Improving PMT Functionality in Public Health Facilities for Better Utilization of Data: A Qualitative Study in the Sidama Region, Ethiopia

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Abstract

Introduction: Although the importance of performance monitoring team in the Ethiopian healthcare delivery system cannot be overstated, there is a paucity of literature on the enablers and obstacles of PMT functionality. Therefore, the present study aims to explore the facilitators and barriers to PMT functionality in public health care delivery systems to improve data quality and information usage in the Sidama Region of southern Ethiopia.

Methods: Using a qualitative phenomenological research approach, the data were collected through in-depth interviews with experienced, trained health professionals. A total of 37 professionals, who are working on health information management systems (HIMS) and have first-hand experience, were interviewed face-to-face using a semi-structured interview guide. The transcript form of interview data was transcribed first by hand and then into a computer open-code file. Emerging themes were refined twice by engaging additional transdisciplinary team members. Preliminary findings were also validated by workshop participants, who came from the targated woreda/district and regional health bureaus.

Results: The study identified several facilitators and barriers to PMT functionality. The identified key facilitators to be considred are: Input and process-related aspects; PMT structure, budgeting and other resources, capacity-building-related, and availability of PMT guideline. On the otherhand, barriers such as PMT member turnover, a lack of funding and other resources, a lack of PMT guidelines and their supply, a lack of training and other motivating concerns, PMT logbook formats, and a lack of clear appraisal and accountability framework guidelines were noted.

Conclusion and Recommendations: Several interfering factors with PMT operations were identified. Creating a sense of data ownership, looking towards strategies to retain workers, improving health information system budgets and supplies, availing of PMT guidelines, modifying logbook forms, and building an accountability framework are are found to be essential interfering factors. [*Ethiop. J. Health Dev.* 2022;36 (SI-1)]

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Key Findings

- Input and process-related components like PMT structure, budgeting and other resources, capacity-building-related factors, and PMT guideline availability are all important facilitators.
- PMT member turnover, shortage of finance and other resources, a lack of PMT guidelines and their availability, an inadequate sense of data ownership, lack of training, and other motivating concerns were the barriers to PMT functionality. In addition, PMT logbook formats and the absence of clear appraisal and accountability framework guidelines are also additional barriers.

Key Implications

- Policymakers, planners, and health service managers should improve inputs (including budget), the capacity of health workers, and process-related components.
- The PMT structure and availability of relevant guidelines should be strengthened.
- PMT members should be carefully selected and trained to avoid turnover and enhance their engagement

Introduction

Evidence suggests that a strong and functional health information system improves healthcare delivery systems at all levels by increasing the availability, accessibility, quality, and utilization of health information for decision-making processes. Effective and efficient routine health information system plays a key role in improving health system performance, though it has been questioned in developing countries, in which Ethiopia is not exceptional (1, 2). Ethiopia's Ministry of Health (MOH) institutionalized performance monitoring meetings monthly to monitor progress and improve the performance of routine health information systems at all levels of the health system, both at administrative health units and health facilities.

The designated Performance Monitoring Team (PMT), chaired by the head of the institution at all levels, is a team of the multidisciplinary health workforce. PMT has been established to improve the performance of health care facilities within which the team is formed, particularly that of data quality and information use through the application of different data quality assurance techniques, and to assure result-based monitoring and evidence-based decision-making to improve the health sector's performance. The team formed within the health care facility regularly monitors and evaluates the performance of their facility against the preset quality standards, identifies the gaps, sets an action plan, and sets interventions according to the identified gaps. PMT at the health center level also provides supervisory activities to health posts to

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improve the standard of care. Hence, PMT works to improve health system performance more efficiently and effectively through progressive follow-up of the Health Information System (HIS) (3).

Therefore, establishing a PMT at all levels of the health system is becoming the norm in Ethiopia. According to the MOH report, in 2019, out of the selected 129 health centers, 91% of the facilities had established PMTs. Even though most facilities claimed to establish their respective facility PMT, reports indicate that regular meetings as per the standard were not common. In facilities where they meet regularly, they usually focus on coverage indicators and do not conduct root cause analysis for observed performance gaps, or they do not develop interventions to address the identified gaps as expected and question the functionality of PMT (3, 4). Consequently, literature is scarce on factors affecting the functionality of PMT at the different health system levels in the country, namely data quality, data use, and service delivery improvement.

Therefore, the current qualitative study aims to explore facilitating factors and barriers to PMT functionality in public health care facilities in Shabedino and Hawella districts/Woredas, southern Ethiopia.

Methods and materials
Study area: Two districts (Woredas in the local context) were identified for the study. These were, namely; Shabedino and Hawela woredas. Shabedino Woreda, located 25 kilometers from Hawassa city, is one of the 36 districts and 4 city administrations of the newly declared Sidaama region. The district has an estimated total population of 201,712 and has one primary hospital, six functional health centers, and 29 health posts. Hawela Woreda is among the newly structured Woreda of the Sidaama region, located 17 kilometers from Hawassa City. The district has a total population of 104,799 and has a total of 4 health centers and 12 health posts.

Study design: The analysis employed the convenience sampling approach as it is the most frequently used in qualitative studies, (5) using the in-depth interview method for its advantage in offering the participants the opportunity to express themselves in a way ordinary life rarely affords them. It has also been argued that participants find it pleasing and even cathartic to discuss their opinions and experiences and to have someone listen with interest (6).

Sample size determination: A convenient sample of 37 health professionals who have direct linkage with Routine Health Information System management (RHIS) in the vicinity were selected for the in-depth interview. The positions of study participants are the facility head, HMIS focal person, Maternal and Child Health (MCH) focal person from the health centers (HCs), Woreda Health Office (WoHo) head, and WoHo HMIS focal person from offices. While 30 of the in-depth interview participants were from the HCs, 7 were from WoHo.

Data collection procedure and analysis: The interview was conducted face-to-face by trained health professionals who are experienced in qualitative data collection. A semi-structured interview guide composed of open-ended questions and probes to yield in-depth responses about participants' experiences, perceptions, opinions, feelings, and knowledge related to performance monitoring team riders and barriers was used. The interview lasted from one to one and a half hours and involved one interviewer and one participant. The interview data consisted of tape recordings, typed transcripts of tape recordings, and the interviewer's notes. During the data analysis phase, the typed transcript form of interview data was transcribed first by hand and then into an open code software computer file, in which it was coded according to participant responses to each question and then to the most salient themes emerging across the set of interviews using the thematic analytic approach.

Ethical Clearance: Ethical clearance was obtained from the Institutional Review Board of Hawassa University College of Medicine and Health Science's Institutional Review Board (IRB). Informed consent was also obtained from each participant before an interview. Participants were also assured that what they said would be kept confidential. The interview was conducted in a private place with no outsiders to help the participants feel that their confidentiality was completely protected.

Results
In this study, the facilitators explored input- and process-related issues. The input-related factors include direct PMT structure and organization-related factors, budgetary and other resources, capacity-building-related variables, and the availability of PMT guidelines. Factors related to PMT processes are experience with PMT in data quality follow-up for better information use; using PMT as an instrument for solving problems of routine health information system activities; setting up a participatory discussion to share experience and knowledge; and staff commitment to the information revolution.

The perceived facilitating factors related to PMT structure and organization include PMT team composition, members' understanding of the role of PMT, PMT interest in and regularity of attendance, group meeting regularity and attendance, the monitoring system of the members, and the usefulness of the log book for their activities.

Team Composition of PMT members:
According to the information obtained from all key informants, the composition of PMT members is in line with the Ministry of Health (MOH) guidelines. For example, one of the respondents said, "… *PMT composition or members are the hospital manager, medical director, matron, case team leaders, KPI head, and management members"* (Male, hospital director).

According to the participants, the health facility head led the meeting; the HMIS focal is the secretary, and the others are members. One of the key informants

responded, "… in particular, *the health center-health post-focal person and the MCH focal person are those performing their best. It is the area where more burdens are loaded…"*

Male, Health center head.

PMT member's understanding of their role
Since the PMT guidelines contain indicators and sources of data; all of the PMT members said they have an understanding of their roles and responsibilities, which facilitated the performance of the PMT as a whole. They have the role of approving data quality and identifying low- and high-performing activities each month. Lot quality assurance sampling (LQAS) is performed. LQAS is used to check the quality of a lot using a sample of indicators drawn at random from the lot. The lot is said to be accepted if there are fewer defective elements than in the sampled indicators. Based on the LAS, they identify indicators with low performance and develop a plan to improve them. The next month, they compare the current performance with the previous one and set a direction. All these activities enhance PMT function. They will avoid false reports, and if outliers appear on the data report, they will discuss those issues. A response from one participant shows this.:

"We see quality using LQS, by selecting 12 data elements randomly. For example, last month LQS was 95%. ……. Every morning, the HMIS focal and I check each case team registration book to see what has been done in the evening and evaluate whether they registered and tally the provided service"
(Health center head)

PMT Meeting related issues
Participant's interest in the meeting, the control system, attendance requirements, and their perspective on the PMT meeting are all PMT meeting-related issues. As one respondent said,

> *"I would be happy if the PMT meeting was strengthened. Data reported by one person and by the team is not the same because group work has more quality and false reports are avoided"*

> *(Male Health Center head).*

The majority of the key informants said that having PMT meetings (every week, monthly, and quarterly) focused on the reported data has facilitated the functionality of PMT. The meeting's regularity is maintained by announcing the time and date to the members. As one of the key informants said,

> *"… At the time there is a meeting, we announce the time and the date to the members. Otherwise, when there is an urgent meeting, such as a conflict, the compliant hearing focal person will call the meeting"*
> (Health Center head).

Consequently, the control system of the activities of PMT by the facility heads has facilitated the effect of PMT activities, including PMT's regular meetings. In addition, health facility heads said that it is mandatory to attend the meeting because each PMT member responds to questions raised during the meeting concerning his/her case team (duty of all members). In regards to attendance, respondents stated that they are required to take attendance and that a minute is signed. According to the majority of the informants, attendance at meetings is usually taken by the head (chairperson of PMT). Participants also suggested using an appropriate hierarchy of command for corrective actions related to PMT for health data quality. The facilitator mentioned, *"...my direct chain of command is to the focal person, not to the individual staff. When I forward any corrective issue to the focal person, he/she in turn commands the rest to correct accordingly."*
(*HMIS focal person*)

Availability and utilization of PMT logbook
Health facility heads responded that the PMT logbook is available in hard copies and, if not, in soft copies for printing and use. They said that it is a good tool to develop an action plan, solve problems, and evaluate data use.
Regarding the utilization of the PMT logbook, Participants of HMIS focal persons responded that the members are using the PMT logbook during the meetings and they believe that the tool is important for evaluating the activities in detail and providing direction for the identified gaps.

Most of the participants who participated in the in-depth interview said that; the standard logbook contents, particularly the minute writing style, are good and guiding, as one said;

> *"Its [log book] style is good... It is prepared by the Ministry of Health and includes important points. PMT minutes, which include the names of members, date, agenda, indicators, achievements, action plan development spaces, and problem identification sections are included in the logbook and are strong for problem-solving."*
> *Interviewer code: "22"*

In this regard, it was noted that the minute style has a positive role in facilitating the improvement of PMT. As one participant said,

> '…*PMT minutes include the PMT agenda, elements, achievements, prioritized problems, and final target activities to solve. Our minute's writing style can solve problems."*
> (*Health Center*)

Budgeting and other resource-related factors

The gathered information from the informants also shade light on the facilitators related to budgeting and the related issues. Accordingly, the allocation of an ideal proportion of the total budget for HMIS, regardless of budget shortage, carrying out the activities using less costly materials, having adequate supplies and equipment, and training to use an available resource in their compound have all

contributed to the enhancement of PMT in the facilities.

"... There is a budget. We estimate that approximately 15% of the total budget of the health center will be set aside. However, this 15 percent is still not adequate to solve problems related to data. There are several printable materials in HMIS."

(Health center head)

Similarly, additional computers supplied by HU and DUP for data digitalization have facilitated PMT activities, as one suggested

"... computer supplied for the HC....made the data management digital and facilitated our activities well, though we are still in need of case teams."

(Another Health center head)

Capacity building
Regarding capacity building, the in-depth interview informant raised the provision of training provided by PMT team members themselves within health facilities and provided supportive supervision as facilitators of enhancing PMT function to utilize data to maximum effect.

The head of a health center mentioned, "*The importance of capacity building assessment report was sent to Hawassa University, and training was given for six health centers on capacity building. Challenges are solved by that training. Our health center is a model health center, and we gave on-the-job training for health professionals on PMT* (interviewer code **007).**" The other head of the health center mentioned, *"We conduct supportive supervision of health posts using checklists.*"

(Health center head)

Existence of PMT guideline
The availability of PMT guidelines is another theme considered in this assessment. Health facility heads said they have standard guidelines obtained from a higher official, though there is a shortage. The guidelines contain protocol and how to do it. They also provide an action plan using the minutes of PMT. As they have said, the PMT guideline helps them give direction on solving a problem by evaluating data and how to agree (consensus) on a discussion about the reports and the suggested solutions.

PMT process-related factors include PMT's monitoring of data quality for better information use; using PMT as a tool for problem-solving related to HMIS activities; organizing participatory discussions to share experience and knowledge; and commitment to the information revolution.

Follow up on data quality by PMT for better information use
According to the responses from a majority of the key informants, having a robust follow-up of the activities by members of PMT was mentioned as a facilitator that enhanced PMT's function in health facilities. As one participant stated;

"....when health care services, for example, ANC and child immunization, are provided to the community, the members of PMT follow strictly whether the service is provided and registered appropriately....."

Interviewer code: "35"

An evaluation of the health facility's data frequently, using a log book and executing LQAS, checking the tally sheet and the report and correcting them accordingly, and on-site discussion are among the facilitators that were explored by about half the respondents interviewed.

"In my view, the quality is nice. We measure the quality using LQS, by selecting 12 data elements randomly. For example, last month's LQS was 95%. ... . Every morning, the HMIS focal and I check each case team registration book to see what has been done in the evening and evaluate whether they registered and tally the provided service. "

(Health Center head

Proper utilization of LQAS to evaluate their data with a good working team spirit was also among the facilitators of PMT functions that were suggested by the participants as one participant stated;

"I evaluate our data by utilizing LQS. Last year's LQS result was 95%. From 12 indicators 11 were correct. "Improvement is seen when we work in the team spirit..."

(HMIS focal)

Using PMT as an instrument for solving problems HMIS activities
The present study indicated that performance evaluation by PMT members and making decisions based on evidence for service improvement—for instance, to solve recording problems, for budget allocation, planning, taking corrective action, carrying out root cause analysis to prioritize problems, and developing an action plan—were quoted as facilitators of enhancing PMT function for the effective utilization of data. One health center head stated the experience of using PMT for problem-solving as follows

"... growth monitoring; previously, it was not good. Currently, root analysis is done through PMT, and we have identified problems related to growth monitoring. Then we identified problems like skill gaps, meters, distance to visit facilities, and others like poor data recording and analysis of HEWs. We have worked on the identified problem and made great improvements. So, PMT is problem-solving." (Health center head)

Setting Participatory discussion to share experience and knowledge
The in-depth interview with the MCH focal person of the facility indicates various facilitators and barriers that enhanced PMT function. Accordingly, setting up participatory discussion was one of the facilitators that the respondents mentioned. One respondent said:

"...Whenever there is a problem, we all gather and discuss it, then we develop an action plan to improve the quality next time... Assign a responsible person to monitor the implementation." (MCH focal)
Another respondent commented;

"I like PMT and feel comfortable as we discuss each performance, How it was done and the gaps. We learn a lot from each PMT member while conducting PMT meetings. I like it and it is interesting".

(MCH focal)

Commitment to an Information Revolution
According to participants of HMIS KIs in this study, giving emphasis and commitment to the information revolution agenda was seen as a facilitator for enhancing PMT function for the realization of data utilization.

An HMIS focal person involved in the study said: *"We give due emphasis to the Information Revolution agenda since it is part of the transformation agenda because **the** transformation agenda focuses on community services provided*

 ...

(HMIS focal)

Barriers to PMT functionality that hampers improved data utilization
In our current analysis, the explored barriers for PMT functionality were identified as input/structure-related issues that include turnover of PMT members, scarcity of budget and other resources, shortage of PMT guidelines, lack of training for newly assigned staff, and other motivational issues; PMT logbook formats; and a lack of appraisal and accountability framework guidelines. Consequently, process and output-related issues include irregular PMT meetings, inappropriate use of LQAS, concern about data ownership, a perceived sense of PMT as not a problem solver, and a lack of team spirit. Accordingly,

Input/structure-related issues are:
Turnover over of PMT members:
The composition of PMT members changes frequently due to the turnover of assigned staff who have better experience in the area. This results in time wastage, and an effective meeting will not be addressed. One of the key informants said, "*Some PMT members leave the membership, and new members are replaced from time to time. We call new members and give an orientation about PMT.*

(Health Center head)

Shortage of PMT guidelines and the related low awareness
The participant said that PMT guidelines are not available in some health facilities. As one of the key informants said,
"*No guidelines come from higher levels. However, there is a manual we prepared at the Health Center level*" *MCH focal*

One of the health facility heads responded that they did not know the guidelines intensely. He said, *"....I didn't know the guidelines deeply".*
" *Health Center Head*
The majority of the MCH focals said that they have no PMT guidelines and do not know about the PMT guidelines.

Scarcity of budget and other resource-related barriers
Participants suggested budget is scarce for HMIS-specific activities, e.g., for printing brochures, inks, papers, transportation, and communication, as one respondent said:

"*…. budget is not adequate to solve problems related to data and purchase several printable materials in HMIS.*"

(Health Center Head)

Concerning the transportation issue for using PMT to solve problems, one HMIS focal person explained the seriousness of the problem:

"The transportation issue has to be solved as well. I cannot transport five individuals on the team on a motorcycle. Transporting each and taking them back for lunch using a motorcycle is difficult. For example, Dullacha and Bonoya Miride Kebele are very far from the health center... (MCH focal)

Training and other motivational issues
Another challenge is that PMT members are restructured frequently due to turnover. Hence, the majority of the newly assigned didn't get training on PMT, data quality, and others. Accordingly, about half of PMT members didn't get training. It is a challenge to work as a PMT member. One of the respondents said that the person assigned to control the regularity of PMT meetings is not working in some health facilities due to a lack of basic training in the area, particularly for newly assigned staff. As the facility head said," *One person is assigned to control the regularity of PMT meetings, but he is not working." (Hospital Medical Director)*

Another respondent also said that PMT members need incentives to participate in meetings. As he said,

"We didn't provide any refreshment or incentive for PMT members during the meeting due to a lack of budget."

(Health Center Head)

"...we don't have any reward or motivation mechanism for the best performer related to performance (health center head).

The HMIS focal person of a health center who participated in this in-depth interview strengthened the above-mentioned barrier: *"At the time we were working in an overburdened or busy situation, deduction of our salary demoralized us. There are no other benefits, including an opportunity to upgrade our education. These demoralizing issues make our underperformance.*

(HMIS focal person)

PMT logbook formats

As the key informants said, they don't believe that the PMT guideline has to be changed, but it has to be used by modifying its form. Some sections of the logbook for minute registration are not adequate. So it has to be modified.

According to comments from MCH focal, some health facilities use the traditional minute writing style; since there is not enough space within the logbook, it is difficult to write what we want.

Appraisal and accountability framework guideline

In the current study, one of the important dimensions in enhancing PMT for the utilization of data to the required level was the issue of health information strategy and governance (appraisal and accountability framework guidelines). The narratives of the respondents revealed no strong or available HIS and governance documents and no accountability and appraisal framework in the study health facilities.

The head of the health center strengthened the above-mentioned barriers, as *our organization is implementing HIS strategy and governance but is not strong enough (hospital medical director). Another in-depth interviewee added: "There is no written description, but there is a responsibility. Of course, we are saying there is, but no one is even asked for any action he or she took in reality* (*health center head*)**,** a participant said.

WoHO HMIS participants said the unavailability of HIS strategy and governance documents and the absence of an accountability framework were also mentioned by key informants (WoHo HMIS).

Process and output-related issues

Irregularity of PMT Meeting

The participants reported that the irregularity of the PMT meeting was a challenge, indicating the underlining cause for this. Most participants said that the COVID-19 epidemic affects the regularity of PMT meetings. As one of the respondents said," *COVID-19 is one of the challenges for this year... It has been about 4 months since I assigned her as head, and that is what I witnessed. There were gaps in PMT when I was assigned here. Since the staff is working through shifts, it has been difficult to have all members present during PMT during this COVID-19 pandemic. Members who attend one meeting are not available for the next meeting. Accordingly, the regularity of PMT was not good for the last 3–4 months". (WoHO head).*

Inappropriate use of LQAS including false recording, reporting, and negligence in data handling

During the interview, the participants also explored barriers to PMT function. Accordingly, inappropriate use of LQAS, data-related activities of the health post, and infrequent false reporting sent from the health post by health extension workers were suggested by some (3) participants, as one participant said;

"....Sometimes false reporting is sent from the health post by health extension workers. They report something that was not done; as if it was done..."
(HMIS focal)

A few (2) participants also mentioned Negligence in data gathering and record keeping, as one of them noted:
"...There is negligence in data gathering and record keeping. They assume the activities are a mandate of the focal person or the one in the position. That is why we continuously follow up, discuss the gathering of data, and reach a consensus among ourselves. Even though fifty percent of the staff are responsible for the assigned activities and the recording procedure, fifty percent of them are negligent and are reluctant..."
(HMIS focal)

Concern about Data Ownership

Some participants have concerns about data ownership issues in that lack of ownership of data by all respected staff (considering it the responsibility of PMT members and coordinators only), an assumption that HMIS activities are the mandate of the focal person or the one at the position only, and a lack of common understanding among the staff on data ownership are all among the barriers mentioned by the participants as a barrier to the functionality of PMT.

One participant commented;

"...Not all staff have a sense of data ownership. A few staff and coordinators are responsible for reporting data. So, other staff perceives that data reporting is the responsibility of coordinators. Accordingly, other staff doesn't show a sense of data ownership. They consider it the responsibility of PMT members and coordinators…'

" (*Health Center Head*)

Perceived sense of PMT is not solving the problem and is not implemented strongly

Some participants mentioned that PMT is not properly implemented as it is intended to be, suggesting that PMT cannot be strongly considered as a problem-solving tool. Lack of teamwork in PMT and transportation problems in visiting health posts to solve health information-related problems are indicated as inhibiting the enhancement of PMT function towards the utilization of data and information.

Participants also mentioned that PMT is not a problem, is not solving the problem properly, and is not properly implemented as required. *"We are not exercising/implementing PMT exactly and properly"* (**HMIS** focal person), *and in our case, it is not solving a majority of our problems. We are dealing with it only because we are told to do it,"* the other HMIS focal person *said.*

Lack of team spirit

According to the informants, a lack of teamwork within PMTs is a barrier to undertaking problem-solving activities and accomplishing anticipated results. **A** male MCH focal, who has been leading a district health

official, reported that *"I didn't think **all** teams are solution finders. Only some members tried..."*

Discussion

The objective of this qualitative study was to explore the facilitators and barriers of PMT functionality in public healthcare delivery systems to enhance data quality and information use in Sidaama Regional State Healthcare Facilities. PMT structure, budgeting, capacity-building-related factors, and PMT guideline availability were among the key facilitators to consider. Barriers such as PMT member turnover, a lack of funding and other resources, a lack of PMT guidelines and their supply, a lack of training and other motivating concerns, PMT logbook formats, and a lack of clear appraisal and accountability framework guidelines were also identified in this study.

One of the primary facilitators and barriers for PMT functionality to improve data utilization, which is centered on PMT input, was direct PMT structure and organization. This is consistent with the findings of the study by Avedis Donabedian. According to him, structure supports an excellent process and should encourage a good health outcome. As a result, structure and input have been discovered to be facilitators for improving PMT functionality in the short term for higher data quality and information utilization. The current study also supports the use of Donabedian's theory in predicting the quality of healthcare in situations when the health information system isn't exceptional (7, 8).

Financial and other resource supplies were among the facilitators of PMT functionality in the current study. If the financial resources allocated to HMIS are low and fall short of the recommended levels, the effectiveness of PMT functionality is compromised (2,9).

The explored study shows that capacity building—for instance, the existence of appropriate training for health workers in general and HMIS workers and PMT members in particular—improves their competencies for PMT functionality. This is not surprising given that a person with more training gains knowledge and skills that aid in the execution of the intended activities in a more effective manner. However, the high turnover of staff that has been noted by participants calls for continuous capacity building (10).

Among the PMT processes, output-related factors are the experience of PMT in data quality follow-up for better information use. As outlined in MOH's health information revolution, PMT is primarily responsible for improving data quality and information use to monitor progress and improve performance at all levels monthly (3,4)**.**

Likewise, setting up a participatory discussion to share experience and knowledge is among the facilitating factors for PMT functionality. Knowledge sharing is a significant facilitator of performance in any organization, particularly when it is done through teams to gain a competitive advantage. Working in a team helps to exchange explicit knowledge with the other team members so that the intended outcome of the activity can be maximized (11).

Similarly, it is believed that employee dedication to the information revolution will aid PMT functionality in improving data quality and information utilization. As such, work commitment is essential because it enables an organization to meet its intended goals and adhere to its vision of a health information revolution. The opportunity of having committed employees will give the healthcare facility the ability to fulfill its intent of health information change, and so they can become a significant source of reasonable advantages for the success of PMT functionality (12, 13).

On the other hand, input/structure-related impediments to PMT functionality contribute to PMT member turnover. Turnover of skilled staff can cause understaffing in HMIS and thus lead to low performance of PMT, which in turn leads to lower data quality and information use (14).

Another barrier to PMT functionality was a lack of financial and other resources. As one would expect, an adequate financing mechanism is fundamental to the ability of health information systems to improve and sustain the improvement. Therefore, for a stronger functionality of PMT, there is a shortage of budget, for instance, perdiem for routine supervision (15). Similarly, a shortage of other input resources like computers, printers, PMT log books, their formatting, and other necessary standard registries are among the barriers identified to hinder PMT functionality. Likewise, the shortage of PMT guideline supply and the related training are among the identified input-related factors that hinder PMT functionality (7).

Shortages of training and other motivational concerns have also been cited as hurdles to PMT functionality, yet in other circumstances, such as the incentive for PMT for meetings held during ordinary working hours, it appears to go beyond expectations. This is not surprising because the success of knowledge transfer in any organization depends on the motivation of employees. At the same time, the high turnover of staff calls for training and awareness among the newly assigned staff for the success of PMT (16).

Concerns about data ownership sensibilities among respective staff and a lack of strong team spirit in some areas were also found to be barriers to PMT functionality. Several studies indicate that ownership has a significant positive effect on performance and vice versa, which is consistent with other studies (17, 18). The lack of strong appraisal and accountability framework guidelines has been identified as a barrier to PMT functionality. This is in line with Ethiopia's MOH Information Revolution review report, which states that the lack of accountability mechanisms for poor-quality data is a challenge to be addressed for PMT functionality. (3) This is important because it calls for the current guideline's revision and also for developing accountability.

The overall barriers that challenge the functionality of PMTs are in line with the MOH report of HSTP II, which indicates that the functionality of PMTs at all levels is adequate (19).

Conclusion and recommendations
It is learned that the functionality of PMT is crucial for improving data quality and information use at all administrative levels and health care facilities. The current study highlighted key facilitators and barriers to PMT functionality related to input/structure, process, and output in two public healthcare delivery systems. Accordingly, PMT structure, budgeting, other resources, capacity-building-related factors, and PMT guideline availability were among the key facilitators to consider. Barriers such as PMT member turnover, a lack of funding and other resources, a lack of PMT guidelines and their supply, a lack of training and other motivating concerns, PMT logbook formats, and a lack of clear appraisal and accountability framework guidelines were among the factors identified.

As such, it is recommended to retain staff by any possible means, improve budget-specific health information systems, improve supplies like stationery and printers, help the staff get the PMT guidelines, provide tailored training, revise the logbook formats, encourage staff to take ownership over data quality and information use, build strong team spirit among PMT members, and prepare an accountability framework guideline.

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