

Assessment of Implementation of the Star Rating System in Primary Health Facilities: Experience from Tanzania

Chrisogone J. German^{1*}, Henry A. Mollel², Mackfallen G. Anasel², Talhiya A. Yahya³, Joseph C. Hokororo¹, Radenta P. Bahegwa¹, Erick S. Kinyenje¹, Syabo M. Mwaisengela⁴, Eliudi S. Eliakimu¹

¹Health Quality Assurance Unit, Ministry of Health, Dodoma, Tanzania

²School of Public Administration and Management, Department of Health Systems Management, Mzumbe University, Morogoro, Tanzania

³Management Science for Health, Dar es Salaam, Tanzania

⁴Division of Policy and Planning, Ministry of Health, Dodoma, Tanzania

Email: *drxgone@gmail.com

How to cite this paper: German, C. J., Mollel, H. A., Anasel, M. G., Yahya, T. A., Hokororo, J. C., Bahegwa, R. P., Kinyenje, E. S., Mwaisengela, S. M., & Eliakimu, E. S. (2023). Assessment of Implementation of the Star Rating System in Primary Health Facilities: Experience from Tanzania. *Journal of Service Science and Management*, 16, 249-265.

<https://doi.org/10.4236/jssm.2023.163014>

Received: March 28, 2023

Accepted: June 11, 2023

Published: June 14, 2023

Copyright © 2023 by author(s) and Scientific Research Publishing Inc. This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).

<http://creativecommons.org/licenses/by/4.0/>



Open Access

Abstract

Introduction: The Star Rating Assessment (SRA) system was established by the Tanzanian government as a method to improve the quality of healthcare. To identify factors influencing SRA implementation, we looked at the deployment of SRA Systems in Kibaha Town and Rufiji District Councils. **Methods:** To comprehend the experiences of distinct healthcare professionals and Quality Improvement Teams (QITs) on implementation of SRA, we used a descriptive cross-sectional study methodology. Focus Group Discussions (FGDs) and in-depth interviews (IDIs) were used to gather data, which was then evaluated using qualitative content analysis. **Results:** According to the study's findings, the majority of group discussion participants were not aware of the SRA system, the QIT members were unaware of their responsibilities for implementing Quality Improvement Plans (QIPs), and the Council Health Management Teams (CHMT) members were not including QIP follow-up in their quarterly supportive supervisions. Shortage of staff, financial resources, insufficient staff training on the SRA system, and insufficient support from CHMT were among the stated difficulties experienced during the deployment of the SRA system. **Discussion:** The provision of high-quality healthcare in the study sites has improved as a result of the introduction of the SRA system. Nonetheless, there is a need to support healthcare facilities during implementation and provide them with greater training on the standards assessed by SRA.

Keywords

Star Rating Assessment, Primary Healthcare, Quality Improvement Plans, Quality of Care, Tanzania

1. Introduction

Tanzania Vision 2025 prioritized high-quality livelihoods, with health as one of its key emphases. Achieving a high-quality livelihood requires, among other things, that everyone have access to high-quality primary healthcare (PHC) (United Republic of Tanzania, 1999). People still struggle to access PHC due to a paucity of PHC facilities. By December 2015, there were a total of 6640 (53%) dispensaries out of 12,545 villages of which 4554 (36%) are government owned and a total of 695 (15.7%) health centres out of 4420 Wards of which 513 (11.6%) are government owned (Ministry of Health and Social Welfare, 2007; Kapologwe et al., 2020). Despite achievement of the Millennium Development Goal (MDG) 4 of reducing the mortality rate for children under five from 166 per 1000 live births in 1990 to 54 per 1000 live births in 2015, the number of new-born and under-five fatalities from preventable diseases is still high (The Ministry of Health, Community Development, Gender, Elderly and Children, 2016).

The persistently high maternal mortality rate (MMR) is a result of a lack of adequate skilled human resources for health, the availability and irrational use of medications, medical supplies, and equipment, and limited access to reproductive health care. The MMR was estimated at 556 fatalities per 100,000 live births as of December 2016 (National Bureau of Statistics, 2010; The Ministry of Health and Social Welfare, 2014).

The Ministry of Health adopted the Big Results Now (BRN) strategy from the Malaysian model in 2014 to address these challenges. The BRN strategy put a strong emphasis on prioritization thorough monitoring systems, and performance accountability as a way to raise the standard of care in PHC facilities. Performance Management of Health Facilities, Human Resources for Health, Health Commodities, and Reproductive, Maternal, Neonatal, and Child Health (RMNCH) were the four priority areas identified (The Ministry of Health and Social Welfare, 2014).

Star Rating Assessment System Description

The Star Rating Assessment (SRA) system was launched as one of the priority areas under Performance Management of Health Facilities as part of the BRN implementation. The SRA method was designed to evaluate and rank PHC facilities by tying a star level to each facility's performance. The star ratings run the gamut from zero, which indicates subpar performance, to five stars, which indicates excellent performance (The Ministry of Health and Social Welfare, 2014; Yahya and Mohamed, 2018).

The SRA system uses standardized tools called Star Rating Tools (SRTs) to grade the standard of healthcare facilities across a number of service categories. There is SRT for hospitals, health centers, and dispensaries at the council level because each level of PHC facilities has its own set of instruments. Each SRT has 12 service areas, which are divided into four domains: facility management and staff performance; service charters and social accountability; conducive and safe environments; and quality of care and services. The service areas and domains

are comparable across all SRTs; however, the number of indicators depends on the level of health facilities. For example, the SRT has 112 indicators for hospitals at council level and 100 indicators for dispensaries.

The first step in putting SRA into action was training assessors at the national and council levels. Following that, SRTs were used to evaluate PHC facilities, and each facility was given a Quality Improvement Plan (QIP) after input from the facility, council, regional, and national levels was gathered. The QIP was implemented by the facilities, and Council Health Management Teams (CHMTs) and Regional Health Management Teams (RHMTs) then remained vigilant as part of their routine supportive supervision.

After assessment, the findings were communicated to various service delivery levels to ensure ownership and accountability, particularly during the implementation of QIPs. Yet, as seen by the lack of improvement in QIP implementation between baseline assessment and re-assessment, most institutions have had difficulty implementing QIPs (English et al., 2018; Yahya and Mohamed, 2018). The study's objective was to assess the SRA system's implementation process in PHC facilities in two Local Government Authorities (LGAs) in the Pwani region.

2. Methods

2.1. Study Setting

The study was carried out in two LGAs in the Pwani region: Kibaha Town Council (TC) and Rufiji District Council (DC) (Figure 1). Pwani region was purposefully selected because it had 18% of PHC facilities with three stars or higher, which is close to the national average (20%). In addition, the region was

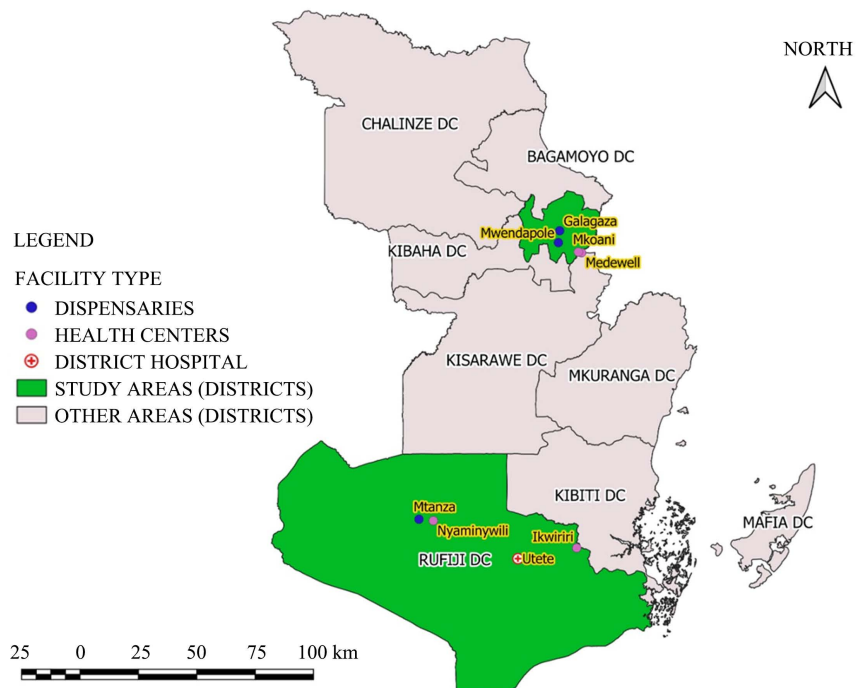


Figure 1. The map of Pwani region showing study councils and facilities.

a focus of performance-based financing interventions (pay for performance—2011-2015 & Results Based Financing—2016-2019) aimed at improving health-care facility performance. Kibaha TC and Rufiji DC were chosen using extreme sampling, with Kibaha TC being the best performing council in the region, with 38% of health facilities scoring three stars or higher, and Rufiji DC being the worst performing council, with 3% of health facilities scoring three stars or higher (The Ministry of Health, Community Development, Gender, Elderly and Children, 2018). Furthermore, the health facilities were selected in clusters (hospitals, health centers, and dispensaries), and in each cluster, an extreme sampling was carried out, with two health centers and two dispensaries chosen from each council and category of best performing and poor performing (The Ministry of Health, Community Development, Gender, Elderly and Children, 2018). The plan was to include district hospitals from each council, but because Kibaha TC did not have a district hospital, only Utete District Hospital (in Rufiji DC) was included in the study.

2.2. Study Design

From November 2018 to May 2019, a descriptive cross-sectional study using a qualitative technique was carried out in Kibaha TC and Rufiji DC. The design aided in gathering individual healthcare providers' and Quality Improvement Teams' (QITs') experiences with SRA implementation. Cross-sectional study entails the detailed description and analysis of a single group, person, process, or system, or any other entity at a specific point in time (Ritchie et al., 2013). Because the purpose of this study was to assess the success or impediment factors for SRA implementation in PHC facilities, a descriptive cross-sectional study was an appropriate study design (Aberdeen, 2013; Ritchie et al., 2013; Creswell and Poth, 2016).

2.3. Study Population

The study population included healthcare workers and managers at all levels of healthcare delivery, from the facility to the national level. Participants included facility managers, QIT members, CHMT members such as the District Medical Officer (DMO) or District Health Secretary (DHS) and the Council Quality Improvement (QI) Focal Person, and RHMT members such as the Regional Medical Officer (RMO) and the Regional QI Focal Person. In addition, national SRA coordinators from the Ministry of Health, Community Development, Gender, Elderly and Children (MoHCDGEC) and the President's Office—Regional Administration and Local Government (PO-RALG) were interviewed to gain a better understanding of SRA implementation as shown in **Table 1**.

2.4. Sampling Techniques

The study employed a non-probability sampling technique to identify the key informant interviewees (KIIs) who provided the information for this study, with

Table 1. Summary of the study participants.

	FGDs			IDIs		
	Male	Female	Total	Male	Female	Total
Kibaha TC						
Mkoani Health Centre	0	5	5	1	1	2
Medewell Health Centre	2	5	7	0	1	1
Galagaza Dispensary	0	0	0	0	2	2
Mwendapole Dispensary	0	0	0	1	0	1
Rufiji DC						
Utete District Hospital	2	3	5	1	0	1
Ikwiriri Health Centre	2	2	4	1	0	1
Nyaminywili Health Centre	0	0	0	0	1	1
Nyamwage Dispensary	0	0	0	0	1	1
Mtanza Dispensary	0	0	0	0	2	2
CHMT Kibaha TC	0	0	0	2	0	2
CHMT Rufiji DC	0	0	0	1	1	2
RHMTs Pwani	0	0	0	0	1	1
MoHCDGEC	0	0	0	0	1	1
PO-RALG	0	0	0	0	1	1
Total	6	15	21	7	12	19

19 KIIs purposely selected. DMO or DHS, QI Focal Persons, and facility in-charges for the selected facilities were interviewed in-depth. The purpose of selecting KIIs is to identify health managers based on their ability to provide rich information and insight on SRA implementations in their council and meet the study's objectives (Eby, 2003; Anasel, 2017; Vasileiou et al., 2018).

Thus, a total of 9 PHC facilities 4 from Kibaha TC and 5 from Rufiji DC were included in the study. A total of 21 participants, 6 men and 15 women participated in four focus groups with QITs held in four locations (Mkoani Health Centre [5 participants], Medewell Health Centre [5 participants], Utete District Hospital [6 participants], and Ikwiriri Health Centre [5 participants]), whereas 19 participants, 7 men and 12 women participated in IDIs.

2.5. Inclusion and Exclusion Criteria

The study included health managers from the facility to the national level who participated in SRA at least once, and those who did not participate in any of the assessments were excluded. The study included all QIT members who were available on the day of data collection.

2.6. Data Collection Methods

Data was collected from the KIIs by the researcher and a trained research assistant for each council. The research assistants were chosen based on their previous participation in SRA at either the baseline or re-assessment levels. Before data collection, a one-day orientation was held for research assistants to ensure the quality of the data collected. IDIs and FGDs guides were used to collect data. IDIs were held with National level coordinators, Regional and Council QI Focal Persons, and facility in-charges for hospitals and health centers. FGDs were held with QITs at Utete Hospital and all selected Health Centres, with the exception of Nyaminywili Health Centre, which had only three staff on the day of data collection, making it difficult to hold an FGD. The summary of questions asked during IDI and evaluated components (**Table 2**).

2.7. Data Management and Analysis

Data collected via audiotape from FGDs and IDIs were transcribed verbatim and then compared to field notes. Within 24 hours of data collection, recorded FGDs and IDIs were transcribed. The recorded transcriptions were translated from Swahili to English and then read several times to ensure data quality and to get a sense of the overall data. Qualitative content analysis was used to examine IDIs and FGDs (Graneheim and Lundman, 2004; Erlingsson and Brysiewicz, 2017). Qualitative content analysis allows for the inductive development of categories from text data; this is important in capturing experiences from KIIs. Data reduction was then used to create condensed meaning units (Sirili et al., 2019).

The transcribed texts were then imported into Atlas.ti version 8.2.4 (Smit & Scherman, 2021). The transcripts were then inductively coded using pre-determined themes such as achievement and offered awards after SRA; awareness on SRA system; status of QIP implementation; roles of QIT in QIP implementation; inclusion of QIPs in annual plans; and supportive supervisions by CHMTs. Emerging themes were deductively coded while coding (Gale et al., 2013). The texts were coded based on the study's objectives, and finally, outputs for all codes, quotations, memos, and families were created in preparation for writing the final descriptive report (Anasel, 2017).

3. Results

The analysis of SRA system implementation experiences from study sites yielded seven categories: achievement of set targets; achievement and offered awards after SRA; awareness of SRA system; status of QIP implementation; roles of QIT in QIP implementation; inclusion of QIPs in annual plans; and supportive supervisions by CHMTs.

3.1. Achievement of the Set Targets

SRA's main goal was to have at least 80% of PHC facilities in the country achieve

Table 2. SRA evaluated components and summary of questions for IDI guide.

Evaluated Component	Questions
Awareness on SRA system & Achievements and Awards after SRA	1) Have you participated in any of the SRA assessments? Probe: Ask him/her to explain his or her participation in baseline and re-assessment? his or her roles 2) Do you know the number/percentage of facilities that attained three stars and above in your region/council? Probe: awards provided to best performing facilities
Achievement of the set targets	3) In your opinion, why most of the facilities did not attain the set target of three stars and above? a) Was the orientation conducted to R/CHMTs adequate before the assessment? Probe: How many days the orientation was done? How many R/CHMTs were oriented? Was monitoring done after orientation?
Status of Implementation of QIP	4) Does your region/council has copies of quality improvement plans (for all facilities) developed after assessment? a) Probe: Are you conducting QIP follow-up in the facilities? How are you organized within R/CHMTs? b) What is the current status of implementation? c) Do you have monthly reports on progress of QIPs? (24 selected indicators), verify the availability
Roles of QIT in implementation of QIP	5) Do you know your roles in implementation of QIPs? a) Probe on roles of documentation of all QI activities including QIPs
Supportive supervisions by CHMTs	6) In the past one year have you conducted supportive supervision to your facilities? a) Probe: How do you conduct SS, is it joint or by interventions based? b) In quarterly supportive supervision <i>inter alia</i> , do you check the progress of SRA? c) Do you get challenges in supervising the aspects of SRA during supportive supervision?
Inclusion of QIPs in annual plans	7) Was the QIP developed during baseline and re-assessment included in facility plan or CCHP? a) Probe: If Yes, what activities were included (verify) b) If No, Why?

three stars or higher by June 2018. Surprisingly, only 20% of facilities met the goal. Only one facility (Ikiwiriri HC) in Rufiji DC met the three-star standard. Utete District Hospital, the council's referral center for lower-level health facilities, received two stars. Kibaha TC, on the other hand, had 11 out of 12 (92%) public PHC facilities with three stars or higher. According to participants, there are several reasons for the failure to meet the set targets. One of the reasons was insufficient staff training to a set of standards that were assessed during SRA.

The majority of the facilities' staff reported that they had not been trained on the standards used to evaluate their health facilities. For example, one of the respondents reported that they were not aware of the standards used for assessments:

"...you know what, they didn't train us on the standards that were used to evaluate us. We don't even know what criteria have been used so far, I've heard that there are different standards for dispensaries, health centers, and hospitals. It's difficult to say whether lack of standards caused us to fail." (IDI-Facility).

Another factor mentioned by some participants, particularly those who took part in the BRN lab, was a failure to set realistic goals. The targets were set during the BRN lab in 2014 without the benefit of realistic baseline data, resulting in overly ambitious targets that are difficult to achieve. One participant stated:

"...BRN was planned under political pressures, we were planning even without data to support, and everything was planned on the table. The goals were overly ambitious. At the time, the facilities did not have a single paracetamol, and the infrastructure was completely inadequate, do you think you can get 80% of the facilities to have a star in that situation?" (IDI-National).

3.2. Achievements and Awards after SRA

Following the assessment, awards were given to the best performing councils and facilities. The awards were divided into two categories: the first was for the best performing council, in which councils were required to achieve the target of at least 80% of their health facilities receiving three stars or higher. There was no council in the Pwani region that met this goal. The second category was for best performing health facilities, which required a facility to have three stars or higher, and the award was given to the top five performing facilities in the region. The top five facilities for the December 2018 re-assessment were Nyota ya Bahari Health Centre (Mkuranga DC), Msata Dispensary (Chalinze DC), Mwendapole Dispensary (Kibaha TC), Mataya Dispensary (Bagamoyo) and Ikwiriri Health Centre (Rufiji DC). Councils received trophies, while health facilities received certificates. According to one of the health facility in-charges in Kibaha TC, the facilities that received certificates were highly motivated:

"I was just surprised, they brought this (pointing...) certificate and we were among the best performing facility in the region. The Deputy Minister of Health presented this certificate, and we gathered and celebrated that day, and all of our neighboring facilities (including Tumbi) were surprised. We're still working hard to get to five stars." (IDI-Facility).

The high-rated facilities were highly motivated, whereas the low-rated facilities were potentially discouraged by their ratings. As a result, the underperforming facilities must be supported by the appropriate authorities. Among the required supports are comprehensive QI training for all facilities to close performance gaps among health facilities and funding for QIP activities that require budget.

3.3. Awareness on SRA System

Among the initial questions posed to interviewees was their knowledge of the star level attained by their facilities in the most recent previous assessments. Some of the interviewed staff were unaware of their facility's star rating, and this was especially true of staff in health centers and hospitals. For example, none of the QIT members could name the star level of their facilities without hesitation among the four health centers evaluated. On the other hand, despite the fact that the results are shared with the facilities on the day of assessment, facility in-charges who were supposed to take the lead in implementing SRA activities were unaware of their facilities' star level. One of the facilities in charge at Kibaha TC's Health Centre narrated:

“In the previous assessment, our facility received two stars, but the results from CHMTs indicated that we received three stars, which differs from the results we have. In addition, we heard from CHMTs that all facilities in the council received three stars.” (IDI-Facility).

In Rufiji DC, awareness was relatively high because one of the QIT members from one of the facilities was aware of the SRA system and precisely explained the concept of SRA, which was even compared to hotel ratings as follows:

“SRA is a system designed to improve the quality of services in our facilities. It was held in our hospitals (Utete District Hospitals), dispensaries, and health centers rather than regional or national hospitals. The quality of services is evaluated using standards that determine the facility's star level, which can range from zero to one, two, four, or five stars. The good news is that the services have been improved, and the ratings are more or less the same as those of hotels with two, three, or up to five stars.” (FGD, Facility).

The SRA system's implementation has been hampered by a lack of awareness. Furthermore, the SRA program was found to be given low priority when compared to other performance improvement activities such as performance-based financing. As a result, it is high time for leaders at relevant authorities to invest in the SRA program, as the program will be ineffective unless leadership fully supports it.

3.4. Status of Implementation of QIP

The implementation of QIP was a critical component in the SRA system implementation process. Following the assessment, the assessors prepared QIP for the identified gaps in collaboration with health facility management teams. The observation revealed that the majority of the facilities are no longer implementing the QIPs that were provided to them, which was supported by the fact that the majority of the facilities did not have copies of the QIPs. For example, only two of the nine facilities evaluated had copies of their QIPs. It was also discovered that most facilities have placed a greater emphasis on RBF indicators while ignoring SRA indicators, which are implemented through QIPs. One of the facility managers stated:

“Do you know what I mean? They gave us the Star Rating Tool, and the CHMTs brought us the QIP, but we had no idea how to use it. We were told that the SRA program no longer exists and that we must deal with RBF, where we receive money quarterly. RBF is responsible for all of the renovations you see here.” (IDI-Facility).

3.5. Roles of QIT in Implementation of QIP

QIT plays an important role in the implementation of QIPs by ensuring that those gaps are assigned to specific individuals from the facility’s departments/units. One QIT member demonstrated a good understanding of QIT roles in QIP implementation by explaining how they identify gaps and find solutions:

“The QIT includes all representatives from each department, one individual from each department presents gaps identified from their respective departments and then we sit down and find the solutions to address them. Also, those identified as gaps or not in place during the assessment are included in the QIP, which will show the gap, responsible person (such as facility in charge), time-frame, and whether or not the gap requires funds.” (FGD-District).

On the other hand, some QIT members from some of the facilities were unaware of their roles in the implementation of QIPs, as well as their routine roles, such as monthly meetings, meeting schedules, and the documentation of QI activities in the facility.

“I believe we meet every three months, or whenever there are problems to be solved, or when directed by our administrator.” (FGD-Facility, Kibaha TC).

The gaps in knowledge among QIT regarding their roles in QIP implementation must be addressed by relevant authorities. Continuous QI training of QIT members, including their roles and responsibilities in implementing QI initiatives, is required.

3.6. Inclusion of QIPs in Annual Plans

The PO-RALG has a role of overseeing the plans and budgets for Tanzanian PHC facilities. Annual plans are developed at the facility level and then compiled at the council level as Comprehensive Council Health Plans (CCHP). One of the agreements reached during SRA design was that any gaps in QIP that required a budget be included in facility annual plans. There are pre-determined indicators known as priority areas under Tanzania’s national essential healthcare interventions package that are used in the planning process (Wright, 2015). Facilities are expected to include QIP activities that require financial resources in their plans during the annual planning cycle, depending on the budget ceiling. However, due to budget constraints, only some of the gaps are included in the plans. Gaps with no financial implications are filled using the QIP’s guidance and technical assistance from CHMT and other stakeholders. A review of the facilities’ plans revealed that some of the gaps had been filled, but the facility in-charges were unaware of whether those gaps were caused by the QIPs developed during SRA.

3.7. Supportive Supervisions by CHMTs

Supportive supervision is one of the primary roles of CHMTs and is provided to the council's facilities at least quarterly. CHMTs' role in QIP implementation includes monitoring QIP progress during quarterly supportive supervision and ensuring gaps are addressed. According to one of the facility managers, the CHMT conducts supportive supervision on a quarterly basis, but they are not dealing with the QIPs anymore; instead, they have a checklist with other indicators.

“They (CHMT) usually come for supervision, especially when distributing vaccines; they bring their checklist, and after supervision, they provide feedback and write some recommendations in this register (MTUHA Book 2), but I m not sure if they were looking at BRN (SRA) issues.” (IDI, Facility).

When some of the supervision reports by CHMTs in the facilities evaluated were reviewed, there was evidence of QIP monitoring in two of the nine facilities included in the study.

4. Discussion

The study sought to assess the implementation of the SRA system in two selected councils in the Pwani region, Kibaha TC and Rufiji DC. In various countries, the star rating system has been used to assess the quality of health-care services provided by health-care facilities (Yahya and Mohamed, 2018; Betts and Cruse, 2020). The Centers for Medicare and Medicaid Services in the United States rates nursing homes using a star rating system to provide residents and their families with an easy-to-understand assessment of nursing home quality, making meaningful distinctions between high and low performing nursing homes (Centers for Medicare & Medicaid Services, 2023). The main goal of Tanzania's SRA system was for at least 80% of PHC facilities to have three stars or higher by June 2018. Attaining this goal has proven difficult in the majority of facilities. For example, approximately 34% of PHC facilities received zero stars in the baseline assessment (The Ministry of Health, Community Development, Gender, Elderly and Children, 2017b), and the percentage of zero stars decreased to 6% in the reassessment, but the percentage of facilities that met the target was only 20% (The Ministry of Health, Community Development, Gender, Elderly and Children, 2018).

Overly ambitious targets set during the program's planning stage were one of the reasons for failure to meet the set target. Because there was no evidence of a documented feasibility study prior to BRN implementation, all targets were set in one sitting for six consecutive weeks as part of BRN priorities (The Ministry of Health and Social Welfare, 2014).

The study councils' levels of achievement of set targets vary to varying degrees. In Rufiji DC, for example, only one facility received three stars, accounting for 3% of the assessed facilities. This could be due to a number of factors, including a lack of healthcare workers and inconsistent supportive supervision due

to geographical location, as some facilities are in difficult-to-reach areas, particularly during the rainy season (Mboya et al., 2016; Renggli et al., 2018; Sirili et al., 2019). In contrast to Rufiji DC, the situation in Kibaha TC is promising, with nearly 40% of facilities receiving three stars or higher, and the situation is even better for LGA-owned facilities, with only one facility (Galagaza Dispensary) receiving two stars in the re-assessment (The Ministry of Health, Community Development, Gender, Elderly and Children, 2018). Kibaha TC has relatively good performance, which is likely due to the fact that it is located in the urban area and close to the commercial city of Dar es Salaam, which contributes to most healthcare workers preferring to work there over Rufiji DC, which is located in the rural area, where retention of healthcare workers is a challenge.

Achievement and awards were reported as motivating factors because the majority of the facilities awarded were eager to achieve higher star levels; however, this may lead to demotivation for poorly performing facilities if they are not supported to close the identified gaps.

Staff awareness of the SRA system varied by facility type, but was relatively high at the dispensary level compared to health centers and hospitals. The observed differences in level of awareness could be attributed to insufficient participation of staff during feedback sessions and clinical meetings. It was surprising that some facility managers were unaware of their facilities' star rating. This could be due to the fact that the majority of the in-charges were newly appointed, as well as a lack of emphasis on SRA and a shift in emphasis to RBF, which provides financial support to the facilities.

Implementation of QIPs is one of the key components of SRA in Tanzania; however, it was only partially completed because most gaps, even those that did not require financial support, were not addressed. This was most likely due to a lack of advocacy to various stakeholders, such as political leaders, who have authority in supporting health-care planning and budgeting.

The QITs, who are the primary implementers of QIPs, appeared to be unaware of their roles and responsibilities in the SRA's implementation. This was attributed to the discovery that team members' roles were changed from time to time, causing QIT members to fail to consider QIP implementation as one of their roles.

One of the agreed-upon strategies in the implementation of the SRA system during BRN lab was the inclusion of QIPs that require financial support in the PHC facility annual plan (The Ministry of Health and Social Welfare, 2014). Direct Health Facility Financing was another strategy in which facilities were given financial autonomy by receiving funds directly in their facility bank accounts. Instead of the previous system, where plans were done at the council level, this has enabled the facilities to plan for their realistic plan (United Republic of Tanzania, 2017; Kapologwe et al., 2019; Kapologwe et al., 2020; Mwakatumula, 2021). The inclusion of QIPs in the annual plan fell short of expectations because most facility in-charges were unable to translate the QIPs with the priorities indicated in

planning guidelines (Presidents' Office—Regional Administration and Local Government, 2011).

Furthermore, the successful implementation of SRA is heavily reliant on quarterly supportive supervision by CHMTs (The Ministry of Health, Community Development, Gender, Elderly and Children, 2017a). The supervisions were conducted infrequently and did not include tracking the progress of QIPs. This is consistent with an analysis of countrywide data from the SRA system, which revealed that LGA administration accounts for 20% of the variation in facility improvement; thus, interventions targeted at the CHMT level may help to support facility improvement (Gage et al., 2020).

Finally, we recommend that healthcare workers continue to be trained, that various stakeholders be involved, and that the SRA system be digitalized. This is supported by a study conducted by Couper et al. in four low- and middle-income African countries, which revealed a significant concern about skill gaps and the quality of training provided to middle-level health cadres (Couper et al., 2018). The training gap and quality have been a challenge in implementing the SRA system. The emphasis of training should be on problem-solving approaches and practical procedures. If the SRA training is conducted in the manner suggested by the majority of participants, the gaps observed during baseline and re-assessment will be significantly reduced.

5. Conclusion

The implementation of the SRA system in Tanzania was hampered by a number of factors, including a lack of skilled healthcare providers, inadequate training, and financial resources. As a result, it is critical for implementers to ensure that the reported challenges are addressed by: training health care providers, including QITs, on SRA standards, strengthening the CHMTs quarterly supportive supervisions to accommodate follow-up of implementation of actions to address the gaps contained in the QIPs, rewarding best performing facilities and supporting those with low scores, including QIPs that require financial support in annual plans. The assessment demonstrated the importance of having a solid implementation process in place to ensure that set goals are met (Durlak and DuPre, 2008). Although our study has pointed out the success and failures of SRA implementation, future research should also look into the factors that influence the SRA system's implementation fidelity (Carroll et al., 2007).

Acknowledgements

The authors gratefully acknowledge the Ministry of Health and all study participants.

Source(s) of Support/Funding

No official funding was received by the authors for the study. The data were collected and analyzed as part of partial fulfilment for Master of Science in Health

Monitoring and Evaluation degree at Mzumbe University.

Ethical Issues

The Mzumbe University Ethical Clearance Committee granted ethical approval (reference number MU/DPGS/INT/35/Vol. IV), and the respective Council Executive Directors granted permission to conduct the study. Before beginning interviews, all interviewed participants provided written informed consent and signed it. To give participants the freedom to express themselves without external or internal interference, privacy was maintained during data collection.

Author's Contribution

Chrisogone J. German and Henry A. Mollel conceptualized and carried out research design. Acquisition of data was facilitated by Chrisogone J. German, Talhiya A. Yahya, Joseph C. Hokororo, Erick S. Kinyenje, and Radenta P. Bahegwa. Analysis and interpretation of data was done by Chrisogone J. German, Syabo M. Mwisengela, Henry A. Mollel, Mackfallen G. Anasel and Eliudi S. Eliakimu. Drafting of the manuscript was done by Chrisogone J. German followed by critical revision of the manuscript for important intellectual content by all authors. Erick S. Kinyenje and Eliudi S. Eliakimu anchored the review, revisions and approved the final article submission.

Conflicts of Interest

The authors have declared no conflicts of interest, and the manuscript has not been submitted for publication elsewhere.

References

- Aberdeen, T. (2013). Yin, R. K. (2009). *Case Study Research: Design and Methods (4th Ed.)*. Thousand Oaks, CA: Sage. *The Canadian Journal of Action Research*, 14, 69-71. <https://doi.org/10.33524/cjar.v14i1.73>
- Anasel, M. G. (2017). *Family Planning Programme Implementation: Differences in Contraceptive Prevalence Rates across Local Government Authorities in Tanzania*. Ph.D. Thesis, University of Groningen. <https://research.rug.nl/en/publications/family-planning-programme-implementation-differences-in-contracep>
- Betts, D., & Cruse, C. (2020). There's More than One Way to Become a 5-Star Hospital. <https://www2.deloitte.com/content/dam/Deloitte/us/Documents/life-sciences-health-care/us-lshc-medicare-hospital-star-rating-system.pdf>
- Carroll, C., Patterson, M., Wood, S., Booth, A., Rick, J., & Balain, S. (2007). A Conceptual Framework for Implementation Fidelity. *Implementation Science*, 2, Article No. 40. <https://doi.org/10.1186/1748-5908-2-40>
- Centers for Medicare & Medicaid Services—CMS (2023). *Five-Star Quality Rating System*. The U.S CMS, Baltimore, Maryland. <https://www.cms.gov/medicare/provider-enrollment-and-certification/certificationandcompliance/fsqrs>
- Couper, I., Ray, S., Blaauw, D., Ng'wena, G., Muchiri, L., Oyungu, E. et al. (2018). Curri-

- culum and Training Needs of Mid-Level Health Workers in Africa: A Situational Review from Kenya, Nigeria, South Africa and Uganda. *BMC Health Services Research*, 18, Article No. 553. <https://doi.org/10.1186/s12913-018-3362-9>
- Creswell, J. W., & Poth, C. N. (2016). *Qualitative Inquiry and Research Design: Choosing among Five Approaches*. SAGE Publications.
- Durlak, J. A., & DuPre, E. P. (2008). Implementation Matters: A Review of Research on the Influence of Implementation on Program Outcomes and the Factors Affecting Implementation. *American Journal of Community Psychology*, 41, 327-350. <https://doi.org/10.1007/s10464-008-9165-0>
- Eby, L. T. (2003). Book Review: Survey Research Methods, 3rd ed., by Floyd J. Fowler Jr. (2002). Thousand Oaks, Ca: Sage. *Organizational Research Methods*, 6, 135-138.
- English, A., Lanzara, C., Awale, A., & Hatt, L. (2018). *Measuring What Matters: Case Studies on Data Innovations for Strengthening Primary Health Care*. Primary Health Care Performance Initiative.
- Erlingsson, C., & Brysiewicz, P. (2017). A Hands-on Guide to Doing Content Analysis. *African Journal of Emergency Medicine*, 7, 93-99. <https://doi.org/10.1016/j.afjem.2017.08.001>
- Gage, A. D., Yahya, T., Kruk, M. E., Eliakimu, E., Mohamed, M., Shamba, D., & Roder-DeWan, S. (2020). Assessment of Health Facility Quality Improvements, United Republic of Tanzania. *Bulletin of the World Health Organization*, 98, 849-858A. <https://doi.org/10.2471/BLT.20.258145>
- Gale, N. K., Heath, G., Cameron, E., Rashid, S., & Redwood, S. (2013). Using the Framework Method for the Analysis of Qualitative Data in Multi-Disciplinary Health Research. *BMC Medical Research Methodology*, 13, Article No. 117. <https://doi.org/10.1186/1471-2288-13-117>
- Graneheim, U., & Lundman, B. (2004). Qualitative Content Analysis in Nursing Research: Concepts, Procedures and Measures to Achieve Trustworthiness. *Nurse Education Today*, 24, 105-112. <https://doi.org/10.1016/j.nedt.2003.10.001>
- Kapologwe, N. A., Kalolo, A., Kibusi, S. M., Chaula, Z., Nswilla, A., Teuscher, T., Aung, K., & Borghi, J. (2019). Understanding the Implementation of Direct Health Facility Financing and Its Effect on Health System Performance in Tanzania: A Non-Controlled before and after Mixed Method Study Protocol. *Health Research Policy and Systems*, 17, Article No. 11. <https://doi.org/10.1186/s12961-018-0400-3>
- Kapologwe, N. A., Meara, J. G., Kengia, J. T., Sonda, Y., Gwajima, D., Alidina, S., & Kalolo, A. (2020). Development and Upgrading of Public Primary Healthcare Facilities with Essential Surgical Services Infrastructure: A Strategy towards Achieving Universal Health Coverage in Tanzania. *BMC Health Services Research*, 20, Article No. 218. <https://doi.org/10.1186/s12913-020-5057-2>
- Mboya, D., Mshana, C., Kessy, F., Alba, S., Lengeler, C., Renggli, S. et al. (2016). Embedding Systematic Quality Assessments in Supportive Supervision at Primary Healthcare Level: Application of an Electronic Tool to Improve Quality of Healthcare in Tanzania. *BMC Health Services Research*, 16, Article No. 578. <https://doi.org/10.1186/s12913-016-1809-4>
- Ministry of Health and Social Welfare (2007). *Sera ya Afya*. <https://www.moh.go.tz/storage/app/uploads/public/61b/084/21e/61b08421e2f71055061527.pdf>
- Mwakatumbula, H. (2021). *The Implementation of Direct Health Facility Financing (DHFF): Prospects and Challenges*.
- National Bureau of Statistics (2010). *Tanzania Demographic and Health Survey 2010*. Na-

tional Bureau of Statistics.

Presidents' Office—Regional Administration and Local Government (2011). *Comprehensive Council Health Planning Guidelines*.

<https://hssrc.tamisemi.go.tz/storage/app/uploads/public/5ac0ae19e5ac0ae19e2abc080738188.pdf>

Renggli, S., Mayumana, I., Mboya, D., Charles, C., Maeda, J., Mshana, C. et al. (2018). Towards Improved Health Service Quality in Tanzania: An Approach to Increase Efficiency and Effectiveness of Routine Supportive Supervision. *PLOS ONE*, *13*, e0202735.

<https://doi.org/10.1371/journal.pone.0202735>

Ritchie, J., Lewis, J., Nicholls, C. M., & Ormston, R. (2013). *Qualitative Research Practice: A Guide for Social Science Students and Researchers*. SAGE.

Sirili, N., Frumence, G., Kiwara, A., Mwangu, M., Goicolea, I., & Hurtig, A. K. (2019). "Doctors Ready to Be Posted Are Jobless on the Street..." the Deployment Process and Shortage of Doctors in Tanzania. *Human Resources for Health*, *17*, Article No. 11.

<https://doi.org/10.1186/s12960-019-0346-8>

Smit, B., & Scherman, V. (2021, January 1). Computer-Assisted Qualitative Data Analysis Software for Scoping Reviews: A Case of ATLAS.ti. *International Journal of Qualitative Methods*, *20*. <https://doi.org/10.1177/16094069211019140>

The Ministry of Health and Social Welfare (2014). *Big Results Now Healthcare NKRA Lab. Dar es Salaam*.

https://pemandu.org/wp-content/uploads/2023/05/TZ-BRN-Healthcare-NKRA-Rev-11-web_English.pdf

The Ministry of Health, Community Development, Gender, Elderly and Children (2016). *The National Road Map Strategic Plan to Improve Reproductive, Maternal, Newborn, Child & Adolescent Health in Tanzania (2016-2020): One Plan II*.

https://www.globalfinancingfacility.org/sites/gff_new/files/documents/Tanzania_One_Plan_II.pdf

The Ministry of Health, Community Development, Gender, Elderly and Children (2017a). *National Supportive Supervision Guidelines for Quality Health Services*. Health Quality Assurance.

<https://roryadc.go.tz/storage/app/uploads/public/626/a67/b7a/626a67b7aa8fe699990192.pdf>

The Ministry of Health, Community Development, Gender, Elderly and Children (2017b). *Star Rating Assessment Report 2017*.

The Ministry of Health, Community Development, Gender, Elderly and Children (2018). *Star Rating Assessment Reports*. Health Quality Assurance.

United Republic of Tanzania (1999). *The Tanzania Development Vision 2025*. President's Office. <http://www.tzonline.org/pdf/theTanzaniadevelopmentvision.pdf>

United Republic of Tanzania (2017). *Direct Health Facility Financing Guide*.

Vasileiou, K., Barnett, J., Thorpe, S., & Young, T. (2018). Characterising and Justifying Sample Size Sufficiency in Interview-Based Studies: Systematic Analysis of Qualitative Health Research over a 15-Year Period. *BMC Medical Research Methodology*, *18*, Article No. 148. <https://doi.org/10.1186/s12874-018-0594-7>

Wright, J. (2015). *Health Finance & Governance Project. Essential Package of Health Services Country Snapshot: Tanzania*. Bethesda, MD: Health Finance & Governance Project, Abt Associates Inc.

<https://www.hfgproject.org/essential-package-of-health-services-country-snapshot-tanzania/>

Yahya, T., & Mohamed, M. (2018). Raising a Mirror to Quality of Care in Tanzania: The Five-Star Assessment. *The Lancet Global Health*, 6, e1155-e1157.
[https://doi.org/10.1016/S2214-109X\(18\)30348-6](https://doi.org/10.1016/S2214-109X(18)30348-6)