perspective) and the important elements (dimensions) that must be considered in defining quality. Consequently quality of health care can be defined from many points of view (perspectives) and dimensions. The common perspectives used are: health care providers, administrators and managers, medical boards, funding agencies, policy makers, patients, communities, technical experts and so on. Likewise many dimensions are considered and commonly these include: access to care (geographical, financial, cultural and linguistic), acceptability of services, effectiveness, timeliness, continuity of care, amenities, interpersonal relationships (courtesy, friendliness, promptness in resolving complaints), technical competency, etc. Below are some examples of definitions of quality health care:

Roemer and Montoya-Aguilar, 1988 (WHO)[7]: Quality of health care consists of the proper performance, according to standards of interventions that are known to be safe, affordable and acceptable to the society in question, and that have the ability to produce an impact on mortality, morbidity, disability and malnutrition (WHO 1988). In this definition the perspectives highlighted are 'the performer' and the "society"; the dimensions include: safety, affordability, acceptability and effectiveness; this is in line with the Zambian policy.

Another example from the Institute of Medicine (IOM)[8]: "the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with

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[7] Roemer M.I. and Montoya-Aguilar (1988): WHO offset publication no.105 available on
http://whqlibdoc.who.int/offset/WHO_OFFSET_105.pdf
[8] IOM seminal 2001 report, Crossing the Quality Chasm: A New Health System for the 21st Century available on
http://www.managedcaremag.com/archives/0406/0406.quality_defined.html

current professional knowledge." The main perspective in this definition is the "health service provider" and the key elements or dimensions are "technical competence" and "effectiveness". This definition also highlights the need for measurement and knowledge.

These two quality definition citations only serve as examples, and the reader should know that there are many more definitions that can be found in the literature. The important issue is for a team to be clear about how they define quality of health care in their context.

The definition of quality of health care will guide the development of standards[9] of care and indicators to track the adherence to these standards.

3.4 DEFINING PERFORMANCE AND PERFORMANCE IMPROVEMENT

Performance and performance improvement are critical aspects of quality improvement. It is all about what people do, how they do them and the results of those actions.

3.4.1 PERFORMANCE

Performance can be thought of as the process of efficiently (in terms of financial and human resources) converting inputs into outputs and getting desirable results. A simple definition of health worker performance has to do with "the things people do, how they do them and the results they get". The emphasis is doing things correctly with minimum cost and numbers of people to get a quality output. For example if you vaccinate 2000 children using 100 people at a cost of ZMK 1.2 billion when you could have vaccinated the same children using 50 people and spent ZMK500 million, then in terms of the definition of performance, you have not performed! Performance takes into account efficiency as well as product. The definition of performance will vary across various industries and interests.

3.4.2 PERFORMANCE FACTORS

In any given environment the ability of a person to perform (work properly) a number of factors must be in place. The main factors identified through research are: access to information and most important here are clear job descriptions and feedback on performance; motivation based on systems that are fair and transparent; skills and knowledge relevant to the task at hand; an enabling environment including tools and space required for the job; and administrative support for example supervision systems, financing, etc. These factors must be considered in any effort to improve performance.

3.4.3 PERFORMANCE IMPROVEMENT

The American Society for Training and Development (ASTD) defines *Performance Improvement* as "the process of identifying and analysing important organisational and individual performance gaps, planning for future performance improvement, designing and developing cost-effective and ethically justifiable interventions to close performance gaps, implementing the interventions, and evaluating the financial and non-financial results." Frameworks for improving performance have been developed and in these guidelines the Performance Improvement Framework (PIF) commonly associated with the Performance Improvement Approach (PIA) will be elaborated.

Briefly the PIF on which the PIA is based takes one through a number of steps to guide the process of improving performance, namely: context analysis, stakeholder analysis, setting desired performances, determining actual performances, calculating the performance gap, analysing root causes of performance gaps, identifying and designing interventions, implementing interventions and monitoring and evaluation. 'Performance' involves the performer, efforts and results of what they do. Processes for achieving

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[9] For definition of standards see definitions

desired institutional and individual results using a problem solving approach are employed. PIA therefore aims at improving access and quality of health services.

 The PIF can be used at institutional or personal level and can be applied to any field of operation.

3.5   APPROACHES TO QUALITY AND PERFORMANCE IMPROVEMENT IN THE HEALTH CARE INDUSTRY

There are many approaches to improving health care services and it is not the intention of this guideline to be exhaustive. A few approaches that have been used with success in Africa will be given here.

3.5.1   5S - KAIZEN-TOTAL QUALITY MANAGEMENT APPROACH

5S is foundational to continuous quality improvement and aims at improving the environment in which work is done. Literally 5S stand for Japanese words which when translated into English are:

- Sort - get rid of unused stuff from your work station and reduce clutter

- Set - organize everything needed in proper order so that you can find easily and quickly (think how easy it would be to find medical records if they are in order!

- Shine - maintain your high standards of order and cleanliness

- Standardize - make sort, set and shine your norm in every section of your work

- Sustain - train and maintain discipline so that your work environment is always tidy and orderly

Kaizen is Japanese meaning continuous improvement. It is also called Continuous Quality Improvement (CQI). This way of thinking says everything can and should be improved. Everyday must see some kind of improvement in our workplace. Practitioners of kaizen are challenged to never say "it cannot improve" but rather to think, "how can we improve". This approach does not dwell on criticising but seeks to find ways of improving looking at systems and using a collaborative approach. Kaizen seeks to provide the ultimate in client experience and improves by learning and problem solving.

Total Quality Management (TQM) is the overarching philosophy that embraces both 5S and CQI and is an approach to quality improvement that is based on the participation of ALL members of the institution to achieve long term success through customer satisfaction and benefits to all members of the institution and society[10]. Key elements of TQM are integrity and ethics, leadership, teamwork, training, recognition and communication as a cross-cutting issue. Table 3.1 shows some key concepts in TQM.

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[10] International Standards Organisation (ISO:8402)

TABLE 3.1: CONCEPTS AND IDEAS IN TQM

Concept	Main Idea
Customer or client focus	Find out the customer or client needs and meet them
Continuous improvement	You can always improve so make an effort to improve continuously – the process does not stop
Employee empowerment	Enable workers to seek out, identify and correct quality problems under their control
Use quality tools	Tools to use in quality improvement are available and supervisors must make sure that workers are trained to use them and apply them in the workplace
Product design	In health care services health interventions must be designed as far as possible to meet the client's expectations
Process management	Quality must be in built in our systems, and activities and sources of quality problems must be identified and addressed
Managing supplier quality	Quality concepts must be applied to suppliers of health care requirements, e.g., drugs must be quality assured and purchased from accredited sources

In TQM two approaches can be used to support continuous quality improvement activities:

FIGURE 3.2: THE PLAN-DO- STUDY- ACT (PDSA) CYCLE

- Benchmarking – learn and study good practices from well performing/leading institutions carrying out practices relevant to our quality improvement effort

Summary of 5S-Kaizen-TQM

Graphically the relationship between 5S, Kaizen and TQM can be depicted as follows:

FIGURE 3.3: RELATIONSHIP BETWEEN 5S, KAIZEN AND TQM

TQM	• Overarching philosophy of institution
Kaizen (CQI)	• Non-stop process to uplift the standard of work environment and service content to the best possible in your environment
5S	• Take steps to make sure you are working in a clean orderly environment that helps you to retrieve what you need quickly and efficiently
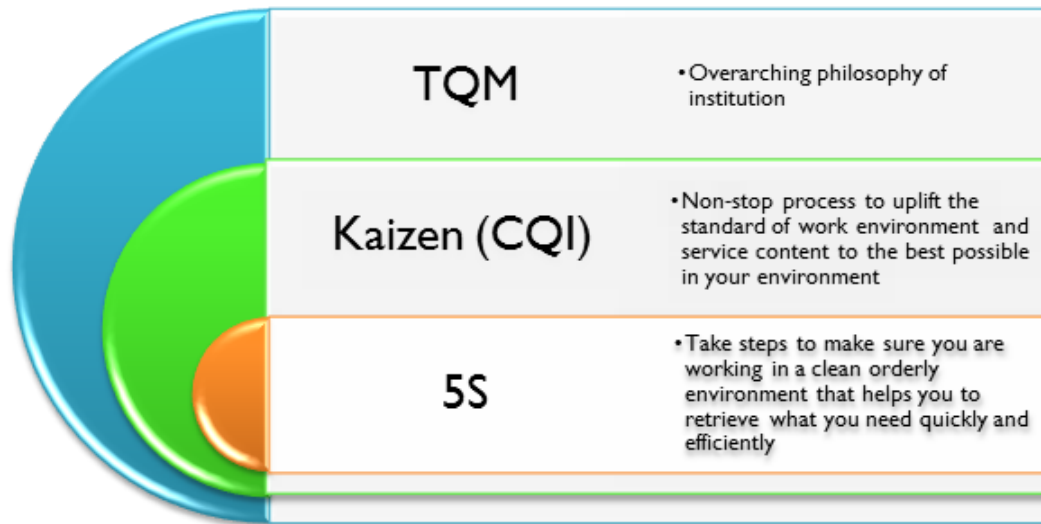
3.5.2 QUALITY IMPROVEMENT COLLABORATIVES

Quality improvement collaboratives borrow from continuous quality improvement principles but are distinguished by: promoting peer learning; collective planning and target setting by different sites; and aiming to achieve improvement rapidly within defined periods of time usually between 12 and 18 months. This approach promotes shared learning and focuses activities on very clearly identified problems. Collaboratives can be demonstrative (to see if something works) or spread (rolling out something that is known to work). The basic framework has alternating cycles of "learning" and "action" periods as shown in Figure 3.5 below. These like any other framework can be adapted to become context specific.

Key Activities in Collaboratives

Pre-work: This is necessary to identify collectively priority focus areas, intervention packages and decide on sites that will participate. An outline of mechanisms for communication, supervision, resources and their management, monitoring, supervision, documentation, reporting and data quality issues is made at this point and may need to be further refined in the first learning session. Often this involves experts or knowledgeable people who know the context in which the improvement is planned to occur. This group may also set criteria for site participation and define key indicators that must be monitored.

Learning Sessions: The first learning session is very important as this is where everyone is put on the same page and agreement is obtained on: intervention packages, indicators and targets, mechanisms of reporting and communication; introduction of tools where warranted; data quality assurance and basic analysis; formats of reporting and so on. Specific needs that must be addressed may also surface and must be addressed. Agree on baselines to enable measurement of improvements. Bring everybody up to speed on the problem that needs to be addressed and how (with justification), and collectively agree on what success will look like and how it will be measured. The second and third learning sessions share some aspects of learning session 1 but have greater emphasis on accountability. In other words: were objectives and targets achieved? If there was success, are there important practices that all can learn from? If there was failure, do we know the causes so that all can avoid the pitfalls? Were there skills

deficits identified that need to be addressed? Were there constraints that could be collectively identified; were targets set realistic or do we have to go back to the drawing board; any need to modify the intervention package or the way it is implemented?

Action Periods: This is where the participating health facilities implement the package agreed upon. The health facility QI teams use problem solving tools used in quality and performance improvement (drawn from PDSA or PIA). In Zambia the PIA would be used in this phase. Health facility QI teams are encouraged to document the implementation process and note any helpful or detrimental practices and must develop a culture of measurement by collecting relevant, high quality data and analysing this at their level. They should also monitor and make adjustments on the basis of monitoring results. The last action period should be followed by an external evaluation if possible. At a minimum an internal evaluation should be conducted.

Documentation and Dissemination/Publication of Results: At the closure of a collaborative there should be proper documentation of the collaborative activity; outcomes must be disseminated and published.

Identification of New Areas for Improvement: This should follow the closure of a collaborative activity. Remember quality improvement is continuous; there will always be something to improve! When a new area has been identified the cycle begins again.

The Institute for Health Care Improvement has defined an improvement model that is often used with the collaborative framework as shown in Figure 3.4 below.

FIGURE 3.4: INSTITUTE OF HEALTH CARE IMPROVEMENT MODEL
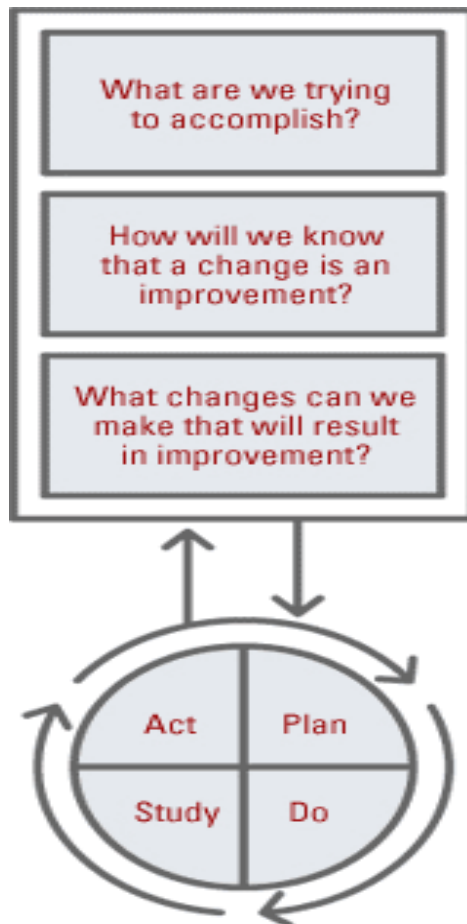
FIGURE 3.5: IMPROVEMENT MODEL

Preparatory work by expert group:
1. Identify participating sites
2. Identify key areas of focus
3. Outline basic interventions and associated measures of success
4. Outline management of collaboratives

IDENTIFY NEW OPPORTUNITIES FOR IMPROVEMENT

Learning Session1 (LS1):
1. Bring collaborative units together (e.g., different districts, hospitals or health facilities together)
2. Agree as a group on targets, interventions, time frames for reporting, communication channels, supervision and support, data collection tools, etc.
3. Have completed plans for implementation

Publish/Disseminate Results and hold the gains

Action Period 3 (AP3) followed by final evaluation

Learning Session 3 (LS3): As for LS2

Action Period 1: Implement plans from learning session one using PIA or PDSA tools; monitor and document field experience; prepare to share in learning session 2 (LS2)

Action Period 2 (AP2) as for AP1

Learning Session 2 (LS2): Bring collaboratives together for shared learning and assessment of progress; re-plan if required; identify needs and plan to address

Imported from IHI at http://www.ihi.org/knowledge/Pages/HowtoImprove/default.aspx

3.5.3 QUALITY ASSURANCE

Quality assurance (QA) is the totality of actions that will provide confidence that a product or service will satisfy given requirements for quality. This requires a formally organized sequence of activities that combine assessment of current situation, judgment about what should be done, development and implementation of plans to bring about change and evaluation to determine if desired changes have occurred.

QA has the following key principles:

- Oriented towards meeting the needs and expectations of patients and the community

- Focuses on systems and processes

- Uses data to analyse service delivery processes
- Encourages a team approach to problem solving to quality improvement

The Quality Assurance Project summarized the process of QA as a triangle, the Quality Assurance Triangle as shown in Figure 3.6 below.

FIGURE 3.6: THE QUALITY ASSURANCE TRIANGLE[11]
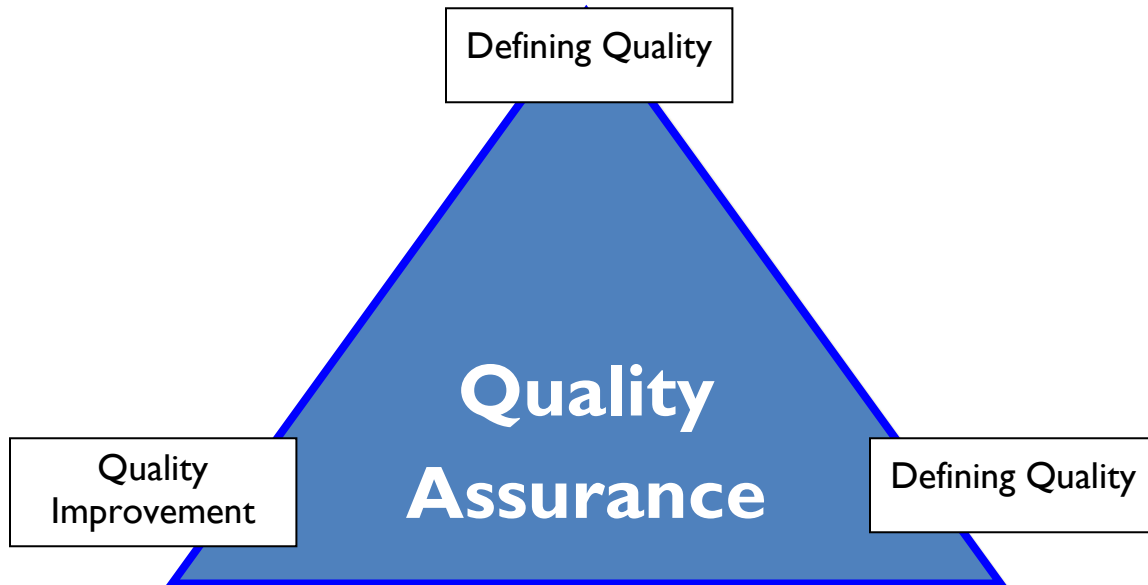
In summary the quality assurance process involves:

- Planning for QA
- Developing guidelines and setting standards
- Communicating standards and specifications
- Monitoring quality
- Identifying problems and selecting opportunities for improvement
- Define the problem operationally
- Choosing a team
- Analysing and studying the problem to identify its root causes
- Developing solutions and actions for improvement
- Implementing and evaluating quality improvement efforts

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[11] Quality Assurance Project, QA Monograph available on http://www.chs-urc.org/pdf/monographinstitQA.pdf

3.5.4 PERFORMANCE IMPROVEMENT FRAMEWORK

The performance improvement approach has its roots in human performance technology and is based on a nine step framework covering context analysis, stakeholder analysis and engagement, defining desired performance, measuring actual performance, defining the performance gap, analysing root causes of the performance gap, identifying and designing interventions, implementing, and monitoring and evaluating. The framework and associated performance factors will be described at length in a later section.

3.5.5 INTERNATIONAL ORGANISATION FOR STANDARDIZATION BASED QUALITY MANAGEMENT SYSTEMS

The International Organisation for Standardization (ISO[12]) has developed sets of standards for health care on which quality management systems are based. An example is the ISO9000 quality management and ISO 9001:2008 for the health sector. Hospitals participating in these schemes receive accreditation upon meeting the standards prescribed by ISO.

3.6 FUNDAMENTAL PRINCIPLES IN PERFORMANCE AND QUALITY IMPROVEMENT

There are a number of basic principles that support successful improvement initiatives in health care:

- **Customer or client focus** – necessitating a clear understanding of current client needs and addressing them; services that do not meet clients' needs fail as patients increasingly want explanation and discussion about their symptoms and like to be involved in decisions about their management. Stakeholders participation is key in ensuring that quality health services are provided which brings satisfaction to all. The PI process can be initiated by the stakeholders. To be comprehensive the services available to clients and community-at-large should include the whole range of interventions such as prevention, care, treatment and support based on the institutional context.

- **Leadership** – to establish unity, focus on vision, promote and sustain teamwork, motivate and mobilise those involved in quality improvement.

- **Involvement of people** – for quality improvement efforts to succeed everyone involved in health care delivery (clinical and non-clinical) must be involved and engaged appropriately; every person in the system has a valuable contribution to make. Improving the quality of the health care system requires that people working in different parts of the system to work in a coordinated manner and focusing on realisation of the same main goal. Therefore involvement and participation of the people and creating a common understanding are essential. Having effective teamwork requires leadership, participation of team members in analysing system deficiencies, agreeing on changes to be made, implementing them and meeting regularly to evaluate progress.

- **Process approach** – most problems in quality of health care arise because of things being done wrong, i.e., during the process of converting inputs to outputs. The greatest gain in quality improvement is made when processes and associated resources are managed efficiently and people are able to do things correctly; remember that processes (actions) convert inputs to outputs. Services offered in health facilities should be viewed as a product of interactions of interdependent parts of a system made up of three components: input, process and output. In designing and implementing PIA activities, a system view (inputs, processes and outputs) should be considered and avoid a fragmented approach in improving quality.

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[12] Derived from the Greek Word "ISOS" meaning equal

- **System approach to management** – identifying, understanding and managing a system of interrelated processes in order to achieve a given objective effectively and efficiently.

- **Continual improvement** – you should always aim at improving more and more; this is a permanent objective and a time to stop improving will never come.

- **Evidence-based decisions** – quality improvement undertakings must be based on reliable, valid high quality real time data and information. For purposes of taking action to improve quality or performance, measurement is usually done at the structure or input level (what you put in such as personnel, supplies, etc.) and at the level of processes (the doing); output/outcome and impact measures are done to find out how well or how badly we have done (this is after the fact and you cannot undo anything to change the result!). For example it is better to measure continuously how well health workers are adhering to treatment standards rather than measure how many people have been treated wrongly (if major errors are made, the patients will already be dead and you cannot undo their death). Specifically to monitor and evaluate performance and/or improvement, quality data are needed to analyse processes, identify gaps, and measure performance. Changes can then be tested and the resulting data analysed to verify that the changes have actually led to improvements through self-assessments and external assessments using performance assessment tools. In implementing PIA it is important to ensure quality of inputs (personnel, drugs, supplies, protocols, SOPs, and physical resources) and measure how well key procedures involving patient/client interactions such as diagnostic, therapeutic and patient care procedures are being conducted and to what extent standards are being adhered to. Outcome and impact measures to determine whether improved performance is leading to desired health care outcomes include infection rates, morbidity and mortality rates as well as client or health care provider satisfaction.

- **Good supplier**-customer relationships – the health care delivery service and the suppliers of goods and services to the health care delivery service must have a relationship that creates value for both.

- **Communication and feedback** – Communication occurs at several levels of interaction (client/provider; health system/community; provider/management and between providers) within the health care system based on performance assessment report findings and technical support (mentorship, technical support supervision) that occurs after a performance assessment. Effective communication is essential for ensuring quality services and client satisfaction. Barriers to communication such as language used, channel used to convey message and message content can affect the quality of service. Communication is the ability to build a relationship of trust, understanding and empathy with the client and to show humanism, sensitivity and responsiveness.

3.7 RATIONALE FOR ZAMBIA'S QUALITY AND PERFORMANCE IMPROVEMENT APPROACH

There are several approaches to improving the quality of health care services and these approaches have overlapping activities. All approaches involve setting standards, analysing problems and putting in place interventions to address these problems.

As noted in the introductory chapter, Zambia initiated service quality improvement activities using the quality assurance framework and set up structures to support this. However national challenges were noted and there have been advances in practices on the African continent and elsewhere that the country has learned from. In summary it has become evident that improving health care services is not a simple task and different approaches may be required along the continuum of health care delivery. The quality assurance approach with associated licensure, accreditation and certification is very good for regulating the general health care delivery system and ensures that appropriately qualified personnel and standards of practice are in place. This is a comprehensive approach that covers among other things personnel, equipment, infrastructure, regulatory processes, and structures. Zambia's experience during the health reforms of the 1990's attests to this. However when the performance of health care

providers is at stake, experience from Zambia indicates that the PIA based on the PIF is a better tool as health workers find it easier to understand and practice. At this same level, experience from JICA led projects in East Africa show that adding the 5S approach to the PIA has a profound impact in improving quality of services offered to patients. A health care provider empowered through the PIA has the ability to identify, analyse and resolve problems at her/his workstation using relatively simple problem solving tools. The PIA also promotes teamwork and peer learning in the work place because it encourages a collective analysis and resolution of activity related problems.

Figure 3.7 is a conceptualization of a national approach to improving the quality of health care services in Zambia by aligning different approaches to different levels of the health care delivery system. At national level the Quality Assurance system already invested in by the country will be maintained as the over-arching approach. Quality management systems based on ISO standards are recommended for facilities offering complex services, in addition to use of 5S to improve immediate working environments, collaboratives to promote rapid improvements and shared learning and PIA to improve health provider performance. At lower levels that offer limited services 5S and PIA should be implemented. The Zambian experience has been that at facility level, PIA is more embracing and easily understood by health workers than the quality assurance PDSA approach.

FIGURE 3.7: CONCEPTUALIZATION OF A NATIONAL APPROACH TO IMPROVING HEALTH CARE SERVICES
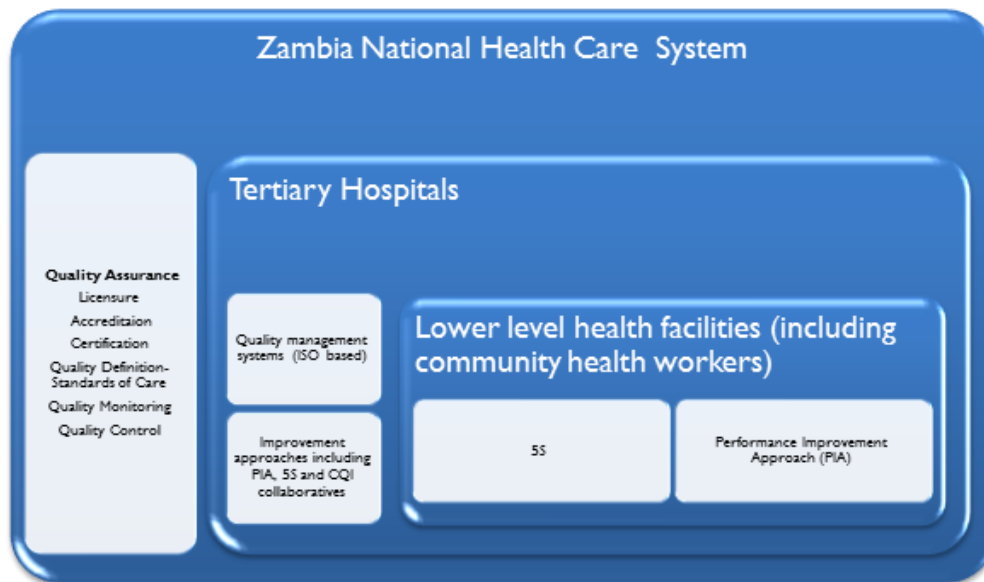
SECTION 4.   THE PERFORMANCE IMPROVEMENT APPROACH

4.1   INTRODUCTION

There are several approaches to improving quality of health care. These approaches appear diverse but do in fact have overlapping activities. The overlapping activities include setting standards, analysing problems, finding root causes, putting in place targeted interventions to address these problems and measuring the outcome of the interventions put in place.

Historically improvement approaches have two origins – industry and behavioural sciences. The PIA in particular originates from behavioural sciences and considers the performer in his or her specific setting and the conditions under which performance occurs. The goal of PIA is to solve performance problems in order to achieve desired results at organisational, process, systems or employee levels. The Zambian health care system has adopted the Performance Improvement Approach (PIA) as a key strategy to improve quality of health care. This focus on performance improvement derives from the fact that the critical key to any improvement process is the way the person at the centre of the activity performs (what they do, how they do it and what comes out of the work they do). Systems are about converting inputs to desired outputs – this happens through processes (the doing or actions that take place). In the health care system the main converter of inputs into outputs is the health worker, therefore the performance of the health worker and her/his ability to resolve problems is an indispensable key to improving quality of health care. It is not the only component but it is a cardinal component.

An enabling environment is required to achieve the best in performance. As noted previously there are critical performance factors that are a must for good performance. However, even in the best working environment, problems are likely to occur and workers must be equipped to solve those problems that are under their control, and this is the purpose of the performance improvement approach. The PIF on which the PIA is based has been shown to be applicable even at the lowest level of health care and is readily adaptable to different needs of improvement. It gives the worker an easy to follow step by step approach to resolving day to day health care delivery problems in an embracing manner which is highly participatory. In Zambia where booth QA and PIA have been implemented, PIA has greater psychological appeal to health workers at implementation level than QA (even though the actual tools for problem solving are similar). The versatility of PIA means it can be Utilised at any level of the health care system to improve outputs of processes (actions/activities) and thus increase the efficiency of utilisation of inputs.

The PIA is a step-by-step methodology for finding out what is needed to ensure good performance and delivering it; it uses the quality tools in a guided, logical manner to attain performance targets and thus improve quality. Quality demands that performance requirements or quality standards and customer expectations are met in a timely and efficient manner. Efficiency includes both fiscal and technical efficiency.

Performance can be affected by factors such as: staff job satisfaction; levels of skills and knowledge; whether or not staff receive performance feedback and how the feedback is given; availability, sufficiency and appropriateness of the work environment; and tools made available to staff; staff levels of motivation and the provision of incentives; and whether functional organisational support systems are available to staff,

Zambian health care system has adopted PIA as a critical component of the drive to improve quality of health care because of its various benefits which include the following:

- It uses a step-by-step diagnostic processes which are important in monitoring performance.

- It is a framework that targets interventions to evidence-based root causes in the context of the working environment to maximize resource use and likelihood of success.

- PIA considers all causes of performance problems.

- It can be applied at different levels –institutional or individual, or to a group of people doing similar jobs.

- Results-orientation is embedded in the process.

- Better return received on financial and human investment because interventions are targeted and based on best evidence.

- Incorporates a patient centred care approach when patients are included in the stakeholder analysis and engagement step.

- Provides a process for collaboration as it is inherently embracing emphasizing the engagement of stakeholders – IT IS HIGHLY PARTICIPATORY.

4.2   THE PERFORMANCE IMPROVEMENT FRAMEWORK

The PIA framework is a systematic process that: analyses the institutional context; describes desired performance; identifies gaps between desired and actual performance; identifies root causes: selects, designs and implements interventions that fix the root causes and measures changes in performance. PIA is a systematic process that Utilises eight steps.

The following is a description of the steps contained in the PIF.

FIGURE 4.1: PERFORMANCE IMPROVEMENT FRAMEWORK

Developed by USAID Performance Improvement Working Group
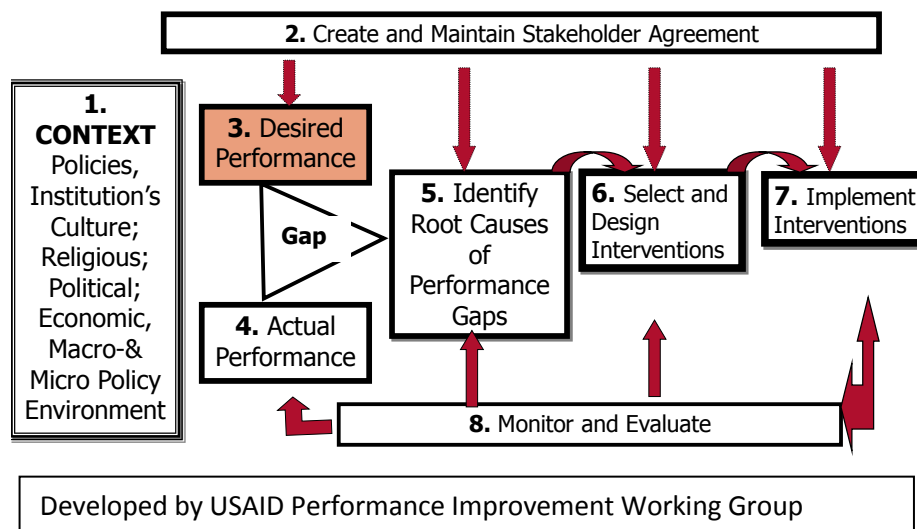
4.2.1 THE INSTITUTIONAL CONTEXT

It is important to understand that many institutional factors may have an effect on efforts to improve performance. Some of these factors include:

- National policies, standards and guidelines

- The institutional vision and mission

- Institutional strategy to achieve set goals

- Political and economic factors

- Culture and traditions, beliefs, demography, expectations, gender, etc.

- Client and community perspectives

Within an organisation the quality of services delivered may be influenced by the following factors:

- The level of teamwork during implementation

- The target population and their characteristics

- The organisation data culture towards data management and utilisation

- The level of communication that exists within the organisation

- Community/system linkages

In delivering quality services certain identified factors such as the human resource capacity, the financial resource and infrastructure, and minimum standards of performance should be considered in the context of the mission and goals of the organisation. Certain factors could be identified as either competitors or potential collaborators in an organisation's efforts to deliver quality services.

4.2.2 OBTAINING AND MAINTAINING STAKEHOLDER AGREEMENT

In order for an organisation to deliver quality services key stakeholders need to be engaged in a transparent participatory process of planning, implementation and monitoring and evaluation strategies that results in performance improvement.

A stakeholder is someone that has something to gain/lose by what happens in an organisation. Stakeholder(s) may initiate the PI process by asking for help with problem(s) or requesting a specific intervention.

In order to obtain and maintain a stakeholder agreement, there is need to consider and undertake the following:

1. Recognize the opportunity to apply performance improvement

2. Gather preliminary information on the aspect of service that is being subjected to a performance improvement process

3. Conduct interviews with representative stakeholders

4. Review findings with the key stakeholders and prepare for the performance improvement agreement meeting

5. Conduct the performance improvement process agreement meeting

6. Prepare the performance improvement process agreement letter (Memorandums of Understanding (MoUs) and facilitate necessary approvals

4.2.3 DESIRED PERFORMANCE

Desired performance is the expected achievement, i.e., "what is expected according to set standards". It is a clear statement of the expected level of performance and is NOT synonymous with IDEAL PERFORMANCE which sets undue emphasis on standards that seem unreachable and therefore discourage the performer.

The main focus of defining a desired performance is solving an existing problem, setting up an enabling system for a new performance, and addressing the needs and expectations of the population.

In defining the desired performance the stakeholders must have a clear understanding of the institutional context in which they are working. Desired performance statements and associated indicators must be evidence based on data/information to support the validity of the desired performance level, including set targets and these must be agreed upon by stakeholders; however these may change over time, as new data come in. Specific programmes should determine or refer their own minimum standards and policies that relate to the topic to be addressed.

4.2.4 ACTUAL PERFORMANCE

Actual performance identifies and expresses in a measurable way the gap between the current level of performance and the expected one. Measuring performance uses indicators defined for desired performance; it collects data about activities for which performance improvement is desired, analyses and interprets it. Performance indicators are measurable variables that can be used to determine the degree of adherence to a stated desired performance, e.g., counts, averages, ratio/proportions/rate/percentage.

There are various data collection methods and sources to determine performance such as observation, inspection of facilities, interviews, group discussions, performance assessment reports, mentorship reports, TSS reports, patient case records, quarterly reports, minutes, technical committee reports/minutes, facility logbooks, HMIS reports, SMARTCare reports, treatment notes, survey reports, census data, support supervision reports, etc. Data collection tools may include forms, checklists, questionnaires, etc.

4.2.5 PERFORMANCE GAPS

Performance gaps refer to the difference between desired and actual performance. You must make sure therefore that the desired and the actual performance is measured in the same units.

4.2.6 ROOT CAUSE ANALYSIS

A root cause in PIA is one which when removed will reduce or eliminate the performance problem. A root cause can explain the "effect" either directly or through a series of events. A good root cause analysis increases the likelihood that the remedial interventions will have a greater impact—that the right tools will be used.

Once the performance gap has been defined, this has to be analysed in order to identify and prioritize the problems that are responsible for the gap. This constitutes the root cause analysis.

Gap analysis and identification of problems should consider answering the what, how, who, where, when and why of the identified performance gap. In finding the answers to these question and thus determining that there is a problem, data obtained through sources such as HMIS reports, special surveys, supervisory visit reports, health facility reports, client complaints, health worker complaints, audits, and peer reviews is analysed.

Performance gaps may be caused by single or multiple problems, some of which the organisation may not be in a position to immediately remedy. In a situation where multiple problems are identified, these

need to be prioritised. Prioritisation of problems can objectively be achieved by use of one of several available tools such as voting, prioritization matrixes, or the Pareto Chart.

Understanding the process in which the performance occurs is needful as most performance problems or quality deficiencies relate to the way work is conducted. Therefore it is important to have a clear picture of the process. Some causative problems of performance gaps may be identified in the course of trying to understand the process.

Tools for understanding systems and processes include the following:

- System modelling (shows how the system should be working and can be used to determine how various components work together to produce a desired outcome)

- Flow charts (useful for designing and documenting processes)

Once a problem has been more specifically located, a hypothesis about the causes should be developed. The "hypothesis" is used because the suspected or proposed root cause (the core of the problem) has to be verified by data. Cause and effect analysis helps to generate a list of as many possible causes as possible and is helpful because root causes may not always be obvious. A cause and effect analysis helps to look beyond the symptoms of the problem by use of analytical tools including the:

- The fishbone diagram (causes by category)*

FIGURE 4.2: THE FISHBONE DIAGRAM
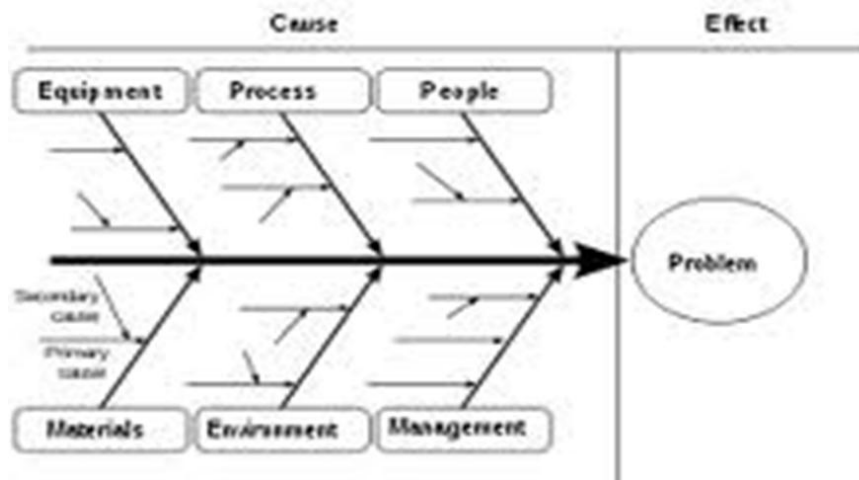
- The why-why-why techniques/the why-tree process (a chain of causes)*

FIGURE 4.3: THE "WHY, WHY TREE"

The cause and effect analysis process produces a hypothesis about what the root cause of the problem leading to the performance gap is, and which needs to be verified by data. When collecting data to verify hypothetical root causes, we must use information sources that are different from the ones used to identify the problem. Once the appropriate data have bee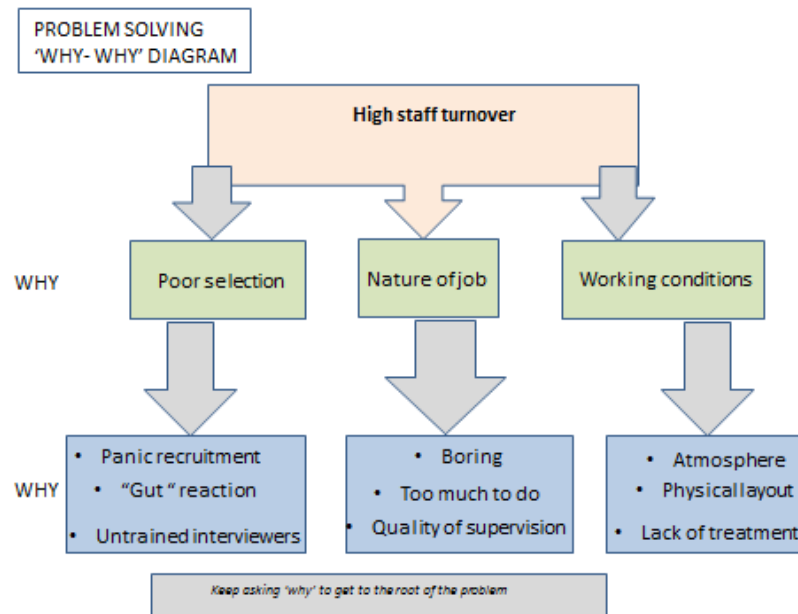n collected and interpreted to prove or disprove the hypothesis, the actual root cause can then be determined based on facts and not opinions or assumptions. Once the root cause or root causes of the performance problems have been found and clearly stated in terms of their performance factors, the next step in the PI process is to identify suitable interventions to address the root cause.

4.2.7 SELECTING, DESIGNING AND IMPLEMENTING INTERVENTIONS

Following the stating of a root cause, the most targeted, systematic, comprehensive, and cost-effective intervention that will close the performance gap that has been identified must be developed.

Such interventions must operate within the existing context of politics/policies, economics, culture, mission and vision of the organisation. They also must be interventions that can be integrated within the existing systems, and use basic inputs that are accessible, well distributed and easy to manage.

The inputs, process and outputs are best done as agreed upon by all concerned stakeholders, with each actor playing his/her role. The outputs must be acceptable to service providers and clients and should be in the correct amounts and quality (and mix).

The following steps can be followed by a multidisciplinary team in developing and implementing interventions to close a performance gap:

- Identify what we need to improve and where (where in the process/procedure or in the system based on the stated root causes)
- Identify the interventions that need to be undertaken and by whom
- Select the intervention
- Develop a design plan for each intervention, including the monitoring and evaluation plan

- Document and get approval of the design
- Develop, field test (where appropriate),and produce final version
- Undertake capacity analysis to see whether the responsible person/department or organisation is able to undertake the finalized intervention design effectively
- Do a risk analysis and outline activities to be undertaken if the unwanted event actually happens
- Assess/hypothesise the possible outcomes of the intervention
- Implement the intervention (while you monitor to assess effectiveness and "side-effects")
- The steps outlined above must be a participatory process, involving all stakeholders at every stage, and could require the inclusion of external expertise.

4.2.8 IMPLEMENTING INTERVENTIONS

During implementation of interventions, it is important to monitor the process through assessment of effectiveness and "side effects" from time to time.

Implementation of interventions entails

- Building implementation team(s),
- Developing a detailed implementation plan and
- Conducting monitoring activities and meetings.

The criteria for selecting interventions should be

- Time bound
- Cost effective
- Feasible
- Owned by users
- Culturally acceptable
- Sustainable
- Acceptable to stakeholders

Examples of possible interventions that could be developed include:

- Clinical mentorship
- Regular data audits
- Job descriptions
- Protocols and policies
- Reorganize/revamp supply line
- Supportive supervision
- Improving logistical systems
- Job aids
- Developing information management systems
- Recognition systems – awards, etc.
- Client feedback

IT IS IMPORTANT TO DOCUMENT YOUR WORK AND THE RESULTS, SO THAT OTHERS CAN LEARN FROM YOU.

4.2.9 MONITORING AND EVALUATION

It is important to know whether or not the interventions you and your staff have implemented and the changes you have made will yield the result(s) that you intended. In other words, *did your interventions help to close performance gaps*, and has this led to an improvement in the quality of services being delivered? You will know this by monitoring activities at your site.

Monitoring is a continuous process of data collection and analysis done to determine actual performance identifying aspects that are working according to plan and those that may require adjustments.

The monitoring process should answer, to what extent are activities being carried out correctly; what extent are the activities being carried out on time; how well are services being provided; how often are the services being provided; who is providing the services; how acceptable are the services being provided; and how close are the programme targets being achieved.

The process is facilitated by monitoring tools which are

- simple

- clear and precise for the intended purpose, tailored to address key issues in implementation and should help to assess the actual performance

Performance can be monitored using the following processes and tools:

- Review records and reports (e.g., information from data collected using the PA tool, patient case records and HMIS reports)

- Conduct performance assessment (using PA tool and reports)

- Conduct self-assessment (using PA tool and HMIS reports)

- Conduct peer assessment (using PA tool and HMIS reports)

- Obtain client feedback (using exit interviews, suggestion boxes)

- Mystery client

- Poll community perceptions (using surveys, focus group discussions, health centre committee meetings)

- Benchmark (compare your site's services with others) e.g., quarterly performance review, HMIS reports, technical committee meetings, Provincial Integrated Meetings (PIM), District Integrated Meetings (DIM). Transform these meetings into events for honest learning and developing strategies.

Evaluation refers to the *measurement of how much things have changed because of the intervention(s) implemented*. Because there are many factors that cause things to change, a ***formal evaluation tries to demonstrate how much a specific intervention contributed to the change.*** It is a systematic method of assessing the service implementation plan. It is a time bound exercise done at specific intervals (weekly, monthly, quarterly, bi annual, annually, etc.) and assesses achievements of ongoing or completed projects.

Evaluation should be conducted by people neutral to the programme using indicators agreed on during the design phase.

Below are examples of indicators that can be used at different levels of health care:

- % of fully immunized children
- Number of children managed according to IMCI guidelines
- % of children born to HIV positive mothers given ARV prophylaxis at birth
- Nursing protocols available and adhered to
- Number of TB sputum smears subjected to quality control through retesting by reference or independent laboratory
- Morbidity and mortality rates at different levels of health care or national aggregates of these

Evaluations can be very specific or very comprehensive. It could include elements of planning, implementation, resource use and value addition, unexpected outcomes and spin offs or even the whole programme.

The following are examples of evaluation questions for different aspects of health care delivery:

Evaluating the planning:

- Was the programme in line with the national policy?
- Were the programme objectives based on need?
- Did the activities meet the needs?
- Were the activities feasible?
- Was the budget adequate?
- Was the implementation time adequate?
- Implementation processes adhered to?

Evaluating activities:

- Did the activities address the needs?
- Were they practical?
- Were the activities adequately funded?
- Was adequate time allowed to implement activities?
- Was there the right mix of skills and knowledge in the implementation team?

Evaluating programmes:

- Were the objectives realistic?
- Were the tasks addressing the objectives?
- Were methods used likely to be effective in achieving the objectives?
- Was the number of implementers involved adequate?

Evaluating the service:

- Were the services delivered according to the set standards?
- Did the programme meet the goals related to the indicators which were agreed upon for the facility, district, province or country?

- Were the services available and acceptable to the intended clients?

- Were the required materials and supplies available?

- Was the atmosphere conducive to the clients using the programme?

- Was the number of implementers involved appropriate?

- Did they have necessary skills and knowledge?

SECTION 5. QUALITY IMPROVEMENT STRUCTURE, ROLES AND RESPONSIBILITIES

Health services in Zambia are organized in four levels: national, provincial, district and facility levels. The national and provincial levels are involved in policy, coordination and technical support supervision to the lower levels. The district and facility levels are responsible for implementation of the QI activities.

FIGURE 5.1: QUALITY IMPROVEMENT STRUCTURE
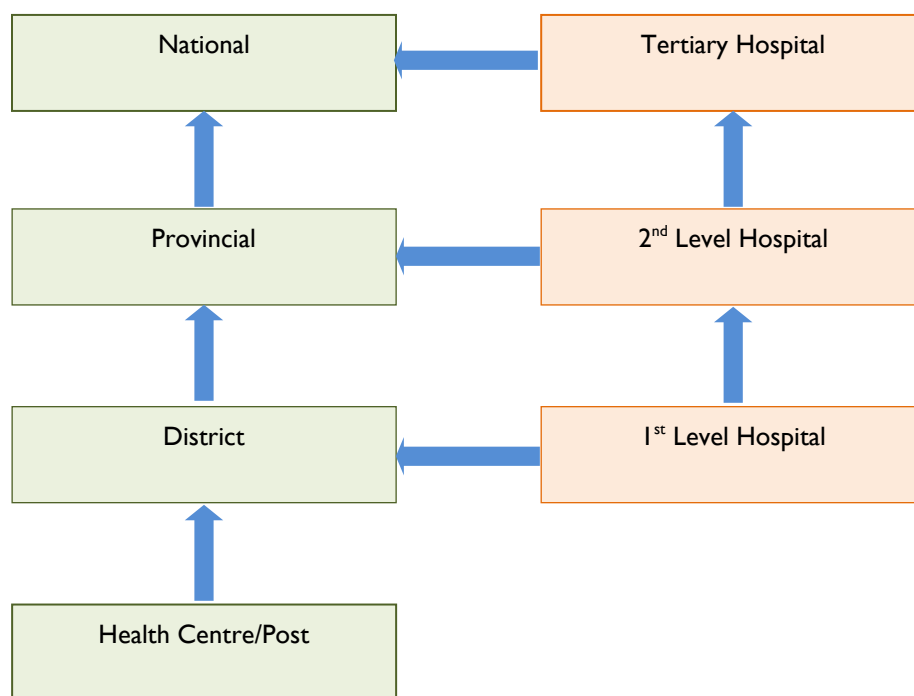
5.1 NATIONAL LEVEL

The national QI programme is coordinated by the QI Specialist based at the MOH.

The MOH is mandated to constitute a National Quality Improvement Steering Committee which is chaired by the Permanent Secretary.

Main objectives

- Provide policy direction, advocacy and resource mobilization for QI programmes
- Assigns responsibilities as need arise

Composition of National Quality Improvement Steering Committee

- Permanent Secretary - Chairperson
- Directors from MOH Directorates
- Registrar – Health Professions Council of Zambia
- Registrar – General Nutrition Council
- Registrar – Pharmaceutical Regulatory Authority (PRA)
- Country Directors – WHO, UNICEF, UNFPA, USAID, CDC
- Representatives from Cooperating Partners
- Managing Director-UTH

Core QI Functions/Activities

- Provide vision on National QI
- Formulate and review QI policy
- Mobilise resources

To attain the above functions the committee shall carry out the following:

- Hold quarterly meetings
- Establish a National QI TWG composed of representatives from MOH directorates and other QI stakeholders.
- Review reports from national TWG
- Conduct meeting for quality of care between 2nd and 3rd level hospitals

National QI Technical Working Group

This is the subcommittee of the National QI Steering Committee and is chaired by the National QI Specialist.

Main objective

Provide overall coordination and technical assistance to all levels in QI in the health sector

Composition

- All the Directors of Directorates - MOH
- Programme Officers - MOH
- QI Programme Officers - Partner Organisations
- Representative from private practitioners

Core functions/activities

- Set QI standards
- Coordinate overall QI activities
- Mobilise resources
- Capacity building

To attain the above functions the committee shall carry out the following:

- Hold quarterly meetings

- Report QI activities to the National QI Steering Committees
- Develop a QI stakeholder coordination mechanism
- Develop and review pre and in-service QI curriculum for all training institutions in the health sector
- Ensure adherence to the existing national health care standards and recommend review or inclusion of new standards.
- Collaborate with the national Clinical Care Team to develop job aids and treatment protocols
- Coordinate countrywide implementation of QI including regular monitoring and review of implementation progress
- Provide technical support to Provincial QI Committees as need arises
- Coordinate development and regular review of QI monitoring and evaluation (such as PA, clinical mentorship, quarterly performance review) tools and disseminate them to lower levels)
- Coordinate and facilitate inter-provincial annual performance review meetings and annual QI conference
- Develop and review QI training package every five years/ or as need arises
- Establish training needs assessment with the help of the provinces, districts and other stakeholders in rolling out QI/PI trainings
- Participate in supervision of QI/PI activities at all levels
- Sharing best practices through annual symposia/conferences (local and international)
- Conduct and facilitate operations research

5.2   PROVINCIAL LEVEL

The Provincial Quality Improvement Specialist/Clinical Care Specialist (CCS) coordinates QI activities in the province and reports to the National QI Specialist at MOH.

Main objective

Coordinate all QI activities in the province

Specific objectives

- Monitor adherence to set national standards
- Provide capacity building in QI
- Conduct QI needs assessments
- Strengthen systems that enhance QI

Composition of Provincial QI Steering Committee

- Provincial QI Specialist
- CCS
- Communicable Disease Specialist
- Principal Nursing Officer-Maternal and Child Health/Standards
- TB/HIV/STI Officer
- Principal Pharmacist

- Biomedical Scientists

- Environmental Health Officers

- Senior Health Information Officer

- Health Education Officers

- Hospital QI Specialist

- Cooperating partners

- Representative from provincial administration

- Representative from training institutions

- Representative from the private sector

Core functions

- Monitor QI activities

- Participate in PA, follow-up TSS and mentorship activities

- Conduct QI capacity building interventions

- Hold quarterly meetings

- Facilitate self-assessments at health facilities

Implementation of QI will depend largely on the core functions allocated to the province. To implement QI tasks at this level, the following performance measures should be considered:

- Establish Provincial QI Committees

- The Provincial QI Specialist shall be the QI coordinator in the province

- Conduct PA and provide technical support and mentorship to the districts

- Monitor adherence to the QI guidelines by all stakeholders

- Ensure QI activities are incorporated into the provincial and district action plans

- Build capacity in QI at all levels in the province

- Coordinate and facilitate inter-district quarterly performance review meetings

- Monitor and evaluate QI through quarterly review meetings of reports (HMIS, PA, TSS, mentorship, Provincial Technical Committee)

- Conduct national health standards assessments with and on behalf of the Health Professions Council of Zambia

- Conduct audits (data, clinical, and mortality reviews) on a quarterly basis at provincial level

- Submit reports to relevant regulatory bodies

- Reward good performance at lower levels

5.3   TERTIARY AND SECONDARY LEVEL HOSPITALS

The Hospital QI Specialist/Clinical Care Manager coordinates QI activities at this level. All service providers at the institution should be trained in QI. The hospitals at this level should constitute functional QI committees. The QI committees at this level will be oriented to QI and expected to use

the PIA framework to improve performance. On a quarterly basis the QI committee should conduct a self-assessment using the performance assessment tools to improve performance. The main hospital QI committee should facilitate formation of QI subcommittees in the various departments which should perform the same functions as prescribed above.

Main objectives

- Monitor adherence to set standards within the hospital

- Provide capacity building in QI

- Conduct QI needs assessments

- Strengthen systems that enhance QI

Composition

- Hospital Medical Superintendent

- Hospital Administrator

- Representation from community

- Legal practitioner

- Traditional healer

- Hospital QI Specialist

- Clinical Care Manager

- Principal Nursing Officer

- TB/HIV/STI officer

- Pharmacist

- Biomedical Scientist

- Environmental Health Officer

- Hospital Health Information Officer

- Cooperating partners

- Representative from training institutions

- Transport Officer

Core functions

- Monitor QI activities

- Be part of the provincial QI committee

- Participate in PA, follow-up TSS and mentorship activities to lower levels

- Conduct QI capacity building interventions

- Hold monthly meetings

- Conduct self-assessments

- Facilitate self-assessments by subcommittees in the departments

Roles and responsibilities

- Ensure the provision of quality clinical services to in-patients and out-patients referred from the district hospitals

- Provision of curative specialist services in the provinces and giving feedback to the referral centres

- Expert and technical support to district, faith-based and private hospitals as well as primary health facilities in QI activities

- Should be able to conduct operational research on quality of health care

- Participate in accreditation of health facilities

5.4   DISTRICT LEVEL

The District Quality Improvement Committee coordinates implementation of the QI activities in the district. This committee is headed by the District QI Programme Officer.

Objective:

Ensure implementation of quality health services in the district

Specific Objectives

- Ensure adherence to set national standards

- Provide capacity building in QI

- Conduct QI needs assessments

- Strengthen systems that enhance QI

Composition

- District Medical Officer

- District QI Programme Officer

- Clinical Care Officer

- Senior Nursing Officer

- TB/HIV/STI Officer

- Pharmacist

- Biomedical scientist

- Environmental Health Officer

- District Health Information Officer

- Representative from first level hospital

- Cooperating partners

- Representative from district administration

- Representative from the community

- Representative from the private practitioners

- Representation of traditional healer

- Local legal practitioner

Implementation of health care policy is done at the district level. To implement QI tasks at this level, the following performance measures should be considered:

- Establish District QI Committees

- District QI Programme Officer/Clinical Care Officer coordinates QI activities in the district

- Participate in PA in the district

- Ensure adherence to QI guidelines by all service providers

- Monitor implementation of QI activities in the district

- Ensure well-coordinated referral of patients and a feedback mechanism

- Conduct operations research

- Collaborate with clinical care teams to facilitate clinical mentorship

- Collaborate with Human Resources to facilitate induction of new staff

- Develop operational plans for QI for the district

- Conduct self and peer assessment with other districts

- Facilitate formation of QI committees at health facility level

- Coordinate and facilitate quarterly inter-facility performance review meetings

- Conduct monthly QI committee meetings

- Report QI activities and performance to the Provincial QI Committee on aquarterly basis

- Link PA results to QI efforts and draw follow up activities for TSS

- Conduct audits (data, clinical, and mortality reviews) on a monthly basis at facility level and on a quarterly basis at district level for maternal mortality cases

- Ensure display of the patients charter and rights and monitor adherence of health workers to the charter

- Evaluate safety of health workers using infection prevention committees

- Coordinate and facilitate a rewards system of best performing health facility

- Strengthen procurement systems to ensure uninterrupted supply of service delivery commodities

- Ensure functioning of the existing system for data collection, analysis, reporting and utilisation in all facilities

- Receive facility reports, aggregate and analyse for decision making, planning and management purposes

- Submit monthly reports to the province

- Advocate, sensitize and promote QI activities at all levels within the district

- Monitor performance of health facilities on priority QI targets and indicators for the health services

- Conduct regular assessments of health facilities in the district to identify priority areas for improvement

- Develop a system for awarding and validating the best performing facilities in quality

- Ensure integration of QI activities into all health service delivery areas

- Distribute and enforce the use of standard guidelines in health facilities within the district

5.5 FIRST LEVEL HOSPITALS

Hospital-wide quality improvement committees should be in place in all first level hospitals. Smaller committees will exist at departmental level – Nursing, Environmental, Clinical, Laboratory, Reproductive health and Administration.

Main objective:

To provide quality health services to the community

Specific Objectives

- Adhere to set national standards

- Utilise available systems to provide quality health services

- Facilitate community participation in health programmes to enhance performance improvement

- Conduct operations research

Composition of QI Steering Committee

- Hospital QI Programme Officer

- Clinical Care Manager

- Senior Nursing Officer/Nursing Sister

- TB/HIV/STI Officer

- Pharmacist/Pharmacy Technologist

- Biomedical Scientist/ Laboratory Technologist

- Environmental Health Officer/ Technologist

- Hospital Health Information Officer

- Representatives from cooperating partners

- Representative from the community (hospital advisory representatives)

- Representative from the private practitioners

To ensure quality health service provision at this level, the following performance measures should be put in place:

- Establish hospital departmental QI committees

- The Hospital QI Officer shall coordinate all QI activities

- Utilise existing data to identify areas for improvement

- Conduct QI needs assessments in collaboration with the community and other stakeholders

- Develop work plans based on identified performance gaps

- Implement the work plans, monitor and evaluate the QI programme

- Share best practices within the district, and the province
- Provide quality case management to outpatient and in patients departments, timely referrals, feedback and follow-up on referred cases
- Conduct monthly clinical meetings
- Have a representation on the District QI Committee
- Provide expert and technical support to primary health facilities, public, faith-based and private facilities
- Submit monthly QI reports the district
- Conduct operational research on quality of health care.
- Adhere to set standards to meet the accreditation requirements

5.6 HEALTH CENTRES

The health centre provides all the services required at this level. The health centre will have a QI committee to support the nearest health post and participate in mobilising the community for outreach and mobile health services.

Main objective:

To provide quality health services to the community

Specific Objectives

- Adhere to set national standards
- Utilise available systems to provide quality health services
- Facilitate community participation in health programmes to enhance performance improvement
- Conduct operations research

Composition QI Steering Committee

- Health Centre In charge - Chairperson
- Principal/Senior Clinical Officer
- Nursing sister
- TB/HIV/STI Officer
- Pharmacy Technologist
- Laboratory Technologist
- Environmental Health Technologist
- Health Information Officer/ data entry clerk/record clerk
- Representatives from cooperating partners (community-based and faith-based organisations)
- Representative from the community (Neighbourhood Health Committees [NHC] representatives)

Roles and Responsibilities

- Establish a QI team, which should include the community
- Ensure implementation and management of QI activities

- Identify quality gaps through analysing processes of care within the facility and propose changes for improvement
- Develop work plans and set targets based on defined national indicators
- Test the proposed changes and innovations using the recommended QI model
- Collect, compile, validate, analyse, and utilise timely submission of data to the district medical office
- Share QI experience through existing internal and external forums including community health committee on QI

5.7 HEALTH POST

This is the lowest level of the health care delivery system. The staff should establish linkages with QI committees at the health centre within their catchment area.

Roles and responsibilities

- Establish strong linkages with the health centre QI committees
- Establish linkages with the community structures such as the NHC and other support groups
- Work closely with the community health workers
- Interpret and disseminate the national guidelines
- Conduct meetings with the community on QI
- To develop QI plans and budgets

SECTION 6. OPERATIONALIZATION OF QUALITY IMPROVEMENT ACTIVITIES ACROSS VARIOUS LEVELS OF CARE

6.1 BACKGROUND

Zambia has had no strategic plan on QI in the health sector. Some of the major constraints have been inadequate human and financial resources. At the time of developing these guidelines, there had only been four trainers at national level. This posed a challenge as they were too few to meet the national QI training needs. To operationalize the QI at all levels in the health care system requires capacity building of QI trainers at all levels. In addition, mobilisation of resources will be a priority.

The Quality Assurance Project defined a model of institutionalisation from which lessons can be learned as Zambia gets on the road to making quality a routine part of health care service delivery. Figure 6.1 shows a diagram of this model.

FIGURE 6.1: QA MODEL FOR INSTITUTIONALIZATION 1[13]

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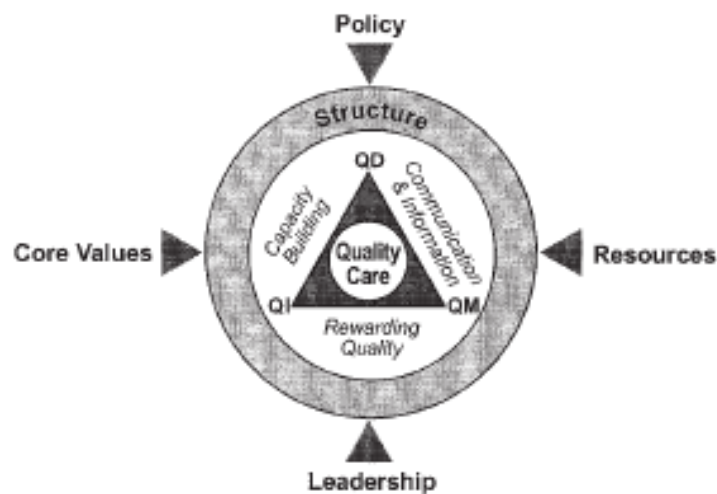
[13] http://intqhc.oxfordjournals.org/content/14/suppl_1/67.full.pdf+html

6.2 CREATING AN ENABLING ENVIRONMENT FOR INSTITUTIONALIZING QUALITY IMPROVEMENT

To institutionalise QI, certain factors must be put in place. This manual discusses a few here.

6.2.1 POLICY

Zambia needs to develop an evidence-based policy to guide all QI practitioners involved in health care delivery. This policy will guide the strategic direction for the country and should be the foundation of a single coordinated roadmap for QI in Zambia. Mechanisms to monitor policy deployment should also be highlighted to make sure it is a functional policy.

6.2.2 RESOURCES

There is a need to develop a business plan for quality improvement in Zambia to ensure that there are sustained human and financial resources to support QI and its institutionalisation in Zambia. As has been alluded to in this guide, one of the reasons for limited success of the QA project was lack of resources. Resourcing QI should be a core function of the government with donor funding being seen as complementary.

6.2.3 LEADERSHIP

The government needs to lead the improvement movement and align all other collaborating and development partners to its strategic plan. Lack of leadership will sustain the fragmented approach to QI with everyone doing what they see fit. Leadership is required for a rational coherent approach to quality improvement.

6.2.4 CORE VALUES

It is essential for Zambia to define the core values that will guide practice in QI. This will be an important part of the strategic planning process.

6.2.5 STRUCTURES

Zambia has some structures for QI in place but these must be strengthened to take into account the challenging environment within which the country is trying to improve quality. It is very important that structures that include the community and based on the highest level of community engagement are embraced. Structures for QI must meet the demands of the health care delivery for the rich and the poor, the urban and rural populations, and the easy and hard to reach populations. To date structures have focused on public service but the private sector must be embraced and called upon to join the QI effort.

6.2.6 SETTING UP SUPPORTING SUB-SYSTEMS FOR SUSTAINED QUALITY IMPROVEMENT

Support functions include capacity building, communication, and reward of facilities in a way that is transparent and agreed upon by QI implementation teams.

6.2.6.1 CAPACITY BUILDING

This is a mammoth task in an environment with generally high turn-over of staff. In the Zambian context this can be mitigated by developing learning environments at individual sites as well as promoting peer learning and critique through collaborative activities that either use face to face meetings or take advantage of information technology so that there is continuous learning between sites at a reasonable cost (once systems are set up).

Capacity building must also include ensuring that at every level, skills and knowledge to formulate a costed strategic, activity, and monitoring plans are available and further that there is sufficient human resources and financing to deploy these plans.

Additionally the national level should have capacity to develop evidence-based standards and to effectively disseminate these standards. At lower level there should be capacity to interpret these standards and to derive from them time-bound desired performances for QI activities. Capacity to conduct judicious monitoring activities coupled with the use of data coming out of the monitoring activities is the crux of QI.

6.2.6.2 COMMUNICATION AND INFORMATION

Communication is critical to success and this means building strong facilitative/supportive supervision systems that encourage immediate constructive feedback and the taking of joint remedial action where this is warranted. Access to information is very important for QI both for remaining current and for evidence based planning and intervention design. QI is data driven. Therefore data used should be of high quality, should be accessed in real time and appropriately analysed and interpreted. This calls for appropriate skills and knowledge among those involved in QI.

6.2.6.3 REWARD SYSTEMS

Reward systems are only motivating if they are appropriate and transparent. It is important to develop clear guidelines for rewards and standardize these across the health care system. Rewards can be at different levels, e.g., for national, provinces, districts, institutions and individuals.

6.3 ROADMAP TO INSTITUTIONALISING QUALITY IMPROVEMENT

To ensure institutionalising QI we need to develop a culture of quality as enshrined under an internal enabling environment, support functions and core activities. These will carry us through the following stages:

- **Pre- awareness** – before an organisation begins to implement any formalized or deliberate quality improvement efforts – is characterized by attempts to improve quality that are sporadic, individual, and informal, rather than part of a deliberate, formal QI intervention.

- **Awareness** – is the first step on the road to institutionalise QI; it is characterized by individuals (especially organisational leaders) becoming conscious of the need to improve quality of health care and the possibility of doing something deliberate and systematic about it.

- **Experiential (Experimental)** – Characterized by an organisation starting to implement QI on a small scale, trying out various QI approaches to learn from the experience and developing evidence (documented results) showing that QI leads to improvements to quality of care.

- **Expansion** – there is an increase in the scope of quality improvement activities. Expansion phase is not only scaling up QI activities but also a signal of strategic expansion of QI implementation, based on knowledge and experiences gained in previous phases. This expansion may be geographical, but could also relate to the types of QI activities, the range of facility types or departments involved and types of health problems being addressed. As expansion strategies are undertaken, they can precipitate or foster the need for "taking stock" of QI activities, ushering in a period of review, refinement, balance and coordination.

- **Consolidation** – Existing QI activities and programmes are simultaneously strengthened and anchored into standard organisational operations, while at the same time being fortified by addressing lagging or missing activities.

- **Maturity** – it is not a phase but a state in which QI is formally and philosophically integrated into the structure and function of a health system. With maturity, QI becomes an integral part of day to day operations at all levels. Organisational values, leadership, policy, and resources reinforce a philosophical and practical culture of quality.

- **Coordination, Learning and Documenting** – opportunities for learning, sharing and documenting are created through either face to face or virtual systematic learning activities that allow experiences from the field to be shared and best practices incorporated. Guidelines for documenting and a collection point for documentation must be established at the different levels of QI activities. This requires a good coordinating mechanism which works through the structures identified in this guide

Table 6.1 is a summary of essential activities across service delivery themes in Zambia.

TABLE 6.1: SUMMARY OF PRE-REQUISITES TO INSTITUTIONALISING AND SUSTAINING QUALITY IMPROVEMENT

	Short Term	Long Term
Internal Enabling Environment		
Policy and Strategy Direction	• Develop road map for QI in Zambia • Develop interim costed plan for institutionalising QI in Zambia operational plans • Develop patients charter and mission statement • License practitioners and health care settings (health and safety to minimize risks)	• Strengthen the Zambia Health Advisory and Accreditation Council • Develop a national QI policy • Develop a five year national QI strategic plan
Leadership	• Partner map and coordinate with government assuming leadership role • Establish working group to direct national QI activities and assign responsibilities to partners in agreement with them • Conduct QI committee meetings • Resource – leadership must take on the role of identifying domestic financial resources to sustain quality improvement activities.	• Committed leaders who will support quality and performance improvement and provide guided coordination for collaborating partners.
Structure	• As in long term	• Re-define the structure for QI for Zambia and advocate for recognition by cabinet. This structure follows the national, provincial, district, hospital, health centre, health post, community and mobile/outreach services.
Core Values		• Enshrine the vision, goal and mission statement for MOH
Support Functions		
Capacity Building	• Train, mentor, certify • Conduct ToTs in QI at provincial and district levels	• Develop a database for accreditation results to show where facilities are meeting expected standards and areas requiring improvement • Training national trainers, ToTs, mentors
Communication	• Produce quarterly reports on quality improvement activities to higher levels • Disseminate patients' rights • Disseminate best practices at various levels	

	Short Term	Long Term
Reward System		• Develop an award programme where a sample of health facilities are supervised according to comprehensive checklist with specific indicators and then rated. The mission and philosophy must be developed given the resource constraints.
Continuous Learning/ Documentation	• Identify document and disseminate best practices • Create opportunities for knowledge and skills updating onsite and offsite	• Ensure adequate budgets to sustain quality improvement
Planning and Resourcing	• Identify domestic and international funding for QI • Facilitate planning for QI at all levels • Develop a robust monitoring plan to cover all levels of health care	
Core Quality and PI activities		
Defining Quality	• Empower all health care delivery sites to define desired performance as they work towards achieving national standards of health care within defined time frames	• Develop systems of evaluating quality across the country: standard-based approach to evaluating quality
Measuring and Monitoring Quality	• Develop health care level indicators in line with improvement objectives • Assess health facilities using specific quality tools – standards, clinical practice, health and safety, • Implement performance assessment • Facilitate supervision • Monitor and evaluate quality of health care	• Develop an indicator monitoring system – structures, processes and outcomes and conduct External Quality Evaluation; first step being needs assessment
Improving Quality	• Provide services as guided by intervention specific guidelines and application of QI models and principles	• Develop an accreditation system • Accredit and certificy health facilities based on standards

ANNEX FURTHER READING

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