The Quality Management System of the Surjer Hashi Network in Bangladesh: An Essential Comprehensive Approach to Quality of Health Care Services

March 2024 | Dr. Bruno Bouchet,* Dr. Rezwana Ferdous,** Parvez Asheque**[1]

Abstract

From 2017 to 2023, Chemonics supported 134 private clinics in Bangladesh to become the Surjer Hashi Network (SHN) through the USAID-funded Advancing Universal Health Coverage Activity (AUHC). With a priority focus on quality of health care services, Chemonics used a comprehensive approach based on a quality management framework that includes three essential functions: quality design/planning (QDP), quality assurance/quality control (QA/QC), and quality

---

[1] *Chemonics-Washington, **USAID/Bangladesh Advancing Universal Health Coverage (AUHC) Activity

improvement (QI). To operationalize these functions, we developed an SHN quality policy and strategy that establishes the structure and standards of a quality management system (QMS) and assigns roles and responsibilities within the network. QMS functionality and performance were evaluated through a maturity assessment tool, which also included a tool for measuring the functionality of quality improvement teams (QITs) and a patient exit interview. Over one year (October 2022 to September 2023), the QMS maturity score increased from 69 to 92 (out of 100), largely due to increased functionality of QITs, from 45% to 100%, which resulted in improving the quality of antenatal care services from 0% to 70% and the quality of deliveries from 0% to 80%. Lessons learned from this journey led to a revision of these tools, presented in this report's annexes, and recommendations to SHN to maintain its dynamic of collaboration, continuous learning, and policy adaptation.

KEY TAKEAWAYS

- To improve and sustain service quality, a comprehensive quality policy and strategy implemented through a QMS is more effective than a traditional training and supervision model.

- Monitoring QMS maturity through regular self-assessments creates a continuous improvement dynamic that is as important as the score itself.

- Self-assessment biases can be limited when performance is delinked from financial incentives and staff retributions and focuses evenly on systemic root causes and individuals' competencies.

Introduction

Universal health coverage (see box) is a priority for Bangladesh. To contribute to the government of Bangladesh's vision, Chemonics supported SHN through AUHC in becoming a gender-sensitive, financially sustainable social enterprise. The network operates 134 clinics distributed across all regions of Bangladesh. Its mission is to provide high-quality service — focusing on maternal care, child health, and family planning services — that is financially affordable to all and addresses inequity in financial access to care for underserved and marginalized Bangladeshis. SHN is one of the largest private networks in Bangladesh: between October 2017, when the activity started, and September 2023, SHN clinics provided approximately 11.8 million services to an average of 1.3 million clients annually, according to SHN's electronic medical records system.

Progress toward universal health coverage is measured through two Sustainable Development Goal indicators: service coverage index (Indicator 3.8.1) and household expenditure on healthcare (Indicator 3.8.2). In 2021, Bangladesh's service coverage index was 52 on a scale from 0 to 100 — 10 points below Southeast Asia's regional average. Additionally, in 2016, 24% of households were spending more than 10% of their income on health expenditures, and 8% were spending more than 25%, according to the most recent data available. Universal health coverage indicators track progress on access through service utilization indicators but do not provide information on the quality of these services.

Recent publications from 2018 have highlighted significant service quality gaps in low- and middle-income countries and introduced the concept of a "high-quality health system, one that improves health and generates confidence and economic benefits." During the same period, the WHO, World Bank, and OECD released two important publications on developing a national quality policy and strategy.

SHN and Service Quality

Service quality has been a priority for SHN and the AUHC team since the beginning of the activity. Initially, SHN addressed quality through a traditional approach that combined supervision visits and clinical training. Every quarter, a team of six service delivery specialists (SDSs) visited each facility to evaluate providers' compliance with the network's standards of care, using 19 detailed checklists (one for each service type). Data was collected through direct observation of care, staff interviews, and documentation audits; it was used to calculate an index score that was entered into a QI system database. This allowed SHN to monitor trends and prioritize areas for QI to be addressed during the next assessment.

While this traditional QA method produced some results, its effectiveness was limited by three main challenges:
1. The supervision visits, which depended on the availability of SDSs at SHN headquarters, were infrequent and irregular, making it difficult to monitor trends and rapidly respond to quality issues.
2. The COVID-19 pandemic affected the feasibility of clinic visits by SDSs. In-person visits were replaced with distance monitoring conducted virtually by SDSs from documentation sampled by the clinic providers. This increased the risk of selection bias in documentation audits.

3. Although unconfirmed, different interpretations of the standards between SDSs may have produced inter-observer variability in scoring.

Furthermore, under the traditional approach to QA, most recommendations remained similar after each visit and review, simply reinforcing standards, and leaving clinic staff on their own to figure out how to implement them — resulting in little progress. Clinical training of individuals was a frequent response to performance gaps but is usually insufficient to produce results when systemic and institutional root causes are not addressed. Examples of recurring quality issues included clinical knowledge gaps and antenatal care service performance, poor family planning counseling practices, and non-compliance with infection prevention protocols.

This situation, coupled with 37 reported maternal and perinatal deaths in AUHC's first four years, prompted SHN leadership and the AUHC team to address quality more comprehensively by developing SHN's quality policy and strategy guided by the 2018 international publications referenced above. The policy aimed to establish a QMS with roles and responsibilities for managers and care providers at SHN headquarters and clinics.

SHN Quality Management System

Over five months (April to September 2022), SHN's chief of clinical services and AUHC led the development of the SHN Quality Policy and Strategy (SQPS). Approved in October 2022 by SHN's CEO, the SQPS was built on SHN's vision and mission:

- *Vision:* Grow into a fully sustainable social enterprise dedicated to bettering human lives
- *Mission:* Deliver high-quality, customer-oriented, and affordable health care to all

SHN uses the United States Institute of Medicine's definition of quality: *The degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge* (Crossing the Quality Chasm: A New Health System for the 21st Century).
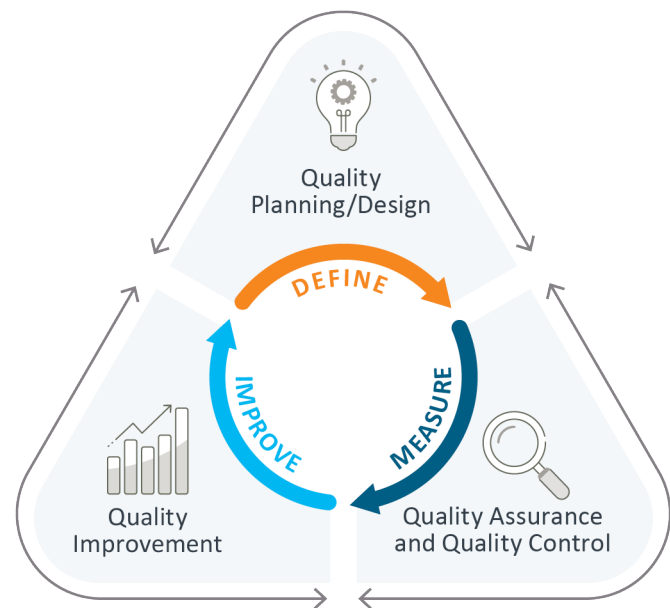
The **policy** makes SHN's commitment to quality explicit, while the **strategy** outlines how the policy will be implemented. The SQPS is articulated around the three functions of quality management adapted from the Juran trilogy (see Figure 1). These functions are **define** (through QDP), **measure** (through QA/QC), and **improve** (through QI) quality.

A. *QDP activities* involve designing products and services with quality in mind by defining requirements (such as setting evidence-based standards of care) to meet client needs and expectations and establishing the conditions necessary to implement the standards (communication, training, equipment, resources, etc.). Examples of standards include clinical practice guidelines (service standards) and standard operating procedures (management standards), such as the SHN Clinics Operations Manual.

B. *Measuring quality* through QA/QC. Because these terms are often used interchangeably, we find it useful to differentiate them:

Figure 1. SHN Quality Management Triangle

- *QA activities* involve evaluating compliance levels with established standards and focusing on processes to identify gaps and their potential causes. This includes observing the delivery of a specific service or a management task, such as through SHN supervision activities. Examples of indicators include the percentage of tasks completed correctly during an antenatal care visit (clinical) and the level of compliance with drug procurement standards (management).

- *QC activities* measure the actual performance of service delivery/management activities to determine whether expected results, outputs or outcomes, were achieved. Examples include the percentage of women completing all four antenatal care visits (clinical output) or the percentage of clinical commodities in shortage (management outcome).

- *QI activities* focus on making system changes (policies, inputs, processes, relationships, etc.) to achieve a higher level of quality and performance. The improvement model is one example of a systematic method for improvement implemented through a four-step process (see Figure 2):
    1. Identifying gaps and improvement opportunities and developing improvement objectives accordingly
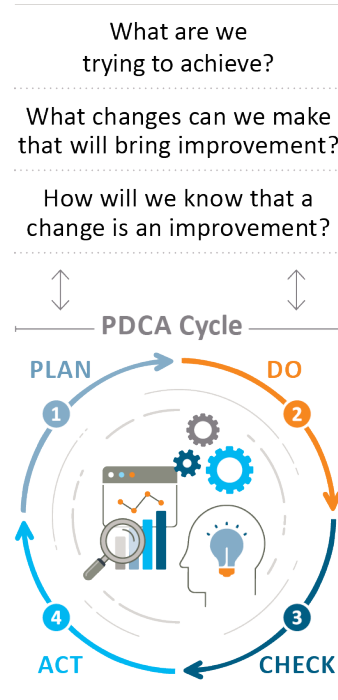
2. Developing a monitoring system through indicators of performance linked to each improvement objective
3. Generating change ideas as potential solutions to address quality performance issues
4. Testing the effects of the changes through a plan-do-check-act cycle of learning and improvement

The QMS is operated by a quality management team (QMT), with a maximum of 12 members, that ensures broad representation of SHN stakeholders. Members of this team include:

- The CEO of SHN, who chairs the QMT
- Representatives from SHN senior management, appointed by the CEO
- Staff responsible for leading QDP, QA/QC, and QI activities
- Representatives from the three types of clinics (advanced, basic with normal vaginal delivery, and basic), including managers and clinicians, who are selected on a rolling basis every six months
- One board member
- Patients' representative(s), if possible

Figure 2. The Improvement Model

What are we trying to achieve?

What changes can we make that will bring improvement?

How will we know that a change is an improvement?

PDCA Cycle

PLAN 1 · DO 2 · CHECK 3 · ACT 4

The SQPS describes in greater detail the roles and responsibilities of SHN stakeholders (see Table 1).

Table 1. Main Roles and Responsibilities of SHN Stakeholders for Quality

Stakeholders	Role in SHN	Responsibilities for Quality
Customers	Customers actively contribute to improving quality of clinical services through feedback, suggestions, and participation in QI teams and efforts whenever possible.	• Express satisfaction and dissatisfaction with services through multiple channels, including responding to exit interview questionnaires. • Suggest improvements.
Service providers	Medical officers, medical assistants, and paramedics deliver clinical	• Conduct client exit interviews. • Report quality issues to manager.

	services according to standards, self-assess performance, and participate in QI teams.	• Conduct root-cause analysis of quality issues. • Suggest and test system changes. • Report and investigate adverse events.
Clinic managers	The clinic manager oversees and ensures compliance with clinical and management functions, measures quality performance, identifies improvement opportunities, and leads QI efforts and teams.	• Ensure staff knowledge of and compliance with standards of care. • Identify staff capacity-building needs. • Set clinic-specific performance indicators. • Report and investigate adverse events. • Design and lead QI efforts and teams. • Ensure patients' involvement in improvement.
Chief clinical officer (CCO) and SDSs	CCO and SDSs support SHN QMS implementation at the clinic level and contribute to SQPS revisions.	• Develop and implement capacity-building plans for clinic staff development. • Measure quality performance through supervision, support implementation of solutions, and monitor progress. • Monitor network-level quality performance indicators. • Lead adverse event investigations and reporting. • Coach QI teams and efforts.
SHN leadership	SHN leadership creates and maintains SHN quality management culture and keeps all stakeholders accountable to the mission.	• Lead the QMT and the QMS quarterly assessment. • Decide on SQPS changes. • Set and review quality performance goals. • Mobilize resources for improvement. • Report to the board on quality.
SHN board	SHN board establishes SHN's quality vision and direction.	• Analyze SHN quality performance. • Make recommendations to address quality issues. • Support implementation of recommendations.

Measuring QMS Maturity

The policy requires the QMT to meet quarterly to assess QMS functionality and performance using a maturity assessment tool (QMS-MAT) developed jointly by SHN and AUHC (see Annex 1*)*. The QMS-MAT expresses 37 standards of structure, functionality (process-focused), and performance (result-focused) organized by the functions described above with greater detail. Each standard is assigned a score on a scale from 1 (not met) to 3 (fully met), with an intermediate score of 2 when it is partially met. The scale allows calculating a maturity score/index as a percentage that can be tracked to evaluate progress. During QMT meetings, each member brings the evidence available regarding each standard and a consensus is met on the score. Most importantly, the team then develops an action-based improvement plan to fill gaps and achieve the desired improvements.

The version of the QMS-MAT in Annex 1 is an improved and expanded version of the original presented in the SQPS, which contained only 26 standards. This is because AUHC aligned the QMS-MAT on 10 priority milestones developed for the performance-based financing component of the activity's last year, resulting in fewer QMS standards and an emphasis on the functionality of QITs (see Annex 1, Standard 31). This emphasis was reflected by attributing 50% of the total QMS score to the QIT functionality because QI was the weakest function at that time. To facilitate QITs' functionality assessments, we developed a tool (see Annex 2) with functionality considered achieved when a team reaches a minimum score of five (with a focus on the process) out of seven (when objectives are met).

While the QMT can choose to assign a different weight to different standards or a function of the QMS, we do not recommend it as it will complicate the calculation of the score, making it more difficult to interpret the trend.

How the AUHC Activity Supported SHN to Build its QMS

Table 2 below summarizes the many activities that AUHC supported to build and strengthen the SHN's QMS functions and its capacity to operate them independently over time.

Table 2. AUHC Support Activities to the QMS and Quality of Services		
Functions		**Design and Capacity-Building Activities**
Design	**QDP**	• Established an electronic database of clinical standards.

		• Developed clinic operations manual for management standards. • Designed a human resource information system (HRIS) that includes service providers' qualifications. • Developed an e-learning training database (Chorcha). • Performed clinic infrastructure improvements. • Procured and upgraded essential medical equipment to deliver services. • Developed a tool to measure compliance with C-section indications. • Organized performance-based training in multiple service areas. • Established a pool of head trainers.
Measure	**QA**	• Developed 19 checklists for quality measurement. • Designed a supervision system based on direct observation, staff interviews, and record reviews. • Designed an electronic quality database (the QI system). • Introduced an electronic medical record system. • Performed audits of C-sections.
	QC	• Developed a health management information system. • Redesigned the maternal and perinatal death surveillance and response system (MPDSR) to track and address adverse events. • Developed a client exit interview questionnaire
Improve	**QI**	• Provided QI training for facility-based teams and their coaching. • Provided training and mentoring of SHN QI coaches. • Designed and coached antenatal care and delivery QI initiatives. • Tested and introduced performance-based incentives scheme.

Results

During the last year of AUHC, the QMT conducted four self-assessments of its QMS, using the short version of QMS-MAT; of the 26 standards, the functionality of QITs was assigned a maximum score of 50 and each of the remaining 25 standards was assigned a maximum score of two, for a total score of 100. A third party, contracted by AUHC, validated the data. Table 3 shows the discrepancies between the self-reported scores and the validated ones. Overall, the results show a slow improvement at the beginning and a significant one in the last quarter.

![Chemonics logo — Development works here.]

Table 3. QMS Maturity Scores and QITS Functionality

Quarters	QMS SHN self-assessed score (A)	QMS third-party validated score (B)	QMS score discrepancies (A-B)	Percentage of functional QITs (# of QITs)
October–December 2022	97	69	28	45.5% (20)
January–March 2023	98	72	26	54.5% (40)
April–June 2023	98	73	25	73% (60)
July–September 2023	98	92	6	100% (80)

The differences between the reported and the validated scores can be explained by three reasons: 1) self-assessment is known to over-estimate performance; 2) standards can be interpreted differently by different members of the QMT; and 3) the functionality of QITs increased slowly at the beginning as they were learning the improvement model, and 20 new clinics were added each quarter (from 20 in the first quarter to 80 in the last quarter).

The last quarter's QIT functionality score was calculated on a sample of 20 clinics, nine of which (45%) were clinics that started their QIT during the last quarter. All nine achieved a minimum score of five and were therefore considered functional.

The establishment of functional QITs has led to impressive results documented in another report: the percentage of clients who received services according to 26 standards of antenatal care services increased from 0% to 70% and from 0% to 85% for deliveries measured against 10 standards.

Lessons Learned

The development of a comprehensive SPQS and QMS has allowed SHN to balance and strengthen its approach to quality by introducing a QI component that has produced results that had not been achieved before through the more traditional "training and QA" model.

SHN's self-assessment of the performance of its QMS and of the QI teams is an innovative feature that builds a dynamic of continuous improvement, leads to data-driven decisions, and

contributes to the ownership and sustainability of the QMS and its continuous development by SHN.

Many factors might have influenced the overestimation of performance (a common challenge in self-assessment), including knowledge gaps in understanding/using the tools, weak self-assessment ability, sometimes unwillingness to provide low scores and possible embarrassment associated with low score among a few supervisors in the SDS team. It is unclear if the financial reward linked to performance under a result-based financing mechanism between SHN and USAID through the AUHC activity also influenced the self-assessment as it is described in the literature. We hypothesize that when financial incentives and fear of retribution are removed, it creates a safe space that promotes a more objective assessment where improvement opportunities are identified.

Both SHN and the third party experienced some challenges with the measurement of the QMS score. These challenges were addressed through clarifying the standards and validation criteria and through the repeated practice of measurement. Hence, the nominal score should be interpreted with caution and the focus should be on the trend rather than the score itself.

The value of QMS-MAT is in the discussions it generates, not simply the final score. This is because the three-level scale to calculate the maturity score is not sensitive enough to capture more nuanced levels of functionality, which might have complicated the interpretation of the standards.

Although the QIT functionality assessment tool was designed to facilitate interactions between QITs and their coaches, the QITs, their coaches, and the third-party validator experienced some challenges because they were unfamiliar with the QI model. This issue was addressed with training and practice.

Way Forward

The QMS is a living system that must evolve based on needs and performance by updating the quality policy and strategy and the tools described in this report (QMS-MAT and QIT functionality assessment). Service quality within SHN depends on how multiple functions of a QMS are performed so that the drivers of quality (real and perceived by clients) are addressed through a comprehensive strategy. Enhancing quality of services drives both the network's financial sustainability and achievement of its social impact. It also contributes to the SHN workforce's professional development by motivating staff to participate in collaborative learning and adaptation of SHN policies, strategies, structure, and processes.

Conclusion

The SQPS is an essential pillar to support SHN's vision to become a sustainable private enterprise delivering affordable quality of care for all, aligned with the Bangladesh government's universal health coverage agenda.

Acknowledgments

We express our gratitude to the SHN leadership and its CEO Shaila Purvin, the chief clinical officer, and the SHN service delivery team for their commitment to quality and collaboration in developing a comprehensive QMS. We thank Carey Walovich, James Card, Nicole Gordon, and Kevin Vergara from Chemonics for reviewing and editing this report.

CONTACT

Founded in 1975, Chemonics is one of the world's leading sustainable development consulting firms for one reason: our people. We are 6,000 experts in more than a hundred countries around the globe, and 90% of us are working in a community we have long called home. We collaborate with communities across the globe to identify and apply innovative, sustainable solutions to the world's biggest challenges. Follow us on LinkedIn, Facebook and X or visit us at www.chemonics.com.

For questions about this technical brief, please contact healthteam@chemonics.com.

Annex 1. Quality Management System Maturity Assessment Tool

Standard	Validation criteria	Situation			Score	Next steps
		None/0	Partial/1	Complete/2		
Quality Management System – Policy						
1. The QMS is described in a quality policy and strategy document	SHN quality policy and strategy document is finalized and adopted	No policy document	Policy document not finalized or not adopted	Policy document finalized and adopted		
2. The quality policy is revised annually	A new edition of the policy is available based on SHN progress and changing environment	No revised quality policy in the past 12 months	Revision of the policy started but not completed	Quality policy revised and adopted in the past 12 months		
3. The quality policy is communicated to all stakeholders throughout the entire network, and each time it is revised	A hard copy of SHN quality policy and strategy (Bangla/English) is available in the clinics	Not Available	Available in some clinics	Available in all clinics		
Quality Management System – Structure						
4. A QMT has been established per the quality policy for responsibility, authority, and membership	Executive order establishing the QMT signed by the CEO, with max 12 members representing SHN leadership, board, clinics, and clients	No executive order	Executive order inconsistent with policy	Executive order consistent with policy		
5. The QMT assesses the QMS at regular intervals (at least semiannually) to determine its fit-for-purpose, functionality, and effectiveness for achieving explicit quality objectives	Self-assessment completed and QMS score available	No QMT meetings in the past six months	QMT met in the past six months, but no maturity assessment	Maturity assessment completed in the past six months and score available		

Standard	Validation criteria	Situation			Score	Next steps
		None/0	Partial/1	Complete/2		
Quality Management System – Performance Objectives						
6. The quality policy includes explicit performance areas and objectives with improvement targets for both clinical services and management functions	Priority areas for improvement are stated in the quality policy or any other strategy document, with explicit and SMART (specific, measurable, achievable, realistic, and timely) objective statements	No specific priority areas identified	Priorities areas identified, but objectives and targets are missing	Priorities objectives and targets developed		
7. Performance objectives are measured through key performance indicators (KPIs)	KPIs are explicitly defined with a clear monitoring plan	No KPIs	Some KPIs but no monitoring plan	Complete KPIs and detailed monitoring plan		
Quality Planning & Design – Clinical Service Standards						
8. Clinical service standards are available for all services delivered by the SHN	Clinical service standards are available in the relevant formats (clinical practice guidelines, procedures, protocols, etc.)	No service standards	Service standards for some services	Service standards for all services		
9. Clinical service standards are consistent with the latest scientific evidence	Service standards are reviewed annually and up to date	No service standards reviewed in the past 12 months	Some service standards reviewed in the past 12 months	All service standards up to date		
10. Clinical service standards are communicated to all service providers	There is evidence that (revised) service standards are available in each clinic or accessible online	No service standards communicated in the past 12 months	Some revised service standards communicated in the past 12 months	All revised service standards communicated in the past 12 months		
11. SHN HQ has a system in place for continuous education of HQ and clinic-level staff	Any combination of online courses, webinars, formal training events, and conference attendance	No continuous education system	Continuous education system partially used	Continuous education system fully functional		

Standard	Validation criteria	Situation			Score	Next steps
		None/0	Partial/1	Complete/2		
12. Service providers have the knowledge and skills to deliver services according to standards	SHN possesses information on qualifications, licensing, and continuous education for each service provider	No HRH information system	Incomplete information on service providers	Complete and up-to-date information on service providers		
Quality Planning & Design – Management Standards						
13. Management standards are defined for all clinics and the SHN leadership team (HQ)	Standard operating procedures (SOP) covering all management functions exist	No SOP	SOP only for clinics or SHN HQ	SOP for both clinics and SHN HQ		
14. Management standards are communicated to all staff in charge of these functions	There is evidence that management standards are available in each clinic and accessible online	No clinic has the SOP	Some clinics have the SOP	All clinics have the SOP		
15. Management staff have the knowledge and skills to perform management functions according to standards	Evidence of clinic and SHN managers having received training to update their knowledge and skills	No refresher training of managers in the past 12 months	Some managers received refresher training in the past 12 months	All managers received refresher training in the past 12 months		
Quality Assurance						
16. A system exists to regularly measure service providers' performance against clinical care standards for antenatal care, deliveries, prenatal care, child services, vaccinations, etc.	Systems and tools to measure service providers' performance are in place	No tools or information on providers' performance	Some providers' performance is measured	Performance of all providers available in a report or database		
17. A system exists to regularly measure managers' performance against standards	System and tools to measure managers' performance are in place	No tools or information on managers' performance	Some managers' performance is measured	Performance of all managers available in a report or database		

Standard	Validation criteria	Situation			Score	Next steps
		None/0	Partial/1	Complete/2		
18. Service quality measures (process indicators) are tracked in an electronic database for each clinic and aggregated at the network level to identify improvement priorities	Evidence of quality measures and stated improvement priorities	No electronic database of quality measures	Quality electronic database exists, but incomplete measures or priorities not identified	Quality electronic database complete and priorities identified		
19. The quality/performance monitoring database includes indicators of patient safety with a focus on infection prevention	Evidence of patient safety and infection prevention measures and results	No indicators of patient safety and infection prevention	Patient safety indicators but not on infection prevention	Patient safety and infection prevention indicators tracked		
20. Quality-of-care issues are identified, documented, and known by SHN leadership	Minutes of senior leadership meetings where quality-of-care issues are addressed	No minutes	Minutes, but no quality-of-care issues mentioned	Minutes where quality-of-care issues are mentioned		
21. Clinic-level management issues are identified, documented, and known by SHN leadership	Minutes of senior leadership meetings where management issues are addressed	No minutes	Minutes, but no management issues mentioned	Minutes where management issues are mentioned		
Quality Control						
22. A system exists to measure and track key patients' output and outcome indicators	Patients' key outputs and outcomes for essential services tracked	No tracking of patients' output or outcome	Some clinics track patients' output or outcome	All clinics track patients' output or outcome		
23. A data quality audit (DQA) system exists to assess the accuracy and completeness of service data reported by the clinics	Evidence of a DQA protocol and its use in the past quarter	No DQA protocol	DQA protocol but no DQA in the past quarter	DQA conducted and results from past quarter available		
24. A Maternal and Perinatal Death Surveillance and Response (MPDSR) system exists with a protocol for reporting and investigating each adverse event	MPDSR guidelines and forms to investigate and report on adverse events are available	No MPDSR system or no adverse events investigated in the past year	MPDSR system exists, but not all adverse events investigated in the past year	No adverse event or all adverse events investigated in the past year and reports available		

Standard	Validation criteria	Situation			Score	Next steps
		None/0	**Partial/1**	**Complete/2**		
25. A system exists to measure and track patients' satisfaction, feedback, and complaints about services	Clinics perform at least 20 client exit interviews per month using SHN standardized form	No tracking of patient satisfaction	Only some clinics complete at least 20 exit interviews per month	All clinics complete at least 20 exit interviews per month		
Quality Improvement – Structure						
26. A reference guide on the plan-do-check-act QI model and training materials is available at HQ and clinic levels	Evidence of QI guide and reference material	No QI reference guide or training material	QI reference guide and training material available in some clinics	QI reference guide and training material available in all clinics		
27. All clinics have at least two staff trained in QI	List of staff trained in QI by clinic	No clinic has two staff trained in QI	Some clinics have two staff trained in QI	All clinics have two staff trained in QI		
28. QITs are established in each clinic, with a leader trained in QI	List of QITs, their members, and roles up to date	No formal QIT	Some clinics have a formal QIT with a trained leader	All clinics have a formal QIT with a trained leader		
29. SDSs have been trained as coaches to support QITs	List of SDSs trained in QI	No SDS trained in QI	Some SDSs trained in QI	All SDSs trained in QI		
30. SDSs know how to manage a large-scale QI effort using the QI collaborative model	QI coaches are trained in the QI collaborative	No SDSs trained in the QI collaborative	Some SDSs trained in the QI collaborative	All SDSs trained in the QI collaborative		
Quality Improvement – Processes						
31. All clinics have a functional QI team using the improvement model	Functionality of QITs is measured through the QIT functionality assessment tool and defined by a score of five or more	No clinic has a functional QIT	Some clinics have a functional QIT	All clinics have a functional QIT		

Standard	Validation criteria	Situation			Score	Next steps
		None/0	Partial/1	Complete/2		
32. Each QIT receives coaching support (visits or virtual) at least once per month	Results of coaching activities documented in a report	No report of coaching support in the past month	Some reports of coaching support in the past month	Coaching support documented for all QITs in the past month		
33. Client complaints are investigated	Reports of client complaints and their investigation are available	No client complaints are investigated	Some client complaints are investigated	No client complaints or all client complaints are investigated		
Quality Improvement – Results						
34. QITs achieve their improvement objectives	Results of QITs interpreted against improvement targets	No QITs have achieved their improvement objectives	Some QITs have achieved their improvement objectives	All QITs have achieved their improvement objectives		
35. Best practices (changes that led to results) are identified, adopted, and scaled up	Best practices are communicated to the entire network and scaled up	No communication of best practices	Best practices communicated but not scaled up	Best practices scaled up to entire network		
36. Successful QITs are recognized and rewarded	Evidence of incentives and rewards to QITs	No successful QIT rewarded	Some successful QITs rewarded	All successful QITs rewarded		
37. Client complaints are resolved and used as opportunities to improve management processes, clinical services, and work environment	Indicate which complaints were addressed and how solutions are relevant to other clinics	No action taken on client complaints	Some client complaints are resolved	All client complaints are resolved and benefit the entire network		
Total Score						

The total score can be a number or a percentage. To calculate a percentage based on equal weight for each standard, divide the total score by 37 and multiply by 100.

Annex 2: Quality Improvement Team Functionality Assessment Tool

Date:		Region/District:	Clinic name:	Clinic code:
Improvement Topic:			Name of the coach:	

Criteria #	Criteria	Proof of Validation	Individual Score (circle when achieved)	Cumulative Score
1	**Quality Improvement Team Composition**			
	A Quality Improvement/Management Team is established	Written list of the members	0.5	0.5
	The QIT includes all the staff involved in the delivery of the service that is the focus of the improvement	Compare with the list of staff involved in the selected service/process	0.5	1
	Roles and responsibilities of team members are explicit	A team leader is identified (on the list of members)	0.5	1.5
2	**Quality Improvement Team Meetings**			
	The QIT meets regularly (at least twice a month)	Minutes of meetings focused on the QI project/aim	0.5	2
3	**Improvement Aim and Indicators**			
	The QIT has an explicit improvement aim	Document or storyboard with written improvement aim expressed as SMART objective	0.5	2.5
	The QIT has developed improvement indicators	Document or storyboard with written improvement indicators	0.5	3
4	**Quality Monitoring**			
	The QIT collects data	Table or database	0.5	3.5
	The QIT plots the data on a run chart	Run chart	0.5	4
5	**Changes**			
	The QIT has identified changes to test	Written list of changes	0.5	4.5
	The QIT is testing/implementing the changes	Changes are being tested with a plan-do-check-act cycle and their implementation documented in the minutes	0.5	5
6	**Results**			
	The data is up to date (according to frequency of measurement) and has been validated	Last data point is plotted on the run chart	0.5	5.5
	The team can explain variation in the trend of the indicators	Annotated run chart	0.5	6
	The improvement aim is achieved	Data/run chart	1	7
Total Score				

RESULT: ☐ Functional   ☐ Non-functional   *To be considered functional, the QIT must obtain a minimum score of 5.*