Assessment of Health Facility Supervision in the Democratic Republic of the Congo



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#### Data for Impact

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# **Abbreviations**

COVID-19	Coronavirus Disease 2019
D4I	Data for Impact
DRC	Democratic Republic of the Congo
HIV	human immunodeficiency virus
IDI	in-depth interview
IHP	Integrated Health Program
KII	key informant interview
TOR	terms of reference
USAID	United States Agency for International Development
USD	United States Dollar

# **Executive Summary**

There is a need for qualitative work around public health supervision schemes to better understand how supervisory visits are planned, conducted, and followed up. Published works on this topic are relatively scant and primarily focus on health facility level performance metrics from baseline to endline. Many of these quantitative studies lack clear control sites used for comparison. And few of these studies attempt to characterize the mechanistic properties of supervisory visits outside of citing established protocols or guidelines if they even exist.

The Data for Impact (D4I) team proposed and conducted a qualitative research activity designed to assess health facility supervision through different data collection techniques. Qualitative research of this kind is useful to identify best practices and effective approaches for establishing working mentor-mentee relationships, methods for the resolution of identified performance issues, how best to optimize the allocation of resources as well as procurement/forecasting strategies, and instituting strategies for quality improvement of health facility processes.

The objective of this study was to develop a better understanding of the supervision system across the United States Agency for International Development (USAID) Integrated Health Program (IHP)-targeted provinces of the Democratic Republic of the Congo (DRC) by focusing on supervision content, structure, and styles as well as perceptions of supervision quality as described by individuals conducting the supervisory visits as well as those receiving the visits. Qualitative research questions focused on the function the supervision system serves, types of supervision schemes, the mechanistic properties of supervisory visits (*i.e.*, what happens during a visit), the atmosphere in which the visit is conducted, the kinds of interactions that occur between supervisor and supervisee, the perceptions of the supervision system serves, and the role USAID-IHP has in supporting supervision schemes.

There were four basic components of the research:

1) Four key informant interviews were held with senior USAID IHP administrators and program directors at the national/provincial level.

2) Thirteen in-depth interviews were conducted with provincial and zonal/hospital-level health officials (who serve as supervisors for health zone and health facility staff, respectively).

3) Twelve in-depth interviews were conducted with head nurses of health facilities who are the beneficiaries of supervisory visits conducted primarily by zonal-level staff.

4) Diary keeping was requested from eight individuals recruited for in-depth interviews.

Participants were selected through a purposive process and included USAID IHP donor agency representatives and program directors as well as members of the public health workforce from the provincial, health zone, and facility level recruited from Sud Kivu, Kasaï Oriental, and Lualaba provinces in the DRC. Participants were interviewed on their understanding of how the supervision process works, the benefits and drawbacks of supervisory visits, and the overall perceived utility of these visits. Data collection started in Sud Kivu in July 2021, but was paused due to the nurses' strike. It later continued and

spanned a period of nine months from March 2022 to November 2022. In total, 64 interviews and diary entries were collected from study participants.

Based on the results of this study, it is clear that supervisory visits are regarded as crucial for maintaining facility level performance and are welcomed interventions by both the implementors and recipients. Respondents collectively understood the overall goal of the supervision schemes to be improved health care services and thus improved health of the population served. Recommendations to improve supervision schemes were made by both supervisors and supervisees. In some instances, these recommendations were not aligned between supervisors and supervisees. Additionally, both within and between the participant groups, there were discordant accounts of how supervision schemes operate and function. In some cases, particularly among supervisors, some respondents seemed to cite protocol or guidelines, whereas others gave more candid descriptions of what is happening on the ground.

In general, there appeared to be a well-structured planning phase leading up to each supervision cycle. Supervisors reviewed previous supervision reports, held meetings with other supervisors, examined routinely reported data, and held monthly monitoring meetings with facility head nurses to better conceptualize the goals and objectives of each new supervision cycle. Facilities were given around 48 hours' notice ahead of each upcoming supervisory visit. Supervisory visits were commonly cited as a monthly endeavor although this appears to be in relation to the frequency with which supervisors conduct visits and not necessarily tied to the frequency with which an individual health facility receives visits. Public and integrated private facilities alike were reported to be included in state-run supervision schemes although visits to private facilities may not categorically occur due to ownership's unwillingness to receive supervisors.

Based on the interviews, supervisory visits seem to be evolving to a style that is less authoritative, one that includes formative support and skills transfer, positive feedback mechanisms, and focuses on more than one person per facility. Some supervision schemes have shifted to integrated approaches where multiple service delivery areas or themes are the focus of supervision over the course of a single visit, whereas other supervision schemes have become more theme oriented (*e.g.*, wholly focused on documentation, or a specific service delivery area such as antenatal care). Experiences are different depending on geographic area as well as the level of the health system (*i.e.*, hospital versus health center). Formative supervision (informal training/skills transfer) is regarded as one of the most beneficial aspects of a supervisory visit, but visits that focus on review of forms, tally sheets, and registers were deemed less helpful.

There was great fluidity around the stated use, reliance, and overall utility of checklists. Some respondents mentioned an integrated checklist was widely available for use, others mentioned they were sometimes used, and still others said they were not available. Some respondents decried their use saying they stymied their ability to explore identified issues while others noted that checklists promoted their ability to drill down on specific issues.

Supervisory visits are an important staple within the health system of the DRC. They can and have been leveraged to provide continuous in-service training for staff at all levels. There is room for improvement and/or critical analysis regarding the overall reach and financing of supervision schemes, the selection of health facilities to include in supervision schemes, the frequency of visits to these facilities given stated

limitations to financial and human resources, supervisor skills and capacities, and the need for standardized methods/approaches and tools used to carry out supervisory visits.

# Introduction

As part of its strategy to improve health outcomes in the Democratic Republic of the Congo (DRC), the United States Agency for International Development (USAID) began supporting the Integrated Health Program (IHP) in 2018. The program began operations in July 2018 and is being implemented by Abt Associates and several partner organizations across nine provinces (Kasai Oriental, Kasai Central, Sankuru, Lomami, Sud Kivu, Haut Lomami, Haut Katanga, Lualaba, Tanganyika). The purpose of USAID IHP is to strengthen the capacity of Congolese institutions and communities to deliver quality, integrated health services to sustainably improve the health status of the Congolese population. The project focuses on the following health, population, and nutrition areas: maternal health; neonatal, infant, and child health; tuberculosis; malaria; child nutrition; water, sanitation, and hygiene; and family planning. USAID IHP works in nine contextually diverse provinces in the regions of Eastern Congo, Katanga, and Kasai and will include a wide array of interventions.

USAID IHP seeks to reach its goal through achievement of the following overall performance objectives:

- Strengthen health systems, governance, and leadership at the provincial, health zone, and facility levels in target health zones (Objective 1)
- Increase access to quality, integrated health services in target health zones (Objective 2)
- Increase adoption of healthy behaviors, including use of health services, in target health zones (Objective 3)

In addition to activity implementation, USAID IHP has developed a Research and Learning Agenda designed to respond to emerging knowledge gaps and capture stakeholders' understanding of underlying factors affecting the program and its desired change, and ultimately help devise strategies aimed at addressing these factors. USAID IHP proposed to design and launch thematic operational research, evaluative research, implementation research, and health system research beginning in Program Year 4 (October 2020–September 2021). In line with these goals, the Data for Impact (D4I) team proposed and conducted a qualitative research activity designed to assess health facility supervision through key informant and in-depth interviews and diary keeping. Synthesis of results from the various sources of data allowed for a better understanding of the preparation for, mechanisms of, and perceptions following supervisory visits. Qualitative research of this kind is also useful to identify best practices and effective approaches for establishing working mentor–mentee relationships, methods for the resolution of identified performance issues, how best to optimize the allocation of resources as well as procurement/forecasting strategies, and instituting processes for quality improvement of health facility processes (Worges, et al., 2018). USAID IHP as well as the DRC Ministry of Public Health should find relevance in this analysis as it may assist in guiding program work.

# Background

The traditional supervision model of external inspections is common, but not the most effective approach to facilitating desired change among those being supervised (Björkman & Svensson, 2007; Condo et al., 2014; Kim et al., 2002; Marquez & Kean, 2002; Ramsey et al., 2013). Under such models, supervisors generally assess overall facility supplies and operations with little emphasis on bolstering staff

competencies to conduct their work – which is to say, supervision is used as a tool to impose the health system's needs on health care providers rather than a mechanism to support and address the needs of health workers (Eliades et al., 2019; Rowe et al., 2009). Supervision using a supportive approach, however, aims to continuously improve the performance of staff by encouraging open communication and building team approaches that work to facilitate problem-solving (Marquez & Kean, 2002). It also focuses on establishing an ongoing relationship between supervisees and their supervisors. This type of supervision functions best when it is delivered in a manner that fosters open exchange and encouragement such that mutual respect is established (World Health Organization, 2008).

Implementing a supportive supervision system requires (re)training a core set of supervisors, creating checklists and recording forms, and ensuring appropriate resources are available (World Health Organization, 2008). Because supervision is meant to be conducted in a context of regular follow-up visits with staff, the supportive approach focuses on monitoring performance towards goals while ensuring correct implementation of tasks and activities along the way. Well-structured, effective, and efficient supervision programs that emphasize a supportive approach are recommended to have:

1) A checklist that balances data collection with the primary objective of mentoring.

2) Criteria for supervisor selection coupled with ongoing evaluation.

3) A dynamic strategy for facility selection and criteria to determine the continued need for support and the type of support.

4) Criteria for selecting facilities and the appropriate frequency of visits.

5) A system that enables the analysis of supervision data for decision-making (Eliades et al., 2019).

Unfortunately, not all health care providers are adequately supervised due to insufficient training of supervisors who lack technical and managerial skills or have limited authority in resolving specific issues (Marquez & Kean, 2002). Additionally, supervisors may be burdened with heavy administrative workloads which detract from their ability to organically interact with those they supervise. Supervision frequency and quality may also be influenced by lack of necessary resources (*e.g.*, means of transportation, fuel costs, per-diems), poor road infrastructure, large distances between health facilities, and conflict/insecurity.

The government run health system in the DRC is designed to have a cascade of supervision. The national level supervises the provincial health offices, which in turn supervise the health zone offices. The health zone offices are primarily responsible for supervising the hospitals and health centers within their administrative boundaries. Private health facilities are integrated into the government supervision system upon mutual public-private agreements called "integration contracts". Hospitals are supposed to receive in person supervision from the health zone office at least once every three months and health centers are supposed to receive supervision once a month. A range of health programs follow this structure, establishing parallel systems of supervision, which still persist at the upper levels of the health system and result in multiple supervisory visits to a single institution at different time points with different agendas/objectives. The style of supervision approach (*i.e.*, authoritative, supportive, democratic, *etc.*) used in these supervision visits is unclear. Programs may provide in-depth training on the importance of a supportive supervision approach, but the burden of data collection and resultant de-emphasizing of meaningful interactions still weighs heavy on supervisors.

The objective of the study was to develop a better understanding of the supervision system across USAID IHP-targeted provinces of the DRC by focusing on supervision content, structure, and styles as well as perceptions of supervision quality as described by individuals conducting the supervisory visits as well as those receiving the visits. Qualitative research questions focused on the function the supervision system serves, types of supervision schemes, the mechanistic properties of supervisory visits (*i.e.*, what happens during a visit), the atmosphere in which the visit is conducted, the kinds of interactions that occur between supervisor and supervisee, the perceptions of the supervision system with respect to its purpose and effectiveness, and the role USAID-IHP has in supporting supervision schemes.

# **Methods**

## **Study Setting and Population**

We conducted qualitative research from August 2021 to June 2022 in rural and urban areas in the provinces of Sud Kivu, Kasai Oriental, and Lualaba in the DRC. In each of the three target provinces, two health zones were identified, including one higher and one lower performing health zone based on key health indicators, and in each health zone, one higher performing and one lower performing health area were selected, with a total of 12 health areas in the sample. In Lualaba and Kasaï Oriental provinces, one urban and one rural health zone was included in the sample, while in Sud Kivu both health zones were rural.

Participants were selected purposively according to their past and current involvement in health service supervision and included USAID IHP administrators and program directors and a donor agency representative, as well as members of the public health workforce from the provincial, health zone, and health area level. Health officials working at different levels of the DRC health systems were interviewed about their understanding of how the supervision process works, the benefits and limitations of supervisory visits, and the overall perceived utility of these visits.

## Study Design, Sampling, and Methods of Measurement

We employed a mix of qualitative methods including key informant interviews, in-depth interviews, and diary keeping. There were common themes across each group of respondents; however, KIIs primarily focused on the higher-level structure of supervision schemes whereas IDIs and diary entries provided more specific detail on the mechanistic properties and utility of these schemes.

#### Key Informant Interviews

Interviews focused on elements of both routine and disease-specific supervision programs, strategies programs have implemented to provide supervision for difficult-to-access health facilities, the scope of supervision among private sector facilities, and strategies USAID IHP is implementing to address specific shortcomings in either existing supervision or in the service delivery that supervision aims to improve. We purposively selected four senior health and program officials including USAID IHP administrators and program directors at the national or provincial level and a representative of the donor agency. Individuals holding these positions were all men.

#### In-Depth Interviews

We conducted in-depth interviews with two different types of informants, including supervisors of health zones and health area staff and nurses in charge of health area centers (referred to as supervisees) who are the beneficiaries of supervisory visits carried out by zonal level staff.

Interviews with supervisors focused on how supervisors conduct a visit (mechanistic properties), the establishment of rapport with health facility staff, general perceptions of what supervisions are meant to achieve and the obstacles they encounter along the way, and their perceptions of the qualities a supervisor needs to run effective supervisory visits. Supervisors were selected purposively based on their roles in the provincial supervision program. We included members of the health zone management team responsible for supervising health area facilities, as well as provincial level supervisors working in the DPS. The research team carried out 13 in-person interviews with health officials who serve as supervisors in the three target provinces. Three women were included among these IDI informants.

The research team also asked supervisees about their interactions with supervisors, how supervisory visits have evolved over time, their perceptions of the utility of supervision visits and how it affects their professional growth, and how they think the program could be improved to help them be more effective in their work. In each of the 12 selected health areas, the head nurses of the health area health center were interviewed. One woman was included among the supervisees recruited for IDIs.

#### **Diary Entries**

Diary entries were meant to document supervision visits from the recipient's perspective. Each participant was asked to model their diary entries based on a sample provided by the research team (see Appendix C). Only diary keepers were compensated for their contributions to the study to help ensure continued engagement in the process and because of the effort required on their part to write up their experiences over a multi-month period. Diary keepers were offered the equivalent of US\$20 for each diary entry submission following a supervisory visit (a US\$10 cash transfer to their mobile money account and US\$10 phone credit transferred to their mobile device) but did not receive payment if they were not supervised. To complement the in-depth interviews, diary keeping was requested of all of 12 head nurses included in the study, as well as three medical doctors working in zonal reference hospitals. Six head nurses and two medical doctors developed journal entries. Only one of the participating diary keepers was a woman.

## **Data Collection Procedures**

The research team included one female and one male international researcher, and two male Congolese researchers based in the DRC, all with advanced university degrees and qualitative research expertise. Prior to data collection, a 2-day training workshop provided background information on the supervision program and the research methodology and included study instrument field testing. All four researchers conducted interviews.

Key informant interviews occurred remotely, while in-depth interviews occurred in person in informants' places of work. The team helped to ensure privacy was maintained during data collection by conducting interviews in a private space. We administered all but one interview in French, the national language of the DRC, and the final interview was conducted in English. All interviews were audio recorded, and interviewers also took handwritten notes during the interviews to provide additional insights into the data. Interview guides are included in Appendix B.

## **Data Analysis**

All audio recordings were transcribed in French except for the one key informant interview that was conducted and transcribed in English. Paper diary entries were collected and digitally scanned for review and analysis. The researchers developed a coding scheme derived from the initial research objectives and questions, as well as from key concepts that emerged based on reviews of the key informant and in-depth interview transcripts. Coding of the interview transcripts was done on ATLAS.ti (Version 9.0), a text-organizing software, and Excel. Content analysis was used to identify trends of concepts across individual codes and informant types. This analytic approach was also used for processing the diary entries. The combination of data and environmental and methodological triangulation allowed analysis across different research methods (e.g., key informant and in-depth interviews, diary entries) and sites.

## **Ethical Approval**

Ethical approval for the qualitative research was granted by the Institutional Review Boards of Tulane University and the Kinshasa School of Public Health. Before data collection, we obtained signed informed consent from all the key informant and in-depth interview informants and diary keepers.

# **Results**

The breakdown of data collection methods by province is presented in Table 1 below. Four KIIs were held with high level program administrators. In both Lualaba and Sud Kivu four IDIs were held with health officials who were active in conducting supervisory visits while five IDIs were conducted with such individuals in Kasaï Oriental. There was a total of 35 diary entries from eight supervised individuals (two doctors and six head nurses) from just as many health facilities in Kasaï Oriental, Lualaba, and Sud Kivu. Only two diary entries were received from a single participant in Sud Kivu.

		Province		
Interview type	Central level	Kasaï Oriental	Lualaba	Sud Kivu
Key informant interviews with administrators	4			
In-depth interviews with supervisors		5	4	4
In-depth interviews with supervisees		4	4	4
Diary entries kept by supervisees		16	17	2
Supervisees keeping diary entries		3	4	1
Sub-totals	4	25	25	10

Table 1. Breakdown of collected information by type an	nd province
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## Perspectives of USAID-IHP Program Administrators and Directors (KIIs)

### USAID IHP Contributions to Supervision Schemes

Informants were asked about the role of USAID IHP in the various health-related supervision schemes that exist across the nine provinces where the project operates. USAID IHP offered financial, logistical, and technical support to the Ministry of Health in its efforts to conduct supervision activities. Two informants

made it clear that USAID IHP does not operate a parallel system of supervision but provides as much support as possible to implement existing, state-run supervision schemes.

For each cycle of supervisory visits, USAID IHP required a terms of reference (TOR) document that detailed the support to be carried out by the supervision teams. One informant described the utility of these TORs as a way to avoid unnecessary visits to health zones that do not exhibit redressable issues. He also said that the TOR documents can be used to help target supervision activities to previously identified issues. By requiring a TOR in exchange for funding, USAID IHP put itself in a position to direct supervision activities.

Additionally, as one informant described, USAID IHP intervened at the ministry level to help with the development, revision, and dissemination of supervision tools. USAID IHP staff were able to meaningfully contribute thanks to the insight they gained by accompanying supervision teams during field visits. One informant explained that these joint visits allowed both parties to see how interventions were being implemented and, together, they were able to devise ways to improve the supervision program.

[USAID IHP] can bring innovations and discuss...things that [we] are observing. How can we improve supervision? What is working where, what is not working where? And this is part of [USAID IHP's] mandate – using the experience from the field, bringing it to the provincial level, discussing those experiences in order to strengthen the service provision and the management of services. So, [USAID IHP] cannot develop [supervision programs], they can just suggest a way of doing things based on their experience.

Another informant said the following:

So, when we [conduct supervisory visits together], it's because we have common objectives with the Ministry of Health, especially since we, as a program, don't have our own activity, we support the ministry teams to do their job well. This is our role as a partner of the Ministry of Health.

#### Supervision Experience and Practices

Informants provided descriptions for the process of preparing for and the mechanics of conducting a supervisory visit. The investigation into any apparent issues which may be addressed by supervisory visits starts with a monthly review of data at the health zone level (*i.e.*, monthly monitoring meetings). During these monthly monitoring meetings data from different health domains are examined, but two informants mentioned that it is commonplace to spend an entire day focused on issues surrounding malaria case management.

One informant described an approach to conducting a supervisory visit:

One way is observing – the supervisor is there, he has his own checklist...looking at what the nurse is doing and then...once that patient has gone...we can have some kind of quick check and [the nurse] can identify what he did well and what he did not do well and you even ask him 'ok, how can you correct that?'. And then he can identify [issues] himself – and then you can see how he improves with the next patient.

This paradigm was corroborated by another informant. He added that if the identified problems require higher-level expertise to redress, supervisors can raise the issues to their superiors in the health system to develop a corrective plan of action.

When asked about receptivity of health workers to being supervised, one informant described his perception as follows:

People are open to new ideas, to test new ways of doing things. A lot of those things depend on individuals. There are people who really like being challenged...others see...it...not as a challenge to overcome but [that] it is just revealing their weakness and [they] do not receive it very openly. Mostly in the rural areas where I have been, I saw that people are really open and the health facilities are open to new ideas, they accept the feedback, and they use it to improve...their performance.

The frequency of supervisory visits was described as monthly for public and private health facilities, quarterly for health zone offices, and semiannually for provincial offices. However, one informant said that entire quarters may pass without supervising health zone offices or health facilities – a scenario that was described as untenable.

One informant said he found a 'low dose, high frequency' method of supervisory visits favorable and practical. This approach was understood to mean incremental and focused capacity building at regular and frequent intervals. He added the following:

Building the hands-on skills of those you are supervising. For me, that's the most important – it's not theory, it's really working with people so that they can acquire the skills they need to do the work perfectly. If the supervision...is something that is done really with the objective of strengthening the...hands-on skills of the people in the health facilities...the benefit can be sustained for a longer period.

Another informant echoed the sentiment above regarding the regularity of supervisory visits saying that after 3-4 'rhythmic' and planned visits to the same facility, many aspects start to improve. This informant insisted on the importance of supervisors being well prepared and avoiding improvisation to be able to conduct *effective* visits. He said that each supervisory visit needs to be based on previous recommendations; otherwise, the discontinuity across visits may result in stagnated performance. A third informant described effective supervisory visits as following overall facility performance rather than individual staff performance for multiple months if not years.

Following on the notion of continuity, one informant mentioned that the development of action plans allows supervisors to create a road map for facility staff to address identified issues over the course of the supervisory visit. He said the supervisors are meant to leave the action plan with the supervisees and when they return for follow-up visits, they compare progress against the recommendations issued in the action plan. One informant added that the ability to return to the same facilities and reassess performance while observing improvements over the previous visit is an advantage.

One informant said that the number of health facilities and health zone central offices is too large to appropriately supervise with limited staff and resources. He said that when quality scores are calculated at the health zone level, it becomes clear that those which did not receive supportive supervision have lower scores. Despite the high workloads that supervisors face, another informant said the length of supervisory visits needs to be increased. He said that instead of quick visits, two days per facility may be more appropriate so that supervisors have enough time to observe staff performing their tasks to provide assistance and feedback.

### Routine Versus Domain-Specific Supervisory Visits

One informant explained that health zone management teams conduct monthly, integrated supervisory visits to health facilities or community care sites. He explained that this is what is supposed to happen according to guidelines, but visits may not occur with such frequency. In any event, when the health zone management team conducts their integrated visits, they assess various health domains. One informant described integrated visits as follows: "When we do the supervision, we don't have the material time to dig into each area to see...the weak side and the strong side, that's why we only have a general vision of each area."

One informant said that the national level supervisors are the ones who primarily focus on a single disease or health domain (*e.g.*, expanded program on immunization, reproductive health, nutrition, and water, sanitation, and hygiene). National supervisors first visit the provincial level before heading to the health zone level (the operational level) where they focus on specific technical areas. Another informant noted, however, that supervision programs dedicated to a specific illness are usually those with outsized health burdens such as COVID-19 or Ebola.

One informant provided additional nuance regarding routine and domain-specific supervisory visits. He mentioned that domain-specific supervisory visits are more effective than integrated supervision, but that integrated supervision is more efficient. His reasoning was that domain-specific supervisory visits delve into the details to quickly resolve any issues saying they are more effective, but they are also more expensive. Integrated visits, he said, are more efficient because for the same amount of money to send a team to a facility, you can cover more health domains in addition to administration and management, but you do not get the same level of detail concerning care practices or operations.

Another informant went into detail about how different programs are funded and the effects this has on their ability to carry out activities. As an example, he said the national malaria control program receives external funding from partners whereas other programs only have funding from the central government. As a result of the differential funding levels, he said there are differences across supervision programs.

Teams that receive external funding... are sufficiently trained...they receive capacity building in terms of supervision techniques in their field. Unlike the other directorates which do not receive technical support in terms of capacity building. [This] makes a difference in the quality of supervision from one team to another. The programs that receive [more] support are better structured in terms of human resources.

This same informant also noted that programs with external support have more motivated staff as the international organizations pay for bonuses, supervision costs, and per-diems. The same motivation levels are not noticed in programs that are exclusively supported by the state. He further stated that externally supported programs are also better in logistics, better equipped with materials and supplies to conduct their work and have better communication because they have operating costs. When asked about whether available resources make for a better supervisor, he said that resources have something to do with it, but that it is mostly about having information and being sufficiently informed about an area of expertise. He said that when you are sufficiently informed, you behave differently than those who did not have the same opportunities or exposure to the same information. He added that the programs receiving subsidies have

more time to reflect on their work. Later in the interview, this informant offered the following to further make his point:

The tuberculosis program receives a lot of support, which means that in organizational terms...and the logistical capacity that these teams benefit from, the strengthening...of personnel...in terms of the ongoing training they receive...this is what makes...the difference [compared to] other programs that do not benefit from the same support in terms of institutional organizational capacity.

### **Supervision Checklists**

Informants mentioned the existence and use of checklists at different levels of the health system and for different supervision domains. One informant said there are checklists for data quality, community care sites, and integrated supervision. He said there is a mobile application the supervisors can download to their Android phones giving them the ability to ask questions relevant for the supervision of community care sites. Another informant mentioned that the country has developed a standard checklist that is used for supervision at the facility, zonal, and even the provincial level. Certain checklists were developed at the national level but were fine-tuned at the provincial level. One informant also mentioned that there are specific technical checklists for each health program, which are much more detailed than checklists for integrated supervision and used when more information is desired. These statements were contradicted by another informant:

The other aspect is the very quality of the supervision...everyone carries out the supervision as they think they should and there are no standard checklists that are being used everywhere. There is no standard checklist for supervision. So, each program adapts supervision in its own way. So, that too is a challenge [because] at a certain level, it doesn't allow you to have all the information possible...to be able to [make] adjustments.

Another informant said that domain-specific supervision programs are more developed because they have electronic tools that allow for better follow up and comparison across visits to see if certain facilities are progressing or stagnating. Following on this, one informant had the view that digital checklists are better because they allow for the capture and storage of information, which allows for analysis of supervision data.

#### Necessary Qualities and Capacities of Supervisors

Informants were also asked about the qualities and capacities that make for a good supervisor. One informant said that supervisors need to allow the facilities time to prepare for their visits. If they don't, they risk conducting only a superficial visit because the facility staff could be busy conducting more important tasks. Or, he said, staff may just not avail themselves to being supervised. He continued by saying that if a supervisor gets it into his head that he has a role of policeman, he has already spoiled everything. This was a common sentiment shared by multiple informants.

One informant said that supervisors need to be good observers to be able to spot issues and redress them with the goal of facility staff internalizing recommended actions to make them part of their daily activities. He also said that supervisors must be able to give feedback as the situation merits. They must be able to say that things are not going well so they have an impact on the supervisees. He continued by saying that

the supervisor must be concise and stick to the essentials during the briefing. Long briefings may mean that no one will understand or retain the key messages.

The supervisor needs...to be humble when [they go] to these places, and be open, and also when you are providing feedback, the way you are providing it is very, very important because if it is...without gentleness...it cannot work. So, that is very, very important – the context in which you are providing it.

Similarly, a third informant said that supervisory visits should not be carried out as inspections meant to intimidate the supervisees. It is simply an opportunity to observe the person working and, through observation, make recommendations to improve their work. He said that a good supervisor needs to provide immediate feedback to have a well-rounded supervisory visit – something he said is not systematically done. He mentioned that just because someone is based at the national or provincial level does not necessarily mean they get to supervise. He said they need skill and the appropriate background and should be regularly (re)trained.

Another informant said that a good supervisor needs to have solid communication skills and be wellversed in the field they are supervising. He said a good supervisor listens to others and can easily help because they have the necessary skills to do so. He added that supervisors might consider their supervisee lacks understanding and that if they just sit with them for a few minutes or even a few hours to seriously address the issue, they can help improve the supervisee's competencies.

Two informants advocated for critical evaluation of the work that supervisors carry out over the course of their visits. One said that a system should be developed in which supervisees provide feedback on the supervision they receive – something that is not currently done. The other suggested implementing a system of checks over a supervisor's work wherein their reports and recommendations are assessed for appropriateness and feasibility which, he argues, will help supervisors avoid a sense of complacency. He said that supervisors must have a critical mind about themselves and that to better serve the facilities and health zone offices, this system of checks is crucial.

#### Supervision Coverage over Private Facilities

Informants were asked about supervision coverage over private entities. One informant stated that if a health facility feeds data into the national health management information system (*i.e.*, if it is *integrated*), it must be supervised in the same manner regardless of whether it is a public or private facility. A second informant had a more focused response saying that there are a few supervision programs that are linked to the private sector, especially if the private health facilities provide services directly to the public.

As far as supervision support for difficult-to-access facilities, there was a dichotomization in responses. One informant simply said that health zone central offices have a responsibility to supervise all facilities within their administrative bounds.

[USAID IHP] provides the [supervision] funds...for the health zones which have the obligation to supervise their facilities...even if it has difficult-to-access [facilities], [the health zone] organizes the supervision...and generally all the health facilities are supervised.

However, a second informant mentioned that facility accessibility is a major challenge in the organization of supervisory visits. He said that after identifying health zones with serious problems, the next step is to

consider how feasible it is to visit them. He gave a scenario where the health zone with the most problems, which would otherwise require special attention vis-à-vis supervisory visits, cannot be reached. The next step would be to figure out which health zone has the penultimate number of issues, determine the feasibility of reaching its facilities based on security, travelability, and available funds, and to basically continue this process until the health zone has identified appropriate and accessible facilities. He summarized his line of thought on selection of facilities with the following: "...sometimes...we deviate a little from objectivity due to logistical conditions, insecurity or the availability of resources."

When the COVID-19 pandemic initially began, one informant said that during the first month, all supervision was shut down, but when they realized that the pandemic wasn't going to resolve in the near future, they decided to continue with supervision activities at least at the national and provincial level. Regardless of the difficulties faced by supervisory teams in the face of COVID-19, certain innovations prevailed:

We started to develop some 'tricks' to see how to conduct the supervisions. What we did...at the national level, when all the teams couldn't travel to the provinces because everyone had to be confined, we started to develop remote technical support where we could hold supervision or coaching meetings with the provincial teams and with some health zone teams. I said 'some' health zones because there was also a problem in terms of audio-visual materials that didn't exist before COVID-19 because nobody could really think of that, 'it's more after COVID-19 that we have started setting up this equipment and [when] everyone was training on it. So, that's how we did it...when everything was...stopped, we developed an online support.

Another informant referred to these online meetings as something akin to the U.S. President's Emergency Plan for AIDS Relief 'Strategic Management Information Visits' during which the national level teams could sit for 2-3 hours with their provincial level counterparts and work through specific program issues over voice calls. He explained that the provincial teams would submit a monthly report of their accomplishments and questions to the central level and then the 26 provinces together with the secretary general would convene a virtual meeting to discuss. He said that these virtual meetings were only conducted with provincial teams and not with health zone management teams.

#### Views of Supervision Schemes

At the end of the interview, each informant was asked if they had any additional information to add. One informant described the importance of distancing the Ministry of Health's reliance on partner organizations for funding supervision activities:

...Supervision...is a very important activity for the provincial health directorates, for the health zones...as well as the health facilities...but the problem...that the ministry has not yet understood [is] that we can already begin to formalize supervision or make it systematic even without partner support. We see how [the health facilities] improve and as soon as the [partner support] comes to an end, everything collapses. A year later you will find a health zone at the bottom of the ladder again. This means that we must support supervision even more because it is important.

He provided an example of how the current system may disincentivize supervision in urban centers in addition to describing how supervision schemes may be conducted with minimal resources, albeit in a subdivided manner:

I take the example of...Kinshasa [where] there are 35 health zones that are in the city. In Lubumbashi we have 11 health zones which are in the city. In Mbuji-Mayi we have ten health zones which are urban, and so on. It means that even if you don't have the means to buy fuel to go [outside of urban centers], we can do planning at the urban level, at the city level. There are [urban] health zones that have serious problems that we can supervise, but we don't do it... you will see that [USAID IHP] supports the supervision missions but the health zones that are in the city are never supervised...the provincial health directorate or health zone offices prefer to go [outside of urban centers] and the reason is simple – it's to have a per diem, because if [they are] in the city, [supervisors] don't get much...maybe just ten dollars for transportation, whereas if [they go] out of town, [they] get maybe 85 dollars for per diem and other things...so we come across several urban health zones that have serious problems but are never supervised. Even without [financial] means, we can conduct [supervisory visits] in the city. This is really a challenge that requires...that the government understands that to make [supervision visits], it is not only a question of the support from the partner...

And finally, he offered a success story of sorts in which he described a scenario of self-reliance:

There is a health zone here in [redacted] that was not supported by a partner [for] twenty years. They never organized any supervision or annual or semi-annual review [in] twenty years...the new division head, when he arrived, switched things up. He sent the chief medical officer of the health zone...to [redacted], [and] when he arrived, without the support of a partner, did a big review...all the health facilities contributed five or ten dollars and then they did...a big review...this problem is a problem of responsibility, will, and vision. This is where I was saying we see the results with the supervisions, [but] as soon as it all stops, it starts to fall apart. So, we must... wake up the ministry to make it aware.

## **Perspectives of Supervisors (IDIs)**

In total, 13 IDIs were held with health system staff who conduct supervisory activities from three different provinces (Sud Kivu, Lualaba, and Kasaï Oriental). These informants were from different levels of the health system including three different provincial health divisions, four different health zone central offices, and six different referral hospitals. Three women were included among the IDI informants. Two informants from different hospitals in Sud Kivu held the title of Managing Director – these individuals did not perform supervisory activities as part of a health zone management team but conducted supervisory activities internal to their facilities. Nevertheless, they provided valuable insight surrounding their own styles and perceptions of supervision as well as on the broader supervision programs conducted by health zone management teams.

### Goals and Objectives of Supervisory Visits

The overall goal of the supervisory visits was expressed as a mechanism to improve the delivery of health services in health facilities and for the population to have access to quality care. The way these improvements are realized was described as follows: ...it's to improve poor-performing indicators at the facility level [and to] help the [facility staff] identify imperfections and work to produce quality work."

Informants noted that the objectives of each supervisory visit change on an as needed basis and are based on perceived weaknesses detected during regular health zone management team meetings, monthly monitoring meetings with health facility representatives, and additional review of routine health data. One informant from Lualaba cautioned that effective supervision cannot be burdened with too many objectives. Excessive objectives lead to a host of recommendations which may be too time-consuming for health facility staff to consider and implement before the next round of supervisory visits.

### Planning Phase and Supervision Scope

One informant from Kasaï Oriental noted that conception of themes for upcoming supervisory visits starts during his weekly health zone management team meetings when data and reports are reviewed (some of these reports may include summaries of issues and recommendations during previous supervisory visits). From these reviews, the health zone management teams are able to identify weaknesses and formulate the beginnings of recommendations they will issue upon their next supervisory visits – a practice which ultimately leads to the development of the TOR used to guide supervisory visits. An informant from Kasaï Oriental noted that there are no pre-established routine supervision programs – the themes and topics for each supervision cycle are determined by reviewing reports and from review meetings.

This review process serves to orient the supervisors on what to expect during monthly monitoring meetings held with health facility representatives (normally, the head nurse). These monthly meetings give the facility staff (the supervisees) an opportunity to present specific health metrics for their facility. Based on their internal reviews covering analysis of trends and previously issued recommendations, supervisors are able to perceive if health facility representatives are progressing as expected. The preparatory meetings, in general, assist the supervisors to be clear about whether they are ready to begin the supervision cycle, which issues are resolvable in consideration of available resources, which supervisors are going to carry out which activities, logistics and available resources to carry out the visits, and how long they will be conducting the visits.

Supervision themes are drawn up each month at the health zone level and incorporated into TOR documents. These documents, according to one informant from Kasaï Oriental, serve to justify the reason for the supervisory visits and are complete with objectives and the results meant to be achieved. An informant from Lualaba explained that the supervision activities described in the TOR are prioritized during the visit, but if unanticipated issues are confronted and deemed important, they should also be addressed. One informant from Kasaï Oriental noted the following:

We identify the [problems] that can be solved by supervision meaning they are [caused by] the service provider in the exercise of his functions...the supervision acts on the service providers...secondly, we determine whether all the problems we have chosen are to be solved at once, [if not]...we prioritize...what is important - if we do not solve this problem, it will have a negative impact on health center attendance or it may promote an increase in community deaths because those who come will not have quality care...that's how we prioritize.

Multiple informants noted that the TORs are preemptively sent to the health facilities targeted for supervisory visits. The facility staff then have a chance to prepare for these visits as they know the expected date of arrival and the material that will be covered. The supervision schedule may be interrupted due to competing priorities on the part of the supervisor and as such, reminders may be sent with relatively short notice. Supervisors strive to remind supervisees of their impending visit via written or oral communication 1-3 days in advance of their arrival. Official mission orders are also drafted by the health zone which legitimize the supervisors' presence at the facilities they visit.

Informants stressed the importance of being prepared before conducting their supervisory visits. When asked about the use of checklists or formal tools used to guide the supervision process, varying accounts were given. One informant from Lualaba was in favor of using checklists as they facilitated drilling down on specific issues, while another supervisor from Lualaba noted that the use of checklists restricts the exploration of identified issues. Some informants noted that checklists were no longer available while others described using them. An informant from Lualaba noted that checklists for integrated supervisory visits are available but not frequently used because they are too long to print out. Informants from three different provinces described a scenario where the supervisors establish their own checklist specific to the issues they intend to address: "The supervision checklist may have been poorly designed [and] does not really give the latitude to exploit the desired subjects." An informant from Kasaï Oriental explained that checklists used to be issued in the past to ensure that everyone was speaking the same language, but they are no longer used.

Supervisory visits appear to prioritize health centers over hospitals, polyclinics, and health posts. A hospital level informant from Sud Kivu made the following statement:

...the supervision program...is not very interested in management and administration. And every time the schedule [of supervisory visits] comes out, you can find that sometimes the hospital is not targeted...it's rather the health centers that are more targeted by routine supervision, it's really rare...you find a service that is supervised [at the hospital level] ...

An informant from Lualaba also confirmed that hospitals are not well supervised particularly when it comes to the technical aspects of their work (*i.e.*, pathology, case management of illnesses). Speaking about supervision in general terms, an informant from Kasai Oriental explained that supervision activities mostly cover health service provision and do not typically focus on human resources management or health promotion activities.

#### Supervisor Resources

Resources made available to supervisors to conduct their visits usually includes transportation or fuel for transportation in addition to printed or photocopied materials (i.e., official guidelines/documents for distribution), pens, and notebooks.

A perennial issue described by informants from all the provinces was the lack of consistently available vehicles and funds for transportation, which affects a supervisor's ability to conduct a visit. A hospital-based informant from Lualaba said:

...to go 50 kilometers or 15 kilometers we need a means of transport, now [if] we do not have [a] means of transport, what should we do? Where will the funds come from? We will first go to the health zone central office [to see] if there is anything...we ask for a two-day rental of a motorbike...if the health zone central office can contribute even some money, the health center can help with the rest.

A second hospital-based informant from another health zone in Sud Kivu mentioned distance and weather as additional challenges:

We can also lack the means to carry out these supervisions... how can we reach 40 kilometers in the rainy season, perhaps on a motorbike? You find that these are obstacles...it can always have an implication on the effectiveness of the supervision. If you had thought about evaluating an indicator or

an objective or a recommendation after a month and you find that you are no longer able to [travel to the health center], you may [go] back after six months [and] there are no more good results.

### Formal Training on Supervisory Visits

The consensus across interviewed informants is that they did not receive formal training for conducting supervisory visits outside of pre-service course material. Several informants reported receiving training on the management of primary health care which, they said, broached the duty of supervision. A hospital-based informant from Sud Kivu described his experience with training as follows:

I have never been trained in conducting supervision. I have nevertheless acquired some experience [from] when I am supervised. I see what they are doing...I know I have certain themes [to address] and I know that I should behave in a particular way in front of this person to improve this issue...I have objectives in mind that I must achieve. So, to get there, I have to proceed in a particular way...but in itself as a technique, I have not had any training.

## Integrated versus Thematic Supervisory Visits

Informants described a shift from focusing on a single theme or disease to becoming 'versatile' supervisors who are expected to have a broader knowledge base. An informant from Lualaba explained that everyone at the health zone office strives to understand all supervision activities, and while there are still supervisors who hold specialties in certain areas (*e.g.*, HIV, tuberculosis, etc.), there is an expectation that all supervisors have minimum knowledge to evaluate various departments and facility activities. The expressed intent of this 'versatile' supervisor is to reduce the reliance on domain-specific supervisory visits (also referred to as 'thematic' supervision) in favor of an integrated approach which serves as a consolidation of efforts and minimizes resource expenditure. A provincial level informant from Sud Kivu noted that integrated supervisory visits may uncover specific issues that require more in-depth expertise to rectify – this is the point at which thematic supervisory visits may be triggered. Note, however, that certain themes covered during supervisory visits may take precedence over others given the epidemiological urgency (*e.g.*, COVID-19, Ebola), expertise of the supervisors, or trends discovered during data review and analysis processes.

#### **Visit Mechanics**

The general approach to a supervisory visit includes establishing a collegial and interactive atmosphere and assessing facility staff progress with adhering to or implementing the last set of recommendations left at the time of the previous supervisory visits. Following these activities, supervisors move to their current supervision plans for which they may have already developed certain hypotheses regarding the different issues they targeted to redress. Generally, all steps are conducted together with the facility staff as team supervision appears to be a preferred approach by the informants.

Often, team supervision is preferred. We supervise the whole team because the work is done as a team. If every time you go there you only [look for] the head nurse, the day you get there without the head nurse, you will be...blocked. We integrate the others...who can understand, and... in relation to the activities that will be carried out... Direct observation of facility staff performing their duties is a common practice among supervisors. This serves as a mechanism to reinforce practitioner knowledge to help maintain performance levels. During observation, supervisors may ask questions to the service providers about what they are doing and will even interview the patients to understand their perceptions on the care being provided. An informant from Lualaba interviews community members to get a sense of how they perceive the quality of care at their local health facility and will compare that information against what the facility staff are expressing about the services they offer. In the event of major discrepancies, the supervisor will discuss possible courses of actions with the health zone management team which may include a phone call to the service provider in question or even replacement. Tempering this notion, one informant noted that it may be necessary to increase staffing and provide certain materials and basic infrastructure before some issues can be resolved: "We can't expect everything to change while we or the government don't provide the people we oversee with what it takes to get it done right."

To complete the visit, feedback is generally provided to the facility staff and recommendations are written in the facility logbook for reference at the next supervisory visit. Relatedly, an informant from Kasaï Oriental expressed that the recommendations left by supervisors must be realistic and achievable within one month (before the next round of supervisory visits). However, an informant from Lualaba mentioned that if he were to leave written recommendations that they wouldn't be followed so he prefers to correct issues through action:

The supervision that is very effective is the supervision where...we do a demonstration because a supervisor is someone who is superior not [only] in theory but also in practice. If you teach someone via demonstration, he remembers faster and it [sinks in], [but] as soon as you start reading theories, there are not many people who will remember that.

Coming full circle, the data collected during supervisory visits are accessible at the health zone level where they are the subject of meetings when relevant to the issue at hand. An informant from Sud Kivu explained that the data the supervisor collects must be the subject of a discussion and not ignored.

#### Contact with Supervisees Post Visit

Several informants mentioned they are available to interact with health facility staff outside of their supervisory visits. An informant from Sud Kivu put it this way:

Of course, they have our numbers [and] we have theirs. If there is a need to communicate, we communicate. They are our collaborators with whom we live, and we are supposed to collaborate. We always communicate when there is need to communicate.

As far as remote assistance, an informant from Kasaï Oriental explained that some problems are easily resolved over the phone and do not require a personal visit. If the problem is a little more difficult, she said she asks one of her colleagues to visit the facility especially if the issue requires an expertise she doesn't possess. One informant from Lualaba takes a proactive approach to remaining in contact with the facility staff he supervises – he will call them himself to ask how things are going if he does not hear from them. Informants from three different provinces described scenarios where they take phone calls to assist supervisees with differential diagnoses, patient referrals, and advice on how to implement recommendations left during previous supervisory visits.

### Style of Supervisory Visits

An informant from Lualaba described his supervision style as one that combines democratic and autocratic styles. He said that sometimes he feels the need to impose himself if he wants to see progression, particularly if he finds he must repeat corrective action across multiple visits. Another informant from Lualaba said his supervision style is based on dialogue – he talks with his supervisees, and they work together in a process where he shows them correct procedures and they ask questions. A hospital-based informant from Sud Kivu echoed this approach:

When I come to supervise someone, I must not first behave as authoritarian, it's a collaboration and when I collaborate it's a dialogue - we talk to each other and sometimes it's a game of questions and sometimes it's document verification, but the interaction is really the dialogue, the exchange.

A provincial level informant from Lualaba emphasized the importance of arriving to facilities ready to help and collaborate. He said supervisors should sympathize with the facility staff so they may come from a confident place in their interactions. An informant from Kasaï Oriental mentioned that the supervisor must not behave as an inspector, but rather as a teacher – someone who is keen to share information and experiences. Another informant from Kasaï Oriental shared the following:

...you need to greet people, when you are given a chair you take a seat, when you are speaking to the supervisees you need to meet them at their level, you speak clearly to them so that they understand you, you don't act like a friend who's making jokes. You can't be distant, you can't sulk.

Many informants said that a supervisor must have superior knowledge compared to the individuals they are supervising in the sense that supervisors must bring 'added value'. An informant from Lualaba summed up the qualities of a good supervisor expressed by several respondents:

...he must first have the necessary skills, he must be technically competent, he must master what he is going to do with others, he must have a communicative attitude, he must have empathy, be of good character, serve as an example for others, integrate easily, easily adapt to all situations, [and] he must know how to drive...

Completing the profile of a good supervisor, an informant from Kasaï Oriental explained that "A good supervisor needs to know how to listen well, how to observe, [and] how to be courteous. He shouldn't feel like he is the big boss - he needs to be friendly (not a friend, but friendly)."

#### Frequency of Visits and Facility Accessibility

The frequency of supervisory visits was commonly cited as a monthly endeavor although this appears to be in relation to the frequency with which supervisors conduct visits and not necessarily tied to the frequency with which health facilities receive visits. For example, an informant from Kasaï Oriental explained that she does not go to the same facility on a monthly basis, but rather she is part of a system that 'sponsors' a health facility in which the supervisor will focus on a facility for 3-6 months depending on the severity of identified issues at that facility. Some informants stated that facility visits occur near the end of each month, and they tend to spend multiple days on the road before returning home. A hospital-based informant from Lualaba mentioned he must carry out at least 3-4 supervisory visits per month. Another informant from Lualaba explained that an impediment to achieving supervision objectives is the irregularity of visits. He said that the technical capacity of facility nurses is such that 3-6 months after

correcting certain clinical behaviors, the same issues are present. In addition to issues surrounding the irregularity of visits, which stem from material, financial, and human resource limitations, seasonal rains limit supervisor capacity to travel and conduct regular visits. More generally speaking, the inaccessibility of some health facilities can be attributed to the vast distances that must be travelled, roads in disrepair, lack of bridges or unpassable rivers, and weather patterns. Consequently, facilities that are difficult to reach are not regularly visited and they suffer as a result.

### Inclusion of Private Facilities

Provincial level informants explained that the state-run health system establishes 'integration contracts' with private facilities. These facilities then accept that they will be supplied with materials and equipment from and be supervised by the state. The clear rationale for incorporating private facilities in supervision schemes is to ensure that the population they serve is protected against low quality care. In some instances, however, it was explained that the integration contracts may create friction as some private facilities are reticent to make their operations accessible to the state. In the words of one informant, 'they do not understand the merits of supervision'. One provincial level informant from Kasaï Oriental also explained that even though nonintegrated health structures are not supervised, they can be approached so that the state does not lose out on the data they are generating.

### USAID IHP Contributions to Supervision Schemes

When asked about USAID IHP's contributions to their supervisory efforts, most informants explained that USAID IHP provided resources for health zone management teams to conduct their supervisory visits. Resource provision was commonly expressed as funds for transportation or fuel. An informant from Lualaba stated that,

...before USAID IHP we had difficulty visiting the health zones regularly and when USAID IHP came it gave us opportunities to visit the health zones with funding...they improved the frequency of visits... [and] when there is this frequency...our visits can help improve the quality of care...

At the provincial level in Lualaba, TOR documents, complete with objectives and requests for funds to execute planned activities, were sent to USAID IHP at least two weeks in advance of supervisory visits. USAID IHP then analyzes the content, prepares the budgets, and sends funds to the supervisors. Aspects of this process were described as problematic by one provincial informant who stated that provincial offices have specific schedules of activities and are sometimes left waiting for USAID IHP to issue the funds for supervisory visits. He said that USAID IHP will sometimes approve a suite of activities all at once resulting in a single person being held responsible for leading multiple activities at the same time, but still having to maintain the same targets.

One provincial level informant from Sud Kivu felt that USAID IHP imposed their strategies explaining that USAID IHP used to elaborate the TOR for the supervisory visits. The informant explained that he refused to execute these TOR because the provincial office was more familiar with the issues to be addressed. After a back-and-forth, USAID IHP agreed to let their provincial level colleagues elaborate their own TOR limiting their own role to one of validating themes. This same informant raised the issue of direct funds transfer from USAID IHP to the health zones bypassing the provincial offices. He explained that supervisors could

receive funds directly to their mobile devices and that it is possible the supervisors could give false numbers for the money transfer resulting in the funds from USAID IHP going to a 'soak pit'.

Similar to the review process at the provincial level, a health zone level informant from Lualaba explained that his team would present a particular health situation to the provincial health directorate, USAID IHP, and other staff who specialize in that area. He said his team would explain the analyses they conducted and present their plan of action for redressing issues. He mentioned that, along with their colleagues, USAID IHP staff weighed in on the action plan and told them what elements were missing and even helped with reframing the approach for redressing issues. Provincial level informants explained that USAID IHP's support encouraged them to carry out mentoring field visits for health zone management teams. Supervisors from Kasaï Oriental explained that after supervisory visits are finished, they regroup to assess their experiences and write up a report which is sent to USAID IHP whose staff provides feedback and recommendations. An informant from Lualaba summarized the influence of USAID IHP as follows:

[The objective of these USAID IHP strategies] is to improve the quality of supervision in any way. And when the quality of supervision is improved, the quality of care also improves, and the damage that is linked to poor quality of care is reduced ([fewer] deaths, complications, and late referrals).

USAID IHP was clearly perceived as a technical partner by both provincial and health zone level supervisors. A provincial informant from Lualaba explained that:

...there are exchanges, we also have meetings with them to discuss the procedures to be implemented and at times we also do joint supervisory visits with them...there are some USAID IHP staff who have skills with [supervision], which creates what is called the transfer of skills.

Health zone level informants from Kasaï Oriental and Lualaba also referred to USAID IHP's influence on introducing the notion of mentoring into supervision practices.

Contrary to these descriptions of USAID IHP's influence over the supervision program at the health zone level, a provincial level informant from Kasaï Oriental said he does not think that USAID IHP had any influence on supervision strategies, explaining that he is, by default, just following guidance from the state. Although, a second provincial level informant from Lualaba explained that USAID IHP held a team building training and provided additional support:

[USAID IHP] has improved many things even in coaching techniques. Really, USAID IHP trained us a lot and they even trained us in institutional auditing [and] in primary health care management. These are themes that have given us skills to go and supervise the health zones.

Finally, a provincial level informant from Kasaï Oriental provided a general description of how partners could support them in their supervisory work. He mentioned that partners should increase their support to assist in evaluating the quality of the supervisors who are conducting the visits. He said that partners should analyze the weaknesses of each health zone by theme and help to develop supervision tools so that those who go to the field to evaluate service provision do not stray from their goals and objectives for that specific visit.

#### Perspectives of Supervisees (IDIs)

Interviews were conducted with 12 head nurses posted in health areas located in Sud Kivu, Lualaba, and Kasaï Oriental provinces. One woman was included among the supervisees recruited for IDIs. In Lualaba

and Kasaï Oriental provinces, one urban and one rural health zone was included in our sample, while in Sud Kivu both health zones were in rural areas.

#### General Description of Supervision Visits

Informants described a range of supervisory visits, which included integrated or routine supervision when different zonal supervisors assess a variety of themes (*e.g.*, curative care, finances, hygiene, maternal health, preventive care such as pre-school consultations, prenatal consultations, and vaccinations, pharmacy management, personnel management) to evaluate the functionality of the health structure. Program specific supervision focused on disease (tuberculosis, HIV, malaria), vaccinations, nutrition, maternal and children health, family planning, and sexual violence. There was weekly supervision of disease pathologies under surveillance and, supervisions triggered by a weakness, concern or problem identified through weekly disease reports (*e.g.*, unusual increases in disease specific cases) or the monthly monitoring data. Some informants reported that supervision which nurses described as interactive, based on the realities of health structure services, and involving the transfer of information aimed to address weaknesses and to improve health indicators. Head nurses contrasted formative supervision to the rigid, authoritarian approach commonly used by the inspection offices. The way head nurses referred to types of supervisory visits was variable, and they sometimes provided contradicting information regarding the content of the different sorts of visits.

Head nurses reported that routine or integrated supervision is carried out by zonal staff monthly and can involve several supervisors with different specialties who follow a schedule to assess ongoing activities. Thematic supervisory visits are carried out by both zonal and provincial staff and the frequency varies. For instance, vaccination supervision related to the Mashako Plan<sup>1</sup> is done every one to two months while visits related to HIV or tuberculosis are scheduled each quarter. Frequency of thematic supervision also appeared, at least in part, to be linked to the proximity of the health structure to the zonal and provincial health offices. Descriptions of the content of thematic supervisory visits varied extensively according to the focus of the supervision.

Informants reported that thematic supervision is triggered by a weakness that the health zone staff often identifies during monthly monitoring meetings. A head nurse from Sud Kivu stated:

When or during the data analysis, during the monitoring meeting, they can see in which health area there may be problems. These problems vary from one facility to another, they can find for example that the data is not consistent, sometimes during the transmission of data there are data that get mixed up... During the analysis of the data, if there are some inconsistencies in the data, personnel at the central office level will know that such facility, such health area had problems. It is based on these problems that health zone personnel formulate the objectives or the TOR for their supervision.

Informants reported that supervision TORs should be provided at least 48 hours prior to a supervisory visit and that supervisors generally do not deviate from the TOR. They indicated that the TOR describes the

<sup>&</sup>lt;sup>1</sup> <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10141424/</u>

purpose of the visit, advises which instruments should be available during the visit, and indicates the date of the visit. A head nurse from Lualaba said:

In principle, we receive an outline of the visit before the supervision where they describe the motive of the supervision, they can tell us that we must prepare certain tools, that they want to triangulate the data perhaps in relation to the data collection tools, or they may say that they will come to check the drugs in the pharmacy. So, they have already determined the theme that they will need to work on and the date they will come. But that does not prevent them from also seeing or noticing something else that is wrong during the visit...this way we can be well prepared, when they arrive there won't be a surprise because we have already told the group that someone is coming, and we are already focused on the work that will be involved. Sometimes [the supervisors] may wish to participate in a session, for example sometimes they arrive on the day you have a session, such as a vaccination session...they will participate for a bit and then the supervisor will go to work. It happens like this.

The TOR documents also spell out weaknesses or problems that supervisors aim to correct during the supervision, as stated by this informant from urban Kasaï Oriental:

The TOR developed for supervision focuses on faults, problems with the health facility services and activities. It is according to these faults they draw up the TOR, or when they come to supervise, they see where there are shortcomings that they try to correct.

Health facilities maintain a supervision notebook which includes previous supervision reports outlining what took place and recommendations regarding how to tackle the problems identified. Recommendations are also included in the subsequent TOR as a reminder that the supervisor will assess whether these previously issued recommendations have been addressed. When supervisors find that previous recommendations had not been adequately resolved, they provide additional recommendations to remedy the problem.

Head nurses from different provinces conveyed divergent views regarding the evolution of supervisory visits. One informant from Lualaba suggested that over time visits have become more integrated, stating:

For both zonal and provincial health teams, supervisory visits were much more specific before, but they don't do that anymore. When they come now, when they come they don't carry out specific supervisory visits, when they come they supervise everything, when they come they start by looking at the supervision notebooks, at the recommendations from such and such partners who have passed, then they will examine the level of achievement, apart from the level of achievement they will see where there are weaknesses so that they can start coaching (health personnel) in the facility.

In contrast, a head nurse from an urban facility in Kasaï Oriental claimed that supervisory visits have become more theme orientated, reporting:

For example, the supervision we received this month, the TOR, indicated that we were going to work on filling in instruments, it was in the TOR, current supervisory visits are not like they used to be. In the past, a team came to tackle almost all the themes, so you wouldn't know what to remember, what to improve. Now they have started to look at different themes (during different visits), a group arrives to look at such and such a theme. For example, a team just came to help us fill out instruments, on the 26th we will receive another team which will speak to us about archiving, on the 29th there will be

another team which will talk to us about another theme, so it is in this manner that supervisions are done.

Some head nurses distinguished differences in supervisions led by zonal and provincial health teams, mentioning that provincial staff follow more specific plans while supervisions carried out by zonal staff are more general, focusing on a range of objectives to improve health center indicators. We were also told that zonal teams concentrate on ensuring that previously identified problems are corrected. A head nurse from urban Lualaba province reported:

The provincial health directorate is much more focused on programs when they supervise, they come here for the tuberculosis account or the HIV AIDS account, but the [health zone] central offices when they come it is not like the provincial health directorate, the [health zone] central offices when they come it is integrated, they generally try to correct small problems by looking for possible solutions. If you look at the level of achievements of the previous month it is different compared to what the provincial health directorate does. The provincial health directorate follows a set plan, but with the [health zone] central office it is not a specific plan, they follow a lot of different objectives.

Urban based health facilities appeared to receive far more supervisory visits which were led by both provincial and zonal health staff. The provincial heath directorate staff seemed to carry out more regular, domain specific visits to urban facilities whereas visits to rural facilities were less frequent. One urban center head nurse reported being overwhelmed by the number of supervisory visits, which he contended interferes with his work.

When asked which type of supervision is the most beneficial, head nurses commonly reported that all supervisory visits are helpful because they aim to improve services. Examples of the ways supervisory visits benefit facilities included addressing a problem related to data entry, introducing a new vaccine, or reviewing revised drug treatment for a specific pathology. Three head nurses mentioned that routine or integrated supervisory visits are most beneficial because they encompass all services and activities, focus on identifying and resolving problems, often involve the transfer of new information, and are monthly. Three head nurses underlined the advantages of "formative" supervision which they described as focused on correcting a deficiency affecting services, adding that formative supervision often involves a briefing or informal training with facility staff. This head nurse from urban Lualaba said:

What is most beneficial is the supervision which is formative and focused on health indicators. They do not pass only to see what you have produced but they follow you with a magnifying glass, they ask questions when there are flaws, explain to you what is needed to get done to reach a certain level, and when there are improvements, they show their appreciation... they even share new ideas that you didn't previously know, and they explain different things to you.

#### Supervision Activities and People Implicated

All but one head nurse reported that at least one supervisory visit had been carried out within the past month. The exception was a health center located in a remote health area in Lualaba province, which had not been supervised for over two months prior to our data collection. One head nurse posted in a remote health area in Sud Kivu mentioned that during the rainy season, which lasts 9-10 months of the year, the road to the health facility is often impassable impeding regular supervision visits. Head nurses posted in the four health facilities situated in the urban centers of Lualaba and Kasai Oriental had received multiple supervisory visits within the past month involving both zonal and provincial health staff. One head nurse from Kolwezi even reported receiving different teams of provincial and zonal supervisors focused on the same topic within a period of a few days. He stated:

We thought why do we have two people around the same time and for the same activity coming for supervision. We wondered what was going on. And in a very close interval. One (supervisor) said, "I am coming to supervise vaccines," and the other said, "I come to supervise vaccines," so exactly the same thing. Generally, we only see one person from the central office (supervise vaccinations), one time per month he passes.



Photo credit: Lauren Blum (Health Center placard, Lualaba Province).

Urban based informants mentioned receiving a supervision schedule of routine and program specific visits from the health zone team.

Six of the 12 head nurses reported vaccinations to be the focus of the most recent supervisory visit, with three of six informants specifying that the supervision related to implementation of the Mashako Plan. Most of these head nurses mentioned that the objective of the visit was to increase vaccination coverage in the health area. Three head nurses specified that the purpose of the visit was to improve data compilation or entry related to vaccines.

The other six head nurses reported that supervisory visits focused on the following: improving health center sanitation activities; protection against COVID-19; disease surveillance concentrating on polio; completion of forms, registers and reports related to HIV activities and administration of antiretroviral treatment; improving tuberculosis detection; and improving data entry of health center instruments.

In all but two instances, the supervisory visit appeared to be carried out by one person and in only one case the supervisor travelled from outside of the health zone. Head nurses generally described people leading supervisory visits as nurse supervisors coordinating an activity or specializing in a particular theme such as water, sanitation and hygiene, tuberculosis, HIV, or disease surveillance in the BCZS. They indicated that the same supervisors regularly lead visits related to their specialty; the exception was supervisory visits involving vaccinations which appeared to change supervisors regularly. All head nurses reported being directly involved in the recent supervisory visit, with half indicating that other staff members such as the assistant head nurse or a lab technician also participated. In three cases, multiple health personnel met with the supervisor. More personnel in urban health facilities participated in supervisory visits, although their involvement depended on their role in the thematic focus of the visit. In rural centers, where there are often few staff, supervisory visits often involved one or two staff members.

Most head nurses described receipt of the TOR, which included the supervision theme and recommendations from prior visits, as the start of the visit. In preparation, head nurses gathered appropriate materials they anticipated would be needed during the visit. Upon arrival, head nurses met with the supervisor and subsequently called health personnel involved in the supervision theme who would work with the supervisor.

If prior recommendations related to the same theme had been made, supervisors assessed whether those recommendations had been followed. Some nurses reported that supervisors examined both expected and actual achievements with the overall goal of improving activities to meet broader ministry of health objectives.

Informants reported that, recently, most supervisory visits occurred monthly or every one to two months, although tuberculosis and HIV visits happened each quarter and the water, sanitation, and hygiene supervisory visits appeared to be one-off events. The average time involved in each visit was just under two hours, with the duration ranging from 55 minutes to five hours. Head nurses explained that the duration depends on the purpose of the visit and whether the supervision involved a "briefing" or training, but also on how well documents related to the supervisory visit were organized and maintained by the health structure.

#### Types of Supervisory Visits

Our informants reported that supervisory visits most often entailed reviews of forms, tally sheets, and registers related to the supervision theme to understand whether data entry and compilation was up to date and accurate. Head nurses described a triangulation process involving the review of different instruments and registers (*e.g.*, comparing the tuberculosis register maintained by the head nurse to the register kept by the lab technician) to assess data completeness, accuracy and discordance, and how related health indicators were established. Some reported that photos of different instruments, materials or equipment were taken during the visit. Head nurses mentioned that discussions took place when supervisors had specific questions related to patient information, identified gaps or errors in the instruments, or inquired how indicators were compiled.

The second most common type of supervision involved a briefing or training focused on data entry of instruments, data reporting, and treatment practices of sick patients. For instance, in Bunkeya one head nurse explained that the most recent supervisory visit included a briefing to explain how to complete a revised vaccine register which had not been filled properly. The supervisory visit focused on HIV involved a five-hour training on HIV reporting, how to take samples of suspected HIV patients, counseling of HIV-positive patients, and the use of antiretrovirals. These sessions appeared to entail active interactions including questions posed by health facility staff and hands on activities.

Depending on the purpose, some supervisions carried out by health zone staff involved observations, which were less commonly carried out by provincial health personnel. Examples included observations of health facility hygiene and sanitation measures or vaccination sessions. In an urban health facility in Lualaba, one informant reported that supervisors spent an entire day observing both fixed and outreach vaccination sessions which guided recommendations for improvements in vaccination sessions. In one instance, a zonal supervisor of tuberculosis activities attempted to visit the household of a suspected tuberculosis patient.

#### Style of Supervisory Visits

Head nurses generally described supervisors as participatory, collaborative, and open, with some adding that supervisors were not authoritarian or intimidating. They reported that the atmosphere created during the most recent supervision encouraged health personnel to ask questions freely and actively exchange perspectives with supervisors, with some describing lively discussions about how best to provide health services. Some described supervisors as attentive and focused on developing evidence informed recommendations. Several head nurses emphasized that the supervision style helped supervisors to identify weaknesses that needed to be corrected and to jointly contemplate appropriate solutions. Some added that supervisors motivated them to follow recommendations; others appreciated the role supervisors played in transferring information related to health facility needs to health zone authorities and implementing partners. This informant from rural Sud Kivu said:

He was cooperative. We had good exchanges. He first called all the staff, he showed us where the faults lie, he showed why there were inconsistencies, he let us know that vaccination services should not be led by a single person, this service must involve everyone in the facility, because a person cannot count, fill in the card, complete the register, and vaccinate all by himself. We were motivated.

Two head nurses noted a recent change in the supervision style. This head nurse from Lualaba said:

They made us feel at ease. It is as though the supervisors are changing, before there were supervisions, when someone came you became uncomfortable. I found the atmosphere was very much collaborative, but there were certain supervisions in the past, when nurses supervised, it became like an inspection...

#### Another head nurse from urban Lualaba province added:

There are [supervisors] who come with a spirit of participatory supervision, they ask questions, you negotiate a little, and there are others when they come to supervise, they turn into an inspector, they yell and they scream and sometimes you can't even express yourself, then they just leave. Here there are people like that too.

#### Feedback Provided

Informants reported that during the visit, supervisors shared verbal comments and suggestions based on observations of the health facility services. In most cases, written feedback was provided at the end of the visit in a supervisor's notebook kept in the health facilities. One head nurse in urban Lualaba mentioned that previously, supervisors would take notebooks with them so that they could enter their recommendations in their offices or homes, but this approach was phased out because notebooks were frequently misplaced. However, in some rural health zones (e.g., Bunkeya) the supervisor took the

notebook and delivered feedback after the visit, and one head nurse from a rural zone in Kasaï Oriental reported at the time of our visit that he had still not received the feedback. Informants reported that feedback was often discussed with informants noting that the supervisor explained identified weaknesses or made additional clarifications as needed.

Head nurses reported that they were requested to review written recommendations and to sign the notebook confirming that they received the feedback provided; supervisors also signed to indicate that the information was transferred. One head nurse received an electronic copy of the recommendations via WhatsApp, noting that this was the first time he had received feedback electronically.

Written feedback included health facility strengths and weaknesses, as well as recommendations for improvements. Several informants noted the importance of receiving positive feedback, which they considered a motivation to improve their work. One head nurse indicated that even weaknesses were shared in a positive fashion, such as, "... you are already doing the job well but if you can also do that it would be much better."

We were told that recommendations sometimes included detailed suggestions such as work plans with timelines or comprehensive instructions to carry out a task. Head nurses stated that most recommendations were grounded in the reality of the context and designed to accomplish health facility objectives. Some added that supervisors provided helpful input aimed at increasing knowledge or sharing new approaches to improve practices. Sometimes the supervisor conferred with staff to assure the feasibility of recommendations. A head nurse from Sud Kivu (SP) said:

I found that he avoided making recommendations that were not feasible, that is to say, he first asked us the question, "Are you able to achieve this?" We said yes for all the recommendations we thought we could carry out; it was these recommendations that were adopted. We found this process to be very important because it encouraged us to appropriate the recommendations. If we agreed to a recommendation difficult to achieve it would be a waste of time.

One nurse mentioned that after the visit, health personnel worked together to review the comments and to identify ways to best address the recommendations.

#### Contact with Supervisors

Most head nurses reported having telephone contact with supervisors after the visit to request clarification regarding the recommendations, inform the supervisor about problems they were confronting, or share information regarding the evolution of services. A head nurse from Sud Kivu said:

Apart from meetings, we have telephone contact. When we have not understood things well, we call him. He may set up a time to intervene again to investigate what we did or not do better, due to our call he may come again.

Two head nurses from Lualaba mentioned that the supervisor actively contacted them to inquire about the status of the recommended changes. The health center that received a visit related to water, sanitation, and hygiene received a call from the supervisor who informed the head nurse that he had contacted an implementing partner and had identified a way to connect the health center to a sustainable water source.
While three of the 12 head nurses had not spoken to the supervisor by phone, two of these informants had recently seen the supervisor during meetings or in passing on the road. Several head nurses reported that they see health zone supervisors regularly during BCZS meetings. Only one head nurse had not had any contact with the supervisor since the last visit.

### Comparison with Past Supervision Visits

When asked to compare the most recent supervision to other visits, five of the nine nurses who responded noted improvements in the way the most recent supervision had been conducted, with one of these head nurses from Lualaba speculating that supervisors had received capacity strengthening training. He said: "There is a change in our relationship, last year a lot of supervisors were authoritarian, but there is a big change because they now come not so much on terms of authority, they have become collaborators."

These head nurses were highly appreciative of the supervision approach, with some linking improvements in health facility activities to the recent visit. For example, in one instance the supervisor found a solution to the health center water shortage; another nurse reported that the supervisor helped health facility personnel evaluate the effect of recent changes in activities; one nurse appreciated that the supervisor carried out in-depth training of all health personnel involved in HIV treatment; and two head nurses reported that the most recent supervision was less authoritarian and more collaborative. Specifically, informants from Kasaï Oriental noted an improvement, as stated by a head nurse from an urban health zone:

There is a small change, before the supervisor was confusing supervision and inspection. Supervision is different from inspection. Inspection occurs when there is an infraction, they come to strike, with supervision they come to teach you. The previous visit (prior to the most recent visit), it was as if it was an inspection, we were condemned, why this, why that? Supervision should not be like that...with inspection, as soon as they arrive, they show a fighting spirit and reject everything outright. When someone has done well you have to congratulate him, you must encourage him so that he will continue with the same momentum, and not only focus on where it didn't work. You must show how to improve, but not condemn him, because when you condemn people like that you push him (in a negative direction).

### Differences in Supervision Visits

Head nurses reported that the content of supervisory visits varies according to the supervision theme and objective of the visit. Supervisory visits focused on the same theme follow a general progression guided by prior recommendations, the review of related instruments and indicators in the health facility, and the identification of additional corrections and or changes that are needed. In addition to document reviews, some visits involve briefings, training, observations of activities, or interactions with community members.

Informants noted that the person leading the supervision can influence the methodological approach and atmosphere of the visit, with nurses indicating that supervisors have different styles. For instance, some supervisors are focused primarily on what should be done rather than first assessing what is being done and the corrections needed. They also mentioned that personalities, temperaments, and the way people express themselves and ask questions can vary. A head nurse in Lualaba said:

The styles are in relation to the way of exchanging with...well, that's why I always say, in general everyone has their own way of communicating or behaving, so everyone has different strategies when they find themselves in front of other people, it's always different.

Head nurses indicated that some supervisors become easily agitated while others focus on establishing a congenial environment that promotes collaboration and encouraging questions that stimulate productive exchanges. A head nurse from Sud Kivu said:

The previous supervisor, he had the cap, I would say, of a policeman, so he came like someone who wanted to repress, like an inspector who threatened us and focused on our deficiencies. When it happens like that the applicability of the recommendations sometimes poses a problem because we may not contribute to the formulation of the recommendations. But with the most recent supervisor the recommendations were formulated in a consensual way.

Many informants reported regular changes in program specific supervisors from one visit to another depending on their availability and the purpose of the visit. In rural areas, there appeared to be continuity regarding routine and integrated supervisions with the health zone nurse supervisor often taking the lead. The health zones in Kasaï Oriental implemented a different approach which involved the same person supervising one facility over a four-month period.

### Perceptions of Supervisory Visits

Most nurses considered supervisory visits as learning opportunities that influence corrections aimed to improve services and stimulate positive changes in health center activities. Many mentioned that supervisors help to identify and find solutions to address deficiencies in health facility practices and procedures, with some noting that each visit is different because the health facility is always evolving. In addition to identifying problems, head nurses reported that supervisors introduce new directives, ideas, and concepts, thus allowing the health facility to develop in a positive direction. A nurse from Lualaba said:

During supervision we are given new directives instead of always following old concepts, in each supervision there is always information that adds to our knowledge. We capitalize on that. Like last time we were doing that, now (we were told by supervisors) the approach is changed, there is this. It always pushes us to evolve.

One head nurse from Sud Kivu underlined the importance of having outsiders visit the health facility, noting that health workers can become complacent. He stated:

A person who is not supervised may think that he is doing his job well but if there is an outside eye, the outside eye always sees better than the person who is on the ground. I find that when the supervisor is there, it stimulates the staff and adds to my efforts. The visit by the supervisor reinforces what I do daily but if the supervisor doesn't come, I may slack off, that's what I found, that is important. So, it (supervision) is a support for me, what I gain is support, and my (health) agents feel that I am supported and accompanied by the health zone.

Some health workers, particularly in urban Lualaba province, underscored the benefits of the recent introduction of formative supervisions which they described as more collaborative and interactive based on discussions and consensus building. In contrast, previous approaches focused on the review of documents with supervisors giving one-way directives. This head nurse reported:

We like formative supervisions because when supervisors arrive and find a problem, they explain it to you, they even show you what to do, how you can improve, you are there and he explains to you, you discuss, and you execute the recommendation. We like the recent formative supervision much more because it is more practical.

The same head nurse noted that in prior times, supervisors only interacted with the head nurse and his assistant, but now they engage with other health personnel to enhance the capacity of everybody implicated in an activity. He also noted that supervisors first focus on achievements before introducing recommendations, further motivating health staff to improve. However, a few nurses mentioned that an authoritarian approach is still used by some supervisors.

Methods used to assess health services and transfer information and skills included on-the-job training, review of documentation followed by verbal feedback on how to make improvements, observations of treatment consultations or health care sessions (*e.g.*, vaccinations, pre-school or prenatal consultations) accompanied by feedback on improvements, household visits of sick patients, and verbal exchanges with health personnel. A couple of head nurses mentioned that supervisors intervened to improve relations with community members, addressed personnel conflict, or tried to help resolve personal issues. Nurses noted that the feedback considered contextual factors affecting the execution of health services and actual problems facilities confronted, with some specifying that recommendations are based on supervisory-health worker exchanges.

Examples of specific problems addressed during past supervisory visits included:

- Identification of gaps and errors in patient forms and registers and mistakes in the calculations of health indicators addressed through hands-on training aimed to ensure complete and accurate data entry of instruments and improvements in data compilation and transfer.
- Inability to map children's growth in well-baby visit forms addressed through hands-on training.
- Failure of health workers to examine prenatal consultation forms when compiling prenatal data addressed through a briefing on the importance of assessing data entered in prenatal consultation forms to ensure data triangulation.
- Lack of materials and supplies available to follow essential hygiene measures addressed through the distribution of handwashing stations, gloves, and masks during the COVID-19 pandemic.
- Low vaccination coverage of children in a health area addressed through increased community health worker sensitization at the community level, vaccination outreach sessions, and household visits of children who missed vaccinations resulting in improved child vaccination coverage.
- Conflict between health personnel (accusation that one health worker used witchcraft against another worker) which was resolved through the transfer of one staff member to another health facility and suspension of the second health worker.
- Parents residing in remote areas declining to have their children vaccinated addressed by the supervisor calling a meeting with community members to talk about the importance of vaccinations.
- Misunderstandings regarding how to manage health structure drug supplies led to hands-on training that focused on the use of forms to monitor medicine stocks.
- Failure to carry out regular community health worker supervision led to hands-on training for developing a realistic calendar for community health worker supervision visits and the development/use of supervision monitoring charts.

- Follow up with tuberculosis cases was far below provincial estimates; supervisors provided information on how to counsel patients to decrease the stigma associated with the condition and encouraged health workers to have more regular contact with patients.
- Health workers were unable to track patients who had participated in a treatment consultation because identification numbers were getting mixed up; supervisors encouraged health workers to assign a unique number to each patient.

When asked about the way supervision motivates health workers, all head nurses responded that just knowing that supervisors are overseeing activities stimulates health personnel to perform better. Some highlighted that the acquisition of new skills and concepts transferred during supervision serves as a motivation to health personnel and strengthens health facility services. It was also mentioned that the failure to follow recommendations for improvements can cause embarrassment during subsequent supervisory visits and even lead to public humiliation during monthly monitoring meetings when a poorly functioning health facility may be singled out. One informant mentioned that if the same problems are identified more than once, it signals negligence on the part of the head nurse. This health worker from urban Kasai Oriental stated:

Yes, supervisory visits always motivate us, since we know that during the subsequent supervision they will first try to see if the old recommendations were carried out or not. If the supervisors find that every time they give recommendations you don't carry it out, that's not good. Therefore, when there are recommendations, it is according to these recommendations that we try to improve.

One nurse mentioned that during monthly monitoring meetings supervisors make reference to facilities that are improving practices, noting that this instills pride and encourages other head nurses to pursue the same approach.

### Recommendations for Improvement

The most common recommendation involved informing health workers about the day and timing in advance of the supervisory visit. Several head nurses from rural areas mentioned that they are generally not forewarned even though the zonal team has established a supervision schedule, while others indicated that poor weather conditions force changes in scheduling or that supervisors sometimes miss visits due to lack of transport or motivation. Urban based nurses, many of whom had received an official supervision schedule, indicated that the calendar is frequently not respected. Head nurses emphasized that health facility staff must prepare for supervisory visits, and if supervisors arrive without notice, the visit is negatively affected, and little is accomplished. One urban head nurse speculated that supervisors intentionally make unannounced visits so that they can identify transgressions or problems. This rural head nurse from Kasaï Oriental said:

We have always asked [the health zone team] that supervision be planned, before conducting a supervisory visit, they must notify the team well in advance so that we can prepare, indicating that on such and such a day they will come to supervise. If they arrive and rush the team, it's not good.

An informant from urban Lualaba said:

[Supervision] can be improved by respecting appointments. They share the supervision calendar indicating that they will come on such and such a day, but they don't respect it. That is a problem. They have never stuck to their monthly appointment schedule.

Another nurse from urban Lualaba added:

Head nurses working in the health zone observed that we sometimes receive supervisions without notification, these kinds of supervisions do not help our work, it's as if they are just looking for infractions or other things. Sometimes the supervisor comes with the supervision plan which they should send a week, four or three days in advance, but he himself arrives with the TOR. The person says hello and you answer, and after you ask what they need. The supervisor says that he is here for a supervisory visit, and we indicate that we are surprised because we weren't informed. The supervisor responds, "No, no, you have to understand, we were very busy." Supervisory visits like that are not good, it is more typical of inspectors...it is good to send the supervision plan in advance, for example, the month of March we will come to such facility on such date, we will come for this and that. That way, the health facilities are ready for the work, it is not during supervision that you want to surprise people.

The second most common recommendation related to the duration of the visit, with several nurses complaining that some visits last for several hours (4-6) and are tiring, boring and interfere with ongoing work activities. Two head nurses noted that information is better assimilated and retained when visits are shorter. On the other hand, three informants insisted that visits must allow for adequate time to establish an environment conducive for exchanging and gathering information critical for supervisors to understand how the health facility functions. A head nurse from Sud Kivu stressed the importance of not only reviewing documents, but also observing health personal to comprehend how they work, which he noted takes additional time. A nurse from urban Lualaba emphasized that when rushed (less than an hour) supervisors are unable to have adequate exchanges with staff to understand the realities of facility activities, thus undermining the effectiveness of the visit. Another informant noted the importance of the timing, stressing that if the goal is to oversee a specific activity, supervisors must not arrive at the end of the session.

Several head nurses made reference to the style used by supervisors which they suggested should be collaborative and interactive to gain the confidence of the staff, rather than didactic and authoritarian which causes stress. One head nurse from rural Sud Kivu described supervision as a form of training, indicating that an exchange of information is essential to increase the capacity of health personnel. He stated:

...supervision is training, it is meant to help, it is to support, but supervision is not inspection, a supervisory visit is the moment of exchange, it is the moment of sharing, it is the moment when the supervisor must build capacity in personnel, but we should not face frustrations during supervision, that is negative.

This head nurse from urban Lualaba said:

In relation to the behavior of supervisors, they should not act like teachers coming to tell people you have to do this and that but behave as collaborators. To try to understand how health staff work, you must ask simple questions they can answer automatically, you need to make them feel confident, so that the objective (of the supervision) can be achieved. You make them feel comfortable by exchanging, not by behaving like they are the teacher, and the health staff are the pupils, nursing staff do not like that approach.

A second head nurse from the same health zone said:

There are those who transform into inspectors...the people overseeing their work need to brief them that when they supervise it should be formative, they can't train someone under pressure, they should

# establish the right climate as soon as they arrive at a facility. We want to have good indicators, but if they act like it is an inspection, I do not think they can help the facility.

The same head nurse emphasized that supervisors must have up to date information and be properly prepared to lead quality supervision. This informant, who had recently participated in a training on malaria, recounted a situation whereby the supervisor was not informed about policy changes related to the malaria treatment regimen, with the supervisor insisting that health personnel administer quinine to patients with acute malaria, which is no longer recommended. The informant said that nurses assume that supervisors are well trained and better informed about health policies, making it awkward to correct them. He added, "If our supervisors come uninformed and change improved behaviors that have been adopted, that is damaging." Another head nurse stressed the importance of making recommendations realistic and based on available resources. He explained that a supervisor recently insisted that the health facility achieve 100% of outreach visits, which he considered an impossible goal due to lack of funds for transport. A head nurse from urban Kasaï Oriental complained about the repetition of supervisory visits, indicating that some visits are carried out even after recommendations have already been addressed.

### Perspectives of Supervisees (Diary Entries)

A total of 37 diary entries were received. One diary entry was excluded from analysis as it could not be classified as an account of a supervisory visit – it appeared to be an account of an off-site training for cholera diagnosis and treatment of dehydration. One other diary entry was incomplete and could not be fully assessed, bringing the total number of usable entries to 35. Entries were received from eight different individuals, six of whom were head nurses at their health facilities, and seven of whom were men. Aside from the health facility-based nurses, one contributor was a chief medical officer and the other was a physician who both served at general reference hospitals. The recruited diary keepers were requested to submit monthly accounts of the supervisory visits in which they were the primary people engaged with the supervisor. Six of the eight diary keepers made three or more entries. The maximum number of entries by a single diary keeper was nine. Nearly all entries were for consecutive months indicating that the recruited individuals were receiving supervisory visits at least once per month. Three diary keepers made entries for two different supervisory visits in the same month.

Various supervising programs conducted the visits to the participating diary keepers. Eighteen visits were conducted by health zone management teams, six by provincial health offices, three by national programs, and one by a health facility head nurse. Eight diary entries did not specify the supervising program. The subject matter for the supervisory visits was wide ranging covering routine facility activities, the expanded program on immunizations, HIV, tuberculosis, COVID-19, data quality, malaria, malnutrition, and mental illness. One visit exclusively focused on maintenance of a refrigerator. Nearly 40 percent (13 of 35) of the supervisory visits focused on vaccination strategies. The average time to conduct each supervisory visit, as recorded by the diary keepers, was three hours and 49 minutes ranging from as short as 28 minutes to nine and a half hours. It is unclear if the longer visits represented the time the supervisor spent with the diary keeper or the total time the supervisor spent at the facility.

Each respondent was given a table that describes different styles of supervision (see Table 2). They were encouraged to refer to this table when noting their perception of the style of supervision exhibited by the individual conducting their supervisory visit. To encourage flexibility in the description of supervision

styles, the mock diary entry the participants received included an excerpt that described a mix of supervision styles. Five diary entries did not include any reference to supervision style and six noted a style of supervision not presented in the provided table. Of the 24 diary entries that made reference to the provided table of supervision styles, 12 explicitly described their supervisor as exhibiting a democratic and participative style, three wrote that the style was task-oriented, two wrote that the style was that of situational leadership, and one response each was given for bureaucratic, charismatic, and transformational leadership. Three diary keepers wrote that their supervisor exhibited two different styles. See Figure 1 for the full breakdown of supervision styles.





Some diary entries were more descriptive than others and provided supporting narrative for the supervision style they selected. One entry said the supervisor's style was bureaucratic because it was expected that the facility staff would follow strict procedures and conform exactly. Another entry described the supervisory visit as a surprise which occurred while the respondent was involved in a vaccination campaign. This respondent said the supervisor adopted a transformational leadership style because he inspired the personnel to have a common vision and had an effective style of communication. One other diary entry described the supervisor as autocratic because she came with an attitude of imposing new directives on the facility staff.

#### Table 2. Supervision styles<sup>2</sup>

Autocratic/authoritarian	Supervisor behaves as though staff need constant attention due to a belief they are undependable and immature; supervisor behaves as though staff cannot be trusted and must be checked frequently; staff have few opportunities for their suggestions to be integrated into their work.
Bureaucratic	Supervisor expects staff to follow strict procedures or have exact compliance; supervisor has a high level of control and staff have little input to change procedures. This supervision style may lead to demoralized staff and an overly inflexible work environment. This supervision style should not be referenced based on supervisor insistence to follow safety guidelines.
Charismatic	Supervisor has energy and enthusiasm, but success depends on the supervisor; performance may decline if the supervisor withdraws. Supervisor believes more in self than team.
Democratic/participative	Supervisor involves staff in decisions, but supervisor usually makes the final determination; staff feel in control; performance improvement process may take longer but quality is better. This supervision style may lead to increased job satisfaction and higher motivation among staff. Additionally, staff may develop skills.
People/relationship-oriented	Supervisor uses a friendship-like relationship and tries to create harmony between staff. If carried to the extreme, confrontation with staff is avoided.
Task-oriented	Supervisor focuses on getting the task done. Performance improvement activities are defined with little thought to how they impact staff. Staff well-being may not be the priority.
Transformational Leadership	Supervisor inspires staff and has shared vision for the team. Supervisor is highly visible and uses effective communication and delegation. Supervisor sees the big picture but needs detailed staff for support.
Situational leadership	Supervisor manages according to the situation; switches between styles; takes into consideration the skill level and experience of the staff, the work involved and the environment; supervisor must know when to follow the rules and when to be flexible.

Most diary entries included descriptions of the feedback they received from the supervisors, but only one made reference to the feasibility of implementing the issued recommendations saying they were realistic. One diary entry noted that the facility staff would start implementing those recommendations deemed to be the easiest before attempting to address the more difficult requests (the rationale in dichotomizing the recommendations appeared to be based on resource availability). This same diary entry noted that an action plan was not submitted by the supervisor to the facility. Two diary keepers noted in three different entries that supervisors were keen to provide their contact information in the event facility staff needed to contact them. One diary keeper noted in five different entries that the visiting supervisors recommended putting in requests for missing forms or out-of-stock commodities. Fifteen diary entries noted that at least some of the issued recommendations revolved around the need to secure or appropriately fill out specific forms and registers.

Diary keepers were also asked to characterize the utility of the visit from their personal perspective. All but six diary entries provided a characterization and among those that did, each viewed the supervisory visits in a positive light describing them as motivating, beneficial, informative, important, interesting, and

<sup>&</sup>lt;sup>2</sup> Adapted from <u>http://toolkit.ahpnet.com/Supervision-Intervention-Strategies/Supervision-Styles.aspx</u>

capacitating. One diary entry noted the following: "This visit allowed me to master the new HIV case management protocol, especially as it concerns the complicated pediatric component."

The most common theme was that of gratefulness and the sentiment that, because of the supervisory visit, the supervisee would be better able to conduct their work. Table 3 below provides a summary of each diary entry.

Appendix A includes a summary of each individual de-identified diary entry.

## Discussion

Supervisory visits are regarded as crucial for maintaining facility level performance and are welcomed interventions by both the implementors and recipients. All diary keepers who reported on the utility of supervision used positive language suggesting they appreciate the visits. Indeed, informants collectively understood the overall goal of supervision schemes to improve health care services and thus the health of the population served by the implicated facilities.

A fair number of recommendations to improve supervision schemes were made by both supervisors and supervisees. In some instances, these recommendations were not aligned between the two cadres of participants. Additionally, both within and between the participant groups, there were discordant accounts of how supervision schemes operate and function. In some cases, particularly among supervisors, some informants seemed to cite protocol or guidelines, whereas others gave more candid descriptions of what is happening on the ground.

A few informants had relatively impassioned views on supervisor capacities advocating for the need for specific training related to carrying out supervisory visits, supervisor comportment, and effective styles. One informant noted that an institutional mechanism could be implemented to evaluate supervisors and described a scenario where supervisees could review supervisor performance as a form of feedback.

The supervision planning phase was similarly described across most supervisor informants. There appears to be a data driven approach in the selection of facilities for supervision visits and for the development of monthly TOR used to describe the goals and objectives of the upcoming supervision cycle. Supervisors were noted as reviewing reports from previous supervision cycles, interacting with health facility head nurses during monthly monitoring meetings, and, in some cases, reviewing health management information system data streams. Most supervisor informants mentioned that facilities were given around 48 hours' notice ahead of their arrival, which was largely corroborated by supervisee informants. There were still issues adhering to set schedules, which appeared to be due to competing priorities and issues with transportation and access to facilities.

Generally, the monthly frequency of supervisory visits to health facilities was not contested, although some supervisees described scenarios where they received multiple supervisory visits in a single month which covered the same thematic area. This may have been due to an overlap between the provincial and health zone level supervision schemes. A heightened level of communication could avoid such scenarios and may result in unified efforts. This approach was understood to mean incremental and focused capacity building at regular and frequent intervals. The length of supervisory visits was generally around 2-3 hours. Some

supervisees felt that this was too long and interfered with their daily activities, but a conflicting sentiment appeared to be that anything shorter than an hour could not result in an effective visit.

When discussing the overall reach of supervision efforts, there was some concern that certain health facilities were deliberately excluded from supervisory visits as their proximity to health zone central offices results in lower per diem rates for supervisors compared to more rural facilities. Health zone management teams should be encouraged, however, to follow the prescribed technique of using data driven methods for the identification of facilities in need of supervisory visits and to engage in a meaningful process of prioritization. Taking into consideration the available human and financial resources, these health zone teams may consider developing a system by which facility level metrics are used to empirically monitor performance and the necessity of continued visits. Additionally, provincial and health zone level teams need to take a critical look at difficult-to-reach facilities to understand how they may be supported or supervised even if this entails a local system of accountability. Note that supervisory visits to hospitals were reported as a gap and when visits did occur at this level, they were described as relatively non-technical in nature as far as patient care.

Based on the interviews, supervisory visits seem to be evolving to a style that is less authoritative, one that includes formative support and skills transfer, positive feedback mechanisms, and one that focuses on more than one person per facility. Some supervision schemes have shifted to integrated approaches where multiple domains or themes are supervised over the course of a single visit, whereas other supervision schemes have become more theme oriented. Experiences are different depending on where the program is being implemented. Formative supervision (informal training/skills transfer) is regarded as one of the most beneficial aspects of a supervisory visit, but visits that focus on review of forms, tally sheets, and registers were deemed less helpful.

There was great fluidity around the stated use, reliance, and overall utility of checklists. Some informants mentioned a checklist for integrated supervisory visits was widely available for use, others mentioned they were sometimes used, and still others said they were just not available. Some informants decried their use saying they stymied their ability to explore identified issues while others noted their ability to drill down on specific issues. There appeared to be a propensity among lower levels of the health system to forgo the use of checklists altogether. Provincial level supervisors may have more frequently noted use of checklists as they tend to conduct domain specific thematic supervisory visits rather than broader, integrated supervisory visits. Note that domain specific programs (*e.g.*, the national malaria control program) may receive external support from international donors who work with the ministry to develop data collection instruments specifically for supervisory activities.

Much could be explored regarding the utility of supervisory checklists (and other formalized guidance tools). This also leads to a broader question of standardization of supervision scheme methods and approaches. The exhibited flexibility may give supervisors the sense that they are able to focus on the most pertinent issues, but the lack of standardized data collection may serve to hamper critical analysis of service provision. The lack of analyzable data could have implications on a host of elements that could be instituted or improved (*e.g.*, pre- and in-service training curricula and opportunities) to ensure proper patient care. Progressively switching to electronic data collection may serve to make great strides in this direction.

Finally, it appeared that feedback or action plans with issued recommendations were not always provided to the supervisees. This should be systematically done to ensure that facility staff have a record of recommendations they are able to periodically consult and against which they can monitor their own efforts in achieving objectives set forth by their supervisors. Additionally, information flow was generally from the supervisor to the supervisee and accounts of interactions appear to describe the use of supervisory visits to provide in-service training and to realign errant supervisee practices with official protocol.

## Conclusion

Supervisory visits are an important staple within the health system of the DRC. They can and have been leveraged to provide continuous in-service support for staff at all levels. There is room for improvement and critical analysis regarding the overall reach and financing of supervision schemes, the selection of health facilities to include in supervision schemes, the frequency of visits to these facilities given stated limitations to financial and human resources, supervisor skills and capacities, and the need for standardized methods or approaches and tools used to carry out supervisory visits. More research is needed to connect the mechanisms and characteristics of supervision to performance improvement (and ultimately, health outcomes) in the DRC and other low- and middle-income contexts.

### References

Björkman, M., & Svensson, J. (2007). Power to the People : Evidence from a Randomized Field Experiment of a Community-Based Monitoring Project in Uganda. Policy Research Working Paper, No. 4268 (License: CC BY 3.0 IGO).

Condo, J., Mugeni, C., Naughton, B., Hall, K., Tuazon, M. A., Omwega, A., . . . Binagwaho, A. (2014). Rwanda's evolving community health worker system: a qualitative assessment of client and provider perspectives. Hum Resour Health, 12, 71. doi:10.1186/1478-4491-12-71

Eliades, M. J., Alombah, F., Wun, J., Burnett, S. M., Clark, T., Ntumy, R., . . . Hamilton, P. (2019). Perspectives on Implementation Considerations and Costs of Malaria Case Management Supportive Supervision. Am J Trop Med Hyg, 100(4), 861-867. doi:10.4269/ajtmh.18-0362

Kim, Y. M., Figueroa, M. E., Martin, A., Silva, R., Acosta, S. F., Hurtado, M., . . . Kols, A. (2002). Impact of supervision and self-assessment on doctor-patient communication in rural Mexico. Int J Qual Health Care, 14(5), 359-367. doi:10.1093/intqhc/14.5.359

Marquez, L., & Kean, L. (2002). Making Supervision Supportive and Sustainable: New Approaches to Old Problems. Retrieved from

Ramsey, K., Hingora, A., Kante, M., Jackson, E., Exavery, A., Pemba, S., . . . Phillips, J. F. (2013). The Tanzania Connect Project: a cluster-randomized trial of the child survival impact of adding paid community health workers to an existing facility-focused health system. BMC health services research, 13 Suppl 2(Suppl 2), S6-S6. doi:10.1186/1472-6963-13-S2-S6

Rowe, A. K., de León, G. F., Mihigo, J., Santelli, A. C., Miller, N. P., & Van-Dúnem, P. (2009). Quality of malaria case management at outpatient health facilities in Angola. Malar J, 8, 275. doi:10.1186/1475-2875-8-275

Worges, M., Whitehurst, N., Yamo, E., Moonga, H., Yukich, J., & Benavente, L. (2018). Outreach training and supportive supervision for malaria case management in Zambia: the effects of focused capacity building on indicators of diagnostic and clinical performance. Malaria journal, 17(1), 438. doi:10.1186/s12936-018-2589-6

World Health Organization. (2008). Training for mid-level managers (MLM). Module 4: supportive supervision. Geneva: World Health Organization; 2008, republished 2020 under the license: CC BY-NC-SA 3.0 IGO.

## Appendix A: Summary of Diary Entries

Supervising Program, Topic, and Duration	Visit Purpose	Style of Visit	Questions Asked	Feedback	Utility of Visit
National HIV/AIDS Control Program Visit duration: 2h 15'	Pediatric case management and management of medicines. Supervisor asked to look at 10 pediatric HIV files and the register for the dispensation of HIV medications	The supervision style was reported as calm and simple and occurred in an atmosphere of dialogue. Overall, the style is described as democratic.	At each step of the supervision process, the supervisor asked the facility staff what they did and then told them what the new case management protocols required while explaining why the changes were necessary.	Feedback on case management was given during the review of the 10 pediatric HIV files where facility staff were shown areas in which they needed to improve performance. The facility staff were told that if they follow the new protocol, they will avoid stockouts and expiration of medicines.	"This visit allowed me to master the new HIV case management protocol, especially as it concerns the complicated pediatric component."
Provincial Health Office - HIV/AIDS Control Program Visit duration: 2h 11'	To train health facility staff on how to fill in each data collection form, one by one, and to better perform targeted screening for HIV.	A constructive visit that was conducted with a joyful ambiance.	Facility staff asked questions about stockouts of HIV tests and if counseling is possible when there are no tests (they were informed that it is not possible). facility staff asked about stockouts of tests saying it can cause a negative impression of this service - supervisor said they are working on this issue. Supervisor asked about the lack of cases with co- infections to which facility staff replied that tests to determine co- infection are unavailable.	Facility staff were encouraged to contact the supervisor by phone in the event of any difficulties. The supervisee said they will start on the feedback that is the easiest to address before moving to the more difficult things. An action plan was not submitted by the supervisors to the facility.	Not mentioned
Provincial Health Office - Reproductive Health Visit duration: 3h 50'	Evaluate assisted deliveries, evaluate the case management of painful childbirth, and evaluate the integration of family planning. Additionally, the supervisor went over the necessary tools for data collection.	A constructive visit. The supervisor participated in the case management of pregnant women and women of reproductive age.	Facility staff asked about the best moment to start a cervicogram. facility staff asked if they could choose a contraceptive method for the patient, but they were told they cannot choose.	An action plan was not submitted by the supervisors to the facility. According to the facility staff, the feedback elements will be prioritized according to available resources, starting with those that are easy to achieve.	The visit was highly motivating, and the facility will integrate all the observations and recommendations to improve their case management practices
Health Services Development Fund from Kasaï Oriental - HIV/AIDS Visit duration: 2h 45'	Support facility services in improving the implementation of activities and the quality of the data reported; supervisors reviewed, analyzed, and highlighted observations from HIV-related data management tools	A constructive visit that was conducted with a joyful ambiance; the supervisors presented themselves as people who had come to help the facility staff.	Facility staff asked how best to improve the quality of data management activities for HIV - supervisors say to analyze data before transcribing and disseminating and to cross check the data from the health management information system form and the HIV reporting forms	Supervisors asked the facility team to contact them even on the phone whenever there are difficulties.	This visit has motivated us to do well, and we believe that we will integrate all the observations and recommendations made even if the action plan has not been submitted.

Supervising Program, Topic, and Duration	Visit Purpose	Style of Visit	Questions Asked	Feedback	Utility of Visit
Health Zone Central Office - Reproductive Health and Tuberculosis Visit duration: 1h 40'	How to properly fill out partograms and to appropriately archive the information - also focused on case management of tuberculosis cases	The style is described as democratic/participatory. The atmosphere was described as good throughout their exchanges.	Supervisor asked why the facility staff didn't just photocopy the partogram, but the facility staff said the partogram is big and that it's expensive to copy. The supervisor asked why there aren't very many tuberculosis positives, but the facility staff said they are getting tuberculosis samples and it's just that their microscopists are not finding any positives.	The facility was experiencing a 2- week stockout of partogram forms; supervisor said to do everything possible to get these forms and to fill them out correctly. The supervisor noted a small rate of positive tuberculosis detection; recommended to intensify community sensitization via community health workers.	Respondent is saying that this visit helped to bring them up to speed on their work and that the different recommendations are realistic and can be put into place.
Health Zone Central Office - Reproductive Health and Tuberculosis Visit duration: 1h 52'	The same team that visited in May is conducting a follow- up visit based on the previous recommendations made	The style is described as democratic. The atmosphere was described as good throughout their exchanges.		Recommendations were 95% realized. Supervisor insists that the facility staff needs to put in a request for the partograms and consultation forms. facility staff said that the health zone didn't even have the forms available, but supervisor said the health zone put in a request to the Division for these forms and that the facility staff needs to keep contacting the health zone.	Respondent is saying that this visit helped to bring them up to speed on their work and that the different recommendations are realistic and can be put into place.
Health Zone Central Office - Expanded Program on Immunization Visit duration: 2h 15'	A specific visit centered on evaluation of vaccinations. Help with vaccination (planning?) sessions, evaluate these sessions, and observe the different tools used to collect vaccination information	The style of the visit was task- oriented; the atmosphere was described as good.	The supervisor asked about a specific commodity for the vaccination activities (it was not present at the facility). The supervisor was reported to have responded to all the questions asked by the facility staff.	Supervisor says the facility staff needs to advocate to the health zone management team for the out-of- stock commodity (isotherm)	The visit motivated them. The different recommendations were realistic, and they will put them into practice.
Health Zone Central Office - Completeness of Data Collection Visit duration: 3h 35'	The supervisor reviewed all data collection tools including illness, antenatal care, and birth registries as well as forms tracking supplies/commodities	The style is described as democratic. The atmosphere was described as good.	The supervisor asked who was responsible for filling in the forms to track supplies/commodities (it's the head nurse, or in her absence, the assistant head nurse).	Include the date for each new entry in the antenatal care register; Include lab results; correctly fill out forms	The visit motivated them. The different recommendations were realistic, and they will put them into practice.

Supervising Program, Topic, and Duration	Visit Purpose	Style of Visit	Questions Asked	Feedback	Utility of Visit
Provincial Health Office - Adolescent/Youth Health Visit duration: 2h 10'	A specific visit focused on properly filling out forms and reporting information	The style is described as democratic. The atmosphere was described as good.	The supervisor asked if adolescents consult the facility in case of any sexual problems and the facility staff said they need to do a lot of sensitizations to bring them to the facility because there are a lot of taboos among the young	The facility was missing forms and certain supplies/consumables	The visit really motivated them, and a reporting form was given to them during the visit.
Health Zone Central Office - Revitalized Pre-school Consultations Visit duration: 1h 52'	An integrated visit focused on the recipes and distribution of micronutrients; supervisor reviewed data collection tools (reception, stock/supplies, pre-school consultation)	The style is described as democratic. The atmosphere was described as good.	The supervisor asked why the program wasn't really oriented towards children and the response was because of prolonged stockouts of supplies.	The supervisor recommended for the facility staff to order the proper forms for pre-school consultations from the health zone management team; another recommendation was to sensitize community health workers on the research concerning cases of severe acute malnutrition	Not mentioned
Health Zone Central Office - Expanded Program on Immunization Visit duration: 1h 41'	The same team that visited in June is conducting a follow- up visit to understand the degree to which the recommendations from the previous visit were implemented. This was a specific visit for vaccinations.	The style of the visit was task- oriented; the atmosphere was described as good.	Not mentioned.	Recommendations were reported to have been implemented at 100%; supervisor said to continue at the same level of work	The visit was motivating
Health Zone Central Office - Prevention and Control of Infections Visit duration: 0h 45'	Triage and isolation of patients in the context of COVID-19. Institutionalization of a prevention and control of infections and hygiene committee. Observation of COVID-19 vaccination administration.	The supervision style was reported as democratic and participatory. A convivial atmosphere was noted between supervisor/supervisee.	facility staff asked about getting personal protective equipment; the supervisor said they need to establish what they need and make a request to the zonal health office. facility staff asked if additional personnel could be trained on prevention and control of infections; the supervisor says if the program budgets for it then yes.	Need to establish an infection prevention and control and hygiene committee. Make the expanded program on immunizations available and set up a system to keep it available (forecasting/procurement?). The supervisor made his contact information available to the facility staff in case of questions.	The supervisee felt that the visit was good because it made them see certain things that needed to be improved which he found motivating.

Supervising Program, Topic, and Duration	Visit Purpose	Style of Visit	Questions Asked	Feedback	Utility of Visit
Health Zone Central Office - Detection and Surveillance of Infectious Diseases Visit duration: 1h 40'	Improve the quality of data reported to the next higher level.	The supervision style was reported as democratic and participatory. The climate with the supervisor was good.	Facility staff asked what needs to happen for HIV/tuberculosis co- infection? Supervisor asked why the laboratory technician hasn't "mastered" supervision?	The supervisor was pleased that the facility had up-to-date registers available for the management of supplies/consumables. Also pleased that the facility had the proper meds for HIV. However, not happy that some of the forms were only partially completed. The tuberculosis register was not up to date for a specific month.	The supervisee felt that the visit was good because it made them see certain things that needed to be integrated into their work.
Health Zone Central Office - Unit of Tuberculosis Case Management Visit duration: 1h 18'	Supervisors accompanied service providers in the implementation of increasing the rate of detection for tuberculosis; the objective was well explained upon supervisor arrival	Democratic and participatory; there was a good atmosphere.	Not mentioned	Update vaccination registry; post the vaccination curve	The supervisee felt that the visit was a good thing to have to improve data quality saying that the recommendations will be integrated into his work
Health Zone Central Office - Unit of Tuberculosis Case Management Visit duration: 1h 15'	Support service providers in the implementation of increased tuberculosis detection rates and systematic screening for HIV.	The style of the visit was democratic and the atmosphere with the supervisors was good.	The supervisors asked the following questions: Why is the order not respected? Why until now are there no nasogastric tubes for children? Why did the corrected report not arrive at the Provincial Blood Transfusion Centre?	Absence of results on the dispatch register of consultations; unable to attain the contractual target (for Tuberculosis detection); absence of treatment start dates; not up-to-date with certain information tools; poor retention of control cases; lack of boxes.	The supervisee felt that this visit was good and will allow him to improve the quality of the data. The supervisee said that all the recommendations will be integrated into the work for the proper functioning of the activities.
Health Zone Central Office - Expanded Program on Immunization Visit duration: 0h 28'	Improve the quality of data related to the Expanded Program on Immunization	The style of the visit was democratic and the atmosphere with the supervisors was good.	The supervisors only asked one question: Why was the curve tracking paper not available to us?	Unable to attain the targeted detection rate of Tuberculosis	The supervisee felt that this visit was good and will allow him to increase the detection rate of Tuberculosis. The supervisee said that all recommendations will be integrated into his work for the proper functioning of the activities of the facility.
Health Zone Central Office - Expanded Program on Immunization Visit duration: 0h 50'	Improve the quality of data related to the Expanded Program on Immunization and find all children lost-to-	The style of the visit was democratic and the atmosphere with the supervisors was good.	The questions were: Why the stockouts of certain vaccines? Why are the vaccination cards not stored in large quantities (i.e., photocopies to be kept at the facility)?	Data collection tools not up to date; non-operational cold chain (absence of operational fridge)	The supervisee felt that this visit was good and the recommendations will be adopted.

Supervising Program, Topic, and Duration	Visit Purpose	Style of Visit	Questions Asked	Feedback	Utility of Visit
	follow-up for their vaccinations				
National HIV/AIDS Control Program (HIV Epidemic Control) - Pediatric HIV/AIDS Case Management Visit duration: 8h 28'	Accompany facility staff in the case management of pediatric cases (there are new products in the facilities). How to properly fill out data collection tools. Management of HIV/AIDS medications in the facility.	There was active participation.	Supervisees asked some basic questions.	The supervisor left some pre-filled forms as guidance for facility staff. The supervisor found inconsistencies between the forms and register and explained how to harmonize the two. The supervisor gave some recommendations to the facility staff for them to improve their service delivery.	The supervisee felt that the visit will allow them to feel capable to better conduct their work.
Expanded Program on Immunization (supervising program level not specified) Visit duration: 8h 21'	Refrigerator maintenance and how to perform monitoring and posting of the temperature form and how to draw the curve on this form. A very quick visit apparently just to show the facility staff how to work the fridge storing vaccines.	Not mentioned	Not mentioned	The supervisor recommended the facility staff avoid overloading the refrigerator, dust once per week, find children who are lost to follow-up for their vaccinations	This visit allowed us to better perform vaccination sessions under all possible strategies.
Provincial Health Office - Expanded Program on Immunization Visit duration: 9h 20'	Evaluation of progress towards implementation of previous recommendations; follow-up on the state of implementation of the "Mashako Plan" for the use of flowcharts for patient care; support service providers in the management of generic drugs (keeping forms up-to- date, monitoring cashflow); oversee the management of the Expanded Program on Immunization; support service providers in the management of patient undergoing ARV treatment; monitor the use of performance-based financing subsidies for the period	Autocratic and bureaucratic	Not mentioned	Records/registers are not up to date; forms and flowcharts for the integrated management of childhood illnesses are not systematically used; due to the broken refrigerator, none of the 6 vaccination sessions were carried out; lack of control over the patient cohort; patient care prices/costs were not clearly displayed; "Mashako Plan" implementation was weakly followed (only 3 of 7 recommendations were implemented).	Not mentioned

Supervising Program, Topic, and Duration	Visit Purpose	Style of Visit	Questions Asked	Feedback	Utility of Visit
Health Zone Central Office - Routine Supervisory Visit Visit duration: 4h 45'	Evaluate progress towards implementation of previously issued recommendations; follow-up on the implementation of the "Mashako Plan" and the utilization of funds (index tool); assess patient flowcharts; coach facility lead on the management of generic drugs and maintenance of data collection tools; supervise activities related to antenatal care, deliveries, postnatal consultations, family planning, therapeutic nutrition, and infant/young child feeding; identify strategies for scheduled routine immunization sessions and recovery of children lost-to-follow-up.	Transformational leadership and bureaucratic	Not mentioned	Add a qualified unit to the health center to strengthen the team, support service providers in the organization of services, update tools and keep them up to date, correctly display the prices of care to the public, buy/order generic drugs that come to the health center, commodify family planning, reactivate activities for Infant and Young Child Feeding, pre-school consultation, and the Ambulatory Therapeutic Nutrition Unit, systematically use the care flow charts, and hold regular service meetings with all staff and listen to them in order to minimize conflicts and improve work. Only 3/7 previously issued recommendations had been implemented.	Not mentioned
Health Zone Central Office - COVID-19 Visit duration: 9h 15'	Brief providers on COVID- 19 vaccines and on how/when COVID-19 started; explain the composition of the health area team to fight COVID- 19.	Democratic	Not mentioned	Not mentioned	Together, they developed the health area team and selected the vaccination site; vaccination campaign activities were to be started the same day
Health Center Head Nurse - Routine Supervisory Visit Visit duration: 4h 15'	Assignment of tasks to facility personnel and/or the development of job descriptions for facility staff	Transformational leadership	Not mentioned	Staff were left with a homework assignment to fill out and update report dates as well as missing pages for the standard reporting forms	Not mentioned
Provincial Health Office - Expanded Program on Immunization Visit duration: 6h 23'	Capacity building on vaccine disposal and vaccine management according to the "Mashako Plan".	Situational leadership	Not mentioned	Table of vaccination curves not up to date and incorrectly completed; otherwise, the supervisor encouraged the supervisees to continue with their good work. The supervisor gave the facility staff his phone number and asked them to reach out if they experience any issues	Not mentioned

Supervising Program, Topic, and Duration	Visit Purpose	Style of Visit	Questions Asked	Feedback	Utility of Visit
Health Zone Central Office - Routine Supervisory Visit Visit duration: 4h 22'	Evaluation of finance resources and verification of supporting materials ( <i>e.g.</i> , invoices, receipts, cash book, entry voucher and exit voucher).	Charismatic	Not mentioned	Absence of the cash book, poor classification of accounting documents, ignorance of reporting at the end of each day the entries and exits in relation to each service.	Not mentioned
Expanded Program on Immunization (supervising program level not specified) Visit duration: 5h 25'	Evaluation of management of the Expanded Program on Immunization; electronic management of the Expanded Program on Immunization; definition of neonatal tetanus, measles, yellow fever, and acute flaccid paralysis cases.	Not mentioned	Not mentioned	Not mentioned	The supervisee felt that the visit will allow them to feel capable to better conduct their work.
Expanded Program on Immunization (supervising program level not specified) Visit duration: 4h 45'	Evaluation of vaccine management and other inputs for the Expanded Program on Immunization according to the "Mashako Plan"	Not mentioned	Not mentioned	Absence of the vaccine management register, absence of reports on the malfunctioning of the refrigerator	The supervisee felt that the visit will allow them to feel capable to better conduct their work.
Expanded Program on Immunization (supervising program level not specified) Visit duration: 1h 58'	Follow-up on implementation of recommendations from the previous month's supervisory visit regarding the electronic Expanded Program on Immunization.	Constructive visit	Not mentioned	Not mentioned	The supervisee felt that this visit allowed them to properly update the vaccination coverage curves.
Expanded Program on Immunization (supervising program level not specified) Visit duration: 9h 30'	Improve vaccination coverage in the health area according to the "Mashako Plan". Determine the number of vaccination sessions conducted via active outreach or through fixed sites by month based on the number of villages in the facility's catchment area.	Not mentioned	Not mentioned	Incorrect classification of vaccines in the refrigerator; ignorance of the importance of timing for plotting vaccination coverage curves.	This visit allowed the supervisee to correctly classify the vaccines in the refrigerator and to draw the vaccination coverage curves for all the antigens.

Supervising Program, Topic, and Duration	Visit Purpose	Style of Visit	Questions Asked	Feedback	Utility of Visit
Routine supervisory visit to improve the quality of services (supervising program level not specified) Visit duration: 6h 59'	Follow-up on implementation of recommendations from the previous month's supervisory visit. Check if data collection tools/registers are up to date. Explain how to properly record data for indicators related to family planning.	Not mentioned	Not mentioned	Update the different registers; send weekly reports every week; cordon off the courtyard of the health center	Not mentioned
Survey and evaluation of medication management (supervising program level not specified) Visit duration: 4h 10'	Evaluation of simple malaria case management practices; assess the disposition of medicines based on the "first expired, first out" method. Track use of medicines by investigating paperwork.	The supervisor was simple and clear about their instructions	Not mentioned	Not mentioned	The supervisee felt that the visit allowed them to feel better equipped to conduct their work.
Health Zone Central Office - routine supervisory visit Visit duration: 4h 33'	Conduct a data quality audit that compared the facility's register data to their corresponding data elements from the health management information system.	The supervisor's style was described as bureaucratic as it was expected that the facility staff follow strict procedures and conform exactly.	Not mentioned	The supervisor congratulated the facility staff's efforts in reporting data but did find a few mis-reported items. The supervisor asked the supervisee to use a check-in register to help disaggregate the entries and inconsistencies in the data. The supervisor also asked the supervisee to fill out all pieces of information located in the registers.	The supervisee felt that the supervisory visit encouraged him to more completely fill in the facility's data collection instruments.
Health Zone Central Office - Expanded Program on Immunization Visit duration: 4h 55'	Evaluate how well-kept the data collection instruments were for vaccination activities.	This was a surprise supervisory visit conducted while the supervisees were in the middle of a vaccination campaign. The supervisor's style was described as transformational leadership because he inspired the personnel to have a common vision and he had a very effective style of communication.	Not mentioned	The supervisor lauded the supervisees engagement of the mothers in educational chats and their injection techniques. Weaknesses were described as having a lack of respect for patient flow in the vaccination room, insufficient number of vaccination team members, and poor allocation of tasks to the vaccination team.	"This visit shed a lot of light on the organization of vaccination sessions."

Supervising Program, Topic, and Duration	Visit Purpose	Style of Visit	Questions Asked	Feedback	Utility of Visit
Health Zone Central Office - Expanded Program on Immunization Visit duration: 4h 20'	Follow-up on implementation of recommendations from the previous month's supervisory visit	The supervisor's style was described as task-oriented	Not mentioned	The supervisor was pleased that facility staff had implemented nearly all the previously issued recommendations. The facility staff was given a new recommendation that they provide motivation to community health workers to encourage them to continue to actively participate in vaccination campaigns. The staff were also encouraged to post vaccination 'technical sheets' to the wall.	The supervisee found the visit to be very important especially given the efforts of the supervisor to help them improve. The supervisee was also encouraged by the harmony amongst the team members during the vaccination campaign.
National Mental Illness Control Program with support from Heartland Alliance International (supervising program level not specified) Visit duration: 0h 58'	Evaluate the evolution of activities concerning mental health care - review of facility data collection documents ( <i>e.g.</i> , consultation register, mental health register, educational themes register, etc.). The supervisor explained the new methodology to use during patient consultations to avoid missing signs/symptoms of mental health issues. The supervisor provided the facility with a new mental health form	The supervisor was described as being in a hurry - upon her arrival she said she only had an hour to spare. The supervisor used a friendly approach and tried to create a collaborative atmosphere, but she came with an attitude of imposing new directives on the facility staff. The staff described her style as autocratic and people/relationship oriented.	The facility staff asked the supervisor why care of mental illness is supposed to be included in the minimum package of care at the facility - as an example, the supervisor mentioned that there are people who come for care who have been victims of natural disasters and witness to multiple massacres (implying they need assistance).	Not mentioned	This visit was described as of interest to the facility staff as they gained new knowledge concerning mental health.
Integrated Management of Acute Malnutrition (supervising program level not specified) Visit duration: 2h 28'	Building the capacity of facility staff case management practices concerning moderate acute malnutrition. Document review. Assess progress against previously issued recommendations.	During the visit, the supervisor focused on evaluating the level of knowledge of facility staff by encouraging dialogue around staff experiences concerning cases of malnutrition. The supervisor's style was described as situational leadership.	Facility staff asked the supervisor why four of 18 facilities are not provisioned with malnutrition prevention materials - the supervisor said it is because of the poor state of their roads.	Facility staff achieved 72% implementation of previously issued recommendations.	This visit was beneficial to the supervisee because it allowed them to remember the principles of good malnutrition case management.

## **Appendix B: Interview Guides**

For program administrators (format: key informant interviews)

- Do you have experience conducting visits to health facilities to supervise the staff in either management, operations, administration, case management, and/or diagnostics? With which areas have you specifically been involved?
  - a. Based on your experiences, could you briefly explain your familiarity with any of the health facility supervision programs (whether routine or disease-specific)?
    - i. To your knowledge, what are the major differences between routine supervision and disease-specific supervision?
    - ii. To your knowledge, which supervision programs cover private sector facilities and why?
- 2) Please draw your attention to the various supervision programs that exist within the health system these programs may be disease specific (malaria, HIV, tuberculosis) or may be broader, routine supervision programs that are not focused on a single disease.
  - a. To your knowledge, which supervision programs are the most well-developed and why?
  - b. To your knowledge, which supervision programs are the most firmly established as a routine component of the health system and why?
  - c. To your knowledge, which supervision programs are the most effective at achieving their objectives and why?
    - i. Based on your understanding, what characteristics do the most effective supervision programs have or what strategies have they implemented to be exceptional?
- 3) To your knowledge, what sort of adaptations or strategies, if any, have the supervision programs implemented to:
  - a. provide supervision and support to difficult-to-access health facilities (at any point in time)?
  - b. continue providing supervisory oversight during the COVID-19 pandemic?
- 4) Are you familiar with the Programme de Santé Intégré de l'USAID en République Démocratique du Congo (PROSANI USAID)? If so, what supervision strategies has the IHP implemented, if any, to address specific shortcomings in existing supervision programs?
  - a. How has the IHP influenced specific activities that supervision programs implement?
  - b. Has the IHP implemented specific activities to improve health facility practices that overlap with areas supervision programs also address? If so, what are they and what has the outcome been?
- 5) How would you describe the qualities of a good supervisor and an effective supervisory visit?
- 6) In your opinion, what makes for a successful supervision program, if not already addressed?
- 7) In your opinion, what needs to be the focus for improving supervision programs?

For health zone administrators (format: in-depth interviews)

- 1) Please draw your attention to the various supervision programs that exist within the health system these programs may be disease specific (malaria, HIV, tuberculosis) or may be broader, routine supervision programs that are not focused on a single disease.
  - a. Which types of supervision are you personally involved in?
  - b. To your knowledge, what are the major distinctions between the supervision types (disease-specific vs broader supervision)?
  - c. To your knowledge, which supervision programs are the most well-developed and why?
  - d. To your knowledge, which supervision programs are the most firmly established as a routine component of the health system and why?
  - e. To your knowledge, which supervision programs are the most effective at achieving their objectives and why?
    - i. Based on your understanding, what characteristics do the most effective supervision programs have or what strategies have they implemented to be more effective than other approaches?
- 2) Please describe how you conduct supervision visits.
  - a. Who did you primarily supervise?
  - b. What do you do to prepare for the supervisory visit? How do you know what the objectives/goals of the visit should be?
  - c. What tools do you have to carry out supervisory visits? (The interviewer should ask to see the tools). What resources are made available to you to conduct your supervisory work (e.g., supervision checklist, guidelines to share, posters to hang, car/fuel/driver, per-diem, etc.)?
  - d. What supervision style do you use? Explain the process/interactions.
  - e. What sort of interactions do you engage in (e.g., one-on-one sessions, group sessions, direct observation, record review)? Who do you typically interact with?
  - f. Are you able to identify and resolve issues facing the individuals you supervise? Explain the process of problem identification and resolution. How do you know if an issue as problematic has been resolved?
  - g. How would you describe an effective supervisory visit?
  - h. What are the barriers you face to conducting effective supervision visits? [Probe for issues beyond transport/access to facilities.]
  - i. How effective are the forms/checklists you use to guide supervision visits? How can the forms/checklists be improved?
  - j. What sort of training have you received for carrying out supervision?
- 3) How frequently do you conduct supervision visits of any type?
  - a. How frequently do you make visits to the same institutions? Are these facilities notified in advance of your visit?
  - b. Do you make yourself available to the individuals you supervise outside of official visits (e.g., provide them with your contact information; reach out to them on your own; see them in person, write to them, or call them between visits)?
    - i. Do the individuals you supervise contact you regarding issues discussed during supervision? What sorts of things are discussed? Are you able to help resolve issues from afar? Why or why not? If so, how do you manage this?

- 4) Are you familiar with PROSANI USAID? If so, what supervision strategies has PROSANI implemented, if any, to improve supervision programs?
  - a. If yes, what are these strategies?
- 5) What do you think the supervision activities you conduct are meant to achieve?
  - a. In your opinion, what is the purpose of supervisory visits?
  - b. What are some obstacles you face in meeting those goals?
- 6) How would you describe the qualities of a good supervisor?
- 7) How is the information collected during supervision used?

For head nurses (format: in-depth interviews)

- 1) Please draw your attention to the various supervision programs that exist within the health system these programs may be disease specific (malaria, HIV, tuberculosis) or may be broader, routine supervision programs that are not focused on a single disease.
  - a. Which types of supervision are you personally exposed to?
  - b. To your knowledge, what are the major distinctions between the supervision types (disease-specific vs broader supervision)?
  - c. In your opinion, which type of supervision (disease-specific vs broader supervision) is the most beneficial to your professional growth/development and/or work performance and why?
- 2) Think of the most recent visit you may have received from an external supervisor in the past 4 months for supervision of the work you conduct in your health facility. An external supervisor is one who does not work in the same facility as you.
  - a. Was the supervisory visit disease-specific? What specific area(s) was the supervision visit meant to target? What were the goals/objectives of the supervisory visit?
  - b. When was the last time you were supervised and what happened during the visit?
  - c. Who conducted the supervision and how frequently does this type of visit occur?
  - d. What did the supervision visit entail (e.g., direct observation, group meetings, one-on-one meetings, on-the-job training, skills development, review of documents/facility records)? How long did it last?
    - i. [Probe for a step-by-step account of what transpired.]
  - e. How would you describe the tone of the supervision visit (e.g., authoritative, collaborative/participative, task-oriented, bureaucratic)?
  - f. How did you participate in the supervisory visit?
    - i. [Probe for the respondents' role, interactions with the supervisor, ability/comfort to ask questions, etc.?]
  - g. What type of feedback did you receive from the supervisor (this could be in the form of directives, suggestions, criticisms, praise, etc.)? How was the feedback conveyed? How did you feel about this feedback?
  - h. Did you have contact with the supervisor even after he or she left? If so, how did this happen and what did this entail?
  - i. How does this supervision compare with other supervisory visits you receive (possibly from other programs/agencies)?
- 3) Is the supervision visit the same each time it occurs?
  - a. What changes, if any, have there been from one supervisory visit to the next? How can you explain these differences?
  - b. How often does the same person come to supervise you? Does the supervisor change?
  - c. Explain how you changed any of your behaviors/practices because of the supervision interactions, if at all?
  - d. How has the relationship between you and the supervisor changed/evolved, if at all?
- 4) How do you feel about the supervision you have received in the past?
  - a. What personal/professional challenges and/or problems did the supervision/supervisor address? How were they addressed?
  - b. What skills development happens during the supervision visit (e.g., on-the-job training, updates for new guidelines, etc.)?

- c. How is feedback about your work and the functioning of the facility given to you?
- d. Did the supervision affect your motivation? How or why not? Provide an example.
- 5) How could supervisory visits be improved to help you be more effective in your work?
  - a. [Probe for details on interactions with the supervisor and ability to give feedback, length of supervision, strategies used to assess performance, interactions with other providers, etc.]

## Appendix C: Mock Diary Entry

Supervisory visit information

Date of visit	July 2, 2021
Supervisor arrival time	09:45 am
Supervisor departure time	Unknown
Program sponsor for visit	PNLP
Visit type	_  Routine visit   <u>X</u>   Disease-specific visit
If disease-specific, which domain?	Malaria

### Purpose of visit

The purpose of the visit was clearly explained to me. The primary purpose of the visit was to familiarize ourselves with new case management guidelines for malaria treatment/prescription practices. The supervisor also took the opportunity to observe me as I conducted a consultation with a febrile patient. I was also asked to show the supervisor both our inpatient and outpatient registers as well as a the most recent patient charts.

### Activities conducting during the visit

The supervisor brought printouts that explained the new case management guidelines which were recently modified to account for artemisinin resistance in our province. She reviewed these guidelines with us and described the conditions when use of fixed-dose dihydroartemisinin-piperaquine would be necessary. It was a helpful discussion, and the printouts will be useful for future reference.

The supervisor reviewed a sample of patient charts and noted that a few patients were prescribed ACTs who did not have a confirmatory parasitological test conducted. She stressed the importance of confirming parasite presence before prescribing ACTs. I remember one of these patients was a small child who came to the facility with his mother who thought he had malaria. At the time we had a stockout of RDTs and the laboratory technician was in the provincial capital attending a training, so no one was available to do a blood smear. I explained this to the supervisor who suggested referring the patient to a different facility.

The supervisor spent time looking through the inpatient/outpatient registers, but I don't know what she was doing with them. The supervisor only met with me and the other nurse who works here.

### Supervision style

During the visit, the supervisor seemed rushed to finish her work. She mentioned that she needed to travel to the capital Lubumbashi the next day. She was nice and it was clear she was there to help us fully understand the new treatment guidelines. I haven't seen her before and wondered if she was new. She did not give me her contact information. I would describe her supervision style as a mix between bureaucratic and people/relationship oriented. We did not meet as a group with the supervisor to review all that was done during her visit.

Feedback received from the supervisor

The supervisor gave me feedback after observing me treat a febrile patient. She asked me if I think I forgot to do anything during the consultation – I said that I thought I did everything I needed to. She mentioned that I should have washed my hands before examining the patient and that I should have taken the opportunity to educate the patient on the importance of using bed nets.

### Questions and answers

The only questions I asked the supervisor were about dosage for the DHA/PPQ – she made sure that I understood and presented a hypothetical scenario to test me on my understanding.

### Your personal perceptions of the visit

The visit did make me feel better equipped to conduct my work. We must follow the new treatment guidelines, so we do not have a choice but to incorporate the new practices into our work. One thing that I am not sure I can do is refer patients when we cannot perform a malaria test. The nearest facility that also tests for malaria is 18 kilometers away and it is hard for people to travel if they have to pay for transportation.

### Supervision styles

Autocratic/authoritarian	Supervisor behaves as though staff need constant attention due to a belief they are undependable and immature; supervisor behaves as though staff cannot be trusted and must be checked frequently; staff have few opportunities for their suggestions to be integrated into their work.
Bureaucratic	Supervisor expects staff to follow strict procedures or have exact compliance; supervisor has a high-level of control and staff have little input to change procedures. This supervision style may lead to demoralized staff and an overly inflexible work environment. This supervision style should not be referenced based on supervisor insistence to follow safety guidelines.
Charismatic	Supervisor has energy and enthusiasm, but success depends on the supervisor; performance may decline if the supervisor withdraws. Supervisor believes more in self than team.
Democratic/participative	Supervisor involves staff in decisions, but supervisor usually makes the final determination; staff feel in control; performance improvement process may take longer but quality is better. This supervision style may lead to increased job satisfaction and higher motivation among staff. Additionally, staff may develop skills.
Laissez-faire	Supervisor gives staff a high-level freedom, but supervisor may need to monitor progress to be effective.
People/relationship-oriented	Supervisor uses a friendship-like relationship and tries to create harmony between staff. If carried to the extreme, confrontation with staff is avoided.
Task-oriented	Supervisor focuses on getting the task done. Performance improvement activities are defined with little thought to how they impact staff. Staff well-being may not be the priority.
Transactional Leadership	Supervisor behaves as though staff must agree to obey them. Support of the supervisor is a requirement. Supervisor often punishes staff if they are not successful in completing their work.
Transformational Leadership	Supervisor inspires staff and has shared vision for the team. Supervisor is highly visible and uses effective communication and delegation. Supervisor sees the big picture but needs detailed staff for support.
Situational leadership	Supervisor manages according to the situation; switches between styles; takes into consideration the skill level and experience of the staff, the work involved and the environment; supervisor must know when to follow the rules and when to be flexible.

### **Data for Impact**

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