

**Perspectives and Insights of Healthcare Professionals Regarding the Necessary Support for Enhancing Health Management Information System (HMIS) Reporting Practices within Private Health Facilities in Kampala City: A case of Makindye Division**

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**ABSTRACT**

*Timely submission of Health Management Information System (HMIS) reports by private health facilities in Uganda has persistently exhibited a notable deficiency. This concern has been discerned through the scrutiny of annual health sector performance reports conducted by the Ministry of Health Uganda. The study explored healthcare professionals' perspectives and perceptions concerning the requisite support for enhancing Health Management Information System (HMIS) reporting practices within private health facilities in the Makindye Division of Kampala City. The study adopted a case study research design, collecting data from 23 health workers across private health facilities in Makindye Division in Kampala District. Data was gathered using semi-structured in-depth interviews and Focus Group Discussions (FGDs). Data was analysed using thematic analysis approach based on Braun and Clarke (2006). Findings revealed the need for support within healthcare facilities, manifested through structured support supervision. This entails the identification of operational weaknesses, facilitated by periodic review meetings designed to foster inter-facility collaboration, enabling shared performance evaluation and mutual learning. Furthermore, the participants emphasized the necessity of a systematic approach in the provision of reporting tools essential for health workers in their reporting duties. The findings could be useful for policymakers and health practitioners in the quest for improved HIMS reporting and data use.*

**Keywords:** Healthcare professionals; Health Information Management System; Health Reporting; Private Health Facilities.

## **1. Introduction**

In the dynamic landscape of healthcare, effective information management is paramount to ensure the delivery of high-quality and timely healthcare services. The Health Management Information System (HMIS) plays a pivotal role in this regard, serving as the backbone for data collection, analysis, and reporting within health facilities (Siyam et al., 2021). The same author says that as the global healthcare landscape continues to evolve, the need to understand and enhance HMIS reporting practices becomes increasingly critical for improving healthcare outcomes.

Research suggests that health facilities often face challenges related to data accuracy in HMIS reporting. Issues such as incomplete or inaccurate data entry, data duplication, and inconsistencies in reporting standards can compromise the reliability of health information. Studies emphasize the importance of training and capacity building for health workers involved in HMIS reporting. Lack of training can contribute to errors in data collection, analysis, and reporting, highlighting the need for continuous education and skill development (Wandera et al., 2019).

Effective HMIS reporting goes beyond data collection; it involves the meaningful use of data for decision-making at various levels of the healthcare system. Research indicates that health facilities that successfully integrate data into decision-making processes experience improved health outcomes (Bernadette, Anthony, Ngaira, & Pepela, 2018). Adherence to regulatory standards and the establishment of standardized reporting procedures are critical for the reliability and comparability of health data. Research suggests that health facilities that comply with established standards demonstrate more accurate and consistent reporting (Kiberu et al., 2014).

Involving the community and relevant stakeholders in the HMIS reporting process is recognized as beneficial. Engaging various stakeholders fosters transparency, accountability, and community participation, contributing to the overall success of reporting practices (Correa & Montero, 2013). Timeliness in reporting is a common challenge identified in research and this delay can hinder the timely identification and response to public health issues. Identifying and addressing the barriers to timely reporting is essential for improving overall system efficiency (Ministry of Health Uganda, 2021).

Ensuring the security and privacy of health data is a growing concern. Research suggests that health facilities need to implement robust data security measures to protect sensitive information and maintain public trust. Adequate resource allocation, including financial resources and manpower, is critical for sustaining effective HMIS reporting practices. Research underscores

the importance of securing funding to address infrastructure needs, training programmes, and system maintenance. This study delves into the intricate web of HMIS reporting practices within health facilities, aiming to provide a comprehensive analysis of the current state of affairs. The term "HMIS reporting practices" encompasses the processes involved in the collection, storage, analysis, and dissemination of health-related data within healthcare institutions. Recognizing the significance of accurate and timely information, this research seeks to uncover the challenges, successes, and potential areas for improvement within the realm of HMIS reporting (Wandera et al., 2019).

Timely Health Management Information System (HMIS) reporting by health facilities in Uganda has continued to be very low. This was noted with concern through the annual year health sector performance reports by the Ministry of Health in Uganda where districts are ranked in performance that some districts have continuously recorded low reporting rates over time. Ministry of Health, The Republic of Uganda, (2020). Data from DHIS 2 shows that the trend for the last three years has been the same, showing that Kampala has never achieved 80% target required by the Ministry of Health for weekly epidemiological report. The data shows that in 2021 the city achieved 20% reporting rate; 2022 improved to 60.6% and then in 2023 the weekly reporting rate was at 67.4% (DHIS 2, December 2023). The delayed reporting and low reporting can hinder the timely identification and response to public health issues. Identifying and addressing the barriers to timely reporting are essential for improving overall system efficiency. Therefore, it was important to investigate the support required by the health workers to improve HMIS reporting practices of health facilities in Makindye Division, Kampala City.

Kiberu (2014) found out that the supply of both data capture and reporting tools should be done ahead of time to avoid delayed reporting by the facilities and this would also avoid the use of non-standardized tools such as counter books which may lead to data loss and incomplete reporting that could arise due to lack of reporting tools. The same study stressed the need to hire staff who should be trained and be responsible for data management at various levels such as health facilities. These should include records assistants, This was in harmony with Kasambara (2017) who also found out that health workers needed to be supported in the recruitment of more staff to handle HMIS reporting practices if they were to be effectively implemented at various levels. Other scholars pointed out the need for the training and capacity building of the health workers involved in data management. The trainings improve the quality of data submitted, which improves the level of analysis done at the facility level. This would encourage facility data use which was a big challenge highlighted by health workers (Samal, 2016).

Wandera (2019) noted that health workers need to be supported with periodic performance reviews in which best practices are shared with poorly performing facilities to enable them improve reporting practices. He also noted the need to have stakeholder involvement during

tools designing and reviews such that all the facilities and concerned stakeholders can get to know what they expect to use going forward.

As health systems worldwide grapple with the complexities of managing vast amounts of health data, the efficacy of HMIS reporting practices emerges as a determining factor in decision-making, resource allocation, and policy formulation (Bernadette et al., 2018). Understanding how health facilities navigate this terrain can shed light on best practices, gaps in implementation, and opportunities for innovation. By examining the experiences and perspectives of healthcare professionals involved in HMIS reporting, this study aimed at contributing valuable insights to the ongoing discourse surrounding healthcare information management.

The key research question that guided this research was: *What kind of support do healthcare providers in the private health care facilities require to enhance HMIS reporting practices?*

## **2. Research design and methods**

### **2.1 Approach and design**

The research methodology embraced a qualitative approach, and utilized a case study research design (Yin, 2017) leveraging semi-structured in-depth interviews and focused group discussions to extract valuable insights about the perspectives and experiences, of senior health managers, division health teams, and health workers about the kind of support they may require to improve HMIS reporting practices within the health facilities.

### **2.2 Sampling and data generation**

The study was conducted in Makindye Division, which is one of the 5 divisions of Kampala City. Makindye Division has over one hundred health facilities with different categories or cadres of health workers working in the facilities, (DHIS 2, 2023). This study targeted health workers from private health facilities within Makindye Division as well as members of the division health team.

A sample size of 23 Health workers was picked from private health facilities in Makindye Division, Kampala City. Of the 23, seven (7) participated as Key Informants who were purposively selected, while 16 of the 23 health workers participated in focussed group discussions (FGDs). Two groups were formulated for the FGDs to discuss the kind of support they required to improve HMIS reporting practices within the health facilities and were guided by a facilitator.

### **2.3 Data analysis**

The generated data underwent systematic analysis utilizing thematic analysis methodology, as articulated by Braun and Clarke (2017). Following the completion of data collection, the researcher transcribed the gathered verbal data and conducted thorough analysis, adhering to the structured approach outlined by Braun and Clarke (2017), comprising six distinct phases. These sequential steps encompassed: (1) Familiarization with the data, (2) Generation of initial codes, (3) Thematic exploration, (4) Review of identified themes, (5) Definition and nomenclature of emergent themes, and (6) The final production of the analytical report. This methodological rigour ensured comprehensive and rigorous examination of the collected data, aligning with established best practices in thematic analysis within qualitative research paradigms.

### **3. Results and discussion**

Health Management Information System (HMIS) reporting is crucial for effective healthcare management, policy formulation, and decision-making. To improve HMIS reporting in health facilities, health workers require various forms of support. The objectives of this part of the qualitative study was to explore new aspects of perspectives about the support required by the health workers to improve HMIS reporting by health facilities. The study explored different support that health workers of Makindye Division needed in order to improve HMIS reporting practices in the division and the entire city at large. The researcher placed the support into three categories namely: support supervision, performance reviews and other support that the facilities recommended to improve HMIS reporting practices.

#### **Support supervision**

Regular supervision and monitoring by designated personnel can help identify challenges and provide immediate feedback to health workers. Supervisory support can address issues related to data quality, completeness, and timeliness. Districts and divisions through the office of the district health officer are mandated to do supervision of service delivery in the districts and it is through this support supervision that the areas of weaknesses are identified and actions put in place to improve performance while the strong areas are further strengthened at the same time. An excerpt from the response of one of the interviewees indicated that:

*“they work as our second eye and identify areas of weakness so that we can work on them, they also help us identify actions and then we put timeliness so that next time when they come they find things better and improved. that’s all that happens at our facility”.*

It was noted that these support supervision visits were done by different stakeholders such as KCCA officials, Ministry of Health ,World Health Organization and some implementing

partners such as IDI and FHI 360. When the division and her partners went for support supervision, it was noted, they did so periodically and with very many things to look at such as administration, HMIS reporting, equipment, among others, so that each area was covered by the end of the day. It was usually a big team so that at least each section was handled.

### **Performance review meetings**

These review meetings were done on quarterly basis by the division health team to enable the facilities share performance and learn from each other, thus improving performance. It was noted that each facility sent in a person to represent it per quarter. One of the participants said: *“Hmmm as a facility we get a representative though they are not planned and so they would benefit us if we get to know in advance”*.

It was noted that sometimes the call or invitation for the review meetings came without prior notice and thus appeared not to be planned. Hence the health workers felt it could be better if they planned with the facilities for the review meetings. One of the health workers also had this to say: *“We are called for the meetings, share performance, give us updates and learn from each other as facilities”* (**Interview Participant 7**).

The performance review meetings facilitated learning amongst the facilities. Best practices were shared so that poor performing facilities could know what to do going forward and improve performance. This was also testified by the participant who said:

*“Hmmm they do call us to attend every time they organize them so we attend they take us through our performance and we share as facilities gaps, challenges, areas of improvement and so many others it is an important activity for us”* (**Interview Participant 3**).

### **Summarizing the HMIS reporting tools**

Developing and implementing user-friendly HMIS tools can simplify data entry and reporting for health workers. Mobile applications or web-based interfaces with intuitive design can enhance accessibility and encourage regular reporting.

The health workers also recommended that the HMIS reporting and recording tools should be summarized and reduced in size so that they are easy to be filled by the health workers. *“...then the other one is the HMIS tools I propose summarizing them to only focus on the indicators that are used for planning”* (**Interview Participant 3**).

The health workers said that the ministry should revise the tools and concentrate only on important variables and indicators that are only used for planning so that the tools are reduced in

terms of size but also in terms of quantity. The health workers say they would support in identifying areas that should be removed from the tools where they do not see the need to be included in the HMIS reporting tools.

### **Providing feedback to the health facilities**

Establishing effective feedback mechanisms, where health workers receive constructive feedback on their reporting encourages continuous improvement. Timely feedback helps identify errors and provides opportunities for corrective actions. There is need for KCCA to provide feedback at all levels including when the reports are correctly written and not concentrate on providing feedback for mistakes and wrong things only. This is what the health workers said: “...we would also recommend KCCA to be rewarding good reporters with certificates etc...” (**Interview Participant 1**).

It was noted that feedback in most cases was given to facilities that reported poor quality data or even had mistakes in their data. However, those with no issues in their data were not given any feedback. It was from this background that the health workers proposed that feedback in terms of rewards should be provided to facilities with good reporting practices and good quality data.

### **Regular trainings on HMIS reporting tools**

Health workers need adequate training to understand the importance of HMIS and how to accurately collect and report data. Training programmes should cover data collection methods, data entry into information systems, and the significance of timely and accurate reporting.

Kampala being unique with the majority of the health facilities being private, it is prone to having many staff attrition rates. Hence the team recommended regular trainings in the tools so that health workers would have the knowledge on the recording and reporting tools. A health worker had this to say: “... private facilities have high staff turnover so I recommend regular trainings in HMIS tools and reporting” (**FGD1 Participant 6**).

There is need for continuous trainings of the health workers on the HMIS reporting tools so that all the health workers get knowledge on how they are filled and how reports are generated from the tools. It was noted that there was high staff turnover in Kampala City which required regular trainings so that the new health workers would get the knowledge.

### **Facility-based performance review meetings**

There is a need for health facilities to be supported to do facility-based review meetings so that real issues are brought out that are affecting HMIS reporting practices. One of the health workers commented that:

*“I would recommend that we are supported with facility based performance review meetings on quarterly basis so that everyone in the facility is brought on board about HMIS reporting practices” (FGD 1 Participant 1)*

Facility based review meetings are conducted at the facility level where different departments and stakeholders participate to discuss the performance of the facility in different sections. The facility may invite external persons so that they share a neutral opinion on the performance or provide guidance on how best the facility can improve performance. Facility reviews are far much better since they are actually discussing the actual issues unlike the general division reviews which sometimes discuss issues concerning other facilities, not all the facilities at once.

### **Stakeholder involvement**

Involving the community in the reporting process can contribute to more accurate and comprehensive data. Educating communities about the importance of health data and involving them in health campaigns can improve the overall reporting culture.

Ministry of Health and KCCA should involve all the concerned stakeholders including facility owners and be oriented on the role of reporting so that they support the facility teams to do reporting. One of the participants said: *“I would suggest the ministry engages our bosses so that they get to know the role of HMIS reporting so that they support the cause” (FGD 1, Participant 5).*

In most cases the facility owners are not involved into some of the issues such as reporting. This is because most of the owners of these health facilities are non-medical investors who are not always available at the facilities to be engaged during the engagements such as support supervision, review meetings. Hence there is a need to engage them by calling for a meeting where they can attend and discuss such issues affecting their facilities with the division teams and higher authorities such as the ministry.

During support supervision visits to the facilities, the visitors should make appointments before they visit the facilities so that they can prepare for them and serve them better rather than just going to the facilities even when the facility heads are not around. One participant said: *“when the visitors from ministry or IPs let them make appointments so that we prepare for them and also have people to attend to them” (FGD 2, Participant 5).*

During the support supervision it was noted that the visitors just moved to the sites and caused compromising of service delivery. Therefore, it was prudent that they first make arrangements with the facilities such that there would be a person to give them fulltime attention and where

possible the facility owners should be present such that they also get feedback about their performance together with action points from the findings of the support supervision visits.

**Motivational Incentives:**

Recognizing and rewarding health workers for their efforts in timely and accurate HMIS reporting can serve as a motivational factor. Incentive programmes, such as acknowledgment in the form of certificates or small rewards, can boost morale.

**Infrastructure and Technology Support:**

Providing health facilities with the necessary technological infrastructure, such as computers, internet connectivity, and reliable software, is essential for efficient HMIS reporting. Support in maintaining and updating information systems helps to ensure the smooth functioning of data collection and reporting tools.

**4. Conclusions and Recommendations**

The conclusions and recommendations are based on the findings that were presented in line with an Inquiry into the Perspectives and Perceptions of Healthcare Professionals Regarding the Necessary Support for Enhancing Health Management Information System (HMIS) Reporting Practices within Health Facilities in Kampala City, a case study of Makindye Division.

It was recommended that trading licences should be tagged to reporting so that non and late reporting facilities should be denied the opportunity to operate until they comply with the reporting practices in the country. It was noted that reporting is not one of the parameters that are looked at during the licensure of the facilities and thus the importance of this recommendation to the division health team members. The government through the line ministry should put in place laws against poor reporting. These may include revoking of licences from the facilities which are not reporting to the expected standards. There is a need for all the stakeholders to sit and summarize the very many tools being used into few tools and then digitalize them so that the health workers spend less time filling the registers and concentrate on service delivery. Digitalizing the tools will facilitate real-time data which is captured at all times and also minimize transport costs for the facilities.

Kampala being unique with majority of the health facilities being private which are prone to having high staff attrition rates, there should be frequent mentorships and trainings in HMIS tools so that all the health workers are very comfortable and able to use the tools with ease at all times. The government through the line Ministry of Health with her implementing partners should distribute the tools such as registers and reporting tools so that the facilities have what to

use at all the times. The facilities are also recommended to always project and quantify which tools they will need in future to enable the supplier to procure in time and supply them in time.

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