

# QUALITY HEALTH SERVICES

## A PLANNING GUIDE



Quality health services: a planning guide

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# Abbreviations

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IPC	infection prevention and control
OECD	Organisation for Economic Co-operation and Development
PHC	primary health care
QI	quality improvement
UHC	universal health coverage
WASH	water, sanitation and hygiene
WHO	World Health Organization

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# Introduction

**Quality health services: a planning guide** provides practical guidance to plan for quality health services. A broad body of existing theories related to promoting quality of health services has informed the content presented here.

## Why quality?

Quality of health services is critical to achieving universal health coverage (UHC). Overall, between 5.7 and 8.4 million deaths are attributed to poor quality care each year in low- and middle-income countries, which accounts for up to 15% of overall deaths in these countries (1). The occurrence of adverse events, resulting from unsafe care, is considered to be one of the 10 leading causes of death and disability worldwide. Improving access to health services must go hand in hand with improving the quality and safety of these services. Further, poor quality health services – particularly unsafe care – can decrease people’s trust in the health system. Indeed, there is an urgent need to place quality at the centre of national-, district- and facility-level actions in order to progress towards UHC.

## What do we mean by quality?

There is growing acknowledgment that quality health services across the world should be (2):

- effective: providing evidence-based health care services to those who need them;
- safe: avoiding harm to people for whom the care is intended; and
- people-centred: providing care that responds to individual preferences, needs and values.

In addition, to realize the benefits of quality health care, health services must be:

- timely: reducing waiting times and sometimes harmful delays for both those who receive and those who give care;
- equitable: providing care that does not vary in quality on account of age, sex, gender, race, ethnicity, geographic location, religion, socioeconomic status, linguistic or political affiliation;
- integrated: providing care that is coordinated across levels and providers, and makes available the full range of health services throughout the life course; and
- efficient: maximizing the benefit of available resources and avoiding waste.

Of note, unsafe health care causes a significant amount of avoidable patient harm, human suffering and negatively affects the quality of health services provided. Estimates show that in high-income countries, as many as one in ten patients is harmed while receiving hospital care (2). In low- and middle-income countries, recent evidence suggests that 134 million adverse events occur each year due to unsafe care in hospitals (3). Indeed, patient safety is a fundamental aspect of quality care and it is often used as a key entry point to improve the quality of health services.

Of further note, the description of quality health services spans promotion, prevention, treatment, rehabilitation and palliation, and implies that quality of care can be measured and continuously improved through provision of evidence-based care that reflects the needs and preferences of service users. To help readers navigate the various uses and definitions of quality-related terms, links to several relevant glossaries are presented in Annex 1.

In 2018, three publications shone a spotlight on quality of health services (1,2,4). The World Health Organization (WHO), the World Bank, the Organisation for Economic Co-operation and Development (OECD), the National Academies of Sciences in the United States of America and the Lancet Global Health Commission all called for quality to be a core UHC consideration. As summarized by the WHO Director-General, without quality, UHC remains an empty promise (5). To capitalize on this global focus, action is clearly required.

To support the necessary action, answers are needed to some of the most burning questions on quality of health services. Questions such as: What do health leaders across all levels of the system need to do? How will they take the necessary actions? What are the essential linkages between national, district and facility level action to enhance quality of health services? What principles need to be considered? What capacities are required to support action for quality? What are some of the initial steps? What are the ongoing activities that need to be sustained? These are some of the questions that this planning guide aims to address.

## Purpose of this document

This planning guide focuses on actions required at the national, district and facility levels to enhance quality of health services, providing guidance on implementing key activities at each of these three levels. It highlights the need for a health systems approach to enhance quality of care, with a common understanding on the activities needed by all stakeholders.

The current guide sits alongside more detailed guidance for specific population groups, in particular quality of care for maternal, newborn and child health. It articulates the key actions required to improve the quality of health services for the entire population. It recognizes that the path varies for each country, district and facility – stimulating the reader to consider multiple factors and entry points for action. National-, district- and facility-level authorities are encouraged to adopt whichever approaches they determine to be the most appropriate for their context, based on evidence and implementation experience, and to be open to adapting approaches based on what they learn. The planning guide focuses on principles and deliberately does not highlight specific branded approaches to quality improvement (QI).



## Who is this document for?

This planning guide is for staff working at all levels of the health system (i.e. national, district and facility) who have a role in enhancing the quality of health services. It is also relevant to all stakeholders initiating and supporting action at facility, district and/or national levels both in the public and private sectors (Box 1). The stewardship role of the national authorities in planning quality health services for its population is emphasized.

## Navigating the document

Successive parts of this planning guide cover each of the three levels: part 1 addresses the national level; part 2 the district level; and part 3 the facility level. Each part builds on and is linked to preceding parts. The success and sustainability of quality improvement efforts is dependent on effective integration between these levels and the need for leaders at each level to understand the activities required not just within their own area but at all levels. In some countries, there will be an array of sub-national levels to consider (e.g. states, regions, provinces or counties). In these cases, the guidance for national or district level needs to be adapted according to their roles in health planning and implementation.

Improving quality often does not have a defined start and end point, usually moving in a continual cycle of planning, implementation and monitoring. However, for the purposes of this guide activities within each level are divided into **start-up activities** and **ongoing activities** (Box 2). The approach outlined emphasizes the need to avoid undue delay in implementing improvement activities. Activities that can be conducted during the initial stages of improvement – and that will help make progress faster – are listed as start-up activities. Activities that either take a longer time to carry out, or are needed on an ongoing basis for sustainability, are listed as ongoing activities. This is an artificial delineation and many activities are required at both start-up as well as on an ongoing basis.

## Foundational requirements

Five foundational requirements for quality health services are proposed all of which are relevant to national, district and facility levels (Fig. 1). First, **onsite support** is required to ensure health workers receive the necessary coaching, mentoring and clinical skills support to improve quality. Second, **measurement** mechanisms are required to track the delivery of quality health services and promote accountability. Third, **sharing and learning** is required to enable exchange of experiences in improving quality between and across health system levels. Fourth, **stakeholder and community engagement** is required to ensure regular, active and meaningful engagement of the community in quality improvement efforts. Finally, **management** is required to ensure activities to improve quality are carried out within a functional support architecture. The actions described in this guide at each of the three levels are closely linked to whether these requirements are in place.

### Box 1.

#### Targets for three-level action



**National** level is used in this planning guide to refer to the leadership, stewardship and planning function of the national health authority for achieving quality health services.



**District** varies according to context. For the purposes of this guide, a district is used to refer to a clearly defined administrative area, where there are local government and administrative structures that take over many of the responsibilities from the national government and where there is a general hospital for referral.



**Health facility** is used in this planning guide to refer to any primary, secondary or tertiary health facility where patients receive health care services.

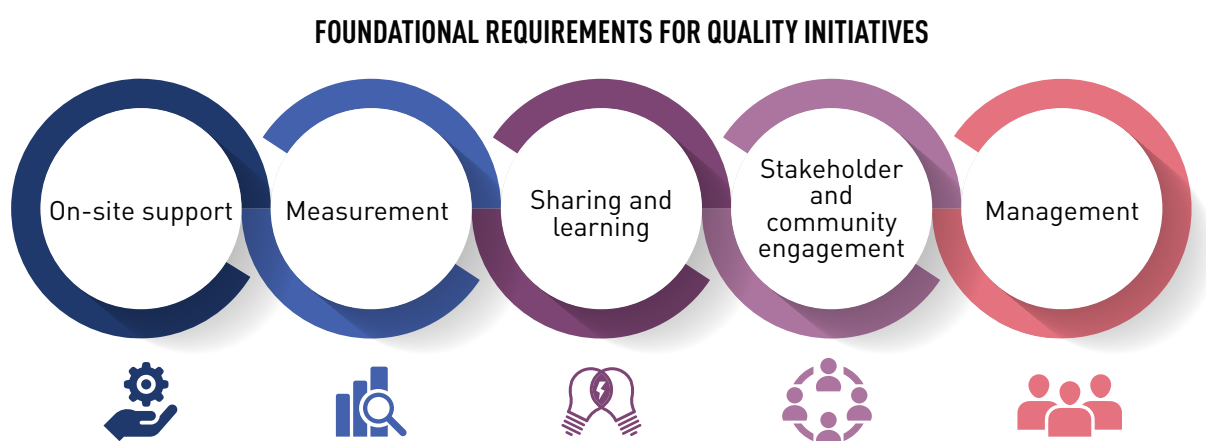
### Box 2.

#### What is meant by start-up and ongoing activities?

**Start-up activities** are efforts usually needed in the initial stages of improving health care quality e.g. to begin roll-out of quality improvement efforts. These activities can begin without delay.

**Ongoing activities** are efforts needed to ensure sustainability and involve continuous follow-up to optimize quality improvement efforts as quality initiatives progress.

**Figure 1.** Foundational requirements for quality health services



Source: Foundational requirements and guiding principles informed by *Improving the quality of care for maternal, newborn and child health: Implementation guide for national, district and facility levels* (11).

**On-site support** needs to be carefully planned for at all three levels based on identified gaps at the facility level. The development of facility capacity for quality improvement requires structured approaches to improve health worker performance through support visits. Specific attention is also required to the development of coaching and mentoring mechanisms, as well as embedding on-site support within existing supportive supervision.

**Measurement** is complex and needs to be adapted to different contexts. The national team responsible for quality needs to draw on measurement expertise to optimally define an adapted measurement framework that supports the national strategic direction for quality. This clearly defines what data should be collected from the facility and district levels and how they will be used to drive improvement. Focused attention on measurement capacity across the system is required. Detailed planning is necessary to define what data should be collected and when, the sources of data and the basic tools to be applied.

**Sharing and learning** is fundamental to improving quality. Initiating and sustaining a learning system takes time but will ultimately yield results if designed well. Simple tools are required at all levels to ensure that lessons are documented for the entire system. Special attention is required for learning to flow upwards from the facility level as well as to ensure district-to-district and facility-to facility learning. Community-based learning and learning from other stakeholders (including global networks) is also important to consider.

**Stakeholder and community engagement** is required at all levels to ensure that care provided in facilities meets the needs and preferences of patients, families and community members. Meaningful engagement and empowerment of communities is needed to shape the strategic direction on quality at the national level, the organization of quality health services at the district level and the delivery of quality health services at the facility level. Across all levels, engagement is essential for health and its broader determinants, intersectoral collaboration, improving accountability, and enhancing accessible, acceptable and people-centred care.

**Management** capacity and training is required at all levels to support quality efforts. Upstream planning is required at the national level to enhance management of quality programmes and related support at the district and facility levels. Attention is required to the practical steps needed to promote a *culture of quality* within health system leadership. In addition, careful attention is required to build the capacity of managers at all levels in the concepts and methods related to quality improvement.

The five foundational requirements touched on above, and described in more detail in subsequent sections of this guide, are mutually dependent (Annex 2). Each requires investment. Hard choices will often be required to prioritize action; however, it is unlikely that success will be achieved without attention to these five foundational requirements in some form. Each of these foundational requirements is intimately linked to health systems. Indeed, while quality of health services is predominantly expressed at the level of the interaction between the provider and receiver, it takes place within a much broader, **complex and adaptive health system**, and this context should also

be considered as central by those planning quality improvement efforts at each of the three levels. The six building blocks of the WHO health system framework are often used by countries to describe quality improvement efforts with different parts of the health system and within their specific context (6). This can help to ensure that health system components that underpin action on quality are in place, and that their influence on delivery of quality care is accounted for.

For example, *service delivery* in many countries may be based on traditional hierarchical provider–patient relationships. Reorienting care around the needs, preferences and engagement of the people served by health workers can be a powerful step to institutionalize a quality of care culture. High turnover of *health workers* may provide a challenge to maintenance of institutional quality improvement efforts and may itself result from working environments that are not conducive to quality health services. *Health information systems* should aim to provide the data providers and health workers need to drive improvement. Health providers require reliable access to *essential medicines and commodities* to provide effective care. Applying a quality lens to *health financing* reforms can help ensure that in expanding access to services, other domains of quality, such as equity and efficiency of service provision, are not compromised. *Leadership and governance* are critical to the success of national strategic direction on quality that is fully aligned with overall national health policy and planning, with a focus on a public health approach. To avoid quality improvement efforts becoming a vertical, standalone initiative requires strong advocacy for and building capacity on quality among the existing health system leadership at all levels, with a strong emphasis on primary health care (PHC). These system considerations are critical for the sustainability of the actions taken to enhance quality. Taken together, the above contribute to a set of guiding principles that underpin the guidance described in this document (Box 3).

### Box 3.

#### Guiding principles for system-wide efforts to improve quality



**1. Start fast.** The only way to reduce mortality and improve experience of care is to change what is happening at facilities and communities; therefore, the focus should be on initiating improvement activities as soon as possible. Planning is most effective when it is informed by implementation.



**2. Build on existing structures and functions.** Improving quality is a fundamental activity of the health system. The responsibility for quality must lie with system leadership, managers and frontline staff. Sustainability of quality activities is dependent on how aligned they are to existing structures and functions.



**3. Support health workers.** Health workers often work in conditions that are difficult, under-resourced and that hinder excellence. Systemic conditions – such as poor organization of care, unclear goals, wasteful rules, inadequate information flows – prevent health workers from carrying out their tasks successfully. Thus, a clear focus is required to support health workers.



**4. Improve care for people.** All efforts to improve service delivery must be directed towards improving clinical outcomes and patient experience of care. Effective and compassionate care for patients and the community should be central to all activities. Changes in systems and processes of service delivery should aim to put people at the centre of care.



**5. Adapt to context.** Activity plans should be adapted based on evidence from implementation as well as local context. We need to learn what different levels of the system need to do to enhance quality. There is always room for doing things better. It is only when we identify problems that they can be addressed. Good ideas should be shared across the system to support further adaptation.

Source: Foundational requirements and guiding principles informed by *Improving the quality of care for maternal, newborn and child health: Implementation guide for national, district and facility levels* (11).

Of further note is the tendency for health systems to gravitate disproportionately towards secondary and tertiary services and facility-based care. Those involved in quality action planning should carefully consider how to focus on utilizing the PHC approach when thinking through health systems levers (as described on page 5).

## Culture of quality

Planning for improvements in health service quality requires special attention to developing and institutionalizing a **culture of quality** – in organizations and across the health system – as a means to sustainable and meaningful change. There is no one definition of what a culture of quality entails. It is generally understood to mean that, at all levels of a health system, there is an inherent and explicit recognition of the value of efforts to improve the quality of health services provided – and such efforts are systematically promoted within an enabling environment that encourages engagement, dialogue, openness and accountability. Some of the features of a culture of quality are outlined in Box 4. There are also important considerations around how the culture of teams responsible for implementation across the health system can impact its success. Delivering reforms that are inclusive, equitable and promote a culture of improvement, requires that clinical and managerial teams responsible for implementation reflect these principles in their own approach and values. This is central to the sustainability of quality improvement efforts.

Efforts focused on **safety culture** are also crucial. This has been described as the product of individual and group values, attitudes, perceptions, competencies and patterns of behaviour that determine the commitment to, and the style and proficiency of, an organization's health and safety management. Organizations with a positive safety culture are characterized by communications founded on mutual trust, shared perceptions of the importance of safety, and confidence in the efficacy of preventive measures (7).

### Box 4.

#### Culture of quality: key features

- Leadership for quality at all levels
- Openness and transparency
- Emphasis on teamwork
- Accountability at all levels
- Learning embedded in system
- Active feedback loops for improvement
- Meaningful, comprehensive and sustainable staff, service user and community engagement
- Empowering individuals and groups while recognizing complex adaptive systems
- Alignment of professional, organizational and individual values
- Fostering pride in care
- Valuing compassionate care
- Coherence between quality improvement efforts, service organization and planning

## How is this planning guide linked to other resources?

This planning guide provides an outline of proposed activities at the national, district and facility level to enhance quality of health services. Other foundational resources and detailed implementation guidance is signposted to ensure that this document remains focused on core content requiring consideration by all those involved in planning quality health services at all levels of the system.

This document builds on an existing body of work on quality of health care by WHO and others. It does not seek to replicate already available information and guidance. Where applicable, the appropriate external resources that can be used in conjunction with this guidance have been referenced, such as *Improving the quality of care for maternal, newborn and child health – Implementation guide for national, district and facility levels*, the *WHO Handbook for national quality policy and strategy* (8) and the multiple practical implementation manuals that WHO has produced on different technical areas such as infection prevention and control (9). A large body of further technical work that is highly relevant to quality health services has been produced by WHO in a range of areas including patient safety, essential surgery and palliative care. A consolidated, non-exhaustive list of relevant WHO online resources is provided in Annex 3.



**Figure 2. Planning quality health services – at a glance**



## EACH LEVEL

...t to improve quality  
...ction on quality  
...ality interventions  
...asurement framework  
...rcing plan with key stakeholders

...ational quality goals and priorities  
...s and operational plan, and where they already  
...ational plans based on learning from health  
...strategic direction on quality  
...- and national-level quality goals and priorities  
...ching selected aims and ensure functioning  
...alth services  
...national level on quality health services  
...istrict-level contexts

...tify clear facility improvement aim(s)  
...multidisciplinary QI teams – prepare for action  
...eline assessment to identify gaps  
...ion plan  
...ment of outcomes  
...nt – sustain improvements and refine action plans

## GUIDING PRINCIPLES



**Start fast**



**Build on existing structures and functions**



**Support health workers**



**Improve care for people**



**Adapt to context**





# National-level activities for improving quality of health services

## Introduction



Before starting this section, consider reviewing the introductory section. This section should also be read in conjunction with the district- and facility-level sections.

To improve health outcomes, health service delivery must be improved at the point of care. National-level leadership, ownership and action are required to guide, support and sustain such improvements (Box 5). This section describes activities required by national health leadership (also referred to as national stakeholders) in order to support quality improvement efforts across the system.

A clearly articulated national strategic direction on quality health services, as described in the WHO *Handbook for national quality policy and strategy* (8), is central to national efforts. The focus is to promote leadership and ownership of quality by national health authorities, ensuring integration with broader national health planning and with disease- or population-specific programmes. Particular attention is placed on eight core and inter-dependent elements to set national quality direction (Fig. 3) (6). Emphasis is also placed on ongoing refinements to national strategic direction on quality, based on feedback and implementation experience from other levels of the system.

### Box 5.

#### Who is taking action at the national level?

The precise roles and/or actors responsible for each activity varies in accordance with country context. In general, those involved will include the ministry of health team responsible for coordinating national quality improvement and patient safety efforts, senior health system and political leaders, relevant steering committees or technical working groups, and other key quality-related bodies active at the country level (e.g. professional councils, disease or population-focused quality programmes, national health insurance funds or external evaluation bodies).

In many settings, national work on quality will also be supported by a range of international partner organizations (e.g. technical and donor agencies). While this document does not specifically address the roles of all such organizations, it is nonetheless important that national authorities consider how such partners can add value, and that any international partners focus resources on alignment with the national efforts to avoid fragmentation and/or verticalization.

**Figure 3** Eight inter-dependent elements of the national quality policy and strategy approach



While this planning guide presents activities required at different levels to improve quality of health services, health outcomes can be maximized through strong collaboration across all levels of the health system. In this way, activities at each level can combine to promote institutionalization of a culture of quality. It is also recommended that stakeholders at each level understand the activities taking place in other parts of the system, so those at the national level are encouraged to read the other sections of this guide to help develop a fuller picture of how the system can work together to promote quality at the point of care.

## The focus of this section

The purpose of this section is for national level stakeholders – in particular those with responsibility for developing and implementing national quality programmes – to understand both the key activities required at the national level and how they can support delivery of quality health services across all levels of health system. Although strategic planning is critical, planning alone is not sufficient. Instead of aiming for a perfect plan, countries can initiate improvement activities alongside the planning process, learn from the implementation experience, and incorporate lessons to update and strengthen their strategic approach accordingly. Whatever levels of human and financial resources are available, there is always an opportunity to start. The activities described here represent important starting points to promote system-wide action on quality.

# NATIONAL START-UP ACTIVITIES



This section describes initial activities to improve quality of health services. Stakeholders at the national level are responsible for a range of activities focused on establishing commitment, developing national strategic direction, and developing an operational plan and resourcing strategy.

## 1

### ESTABLISH NATIONAL COMMITMENT TO IMPROVE QUALITY

A critical early step is for national level leadership to commit to improve quality of health services, for example through high-level official political or policy statements.

#### Key activities

- Senior health leadership and national government commits to improve quality of health services and allocate appropriate domestic resources.
- National government/ministry of health commits to develop national strategic direction on quality.
- National government/ministry of health commits to endorse and enact globally agreed resolutions, commitments and partnerships related to quality of care.
- Ministry of health commits to:
  - supporting development of leadership on quality health services across the system, and promoting a culture of quality;
  - provide regular public updates on progress in improving quality of health services;
  - meaningful and sustained engagement of patients, families, communities and health workers in design, planning, implementation and monitoring of national efforts;
  - respond to district needs in reaching selected quality goals and priorities;
  - facilitate sharing of learning (successes and failures) within and across countries;
  - coordinate and align development and technical partner activities with the national quality agenda.
- Other key national-level stakeholders supporting quality activities commit to align with national strategic direction on quality.
- Develop a communication and advocacy plan to support buy-in and engagement from stakeholders across the system.
- Consider development of an action plan (see Annex 4 for sample) outlining broad steps to be taken to further the national quality agenda, incorporating development and implementation of national quality policy and strategy (6).



## DEVELOP NATIONAL STRATEGIC DIRECTION ON QUALITY

Country efforts to improve quality of health services should be based on a clear national strategic direction on quality, often articulated in a national quality policy and strategy (2). Countries that do not have national policies or strategies for quality health services should initiate multistakeholder efforts to develop these. The WHO *Handbook for national quality policy and strategy* (8) provides further guidance on this, based on eight interdependent elements for national strategic direction on quality (see Fig. 3).

Although developing national strategic direction on quality may take time, this should not delay the initiation of further quality activities across the system; in fact, such activities can help inform efforts to set national strategic direction on quality. While this process will be led by national-level stakeholders, development and implementation of national strategic direction on quality relies upon active engagement of stakeholders from across all levels of the health system. This will be a key activity for developing a shared understanding of quality across national, district and facility levels. The main overarching activity within this section is to strengthen or develop national strategic direction on quality. Key activities below are described under each of the eight elements of the national quality policy and strategy approach.

Many of the actions across the system will be based on a practical, prioritized set of quality interventions, agreed at the national level, and implemented in collaboration with districts and facilities. Implementation of most interventions will require action at multiple levels of the health

system; there is no simple delineation of national, district and facility interventions. This document uses the list of illustrative quality interventions outlined in the WHO *Handbook for national quality policy and strategy* (8) and the WHO–World Bank–OECD report ***Delivering quality health services*** (2).

Quality interventions can be broadly categorized as serving the following purposes:

- Creating a system environment that supports quality of health services (e.g. training, professional regulation, external evaluation, clinical governance, public reporting, benchmarking, ethical performance-based financing and medication regulation).
- Reducing harm (e.g. safety protocols and checklists, facility inspection, availability of personal protective equipment and adverse event reporting).
- Improving facility-level clinical care (e.g. clinical standards and protocols, clinical decision support tools, audit and feedback, morbidity and mortality reviews, and quality improvement cycles).
- Engaging and empowering patients, families and communities (e.g. health literacy, peer support, shared decision-making and self-management programmes).

The list is not exhaustive, and there may be other quality interventions that are being applied in various countries. However, none of these are simple to implement, and they should not be viewed in isolation – these interventions are interrelated and can have greater impact when implemented in combination. In general, the national level will have a key role in considering the set of interventions to be applied across the system, while district and facility leaders will determine how best this same set of interventions can be adopted and adapted at their respective levels. The national level will also often have a specific role in implementing many of the system environment interventions. It is important to note that many districts and facilities will commence QI activities before there is a validated national strategic direction. Where this occurs, efforts should be made to encourage learning from implementation experience that can be fed into the process of setting national strategic direction and finalizing the set of interventions.



For more information and description of a set of 23 illustrative quality interventions, see annex of the WHO–World Bank–OECD report *Delivering quality health services* (2)

Underpinning the national strategic direction on quality is quality measurement (10), which should be given particular attention as any national quality programme is implemented. Effective measurement supports quality improvement efforts across the system, including:

- monitoring for adherence against standards and guidelines;
- feedback to providers on quality improvement activities;
- transparency and accountability to the public;
- benchmarking to understand comparative performance;
- strategic or value-based purchasing and contracting;
- monitoring the effectiveness of quality interventions.

For tools and resources on quality measurement, visit National quality policy and strategy tools and resources compendium (page 15) (10)



## Key activities

These activities are based on the eight inter-related elements (see Fig. 3). It is recommended that the elements are reviewed carefully for full detail of the suggested actions.

### National health goals and priorities

- Identify existing health sector goals and priorities, as well as existing relevant health planning processes.
- Throughout the national quality policy and strategy development process, aim for alignment of emerging activities and governance arrangements with existing national health goals and priorities.
- Develop a statement of goals and priorities for the national quality policy and strategy, based on national health goals and priorities.

For more information on all eight elements of developing national strategic direction on quality see the WHO Handbook for national quality policy and strategy (8)



### Local definition of quality

- Identify previously developed or published national definitions of quality.
- Systematically engage a broad range of health system stakeholders in the development of the national strategic direction on quality. This is likely to include relevant departments across the ministry of health, health workers and managers from all levels of the health system, community and civil society representation, health professional bodies and councils, and cooperating partners such as health insurance and external evaluation organizations.
- Develop a shared understanding among stakeholders of quality, usually articulated in an agreed national definition.

### Stakeholder mapping and engagement

- Identify and engage stakeholders responsible for existing quality-related programmes, for example disease/population programmes or prominent facility QI programmes.
- Engage key subnational/district stakeholders and those directly affected by quality of care issues in further planning for implementation of national strategic direction on quality.

### Situational analysis

- Collect relevant data from multiple sources on state of quality, contextual factors and the historical quality development journey.
- Review relevant national health and quality documentation (e.g. existing quality policy/strategy, national health strategic plans).
- Map existing quality-related interventions taking place throughout the health system.

- Through review of existent data and engagement of stakeholders and communities, develop a situational analysis that outlines the current state of quality, identifies challenges and assets for improving quality, and can inform development of appropriate interventions.

#### Governance and organizational structure

- Clarify the function and governance of existing structures for quality health services, aiming to place them at an appropriate level within the ministry of health, to ensure coordination and provide technical leadership. These structures should also formalise collaboration and coordination between different health system levels.
- Strengthen or establish a government-led, multistakeholder steering group/technical working group to guide and coordinate efforts (11). Consideration should be given to how such a group can frame accountability for quality health services as a responsibility not just of a quality team or directorate, but of all relevant parts of the government (e.g. health workforce, medicines, policy and planning etc.).
- Consider options for strengthening accountability for delivery of quality health services, encompassing all health system levels and both the public and private sectors.
- Consider options for integration of existing quality programmes throughout national quality planning process (8).
- Align national strategic direction for quality with broader health planning and budgeting processes, ensuring there are budget lines for key quality activities.

#### Improvement methods and interventions

- Collect and review local evidence for successes and challenges in implementing quality interventions. This should provide an opportunity for technical partners, district stakeholders and facility health workers to shape a set of interventions based on the local implementation experience.
- Select and prioritize an initial set of proposed interventions, taking into account:
  - existing infrastructure and available resources for quality;
  - national quality goals and priorities;
  - local and global evidence/consensus on quality interventions;

For more information on IPC, see: [Interim practical manual supporting national implementation of the WHO Guidelines on core components of infection prevention and control programmes \(9\)](#).



For more information on WASH, see: [Water, sanitation and hygiene in health care facilities: Practical steps to achieve universal access to quality care \(12\)](#).



- global consensus on action areas, for example the global patient safety action plan;
- need for action at different levels of the health system;
- health worker and service user views on what is required to ensure quality care;
- need for action across quality planning, control/assurance and improvement;
- foundational requirements to support quality improvement (see Fig. 1);
- need for essential infrastructure, water, sanitation and hygiene (WASH) (12) and infection, prevention and control (IPC) (9);
- agreed selection criteria such as feasibility, value for money, and estimated impact on national health goals.

- Develop plan for supporting learning and knowledge management across the health system. Initial steps might include engagement of local academic institutions, identification and training of learning focal points in districts and facilities, and collaboration with partners on learning events.



## Health management information systems and data systems

- Map existing data sources and capabilities.
- Identify gaps related to quality in current health information systems.
- Develop a plan to improve systems required for measuring, monitoring and reporting on quality of health services at the national level (8,10).

For more information on learning systems, see: WHO Global Learning Laboratory for Quality UHC (13).



## Quality indicators and core measures

- Develop a pragmatic national quality measurement framework. This should facilitate measurement of quality care across the system as well monitoring and evaluation to understand and improve implementation of the set of quality interventions:
  - Map quality-related indicators that are currently collected, as well as current data collection platforms (e.g. district health information systems, surveys).
  - In collaboration with stakeholders, develop a framework for quality measurement that reflects local definitions and national priorities.
  - Allocate existing quality indicators against this quality measurement framework and identify any key gaps where no data are currently collected.
  - If necessary, suggest new indicators to meet the identified key gaps, utilizing existing data collection platforms where possible and drawing on global lists of illustrative quality indicators.
  - From the framework for quality measurement, select a small number of indicators (i.e. 5–10) that should be prioritized for early use in monitoring and improvement. Outline what mechanisms will be used to monitor and use these indicators for improvement across the health system.
  - Develop an action plan (see Annex 4 for example), outlining the steps that need to be taken to move from measuring and using the initial set of indicators (5–10) to measuring and using the full framework.



## DEVELOP AN OPERATIONAL PLAN AND RESOURCING STRATEGY

To ensure that the national strategic direction on quality is translated into actions that improve care, the national level has a key role in operational planning. A national operational plan describes what is needed to achieve progress towards the stated goals and priorities of the policy/strategy, including resources, timeline, and arrangements for monitoring. An operational plan will usually outline how the strategy will be implemented, specifying the tasks that will be required, who will complete them, the intended timescale, resource requirements, and how success will be measured. It may focus on a shorter timescale than the policy or strategy, being revisited and revised throughout the full term of the strategy. The strategy might also be supplemented by a more detailed resourcing plan specifying the financial and human resources required across the system for implementing the quality interventions, identifying current funding sources, and outlining how any further required resources can be mobilized.

Operational planning needs to consider resourcing requirements. While quality improvement efforts across a health system can be expected to result in more cost-effective care and less waste of resources, there will clearly be initial resource implications as activities are commenced. Teams responsible for the national strategic direction on quality should plan for how the strategic approach, governance structures and interventions can be adequately resourced.

## Key activities

- Agree on process for developing an operational plan. This may be a discrete planning process for the national initiative on quality or there may be an opportunity to combine with broader national health planning or existing financial planning cycles. Those developing operational plans should consider:



For more information and tools on operational planning, visit: [National quality policy and strategy tools and resources compendium \(page 17\) \(10\)](#).

- where to begin (for example, whether to start in particular districts or with a nationwide programme);
  - the need for operational planning at different levels of the health system, including resource considerations to support subnational scale up of quality interventions;
  - timing and plan for nationwide spread and scale up;
  - how to involve key stakeholders in operational planning.
- Develop draft operational plan and share with key stakeholders for consultation.
  - Prioritize quality interventions, giving due consideration to additional cost, expected impact, feasibility and importance in reaching the aims identified. In the start-up phase, consider a focus on 'best buys' or 'quick wins' to accelerate initial progress on quality, focusing on those interventions that will give maximum impact for limited additional cost.
  - Engage with ministry of finance, donor organizations, technical partners and related technical programmes to understand resources required for each quality intervention, and clarify how this need will be met, also ensuring existing structures and systems are built upon where possible.
  - Finalize operational and resourcing plan and agree process for progress review as part of broader health system arrangements for quality health services.
  - Identify priority resourcing gaps. Carefully consider the benefits and risks associated with roll-out of some activities in only selected geographical areas.
  - Where required, develop a formal plan to mobilize funds to address critical gaps and allow for future scale up.



# NATIONAL ONGOING ACTIVITIES



While the activities described earlier will need early attention by national teams, several further activities will require ongoing attention to promote the sustainability of efforts. As well as ongoing advocacy and coordination of national programmes, the national level should help address health systems constraints on delivery of quality health services that are not easy to resolve at a facility or district level. For example, strengthening or adapting human resources, commodities, infrastructure and financing.<sup>a</sup>

## Key activities


- Assess and maintain existing infrastructure and systems, ensuring adequate resources, oversight and integration with related national efforts for quality health services.
- On an ongoing basis, sensitize political and health system leadership regarding national progress.
- Continue to refine mechanisms to use data on quality emerging from the health information system and take action to improve, identifying where national level intervention brings added value to quality improvement efforts.
- Respond in a timely manner to district needs in reaching selected improvement aims.
- Share and facilitate learning between districts.
- Support ongoing needs across all health system levels for leadership development.
- Develop and maintain mechanisms to facilitate effective coordination between different stakeholders, including technical and development partners.
- Drive the regular, multistakeholder review of quality work across all levels to improve and refine operational planning. This process should bring together learning from national and subnational levels (for example on implementation of the prioritized set of quality interventions), and can be used to reappraise available resources, evaluate emerging implementation experience, and plan for scale up of the strategic approach. For example, where this has been initially implemented through a specific technical programme or in a particular geographical area.
- Demonstrate accountability using existing periodic review mechanisms.
- Publicly report progress on implementation (including data on the state of quality).
- Continue to engage communities, civil society, health providers and health workers in ongoing strategic planning.
- Identify steps to sustain progress and institutionalise a culture of quality, for example:
  - Review of factors promoting a culture of quality (8).
  - Development of ministry of health/health services values statement and/or patient charter.
  - Commitment to publicly release data on progress on quality of care.
  - Leadership engagement and development activities to develop appropriate leadership culture across the health system.
  - Engagement with regulatory and professional bodies.
- Engagement with global learning mechanisms/networks (13–15) and connection with counterparts in peer countries to share progress and learning.

<sup>a</sup> A range of WHO normative materials are available to support this broader health systems strengthening, and selected examples are listed in Annex 3.

# Driving foundational requirements for quality from the national level

Quality at the point of care relies upon several actions at the national level. Table 1 outlines key considerations for national level stakeholders as they look to develop and sustain foundational requirements for quality.

**Table 1. Key considerations for national level stakeholders**

FOUNDATIONAL REQUIREMENT	NATIONAL-LEVEL KEY CONSIDERATIONS (NON-EXHAUSTIVE)
 <p><b>Onsite support</b></p>	<ul style="list-style-type: none"> <li>▪ How can national quality teams strengthen on-site support mechanisms through national planning?</li> <li>▪ How can health care and health management training be improved to increase capacity across the system in quality improvement?</li> <li>▪ What human and financial resources are required to enable effective on-site support and how should initial efforts be prioritized?</li> </ul>
 <p><b>Measurement</b></p>	<ul style="list-style-type: none"> <li>▪ What sources of data on quality of health services exist (e.g. disease/population programmes, health facility assessment, patient surveys etc.)?</li> <li>▪ How can the national team responsible for quality access the measurement expertise needed to generate the required data?</li> <li>▪ How can measurement capacity and information systems be strengthened across the health system?</li> <li>▪ How can transparency of data on health system performance be achieved/enhanced?</li> <li>▪ How will the efficiency and effectiveness of quality interventions be evaluated?</li> </ul>
 <p><b>Sharing and learning</b></p>	<ul style="list-style-type: none"> <li>▪ What support can the national level provide to initiate and sustain a learning system?</li> <li>▪ How can the emerging learning be meaningfully fed into national strategic direction-setting for quality?</li> <li>▪ How can the national level facilitate sharing of learning between districts?</li> <li>▪ How can health system leaders engage in global learning on quality?</li> </ul>
 <p><b>Stakeholder and community engagement</b></p>	<ul style="list-style-type: none"> <li>▪ What role can national quality teams play in designing and applying a community engagement approach to ensure that care provided in facilities meets the needs and preferences of patients, families and community members, and is to their satisfaction? (16)</li> <li>▪ Who needs to be engaged to ensure national plans are in line with needs of stakeholders and specific population groups, to address determinants within and beyond the health sector?</li> <li>▪ How can these approaches be used to ensure meaningful engagement and empowerment of communities in broader national dialogue on health system planning?</li> <li>▪ How can the activities of partners be best coordinated and aligned to maximize impact on quality?</li> </ul>
 <p><b>Management</b></p>	<ul style="list-style-type: none"> <li>▪ What additional management capacity and training is required at all levels to support quality improvement efforts, and how can this be achieved?</li> <li>▪ What upstream planning is required at the national level to enhance management of quality programmes and support at the district and facility level?</li> <li>▪ What practical steps can be taken to promote a culture of quality throughout the system?</li> </ul>

# SUMMARY OF ACTIONS

## NATIONAL LEVEL

**Improving quality of health services requires several actions at the national level. After reading this chapter you should know how to address the following interconnected actions**



**Establish national commitment to improve quality**



**Develop national strategic direction on quality**



**Select and prioritize a set of quality interventions**



**Develop a pragmatic quality measurement framework**



**Develop operational and resourcing plan with key stakeholders**





# District-level activities for improving quality health services



Before starting this section, review the introductory and national level sections. This section should also be read with the facility-level section.

## Introduction

The health district is an essential element of a national health system. Interpretation of the term ‘district’ varies depending on country and local contexts. For this planning guide, the term refers to a clearly defined administrative area, where there are local government and administrative structures that take over many of the responsibilities from the national government and where there is a general hospital for referral. Activities at the district level influence implementation of quality health services at the facility and community levels, and should be carefully considered in national-level strategic direction on quality. The district level is the key interface between health facilities and higher levels, and is responsible for operationalizing national strategic direction on quality. It is at this level that planning, implementation, monitoring and supervision of activities to improve quality of health services in facilities and communities are carried out.

## The focus of this section

This section describes activities that staff at the district level (particularly district health leadership and teams) can do to improve quality of health services. Activities at the district level should be coordinated with national and facility-level authorities to ensure coherence and strengthening in the delivery of quality health services designed to meet the needs of people.

### Box 6.

#### Who is taking action at the district level?

District management leadership and teams facilitate and ensure that quality of care activities is prioritized, supported and delivered at the point of care. Engagement of other stakeholders at the district level – including health providers, civil society and communities, academic and professional associations, cooperating partners and other decentralized services such as WASH and housing authorities – is critical for quality health services. Further, stakeholders involved in the national health sector planning process should be attentive to activities, challenges and competences at the district level.

# DISTRICT-LEVEL START-UP ACTIVITIES



This section describes a range of activities to improve quality of health services that can be initiated more readily by district-level actors. These activities are clustered around district commitment, structures and operational planning, and orientation of facilities.



## DISTRICT COMMITMENT TO NATIONAL QUALITY GOALS AND PRIORITIES

The district level should commit to deliver on national quality goals and priorities by developing, aligning and implementing operational plans with clear actions for district-level actors, that aim to improve the quality of health services delivered at the subnational level. Where there is no clearly defined national strategic direction on quality, the district level can demonstrate through implementing, sharing results and advocating for quality at all levels.



### Key activities

- Internalize and commit to the district aims and targets in support of the overall national goals and priorities for quality health services.
- Commit structures and resources (both financial and human) to support the needs of health facilities.
- Commit to creating an enabling environment for QI, reflecting on the elements of a culture of quality (see Box 4).
- Commit to and facilitate documentation and sharing of learning within and across districts, and with the national level.
- Facilitate sharing of national strategic goals and priorities with facilities and relevant programmes.
- Ensure national quality strategic direction is informed by health service realities encountered at the district level.
- Ensure effective dialogue with the national level, facilities and communities in planning and coordination.

# 2

## DISTRICT QUALITY STRUCTURES AND OPERATIONAL PLAN

District-level structures and operational plans play an important role in setting out implementation of quality health service activities. District-level structures help clarify governance and implementation arrangements for quality. Operational plans at the subnational level help to identify and prioritize tasks, timelines, responsible stakeholders, resource requirements and measurement/monitoring parameters. Understanding current quality interventions being applied at the district level and adapting any existing national quality interventions is critical for operational planning.



### Key activities

- Review and map existing quality health service activities, partners and resources.
- Map existing quality interventions applied within the district and identify whether a set of national-level quality interventions exists.
- Examine district-level quality health service data to set priorities and guide the process of selecting aims.
- Identify district aims in support of national level goals and priorities.
- Establish appropriate structures and mechanisms to support quality of care activities at the facilities level.
- Build capacity for QI support among district staff.
- Consult with and introduce the related quality programme to district, facility and community stakeholders.
- Work with facilities and communities in identifying improvement aims to support district-level quality goals and priorities (aligned with equivalent national goals and priorities).
- Develop and share district operational plan, outlining activities, timelines, budgets and responsible actors.
- Establish coordination and collaboration mechanisms with other programmes working on quality health service delivery.

# 3

## ORIENT FACILITIES ON KEY QUALITY CONCEPTS AND ACTIVITIES

Quality care happens in health facilities and communities. Any new or renewed effort to improve quality of care requires that facility health workers and leadership be brought on board to understand their roles in improving care. Orientation of health facilities and health workers to improve health care quality is therefore an essential component of strengthening capacity and building interest to deliver effective, safe and people-centred care.



## Key activities

- Identify who will be involved in the orientation.
- Based on the emerging national strategic direction, operational plan and set of quality interventions, develop a district orientation package for – and in consultation with – facilities and communities. The district-level orientation package includes key quality concepts, a set of quality interventions adapted to the district context and key activities to be operationalized.
- Identify other activities to be undertaken alongside the orientation. For example, periodic capacity building on the foundational requirements identified (i.e. on-site support, measurement, sharing and learning, stakeholder and community engagement and management), alongside any quality intervention training.
- Deliver the orientation and continuously refine it based on feedback.



# DISTRICT-LEVEL ONGOING ACTIVITIES



This section describes activities that may be currently ongoing at the district level or long-term processes to support quality of care programmes. A number of these areas also contribute to the start-up of quality health service activities at the district level. These activities at the operational district level inform and contribute to overall policy or strategy direction put forth by national authorities and serve as a support to health facilities in rolling out activities aligned with the district-level aims and objectives.

## 1

### RESPOND TO FACILITY NEEDS IN REACHING SELECTED AIMS

A key function for leadership at the district level is the support to health facilities in achieving stated aims.



#### Key activities

- Identify ways the district level can help in reaching selected aims at the facility level.
- Identify what types of support may be needed from the district level, informed by consideration of foundational requirements for quality at the district level (see page 33).
- Map out existing capacities at the district level to respond to facility needs.

## 2

### ENSURE FUNCTIONING MECHANISMS TO SUPPORT QUALITY HEALTH SERVICE DELIVERY

District-level leadership should ensure that the foundational requirements to support quality health services are functional. Where lacking, district leadership should provide support to build this. On-site support and management are needed to build and sustain a culture of continuous quality improvement. District managers overseeing quality activities need data to determine whether planned activities to improve quality of health services are happening and whether they are leading to better care. Learning within the district can be either collaborative – bringing a multidisciplinary team, from different health facilities to work through an improvement aim and improve systems performance or, working with one individual facility to improve a weak area identified by district and facility leadership. Stakeholder and community engagement are pivotal to building trust within the health system and ensuring that service delivery is centred on people.



## Key activities

### On-site support

- Ensure that each facility has assigned coaches to provide refresher trainings/orientation to facility health workers and support overall quality improvement efforts.
- Support coaches to build QI skills.
- Keep track of QI support visits and help facilities to solve problems.
- Collect data on facility QI projects, review to identify successes and identify facilities needing support.
- Incorporate mentoring and supportive supervision as part of activities to improve health worker performance.
- Identify gaps and develop an advocacy and communication plan to address gaps, targeting both district and national stakeholders.
- Based on identified gaps at facility level, address specific challenges, or coordinate with national level to get necessary support.

### Measurement

- Collect data pertaining to patient outcome measures and process measures at the facility level.
- Collect district-level performance measures based on aggregate data from facilities.
- Analyse data emerging from both the facility and district levels to inform facility-level support and district-level planning.
- Share emerging data on quality of health services with community stakeholders and into national-level reporting systems.

### Learning

- Establish exchange visits between health facilities and between health districts to understand how improvement activities were conducted.
- Develop simple tools and resources to facilitate sharing of data and stories.
- Identify key learning about what works to improve care in the district, record good practices that should be scaled up, and learn from failures.
- Include capacity building on data collection and story-writing/sharing as part of regular supervision visits, in order to enable health workers to capture key elements of improvement.
- Host peer-to-peer learning opportunities. Examples at the district level can include district review meetings, quarterly sharing meetings, district newsletters or bulletins and other routine meeting opportunities.
- Include a measure on learning in periodic assessments and feed emerging information to the national level.

### Stakeholder and community engagement

- Engage relevant stakeholders and the community in the design, planning, implementation and monitoring of district-level activities to improve quality of health services.
- Jointly plan and produce quality health service activities with relevant stakeholders and communities.

## Management

- Ensure and build management capacity for quality improvement at the district and facility levels.
- Hold regular management meetings to ensure coordination of QI efforts.
- Communicate effectively between district and national staff, relevant stakeholders and communities.
- Ensure resources to support activities are in place.



## UPDATE DISTRICT QUALITY HEALTH SERVICE OPERATIONAL PLANS AND ACTIVITIES BASED ON LEARNING

District leadership should periodically review operational plans against emerging learning from facilities and the district to adjust as needed.



### Key activities

- Regular review of quality activities.
- Based on learning from facilities, refine district-level plans.
- Participate in national-level learning activities and learn from experiences in other districts.



## MAINTAIN ENGAGEMENT WITH NATIONAL LEVEL

District management should interact regularly with the national level to convey their progress and outline how district-level goals and priorities are contributing to the overall national strategic direction on quality. Engagement between national, district and the facility levels is a cross-cutting function across all levels of the health system, which helps foster the positive environment required for successful implementation.




### Key activities

- Share data on progress with national level.
- Identify specific problems that the district needs help with.
- Share any key learnings about how best to organize such an effort at a district level.
- Ensure progress and activities on quality are discussed at periodic meetings with national-level leadership.



## FOSTER POSITIVE ENVIRONMENT FOR QUALITY HEALTH SERVICE DELIVERY



A key role of the district level is to cultivate an environment for improving quality of health services. Supporting and sustaining a culture for everyday quality is key to improving health outcomes. District leadership can influence how quality is perceived and acted upon by cultivating and institutionalizing quality considerations across all governance structures within the district.



### Key activities

- Recognize and celebrate successes of health facilities.
- Establish health facility and health workers forums to share learning about quality.
- Develop strategies to build motivation to improve quality of health services.
- Engage with health facility leadership to ensure quality is prioritized and staff are supported.



## ADAPT QUALITY INTERVENTIONS AT THE DISTRICT LEVEL

Quality interventions can vary greatly depending on the context and surrounding health systems environment at the district level. At the national level, authorities are responsible for prioritizing a set of quality interventions to drive health systems towards the stated national level objectives for quality of care. District health teams may adapt these prioritized quality interventions to achieve the desired district-level goal(s) in support of the national-level objective.



### Key activities

- Identify and map existing quality interventions that aim to improve the health systems environment, reduce harm, improve clinical care and engage patients, families and communities.
- Prioritize and adapt quality interventions to use at the district level.
- Align the district-level set of quality interventions with the national-level set of quality interventions.
- Roll out the prioritized quality interventions within the district.
- Decide on measures to periodically evaluate the effectiveness of the applied interventions in the district.
- Learn from application of quality interventions and refine the district-level set of quality interventions.
- Review foundational requirements to support application of the quality interventions at the district level.

## Key questions to consider when adapting quality interventions at the district level

- What quality interventions are currently being applied at the district level?
- Of these interventions, which ones have yielded positive results?
- What national-level interventions need to be prioritized and adapted to the district-level context, and at what cost?
- What value can the district health authority add to the implementation of the quality interventions?
- What resources are required from the district and the national levels to adapt and implement the prioritized interventions?
- What foundational requirements are needed to support implementation of quality activities at the district level?

For practical tools and resources on district health management, visit Chapter 6, page 30 of the *WHO Recovery Toolkit: Supporting countries to achieve health service resilience* (17).



## FURTHER CONSIDERATIONS FOR ADAPTING QUALITY INTERVENTIONS AT THE DISTRICT LEVEL

For **systems environment interventions**, district leadership have the role of managing and ensuring allocation of adequate human and financial resources – in terms of both quality and quantity – as well as adapting guidance on processes of care emerging from the national level. Foundations of care, including governance and accountability structures, health workforces, essential medicines, tools and commodities, and health management information systems are all essential to have in place and are central to how quality of care is delivered at the facility level (4). As an example, district leaders are responsible for public reporting and comparative benchmarking to facilitate sharing of information between health facilities and promoting transparency and accountability in reporting. In addressing health workforce competence, supervision, coaching and mentoring of health facility QI teams can promote health system leadership and build local capacity to lead and sustain QI efforts. District leadership can improve facility readiness by ensuring that health workers and health facilities/institutions meet the minimum criteria when conducting periodic assessment visits.

**Reducing harm** to patients, health workers and the community should be at the core of service delivery and a key pillar of any district-level operational support. Key activities that can be considered for district-level leadership can include inspection of institutions for minimum safety standards to ensure there is baseline capacity and resources to maintain a safe clinical environment. This includes ensuring that minimum requirements for WASH infrastructure, IPC and energy/power supply are all available and maintained. Considering the differences between districts – for example those in urban and rural settings – adaptation and capacity building related to safety protocols and checklists may be required for sustained uptake of safety interventions.

Support will be needed from district-level leadership to facilitate **improvements in clinical care**. Types of support that may be considered at the district level include:

- Adaptation of clinical standards, pathways, guidelines and protocols to fit the local district context(s).
- Clinical skills mentoring, coaching and skills development.
- Periodic assessment of health facilities for appropriate implementation of standards.
- Development of locally appropriate tools and resources (electronic or print-/paper-based) to support decision-making processes at the facility level.
- Co-development of feedback mechanisms on clinical practice with health facilities, stakeholders and communities.

- Periodic learning reviews with health facilities and with other districts.
- Learning reviews to weigh effectiveness of interventions and costs to inform future operational planning.
- Development of plans and mechanisms for occupational health and safety, including the provision of adequate personal protective equipment for health workers.






Similar to the national level, **engaging and empowering patients, family and communities** (16) at the district level can increase participation in district-level planning and ensure that activities proposed at the district level are tailored to the needs of the community. Representation of community and patients on district health boards can create the open space needed to feed emerging community needs into district planning and increase community participation in district-level health outreach programmes. A strong link between community and district leadership creates the dialogue needed to ensure that emerging national policy/plans/strategies are grounded in community needs, and can in turn help operationalize emerging policy and plans at the district level.

District leadership is well-placed to tap into the wisdom of relevant stakeholders (e.g. facilities, partners, civil societies, communities, professional bodies etc.) to improve health care quality. Each stakeholder will need to be engaged within the planning cycle of the district as well as the continued design, implementation and monitoring of district level plans and quality improvement activities. As part of this engagement, key insights and learning from frontline experiences need to be identified and harvested collaboratively with relevant stakeholders. This learning needs to feed into local QI efforts, and best practices shared to ensure scale up and uptake of proven interventions. As part of the convening power of district leadership, emerging issues relating to resources, clinical management, administration and QI can be discussed, and actions identified in periodic learning fora. This collaborative approach can improve communication between district-level stakeholders and promote coordination and harmonization of efforts to support quality of service delivery.

# Driving foundational requirements for quality from the district level

Quality health services at the point of care rely upon several actions at the district level. Key considerations for district actors as they look to develop and sustain foundational requirements for quality are outlined in Table 2.

**Table 2. Key considerations district-level stakeholders**

FOUNDATIONAL REQUIREMENT	EXAMPLES OF DISTRICT-LEVEL KEY CONSIDERATIONS
 <p><b>Onsite support</b></p>	<ul style="list-style-type: none"> <li>▪ What is required from the district level for the QI on-site support system?</li> <li>▪ How can district-level leadership support facilities in moving forward on quality health service delivery?</li> <li>▪ What resources are required from the district level to support facility-level improvements?</li> </ul>
 <p><b>Measurement</b></p>	<ul style="list-style-type: none"> <li>▪ What sources of data and tools are used for QI at the district level?</li> <li>▪ What data should be collected from the facility and district levels?</li> <li>▪ How should quality health services data be reported and used?</li> <li>▪ What measures are needed to manage quality-related activities?</li> <li>▪ How can the district level support data quality and transparency?</li> <li>▪ How can district-level leadership support measurement capacity-building in facilities and across the district health management team?</li> <li>▪ What is required for health data to be able to monitor effectiveness of care and cost of quality interventions at the district level?</li> </ul>
 <p><b>Sharing and learning</b></p>	<ul style="list-style-type: none"> <li>▪ What tools and resources are available at the district level to support learning around quality health service activities?</li> <li>▪ How should learning on quality be documented?</li> <li>▪ What information is needed to support learning on quality?</li> <li>▪ How should data emerging from the facilities be shared within and beyond the district?</li> <li>▪ How should learning opportunities be organized within the district?</li> </ul>
 <p><b>Stakeholder and community engagement</b></p>	<ul style="list-style-type: none"> <li>▪ What relevant stakeholders need to be engaged in district-level design, planning, implementation and monitoring for quality health service delivery?</li> <li>▪ How can stakeholders be engaged within design, planning, implementation and monitoring efforts on quality at the district-level?</li> <li>▪ What existing mechanisms are being used for community engagement within the district?</li> <li>▪ What are the ways the community can be engaged at the district level in improving quality of health services?</li> </ul>
 <p><b>Management</b></p>	<ul style="list-style-type: none"> <li>▪ What does the management system for quality health services look like at the district level?</li> <li>▪ What is required to support management for quality health services?</li> <li>▪ What additional resources are needed to support district-level aims and goals for quality health services?</li> <li>▪ What do mechanisms to review performance of QI interventions look like? What stakeholders are involved in these mechanisms?</li> </ul>

# SUMMARY OF ACTIONS

## DISTRICT LEVEL

Improving quality of health services requires several actions at the district level. After reading this chapter you should know how to address the following interconnected actions.



Align district commitment to national quality goals and priorities



Develop district quality structures and operational plan, and where they already exist, update district quality operational plans based on learning from health facilities and emerging national strategic direction on quality



Orient health facilities to district- and national-level quality goals and priorities



Respond to facility needs in reaching selected aims and ensure functioning support systems for quality health services



Maintain engagement with the national level on quality health services



Adapt quality interventions to district-level contexts









# Facility-level activities for improving quality of health services at the point of care



Before starting this section, consider reviewing the introductory, national- and district-level sections.

## Introduction – the focus of this section

The ultimate aim of QI efforts is to deliver quality at the point of care in health facilities. This section focuses on health facilities and describes the activities that health workers can undertake to improve the quality of health services and patient outcomes. This encompasses a wide range of facilities where health services are provided to the population, including large to small hospitals and clinics, and primary care centres, covering the public, faith-based, private for-profit and not-for-profit sectors in both rural and urban areas. To some extent, the approach and principles can also be applied to a general practice or dental practice, although this is not the main intended audience.

Not all quality-related challenges can be addressed at the facility level. In some cases, facility-level activity and progress are influenced by what happens nationally and in districts. For example, a national aim to reduce waiting times for a specific surgical procedure can provide a strong mandate for facility level action. On the other hand, a facility may be more motivated to work on problems that are identified locally, by both health providers and the local community. Both approaches have advantages and disadvantages, which are explored in more detail throughout this section.



The key activities listed in the national- (from page 13) and district-level (from page 24) sections of this guide provide a useful reminder of upstream actions and responsibilities that will impact work to address quality-related challenges at the facility level.

## Fundamental success factors



Take a few moments to review the foundational requirements and guiding principles in the introduction of this document (pages 4– 5). These help to lay the foundations for success.

In addition to the foundational requirements addressed earlier, there are certain aspects of the health system at the facility level that influence implementation of activities for quality health service delivery. The following are widely considered to be prerequisites for quality health services:

1. **Essential infrastructure:** These include but are not limited to elements related to the physical environment in which care is provided (e.g. WASH and safe waste disposal infrastructures; reliable energy/power supply; supplies of safe and effective medicines; medical devices and technologies; supplies of personal protective equipment; and hand hygiene materials).
2. **Health workers:** Sufficient numbers of trained and competent staff.
3. **Health management information systems and data systems** (e.g. availability of quality measures and data collection templates to generate data; computer hardware/software to analyse data and synthesize the findings into actionable information for further improvement).



For more information on WASH, see: *Water, sanitation and hygiene in health care facilities: practical steps to achieve universal access (12)*.

### Box 7.

#### Who is taking action at the facility level?

Facility leadership and facility QI teams drive activity and ensure relevant stakeholders are engaged. These may be called by various names in different countries and contexts.

- The **facility leadership** includes the overall facility chief or administrator.
- The **QI team** includes the team working on specific improvement aims. The QI team is the focal point for guiding the process within the facility. Smaller facilities may have one QI team that works on different aims. Larger facilities may have multiple departments working on a range of QI-related issues and a central coordinating team.

The facility leadership and QI teams should work with all facility health workers – across all clinical and non-clinical cadres – to ensure everyone understands and is engaged in improving the quality of health services and to foster a sense of ownership and the realization that quality is everyone’s business.

#### The role of patients, families and communities

The health facility is the place where health services are delivered to the patients, their relatives and the local community, including community-based organizations and workers. This important stakeholder group comprises patients, families, the community and various population groups, and helps shape accountability and governance mechanisms for quality, the demand for quality services, and the prioritization of QI projects, and supports learning at the community level. They should be active partners in the development, implementation and evaluation/monitoring of QI projects in transparent and sustainable ways.

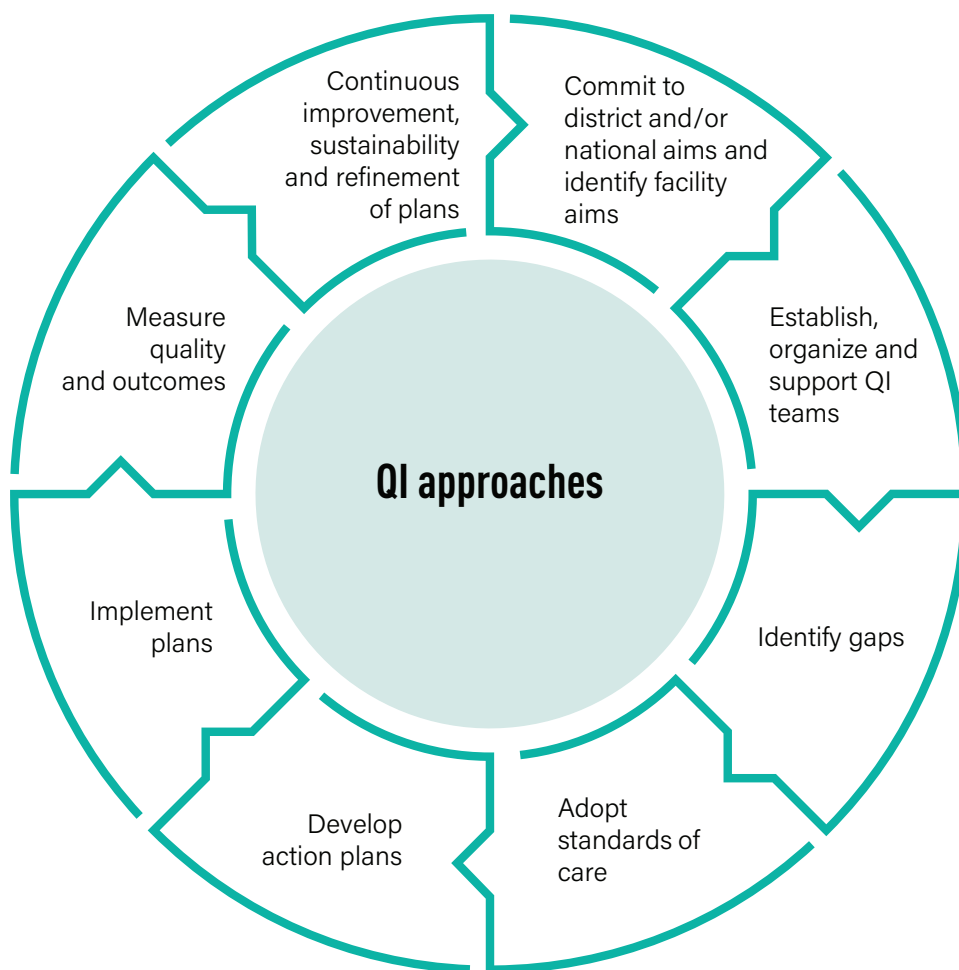
# FACILITY-LEVEL START-UP ACTIVITIES



This section describes the actions that facility leadership and health workers can take to improve quality of health services.

Actions at the facility level are based on an iterative approach to quality improvement that supports refinement over time (Fig. 4).

**Figure 4.** Iterative approach to improving quality of health services at the facility level



The above diagram is not intended to represent a QI methodology; rather, it is a representation of a broader improvement process that links with the national and district approaches.<sup>b</sup>

<sup>b</sup> For more information see: *Taking action: Steps 4 and 5 in twinning partnerships for improvement (18)*.

## COMMIT TO DISTRICT AND/OR NATIONAL AIMS AND IDENTIFY CLEAR FACILITY IMPROVEMENT AIMS

A critical early step is for facility leadership to commit to district and/or national quality aims where these exist. Where a national quality policy or strategy and operational plan are in place, consider how to adapt the goals and associated priorities for the facility aligned with the district-level aims. Working towards the national goal or district aims allows facilities to start fast, and to learn from and share learning across districts and facilities. It can also present an opportunity to shape national and district priorities.

In the absence of national and/or district aims, the facility needs to select their priorities locally. This can motivate facility health workers to work on problems that are important to them and meet local needs.

### Key activities

#### For facility leadership

- Where available, familiarize yourself with the district orientation package on key quality concepts and activities.
- Consult with health workers and the community around district aims, and adapt those aims to the local context through dialogue. This will also help secure commitment from those who will be most affected by the facility-level planning. With the support of district officials, introduce the collective district aims and targets to relevant health workers and community representatives (e.g. hold meetings to review and discuss district aims).
- Establish a mechanism for regular communication with community representatives and patients.
- Commit to creating an enabling environment for QI (e.g. availability of the fundamental success factors described earlier and promoting the key features of a quality culture (see Box 4). Liaison may be required with the district and national levels to explore plans for addressing critical gaps.
- Identify approaches, tools and resources needed in collaboration with the district.
- Create the appropriate quality management structures in the facility (e.g. identifying a QI coordinator, establishing a quality management unit).
- To motivate and incentivize for quality, provide health workers and members of the QI team with training opportunities to build their knowledge and skills for improving quality of health services.

#### For QI team

- Identify and define the overall aim(s) for the facility and develop a clear statement of purpose describing the aims with associated targets to achieve and the related timeframe (e.g. "This facility aims to reduce the surgical site infection rate by 50% for patients undergoing elective surgery, by 2021.")
- Commit to achieving the standards of quality of care set by the district and national level.
- Review district-level orientation package and identify how best to adapt to the facility context.
- Identify facility champion(s) (or quality focal point(s)) among health workers, partners, patients and community representatives to create a coalition of quality champions and role models. The coalition can help promote the initiative and mobilize support for implementation.
- For large facilities, QI teams should develop specific aims for their respective units/departments to improve the quality of health services.

### For both leadership and QI teams

- Commit to and facilitate documentation and sharing of learning within the facility and the district (e.g. weekly or monthly newsletters, regular communication or meetings with the district level, as well as with community representatives and patients).
- To motivate and incentivize for quality as an integral dimension of fostering a positive environment, establish ways to recognize and reward progress and achievements. In addition to financial incentives, opportunities for QI teams and facilities to present their work in meetings, seminars, conferences and other sharing platforms can provide encouragement and inspiration.

# 2 ESTABLISH, ORGANIZE AND SUPPORT QI TEAMS – PREPARING FOR ACTION

## Key activities

### For facility leadership

- Establish and support a multidisciplinary QI team comprising all cadres of health workers involved in achieving the selected aim.
- Build on functioning teams where they exist (e.g. patient safety, IPC etc.).
- Aim to include people with effective communication skills, and those with interest, knowledge and the ability to address administrative and management issues.
- Include representatives from community and patient groups.
- For large QI teams (i.e. in larger facilities) ensure a dedicated QI manager to lead the QI team.

### For QI team

- Agree upon QI team functions and develop clear roles and responsibilities:
  - a) Setting improvement aims; b) reviewing facility data on selected improvement aims; c) taking continual action to improve quality of care; d) sharing learning; and e) keeping facility leadership informed about activities and progress.
  - Establish a schedule of meetings, mode and purpose of communication etc.
- Collaborate with and introduce the quality of care programme to facility staff, community representatives and other stakeholders (e.g. holding briefings, learning and/or orientation sessions for clinical and non-clinical staff – such as cleaners, administrative workers, technicians).
- Use practical examples to illustrate how quality of care encompasses technical areas such as IPC and antimicrobial resistance.

For more information on taking action on quality improvement at the facility level, see: *Taking action: Steps 4 and 5 in twinning partnerships for improvement (18)*.



# 3

## CONDUCT SITUATIONAL ANALYSIS/BASELINE ASSESSMENT TO IDENTIFY GAPS

The purpose of facility situational analysis is to understand the current 'state of quality' within the facility before starting implementation. While important to align facility improvement aims with those at the district and national levels, these aims are more specific and grounded in the local context and data. Through situational analysis the QI team gathers detailed information on different aspects of quality such as infrastructure, availability of policies, guidelines, standards and related resources in the facility. This is key to identifying gaps and effectiveness of applied quality interventions to inform improvement.



### Key activities

- Conduct facility situational analysis to identify priority areas for action and inform improvement aims at the facility level.
- Use recent assessment results, where available.
- Based on the results of the assessment, undertake a gap analysis to identify where priority actions are needed.
- Actively engage facility staff, district leadership, the community and other stakeholders to identify gaps. Share results of the gap analysis with district and community stakeholders for feedback, and to support their advocacy and mobilization efforts both nationally and locally.

# 4

## ADOPT STANDARDS OF CARE

Informed by the results of the baseline assessment, QI teams should ensure relevant clinical standards, protocols, pathways and guidelines that are set at the national and/or district levels are applied. The term 'standards' is used here to embrace all types of these. In the absence of national and district standards, international standards can be considered. Lack of specific standards is a barrier for defining and analysing gaps between standards and current practices.

Stakeholders from professional societies or councils, and academic research institutions can play an important role in this step. For example, working with academic research institutions could help shape the local research agenda, and result in research outputs focused towards improving quality of care, in addition to bringing on board a useful stakeholder group to advance the QI agenda.



### Key activities

- Orient all staff towards relevant national standards, protocols, pathways and guidelines (if available) and on the results of the baseline assessment.
- Identify gaps in quality based on the standards, protocols, pathways and guidelines.
- Set goals for improving performance.
- Report to the district health management on critical resources that are needed to achieve improvements in quality.



## 5 IDENTIFY QI ACTIVITIES (DEVELOP ACTION PLANS)

Based on the overall improvement aim(s), the QI team identifies one or two specific clinical components of care for initial improvement. After they address these, they can move on to improve other components of care. The QI team should be encouraged and supported by leadership to progressively apply improvement strategies and methods during these steps, focused on identified priorities (e.g. where wide variations in practice have been identified).

The QI team coordinates the planning of QI activities by developing an action plan (see Annex 4 for sample). Elements of the plan should have SMART characteristics: specific, measurable, achievable, relevant and time-bound. **The QI team should review and consider the range of strategies and methods available to support QI (18).**

### Key activities

- Rapid recap on QI strategies and methods.
- Decide upon specific improvement aims with a defined target and time frame, based on the result of the situational analysis. Early success is a strong motivator, so look for 'quick wins' initially – aims that are: a) considered relatively easy to achieve; b) easy to measure; or c) would have the highest impact.
- Identify specific QI interventions to be implemented to achieve the improvement aims, informed by the national set of quality interventions (i.e. system environment, reducing harm, improvement in clinical care, patient, family and community engagement interventions).
- If the facility is already implementing interventions from the national set of quality interventions (e.g. clinical mentorship, clinical audits) consider establishing mechanisms to strengthen the capacity of QI teams.
- Develop an action plan that lists all the actions to be taken to implement the intervention(s), including start and end dates, the person(s) assigned to perform the action and required resources.
- Liaise with the district for implementation support.

For more information on taking action on quality improvement at the facility level, see: Taking action: Steps 4 and 5 in twinning partnerships for improvement (18).



## 6 IMPLEMENT QI OPERATIONAL PLAN

QI teams test and implement the action plan. Periodic measurement will determine whether the actions are helping to reach the aims. The support of facility leadership is important to help make successful actions routine. New ways of working may then form new facility policies and protocols to support institutionalizing successful actions.

### Key activities

- Test the proposed action plan initially on a small scale and for a limited period.
- Review data to determine effective actions and progress, and refine the action plan as needed.

- Consider the best ways to share good practices with all staff, facility leadership and other facilities (e.g. during meetings, exchange visits, online webinars and/or through other virtual and in-person platforms).
- Reflect on: 1) system interventions that are implemented nationwide and how these may affect your facility; and 2) how different disease or population-based programmes might implement selected QI interventions towards their specific goals, and how linkages might be made throughout a health facility to support learning of lessons.

## 7 UNDERTAKE CONTINUOUS MEASUREMENT OF QUALITY AND OUTCOMES

Measurement of outcomes, and in particular continuous monitoring of QI tracers and feedback, is an important responsibility of **QI teams**. Measurement generates internal knowledge and information that can be used quickly by the facility to drive improvement, often *before* being reported to district and/or national level. It enables monitoring of whether QI interventions are being implemented effectively. Measurement is also critical for team-based learning.

When QI interventions are prioritized at the district level consider how the district intends to evaluate or support evaluation of the effectiveness of these QI interventions at the facility level. Coaching, mentoring and supportive supervision may be helpful during this step and should be done in an integrated way where possible. Use existing tools such as surveys to collect patient and community feedback.

### Key activities

- Define measures related to the identified aims and set up the measurement process for data collection, compilation, analysis and synthesis, drawing from existing measures and measurement processes where possible.
- Define a reporting process to share results with facility management and district leadership. Feedback is important – also consider feeding back to the local community.
- Consider whether the QI team requires additional facilitation, training, coaching or supportive supervision to conduct measurement e.g. district level/partner support if available.
- Develop job aids to support measurement.

# FACILITY-LEVEL ONGOING ACTIVITIES



This section describes activities that may be currently ongoing or may require ongoing action at the facility level to support quality of health services at the point of care. A number of these areas also contribute to the start-up of quality of care activities at the facility level. These activities inform and feed into overall policy or strategy direction from national and district authorities.

## Continuous improvement – sustaining the improvement and refining operational plans

Quality improvement is not a one-off static process but rather a continuous dynamic effort. Support from facility leadership is needed throughout the process to reach the selected improvement aims. Once an aim has been achieved and informed by the findings of measurement and monitoring, the QI team should continue activities by selecting new improvement aims based on the priorities that will most impact the quality of care and developing a new action plan accordingly.

A basic principle underlying continuous quality improvement is learning – identifying what works and what does not work – and sharing this knowledge within and across facilities and districts. To enable this, the facility leadership should foster a culture of quality described earlier in this document (see Box 4). QI benefits from shared and distributed leadership that involves multiple actors working together collaboratively. Facility leadership and QI teams should ensure quality care is sustained and the new way of working is made the norm in the facility. Additionally, and to promote sustainability, stakeholders and communities should be actively engaged.



The key activities listed on page 21 in the national-level section provide a useful reminder of actions and responsibilities at the central level that will impact work aimed at improving quality of care at the district level. Similarly, the activities outlined on page 47 in the facility-level section provide a useful reminder of actions and responsibilities at the facility level that need to be considered when planning and implementing district-level activities.

### Key activities

#### For facility leadership

- Secure continuous support for quality improvement efforts:
  - Work with the district leadership to make sure the QI team receives adequate support such as coaching and clinical mentorship.
  - Support the QI team in involving community representatives in all stages of the process.
  - Ensure the QI team is able to collect and use measurement data to determine effectiveness of the interventions and progress.
  - Provide quick solutions to emerging problems, including those addressing processes, resources, infrastructures and clinical skills.

- Foster a positive environment for QI.
- Put in place health workforce development mechanisms (e.g. career paths, professional development).
- Ensure improvement gains are institutionalized (e.g. revision of standard operating procedures, structural and process changes).
- Ensure practical mechanisms are in place for occupational health and safety, including the ready availability of personal protective equipment.
- Share learning:
  - Facilitate continuous learning by sharing experiences and results (e.g. incorporating discussions in relevant routine facility meetings, peer-to-peer learning across the QI team).
  - Ensure facility health workers participate in learning activities to share their first-hand experience (both successes and failures) in relation to QI efforts.
  - Working with district counterparts, prioritize learning by:
    - Forming a collaborative with other health facilities/networks of facilities to discuss and compare indicators, data and quality improvement experience, as well as facilitate joint learning.
    - Participating in exchange visits between health facilities and between districts, according to direction from the district level.
    - Sharing experience and stories using district-generated tools and resources.
    - Building capacity on story-writing/sharing as part of regular QI support visits from the district level to enable health workers to capture key elements of improvement.
    - Participating in peer-to-peer learning opportunities (e.g. district-level review meetings, quarterly sharing meeting, district newsletters or bulletins, and other regular meeting opportunities using online technologies).
- Recognize and reward achievements (e.g. through awards or other acknowledgements, including the opportunity to present at conferences and seminars).
- Ensure engagement and accountability mechanisms:
  - Maintain engagement with the district, local stakeholders and the community as part of the ongoing demonstration of accountability (including social accountability).

### **For QI teams**

- Share learning on challenges and successes both internally and with community representatives (e.g through social media, local newspapers and digital platforms).
- Ensure engagement and accountability mechanisms:
  - Maintain engagement with facility leadership – this is important when the facility leadership are not members of the QI teams (e.g. provision of regular updates on progress and requests for support).
  - Engage community representatives and patients, and collect patient experiences for identifying new improvement aims, analysing gaps and proposing and testing solutions. Ensure patient, family and community engagement mechanisms are functional and regular.
  - Consider how other facilities are engaging stakeholders and communities during exchange visits and peer-to-peer learning events.
- Continue improvement activities:
  - Select new improvement aims in discussion with district and aligned with national and district aims.
  - Orient new facility health workers to the QI efforts in order to amplify benefits into the future.

# SUMMARY OF ACTIONS

## FACILITY LEVEL

Improving quality of care requires several actions at the facility level. After reading this chapter you should know how to address the following interdependent actions.



**Commit to district aims and identify clear facility improvement aim(s)**



**Establish, organize and support multidisciplinary QI teams – prepare for action**



**Conduct situational analysis/baseline assessment to identify gaps**



**Adopt standards of care**



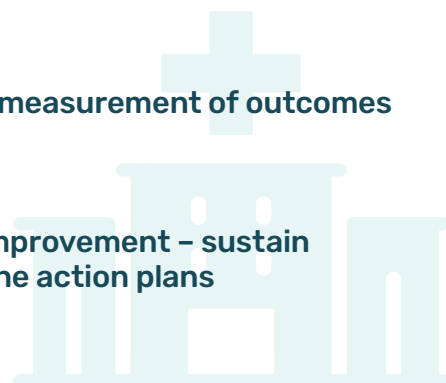
**Identify QI activities – develop action plan**



**Undertake continuous measurement of outcomes**



**Focus on continuous improvement – sustain improvements and refine action plans**



# Final reflections

The purpose of this planning guide is to support required actions at the national, district and facility levels to enhance quality of health services.

The guidance provided on implementing essential activities at each respective level cannot be seen in isolation, and they are clearly interdependent. As stated in the introduction, the success and sustainability of quality improvement efforts is dependent on the effective alignment and integration between these levels, and the need for leaders at each level to understand the activities required not just within their own area but at all levels. An obvious statement for many, it is emphasized again here to encourage a systems approach to enhance quality of care.

Such a systems approach has five outstanding implications:

- First, the foundational requirements relevant to each of the three levels – on-site support; measurement; sharing and learning; stakeholder and community engagement; and management – provide a clear linkage point between the respective levels.
- Second, each of the health systems levers (as described on page 5) need to be considered when planning action for quality at each of the three levels.
- Third, the culture of quality should percolate at all levels – without careful attention and emphasis on the culture of quality, sustainable and meaningful system-wide change is unlikely.
- Fourth, implementation of quality interventions occurs at all three levels – while it is tempting to recognize and focus only on the visible facility-based interventions at the point of care, multiple interventions also require focused attention at national and district level.
- Finally, a diversity of priorities is the natural state within a health system – a shared vision for quality health services based on facility- and district-based realities, and driven by long-term national aspirations, can drive improvement.

The litmus test for any health system is the quality of health services that are delivered at the point of care and the health outcomes that the system achieves for its populations. Challenges and barriers to progress are manifold and varied. These will continue to be collated by WHO as part of efforts to learn from frontline experiences across the world. It is often when examining these challenges and barriers that solutions emerge. The Director General of WHO has emphasized that quality is not a given (5). As he highlights: “It takes vision, planning, investment, compassion, meticulous execution, and rigorous monitoring, from the national level to the smallest, remotest clinic.”

This planning guide hopefully helps organize thinking on the urgent actions required for quality health services and in response to that litmus test at the point of care. Inaction clearly is not a choice, given the substantial impact quality health services have on the health of populations across the world.

# References

1. Crossing the global quality chasm: improving health care worldwide. Washington, D.C.: The National Academies of Sciences, Engineering, Medicine; 2018 (<http://nationalacademies.org/hmd/Reports/2018/crossing-global-quality-chasm-improving-health-care-worldwide.aspx>, accessed 28 June 2020).
2. Delivering quality health services: a global imperative for universal health coverage. Geneva: World Health Organization, Organisation for Economic Co-operation and Development, the World Bank; 2018 (Available from: <http://apps.who.int/iris/bitstream/handle/10665/272465/9789241513906-eng.pdf>, accessed 28 June 2020).
3. Patient safety. Key facts. Geneva: World Health Organization (<https://www.who.int/news-room/fact-sheets/detail/patient-safety>, accessed 28 June 2020).
4. Kruk ME, Gage AD, Arsenault C, Jordan K, Leslie HH, Roder-DeWan S et al. High-quality health systems in the sustainable development goals era: time for a revolution. *Lancet Glob Health*. 2018; 6(11):e1196–252. doi:10.1016/S2214–109X(18)30386–3.
5. Ghebreyesus TA. How could health care be anything other than high quality? *Lancet Glob Health*. 2018; 6(11):e1140–1. doi:10.1016/S2214–109X(18)30394–2.
6. Monitoring the building blocks of health systems: A handbook of indicators and their measurement strategies. Geneva: World Health Organization; 2010 ([https://www.who.int/healthinfo/systems/WHO\\_MBHSS\\_2010\\_full\\_web.pdf](https://www.who.int/healthinfo/systems/WHO_MBHSS_2010_full_web.pdf), accessed 28 June 2020).
7. Study Group on Human Factors. Organising for safety: third report of the Advisory Committee on the Safety of Nuclear Installations. Sudbury: HSE Books; 1993.
8. Handbook for national quality policy and strategy: a practical approach for developing policy and strategy to improve quality of care. Geneva: World Health Organization; 2018 (<http://apps.who.int/iris/bitstream/handle/10665/272357/9789241565561-eng.pdf?ua=1>, accessed 28 June 2020).
9. Interim practical manual supporting national implementation of the WHO Guidelines on core components of infection prevention and control programmes. Geneva: World Health Organization; 2017 (<https://www.who.int/infection-prevention/tools/core-components/cc-implementation-guideline.pdf>, accessed 28 June 2020).
10. National quality policy and strategy tools and resources compendium. Geneva: World Health Organization; 2020 ([https://www.who.int/servicedeliverysafety/areas/qhc/nqps\\_compendium/en/](https://www.who.int/servicedeliverysafety/areas/qhc/nqps_compendium/en/), accessed 28 June 2020).
11. Improving the quality of care for maternal, newborn and child health – Implementation guide for national, district and facility levels. Geneva: World Health Organization; 2020.
12. Water, sanitation, and hygiene in health care facilities: practical steps to achieve universal access to quality care. Geneva: World Health Organization and United Nations Children’s Fund; 2019 ([https://www.washinhcf.org/wp-content/uploads/2019/04/2019\\_WASH-in-HCF-Practical-Solutions-for-Universal-Access-to-Quality-Care\\_2April-compressed.pdf](https://www.washinhcf.org/wp-content/uploads/2019/04/2019_WASH-in-HCF-Practical-Solutions-for-Universal-Access-to-Quality-Care_2April-compressed.pdf), accessed 28 June 2020).

13. WHO Global Learning Laboratory for Quality UHC [website]. Geneva: World Health Organization (<https://www.who.int/servicedeliverysafety/areas/qhc/gll/en/>, accessed 28 June 2020).
14. Quality. Equity. Dignity. A network for Improving Quality of Care for Maternal, Newborn and Child Health [website]. Geneva: World Health Organization (<http://www.qualityofcarenetwork.org/about>, accessed 28 June 2020).
15. Global knowledge sharing platform for patient safety [website]. Florence: Regione Toscana (<http://patientsafety.ftgm.it/>, accessed 28 June 2020).
16. WHO community engagement framework for quality, people-centred and resilient health services. Geneva: World Health Organization, 2017 (<https://apps.who.int/iris/bitstream/handle/10665/259280/WHO-HIS-SDS-201715-eng.pdf>, accessed 28 June 2020).
17. Recovery toolkit: Supporting countries to achieve health service resilience. Geneva, World Health Organization, 2016 (<https://www.who.int/csr/resources/publications/ebola/recovery-toolkit/en/>, accessed 28 June 2020).
18. Taking Action: Steps 4 & 5 in twinning partnerships for improvement. Geneva: World Health Organization (<https://www.who.int/servicedeliverysafety/twinning-partnerships/steps4-5/en/>, accessed 28 June 2020).



# Annex 1.

## Glossaries of quality-related terms

1. Health systems strengthening glossary [website]. Geneva: World Health Organization ([https://www.who.int/healthsystems/hss\\_glossary/en/](https://www.who.int/healthsystems/hss_glossary/en/), accessed 28 June 2020).
2. Handbook for national quality policy and strategy: a practical approach for developing policy and strategy to improve quality of care (page 66). Geneva: World Health Organization; 2015 (<https://apps.who.int/iris/bitstream/handle/10665/272357/9789241565561-eng.pdf>, accessed 28 June 2020).
3. WHO global strategy on people-centred and integrated health services (Annex 1). Geneva: World Health Organization; 2015 ([https://apps.who.int/iris/bitstream/handle/10665/155002/WHO\\_HIS\\_SDS\\_2015.6\\_eng.pdf](https://apps.who.int/iris/bitstream/handle/10665/155002/WHO_HIS_SDS_2015.6_eng.pdf), accessed 28 June 2020).
4. Improving the quality of care for maternal, newborn and child health: Implementation guide for facility, district and national levels. Geneva: World Health Organization; 2020 (<http://www.qualityofcarenetwork.org/>, accessed 28 June 2020).

# Annex 2.

## Driving foundational requirements for quality across the health system

A number of key questions need to be considered when planning for quality health services. Delivering quality health services relies upon several interlinked foundational requirements working together to consistently deliver the right care, at the right time, to the right patient and in the right way. A non-exhaustive list of questions to be considered is presented here. This is intended to guide ministries of health, district health management teams and facility health workers as they undertake improvements in health service quality.

### Key considerations for foundational requirements

	On-site support	Measurement	Sharing and learning	Stakeholder and community engagement	Management
<b>National</b>	<ul style="list-style-type: none"> <li>How can national quality teams strengthen on-site support mechanisms through national planning?</li> <li>How can health care and health management training be improved to increase capacity across the system in quality improvement?</li> <li>What human and financial resources are required to enable effective on-site support and how should initial efforts be prioritized?</li> </ul>	<ul style="list-style-type: none"> <li>What sources of data on quality of health services exist (e.g. disease/population programmes, health facility assessment, patient surveys etc.)?</li> <li>How can the national team responsible for quality access the measurement expertise required to generate the required data?</li> <li>How can measurement capacity and information systems be strengthened across the health system?</li> <li>How can transparency of data on health system performance be achieved/enhanced?</li> <li>How will the efficiency and effectiveness of quality interventions be evaluated?</li> </ul>	<ul style="list-style-type: none"> <li>What support can the national level provide to initiate and sustain a learning system?</li> <li>How can the emerging learning be meaningfully fed into national strategic direction setting for quality?</li> <li>How can the national level facilitate sharing of learning between districts?</li> <li>How can health system leaders engage in global learning on quality?</li> </ul>	<ul style="list-style-type: none"> <li>What role can national quality teams play in designing and applying a community engagement approach to ensure that care provided in facilities meets the needs and preferences of patients, families and community members, and is to their satisfaction?</li> <li>Who needs to be engaged to ensure national plans are in line with needs of stakeholders and specific population groups, to address determinants within and beyond the health sector.</li> <li>How can these approaches be used to ensure meaningful engagement and empowerment of communities in broader national dialogue on health system planning?</li> <li>How can the activities of partners be best coordinated and aligned to maximize impact on quality?</li> </ul>	<ul style="list-style-type: none"> <li>What additional management capacity and training is required at all levels to support quality improvement efforts, and how can this be achieved?</li> <li>What upstream planning is required at the national level to enhance management of quality programmes and support at the district and facility level?</li> <li>What practical steps can be taken to promote a culture of quality throughout the system?</li> </ul>

	On-site support	Measurement	Sharing and learning	Stakeholder and community engagement	Management
<b>District</b>	<ul style="list-style-type: none"> <li>What is required from the district level for the QI on-site support system?</li> <li>How can district-level leadership support facilities in moving forward on quality health service delivery?</li> <li>What resources are required from the district level to support facility-level improvements?</li> </ul>	<ul style="list-style-type: none"> <li>What sources of data and tools are used for QI at the district level?</li> <li>What data should be collected from the facility and district levels?</li> <li>How should quality health services data be reported and used?</li> <li>What measures are needed to manage quality-related activities?</li> <li>How can the district level support data quality and transparency?</li> <li>How can district-level leadership support measurement capacity-building in facilities and across the district health management team?</li> <li>What is required for health data to be able to monitor effectiveness of care and cost of quality interventions at the district level?</li> </ul>	<ul style="list-style-type: none"> <li>What tools and resources are available at the district level to support learning around quality health service activities?</li> <li>How should learning on quality be documented?</li> <li>What information is needed to support learning on quality?</li> <li>How should data emerging from the facilities be shared within and beyond the district?</li> <li>How should learning opportunities be organized within the district?</li> </ul>	<ul style="list-style-type: none"> <li>What relevant stakeholders need to be engaged in district-level design, planning, implementation and monitoring for quality health service delivery?</li> <li>How can stakeholders be engaged within design, planning, implementation and monitoring efforts on quality at the district level?</li> <li>What existing mechanisms are being used for community engagement within the district?</li> <li>What are the ways the community can be engaged at the district level in improving quality health services?</li> </ul>	<ul style="list-style-type: none"> <li>What does the management for quality health services look like at the district level?</li> <li>What is required to support management for quality health services?</li> <li>What additional resources are needed to support district level aims and goals for quality health services?</li> <li>What do mechanisms to review performance of QI interventions look like? What stakeholders are involved in these mechanisms?</li> </ul>
<b>Facility</b>	<ul style="list-style-type: none"> <li>Is the QI team receiving the necessary coaching, mentoring and clinical skills support from the district level?</li> <li>Are managerial, clinical and non-clinical health workers receiving the necessary coaching, mentoring and clinical skills support from the district level?</li> <li>What type of on-site support is required, (e.g. training, mentoring, coaching/supportive)?</li> </ul>	<ul style="list-style-type: none"> <li>What sources of data on quality of care exist?</li> <li>How can measurement capacity and information system be strengthened in the facility?</li> <li>How can facility data and information on quality be made open and transparent?</li> <li>What is required to ensure health data are timely, accurate and complete for monitoring the effectiveness of QI interventions?</li> <li>What is required to ensure generated data is translated into actionable information for quality improvement?</li> <li>What is required to ensure timely and appropriate use of the measurement information for QI?</li> <li>Is the facility receiving necessary support from the district for QI measurement (e.g. through support and problem-solving visits)?</li> </ul>	<ul style="list-style-type: none"> <li>Are there opportunities to participate in peer-to-peer learning activities (e.g. district-level review meetings, quarterly sharing meetings, district newsletters or bulletin)?</li> <li>Are there opportunities for participating in exchange visits between health facilities and between health districts?</li> <li>Are district-generated tools and resources available to support sharing experience and stories among facilities?</li> <li>How can district-level actors support the facility in documentation and sharing of lessons learned?</li> <li>Is learning addressed during periodic assessments?</li> <li>Are mechanisms in place to ensure learning feeds into the district level?</li> </ul>	<ul style="list-style-type: none"> <li>Are representatives from community, patient groups and other stakeholders involved in all stages of design, planning, implementation and monitoring of quality improvement efforts in the facility?</li> <li>How can stakeholders be engaged in design, planning, implementation and monitoring of quality improvement efforts in a meaningful way?</li> <li>Do district-level actors play a role in supporting community engagement?</li> <li>Is there an opportunity to build joint approaches with other facilities to successfully engage communities in QI activities?</li> </ul>	<ul style="list-style-type: none"> <li>What additional management capacity is required to support QI efforts, and how can this be achieved?</li> <li>Are QI team members capacitated in QI concepts and methods as well as communication skills, problem-solving skills, teamwork, etc?</li> <li>Are managerial, clinical and non-clinical staff capacitated in QI concepts and methods?</li> <li>What resources are required?</li> <li>Is facility receiving necessary support from the district (e.g. support and problem-solving visits)?</li> <li>What practical steps can facility leadership take to promote a culture of quality throughout the facility?</li> </ul>

# Annex 3.

## WHO websites with technical content related to quality care

Topic/theme	Relevant website(s)
Antimicrobial resistance	<a href="https://www.who.int/health-topics/antimicrobial-resistance">https://www.who.int/health-topics/antimicrobial-resistance</a>
Emergency and trauma care delivery	WHO tools for strengthening emergency care systems: <a href="https://www.who.int/health-topics/emergency-care">https://www.who.int/health-topics/emergency-care</a>  Guidelines for trauma quality improvement programmes: <a href="https://www.who.int/publications-detail/guidelines-for-trauma-quality-improvement-programmes">https://www.who.int/publications-detail/guidelines-for-trauma-quality-improvement-programmes</a>
Gender equity and rights	<a href="https://www.who.int/gender-equity-rights/knowledge/en/">https://www.who.int/gender-equity-rights/knowledge/en/</a>
HIV	Global standards for quality health care services for adolescents: <a href="https://www.who.int/maternal_child_adolescent/documents/global-standards-adolescent-care/en/">https://www.who.int/maternal_child_adolescent/documents/global-standards-adolescent-care/en/</a>  Maintaining and improving quality of care within HIV clinical services: <a href="https://www.who.int/hiv/pub/arv/quality-care-hiv-services/en/">https://www.who.int/hiv/pub/arv/quality-care-hiv-services/en/</a>  Male circumcision quality assessment toolkit: <a href="https://www.who.int/hiv/pub/malecircumcision/qa_toolkit/en/">https://www.who.int/hiv/pub/malecircumcision/qa_toolkit/en/</a>  WHO implementation tool for pre-exposure prophylaxis of HIV infection: <a href="https://www.who.int/hiv/pub/prep/prep-implementation-tool/en/">https://www.who.int/hiv/pub/prep/prep-implementation-tool/en/</a>
Hospitals	<a href="https://www.who.int/hospitals/en/">https://www.who.int/hospitals/en/</a> <a href="https://www.who.int/hospitals/management-and-quality/en/">https://www.who.int/hospitals/management-and-quality/en/</a>
Immunization	<a href="https://www.who.int/topics/immunization/en/">https://www.who.int/topics/immunization/en/</a>
Infection prevention and control	<a href="https://www.who.int/infection-prevention/en/">https://www.who.int/infection-prevention/en/</a>  Supporting national and facility level implementation of the WHO Guidelines on Core Components of Infection Prevention and Control Programmes: <a href="https://www.who.int/infection-prevention/tools/core-components/en/">https://www.who.int/infection-prevention/tools/core-components/en/</a>
Integrated health services	<a href="https://www.who.int/servicedeliverysafety/en/">https://www.who.int/servicedeliverysafety/en/</a> <a href="https://www.who.int/servicedeliverysafety/areas/qhc/en/">https://www.who.int/servicedeliverysafety/areas/qhc/en/</a> <a href="https://www.who.int/servicedeliverysafety/compendium-tools-resources/en/">https://www.who.int/servicedeliverysafety/compendium-tools-resources/en/</a>
Malaria	<a href="https://www.who.int/malaria/en/">https://www.who.int/malaria/en/</a>
Maternal, newborn, child and adolescent health	<a href="https://www.who.int/maternal_child_adolescent/en/">https://www.who.int/maternal_child_adolescent/en/</a> <a href="https://www.who.int/maternal_child_adolescent/topics/quality-of-care/en/">https://www.who.int/maternal_child_adolescent/topics/quality-of-care/en/</a>

Topic/theme	Relevant website(s)
Mental health	<a href="https://www.who.int/mental_health/en/">https://www.who.int/mental_health/en/</a> <a href="https://qualityrights.org/">https://qualityrights.org/</a> <a href="https://www.who.int/publications-detail/who-qualityrights-guidance-and-training-tools">https://www.who.int/publications-detail/who-qualityrights-guidance-and-training-tools</a>
Patient safety	<a href="https://www.who.int/patientsafety/en/">https://www.who.int/patientsafety/en/</a>
Primary health care	<a href="https://www.who.int/health-topics/primary-health-care">https://www.who.int/health-topics/primary-health-care</a> <a href="https://www.who.int/publications-detail/quality-in-primary-health-care">https://www.who.int/publications-detail/quality-in-primary-health-care</a>
Sexual and reproductive health	<a href="https://www.who.int/reproductivehealth/en/">https://www.who.int/reproductivehealth/en/</a>
Traditional, complementary and integrative medicine	<a href="https://www.who.int/health-topics/traditional-complementary-and-integrative-medicine">https://www.who.int/health-topics/traditional-complementary-and-integrative-medicine</a>
Tuberculosis	<a href="https://www.who.int/health-topics/tuberculosis">https://www.who.int/health-topics/tuberculosis</a>
Water sanitation and hygiene	<a href="https://www.who.int/water_sanitation_health/en/">https://www.who.int/water_sanitation_health/en/</a> <a href="https://www.washinhcf.org/">https://www.washinhcf.org/</a>
WHO Global Learning Laboratory for Quality UHC	<a href="https://www.who.int/servicedeliverysafety/areas/qhc/gll/en/">https://www.who.int/servicedeliverysafety/areas/qhc/gll/en/</a>

# Annex 4.

## Action plan template

The template includes general headings used in action planning but can be used or adapted to support local practical implementation of quality improvement. The template can be adapted for multiple levels of the health system.

Identified priorities	Who is responsible? (lead & team members)	What action is required?	When will it be done? (timeline)	What budget or other resources are required?	What is the measure of success? (include review and completion dates)
<i>Insert rows as required</i>					



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