REPORT

MINISTRY OF HEALTH
REPUBLIC OF GHANA

Ghana National Healthcare Quality Strategy (2017-2021)

Part 1: The Strategy
Part 2: Coordination and Accountability Framework

December 2016
Accra

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List of Acronyms

AIDS	Acquired Immunodeficiency Syndrome
ART	Antiretroviral Therapy
BMGF	Bill & Melinda Gates Foundation
CHAG	Christian Health Association of Ghana
CHPS	Community-based Health Planning and Services
CPD	Continuing Professional Development
CPPA	Community Pharmacists Practice Association
CSM	Cerebrospinal Meningitis
CWG	Core Working Group
DANIDA	Danish International Development Agency
DHIMS	District Health Information Management System
DHMT	District Health Management Team
DQMU	District Quality Management Unit
GAQHI	Ghana Association of Quasi-Government Health Institutions
GHS	Ghana Health Service
HEFRA	Health Facilities Regulatory Agency
HIV	Human Immunodeficiency Virus
HRD	Human Resource Directorate
HSMTDP	Health Sector Medium Term Development Plan
HTC	HIV Testing and Counselling
IGF	Internally Generated Funds
IHI	Institute for Healthcare Improvement
IPT	Intermittent Preventive Treatment
ITN	Insecticide Treated Net
LMICs	Low- and Middle- Income Countries
M&E	Monitoring and Evaluation
MEBCI	Make Every Baby Count Initiative
MOH	Ministry of Health
NCD	Non-communicable Disease
NCHS	National Catholic Health Service
NHIA	National Health Insurance Authority
NHIS	National Health Insurance Scheme
NQD	National Quality Director
NHQS	National Healthcare Quality Strategy
NQSSC	National Quality Strategy Steering Committee
PEPFAR	President's Emergency Plan for AIDS Relief
PPME	Policy, Planning, Monitoring and Evaluation
QA	Quality Assurance
QC	Quality Control
QI	Quality Improvement
QMT	Quality Management Team
QMU	Quality Management Unit
RHMT	Regional Health Management Team
RQMU	Regional Quality Management Unit
SPMDP	Society of Private Medical and Dental Practitioners
UNICEF	United Nations Children's Fund
USG	United States Government
WHO	World Health Organization

Preface

In September 2015, Ghana held its first National Quality Forum under the auspices of the Health Ministry. At this Forum, stakeholders representing agencies of the Ministry and key partners underscored the need to develop a National Healthcare Quality Strategy. Prior to this, the need for an integrated national strategy for improving the quality of care and patient safety had been identified in our national medium-term strategy. Our medium-term strategy also specifically called out mental healthcare and traditional medicine for attention.

Subsequent to the National Quality Forum, the Ministry escalated the development of a National Healthcare Quality Strategy into the 2016 Aide Memoire. By so doing, we indicated our clearest intention at the highest policy levels, and with the active support of all our development partners, to mainstream the National Healthcare Quality Strategy development and implementation into the operations of all the agencies of the Ministry, including the private sector and richly incorporating patient perspectives.

After extensive consultations with various stakeholders in the Northern, Middle, and Southern belts of the country, we have achieved a significant milestone with the development and launch of Ghana's National Healthcare Quality Strategy, with the following population-level priority areas: maternal health, child health (neonate, infant, under five), malaria, epidemic-prone diseases (cerebrospinal meningitis, cholera), non-communicable diseases (hypertension, diabetes), mental health, and geriatric care.

Overall, our vision is to create a health system that places the client at the centre of health care and ensures continuously improved measurable health outcomes. Achieving this vision will require stronger leadership and coordination from the Ministry of all its agencies to address identified gaps inhibiting improved patient care and outcomes. It will also require stronger partnership directly with patients themselves, to understand what truly matters most to them.

The development of this five-year strategy (2017 – 2021) is only one part of this story. Beyond the launch of the strategy, the Ministry is keen to proactively coordinate the process of implementation within its agencies at all levels of the health system. Ultimately, we aim to see improved health outcomes in a health system that listens to, amplifies, and respects the voice of the patient.

I call on all agencies of the Ministry, patients and patient support groups, the private health sector, regulatory and service agencies, expert development partners, health training institutions, agencies with accreditation and credentialing roles that all have full representation on the proposed National Healthcare Quality Strategy governance structure to fully dedicate themselves to fulfilling their mandate. Through the accompanying Coordination and Accountability framework, the Ministry at its highest levels plans to hold wholly accountable all stakeholders critical to the successful implementation of this strategy.

Finally, the Ministry recognizes that the finalization of this strategy does not represent a fresh start in Ghana. Rather, it signifies a diligent attempt to improve the quality of care by harmonizing and building on previous efforts with a whole system approach under the proactive leadership of the Ministry itself. To this extent, we recognize and celebrate every identifiable organization and indeed everyone, both past and present, whose various and diverse roles have played no small part in bringing us this far. We look forward to improved health outcomes through integrated quality planning, quality assurance, and continuous quality improvement functions that ensure better and more reliable care in a sustainable fashion.

HON. ALEXANDER P. SEGBEFIA

Minister for Health

1st December, 2016

Foreword

Our vision is to create a health system that places the client at the centre of health care and ensures continuously improved measurable health outcomes. More specifically, this means stronger leadership and coordination from the Ministry of all its agencies to address identified gaps inhibiting improved patient care and outcomes. It also means more partnership directly with patients themselves, to understand what truly matters most to them.

The National Healthcare Quality Strategy has been developed through a collaborative approach led by a steering committee of key stakeholders representing various perspectives of the health care system, managed by a core team within the Ministry of Health, and incorporating input and feedback from patients/clients and providers at all levels of the health care system. As part of this process, multiple stakeholder meetings were held, including a patient forum to directly solicit patient inputs to inform successful design and implementation of the strategy in a true spirit of partnership.

Indeed, in implementing this National Healthcare Quality Strategy, we aim to partner with a full spectrum of stakeholders, including patients and providers, and the larger Ghanaian community in our quest to improve the quality of care. Overall, the strategy has been iteratively developed through many in-depth interviews and multiple key stakeholder meetings.

While there have been previous initiatives to improve quality, these have generally focused on one particular area (e.g., newborn health and preventing under-five mortality), one particular geography, or one particular sector. Other quality initiatives have suffered the effect of not sufficiently addressing critical governance issues with an eye on careful integration into the structures of the existing health system. This National Healthcare Quality Strategy aims to coordinate the system of health and health care quality at all levels of the health system, across both the public and private sectors, and all areas of health – with a particular focus on the following priority health areas:

- Maternal health
- Child health: neonate, infant, under-five
- Malaria
- Epidemic-prone diseases: cerebrospinal meningitis, cholera
- Non-communicable diseases: hypertension, diabetes
- Mental health
- Geriatric care

The Ministry will work closely with all its agencies and patient groups through the newly formed National Quality Strategy Steering Committee to oversee successful and robust implementation of the strategy.

Acknowledgments

The Ministry of Health is indebted to the many partners, individuals, and organizations that helped to shape this National Healthcare Quality Strategy. We thank the stakeholders who shared their thoughts on the current state of quality in Ghana and the way forward, through key informant interviews, focus group discussions, and other forums. Appendix 1 lists all who were targeted as respondents, the majority of whom endeavoured to make time within their busy schedules to talk to us.

The Ministry of Health further acknowledges the hard work of the Core Working Group that put the document together, and the supervisory efforts of the National Quality Strategy Steering Committee.

We also acknowledge the Ubora Institute for their technical expertise in quality improvement and logistical support in mobilizing interviewees in the field, engaging stakeholders, and liaising across partners.

We also acknowledge the Institute for Healthcare Improvement, which funded the development of this strategy through a grant from the Bill & Melinda Gates Foundation, for their technical assistance in the development of the strategy.

Executive Summary

The definition of quality adopted in this National Healthcare Quality Strategy (NHQS) was derived collaboratively with key stakeholders of the nation's health care system:

"Health care quality is the degree to which health care interventions are in accordance with standards and are safe, efficient, effective, timely, equitable, accessible, client-centred, apply appropriate technology and result in positive health outcomes, provided by an empowered workforce in an enabling environment."

The ultimate goal of the Ghana National Healthcare Quality Strategy is:

To continuously improve the health and well-being of Ghanaians through the development of a better-coordinated health system that places patients and communities at the centre of quality care. (MOH, Ghana 2016)

The specific goals of this strategy are to:

1. Continuously improve health outcomes in the population health priority areas;

2. Develop a coordinated health care quality system in the areas of quality planning, quality control, and quality improvement – including improved use of data for evidence-based decision-making; and

3. Improve client experience by being responsive to the health needs and aspirations of the patient and the community

Introduction

The National Healthcare Quality Strategy (NHQS) seeks to build upon useful lessons from previous health care quality improvement initiatives.

Quality is embedded within a larger global movement towards universal health coverage. This is addressed in Sustainable Development Goal 3, which aims to ensure healthy lives and promote well-being for all at all ages. This global agenda explicitly sets forth the idea that quality is essential to achievement of safe, effective care and improved health outcomes, especially as access to care expanded (WHO, 2016). In the local context, the Health Sector Medium Term Development Plan (HSMTDP), 2014-2017 seeks to improve the quality of health service delivery. The National Quality Forum of September 2015 and the 2016 Aide Memoire issued by the health sector give further impetus to the development of the NHQS.

Besides secondary data from the literature review, multiple stakeholders within and outside the health sector were interviewed to gather primary data to inform this strategy.

Vision for Healthcare Quality in Ghana

With the definition of quality as stated above, the "ideal state" of quality was defined to reflect key aspects to achieve optimal health system performance, as defined by stakeholders across the three dimensions of Quality Planning, Quality Control, and Quality Improvement (Juran & Godfrey, 1999), as shown in Table 1 below:

Table 1: Ideal State of Quality in Ghana

Quality Planning	Quality Control	Quality Improvement
• Leadership for quality in health care • A central quality management unit • Culture of quality • Logistical capability • Managerial skills • Data use for evidence-based decision making • Human resource numbers and mix • Safe and effective medicines, supplies, and equipment • Quality improvement and clinical skills • Physical and financial access • Clear and cordial communication	• Delivery of care in accordance with evidence-based standards • Monitoring standards and evaluating performance • Data collation, review, and feedback • Uniform system for incentives across facilities • Supportive supervision; collection of data to conduct needs assessment • Reliable and timely data entry by public and private sector • Patient feedback through patient satisfaction surveys	• Policy direction and health prioritization • Outcome-oriented goals based on health priorities • Adaptation and scale-up of effective interventions based on evidence • Feedback on performance against targets • Identification of gaps in health outcomes and delivery based on data • Action planning based on gap analysis • Capability building • Quality culture backed by patient-centeredness • Motivation for workforce • Availability of medicines and logistics • Patient feedback incorporated into the planning of quality improvement initiatives • Client participation in quality management committees

Situation Analysis

The situation analysis was based on both primary sources (interviews) and secondary sources (literature review) and was organized under the themes of health of the population; leadership and functionality; quality improvement initiatives; and data systems and quality metrics.

Key successes in **health of the population** include significant reduction in under-five mortality from 111 in 2003 to 80 per 1000 live births in 2014 (GDHS, 2015); reduction in infant mortality rate from 64 in 2003 to 41 per 1000 live births in 2014 (GDHS, 2015); increased financial access due to NHIS; free maternal care; increase in skilled birth attendant during delivery from 59% in 2008 to 74% in 2014 (GDHS, 2015); reduction in HIV prevalence from 3.6% in 2007 to 1.3% in 2013 (GDHS, 2015); and introduction of Mental Health Act (WHO, 2016). Challenges in population health include near-stagnant neonatal deaths around 32/1000 live births (NNSAP, 2013); unacceptable levels of maternal mortality of 350/100,000 live births (GDHS, 2015); shortages of logistics and equipment for delivery; high child stunting of a third of children under 5 and 66% anaemia prevalence in children (GDHS, 2015); rising prevalence and deaths due to non-communicable diseases (among top 10 causes of death); mental health treatment gap of 98% (WHO, 2016); severe shortages of mental health staff; stock-outs of essential mental health medicines; and delayed payment of NHIS claims and increasing payments out of pocket.

In the area of **leadership and functionality**, the key successes and challenges are highlighted in the table below:

Table 2: Key Areas to Address in Leadership and Functionality

Leadership and Functionality	
Key Successes to Leverage with NHQS	Key Challenges to Address with NHQS
• Building of in-country leadership, commitment, and expertise over the years • Establishment of regulatory bodies for the various professions and health facilities • GHS leadership in the development of a large number of standards, protocols and guidelines including the Patient's Charter, quality books and patient safety guidelines • Existence of structures for the management of quality at the various levels, which have been functional to varying degrees • Exposure of most health workers to the concept of quality and involvement in one or more quality initiatives	• Low levels of coordination among agencies; weak accountability, reward and recognition mechanisms • Limited influence of the Ministry of Health (MOH) and its regulatory agencies on the private sector • Involvement of the private sector at the regional and district level contingent on regional or district Ghana Health Service (GHS) leadership • Focus on clinical care quality to the exclusion of public health services quality • Restriction of accountability for policy implementation to GHS • Low accountability of teaching hospitals to MOH

Key successes and challenges in **quality improvement initiatives** are highlighted in the table below:

Table 3: Key Areas to Address in Quality Improvement Initiatives

Quality Improvement Initiatives	
Key Successes to Leverage with NHQS	Key Challenges to Address with NHQS
• Presence of several quality improvement initiatives and willingness of development partners to support • Policies and plans developed • Private sector and teaching hospitals also implemented some initiatives • Health education has improved client knowledge of their rights and responsibilities • Automation of medical records to reduce waiting time in health facilities	• Little coordination among initiatives by development partners • Low quality culture and variation in perception of accountability for quality • Protocols and manuals often do not come along with clear strategy for implementation • Irregular monitoring of identified quality indicators and of adherence to standards • Increasing numbers of medico-legal issues

With **data and quality metrics**, the landmark success is the development of the District Health Information Management System (DHIMS) by the GHS. Challenges include low data use at the site of collection; only 33% of facilities enter data into the DHIMS; few private facilities and two out of the four teaching hospitals do not input data in the DHIMS; and low provider knowledge about the capabilities of DHIMS (NHQS Interview, 2016).

The Strategy

The ultimate goal of the National Healthcare Quality Strategy is:

To continuously improve the health and well-being of Ghanaians through the development of a better coordinated health system that places patients and communities at the centre of quality care.

The specific goals of this strategy are to:

1. Continuously improve health outcomes in the population health priority areas;
2. Develop a coordinated health care quality system in the areas of quality planning, quality control, and quality improvement – including improved use of data for evidence-based decision-making; and
3. Improve client experience by being responsive to the health needs and aspirations of the patient and the community

While this strategy applies to all areas of health, there is a specific focus on the following key health areas which have been chosen based on potential for impact in improving the lives of Ghanaians nationwide:

- Maternal health
- Child health: neonate, infant, under-five
- Malaria
- Epidemic prone diseases: cerebrospinal meningitis, cholera
- Non-communicable diseases: hypertension, diabetes
- Mental health
- Geriatric care

In order to reach our ultimate goal of continuously improving health outcomes, this strategy outlines an 8-point framework for action across all levels of the health system based on key **strategic objectives**:

1) Improve the capacity of relevant health workers to manage identified priority health interventions.
2) Promote a quality culture and accountability for quality in all health workers and sector agencies.
3) Create a sustainable leadership and governance for quality planning, quality control, and quality improvement at all levels of the health care system.
4) Strengthen coordination among all health sector agencies.
5) Standardize collection of data and improve use and analysis of data at all levels (including by providers at the frontline) for evidence-based decision making.
6) Resource and strengthen regulatory agencies (especially Health Facilities Regulatory Agency (HEFRA)) to roll out a nationwide accreditation process with clear links to facility-based quality management teams for ongoing improvement action.
7) Improve client safety, satisfaction and participation in quality definition and quality improvement.
8) Build a culture of "joy at work" (financing, logistics, recognition and reward) that creates the context for health providers to treat clients with dignity and respect, deliver high-quality care and be motivated to continuously improve quality.

More specifically, across this 8-point framework for action, the NHQS highlights seven key strategies and a number of activities. The table below shows the strategies and high-level activities; a detailed action plan is shown in the complementary document, *National Healthcare Quality Strategy 2017-2021: Part 2 – Coordination and Accountability Framework*.

Table 4: Key Strategies and Activities of the National Healthcare Quality Strategy

STRATEGY	HIGH-LEVEL ACTIVITIES
1. Establish structures at all levels of the health system to lead quality across planning, control/assurance and improvement	▪ Appoint and inaugurate NQSSC, QMUs and QMTs ▪ Train QMUs, QMTs in quality management/quality improvement ▪ Train facility managers in basic managerial skills ▪ Monitor the performance of quality management units/teams (QMUs/QMTs) at all levels
2. Develop and implement a uniform national policy on data reporting and data use by health workers and health sector agencies	▪ Develop national health data policy, train data officers in public, private, teaching hospitals, agencies ▪ Monitor data policy implementation in sector agencies, districts and facilities (data collection, entry/reporting, local use)
3. Improve patient safety, client satisfaction, and participation of patients and the community in quality governance structures at all levels	▪ Involve patients and the community in quality improvement through participation in quality management teams at all levels ▪ Involve patients in defining quality through biannual client satisfaction surveys ▪ Scale up implementation of national patient safety policy to all public, private service delivery sites and teaching hospitals; and monitor implementation
4. Improve quality culture in health workers through training in the requisite clinical skills and in quality improvement methods and incorporation of quality-related performance indicators in their job descriptions	▪ Provide in-service training on quality improvement for workforce (in service provision sites and within sector agencies) and incorporate ethics and quality-related standards in the job description of health workers; also train selected staff in sign language ▪ Build quality into health workers training and deliver the training to health workers ▪ Apply sanctions for non-compliance with ethics or breeches of the Patient Charter or reporting false data, in accordance with the Code of Ethics and Code of Discipline ▪ Adopt/adapt protocols for the management of health priorities (including traditional medical practice), train relevant workers and monitor adherence to protocols
5. Create the "joy at work" environment to enable health workers to consistently deliver safe and high-quality care through the provision of essential inputs, incentives, recognition and reward	▪ Provide medicines and logistics for service provision at all levels, and incentives including rural incentives ▪ Develop indicators and apply indicators to reward/award deserving staff at facility, district, regional and national levels
6. Enhance transparency through the ranking of like facilities and like agencies in league tables, with awards at annual quality conferences that involve patients, communities and providers	▪ Agree on quality metrics, build the indicators into the performance contracts of sector agencies and health facilities of all ownerships ▪ Maintain league tables for like health facilities and for other health sector agencies ▪ Hold annual national quality conference to evaluate NHQS implementation and award deserving agencies, health facilities and health workers
7. Improve supportive supervision and monitoring across all MOH directorates, sector agencies and all service delivery sites in the public, private sub-sectors and teaching hospitals	▪ Adopt/adapt existing supportive supervision guidelines and tools, train supervisors and monitor implementation of supportive supervision in all MOH directorates, agencies and service delivery facilities and sites ▪ Adopt/adapt existing peer-review guidelines and tools, train relevant managers and monitor the implementation among like agencies and like providers ▪ Develop reporting format for MOH directorates, sector agencies, facilities (public, private, teaching); monitor reporting quarterly and provide feedback ▪ Undertake sector-wide reviews once a year

Making This Happen

MOH will lead the strategy implementation process, and operationalization at all levels will largely involve leveraging existing structures. Capacity will be improved in quality improvement, managerial and clinical skills.

A separate document (*Part 2: Coordination and Accountability Framework*) outlines an action plan for coordination of implementation, assigns implementation roles to health sector agencies, and discusses possible financing mechanisms. The short-term financing proposal is for all health facilities and agencies to contribute to the implementation of this strategy using five percentage points of the 15% agencies returns to the MOH, together with donor support. In the long term, the proposal is that facilities and agencies use their internally generated funds (IGF).

Measuring Improvement

Indicators have been selected to measure progress in (i) health outcomes in the priority population health areas; (ii) quality; (iii) systems improvement; and (iv) performance of health sector agencies.

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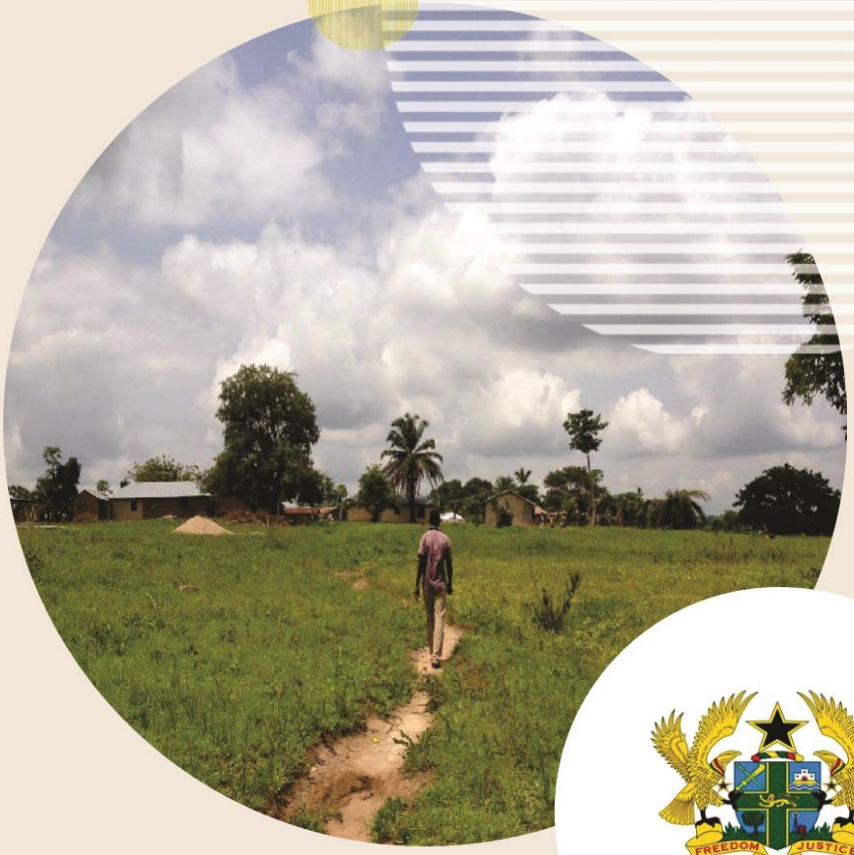

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REPUBLIC OF GHANA

Ghana National Healthcare Quality Strategy (2017-2021)

Part 1: The Strategy

December 2016

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Chapter 1: Introduction

1.1 Background and rationale

Ghana's quality journey in brief

Initiatives to improve the quality of care are not new to Ghana's health system. This National Healthcare Quality Strategy (NHQS) builds on previous initiatives. At the start of formal health care quality processes in the mid-1990s, there were two concurrent pilot projects in the country, one in the Upper West with support from Danida, and the other in the Eastern Region supported by the Liverpool School of Tropical Medicine (Offei, Bannerman, & Kyeremeh, 2004). These projects were focused on process quality without ignoring structure and outcome quality. A nationwide review of quality improvement initiatives conducted by MOH followed in 1998. Recommendations from the review included: harmonization, institutionalization, and pre- and in-service training on quality in health care (Offei, Bannerman, & Kyeremeh, 2004). In 2000, under the Liverpool School of Tropical Medicine, a team of nine national trainers were sent for a six-week course at the Royal Tropical Institute in Amsterdam (Offei, Bannerman, & Kyeremeh, 2004). Widespread training was then instituted and client satisfaction surveys became a useful tool for health facilities to identify quality gaps with a view to implementing improvement interventions.

Quality was mainstreamed in the mid-2000s with the setting up of a Quality Assurance (QA) Department in the Institutional Care Division of the Ghana Health Service (GHS). Since then, GHS has developed a Quality Assurance Strategy, produced a large number of standards, protocols and guidelines, a Patient Charter and three editions of Quality Assurance Manuals, culminating in the writing in 2013 of the book Quality and Patient Safety in Health Care. Besides the initiatives by GHS, several development partners have experimented with various quality assurance and quality improvement initiatives which have provided a number of lessons to build upon.

Rationale and impetus for developing NHQS

The global context for quality, the basis for which is provided by the WHO, rests on two main arguments for promoting a focus on quality in health systems today:

- "Even where health systems are well developed and resourced, there is clear evidence that quality remains a serious concern, with expected outcomes not predictably achieved and with wide variations in standards of health-care delivery within and between health-care systems."
- "Where health systems – particularly in developing countries – need to optimize resource use and expand population coverage, the process of improvement and scaling up needs to be based on sound local strategies for quality so that the best possible results are achieved from new investment." (WHO, 2006).

Quality is embedded within a larger global movement towards universal health coverage. This is addressed in Sustainable Development Goal (SDG) 3, which aims to ensure healthy lives and promote well-being for all at all ages. Specifically, SDG 3 states the following target: "Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all." (WHO-SDG, 2015) This global agenda explicitly sets forth the idea that quality is essential to achievement of safe, effective care and improved health outcomes, even as access to care is expanded.

In spite of the numerous quality initiatives implemented in Ghana to date, a culture of quality has not yet been institutionalized in the system. Weak links persist between clinical care and public health at the district level, and unclear oversight and accountability structures have resulted in fragmentation in quality approaches with limited impact on patient experience and health outcomes (HSMTDP, 2014). Sector agencies work independently without any coordination, and teaching hospitals and private sector players have largely been on the fringes, with little involvement and little expectation of accountability (HSMTDP, 2014).

These shortcomings have however not escaped attention, and the Health Sector Medium Term Development Plan (HSMTDP), 2014-2017 highlights quality in policy objective number 4, seeking to "Improve quality of health service delivery including mental health services." The National Quality Forum of September 2015 determined to move this national quality agenda forward through the development of a National Healthcare Quality Strategy to guide all quality planning, quality assurance and quality improvement initiatives in the country.

Between October and December 2015, MOH and the Institute for Healthcare Improvement (IHI) submitted a proposal to the Bill & Melinda Gates Foundation (BMGF) around developing the foundations of a National Healthcare Quality Strategy, which was approved. Preparatory work done by MOH and IHI between February and April 2016 included the preparation of a concept note which spelled out the processes for developing the strategy. In April-May 2016, the development of a NHQS was escalated unto the Aide Memoire of the 2016 Health Summit. The aide memoire simultaneously called for the formation of a National Quality Strategy Steering Committee (NQSSC). In May 2016, the NQSSC and the Core Working Group (CWG) were established to lead the NHQS development process.

1.2 The strategy development process

The process, as shown in Figure 1, was led by a National Quality Strategy Steering Committee (NQSSC), which gave direction to the development process. The NQSSC was chaired by the Director of Policy, Planning, Monitoring and Evaluation (PPME) Directorate of the Ministry of Health. Membership of the NQSSC was drawn from the agencies of MOH, including the private sector and patient groups. The committee was tasked to guide the overall development and implementation of the NHQS to improve national health outcomes. The NQSSC was to provide technical leadership in driving quality improvement goals. In this regard, the NQSSC was to help identify gaps, set ambitious goals and mainstream the implementation of QI plans within the agencies to close the performance gaps identified.

The NQSSC delegated the day-to-day writing of the NHQS document to a Core Working Group (CWG) which comprised experts selected from the public and private sectors. The CWG was responsible for the literature review, the planning and conduct of interviews and the development of the strategy document. The CWG adopted a wide mix of communication modes to coordinate their work, including in-person meetings, weekly Skype/phone calls and the exchange of an unending stream of emails.

Key stakeholders in health were all given the opportunity to contribute to the strategy. Stakeholders targeted and/or interviewed are detailed in Appendix 1. Stakeholder contributions were chiefly by way of in-person meetings and formal interviews, which comprised both key informant and focus group discussions, including patient forums. Stakeholders were sampled from three regions which were purposefully sampled for the interviews – Northern Region representing the northern zone, Ashanti Region representing the middle zone, and Greater Accra Region representing the southern zone. Besides representing the southern zone, the Greater Accra Region is also the region with most of the central-level stakeholders. A further criterion for selecting Ashanti Region is the existence of the capitation mode of provider payment, with its unique quality challenges. Overall, the interview response rate was 82%.

The National Healthcare Quality Strategy articulates a vision, with related goals, objectives and strategic interventions built on WHO and AFRO Health Systems Building blocks, and measured by indicators. In addition, there is an implementation plan with activities that lead to changes in health system performance, using quality planning, quality control and quality improvement principles.

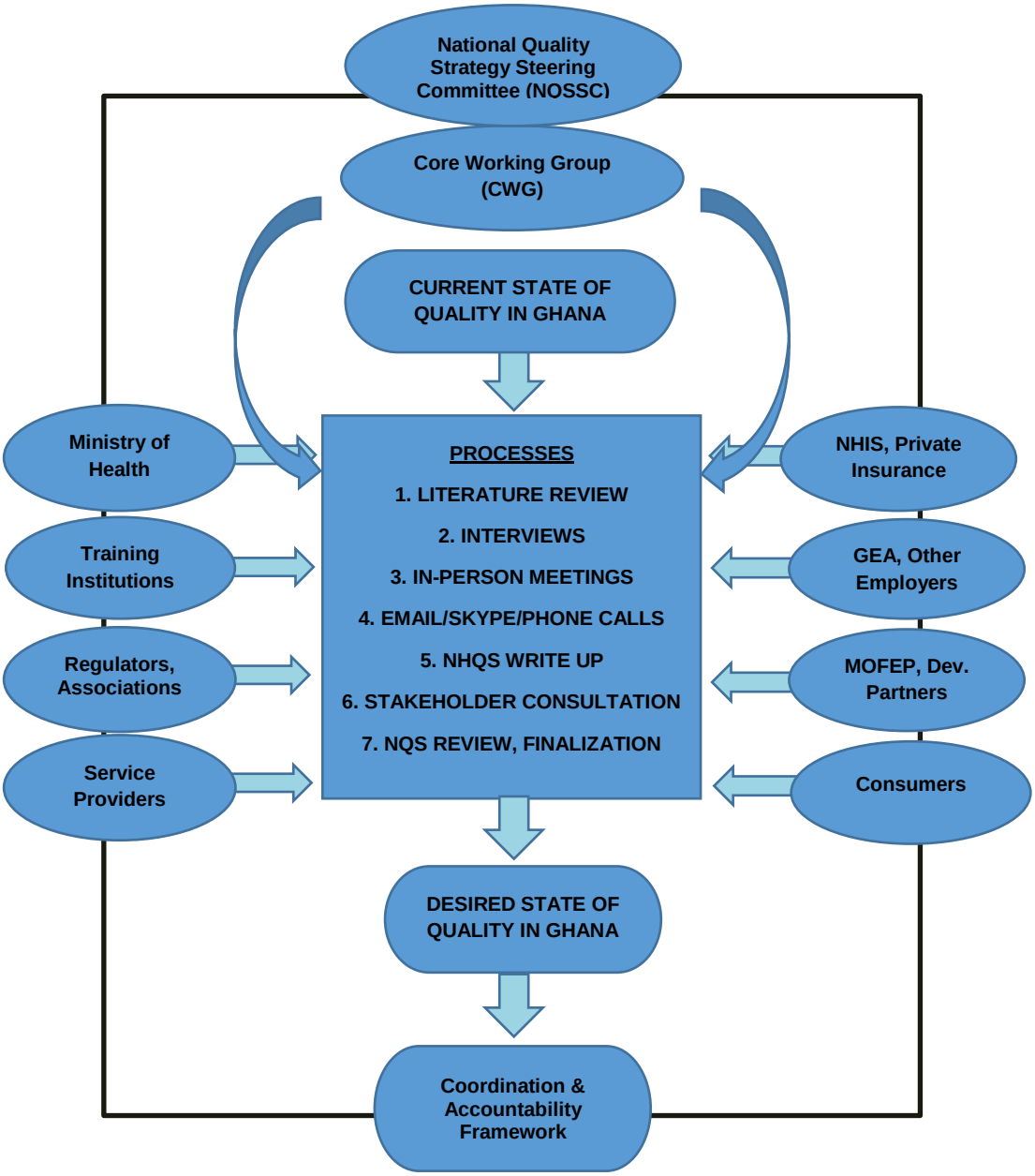

Figure 1: Ghana NHQS Development Framework

Chapter 2: Vision for Healthcare Quality in Ghana

2.1 Stakeholder Definition of Quality

Determining the ideal state of quality is a vital step in understanding the current gaps in the current Ghanaian health system, and setting forth priorities that align with this vision. Stakeholder interviews revealed variation in the perspectives of policymakers, providers, clients, and more as to what constitutes quality. These views have informed the adoption of the following multi-dimensional definition of health care quality:

"Health care quality is the degree to which health care interventions are in accordance with standards and are safe, efficient, effective, timely, equitable, accessible, client-centred, apply appropriate technology and result in positive health outcomes, provided by an empowered workforce in an enabling environment" (NHQS Interviewees & NQSSC, 2016)

Commonalities in stakeholder views emerged around the Donabedian principles of "structure, process, and outcomes," while also drawing on WHO and IOM definitions of quality and citing the need for input availability, empowered and skilled health workers, access to safe and effective care, and a client-centred approach to the delivery of care.

2.2 Ideal state of quality in Ghana

We now outline what the ideal state of quality looks like across all levels of the health care system in Ghana. The ideal state reflects key aspects or levers to achieve optimal health system performance, as defined by stakeholder. These levers are organized across the Juran trilogy of Quality Planning, Quality Control, and Quality Improvement.

- **Quality Planning**: Policy, resources, accountability, coordination, execution
- **Quality Control**: Standards/guidelines, protocols, professional oversight, accreditation, performance review
- **Quality Improvement**: Gap analysis, needs assessment, tools and methods to develop, test, and measure change, feedback processes, change ideas for improvement, administrative and frontline support to close the "gap"

The ideal state of quality is organized across these three dimension in the table below.

Table 5: Ideal State of Quality at All Levels of the Ghanaian Health System

LEVEL	QUALITY PLANNING	QUALITY CONTROL	QUALITY IMPROVEMENT
National level	▪ Leadership vision for quality in health care backed by political will ▪ A central quality management unit to harmonize and coordinate across agencies ▪ Co-design with all levels of a national strategy with wel-selected interventions at all levels of health system ▪ Strong and coordinated accreditation and enforcement process, led by central regulatory agency (HEFRA) to ensure adherence to standards ▪ Institutionalized culture of quality in the systems, from training institutions to agencies to facilities ▪ Logistical capability ▪ National policy on treatment of non-communicable diseases, acute needs to effectively manage chronic illnesses and integration of preventive practices	▪ Delivery of care in line with evidence-based standards and protocols, that meets the expectations of the client ▪ Mechanisms to monitor standards and evaluate performance ▪ Systematic collection and review of data and feedback loops to regional, district, and local levels ▪ Uniform system of incentives across facilities to promote quality and use of data	▪ Policy direction and health prioritization led by Ministry to ensure sustainability of efforts ▪ Ministry sets outcome-oriented goals based on health priorities to drive improvement ▪ Adaptation and scale-up of effective interventions based on evidence ▪ Feedback on performance against targets that is reported downwards, all the way to the local level
Regional and district levels	▪ Strengthened regional and district level directorates that lead implementation of quality across public and private sector ▪ Data-driven decision making about resource and human resource allocation	▪ Supportive supervision ▪ Review of data to conduct needs assessments	▪ Identification of gaps in health outcomes and delivery based on data ▪ Action planning based on gap analysis and periodic needs assessment ▪ Focal point for quality at the regional, district, and facility level to manage quality efforts ▪ Capability building within leadership
Health facility and provider level	▪ Facilities have available a sufficient workforce of appropriately trained health care providers ▪ Availability of safe, effective, and essential medicines, supplies, and equipment ▪ Safe and hygienic waste management and sanitation infrastructure ▪ Development of QI and clinical skills in the workforce through continuous training	▪ Reliable and timely collection and data entry of public and private sector data	▪ Quality culture backed by patient-centeredness ▪ Performance feedback ▪ Capability building ▪ Motivation for workforce ▪ Availability of medicines and logistics
Patient and community level	▪ Physical and financial access to care that is acceptable, efficient, and effective ▪ Cordial and clear communication between providers and patients ▪ Engagement and education of patients and communities by health authorities in addition to community health workers	▪ Patient feedback is captured uniformly across facilities via patient satisfaction surveys, exit interviews	▪ Patient feedback is incorporated into the planning of quality improvement initiatives ▪ Client participation in quality steering committees

Chapter 3: Situation Analysis

This chapter serves to analyse the current state of health care quality in Ghana through literature review and stakeholder interviews. We highlight health priorities and existing initiatives and structures that aim to improve health outcomes for the population. The analysis is organized under four themes:

- Health of the population
- Leadership and functionality
- Quality initiatives
- Data systems and quality metrics

3.1 Health of the population

The population of Ghana is projected to grow from the current 26 million to around 50 to 60 million by 2050 (US Census Bureau, 2016). The life expectancy at birth in Ghana is 66.6 years of age (Central Intelligence Agency, 2016). The country has made significant improvements in health outcomes for the population over the past several years, though this progress has varied (Science Daily, 2010). Given that the southern half of the country is more populated than the northern regions, and more than half of Ghana's population is urban, accessibility to quality care is often dependent on geography.

Key health issues that continue to affect Ghana's population are maternal and child health, child nutrition, infectious diseases, non-communicable diseases, and mental health.

Maternal and Child Health

Significant reductions in under-five mortality rates have been made between 2003 and 2014, decreasing from 111 per 1000 live births to 60 per 1000 live births (GDHS, 2015). Similarly, improvements have been made in infant mortality, overall, with reductions from 64 per 1000 live births in 2003 to 41 per 1000 live births in 2014 (NNSAP, 2016). Interventions that contributed to the improvement in these areas were the implementation of the National Health Insurance Scheme, which guaranteed free maternal care, and an increase in the number of skilled birth attendants during delivery increased from 59% in 2008 to 74% in 2014 (GDHS, 2015). However, high and somewhat stagnant rates of 32/1000 live births neonatal mortality (NNSAP, 2013) and 350/100,000 live births maternal mortality (GDHS, 2015) persist, indicating a need to reduce disparities and deliver high-quality care specifically targeted towards these subpopulations.

Key challenges and hurdles have been identified in the delivery of maternal health services. Improving deployment of skilled health workers, supply of medical equipment for birth and post care, logistics, staff within the medical centres, transportation for women, quality health care and ambulance services were all barriers that threatened the delivery of quality and safe maternal health care. The Ministry is committed to addressing these priorities.

Child nutrition

As many as 1.2 million people (about 5% of the population) are considered food insecure and chronically undernourished in Ghana (Ministry of Food and Agriculture, n.d.). Nearly one-third of children nationwide are stunted and 66% are anaemic (GDHS, 2015), factors that also contribute to under-five mortality.

Infectious diseases

There are 50,000 new cases of TB every year in Ghana (National TB control programme, 2013). The National HIV and AIDS prevalence has fallen from 3.6% in 2007 to 1.3% in 2013 (GDHS, 2015); however, regional disparities still persist. With the implementation of antiretroviral therapy (ART), there have been improvements for people living with HIV. Ghana has received support from various bodies including the UN, USG, and PEPFAR to combat the transmission of HIV, malaria and tuberculosis. To make further progress in this health priority area, we need to address the unstable supply of antiretroviral medicines, risky sexual behaviour, stigmatization of and discrimination against those living with TB and HIV.

Malaria remains the biggest cause of mortality and morbidity in Ghana (National Development Planning Commission, 2015) despite efforts to tackle this disease, with the most vulnerable being children under five, pregnant women and the poor. Challenges faced include limited access to and proper use of ITNs, resource limitations for scale-up of malaria programs, and poor sanitation and inadequate waste disposal.

Non-communicable diseases

Ghana's health sector, like that of many African countries, is ill-equipped to deal with the country's double burden of disease (MoH, 2011). Due to socioeconomic and lifestyle changes, the Ghanaian population faces a rising prevalence of non-communicable diseases. NCDs such as hypertension, stroke, cancer and diabetes affect the young and old, urban and rural, and wealthy and poor communities, featuring among the top ten 10 causes of death (MoH, 2011). Globalization, urbanisation, ageing population and weak health systems have catalysed the escalating emergence of non-communicable diseases. Deaths due to non-communicable diseases (NCDs) in low- and middle-income countries (LMICs) including Ghana are expected to increase from 30.8 million in 2015 to 41.8 million by 2030 (Piot et al., 2016).

Mental health

It is estimated that approximately 2.8 million people suffer from a severe to mild mental health disorder, with a treatment gap of 98% of the affected population (WHO, 2016), yet only 1.4% of the nation's health expenditure is spent on mental health care in Ghana (Roberts, Mogan & Asare, 2014). In 2012 the Mental Health Act was passed, creating a Mental Health Authority tasked with the responsibility to coordinate the delivery of quality mental health care nationwide. This recognizes mental health as an imperative issue to address. However, implementation has been slow, exacerbated by the fact that acknowledgment and treatment of mental health conditions are stigmatized. There are currently severe shortages in human resource capacity (doctors, psychiatric nurses, community psychiatric nurses), weak data systems with facility-level data not well integrated into national data systems, chronic reports of under-resourcing and stock-out of essential drugs (Roberts, Mogan & Asare, 2014). In order to improve treatment and outcomes in mental health and address both the social and psychological causes of mental illness, a multi-sector approach is needed, with collaboration between state programs and faith-based institutions to deliver culturally appropriate care in community settings (NHQS Interview, 2016).

Health financing

In 2003 Ghana promulgated the National Health Insurance Act (650), which saw the establishment of the National Health Insurance Scheme (NHIS) with the goal of providing financial risk protection for all residents in Ghana. The bulk of the funding comes from a 2.5% health insurance levy on Value Added Tax (VAT) (National Health Insurance Authority, 2016). Three types of schemes were established under the law: district-wide mutual health insurance schemes, private mutual health insurance schemes, and private commercial health insurance schemes. Act 650 was replaced with Act 852 in 2012, which provides for a centralised national scheme and private schemes (Blanchet, Fink & Osei-Akoto, 2012).

Utilization of health services increased since the introduction of the NHIS, which now covers 40% of the population (NHIA, 2012). However, while quantity and overall access have increased, quality of care and equity remain significant issues to be addressed (NHQS Interview, 2016). Delayed reimbursement of claims, and rejection of claims due in part to quality issues such as mismatch between diagnosis and prescription, polypharmacy, and prescribing outside the standard treatment guidelines have all raised significant concerns about the quality of care that is delivered.

Capitation has recently been introduced as a provider payment method for an identified package of primary care services (National Health Insurance Authority, 2016). A provider focus group in the Ashanti Region, where capitation is being piloted, observed that while capitation has helped bring competition into the health care marketplace to satisfy and retain clients, there have been many implementation challenges. Low capitation rates have led to costs being borne by patients and hospitals, and concerns have arisen about the unavailability of essential medicines and supplies in facilities due to limited reimbursement. From the client perspective, capitation has led to reduction in access to some drugs, and does not provide sufficient coverage for clients when they travel outside of their home district.

3.2 Leadership and functionality

Driving Quality at the National Level

The Ministry of Health has led high-level planning with the Health Sector Medium Term Development Plan (HSMTDP) (2014-2017), in which quality is recognised as a key strategic focus area. To improve adoption and implementation of this plan, specific strategies to address quality-related objectives need to be defined, at all levels of the system. The MOH is also responsible for development of policy and identification of national priorities for the entire health sector. Accountability for implementation of these service delivery-related policies and programs has, to date, been largely restricted to the Ghana Health Service (GHS), to the exclusion of the other service agencies, particularly teaching hospitals and private sector providers.

The Ministry has largely exercised its quality assurance role through its regulatory agencies. Most regulatory bodies are mandated to license and register practitioners in their respective health professions and prescribe general standards of practice to ensure that professionals are up to date through a system of renewal of licences based on continuing professional development.

The now-defunct Private Hospitals and Maternity Homes Board (PHMHB), which did not mandate regulation of public health facilities, has by law (Act 829) been replaced with the Health Facilities Regulatory Agency (HEFRA) as of 2011. HEFRA has an expanded mandate covering

the accreditation and regulation of both private and public health facilities (Ministry of Health, 2013).

The key challenge among the various regulatory bodies is their operation under independent policies, systems, and plans with standards that lack cross-coordination. Regulatory bodies perform their mandated functions without collaborating across their individual efforts. In addition, there is limited influence of the Ministry and other regulators such as the Ghana National Drugs Programme, Food and Drugs Authority, Pharmacy Council and the Chief Pharmacist's office over the private sector. The overarching authority of HEFRA can be leveraged to enforce quality standards across public and private providers in future, although the agency's inception and the transition from numerous regulatory bodies to HEFRA has been slow to date.

Leadership in quality assurance has been shown by service provider groups, particularly the Ghana Health Service (GHS) and the Christian Health Association of Ghana (CHAG), and to a lesser extent, by private sector umbrella organizations such as the Society of Private Medical and Dental Practitioners (SPMDP) and the Community Practice Pharmacists Association (CPPA). In the GHS, the Quality Assurance Department within the Institutional Care Division has overall oversight for quality within the entire GHS across the country. In line with this oversight responsibility, the Ghana Health Service developed the Quality Assurance Strategic Plan (2007-2011); this planning process has however not been continued beyond 2011. By 2011, the Strategic Plan had led to the establishment of quality assurance teams in most facilities and regular client satisfaction surveys with follow-up actions on gaps identified. Furthermore, the GHS produced a large number of standards, protocols, and guidelines across the spectrum of health care delivery. GHS also led the development of the Patient's Charter for the country, three editions of quality manuals, and more recently, the Quality and Patient Safety book (NHQS Interviewee, 2016).

The GHS normally disseminates and trains health staff on these standards to enable them to implement them effectively, but training has not always benefited the bulk of frontline staff and monitoring of implementation has often not been effective. Field interviews revealed that improvements needed to be made to ensure that staff at the community level receive continuous training, and have an ability to transfer knowledge to new staff.

According to a manager within the CHAG set-up, CHAG leadership influences quality through continuous staff orientation, provision of the essentials needed to deliver service, motivation of staff, good working environment and a safe environment for patients.

As a purchaser, the National Health Insurance Scheme (NHIS) was mandated by law (Act 650) to accredit facilities that provide services to NHIS subscribers (Blanchet, Fink & Osei-Akoto, 2012). The National Health Insurance Authority (NHIA) has therefore been at the forefront of the implementation of a national accreditation system that accredits all levels of health facilities from CHPS compound (community level) to hospitals, from licensed chemical shops to pharmacies, and diagnostic facilities. The accreditation role has since 2012 been ceded by law to the Health Facilities Regulatory Agency (HEFRA); the new NHIS law (Act 852) has changed the NHIA role to one of credentialing health facilities (National Health Insurance Authority, 2013). Credentialing, which admits providers into the scheme based largely on accreditation by HEFRA, is meant to be a less rigorous process to assure confidence that the health facility can provide safe and quality services to NHIS subscribers.

Driving Quality at the Regional & District Level

In the Ghana Health Service, the clinical care units within the Regional Health Directorates are responsible for the supervision of quality within the regions. The regional team adopts/adapts

plans and programs from the national level, disseminates them, and builds the capacity of the district to implement them. Planning for dissemination and training are done at the regional level, and the regions largely employ a train-the-trainer model, cascading the effects of training from the districts even further downstream. The regional team further supervises and monitors implementation across the different districts.

In order to move towards a more holistic approach and reach public health facilities and private sector providers in each region, the mandate of the Clinical Care unit of the RHD must be broadened to look beyond clinical care. Further, there is the need to standardize a broad view of the mandate of Regional and District health directorates to look beyond Ghana Health Service and CHAG facilities to specifically include private facilities. This will entail some redesign of the current system to ensure more reliable reporting of the data generated from the work of private providers for improved transparency and improvement action.

Leadership at the district level is key to implementation and performance within the district. The districts supervise the facilities, sub-districts (health centres) and communities (CHPS), training these lower levels and monitoring their adherence to standards through data inputted in DHIMS by the sub-districts and facilities. The district health administration is an active player in quality improvement activities, building capacity of providers in the health facilities and community health providers to implement prioritized quality improvement activities. At the district level, as well, the private sector is often not involved in quality initiatives and training, nor is it under strict mandate to be accountable.

Driving Quality at the Facility & Community Level

Strong and committed internal facility leadership is the sine qua non of a successful quality effort (NHQS Interviewee, 2016). Where the facility head is interested and committed to leading and facilitating quality processes, the effort is sustained. In GHS and CHAG facilities, improvement assignments are led by facility quality teams. Risks to quality improvement at the facility level include poor knowledge management (knowledge sharing), turnover of committed leadership, lack of logistical support, and a low degree of empowerment among staff to drive change. Quality improvement efforts have therefore often resulted in slow improvements in outcomes of care – both technical outcomes and outcomes from the client perspective.

Patients and communities help the service provider to identify gaps in service provision and care through exit interviews, client complaints systems, and community engagements such as community surveys and community durbars. This data provides a source of information for facilities about how they can improve quality from a client perspective. Translating this feedback into action and improvement will help to renew the public's trust in and satisfaction with the health care system.

Generally speaking, little quality planning occurs at the community level; planning is almost always pre-packaged, ready for un-packaging at the community level for implementation. The community is therefore essentially reduced to a passive implementer of quality improvement initiatives and a source of data for higher levels or donors. The community level, being in touch with the people and local culture, could be better leveraged to highlight local contextual peculiarities to enrich quality planning.

Teaching Hospitals

Teaching hospitals are under the purview of the Ministry of Health, but there is variability in the degree to which their plans are developed with recourse to the MOH. Accountability to the MOH also seems to be low, with two of the four teaching hospitals regularly reporting performance to

the Ministry. A common forum exists for teaching hospitals, but knowledge sharing and cross-fertilization of ideas around quality planning, quality assurance, and quality improvement could be improved. The result is a system of effectively self-regulating, independent service providers without a clear set of standards and protocols enforced or supervised by the Ministry of Health. Supervisory tools and standards need to be agreed upon by all health facilities, in order that the Ministry can extend to teaching hospitals.

Private Sector

The private sector is made up of private medical practitioners, most of whom are members of the Society of Private Medical and Dental Practitioners (SPMDP); health facilities of both private and public corporate organization associated with the Ghana Association of Quasi-Government Health Institutions (GAQHI); private pharmacists under the umbrella of the Community Practice Pharmacists Association (CPPA); private midwives associated with the Ghana Registered Midwives Association (GRMA); and private diagnostic scientists within the Association of Biomedical Scientists. About 51% of Ghana's population use private health facilities as their first point for health care (Morrison, 2016). The leadership of many of these organizations integrate quality into their practice by building capacity of their members through workshops and trainings. The Ghana Health Service also provides opportunities for private sector operators to participate in essential technical training.

Leadership at the district level often determines the degree to which private providers report into DHIMS. Strengthening the governance structure and supervisory capacity of the district directorates will help to address the key challenge of better integrating the private health sector.

3.3 Quality improvement initiatives

Ghana has a history of a number of quality improvement initiatives, spanning from small steps independently taken by staff at the facility level, to strategy plans to improve quality of care at the national level. Currently, quality improvement initiatives address quality elements such as patient safety, effectiveness, patient-centeredness, timeliness of service provided, efficiency, accessibility, and equity, throughout the continuum of care. These quality improvement approaches adopted various strategies and teaching models, but certain themes were common:

- Use of quality planning tools to identify performance gaps in systems and processes by managers and frontline staff
- Prioritization of critical gaps for intervention
- Formation of multidisciplinary improvement teams, generation and use of innovative cost-effective solutions
- Continuous data feedback loops and reflection on data through learning systems
- Coaching and mentoring follow-up visits
- Capacity building with embedded practical components including onsite activities

The organisation and implementation of quality in a nation can be analysed using three interlinked categories of quality: Quality Planning, Quality Control and Quality Improvement. Table 6 below lists quality initiatives and their level of influence across the health care system.

Table 6: Quality Initiatives Across the Ghanaian Health System

Quality Initiatives	Level of the Health System			
	National	Regional/District	Facility	Patient/Community
Quality Planning				
National Health Policy, 2012	X	X	X	X
Non-communicable Disease Policy, 2011	X	X	X	X
Health Sector Medium Term Development Plan (HSMTDP) (2014-2017	X	X	X	X
Mental Health Act, 2012	X	X		
National Health Insurance Scheme (Act 2003)	X	X	X	
GHS-Quality Assurance Strategic Plan, 2007	X	X	X	
Patient Charter, 2013	X	X	X	
Code of Ethics	X	X	X	
Code of Conduct and Disciplinary Procedures	X	X	X	
Nutrition Policy	X			
Quality Assurance/Control				
Client Satisfaction Survey			X	X
Clinical & Mortality Audits		X	X	X
Child Care Guidelines		X	X	X
Maternal Care Guidelines		X	X	X
Patient Safety Guidelines		X		
Infection Prevention and Control		X		
Malaria Protocol		X		
Surgical Safety Guidelines		X		
Guidelines for Community Pharmacy Practice				X
Health Facility Accreditation and Credentialing		X	X	
Health Professional Licensing		X	X	X
Certification by Food and Drugs Authority and Ghana Standards Board	X	X	X	X
Quality Improvement				
Project Fives Alive! (IHI & NCHS)	X	X	X	X
Peer Review program			X	
Leadership Development Program	X	X	X	
Safe Motherhood taskforce			X	X
High Impact Rapid delivery (HIRD)			X	
HIV Coordinated National Response Program		X	X	X
HIV Testing and Counselling (HTC)			X	X
HIV Prevention of mother-to-child transmission			X	X
Condom promotion and distribution alongside education on abstinence			X	X
Strengthening referrals and collaboration between facilities and communities to increase ART uptake and adherence			X	X
Intermittent Preventive Treatment (IPT) to provide chemoprophylaxis for pregnant women			X	X
Production of quality generic anti-malaria drug by local pharmaceutical companies	X			
Availability of over-the-counter malaria tests contributing to rapid diagnosis		X	X	X
Provision of Insecticide Treated Nets (ITNs) to pregnant women and children		X	X	X

The Ministry of Health has a number of policies and strategic plans well-written to promote quality in health care. However, they often lack a deliberate prioritization process; an evaluation method to assess implementation and results of these initiatives; and a strong dissemination component to ensure that both public and private sector providers are aware of policy changes. The result is **fragmentation in the system, and little integration of efforts**. Interviews also revealed variation in perception of accountability for providing and driving quality health care – from the government, to facility management, to health care professionals, to patients, themselves.

"Lots of policies at the GHS website but they are poorly publicized, for people to even know and implement. There is commitment with quality policy formulation and strategy development, but not with monitoring of implementation." - A Private Sector Provider

The Ghana Health Service has introduced standards, protocols and guidelines, and defined a set of client-oriented and professional-oriented indicators (Kaba, 2016) for monitoring across GHS facilities, and these indicators have been adopted or adapted by the Christian Health Association of Ghana (CHAG) and some private sector operators. **The key shortcoming is a reflection of weak accountability and planning function within the health system: the protocols and manuals often do not come along with a clear strategy for implementation at various levels of the health system**. In effect, they become well-written documents, the usage of which is largely left to the initiative of the individual leader. Even with the introduction of peer review programs, mortality and clinical audits, not too many health facilities have been regular in monitoring identified indicators. Moreover, failure to do so does not attract any significant sanctions, neither does compliance attract reward. Indeed, monitoring of adherence to standards has generally not been optimal.

Within the private sector, the Community Practice Pharmacists Association has just launched "Guidelines for community pharmacy practice, quality standards for community pharmacy practice in Ghana" and has provided training on this to about 1,000 of its members nationwide. The association called for policy change – separating services by hospital pharmacists (inpatient care) from community pharmacist (outpatient care) (Allotey, 2016).

Ghanaian teaching hospitals have also instituted initiatives to improve quality. For example, in the Korle Bu Teaching Hospital initiatives have included capacity building in quality improvement, running of continuing professional development (CPD) programs, initiating improvement processes in various departments, improving data systems, developing protocols for referrals, and writing a quality strategy. The hospital has also introduced paediatrics and obstetrics triaging at its children and obstetric outpatients & emergency rooms to reduce the waiting time of clients in accessing care. Its surgical medical emergency is also using the triaging system as a means of prioritizing cases. Komfo Anokye Teaching Hospital has implemented the WHO Patient Safety initiative under the African Partnership on Patient Safety (APPS).

The regulatory arm of the Ministry of Health has initiated improvements in the quality of care. Some of measures include:

- FDA initiative to reduce fake medicines coming into the country from 30% to 2.5%, and introducing nurses to basic pharmacovigilance (Food & Drugs Authority, 2016);
- The Mental Health Authority coming up with a legislative instrument that will protect their vulnerable patients;
- Nursing and Midwifery Council organizing workshops to sensitize nurses about the art of health care (customer care); and
- Accreditation and renewal of licenses by facilities through HEFRA and by health professionals through their respective regulatory bodies ensuring that the environment in which the health service is being provided is standardized and staff are poised for great outcomes.

MOH works closely with its development partners in the provision of quality health care to the people of Ghana. Through these partnerships, a number of CHPS facilities have been built in places with limited access to care, public health interventions have been adequately promoted, and the capacity of health workers has been enhanced. Notwithstanding, the **key challenge to be addressed by this strategy is the lack of coordination among a number of quality initiatives initiated by development partners**. Different approaches and reporting requirements result in duplication of efforts and loss of man-hours for public sector service providers. On the other hand, the private sector is often not involved in these initiatives.

From a patient perspective, the impact of quality initiatives has not always been clear. A provider observed that the increasing number of medico-legal issues is an indicator of poor quality of care, despite efforts. Provider and patient interview respondents noted the low doctor-to-patient ratios, long waiting times, unavailability of essential supplies, medicines, and diagnostics, which lead to low client satisfaction especially in government facilities.

Other client and community focus groups identified additional issues that still need to be addressed – for example, sub-optimal levels of professionalism which manifests in ways such as breaches in privacy and confidentiality, health workers' impatience with clients, disrespect, and inadequate communication and transparency with clients and their families. **Cultural change in the health workforce is a necessary ingredient to drive change.** "People have to know that it is not enough to do just anything, but to ensure that the little that they do bears the stamp of quality" (Alhaji Ibrahim, 2016). Defining interventions that build quality culture over time, such as professional development, incentive packages for working in remote areas, and in-service training are all mechanisms to help motivate the health workforce to pursue quality.

Some of these quality initiatives have had positive impact on the quality of health care in Ghana. The Ministry of Health can report higher numbers of trained health professionals than ever before, including specialists in various fields of health care. Through Project Fives Alive! (PFA!) 10 health staff were trained as regional improvement advisors, with over 400 quality improvement coaches leading quality improvement work at the various levels of health care in Ghana. Similarly, about 4000 frontline workers were also trained in quality improvement methodology (Project Fives Alive!, 2015). Systems for Health Project (S4H) also supports health staff in their improvement work. Health education by all stakeholders has improved client knowledge about their health and how to be responsible for their health. The introduction of capitation has led to an increased focus on providing value-based care. A number of hospitals have automated their records department to reduce the long waiting time normally experienced at the health records department. There is also triaging for children under five to receive prompt care. Similarly, health providers, training institutions and professional bodies provide opportunities to improve the capacity of health workers to provide services with desirable outcomes.

3.4 Data systems and quality metrics

The current state of data collection and use within Ghana's health system reflects the way in which health as a whole is organised, namely the Policy, Planning, Monitoring and Evaluation division within the Ghana Health Service (GHS) is charged with monitoring and evaluation as well as data management of all activities under the GHS. In 2012, the GHS collaborated with the University of Oslo in developing the District Health Information Management System (DHIMS2) software used for reporting and analysing district health administration and health facility needs. Data entered into DHIMS2 include measures on finance, laboratory, pharmacy, disease control, maternal health, surgical operations and occupational health.

> *"People say they only use the data for presentation, but I feel we use it for more than that; it is actually being used for clinical reviews and outcomes at some facilities. We use it for planning. We have developed the data utilization manual; people don't always know how to move numbers to make interpretations or support solutions, so the purpose of the data utilization manual is to help facilities, districts to use the data."*
>
> -A policy maker

Currently, health information is uploaded into the DHIMS2 at the local level. Data is collected and aggregated monthly by the facility health information officer or regional data officer, who subsequently manually enters the aggregated data into the DHIMS2. Once the data has been entered, the regional and central health management levels are able to access it in real time. At the local level, data is used to monitor and plan clinical activities. At the regional level, the data is used for supervisory and routine monitoring purposes. At the national level, data is only fed back to the regional level if there is some discrepancy in what has been submitted. Occasionally, members of the M&E unit at the national level conduct validation visits to the facility and regional level.

In spite of the great strides that have been made with the roll-out of the DHIMS2, the health sector has identified weak integrated research, information and monitoring systems to support evidence-based decision making and to track performance in priority areas. A policy maker explained that about 33% of facilities, public and private, enter data directly into the DHIMS2 "because they have a data information officer, computer and Internet access." Currently, two of the four teaching hospitals nationally report into DHIMS2, while the other two have a parallel electronic health records system that provides a challenge for the GHS to access their data. CHAG, which is responsible for up to 40% of the health care provided in Ghana, has some its facilities currently using the Health Administrative System (HAMS) electronic database, where each health unit is able to enter their data as they see the clients. Although close to 60% of the data collected at CHAG facilities is being entered into the DHIMS2, this data is not entered in a timely manner. The MOH/GHS is currently working on several strategies to support the improvement of health information and data use throughout the health sector, as well as use of data at a local level.

Private hospitals, which are not under the mandate of the GHS, largely collect data that is not linked or entered into the DHIMS2, although some of the facilities have the appropriate technology and capability to do so. In an effort to improve data management among the private facilities, the MOH has been working through the Health Facilities Regulatory Agency (HEFRA) that provides licenses to hospitals to encourage the availability of health informatics personnel to support improved data collection, entry and abstraction.

Currently, the culture for data demand and use is low. A provider focus group observed that data recording is very challenging and software for collecting, analysing and interpreting the data would be appreciated. This seems to show a disconnect between provider knowledge and the current capabilities of the DHIMS, which is reported to be underutilized in terms of its analytic capabilities. The group further advocated in-service training on data collection and management. Facility health information officers report that many staff do not regard the data as important or useful to their daily work. This leads to low demand for evidence-based policy development and implementation, and decreased funding for initiatives that have been proven effective.

Community-level facilities (CHPS) interact directly with homes and patients; hence this direct disaggregated information is used to track patients within the community and to provide health care at this level. However, building continued capacity to be able to go in and extract the data from DHMIS2 and analyse it for themselves and identify their specific needs remains a priority. The MOH also conducts performance reviews which provide feedback and information to the regions. This also provides feedback to the GHS. Feedback to the lower levels, however, needs to be strengthened.

Chapter 4: Prioritizing for Improvement

4.1 Key Issues from Analysis

Table 7 below summarizes the key health system priority issues and the key population health priorities identified in the Health Sector Medium Term Development Plan (Appendix 6), situation analysis and stakeholder interviews.

Table 7: Health System and Population Health Priorities

No.	Source	Health System Priority Areas	Population Health Priority Areas
1.	**HSMTDP and Burden of Disease**	• Leadership, governance and management • Health research and information management • Human resource development • Regulation • Financing • Quality health service delivery • Response to emergencies	• Maternal health • Neonatal health • Child health • Malaria • HIV/AIDS • Tuberculosis • Epidemic-prone diseases • Neglected tropical diseases • Non-communicable diseases • Mental health services • Geriatric care
2.	**Situation Analysis (Primary and secondary data)**	• Leadership and governance • Harmonization of data systems • Data management • Harmonization of quality approaches • Coordination among sector agencies • Client-centeredness • Mainstreaming of teaching hospitals and private sector	• Maternal and child health • Malaria • HIV/AIDS • Tuberculosis • Epidemic-prone diseases (Cholera and CSM) • Non-communicable diseases (hypertension, diabetes, cancers) • Mental health services • Geriatric care

4.2 Priorities for improvement

From our crosswalk of the current state of health, policy context, and stakeholder interviews, the following priority areas have been identified for the National Healthcare Quality Strategy to focus on in order to improve the health care system and achieve improved health outcomes:

Population health priorities

- Maternal health
- Child health (neonate, infant, under 5)
- Communicable diseases (malaria; epidemic-prone diseases – cerebrospinal meningitis (CSM) and cholera)
- Non-communicable diseases (hypertension, diabetes)
- Mental health
- Geriatric care

Systems strengthening priorities

- Leadership, governance, accountability, coordination, supervision and monitoring
- Data, measurement, data use and learning
- HRH strengthening (managerial skills, technical skills and quality culture), recognition and reward
- Client and community experience (participation, patient safety, client satisfaction)
- Financing and logistics

Chapter 5: Strategic Direction

5.1 What is Our Aim?

Through the various consultative processes, the MOH set the following ultimate goal to drive the National Healthcare Quality Strategy:

To continuously improve the health and well-being of Ghanaians through the development of a better-coordinated health system that places patients and communities at the centre of quality care. (MOH, Ghana 2016)

The elements of this goal were developed by the Ministry to consolidate the elements of the "ideal" state of quality in Ghana into prioritized areas that:

- Focus on measurable improvements in health outcomes as the end goal;
- Seek to strengthen systems towards this end goal; and
- Place the client at the centre of care by focusing on improved client experience.

Continuously improving health outcomes requires a culture shift towards quality improvement at all levels of the health system. To do this, a harmonized and coordinated health system would be integrated across the elements of quality planning, quality control, and quality improvement – utilizing a uniform health data system and quality indicators that not only get reported up to MOH, but also are used by health providers at the front line to improve the quality of care provided. Placing the client at the centre of care will entail being responsive to community and client needs, delivering care with respect and dignity. Within these three high-level components of the "aim" are also embedded the various building blocks of the WHO and AFRO Health, particularly service delivery, health workforce, health information systems, access to essential medicines, financing, leadership and governance, and health systems research.

5.2 Specific goals

The goals to address towards achieving the quality aim are to:

1. Continuously improve health outcomes in the population health priority areas;
2. Develop a coordinated health care quality system in the areas of quality planning, quality control, and quality improvement – including improved use of data for evidence-based decision-making; and
3. Improve client experience by being responsive to the health needs and aspirations of the patient and the community

Within the next five years, by 2021, all health care service providers in the public, faith-based, quasi-government teaching hospitals and the private self-financing sectors will have a common approach to quality improvement and have a common reporting platform to report common quality indicators and health data through implementation of this National Healthcare Quality Strategy. Within the same period of time, agencies of the Ministry of Health such as the regulatory bodies, health training institutions, health research institutions and health financing agencies will coordinate their systems to facilitate quality improvement practice as an everyday culture among service providers. The client and community should have a measurably improved experience with health care and benefit from improved health outcomes within the next five years.

5.3 Strategic objectives

The strategic objectives of this National Healthcare Quality Strategy are:

Goal 1.0: To continuously improve health outcomes in the population health priority areas.

Strategic objectives:

- 1.1: To improve the clinical skills of relevant health workers to manage identified priority health interventions
- 1.2: To promote a quality culture and accountability for quality in all health workers and sector agencies

Goal 2.0: **To develop a coordinated health care quality system in the areas of quality planning, quality control, and quality improvement, including improved use of data for evidence-based decision making.**

Strategic objectives:

- 2.1: To create sustainable leadership and governance for quality planning, quality control, and quality improvement at all levels of the health care system
- 2.2: To strengthen coordination among all health sector agencies
- 2.3: To standardize collection of data and improve use and analysis of data at all levels (including by providers at the frontline) for evidence-based decision making
- 2.4: To resource and strengthen regulatory agencies (especially HEFRA) to roll out a nationwide accreditation process with clear links to facility-based quality management teams for ongoing improvement action

Goal 3.0: To improve client experience by being responsive to the health needs and aspirations of the patient and the community

Strategic objectives:

- 3.1: To sustain patient safety at all levels of health care delivery
- 3.2: To improve client satisfaction and participation in quality definition and quality improvement
- 3.3: To build a culture of "joy at work" (financing, logistics, recognition and reward) that creates the context for health providers to treat clients with dignity and respect, deliver high-quality care and be motivated to continuously improve quality

Chapter 6: Strategic Interventions

6.1 Strategies

Seven strategies to achieve the strategic objectives are:

1) Establish structures at all levels of the health system to lead quality across planning, control (assurance) and improvement
2) Develop and implement a uniform national policy on data reporting and data use by health workers and all health sector agencies
3) Improve patient safety, client satisfaction, and participation of patients and the community in quality governance structures at all levels
4) Improve quality culture in health workers through training in the requisite clinical skills and in quality improvement methods and incorporation of quality-related performance indicators in their job descriptions
5) Create the "joy at work" environment to enable health workers to consistently deliver safe and high-quality care through the provision of essential inputs, incentives, recognition and reward
6) Enhance transparency through the ranking of like facilities and agencies in league tables, with awards at annual quality conferences that involve patients, communities and providers
7) Institutionalize supportive supervision and monitoring across all agencies and all service delivery sites in the public, private sub-sectors and teaching hospitals

6.2 High-level Activities

Table 8: Strategic Interventions (Short-Term and Long-Term)

Strategy	Short Term (2017-2019)	Long Term (2020-2021)	High-Level Activities	Responsibility	Indicator/Target
1. Establish structures at all levels of the health system to lead quality across planning, control /assurance and improvement	Q1/2017)		1(i). Appoint and inaugurate NQSSC, QMUs and QMTs	MOH PPME and MOH HRD through NQSSC, QMU, RQMUs, DQMUs	NQSSC, QMU, 10 RQMUs, 15 agency quality teams inaugurated 210 DQMUs, minimum of 2,500 QMTs established
	Q2 to Q4 /2017		1(ii). Train QMUs, QMTs in quality management /quality improvement		
	By Q3/2018		1(iii). Train facility managers in basic managerial skills		
	From Q4/2018	**X**	1(iv). Monitor the performance of quality management units/teams (QMUs/QMTs) at all levels		
2. Develop and implement a uniform national policy on data reporting and data use by health workers and health sector agencies	From Q1/2018		2(i). Develop national health data policy, train data officers in public, private, teaching hospitals, agencies	MOH PPME, MOH HRD supported by QMU, NQSSC, RQMUs/RHMTs, DQMUs/DHMTs (Broad consultation)	Minimum of 2,000 data officers trained
	Q1-Q4/2018	**X**	2(ii). Monitor data policy implementation in sector agencies, districts and facilities (data collection, entry /reporting, local use)		50% of sector agencies and facilities entering timely, accurate data into national system; local data use in 50% of data collection sites
3. Improve patient safety, client satisfaction, and participation of patients and the community in quality governance structures at all levels	From Q1/2017	**X**	3(i). Involve patients and the community in quality improvement through participation in health committees at all levels	NQSSC, QMU, RQMUs, DQMUs, QMTs, health committees	Patient and/or community participation in NQSSC, 10 RQMUs; 210 DQMUs; minimum of 2,500 QMTs
	Q1/2018; surveys from Q3/2018	**X**	3(ii). Involve patients in defining quality through biannual client satisfaction surveys	QMTs, DQMUs, Community	50% facilities report client satisfaction indicators twice a year
	From Q4/2018	**X**	3(iii). Scale up implementation of national patient safety policy to all public, private service delivery sites and teaching hospitals; and monitor implementation	MOH PPME, MOH HRD, MOH through Procurement, Provider organizations, NQSSC, QMU, RQMUs, DQMUs	Improvement in 50% of patient safety indicators nationwide between Q1/2019 and Q4/2021

Strategy	Short Term (2017-2019)	Long Term (2020-2021)	High-Level Activities	Responsibility	Indicator/Target
4. Improve quality culture in health workers through training in the requisite clinical skills and in quality improvement methods and incorporation of quality-related performance indicators in their job descriptions	From Q4/2017	**X**	4(i). Provide in-service training on quality improvement for workforce (in service provision sites and within sector agencies) and incorporate ethics and quality-related standards in the job description of health workers; also train selected health workers in sign language	MOH HRD, MOH PPME through NQSSC, QMU, RQMUs, DQMUs, QMTs; Provider organizations, facility heads	1. 10,000 health workers trained in QI by Q4/2018; 40,000 trained by Q4/2020 2. Minimum 1,000 staff trained in sign language 3. 50% of facilities and districts appraise health staff on quality
		From Q1/2020)	4(ii). Build quality into health workers' training and deliver the training to health workers	Training institutions supported by NQSSC, QMU	70% training institutions deliver training in quality by Q4/2021
		From Q1/2020	4(iii). Apply sanctions for non-compliance with ethics or breeches of the Patient Charter or reporting false data, in accordance with the Code of Ethics and Code of Discipline	Facility heads, DDHSs, RDHSs, agency heads	No. of sanctions reduced by 50% by Q4 2021 compared to Q1 2020 levels
	Q1/2018 to Q!/2019	**X**	4(iv). Adopt/adapt protocols for the management of health priorities (incl. traditional medical practice), train relevant workers and monitor adherence to protocols	Hon Minister, MOH PPME, MOH HRD, through experts, NQSSC, QMU, RQMUs, DQMUs, HEFRA	70% average adherence to identified protocol
5. Create the "joy at work" environment to enable health workers to consistently deliver safe and high-quality care through the provision of essential inputs, incentives, recognition and reward	From Q1/2018	**X**	5(i). Provide medicines and logistics for service provision at all levels, and incentives including rural incentives	MOH Procurement; MOH HRD, provider organizations	1. Maximum of 5% stock-out rate for identified tracer drugs in all service delivery sites 2. Over 50% of staff are satisfied with incentives provided
	From Q2/2018	**X**	5(ii). Develop indicators and apply indicators to reward/award deserving staff at facility, district, regional and national levels	Chief Director through NQSSC, QMU, RQMUs, DQMUs, QMTs	Four annual awards at national level; four in 100% regions; four in 50% districts; four in 30% facilities

Strategy	Short Term (2017-2019)	Long Term (2020-2021)	High-Level Activities	Responsibility	Indicator/Target
6. Enhance transparency through the ranking of like facilities and like agencies in league tables, with awards at annual quality conferences that involve patients, communities and providers	From Q4/2017	**X**	6(i). Agree quality metrics, build the indicators into the performance contracts of sector agencies and health facilities of all ownerships	MOH PPME supported by NQSSC, QMU,	Quality indicators built into all sector agencies and health facilities (public, private, teaching hospitals)
	From Q1/2018	**X**	6(ii). Maintain league tables for like health facilities and for other health sector agencies	MOH PPME through NQSSC, QMU, RQMUs, DQMUs	League tables available for sector agencies, regions, districts, facilities, communities
	X (From Q4/2018)	**X**	6(iii). Hold annual national quality conference to evaluate NHQS implementation and to award deserving agencies, health facilities and health workers	MOH PPME, QMU, NQSSC	Minimum of four annual awards held between 2018 and 2021
7. Improve supportive supervision and monitoring across all MOH directorates, sector agencies and all service delivery sites in the public, private sub-sectors and teaching hospitals	From Q1/2018	**X**	7(i). Adopt/adapt existing supportive supervision guidelines and tools, train supervisors and monitor implementation of supportive supervision in all MOH directorates, agencies and service delivery facilities and sites	MOH PPME through QMU, NQSSC, RQMUs, DQMUs, provider organizations	100% MOH directorates 50% of agencies, 100% regions, 80% districts and 50% service delivery sites implement SS
	From Q4/2018	**X**	7(ii). Adopt/adapt existing peer review guidelines and tools, train relevant managers and monitor the implementation among like agencies and like providers	MOH PPME, through QMU, NQSSC, provider organizations	50% like agencies and like facilities participate in peer review
	From Q3/2017	**X**	7(iii). Develop reporting format for MOH directorates, sector agencies, facilities (public, private, teaching); monitor reporting quarterly and provide feedback	MOH PPME through NQSSC, QMU, RQMUs, DQMUs	1. 50% sector agencies and MOH directorates report every quarter to NQSSC 2. 80% health facilities report every quarter to DQMUs/RQMU 3. 80% reporting agencies, directorates and facilities given feedback
	From Q4/2017	**X**	7(iv). Undertake sector-wide reviews once a year	MOH PPME supported through NQSSC, QMU, regulators, RQMUs, DQMUs	Annual sector-wide reviews undertaken

Chapter 7: Making This Happen

To successfully implement this strategy, there is need to: (1) build functional structures at all levels; and (2) build managerial capacity of leadership to lead quality and build technical capacity of the health workforce to implement the clinical and public health interventions required to improve outcomes in the population health priorities. Please see the accompanying document Part 2 Coordination and Accountability Framework for a detailed implementation framework.

7.1 Functional structures at all levels

In the implementation of this strategy, the ministry will focus on its role of deciding priorities and leading policy, planning, regulation and coordination. With regard to frontline implementation, the ministry will work through the sector agencies whose mandate cover the respective areas of implementation. The ministry however recognizes that the need for a structure within the ministry responsible for coordinating quality, and it has commenced action in this direction by prioritizing the formation of the NQSSC, chaired by the Director of Policy Planning Monitoring and Evaluation and reporting directly to the Chief Director of the ministry, to lead the development of this strategy. This step is in line with the 2016 Aide Memoire of the health sector that requires the Ministry of Health to "**set up a national Quality of Care Steering Committee that oversees quality service issues at all levels by December 2016.**" MOH has however outlined a full quality governance structure that reflects linkages across all levels of the health system.

For the day-to-day running of the quality function, a national Quality Management Unit (QMU) will be set up within the PPME Directorate. The QMU will be headed by a focal person, the National Quality Manager (NQM), who may be a re-assigned existing public servant. The QMU is expected to be both outward and inward looking, coordinating quality even within the directorates of MOH. All agencies and the private sector must establish quality units/quality teams at all levels of their establishments to implement the national strategy (Figure 2).

MOH does not intend to create parallel structures but, as much as possible, to integrate into existing structures. The regional level and below will therefore leverage existing structures for leadership. Hence at the regional level, an interagency Regional Quality Management Unit (RQMU) will be set up under the Regional Health Committee with the Regional Director of Health Services (RDHS) as the chair and the Deputy Director, Clinical Care as the focal person. Membership will however be drawn from both public health and clinical care units. The team will oversee quality in both clinical and public health services, and participation will involve both the public and private sectors.

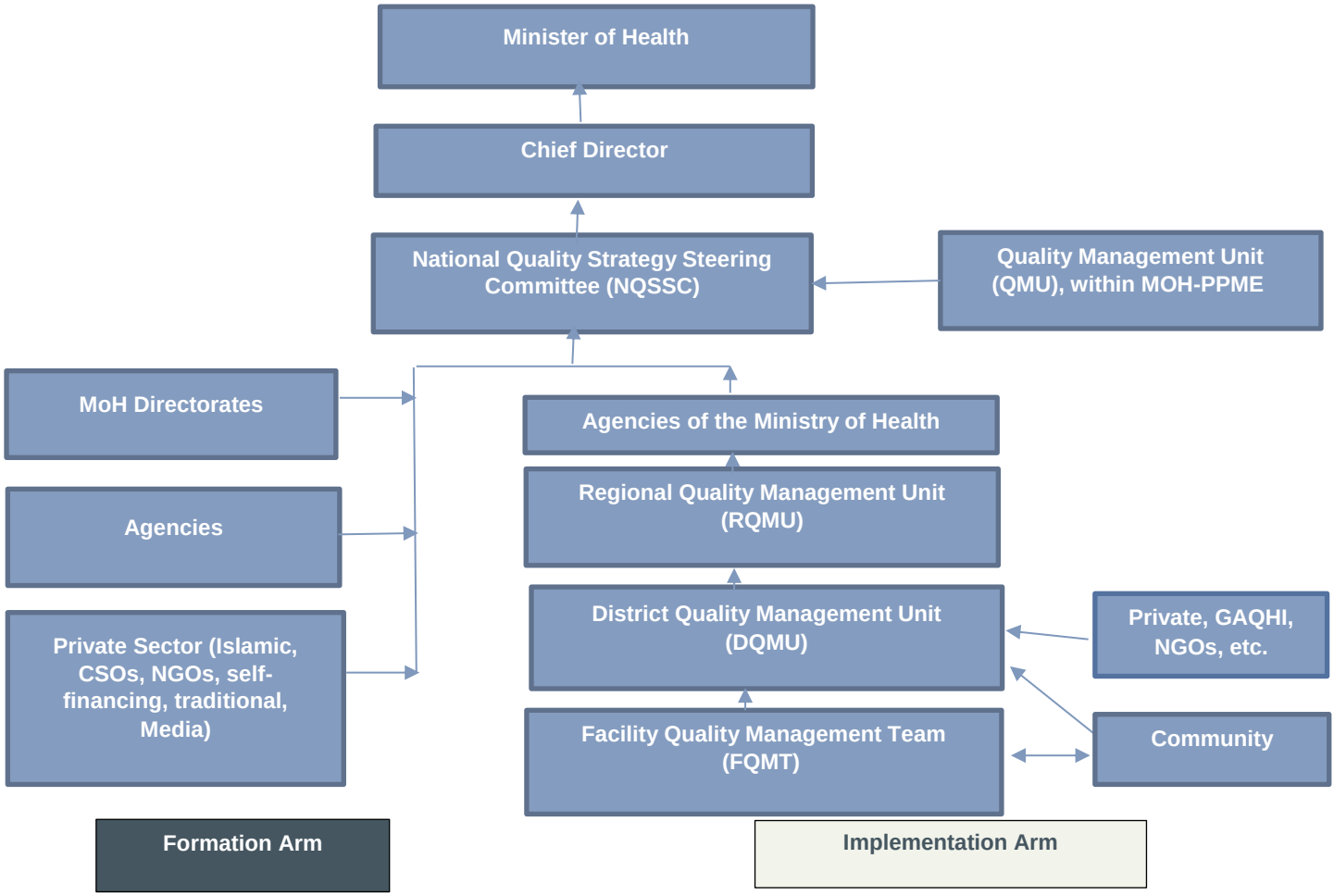

Figure 2: Quality Coordination Organizational Structure

Similarly, a multi-stakeholder District Quality Management Unit (DQMU) will be formed in each district under the District Health Committee, headed by the District Director of Health Services (DDHS) and with public and private participation as well as community involvement. The sub-district head will lead a community committee (the existing health committee), supported by the DHMT and sub-district (SD) team, and with wide participation by the community and patient groups. At the facility level, the facility Quality Management Team (QMT) shall be a multidisciplinary team headed by the facility head.

Roles of Quality Management Units (QMUs) at the various levels

Table 9 below presents a snapshot of the roles expected of the Quality Management Units at the various levels in the implementation of this strategy, which roles are largely in line with stakeholders' respective mandates. More detailed roles are spelled out in the Coordination and Accountability Framework.

Table 9: Synopsis of Roles of Quality Management Units (QMUs)

STAKEHOLDER	ROLES (Roles are Summarized. Detailed roles are outlined in the Stakeholder Roles in Part 2: Coordination and Accountability Framework)	REMARK
1.0 NATIONAL		
1.1 National Quality Strategy Steering Committee (NQSSC)	• Guide the implementation of the National Healthcare Quality Strategy (NHQS) including patient safety policy and subsequent variations of these • Determine national quality priorities, policies and high level planning • Decide and apply indicators for monitoring the implementation of quality plans, policies and health outcomes in the priority areas • Define data requirements for the measurement of quality at the various levels of the health system • Provide guidelines/policy for compliance to data quality and reporting • Strengthen leadership and ownership among stakeholders in the health system on quality planning, quality assurance and quality improvement at all levels, in all sub-sectors and in all sector agencies • Provide a platform for inter-agency knowledge sharing and learning • Develop Terms of Reference for RQMUs, DQMUs, Facility QMTs • Support regions to establish DQMUs • Support MOH PPME and MOH HRD to train RQMUs • Monitor implementation of NHQS in all agencies at all levels • Establish criteria for identifying and celebrating teams and individuals improving health care and patient outcomes	• Technical experts supported by their respective agencies • Committee chaired by Director PPME, MOH • Reports to Chief Director
1.2 National Quality Manager (NQM) /Quality Management Unit (QMU)	• Day to day oversight of quality across all agencies, sub-sectors and all levels on behalf of Director PPME, MOH • Implement a certification mechanism for data and information systems employed in the delivery of health care at all levels • Conduct operational research/National quality surveys/ Health systems research • Publish an annual report on the state of healthcare quality in Ghana • Support NQSSC to develop Terms of Reference for RQMUs, DQMUs, Facility QMTs • Coordinate with NQSSC to support regions to establish DQMUs • Lead the monitoring of NHQS implementation • Identify required policies, standards and protocols and initiate the development process • Publish annual State of Quality in Ghana reports	• Located in the MOH PPME • Focal person is National Quality Manager • Reports to Director of MOH-PPME
2.0 REGIONAL		
2.0 Regional Quality Management Unit (RQMU)	• Apply approved indicators for monitoring the implementation of quality plans, policies and health outcomes in the priority areas in the region • Facilitate the implementation in the region of the harmonized approaches and data systems determined by the national NQSSC • Strengthen collaboration among agencies in quality planning, quality assurance and quality improvement initiatives originating both locally and internationally and operating in the region	• Regional Health Committee will be the convener • Reports to NQSSC

STAKEHOLDER	ROLES (Roles are Summarized. Detailed roles are outlined in the Stakeholder Roles in Part 2: Coordination and Accountability Framework)	REMARK
2.0 REGIONAL		
2.0 Regional Quality Management Unit (RQMU)	• Strengthen leadership and ownership among stakeholders in the health system on quality planning, quality assurance and quality improvement in the region • Disseminate national standards to the districts and train staff of the districts • Partner HEFRA to monitor the implementation of policies and plans, and health outcomes in the districts on behalf of the NQSSC • Use national standards to assess institutions and determine underperforming agencies, for mentoring and make recommendations for improvements, with reward systems • Establish and train DQMUs in all districts and supervise districts training of facility QMTs • Monitor the functioning and performance of DQMUs	• Regional Health Committee will be the convener • Reports to NQSSC
3.0 DISTRICT		
3.0 District Quality Management Unit (DQMU)	• Strengthen leadership and ownership among stakeholders in the health system on quality planning, quality assurance and quality improvement in the district and sub-districts • Lead quality planning in the district and sub-districts • Disseminate national standards to the facilities and communities and train staff at the facility and community levels (both public and private) • Monitor the implementation of policies and plans, and health outcomes in the facilities and communities • Use national standards to assess institutions and determine underperforming institutions, for mentoring and make recommendations for improvements, with reward systems	• District Health Committee, led by the District Director of Health Services (DDHS) will be convener • Reports to RQMU
4.0 FACILITY		
4.0 Quality Management Team (F**QMT)**	• Exhibit leadership, participation and accountability at the health facility level • Facility head to be responsible for the implementation of NHQS in the facility • QMT to feedback to the DQMU (regional hospitals feedback to RQMUS) any implementation challenges or any other interesting development • Use national standards to assess departments of the facility and determine underperforming departments, for mentoring and make recommendations for improvements, with reward systems • Disseminate and continuously train staff on NHQS and Guidelines • Oversee implementation of quality improvement activities across the facility • Inculcate quality culture into health workforce	• Quality Management Team will be headed by the head of the health facility
5.0 FACILITY		
5.0 Community	• Collaborate with other agencies, organisations and relevant stakeholders in integrative planning and implementation of the National Healthcare Quality Strategy and create modalities for peer learning • Use national and quality standards to plan and implement health programs • Establish Quality Improvement Teams/Committees at the community level	• Composition: CHPS, CHO, Health Promotion Officer • Supported by DHMT

7.2 Capacity development

To bring everyone involved in health care delivery to a common understanding of the National Healthcare Quality Strategy (NHQS), there will be systematic training of health agencies and quality teams at all levels in the basics of quality management and quality improvement, as well as what the strategy seeks to accomplish and how it will be implemented. The capacity of the entire health workforce will be built and enhanced around quality improvement to get them better equipped to working towards achieving the desired health outcomes; in addition, facility managers will undergo training in basic managerial skills.

Through rolling out this NHQS, the National Quality Strategy Steering Committee (NQSSC) and the Quality Management Unit will be oriented to a common understanding of the concepts, principles and practice of quality and made familiar with roles of the various agencies and levels in quality planning, quality assurance and quality improvement.

In the short term, training of the existing health workforce in the management of priority health conditions will mean that MOH will constitute expert technical teams in the various areas to develop protocols and guidelines in the respective clinical and public health priorities. In the medium and long term, these protocols and guidelines will be used in pre-service training and in continuing professional development programmes. Training will involve health professionals in the teaching, public and private facilities. Effective supportive supervision will be employed to keep staff up to date on the implementation of priority health interventions.

7.3 Coordination and Accountability Framework

A separate Coordination and Accountability Framework accompanies this strategy. The document describes general considerations for implementing the National Healthcare Quality Strategy, provides a coordination action plan and outlines implementation responsibilities of various health sector agencies.

7.4 Monitoring and evaluation of strategy implementation

The strategy will be monitored to determine whether implementation is on course and how much progress is being made towards achieving the objectives of the strategy.

Routine monitoring

Quarterly monitoring of the strategy implementation process with a focus on whether activities are being implemented according to plan and whether expected implementation milestones are being reached will be the ultimate responsibility of the Ministry of Health (PPME), but immediate responsibility will lie with the NQSSC/QMU which will report findings to the ministry, with appropriate recommendations. The NQSSC/QMU will be fed from the regions with data and information collated from district reports every quarter.

Monitoring of the progress and achievement of health outcomes will be through regular bi-annual reports from the regions and agencies to the QMU using agreed indicators (see Indicator set under the chapter on Measuring Improvement) and reporting formats. The QMU will in turn synthesize the reports and apprise the NQSSC and the MOH (PPME). In addition, the QMU will undertake validation through random surveys and monitoring visits.

Beyond monitoring by the QMU and the NQSSC, NHQS indicators will be integrated into existing monitoring mechanisms within the ministry such as the Demographic and Health Survey (DHS) and Multiple Indicator Cluster Survey (MICS).

Annual review

The NQSSC/QMU will receive annual reports from agencies and the regional level. Regional reports will be based on district reports. Beyond that, annual reviews will be built into the existing annual review mechanisms of the Ministry of Health including the Independent Annual Reviews and Holistic Assessment.

Chapter 8: Measuring Improvement

8.1 Prioritization for Measuring Improvement

Areas selected for measurement of improvement are the focus areas of the broad quality goal espoused in this strategy document, namely:

- Improvements in health outcomes as the end goal;
- Strengthening of systems towards this end goal; and
- Placing the client at the centre of care by focusing on improved client experience.

8.2 Indicator Set

The indicator set for measuring improvement are grouped in Table 10 below under non-health care service providing agencies performance indicators, systems improvement indicators, quality indicators, and health outcome/output indicators. These indicators have been selected on the basis that they can be used to track improvement in the priority areas selected to be addressed by this strategy, and that they are simple, measurable, achievable, reliable and time-bound (SMART).

A number of the indicators have been selected from the Health Sector Medium Term Development Plan (HSMTDP) because they are relevant to this strategy. Fresh indicators have additionally been developed to cover aspects of the strategy which do not already have indicators in the HSMTDP. In consultation with the PPME directorate of MOH, the NQSSC will review the listed indicators and determine which of the indicators and which additional ones will be monitored, and how frequently each indicator will be measured and reported.

Table 10: Indicator Set

NO.	SPECIFIC AREA	INDICATOR	MEASUREMENT	FREQUENCY
A. Health Outcome and Output Indicators (priority health conditions)				
A1	Maternal health	Proportion of deliveries attended by a trained health worker*[1]	No. of deliveries attended by a trained health worker / number of deliveries	Quarterly
A2	Maternal health	Maternal Mortality Ratio*	No. of maternal deaths / 100,000 live births	Quarterly
A3	Maternal health	Institutional Maternal Mortality Ratio*	Institutional maternal deaths / institutional live births	Quarterly
A4	Maternal health	Eclampsia incidence rate	Number of women who develop eclampsia / Total number of deliveries	Quarterly
A5	Maternal health	PPH case fatality rate	Number of women who die as a result of PPH / Total number of women who experience PPH	Quarterly
A6	Maternal health	Antenatal Care Coverage 4+ (*)	No. of women undergoing ANC service by a skilled health provider at least four times during pregnancy / total number of expected pregnancies	Quarterly
A7	Neonatal health	Still birth rate*	Number of still births (fresh and macerated) / expected actual number of deliveries	Quarterly
A8	Neonatal health	Institutional Neonatal Mortality Rate*	No. of institutional deaths of neonates before the age of 28 days / institutional live births	Quarterly
A9	Neonatal health	Neonatal Mortality Rate*	No. of deaths within the first 28 days of life / 1,000 live births	Quarterly
A10	Neonatal health	Postnatal care coverage for newborn babies*	No. of newborn babies getting the services of skilled health providers within 2 and 7 days of birth/ Total number of live births	Quarterly
A11	Infant health	Infant Mortality Rate*	No. of deaths of infants below 1 year /1,000 live births	Quarterly
A12	Infant health	Proportion of children fully immunized (proxy Penta 3 coverage)*	Number received Penta 3 / projected population of children under 1 years	Quarterly
A13	Infant health	Exclusive breast feeding for six months*	No. of infants aged who are exclusively breastfed / total no. infants	Quarterly
A14	Child health	Under-5 Mortality Rate*	No. of deaths of children below 5 years / 1,000 live births	Quarterly
A15	Malaria	Proportion OPD attendance due to malaria*	No. of OPD attendants diagnosed as malaria / total OPD attendants	Quarterly

[1] Indicators with asterisks were selected from the Health Sector Medium Term Development Plan.

A16	Malaria	Institutional Malaria Under 5 Case Fatality Rate*	No. of children U5 who die as a result of malaria per year / no. children admitted and diagnosed with malaria	Quarterly
A17	Cerebrospinal meningitis (CSM, epidemic prone disease)	CSM case-fatality rate	Number of people who die from CSM / total number of people diagnosed with CSM	Quarterly
A18	Cholera (Epidemic prone disease)	Incidence of cholera	Number of cholera cases reported / Population	Quarterly
A18	Cholera (Epidemic prone disease)	Case-fatality rate for cholera	Number of people who die from cholera / total number of people diagnosed with cholera	Quarterly
A19	Mental health	Proportion of public hospitals offering mental health services*	No. of public hospitals offering mental health services / total no. of public hospitals (Trained clinical psychologist, trained psychiatrist or psychiatric nurse, availability of defined essential medicines for psychiatric care)	Quarterly
A20	Hypertension (NCD)	Proportion of hypertensive patients on treatment whose blood pressure is controlled	Number of hypertensives on treatment whose BP is within a defined normal range / Total number of hypertensives on treatment	Quarterly
A21	NCD	Uncontrolled hypertension admission rate	Number of patients admitted with uncontrolled hypertension / Total number of hypertensive patients	Quarterly
A22	NCD	Diabetes, short-term complications admission rate	Number of diabetics admitted with short-term complications / Total number of diabetic patients (Diabetic ketoacidosis, hypoglycaemia)	Quarterly
A23	NCD	Uncontrolled diabetes admission rate	Number of patients admitted with uncontrolled diabetes / Total number of diabetic patients	Quarterly
B. Quality Indicators				
B1	Responsiveness	Outpatient waiting time	Number of clients whose wait to be seen by the doctor was within agreed standard / Total number of clients interviewed (or observed)	Biannual
B2	Responsiveness	Prompt attention in emergencies (client perception)	Number of clients who perceive that they or their relatives received prompt attention in an emergency / Total number of clients interviewed who had reported in an emergency	Biannual
B3	Responsiveness	Prompt attention to emergencies (objective measurement)	Number of emergencies seen by a doctor within three minutes of arrival in the facility / Total number of patients reporting with emergencies	Annual
B4	Interpersonal skills	Staff attitude	Number of clients perceiving staff attitude as excellent / Total number of clients interviewed	Biannual
B5	Technical competence	Physical examination	Number of client folders showing physical examination / Total number of client folders sampled	Biannual
B6	Interpersonal skills	Information about client's condition	Number of clients who say they were given satisfactory information about their condition / Total number of clients interviewed	Biannual

B7	Access	Availability of tracer drugs	Number of tracer drugs available throughout the last half year / Total number of tracer drugs	Biannual
B8	Rational medicine use	Percentage of prescribed items appropriate for diagnosis	Number of prescribed items relevant to the diagnosis / Total number of items prescribed	Biannual
B9	Interpersonal skills	Information about clients' medicines	Number of clients who say they were given satisfactory information about all their medicines / Total number of clients interviewed who collected medicines at the pharmacy or dispensary	Biannual
B10	Continuity of care	Completeness of labelling of medicines	Number of medicine envelopes meeting agreed labelling standards /Total number of client's medicine envelopes inspected	Biannual
B11	Environment (Amenities)	Cleanliness of environment	Number of clients who say the facility environment is very clean /Total number of clients interviewed	Biannual
B12	Client satisfaction	% clients satisfied with service provision	Number of clients satisfied with identified elements of service delivery / Total number of clients interviewed	Biannual
B13	Continuity of care	Completeness of OPD records	Number of OPD records meeting the standard for completeness /Total number of OPD records reviewed	Biannual
B14	Continuity of care	Completeness of admission records	Number of admission records meeting the agreed standard for completeness /Total number of admission records reviewed	Biannual
B15	Continuity of care	Completeness of referral documentation	Number of referral records meeting the standard for completeness /Total number of referral records reviewed	Biannual
B16	Patient safety	Surgical site infection rate*	No. surgical wound infected among inpatients / total no. surgical interventions among inpatients	Biannual
B17	Patient safety	Perioperative pulmonary embolism or deep vein thrombosis rate	Number of patients who develop pulmonary embolism or deep vein thrombosis within the agreed hours of surgery /Total number of post-operative records reviewed	Biannual
B18	Patient safety	Perioperative haemorrhage or hematoma rate	Number of patients who develop haemorrhage or haematoma post-operatively /Total number of post-operative records reviewed	Biannual
B19	Mental Health	Availability of tracer mental health drugs	Number of tracer mental health drugs available throughout the last half year /Total number of tracer mental drugs	Biannual
C. System Improvement Indicators				
C1	Accurate and complete reporting of national health data	% of data system with accuracy and completeness	Number of health and community service delivery outfits reporting accurate data into the national health data system / Total number of health facilities and community service delivery outfits	Biannual
C2	Financial access	Proportion of population with active NHIS membership*	Number of active NHIS members / population	Annual

C3	Efficiency	% of MOH Agencies with operating ratio less than 1	Operating ratio = operating expenses/revenue	Quarterly
C4	Efficiency	% of MOH Agencies with +/- 10% variance from budgetary allocations each quarter	Variance Analysis; deviations in financial performance from the standards defined in MOH budgets	Quarterly
C5	Efficiency	% of NHIA-credentialed Health Facilities with prompt claims reimbursement per quarter	# NHIA-credentialed facilities reimbursed within one month of statutory 90 day period/Total # of credentialed facilities	Quarterly
C6	Emergency preparedness	Percentage of public hospitals with trained emergency team*	No. public hospitals with trained emergency team x 100 / total number of public hospitals	Annual
C7	Physical access (essential medicines)	Average stock-out rate of identified basket of medicines	**Number of gap items,** **population size, number of facilities affected**	Quarterly
C8	Improved coordination among health agencies	Implementation of national quality conference decisions	Number of health sector agencies implementing all decisions of annual national quality conference / Total number of health sector agencies	Annual
D. Indicators for Non-Health Care Service Providing Agencies				
D1	Quarterly reports	Timely submission of reports		Quarterly
D2	Quarterly reports	Completeness of report		Quarterly
D3	Financial reports	Completeness of financial reporting forms		Quarterly
D4	Customer experience	Customer satisfaction index		Biannual
D5	Performance index	Percentage of targets met		Annual
D6	Financial efficiency	Operating ratio		Annual
E. Additional Health Outcome and Output Indicators				
E1	Overall institutional mortality	Institutional all-cause mortality*	All institutional deaths / all discharges and deaths	Quarterly
E2		Inpatient mortality	Number of inpatient deaths in an agreed period of time (e.g., quarter) /Total number of patients admissions within the same period	Quarterly
E3		Emergency department mortality	Number of inpatient deaths agreed period /Total number of patients seen at the emergency department within the same period	Quarterly
E4		Outpatient attendance rate (private, public, teaching hospitals)	Total number of clients treated at the outpatient within an agreed period [Count each person once for multiple visits within the period]	Quarterly
E5	Equity	Per capita OPD attendance*	Total OPD attendants / population	Quarterly
E6		Inpatient admission rate	Total number of admissions within an agreed period	Quarterly
E7		Bed occupancy rate		Quarterly
E8		Average length of stay		Quarterly

Chapter 9: Conclusion

It is often quoted that "Every system is perfectly designed to get the results that it gets" (Proctor, 2008). In order to significantly improve the health outcomes in our country – especially in the priority areas of maternal health, child health, malaria, epidemic-prone diseases, non-communicable diseases, and mental health – we need to improve the coordination of our health care system itself in a holistic way that incorporates both the public and private health care sectors, partners with patients and providers, and builds continuous feedback loops to improve quality at all levels of the health care system.

This National Healthcare Quality Strategy builds on previous quality initiatives in Ghana and helps bring these initiatives together under a common goal and approach to quality, through a framework of quality planning, quality control, and quality improvement.

The clients of the Ghana health care system are our families, our relatives, ourselves. The time is now to harmonize and coordinate a health care quality system that ensures the delivery of the right care… in the right manner… in the right place… at the right time… ALL the time. This is quality in health care and remains our north star.

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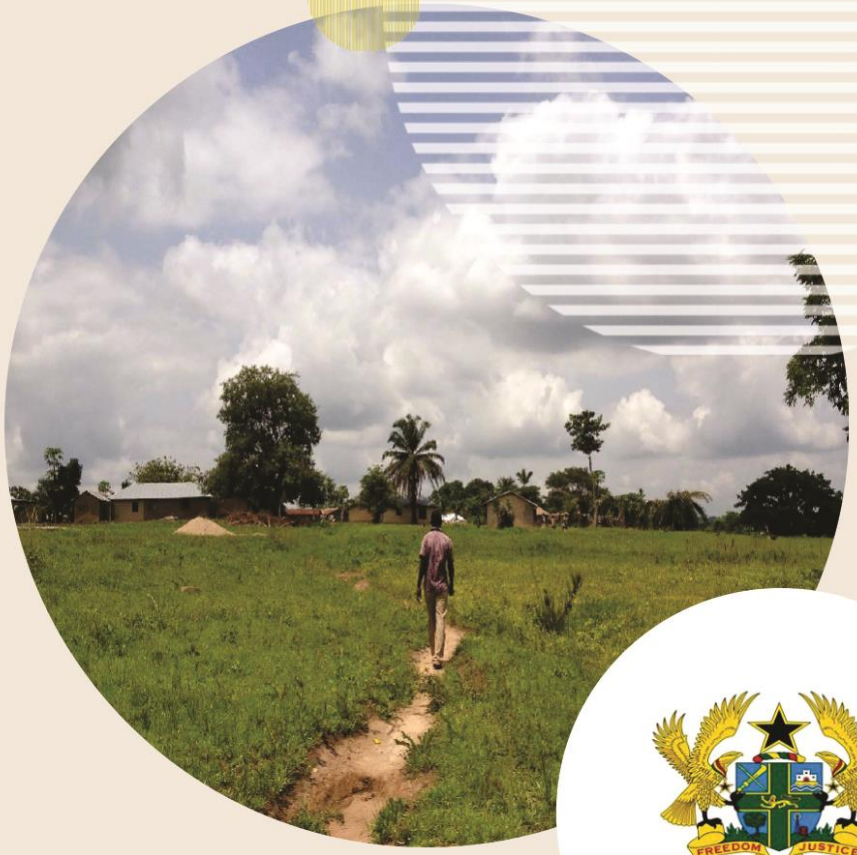


MINISTRY OF HEALTH
REPUBLIC OF GHANA

Ghana National Healthcare Quality Strategy (2017-2021)

Part 2: Coordination and Accountability Framework

December 2016
Accra

Chapter 1: Introduction

This document is the strategy implementation plan that accompanies the Ghana National Healthcare Quality Strategy. The document is divided into three parts:

1. Description of the general considerations governing the implementation
2. Coordination action plan and implementation responsibilities of sector agencies
3. Financial management for interventions

Chapter 2: Coordination and Accountability

2.1 General Considerations

The Policy, Planning, Monitoring and Evaluation (PPME) division of the Ministry of Health (MOH) will lead the change process, supported by the National Quality Strategy Steering Committee (NQSSC) and the National Quality Manager/Quality Management Unit (NQM/QMU). The MOH will depend largely on in-country technical support from experts in the priority health intervention areas and experts in the discipline of quality management.

The Ministry of Health will be ultimately accountable for successful implementation of the NHQS, but as a sector ministry, the MOH will focus on its role of deciding priorities and leading policy, planning, regulation and coordination. Therefore, even when the ministry is identified as being responsible for an activity, each agency, sub-sector and level will be accountable for implementation within their respective mandates. Furthermore, this document provides an indication of the source of funding to support the implementation of the National Quality Strategy (NQS), but day-to-day implementation within the agencies and at the various levels and within the teaching hospitals and the private sector will be funded by the respective agencies, levels, facilities and sub-sectors.

During the implementation of the NHQS, only the Ministry of Health will have the authority to amend the implementation plan, although recommendations can be made to the MOH by key players, particularly the NQSSC, QMU and Regional Quality Management Units. It is anticipated that implementation of the strategy will start in all regions of the country simultaneously. Communication between the MOH and stakeholders will be chiefly through the Regional Quality Management Units and heads of agencies and through in-person forums where necessary.

Comprehensive indicators to measure progress in the priority areas are outlined in the Ghana National Health Care Quality Strategy chapter on *Measuring Improvement*.

2.2 Action Plan for Coordination

Table 11: Action Plan for Coordination

Strategy	Activities	Responsibility	Resources	Short Term (2017-2019)	Long Term (2020-2021)	Indicator/Target
1. Establish structures at all levels of the health system to lead quality across planning, control/assurance and improvement	1A. Develop Terms of Reference for NQSSC, QMU, RQMUs, DQMUs, facility QMTs (Quality Management Teams) and agency quality teams	MOH PPME with support of NQSSC		**X** (Complete by Q1/2017)		TORs developed for NQSSC, QMU, RQMUs, DQMUs, facility QMTs
	1B. Appoint and inaugurate NQSSC, QMU, RQMUs, agency quality teams	Hon Minister supported by MOH PPME, MOH HRD		**X** (By Q1/2017)		NQSSC, QMU, 10 RQMUs, 15 agency quality teams inaugurated
	1C. Appoint and inaugurate DQMUs	RDHSs		**X** (By Q1/2017)		210 DQMUs inaugurated
	1D. Support the establishment of facility QMTs	DDHS/DQMUs with support from RQMUs		**X** (By Q2/2017)		Minimum of 2,500 QMTs established
	1E. Train NQSSC, QMU, RQMUs, agency quality teams on functions and quality management principles	Hon Minister through MOH PPME, MOH HRD		**X** (By Q2/2017)		15 agency quality teams, 10 RQMUs trained
	1F. Train DQMUs on their functions and quality management principles	RQMUs supported by NQSSC, QMU		**X** (By Q3/2017)		210 DQMUs trained
	1G. Train facility QMTs on their functions and quality management principles	DQMUs supported by RQMUs		**X** (By Q4/2017)		Minimum of 2,500 QMTs trained
	1H. Train facility managers in basic managerial skills	MOH HRD thru RHMTs/RQMUs, DHMTs/DQMUs		**X** (By Q3/2018)		Minimum of 2,000 facility managers trained
	1I. Develop indicators and monitor the performance of quality management units/teams (QMUs/QMTs) at all levels	QMU supported by NQSSC. Lower levels: RQMUs, DQMUs		**X** (From Q2/2018)	**X**	50% QMUs/QMTs meet targets on all indicators by 2021

Strategy	Activities	Responsibility	Resources	Short Term (2017-2019)	Long Term (2020-2021)	Indicator/Target
2. Develop and implement a uniform national policy on data reporting and data use by health workers and health sector agencies	2A. Develop national health data policy	MOH PPME supported by QMU, NQSSC (broad consultation)		**X** (Q4/2017)		Availability of national data policy
	2B. Disseminate and train data officers in facilities (public, private, teaching hospitals) and in other agencies in the health sector	MOH HRD, MOH PPME through NQSSC, QMU, RHMTs/RQMUs, DHMTs/DQMUs		**X** (Q1-Q4/2018)		Minimum of 2,000 data officers trained
	2C. Monitor data policy implementation in sector agencies, districts and facilities (data collection, entry/reporting, local use)	NQSSC, QMU, MOH PPME through RQMUs, DQMUs		**X** (from Q1/2019)	**X**	50% of sector agencies and facilities entering timely, accurate data into national system
	2D. Determine sanctions to apply to agencies, districts and facilities for not complying with data reporting responsibilities or reporting standards	Chief Director, MOH HRD, MOH PPME through QMU, NQSSC		**X** Q2/2019		Availability of guidelines on sanctions
	2E. Apply agreed sanctions to agencies, districts and facilities not complying with data reporting responsibilities or reporting standards (in line with health worker code of ethics)	Chief Director, MOH HRD, MOH PPME supported by QMU, NQSSC, RQMUs, DQMUs		**X** (From Q3/2019)	**X**	1. 80% sanctions for non-reporting 2. 80% sanctions for reporting false data 3. 80% sanctions for undue delay in reporting

Strategy	Activities	Responsibility	Resources	Short Term (2017-2019)	Long Term (2020-2021)	Indicator/Target
3. Improve patient safety, client satisfaction, and participation of patients and the community in quality governance structures at all levels	3A. Involve patients, the community and the media in quality improvement through participation in health committees at all levels	NQSSCs, RQMUs, DQMUs, QMTs		**X** (from Q1/2017)	**X**	Patient and/or community participation in NQSSC, 10 RQMUs; 210 DQMUs; 2,500 QMTs (or more)
	3B. Adopt/adapt/develop client satisfaction survey guidelines and tools and also tools for conducting staff and community satisfaction surveys	MOH PPME through NQSSC, QMU		**X** (From Q1/2018)		Availability of client satisfaction survey guidelines and tools
	3C. Train quality management units/teams of sector agencies, districts and facilities on the use of client satisfaction guidelines and tools	MOH PPME, MOH HRD, through NQSSC, QMU, RQMUs, DQMUs		**X** (Q1-Q2 2018)		Staff in 15 agencies, 10 RQMUs, 210 DQMUs, 2,500 QMTs or more trained
	3D. Involve patients in defining quality through biannual client satisfaction surveys	QMTs, DQMUs		**X** (from Q3/2018)	**X**	50% facilities report client satisfaction indicators twice a year
	3E. Train untrained health workers in the public, private service delivery sites and teaching hospitals on the existing national patient safety policy	MOH PPME, MOH HRD thru NQSSC, QMU, RQMUs, DQMUs		**X** (Q4/2018 to Q1/2019)	**X**	Minimum of 10,000 health workers trained
	3F. Provide basic tools to facilitate scale-up of the implementation of the existing national patient safety policy to all public and private service delivery sites and to all teaching hospitals	MOH Procurement, NQSSC, QMU, provider organizations, with support of RQMUs, DQMUs		**X** (Q4/2018 to Q1/2019)	**X**	Improvement in 50% of patient safety indicators nationwide between Q1/2019 and Q4/2021
	3G. Monitor patient and community participation; patient satisfaction; and patient safety	NQSSC, QMU through RQMUs, DQMUs		**X** (From Q2/2019)	**X**	See 2A, 2B, 2C above

Strategy	Activities	Responsibility	Resources	Short Term (2017-2019)	Long Term (2020-2021)	Indicator/Target
4. Improve quality culture in health workers through training in the requisite clinical skills and in quality improvement methods and incorporation of quality-related performance indicators in their job descriptions	4A. Provide in-service training on quality improvement for health workforce (in-service provision sites and within sector agencies)	MOH HRD, MOH PPME through NQSSC, QMU, RQMUs, DQMUs		**X** (From Q4/2017)	**X**	10,000 health workers trained in QI by Q4/2018; 40,000 trained by Q4/2020
	4B. Develop curricula and build quality into health workers' training and deliver the training to health workers	Training institutions supported by NQSSC, QMU			**X** (From Q1/2020)	Integrated Curriculum developed for QI, client communication, data use, etc.; 70% training institutions deliver training by Q4/2021
	4C. Incorporate ethics, Patient Charter requirements and quality standards into the job descriptions and appraisal system for health workers and workers in other health sector agencies	Provider organizations, agency heads, RHMTs, DHMTs, facility heads supported by MOH PPME, NQSSC, QMU		**X** (Q1/2018 to Q4/2019)	**X**	50% of facilities and districts appraise health staff on quality
	4D. Apply sanctions for non-compliance with ethics or breeches of the Patient Charter or reporting false data, in accordance with the Code of Ethics and Code of Discipline	Facility heads, DDHSs, RDHSs, agency heads			**X** (From Q1/2020)	No. of sanctions reduced by 50% by Q4 2021 compared to Q1 2020 levels
	4E. Appoint expert teams to review/develop protocols for the management of population health priorities as well as guidelines for traditional medical practice	Hon Minister of Health, Chief Director, PPME through QMU		**X** (Q1/2018, complete protocols by Q3/2018)		Availability of protocols for population health priorities
	4F. Train relevant health workforce in the use of the protocols	MOH PPME, MOH HRD, thru QMU, RQMUs, DQMUs		**X** (Q4/2018 to Q1/2019)	**X**	70% relevant health workers trained
	4G. Monitor adherence to protocols	HEFRA supported by NQSSC QMU, RQMUs, DQMUs		**X** (From Q2/2019)	**X**	70% average adherence to identified protocol
	4H. Train selected health workers in basic sign language	MOH PPME, MOH HRD, thru QMU, RQMUs, DQMUs supported by NGO for the Deaf		**X** (From Q4/2019)		Minimum of 1,000 health workers trained

Strategy	Activities	Responsibility	Resources	Short Term (2017-2019)	Long Term (2020-2021)	Indicator/Target
5. Create the "joy at work" environment to enable health workers to consistently deliver safe and high-quality care through the provision of essential inputs, incentives, recognition and reward	5A. Provide medicines and logistics for service provision at all levels	MOH Procurement; provider organizations		**X** (From Q1/2018)	**X**	Maximum of 5% stock-out rate for identified tracer drugs in all service delivery sites
	5B. Provide incentives, including rural incentives	MOH HRD supported by provider organizations		**X** (From Q1/2018)	**X**	Over 50% of staff are satisfied with incentives provided
	5C. Develop criteria to use in awarding deserving staff	MOH PPME, NQSSC, QMU, provider organizations		**X** (Q2/2018)		Availability of criteria
	5D. Apply agreed criteria to reward/award deserving staff at facility, district, regional and national levels	Chief Director through NQSSC, QMU, RQMUs, DQMUs, QMTs		**X** (From Q3/2018)	**X**	Four annual awards at national level; four in 100% regions; four in 50% districts; four in 30% facilities
6. Enhance transparency through the ranking of like facilities and like agencies in league tables, with awards at annual quality conferences that involve patients, communities and providers	6A. Agree quality metrics to use in ranking agencies and like facilities in league tables	MOH PPME thru NQSSC, QMU, RQMUs, DQMUs		**X** (From Q4/2017)		Quality indicators available (see 6B below)
	6B. Build quality-related indicators into the performance contracts of health facilities and sector agencies	MOH PPME supported by NQSSC, QMU		**X** (From Q1/2018)	**X**	Quality indicators built into all sector agencies and health facilities (public, private, teaching hospitals)
	6C. Maintain league tables for like health facilities and for other health sector agencies	MOH PPME through NQSSC, QMU, RQMUs, DQMUs		**X** (From Q1/2018)	**X**	League tables available for sector agencies, regions, districts, facilities, communities
	6D. Hold annual national quality conference to evaluate NQS implementation and to award deserving health facilities and deserving health workers	MOH PPME through QMU, NQSSC, RQMUs		**X** (From Q4/2018)	**X**	Minimum of four annual awards held between 2018 and 2021
	6E. Carve out specific time slot during the Annual National Health Summit to share updates, successes and challenges on the quality strategy implementation	MOH, NQSSC, QMU		**X** (Q2/2017)		Key next steps for quality strategy implementation captured in Aide Memoire

Strategy	Activities	Responsibility	Resources	Short Term (2017-2019)	Long Term (2020-2021)	Indicator/Target
7. Improve supportive supervision and monitoring across all MOH directorates, sector agencies and all service delivery sites in the public, private sub-sectors and teaching hospitals	7A. Adopt/adapt existing supportive supervision guidelines and tools for use in all MOH directorates, agencies and service delivery facilities and sites	MOH PPME, QMU, NQSSC, supported by provider organizations		**X** (Q1/2018)		Existing supportive supervision (SS) guidelines and tools adopted/adapted
	7B. Train supervisors on the supportive supervision guidelines and tools	MOH PPME, MOH HRD, NQSSC, QMU, through RQMUs, DQMUs, provider organizations		**X** (Q2/2018 to Q3/2018)	**X**	Managers and technical experts in 50% agencies and provider sites trained in SS
	7C. Monitor implementation of supportive supervision within the health sector	MOH PPME, QMU, NQSSC, through RQMU, DQMUs, provider organizations		**X** (From Q4/2018)	**X**	100% MOH directorates 50% of agencies, 100% regions, 80% districts and 50% service delivery sites implement SS
	7D. Adopt/adapt existing peer-review guidelines and tools for use among like agencies and like providers	MOH PPME, thru QMU, NQSSC, RQMUs, provider organizations		**X** (Q4/2018 to Q1/2019)		Existing peer-review guidelines and tools adopted/adapted
	7E. Train relevant health workforce and agencies on peer-review guidelines and tools	MOH PPME, MOH HRD, NQSSC, QMU thru RQMUs, DQMUs		**X** (Q2/2019 to Q3/2019)		50% agencies and facilities trained
	7F. Monitor implementation of peer review among agencies and facilities	NQSSC, QMU through RQMUs, DQMUs		**X** (From Q4/2019)	**X**	50% like agencies and like facilities participate in peer review
	7G. Develop reporting format for MOH directorates, sector agencies, facilities	MOH PPME through NQSSC, QMU		**X** (Q3/2017)		1. Availability of reporting format for MOH directorates, sector agencies 2. Availability of reporting format for facilities
	7H. Monitor reporting by MOH divisions, sector agencies and facilities quarterly	MOH PPME through QMU, NQSSC, RQMUs, DQMUs		**X** (From Q4/2017)	**X**	1. 50% sector agencies and MOH directorates report every quarter to NQSSC 2. 80% health facilities (public, private, teaching) report every quarter to RQMU

	7I. Assess performance and provide feedback to reporting facilities, agencies and divisions quarterly	MOH PPME, QMU, NQSSC supported by RQMUs, DQMUs		**X** (From Q4/2017)	**X**	80% reporting agencies, directorates and facilities given feedback
	7J. Undertake sector-wide reviews once a year	MOH PPME supported by QMU, NQSSC, regulators, RQMUs, DQMUs		**X** (From Q4/2017)	**X**	Annual sector-wide reviews undertaken

2.3 Stakeholder Roles

Table 12 below summarizes the roles of the various key stakeholders in the implementation of the strategy.

Table 12: Stakeholder Roles in Implementation

No.	STAKEHOLDER	ROLES	REMARKS
1.	Hon Minister of Health	• Overall oversight for development, launch and implementation for National Health Care Quality Strategy • Appoint and inaugurate National Quality Steering Committee (NQSSC) • Establish national QMU and appoint NQM, regional QMUs in all 10 regions	
2.	Chief Director	• Ultimately responsible for health care quality in Ghana • Chair NQSSC • Support agencies to establish agency quality teams • Support the Director of Policy Planning Monitoring and Evaluation to exercise closer operational oversight over the NQSSC	
3.	National Quality Steering Committee (NQSSC)	• Guide the implementation of the national quality strategy, including patient safety policy and subsequent variations of these • Determine national quality priorities, policies and high-level planning • Decide and apply indicators for monitoring the implementation of quality plans, policies and health outcomes in the priority areas • Define data requirements for the measurement of quality at the various levels of the health system • Provide guidelines/policy for compliance to data quality and reporting • Strengthen leadership and ownership among stakeholders in the health system on quality planning, quality assurance and quality improvement at all levels, in all sub-sectors and in all sector agencies • Provide a platform for inter-agency knowledge sharing and learning • Develop Terms of Reference for RQMUs, DQMUs, Facility QMTs • Support regions to establish DQMUs • Support MOH PPME and MOH HRD to train RQMUs • Monitor implementation of NQS in all agencies at all levels • Establish criteria for identifying and celebrating teams and individuals improving health care and patient outcomes	• Technical experts supported by their respective agencies • Committee chaired by Chief Director

No.	STAKEHOLDER	ROLES	REMARKS
4.	National Quality Management Unit (QMU)/National Quality Manager (NQM)	• Day-to-day oversight of quality across all agencies, sub-sectors and all levels on behalf of Chief Director • Implement a certification mechanism for data and information systems employed in the delivery of health care at all levels • Conduct operational research/National quality surveys/Health systems research • Publish an annual report on the state of health care quality in Ghana • Support NQSSC to develop Terms of Reference for RQMUs, DQMUs, Facility QMTs • Coordinate with NQSSC to support regions to establish DQMUs • Lead the monitoring of NQS implementation • Identify required policies, standards and protocols and initiate the development process • Publish annual State of Health Care Quality in Ghana reports	• Located in the MOH PPME • Focal person is National Quality Manager • Reports to the Chief Director
5.	MOH PPME Directorate	• Lead the development of policies, standards and protocols identified by national QMU • Lead training of QMUs and QMTs at all levels, with support of MOH HRD and NQSSC • Lead training of health workers in standards and protocols, with support of MOH HRD and NQSSC • Host and support national QMU and NQSSC in their monitoring functions	• Lead directorate in the ministry for quality
6.	MOH HR Directorate	• Support MOH PPME to train QMUs and QMTs at all levels • Train facility heads in basic managerial skills in collaboration with PPME • Support other forms of training geared towards quality management/improvement	
7.	MOH Procurement Directorate	• Supply quality, efficacious medicines and other medical commodities to facilities and community service delivery points on continuous basis • Monitor availability of medical commodities at service delivery sites through the national health database and through the RHMTs and DHMTs	• Liaise with RHMTs and DHMTs
8.	Health Facilities Regulatory Agency (HEFRA)	• Accredit and license health facilities • Support NQSSC and QMU to develop quality standards for health facilities and for other health sector agencies • Monitor quality of care in all health facilities • Sanction health facilities for deviation from ethical standards and for non-compliance with national health data policy	• Collaborate with RHMTs /RQMUs and DHMTs /DQMUs to implement HEFRA's monitoring function

No.	STAKEHOLDER	ROLES	REMARKS
9.	Regional Quality Management Units (RQMUs)	• Apply approved indicators for monitoring the implementation of quality plans, policies and health outcomes in the priority areas in the region • Facilitate the implementation in the region of the harmonized approaches and data systems determined by the national NQSSC • Strengthen collaboration among agencies in quality planning, quality assurance and quality improvement initiatives originating both locally and internationally and operating in the region • Strengthen leadership and ownership among stakeholders in the health system on quality planning, quality assurance and quality improvement in the region • Disseminate national standards to the districts and train staff of the districts • Partner with HEFRA to monitor the implementation of policies and plans, and health outcomes in the districts on behalf of the NQSSC • Use national standards to assess institutions and determine underperforming agencies, for mentoring and make recommendations for improvements, with reward systems • Establish and train DQMUs in all districts and supervise districts training of facility QMTs • Monitor the functioning and performance of DQMUs	• Regional Health Committee will be the convener • Reports to NQSSC
10.	District Quality Management Units (DQMUs)	• Strengthen leadership and ownership among stakeholders in the health system on quality planning, quality assurance and quality improvement in the district and sub-districts • Lead quality planning in the district and sub-districts • Disseminate national standards to the facilities and communities and train staff at the facility and community levels (both public and private) • Monitor the implementation of policies and plans, and health outcomes in the facilities and communities • Use national standards to assess institutions and determine underperforming institutions, for mentoring and make recommendations for improvements, with reward systems	• District Health Committee, led by the District Director of Health Services (DDHS) will be convener • Reports to RQMU
11.	Facility Quality Management Teams (QMTs) – teaching, public, private	• Exhibit leadership, participation and accountability at the health facility level • Facility head to be responsible for the implementation of National Quality Strategy in the facility • QMT to feedback to the DQMU (regional hospitals feedback to RQMUs) any implementation challenges or any other interesting development • Use national standards to assess departments of the facility and determine underperforming departments, for mentoring and make recommendations for improvements, with reward systems • Disseminate and continuously train staff on Quality Strategy and Guidelines • Oversee implementation of quality improvement activities across the facility • Inculcate quality culture into health workforce	Quality Management Team will be headed by the head of the health facility

No.	STAKEHOLDER	ROLES	REMARKS
12.	Community level	• Collaborate with other agencies, organisations and relevant stakeholders in integrative planning and implementation of the National Quality Strategy and create modalities for peer learning • Use national and quality standards to plan and implement health programs • Establish Quality Improvement Teams/Committees at the community level	• Composition: CHPS, CHO, Health Promotion Officer • Supported by DHMT
13.	Patients and community groups	• Participation in quality governance structures at all levels • Participation in defining quality • Participation in quality improvement • Adherence to health advice and lifestyle modification	
14.	Civil Society Organizations	• Advocacy for policy and practice • Community mobilization for health • Community education	
15.	Service Provider Organizations	• Support the MOH, QMU, NQSSC in the development of policies, standards and protocols • Establish and maintain an organizational Quality Management Unit • Supervise, monitor and evaluate facilities in their jurisdiction to adhere to quality and ethical standards in collaboration with RQMUs and DQMUs	• Include GHS, CHAG, Ahmadiyya, GAQHI
16.	Professional Bodies	• Support MOH in the development of policies, standards and protocols • Establish professional Quality Management Units/Teams • Peer review professional colleagues towards the delivery of safe and quality care	• Include GMA, PSGH, GRMA, GRNA, Biomedical Scientists, Traditional Medical Practice Association
17.	Regulatory Bodies	• Support MOH in developing policies, standards and protocols • Support continuing education through CPDs • Monitor adherence to professional ethics and standards • Monitor performance of health facilities (HEFRA)	• Include MDC, NMC, TMPC, HEFRA, FDA, Pharmacy Council
18.	Training Institutions	• Support MOH in the development of policies, standards and protocols • Develop and implement quality training curricula • Provide training in technical disciplines, managerial skills and quality for health professionals	• Include schools of nursing, midwifery, medicine, dentistry, public health, pharmacy, colleges
19.	NHIA	• Provide financial access • Incentivize the provision of quality and safe care by service providers • Undertake credentialing of health facilities to ensure minimum standards are in place for the provision of quality care to NHIA Clients	
20.	Development Partners	• Support the ministry and its agencies to plan and implement programs to improve quality and safety	

Chapter 3: Financial Management for Interventions

3.1 Funding sources

A resource plan will be looked at in the short, medium and long term. In the short term, we will use the costed implementation plan, dissemination strategy and monitoring and evaluation of and use these as a business case. Champions will use the business case for resource procurement. The strategy is to get a good buy-in and support from WHO, UNICEF, JICA, USAID, DFID, KOICA and the World Bank, as the strategy aims to improve quality and safety for all, including the poor.

In the long-term we shall explore internal resources in order to sustain the momentum. In this regard health facilities and agencies will use their internally generated funds (IGF) to implement the strategy.

3.2 Key cost elements

The key cost elements are as tabulated in the table below:

Table 13: Key Cost Elements

No.	Process	Outcome (Costing)
1.	Policy development	Cost of strategy development
2.	Policy dissemination: • Prepare dissemination/communication strategy • Use champions • Direct/electronic mechanisms • Dissemination meetings at all levels	Cost of dissemination
3.	Coordination and accountability framework	Cost of coordination and accountability processes
4.	Monitoring and evaluation (M&E)	Cost of M&E plan
5.	Executive capacity building • Training manual(s) • Facilitation • Training facilities and materials • Daily subsistence allowance for participants	Cost of capacity building

3.3 Use of resources and accountability

Priority activities in the strategy will be identified for priority funding; for example, dissemination of the strategy and stakeholder engagement will be definite priorities. There are options for accountability, such as the UN approach whereby funds are released directly to the government partner. Other options include a harmonized approach to cash transfer in which reports are written indicating itemized cost elements with evidence of appropriate spending such as invoices and receipts; performance based grants; and the cashless approach.

Ghana National Healthcare Quality Strategy (2017-2021)

Appendices

Appendix 1: Stakeholders Targeted for Interview and/or Interviewed

The following were targeted for interview (*stakeholders interviewed):

1. Chief Director, Ministry of Health*
2. Director PPME MOH*
3. Director Procurement, MOH*
4. Health Facilities Regulatory Authority (HEFRA)*
5. Medical and Dental Council (MDC)
6. Nursing and Midwifery Council*
7. Pharmacy Council*
8. Registrar, Allied Health Professional Council*
9. Traditional Medical Practice Council*
10. Mental Health Authority*
11. Food and Drugs Authority (FDA)*
12. Director General, Ghana Health Service*
13. Ghana Health Service directors at the national level*
14. Regional Directors of Health Services*
15. District Directors of Health Services*
16. Christian Health Association of Ghana (CHAG)*
17. Ghana Association of Quasi-Government Institutions (GAQHI)*
18. Ahmadiyya Muslim Mission (Health Services)*
19. Society of Private Medical and Dental Practitioners (SPMDP)*
20. Community Practice Pharmacists Association (CPPA)*
21. Teaching hospitals*
22. Primary hospitals (CHAG, quasi-government and private sectors)*
23. Ghana Medical Association*
24. Pharmaceutical Society of Ghana (PSGH)*
25. Ghana Registered Nurses and Midwives Association (GRNMA)
26. Association of Biomedical Scientists*
27. Traditional Medicine Practitioners Association
28. Association of Health Service Administrators of Ghana (AHSAG)
29. Medical schools
30. Dental school
31. School of Pharmacy*
32. Nurses Training College*
33. Midwifery Training Schools*
34. Biomedical training institutions
35. College of Physicians and Surgeons*
36. National Health Insurance Authority*
37. Private Health Insurance Agency*
38. The Trades Union Congress*
39. The Ghana Employers Association (GEA)*
40. Coalition of NGOs in Health*
41. Consumer Protection groups*
42. Patients*
43. Community*
44. The media*
45. Ministry of Women, Children and Social Protection (MWCSP)*
46. Ministry of Local Government
47. Ministry of Finance and Economic Planning (MOFEP)
48. National Development Planning Commission (NDPC)
49. Development partners*

Appendix 2: National Quality Strategy Steering Committee Members

Table 14: Members of the National Quality Strategy Steering Committee

National Quality Strategy Steering Committee		
#	**AGENCY**	**COMMENTS**
1.	Chief Director, Ministry of Health	General oversight over policy actions and implementation within the Ministry's agencies
2.	Director, Policy Planning, Monitoring & Evaluation	Chair of NQSSC
3.	Director of Procurement & Supply, MoH	Supply chain management
4.	Director, National Ambulance Service	Emergency and referral services
5.	Representative, Teaching Hospitals	Four representatives, one from each Teaching Hospital
6.	Ghana Health Service: i. Director General ii. Director, PPME iii. Director, ICD iv. Director, FHD v. Director, PH	
7.	Representative, Christian Health Association of Ghana	Faith-based sector with experience in large-scale improvement work
8.	Representative of Society of Private Medical & Dental Practitioners	Private sector
9.	Representative of Health Regulatory Authorities	To represent all Regulatory Agencies in Ghana and set up mechanisms for disseminating information to them and receiving feedback
10.	Representative, Health Training Institutions	Pre-service education/training
11.	Representative, National Blood Transfusion Services	Reliable supply of safe blood nationwide
12.	Representative, Mental Health Authority	Mental health
13.	Representative, National Health Insurance Authority	Health financing
14.	Representative, Patient Groups	Patient voice
15.	Technical Support: i. Institute for Healthcare Improvement ii. Ubora Institute iii. WHO iv. Systems for Health, USAID v. UNICEF	Perspectives from Quality Improvement, Infection Prevention Control, Patient Safety, Data Analysis, etc.

Appendix 3: National Quality Strategy Core Working Group (NQS-CWG) Members

Table 15: Members of the Core Working Group

NAME	INSTITUTION/AGENCY
DR. ISAAC C.N.MORRISON	SOCIETY OF PRIVATE MEDICAL & DENTAL PRACTITIONERS
DR. MEMUNA TANKO	NATIONAL HEALTH INSURANCE AUTHORITY (NHIA)
DR. SAMUEL KABA	GHANA HEALTH SERVICE (GHS)
CHRISTIANA AKUFFO	
BENJAMIN NYAKUTSEY	MINISTRY OF HEALTH (MOH)
JOSEPH DODOO	
MARK BIGOOL	
ELOM HILLARY OTCHI	
BARNABAS YEBOAH	
EMELYN LOVETT YORKE	
AMINU ZULEIHA	
KAFUI DANSU	
DR. SIMPSON ANIM BOATENG	HEALTH FACILITY REGULATORY AUTHORITY (HEFRA)
DR. NICHOLAS A. TWENEBOA	INDEPENDENT CONSULTANT
SODZI SODZI-TETTEY	INSTITUTE FOR HEALTHCARE IMPROVEMENT (IHI)
TRICIA BOLENDER	
AMRITA DASGUPTA	
LAUREN MACY	
CLEOLA PAYNE	
ERNEST KANYOKE	UBORA INSTITUTE
PHILOMINA AMOFAH	
JOLANDA STEENWIJK	
ROSELINE DOE	WORLD HEALTH ORGANISATION (WHO)
DR. HARI KRISHNA BANSKOTA	UNICEF
DR. PETER BAFFOE	
MARNI LAVERENTZ	USAID SYSTEMS FOR HEALTH
DR. ERNEST OPOKU	
ISAAC AMENGA-ETEGO	
DR. WISDOM ATIWOTO	QUEAUJI CONSULT

Appendix 4: Synopsis of Interview Guide for National Quality Strategy

The objective of the interviews is to collect primary data to enrich the Current State Analysis and inform NQS formulation.

1. Quality of health care

- What you understand by quality of health care in the Ghanaian context
- What elements of quality are most important to you and why
- Ways in which your organization influences quality
- The role of patients and the community in influencing quality of care
- What the current state of quality is
- What you see as the "ideal" situation of quality
- What the barriers to achieving quality of healthcare are
- How we can reach the "ideal" state

2. Leadership and governance

- How quality policies and plans are developed; how this might be improved
- How quality is regulated and implemented from the national to the local level; how this might be improved
- What quality levers/spheres of influence/drivers of quality exist at the various levels
- How these levers might be used to improve quality processes at all levels, across regions and across sub-sectors
- Degree of involvement of the private sector
- Existence or otherwise of accountability systems
- How coordination and collaboration can be achieved

3. Quality initiatives

- What quality initiatives you have been involved in (or are you aware of)
- How the initiatives were planned, implemented and monitored
- The ownership of the initiatives
- The results of the initiatives
- With whom and how learning was shared
- How the initiatives were related/harmonised with other initiatives

- How ownership, collaboration and harmonization of quality initiatives might be improved

4. Data

- What indicators your organization uses to monitor quality
- Who collects the data
- Reliability of the data
- The movement of the data
- Provision of feedback
- Who uses the data
- Public sector compared with private sector

5. Health of the population

- Priority diseases/health conditions
- Existing initiatives to address them
- Who is involved in current initiatives (e.g., public vs. private; provider vs. patient/community; policy makers vs. implementers)
- Effectiveness of current efforts
- How participation and outcomes can be improved

Appendix 5: The Juran Trilogy

The Juran Trilogy summarizes three organizational components of quality: Quality Planning, Quality Assurance, and Quality Improvement.

Quality Planning (QP) entails determining the needs that a health care system must fulfill, and establishing the goals and strategy to meet these needs. Quality Planning involves designing a structure that delivers the right care to patients at the right time, every time. It rests largely on key principles laid out by W. Edwards Deming:

- Systems produce results.
- Data, especially variation in performance, reveals how the system functions.
- The system must create, adapt to, and spread new knowledge.
- Humans ultimately carry out the work; the system must be designed around human psychology.

Quality Assurance (QA), or Quality Control, is often the starting point for a country's quality journey. QA is typically a regulatory approach to ensuring that quality remains at or above baseline expectations. QA could include accreditation, licensing, empanelment of facilities, etc. Often these are key government or parastatal functions to ensure a certain level of quality with a broad stroke. Viewed within the Juran Trilogy, it is clear that QA is a vital component of a quality strategy, which must be tightly integrated with planning and improvement efforts.

Finally, Quality Improvement (QI) allows a system achieve a new level of performance beyond what QA requires. QI is a continuous process whereby organizations iteratively test and measure changes, achieve ambitious aims, and spread best practices.

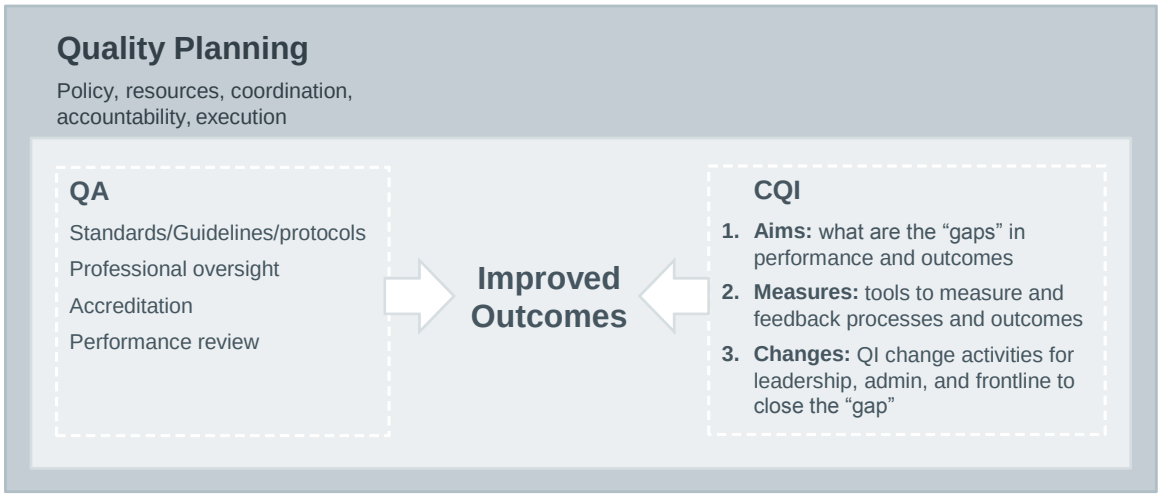


Figure 3: The Juran Trilogy

Appendix 6: Health Sector Medium Term Development Plan in Relation to the NQS

The NHQS is developed in the milieu of the Health Sector Medium Term Development Plan 2014-2017 (HSMTDP) crafted by the Ministry of Health. The HSMTDP states that "The goal of the health sector is to have a healthy and productive population that reproduces itself safely" (MOH, 2014).

The HSMTDP recognizes the key players in health service delivery as the Ghana Health Service (GHS), the Christian Health Association of Ghana (CHAG) and the Teaching Hospitals, acknowledging that the private sector provides significant health services. "The Ghana Health Service provides public health and clinical services at primary and secondary levels. As part of the effort to improve access to health services, the Community-Based Health Planning and Service programme (CHPS) has also been designated as another level of health care delivery that combines public health and basic clinical care activities" (MOH, 2014).

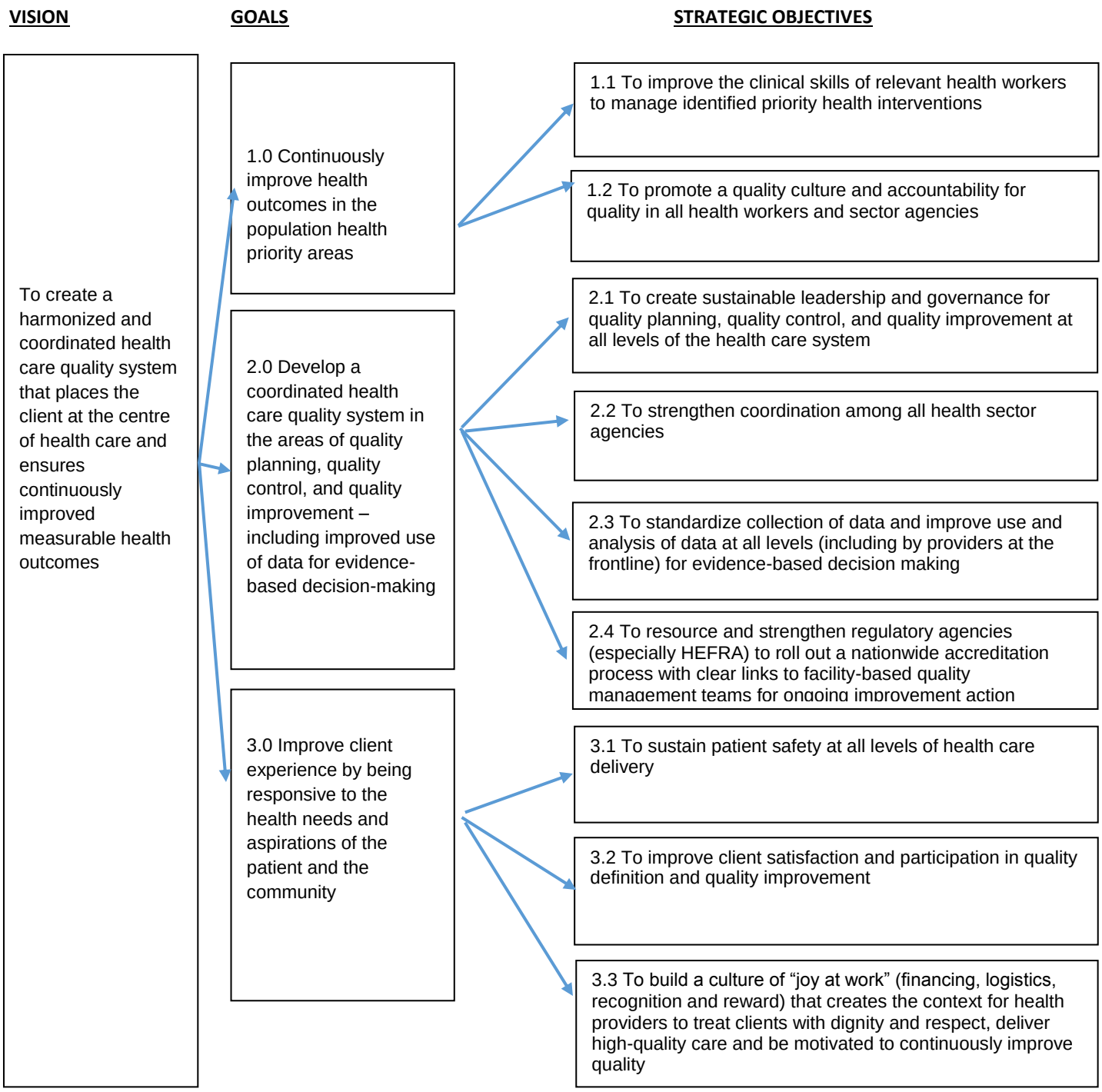
The document catalogues the top 10 causes of outpatient attendance as malaria, upper respiratory tract infections, diarrhoeal diseases, skin diseases, rheumatism and other joint pains, anaemia, hypertension, intestinal worms, acute eye infections and acute urinary tract infection.

Challenges mitigating against achieving desirable health outcomes identified in the HSMTDP include limited geographical and financial access to health services; poor quality of the services provided, both from technical and client perspectives; weak coordination of regulatory functions within the health sector, leading to continuing influx of substandard goods and services; weak integrated research, information and monitoring systems to support evidence-based decision making and to track performance in priority areas; weak leadership capacity within the health sector to coordinate and promote effective participation of civil society organizations and the private sector in health; and sub-optimal staff mix coupled with inequitable distribution of existing staff.

Health sector development issues prioritized in the HSMTDP are leadership, governance and management; health research and information management; human resource development; regulation; financing; and health service delivery.

Issues prioritized under health service delivery are meeting health-related MDGs with the challenges of persistent high neonatal, infant and maternal mortality, morbidity and mortality from malaria, persistence of HIV and TB; disease promotion and control, with a focus on increasing morbidity and mortality from NCDs, high prevalence of communicable diseases including epidemic-prone diseases and climate-related diseases; high morbidity and mortality from neglected tropical diseases such as yaws, leprosy, buruli ulcer and filariasis; access to health care services with huge gaps in geographical access; quality of care with a focus on public and users; concerns about the quality of health care; and a huge unmet need for mental health services. The HSMTDP envisages community- and facility-based interventions for childhood illnesses, attention to immunization in the Expanded Program on Immunization (EPI) and improved response to medical emergencies.

Appendix 7: Driver Diagram



Appendix 8: Data Systems and Reporting Feedback Flow

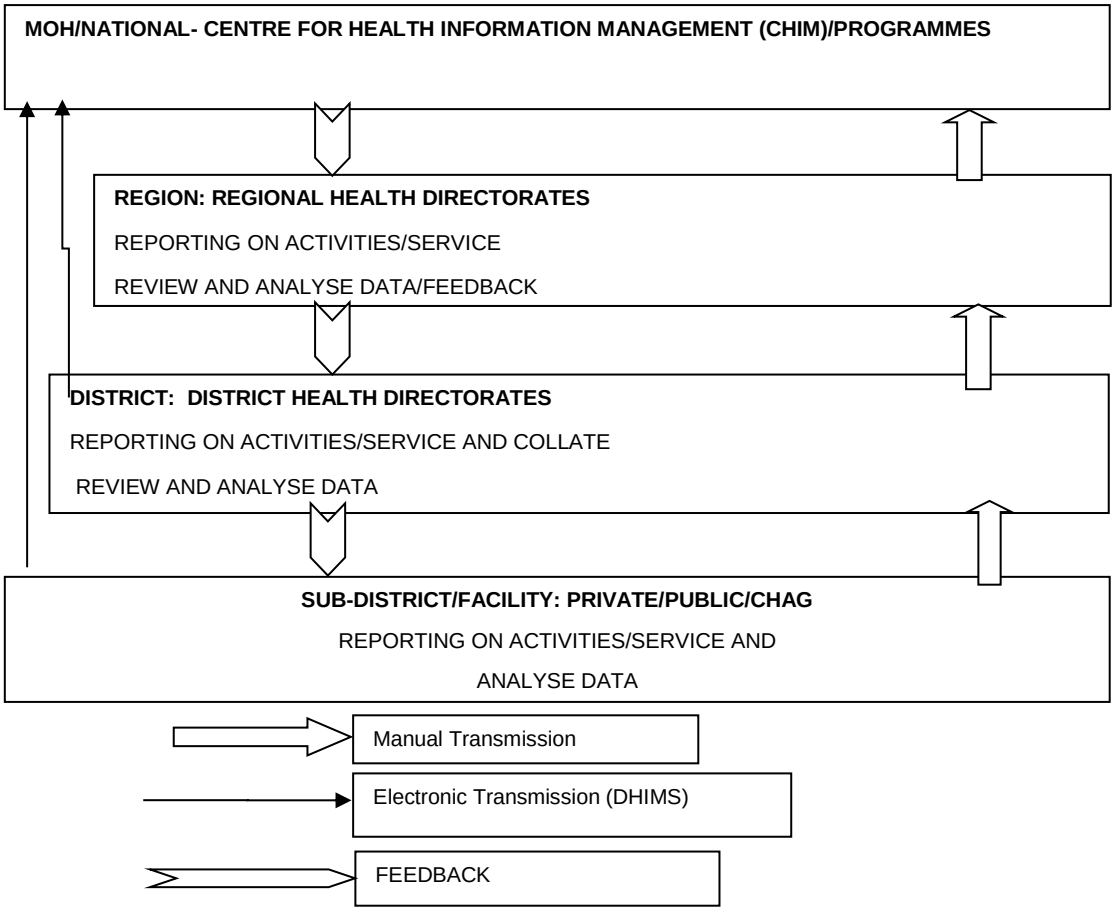


Figure 4: Data Systems Flow

Source: Standard Operating Procedures on Health Information, 2nd Edition, Ghana Health Service, January 2014

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