A strong health system must be able to monitor quality of care and work to improve it to achieve better health outcomes. It can be further strengthened if the culture is such that health care workers, patients, and community members are empowered to take action towards improving their health services. However, the complexity of health care systems makes it difficult to identify whether health facilities are meeting targets, where they fall short, and how they can improve service delivery.

Continuous quality improvement (CQI) refers to an iterative, data-driven process of empowering health care workers to improve health service delivery by identifying problems, implementing solutions and monitoring efforts to improve care, then measuring the effectiveness of these efforts. Integrating CQI approaches in health systems is a best practice that can improve clinical care and health outcomes, while reducing health system costs.1-5 In its earliest form, CQI was often top-down and driven by health sector leadership. But CQI approaches have evolved over time to increasingly engage patients and community members, in addition to the health workers, managers, and organizational systems providing care.

PATH envisions CQI as an approach that empowers individuals to drive change that improves the processes and systems in which they operate and live. This may take the form of health workers adapting clinical interventions to meet the contextual needs of their communities, community members developing educational tools to address gaps in care, or health system managers realigning resources to invest in system-wide improvements that have been tried and tested.

Our approach to CQI

Successful CQI enables responsive and flexible approaches to improve the health system through repeated cycles of identifying the problem, assessing health system challenges, measuring the health system problem, and establishing interventions to improve service delivery. Taking incremental and iterative steps toward change is critical for sustainability. These include:

1. **Identifying and understanding the problem**, then documenting the goals for improvement.
2. **Identifying and implementing solutions** to respond to health system gaps and challenges.
3. **Measuring solutions to learn what works**, including collecting relevant information to monitor progress toward improvement goals.
4. **Adapting the solution as necessary and scaling what works**. This includes recalibrating solutions to meet the evolving needs of the community and emergent health trends. Stakeholders must then learn from and scale successful solutions based on evidence of what does and does not work.

Our principles for CQI

CQI is critical to meeting patient needs, ensuring patient safety, and enabling an efficient health care system. Core
What is CQI?

Continuous quality improvement (CQI) is an iterative process to improve health system performance and health outcomes.

Our principles for CQI?

CQI is critical to meeting patient needs, ensuring patient safety, and enabling an efficient health care system. Five key principles to PATH’s approach include:

1. **The use of multiple, existing data sources:** This may include digital tools, health worker self-assessments, client feedback, facility reviews, and clinical service observations. Existing data should be used to minimize data collection burdens on health workers, such as from national health management information systems. Multiple data sources can help triangulate information, understand performance issues from multiple angles, and minimize data biases if there are data quality issues. Access to real-time data can also help to inform rapid, iterative feedback loops and quality improvement cycles.

2. **A commitment to building the capacity of health workers and lay providers to analyze and make sense of health data:** In addition to trainings and job aides, this requires designing and introducing the right tools for health workers, so they are better equipped to make informed decisions and to act on information. This may include digital systems with decision-support features so health workers know what solutions are at their disposal and how best to address the problems that have been identified.

3. **A coherent, systematic process that contributes to a culture of quality improvement:**

   **PRINCIPLE 1:** The use of multiple, existing data sources.
   **PRINCIPLE 2:** A commitment to building the capacity of health workers and lay providers to analyze and make sense of health data.
   **PRINCIPLE 3:** A coherent, systematic process that contributes to a culture of quality improvement.
   **PRINCIPLE 4:** A human-centered design (HCD) approach that places local knowledge from the end users—health workers and their patients—at the center of the process.
   **PRINCIPLE 5:** A responsive and rapid approach to improvement.

Graphic: PATH/Shawn Kavon.
improvement: This includes using relevant CQI tools to engage every tier of the health system, from health workers on the frontlines, to health managers and health officers operating at a national level. CQI plans should include deliberate steps and mechanisms for generating solutions that are actionable, using tools that are relevant to the context. By working within existing health system structures and processes, health actors strengthen and institutionalize a culture of CQI. Mechanisms for change may include new policy, quality improvement assessment schemes, digital systems, or trainings.

4. A human-centered design (HCD) approach that places local knowledge from the end users—health workers and their patients—at the center of the process: This empowers them to see their role within the performance of the health system and to take charge of and act on their own quality improvement. For example, this may take place through data review meetings and locally-driven improvement cycles, strengthened by supportive supervision and reinforced by recognition of success. A HCD approach should prioritize diversity, equity, and inclusion so all stakeholders are at the table and co-leading together.

5. A responsive and rapid approach to improvement: Successful CQI follows “fail fast, learn fast” principles. By iterating quickly and applying new learnings, health systems can tackle complex challenges and quality improvement issues.

Digitalizing facility supervision: A case study from Tanzania

The Data Use Partnership (DUP) is a government-led initiative in Tanzania that is supported by PATH to digitalize the country’s health system. Across the country, health facilities currently have several different mechanisms and uncoordinated tools for performance improvement. Throughout the year, health facilities are subject to frequent supportive supervision visits by different actors, and for different purposes. In the past, these visits would result in health facilities receiving numerous paper feedback reports and checklists that were hard to manage, put into action, and track.

Now, a new facility supervision system developed and soon to be launched under DUP will link performance data and supervision recommendations in a systematic way so that health workers have a single, consolidated action plan to improve their facilities’ service delivery and quality. Supportive supervision is a critical backbone of CQI processes because it draws on existing, institutionalized processes within the health system and can generate actionable recommendations. It can also serve as a capacity-building mechanism for health workers.

The new facility supervision system will make work easier for health workers and managers. In the past, when supervisors visited, they often repeated information they had already shared, even if there were no updates or changes to the facility. Different supervisors used different checklist tools, which were not integrated, so the supervisors could not easily refer to information provided under previous supervision visits. Facilities struggled to organize, prioritize, and follow through with these suggestions in part because supervisory systems were paper-based and disconnected. Health workers also were not actively involved in developing their facility’s action plan, so felt little ownership or accountability to the quality improvement plans.

As part of DUP, the Government of Tanzania is working to link and digitalize different supervision tools in a systematic way. The redesign of Tanzania’s facility supervision system will enable more CQI approaches. Harmonizing and digitalizing the supervision process will ensure that managers have more reliable, real-time access to information on the performance of health services. As a result, they will be able to more effectively target underperforming facilities and allocate resources.
according to the greatest need. Health workers, in turn, will improve their capacity and be able to deliver better care.

**Advancing viral suppression of HIV: A case study from the DRC**

If taken as prescribed, antiretroviral therapy (ART) reduces the viral load (VL) of HIV in the body to a very low level, which can prevent further HIV transmission to others and keep the immune system healthy. The Integrated HIV/AIDS Project in Haut-Katanga (IHAP-HK) is supported by PATH and the United States Agency for International Development (USAID). IHAP-HK is working with health facilities and local implementing partners across eight health zones of Haut-Katanga province in the Democratic Republic of Congo (DRC) to advance client-centered approaches to diagnose and link people living with HIV (PLHIV) to treatment and support them to achieve viral suppression. In order to better monitor health facility performance, IHAP-HK established a site-level weekly monitoring system to monitor site performance against key indicators related to HIV testing, treatment, and viral suppression. Indicators included:

- Promoting HIV testing efficiency through use of a HIV risk screening/assessment tool;
- Tracing patients who missed appointments;
- VL sample collection; and
- Viral suppression.

This CQI system helped the IHAP-HK team deliver targeted technical assistance to 125 different facilities, depending on their current performance challenges and needs. IHAP-HK supported these facilities as they integrated strategies to improve VL coverage and suppression, with activities ranging from case management tactics that paired peer educators with facility providers for weekly follow-up with PLHIV; to regular virtual therapeutic committee meetings to review cases of potential treatment failure and update care regimens. IHAP-HK also conducted on-site coaching on improving the quality of and messaging delivered during adherence counseling and established adherence checks at each touchpoint with virally unsuppressed PLHIV.

As a result of this robust CQI process, IHAP-HK witnessed an improvement in VL coverage and suppression, from 86% VL suppression in December 2019, to 92% as of September 2020.

**References**


