

**Exploring Private Health Providers' Perception of Challenges
and Opportunities in Providing Quality Maternal and Neonatal
Services in Uganda**

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Thesis submitted in partial fulfillment of
the requirements for the degree of
Master of Science in the Duke Global Health Institute
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ABSTRACT

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Abstract

In Uganda, neonatal and maternal mortality rates remain high despite modest improvements in the last decade. Public health officials often believe these mortality rates can be best improved by improving access and quality of care in public health facilities, but many Ugandans visit private providers due to ease of access to care and perceptions of better quality services. Few studies have examined provider perceptions of the delivery of quality maternal and neonatal care in private facilities in Uganda, especially in lower level private facilities. The objective of this study was to explore the administrative, contextual, and clinical challenges and opportunities in providing perceived quality obstetric and neonatal care services in private health facilities in Masaka and Jinja districts in Uganda. This descriptive qualitative study included 5 focus group discussions and 20 in-depth interviews with 27 staff from 7 private facilities that had all participated in trainings by Life-Net International, an organization that provides onsite medical and administrative training. The study participants were midwives, clinical officers, nurses, nursing assistants, a laboratory attendant and a cashier. Descriptive qualitative analysis was conducted using data-driven codes for the transcribed texts. Data were coded using NVivo software version 11 and coded segments were reviewed and themes developed, which were then categorized into domains. Our main finding is that 1) private lower level providers were not confident in their clinical skills capacity to provide quality neonatal and maternal care and 2) training is one piece of strengthening these systems and yet private lower level providers may have less access to training.

The factors reported to affect provision of quality maternal and neonatal care emerged in the following 6 domains: 1) health center supplies and equipment; 2) health center human resources; 3) health center record-keeping and data management; 4) facility connection to the health system; 5) in-clinic patient care at pre-natal, labor, birth and post-natal care; and 6) Life-Net training experiences. These factors are similar to those reported in the literature on public facilities, but private sector providers reported having less access to training opportunities. Further, clinical practice as reported was not consistent with government guidelines and World Health Organization standards for a low-level facility. To improve neonatal and maternal care in Uganda, both public and private facilities need to be robust. There is an urgent need to invest in private facilities, provide training programs and hear more from private lower level providers.

Dedication

This thesis is dedicated to my Uncle Mike Ocan (RIP) for his persistence and commitment to education, discipline and community work.

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1. Introduction

Tragically for too many babies, their first day of birth is also their day of death. Globally, almost 1 million neonatal deaths occur on the day of birth (1). Furthermore, close to 2 million die in the first week of life, and an additional 2.6 million are stillborn (2). The majority of perinatal mortality happens around the period of birth, with the highest number of deaths occurring within the first 24 hours after birth (3).

Regions with high neonatal mortality also have the highest maternal mortality, according to World Health Organization (WHO) statistics. Globally, 99% (533,000) of the estimated total 536,000 maternal deaths worldwide occurred in developing countries, with more than half the deaths (270,000) in the sub-Saharan Africa region alone (4).

In Uganda, the neonatal and maternal mortality ratio is high at 23/1,000 and 0.93/1,000 live births as of 2013 (5, 23). National data indicate only 39% of pregnant women receive a supervised delivery by a trained health professional, meaning, a doctor, nurse, midwife, medical assistant or clinical officer. This is in contrast to the rest of the world where 61.5% receive professional care at delivery (5).

The United Nations and the WHO advocate for "skilled care at every birth" to ensure quality maternity care services that can save the lives of women and newborns. The term 'skilled attendant' refers to "an accredited health professional — such as a midwife, doctor or nurse — who has been educated and trained to proficiency in the skills needed to manage normal (uncomplicated) pregnancies, childbirth and the immediate postnatal period, and in the identification, management and referral of complications in women and newborns (6)."

As noted above, it is particularly vital that all births are attended by skilled health professionals, as timely management and treatment can make the difference between life and death for both the mother and the baby. However, for the benefit and protection of women and babies, health professionals need to have the appropriate skills and motivation and should be in the right place at the exact time of need.

There needs to be a wide-ranging continuum of care that starts from the home of a pregnant woman with self-care to the first contact with the facility and quality midwifery services (6). Health providers need to be guided by appropriate policies and have adequate essential supplies, and should operate under appropriate regulatory framework.

The delivery of health services in Uganda is through both public and private providers, with the Uganda government owning 51% of facilities. However, utilization is limited in the public sector due to poor infrastructure, lack of supplies, shortage of human resources, low salaries, and lack of housing at health facilities. Private-for-profit providers (PFPs) and private-not-for-profit providers (PNFPs) play an important role by covering about 50% of the reported health outputs in Uganda. They face similar challenges like their public counterparts; they are funded through user fees from patients (7).

About 41% of the hospitals in Uganda are owned by PNFPs, including 22% of the lower level facilities supplementing government facilities, especially in rural areas, while 22.5% of health care providers are PFPs (7). Administratively, the ministry of health oversees the health system through decentralized health units that include: at the top a general hospital at the district level, followed by a Health Center IV at a health sub-

district and Health Center III and II at the lower level facilities (those selected for this study) and finally Village Health Teams (VHTs) at the lowest levels (7).

Private facilities are not synonymous with better capacity and quality of care, although they are a major source of care. Private facilities often have less coverage in terms of infrastructure, staffing, equipment, and medicines. One's choice of a provider is affected by proximity to health care providers, perceived quality of care, user fees charged and perceived severity of illness (8).

A study in Eastern Uganda showed that private health facilities accounted for 22% of deliveries but did not perform significantly better than public facilities in terms of provision of essential care for newborns. It was highlighted that despite the overall increase in health facility births from 69% at study baseline to 78%; there was an 8% decline in private sector deliveries, from 25% to 17% in that setting in eastern Uganda (9). It is important to note that the women who delivered in the private facilities had a lower socio-economic status and less education, and were more likely to seek antenatal care (ANC) later in pregnancy, thus highlighting that the private sector is reaching vulnerable women.

The Uganda Ministry of Health has identified three reproductive health strategies, namely: revitalization of family planning; increasing access to antenatal care; and increasing access to Emergency Obstetric Care (EmOC) (7). Despite the high use of antenatal care (94% for the first ANC visits) in Uganda, deliveries at health facilities have remained low (42%). EmOC met need is only 14%, postnatal care (PNC) coverage

is very low and maternal mortality, perinatal and neonatal mortality have remained high (8).

A study assessed the availability of EmOC in Uganda at both public and private facilities and found that 86% were not able to offer it. Less than half (only 8) of the 19 districts surveyed met the WHO recommended standard for EmOC services at the facility level (10). A follow-up study found that postpartum hemorrhage (42.2%) was the leading direct cause while malaria (65.5%) was the leading indirect cause of maternal deaths (11).

Furthermore, among the obstetric complications, it was established that abortion accounted for 38.9% and malaria 87.4% of the direct and indirect causes of maternal mortality, respectively. The major factors contributing to maternal deaths were failure to clean the uterus of retained products, unsanitary assisted vaginal delivery and lack of availability of blood transfusions (11). A missing piece of placenta could be in the uterus, leading to a danger sign during delivery, for example.

The WHO identifies 8 critical services or monitoring signal functions as essential for the treatment of obstetric complications to reduce maternal deaths. These signal functions are the basis for assessing availability, training, equipping, and monitoring EmOC services. If a health facility provides the first six signal functions like antibiotics, oxytocics, anticonvulsants and removal of retained products, it is defined as a basic (BEmOC) facility. If a health facility provides all eight functions, including surgery and blood transfusion, it is a comprehensive EmOC facility (16).

According to the WHO, provision of quality effective care for all women and babies at birth in facilities could prevent an estimated 113,000 maternal deaths, 531,000 stillbirths and 1.3 million neonatal deaths annually. (3).

Despite the private sector gaining prominence in providing delivery and new-born care, very few studies have examined the quality of these services in Uganda (11). Much effort and studies to improve maternal and newborn health in Uganda have focused on influencing provider supply, usually training of health workers (12). Further understanding is needed of what motivates service providers to participate in such undertakings. Additional understanding is also needed on private providers' limitations, challenges and opportunities to providing quality care services.

Given the high burden of morbidity and mortality, the global commitment to improving maternal health and reducing infant mortality through the Millennium Development Goals 4 and 5, and now the Sustainable Development Goal 3 (“ensure healthy lives and promote well-being for all at all ages”) (60), it is expected that government and development partners will prioritize these services in both the public and private sector.

Life-Net International is a social enterprise devoted to addressing quality of health care services in Uganda and Burundi. They partner with existing faith-based private clinics to provide in-clinic medical and management trainings. Additionally, they finance facility improvement and equipment purchases using a franchise network model (12).

Life-Net International's in-clinic medical training covers several modules including: 'nursing care basics,' 'safe baby,' 'safe birth,' 'healthy children' and 'disease

burden.’ The training aims at improving nursing care and safe deliveries and reducing neonatal, infant and under-5 mortality and morbidity (12). This study entailed a fieldwork experience with Life-Net International in Uganda.

Life-Net International is an innovator within the Social Entrepreneurship Accelerator at Duke (SEAD) program. Based at Duke University, SEAD is an interdisciplinary partnership across the world that “leverages institutional relationships and networks to create an integrated global health social entrepreneurship hub for diverse stakeholders across the globe (13).”

Despite recent investments by private providers and government, political stability, and improved socio-economic development in Uganda, the utilization of obstetric care remains low (8) and maternal and neonatal mortality and morbidity remains high (5). This study was carried out with an aim to assess the challenges and opportunities in providing quality neonatal and maternal health care services in lower level private facilities in Uganda. The study also assessed the perceptions of providers about Life-Net International’s training program.

2. Methods

The study used a descriptive cross-sectional study design. Qualitative Semi-Structured Interviews (SSIs) and Focus Group Discussions (FGDs) were conducted with service providers in two districts in Uganda. The faith-based facilities selected were those that had participated in Life-Net International training for at least the past 6 months. About 70% of the 19 faith-based facilities partnering with Life-Net in both Jinja and Masaka had trained for at least 6 months.

2.1 Setting

The study was conducted in Jinja and Masaka districts located in Eastern and Central Uganda, respectively. Jinja, the second largest town in Uganda, is located 80 km east of Kampala, the capital city on the northern shore of Lake Victoria and the eastern shore of the River Nile. The town serves a catchment area of about 3 million people (13). The study was also conducted in Masaka, located 87 miles west of Kampala city on the northern shore of Lake Victoria. Masaka serves a catchment area of about 3 million people with a population of 73,300 (13).

Per government health services delivery levels, Health Center IIs and IIIs serve a parish and a sub-county respectively, both local administrative political units in a bigger district. They both provide maternity services including basic EmOC and laboratory services on paper. Nationally, about 40% of Private Health Providers (PHPs) provide maternity, post-abortion care and adolescent reproductive health services (7).

2.2 Participants

The study participants recruited were private providers selected from facilities in these two districts that had completed Life-Net International training in the last 6 months. They included point-of-care clinical providers including clinical officers, nurses, midwives, nursing assistants and non-clinical staff including facility administrators, finance and management. Life-Net International provided the initial list of facilities from which the researcher identified potential respondents.

At the facility, the researcher, upon introduction by Life-Net International, introduced the study to the facility management and asked for a full list of staff who may be available for an interview or discussion. From that list, the researcher purposefully sampled 4-6 staff for the FGD and 1 for the in-depth interview at each facility, balancing FGD composition to be representative of the staff list from management. As shown in Table 1, five FGDs and 20 SSIs were conducted across the two regions.

Table 1. Number of Semi-Structured Interviews (SSIs) and Focus Group Discussions (FGDs) by study site

District	Region	Facilities	Number of FGDs and SSIs
Masaka	Central	4	4 FGDs and 12 SSIs
Jinja	Eastern	3	1 FGD and 8 SSIs
Total		7	5 FGDs and 20 SII

2.3 Procedures

We used purposive sampling since the goal was to talk to providers with experiences managing maternal and neonatal cases and who have undergone Life-Net International training. We collected focus group and interview data on participants' experiences providing maternal and neonatal services, and their opinions and perceptions on the barriers, challenges and opportunities in provision of those services. There was no payment or compensation provided for participation in the study.

The study was approved by Duke University Arts and Sciences Review Board. The study protocol was also reviewed by The AIDS Support Organization (TASO) Uganda (20), a local Institutional Review Board (IRB). In addition, notification and clearance was sought from the district authorities (the local government bureaucracy) where the study was conducted. Written informed consent was sought and obtained from all the study participants.

2.4 Measures

FGDs and SSIs were conducted using guides developed for this study. The FGDs and SSIs were both conducted by the lead researcher, who moderated the sessions and took notes.

2.5 Analysis

The focus groups and interviews were conducted in English, recorded, and transcribed. Hand written field-notes and typed-up memos were used to record interview dynamics and reflections of the interviews by the researcher. Descriptive codes were used

for factual data such as the education, sex of providers, age and their position, all captured in the SSIs questionnaire. Thematic data analysis, a method for identifying, analyzing and reporting patterns within the data set, was used, with the goal of arriving at a useful and clear description of the data (19). First, codes were created, based on the data (i.e., data-driven codes), and definitions were written in a codebook. Next, all data were coded using QRS N-Vivo software, version 11 (18). Two people (the lead researcher and a colleague) coded 2 FGDs and 5 SSIs. Discrepancies were discussed until consensus was reached and definitions were clarified in the codebook. The lead researcher coded the remaining FGDs and SSIs.

The related codes were carefully considered and developed into themes. Some themes such as barriers were pre-determined, while others arose from the data from the interviews and FGDs. Others emerged during the data analysis. Themes were considered significant if corresponding data were repeated frequently, stated with lots of detail, or stated with emotion by the participants across sites. Once a theme was considered, the data were referenced again and, if contradictory evidence was found, the ideas were discounted (19). Once themes were determined, related themes were congregated into larger domains.

3.0 Results

In total, 27 service providers, including 5 midwives, 6 nurses, 10 nursing assistants, 4 Clinical Officers, 1 laboratory attendant and 1 cashier volunteered and participated in the study either in the in-depth interviews, focus group discussions or both. The average age of the participants was 29 years; 77.8% were female.

In terms of education, 10 participants (midwives and clinical officers) had completed high school and had diplomas while all 16 of the nursing assistants and support staff stopped mid-way through high school (Senior four) and were certificate holders. Most of the participants had worked at the facility for an average of four years; 4 nursing assistants had worked in the facility for less than a year.

As shown in Table 2, 77.8% of the participants were female while 22.2% of the participants were male.

Table 2. Number of participants and their roles at the facility.

Participant	Category	Male	Female	Total
Demographic	Sex (%)	22.2	77.8	100
Role	Mid-wife	0	5	5
	Clinical Officer	3	1	4
	Nurse	1	5	6
	Nursing Assistant	1	9	10
	Support staff	1	1	2
Total		6	21	27

Six domains emerged regarding the challenges and opportunities in providing quality obstetric and neonatal care. Table 3 (in the annex) shows qualitative analysis domains and themes with their corresponding codes and frequencies. One of the six domains was selected to represent experiences with Life-Net International, based on the prominence of Life-Net International in the interview guides and responses. All the facilities were partners of Life-Net International Uganda, a local NGO building the capacity of private health providers through in-clinic training and support. The six domains are: 1) health center supplies and equipment, 2) health center human resources, 3) health center record-keeping and data management, 4) facility connection to the health system, 5) in-clinic patient prenatal care, labor management, child birth and post-natal care and, lastly, 6) Life-Net International training experiences.

3.1 Health center supplies and equipment

The first domain is Health Center Supplies and Equipment, which includes 4 themes (see Table 2 for all domains and associated themes and codes). One theme is that providers said they have inadequate availability of infrastructure, critical pharmaceutical supplies, and instruments and their components:

Facilities are limiting us to a certain extent, like recently we had something like five mothers who labored on the same day and we never had enough beds where to put them. (Midwife, health center III)

A second theme is that providers said the inadequate availability greatly lowered the quality of services they offered. This domain encompassed all supplies and tools, infrastructure and patient feedback on them. Although a few providers reported that they have the basic supplies and equipment they needed, most stated that there were not enough to meet care demands. Providers also said they were further limited by infrastructure. For example, providers said they did not have enough beds, toilets, and space. They indicated that they were not sure of the plan to stock some of these amenities:

By the time I came here, we were using electricity and it went off often and we used hand lamps for deliveries at night but one year ago, a faith-based non-profit provided us with solar, so now when power goes, solar is on some days. Another issue is that they provided us with new delivery beds. We had some sponsors who gave us delivery beds and they provided new delivery beds, mattresses and mothers pouches but not anymore. (In-charge, health center III)

A third theme is that most providers said they have materials for records more than the other core supplies. Almost all providers said that the government supplied them adequately with ministry of health record books and health education posters that were either delivered monthly or could be picked up from the district; other record materials were said to be provided by NGOs like Mild May or Life-Net International in Uganda.

Many providers further stated that the government provided them with bed nets, community outreach bicycles, ARVs (antiretroviral drugs) and mama kits (basic delivery items like gloves and blades), but in an inconsistent way. They stated that the distributed

items quickly ran out and could only be distributed through the next government program, which they did not know when would commence:

Sometimes the government gives us Mama kits; for documentation, we do photocopying, they used to give us mother books and pass port but now it is over. Last time they (government) gave us ANC charts and maternity registers. (Nurse, health center III)

The fourth theme is that many providers said they lack many necessities and skills to fill the gaps that they have and therefore believe the services are not of the best quality, despite some improvement. One mid-wife said, “There is some improvement in the labor ward because the instruments are now enough, they had one set, though not definitively delivery set is not enough. We need more to sterile them.”

3.2 Health center human resources

In the second domain of facility human resources, a particularly frequent theme was that almost all supervisors said the pay was inadequate. They said poor remuneration made it hard to maintain and recruit workers. Although the providers acknowledged that they needed to recruit and maintain more workers, a concern most said had shared with management, they said little had been done to that effect mainly due to lack of funds:

... because of finances, as I have said it is challenging, I can't get somebody to come when we don't have the money to pay them. It is challenging so I am using the available (human) resources that we have to make sure things move on better. (In-charge, health center III)

In a second theme, all providers unanimously stated that there was an inadequate work force in their facilities. They indicated that this acute shortage meant that almost all the facilities had insufficient manpower to provide quality services and that the currently employed providers were overworked. They said this was worsened by the low pay and the remote location of these low-level health facilities in rural areas:

The work load is too much according to what I told you like I'm going for night duty as per now. I have to see the maternity patients at the same time as the out-patients. So according to these mothers, they see you doing the same thing you are the same, you are in the lab, maternity, out-patient, dispensing room etc... That is too much work for one person. But because of the very few health workers I have, a staff of six, we find this unavoidable. (Midwife, health center III)

In another theme, some providers said that they are still motivated to provide quality services despite the limitations of equipment, pay and capacity. One medical clinical officer stated, "I have the morale of working myself because I feel I have the attitude to work, so I feel I have no problem with that work, though there are some challenges like poor pay, heavy work load and inadequate staffing."

None of the providers said they 'moonlight' at another facility to supplement their income, a practice common in the private and public facilities in Uganda. This may be because of the remoteness of their facilities and management policies:

This place is okay only that we have challenges, the work load is much but the payment is not corresponding to the work load and this being a village facility, you cannot part-time such that you can add something on the monthly salary, which is not enough demoralizes me. (Clinical Officer, health center III)

In another theme, almost all the providers said they went to their immediate supervisor, usually the in-charge, for any work-related or personal matters advice. They felt the management was always available to talk about work and personal issues. They reported that they contacted church-appointed officials or the facility advisory council chairperson if they did not prefer their immediate supervisor. Providers also indicated that their colleagues were available for consultation on both professional and personal issues and they mentioned that they would most likely be able to support them without a problem:

The In-charge is always available, if cannot be solved by in-charge; if you think you have not been helped, then you can now go those HUMAC people (Health Unit Management Committee members). (Nursing Assistant, health center II)

3.3 Health center record keeping and data management

In this third domain, one theme that arose is that almost all the providers said that data collection and management had improved greatly at the facility. As a reminder, Life-Net International conducted training with the facilities from which all participants were drawn. These trainings included book keeping and procurement and logistics management.

A second theme that arose is that most providers stated that through Life-Net International trainings, they had come to understand the importance and use of data that they collected daily. They indicated that the display of results practice showed them the targets met and areas needing improvement:

We have pinned up on our notice board some of the data we have extracted from our registers to indicate our performance. This has motivated some to see that targets are being reached before the financial year ends. The others to see that we are under performing and what we can do meet our targets. (Nurse, health center III)

Some providers stated that proper data collection had improved provision of service to their clients. One nurse stated, "...data collection helps us keep treatment record on forms such that the next service providers knows the treatment given to a patient."

In a third theme, although many providers said they had learned the importance of in-clinic data collection through the Life-Net International training, some stated that they did not know whether they were meeting the expectations of those who use both their medical and administrative data outside the facility. The providers noted that they were especially unclear about how the administrators at higher levels at the district and ministry of health used their data, because the officials never provided them with any direct feedback:

We don't know the [district officials'] expectations of the data we collect the way we [medical providers] do. Even when we collect and send to the district, they rarely come and tell us that this is how we should collect, what to improve etc... so we are not certain about the quality. (Nurse, health center III)

In addition, one theme was that many providers said that data collection had greatly improved the way they handled finances. Specifically, they said that they engaged in improved book keeping such as the practices of entering cash flows and making balance sheets. They attributed these practices to what that they had learned during bookkeeping training with Life-Net International Uganda.

3.4 Facility connection to the health system

The fourth domain centers on how the health centers interact with the larger health systems, such as with referral hospitals. In one theme, almost all the providers acknowledged that the referral services and systems in their facilities were poor, not harmonized and coordinated inappropriately. The providers said there were insufficient data records and monitoring of referrals to the wider health system.

Many providers indicated that they only wrote a referral note, which is a vital requirement for admission by the higher facility but is only the first step. A referral note contains the patient's treatment history and basic biographical data. However, it is insufficient because patients take this referral to the next facility of reference and little remains recorded anywhere about the patient at the health facility of origin.

Another theme arose in which participants reported that at almost all the facilities, there were no ambulatory services; the providers said the patients looked for transportation means and paid for it independently, in addition to any referral-related expenses:

I can't say much because we don't have an ambulance. Once we refer patients, they get a private means/ vehicle and they go by themselves. Like I told you, for example at night, there is only one nurse; they can't leave patients alone and go for referrals. Like today in the morning, you have seen there is only one midwife on duty so she cannot follow-up a patient. That is a problem so we only receive calls from patients [not providers] that we have referred that it has been successful or otherwise.
(Midwife, health center III)

However, for the few providers who mentioned having a donated or improvised vehicle at the facility, they also mentioned that it was broken down during the day of the interview. Regardless, providers indicated that in a circumstance that they had a running vehicle, patients still paid for fuel and basically hired the vehicle. At one facility, the in-charge said because their clients lacked transport money, if they had a working vehicle they would transport patients and wait for them to pay later when they got discharged from the hospital and could.

In a third theme, some providers said they occasionally followed-up on patients with a phone call, especially if the patient was referred in a critical state. They added that they rarely called to follow-up on other "normal referrals." They stated that these calls were not recorded anywhere. At two facilities, providers mentioned that the Village

Health Team volunteers followed-up on the mothers who were referred to other facilities and came back in the community, though there was no record or system for this task:

We refer but the clients have no transport, our vehicle is down. Some clients delay until it is too late; they don't have transportation and that could be detrimental. We have some system but we don't record. We call those who are in a worrying state when we refer. The others we don't. (Midwife, health center III)

Another theme that emerged was that many providers felt that they were giving patients the best suitable and professional care they could offer in terms of standards and quality of care as compared to neighboring facilities. Many providers said patients provided them with positive reviews on their service delivery, kept returning and recommended other clients to their facilities. One health center III in-charge stated, "I may say it's good simply because its [our services is] witnessed by the turn up of very many patients because it is a private setting and very many patients are coming compared to the different health centers in the district."

3.5 In-clinic patient care at pre-natal, labor, birth and post-natal

This domain encompasses all factors that were said to affect utilization of health facility services, pre-natal and post-natal attendance, labor and delivery care, neonatal care and emergency obstetric care services available at the facility; five key themes arose.

One theme which arose is that all the providers highlighted the importance of attending both pre-natal and post-natal care services. They unanimously felt that providing quality care for neonates and mothers at delivery required attending and

completing antenatal and postnatal care, in addition to having in place adequate supplies, infrastructure and human resources; however, as noted in an earlier domain, most said these were lacking in their facilities. In terms of human resources, Nursing Assistants and nurses, who made up more than 60% of the medical staff in all the sampled facilities, had basic training in delivery and were not supposed to deliver. It was not clear if they did so.

Another theme that most providers said was that socio-economic and socio-cultural barriers were the main factors affecting poor utilization of their services. The most frequently named socio-economic factors were ignorance, living a long distance from the facility and poverty, which providers explained made the mothers unable to afford transportation and meet treatment costs. Providers also said that men did not provide enough support for pregnant women, especially financial support.

Such economic constraints are exacerbated by the fact that all the facilities sampled were private and charged user fees; even when subsidized, providers said the fees remained high for their clients as most of them came from distant poor rural backgrounds. The sociocultural barriers identified by providers included negative attitudes of the health workers. For example, one nurse said, “The way we handle them as health workers is sometimes a bit rude so they don’t come here because we give them a hard time.”

In addition, the providers indicated that traditional cultural beliefs and the active operation of the traditional birth attendants (TBAs) were barriers to coming to facilities. In especially one district, both TBAs and the clinics reportedly offered sub-standard pre-natal care and even conducted delivery and abortion services to expectant mothers

illegally, TBAs and clinics are 'reliable' for expectant mothers because of background challenges and factors like distance and provider attitudes that affect access and utilization of the formal health systems:

...transport, poverty and ignorance are barriers, and because some believe in witchcraft and the ones who have co-wives thinking they are being bewitched; they prefer to go to the TBAs which they believe is better than coming to the health center. So, we have a lot to do; we have a lot of work to explain and give them continuous counselling and mobilization. (Midwife, health center III)

An additional issue stated by providers was that many clients first turn to other private clinics before moving to their facilities, usually when in worse conditions. These are usually smaller private clinics that are independent from a bigger administrative structure like a church diocese, organization or institution. These clinics have poor infrastructure, lack skills and are proximately located to populations and because of easy accessibility. One midwife said:

Some mothers need sensitization, there is a mother who came here for ANC, went to a small clinic in the village instead of coming here for birth. The nurse forced her to push when they cervix was not yet open in a small clinic in the village so the uterus ruptured and she was taken to the government hospital.

In another theme, almost all the providers said their facilities consistently provided pre-natal and post-natal care services on selected days of the week to all mothers, even though they said they had low attendance for these services. Providers

reported that even after the first appearance by pregnant women, return and completion rates were low. Providers said lack of service utilization could be due to distance, transportation challenges, or unaffordable user fees. They also said that the high attrition could be due to many women delivering from home assisted by TBAs or others going to other facilities. Providers added that they could not track the expectant mothers on a case-by-case basis:

...we don't have very many clients for pre-natal services, though our process is subsidized, some of them don't want to pay. They thought if it was free they would come more. In fact, if this facility was offering free services, we would be having very many clients because the environment is a bit conducive, the money even when you ask for little, people will not realize it is little. (Midwife, health center III)

Another theme was that the providers said during admissions and labor, they were confident with their level of knowledge, skills and experiences in handling mothers at the facility at all parts of the process. These parts included the initial history-taking, assessment, monitoring of labor progress using the pantograph, conducting delivery, and giving immediate postnatal care for the first two hours after delivery. Midwives and clinical officers made up less than 40% of the total staff in the facilities. However, many providers said their success was negatively affected by high work load, lack of equipment and lack of other necessities:

A mother came for delivery, she found me in the out-patient-department, I took her to the maternity, I took her blood pressure, then took the fetal heartbeat, temperature. I

did a VE (Vaginal Examination) and by that time she was 6 cm meaning she was in active phase of labor. I started a pantograph and I started monitoring that mother. The VE was 4 hourly, assessed just 2 hourly plus the temperature after 30 minutes. She came at 12 pm mid-day and at around 6.30pm, the membrane ruptured. I did a VE again, she was fully dilated, she had strong contractions, I prepared her for second stage of labor and we delivered a male live baby boy, 9/10, birth weight was 3.4 Kgs. The third stage was fully managed, both the transfer and the post-natal was taken care of. (Midwife, health center III)

In contrast to healthy deliveries, the midwives and clinical officers said they were not equipped or confident in handling complications. Almost all the providers said that they did not feel very confident handling obstetric emergencies and complications like severe pre-eclampsia and post-partum hemorrhage, which are reportedly one of the most common cause of maternal mortality in Sub-Saharan Africa.

Again, all the providers said that they were not satisfied with the quality of their emergency obstetric care services. They stated that they lacked the necessary equipment and some patients reportedly came late when they were about to deliver and already in labor:

We don't have some emergency kits but we have an adrenaline, bulb syringes only that. For me, I think we lack the most essential things like the suction machine, oxygen cylinders, excrucator. These are the cardinal essential things but we don't have. (Midwife, health center III)

In another theme, providers reported a similar inadequacy of equipment for neonatal care services. The greatest number of the providers said they lacked sterilizing capability for their equipment and instruments. Also, necessities like incubators for babies born with complications, oxygen and resuscitation machines were unavailable, and the skills to manage the processes and handle machines were all said to be inadequate. They said in-clinic limitations contributed to unsafe and unclean environments for handling the neonates within the already inadequately stocked facility with limited newborn care capacity:

These ones can only help us to resuscitate, mild to moderate complications (asphyxia), but for severely asphyxiated neonates, we will really not handle and referring from such a place, some would reach when dead, I think, because with severe asphyxia, you need immediate resuscitation with oxygen immediately but we have no equipment. (Midwife, health center III)

Indeed, most providers said mothers possessed inadequate skills and knowledge regarding provision of quality neonatal care. Outside the health center and back in their communities, most providers stated that many new parents and babysitters lacked knowledge and the means to provide good care to the baby, for example through proper nutrition and clean beddings. Subsequently, they exposed the baby to infection through unhygienic cultural practices like umbilical cord cutting. Providers also reported that using local herbs puts newborns at the risk of infection.

3.6 Life-Net International training experiences

All interview and focus group discussion participants were from facilities that had received Life-Net International trainings. One component of the interview and focus group guides was to ask providers their perceptions of the Life-Net International trainings, including perceived benefits and concerns to participation in the trainings.

In the first of five themes, all the providers said they were really motivated to attend Life-Net International trainings, with high expectations to attain new skills and knowledge to improve the quality of care at their facilities.

In a second theme, most of the providers reported that they had had some mild prior exposure to most of what Life-Net International offered training on, either from training school, at other workshops or during their lifetime practice. However, providers indicated that they learned from Life-Net International because either they did not have in-depth knowledge in those areas, had not put them into practice or had forgotten most of them:

Especially in infection prevention, for example they emphasize hand washing technique; for instance, some of us had last heard or practiced of hand washing procedure in training institutions and they have come and put emphasis on it and this has changed. (Midwife, health center III)

Furthermore, in a third theme, many providers indicated good acceptability of Life-Net International trainings, in that they were motivated to attend and found the content to be fine. Almost all the providers positively reviewed the curriculum and said it was suitable for the training they underwent in terms of content, planning and execution by Life-Net International.

In a fourth theme, most providers said the trainings had improved how they conduct their roles and made them discover their gaps, with training on how to improve:

On IV (intravenous) fluid administration, they taught us the number of drops, inflowing drops; for instance, you find the fluids that would flow in 4 hours it is administered in 8 hours. That one is not good. So, they taught us at which rate fluids should flow in different veins. Another thing they taught us is the administration of IV drugs, for example the duration a cannula should spend on a tissue, in a vein. They also taught us patients' rights. Now as I am working I am careful of patients' rights not to violate any. (Midwife, health center III)

Specifically, many providers said most recent improvements in standard of quality of care offered at the facility was to some extent due to the Life-Net International training:

Life-Net International trainings has helped us to improve in our roles as health workers. They have helped us realize our weaknesses and improve in those areas where we were not performing to the standards, at least we are [now] doing things to standard operating procedures. Life-Net International is helping us develop standard operating procedures and when these are performed, we shall be giving quality services. (Midwife, health center III)

In a final theme, some providers stated that the training sessions took a lot of time and also that the time the training was held was difficult due to simultaneously needing to tend to high numbers of patients on busy days. However, providers were also divided on how to improve the timing of the training. Some suggested increasing the period and shifting the time of training, while others wanted a reduction in the length and did not want to change the training time. Some providers felt the demand by evaluation tests was high and wanted a reduction of evaluation exercises that Life-Net International offered per module completed before progressing to the next one. Every trainee had to score 80% or higher on Life-Net International tests before the group could advance to the next training module.

4.0 Discussion

This study set out to provide insights into the perceptions of low-level private facility providers on the factors that affect provision of quality neonatal and maternal health services in two regions of Uganda. The voices of private lower level providers are seldom heard despite the amount of health care they currently provide and their potential to improve service delivery. It is important to hear more from the private sector. The findings reveal the perceived challenges and opportunities to providing quality services to expectant mothers and newborns.

Our main findings are that 1) private lower level providers were not confident in their clinical skills and 2) training is one piece of strengthening these systems and yet private lower level providers may have less access to training.

Based on this study's findings, the main factors affecting provision of quality maternal and neonatal care as stated by providers can be organized into the following domains: 1) health center supplies and equipment, 2) facility human resources, 3) record keeping and data management, 4) facility connection to health systems, 5) in-clinic patient prenatal care, labor management, child birth and post-natal care, and 6) Life-Net International training experiences.

Study participants indicated a major concern in the quality of health services. Many providers alluded to the fact that they were inadequately supplied with critical pharmaceutical supplies and medicines and essential equipment and faced poor infrastructure in their facilities. Many providers said clinical practice at their facilities did not always meet their requirements and therefore government policy standards.

Our findings are in agreement with Pearson and Shoo (2005) who found poor basic amenities, such as limited water and electricity supply and a lack of essential drugs and equipment, in Uganda, Rwanda, Sudan and Kenya in a four-country survey of both private and public providers (29). Likewise, Conrad et al. (30) found that supplies and equipment were critically needed to improve service provision and their lack made it difficult for providers in Uganda to stick to procedures and guidelines.

Similarly, insufficient amounts of drugs, reagents and instruments were revealed to be widespread in other studies in Sub-Saharan Africa. Cham, Sundby, & Vangen, (31) found that inadequate blood for transfusions and shortages of essential medicines, especially antihypertensive drugs, considerably hindered timely and adequate treatment for obstetric emergencies in Gambia. Also, 58% of women in rural Tanzania were not clinically examined for hemoglobin because half of the rural health clinics had no instrument to measure hemoglobin (31).

With respect to the human resources-related challenges, we identified five themes. We observed that the human resources-related issues of low pay, difficulty in maintaining and recruiting new personnel, motivation, management and peer support were reported in almost all facilities. Almost all providers reported difficulties in recruiting and keeping workers due to low pay. Participants described the lack of providers as leading to work overload.

Uganda has historically experienced a crisis in human health resources, as observed by a USAID report in 2003 (27). Nationally, available data indicate that there are only 14.2 midwives per 10,000 people (24), which is far below the WHO

recommended threshold of 23 (25). With the population in Uganda currently estimated at 38.5 million and projected to rise to 102 million by 2050 (26), the already worrying numbers indicate that private facilities may continue to have difficulty in recruiting and maintaining workers in the face of increasing demand for services.

Low staffing can lead to numerous problems, including heavy workload. Heavy workloads, in turn, lead to poor performance below the standard, inappropriate employee behavior and negative attitudes (59). The WHO considers performance to be “a combination of staff being available (retained and present) and staff being competent, productive and responsive (28).”

A surprising and positive finding was that providers indicated that they are still motivated to work, even with compensation challenges. This finding underscores that the reasons why health workers leave and keep their jobs are often not only financial, as found in one prominent WHO commissioned study (59).

The participants’ observations were that there was inadequate capability of low level private facilities to provide quality in-clinic patient prenatal care, labor management, child birth and post-natal care are not new. With respect to the maternal and neonatal care-related challenges, we identified the challenges of attending and completing the recommended number of ANC visits despite consistent provision by health facilities.

Participants observed that many patients who attended prenatal care did not return later for births. Waiswa et al. (9) studied pre-natal attendance in private facilities in Eastern Uganda and found that 99% of the women attended at least one pre-natal care

visit and about half (49%) of all women attended four or more times. The number dwindled further, with less than a fourth (23.6%) of women found to have attended pre-natal care in their first trimester. For births, the researchers recorded a decrease from 25.1% to 17.3% in private sector deliveries during the study period.

This resonates with this study's findings. Providers asserted that attrition of attendance at pre-natal care services and birth at facilities occurred after the first visit due to distance, transportation challenges and unaffordable user fees. They also indicated that some women preferred traditional birth attendants or smaller private facilities. Other studies in Uganda and elsewhere have attributed user fees to be a reason for the decline in utilization of services (33-38). User fees can expose poorer clients to catastrophic expenditures beyond their household incomes.

In this study, providers reported having good prenatal, postnatal care, and normal delivery knowledge but not being confident in their skill level in identifying and handling complications like eclampsia, hemorrhage, and obstructed labor. All the facilities sampled were at the level of Health Center II or III and were expected to provide basic emergency obstetric and neonatal care (39).

A basic emergency obstetric and neonatal care (BEmOC) facility is expected to offer the following components: i) administer antibiotics; ii) administer oxytocins; iii) administer anticonvulsants for pre-eclampsia and eclampsia; iv) perform manual removal of the placenta; v) perform removal of retained products; and lastly vi) perform assisted vaginal delivery. A comprehensive EmONC facility, which is the next level referral

facility for these health centers, offers all the six services in addition to conducting surgeries and blood transfusions (39).

However, almost all providers stated that their facilities did not offer BEmONC services as expected; many also said they were not confident in the quality of maternal and neonatal services in their facilities. Providing basic emergency obstetric and neonatal care is a very critical factor and the most effective way of reducing maternal and newborn mortality and morbidity (40).

Major direct causes of maternal deaths are due to obstetric complications include obstructed labor, bleeding, infection, unsafe abortion and hypertensive diseases (28). The indirect causes are due to pre-existing or concurrent diseases that complicate pregnancy or aggravate it (but are not complications of pregnancy). These include malaria, anemia, HIV/AIDS and cardiovascular diseases (41). All of these conditions require the availability of functional BEmONC services.

The highest risk of neonatal mortality is during the first 24 hours of life, with an additional three-quarters of deaths occurring in the first week of life, majorly attributed to asphyxia, infections and complications of preterm birth. This is worsened by the fact that 15% of all pregnancies in Uganda develop some form of life-threatening complications requiring emergency obstetric care services and may lead to maternal deaths if timely medical care is unavailable (42).

Mbonye et al. (43) also found the availability of quality emergency obstetric and neonatal care to be inadequate in many facilities in Uganda. A recent WHO report similarly corroborated our findings and stated that only 34% of facilities in Uganda

offered the recommended basic emergency obstetric and neonatal care services (44). It is therefore not surprising that many providers felt that one of the most important challenges facing their facilities was the limited capacity to provide quality emergency obstetric and neonatal care services, critically depriving pregnant women and newborns of vital care.

As highlighted above, many providers stated that they were not confident in their skill level in handling complicated births and obstetric emergencies. Nevertheless, having a skilled birth attendant and basic emergency obstetric and neonatal care services is considered one of the most critical necessities in reducing the global burden of maternal and neonatal mortality (45).

Additionally, there was even more inadequacy in providing neonatal care and managing neonatal emergencies in most facilities sampled. Managing low birth weight and asphyxia are vital in saving neonates in Uganda (46). Infections, premature births, delivery complications, perinatal asphyxia and birth injuries are the most common direct cause of neonatal morbidity and mortality (47).

This study's findings correspond to those from a recent survey that found services for basic resuscitation lacking in many facilities in Uganda and elsewhere (48-51). This highlights the substantial challenges in curbing the high neonatal mortality in Uganda, currently standing at 23 per 1,000 live births (24).

The absence of quality maternal and neonatal care was found to be exacerbated by the poor referral systems at all the facilities. With respect to connection to the higher-level health facilities, we identified four themes. We observed that there was no system

for referral, no tangible record-keeping, that providers felt they could not provide more than they deliver, that patients paid for their transportation and that providers did not adequately follow-up on patients. Our findings concur with Adisasmita et al. (52) who found that private maternity facilities were not always equipped to provide 24-hour emergency obstetric care services in case of obstetric emergencies.

The lack of emergency obstetric and neonatal care and referral systems pose a real risk to provision of maternal and neonatal quality care and survival. Barriers to emergency obstetric and neonatal care may be overcome by improving referral systems, health infrastructure and information systems (53). There is an urgent need to improve referral systems to save lives and substantially reduce maternal mortality and morbidity.

In that respect, Tayler-Smith et al. (54, 55) demonstrated that provision of quality emergency obstetric and neonatal care and a basic low-cost, cost effective ambulance referral network was feasible and sustainable in rural Burundi. In Rwanda for instance, through a SMS based application, the pregnancy life-cycle could be monitored and tracked with instant alerts sent by mothers and caretakers to facilities, hospitals and ambulances in case of emergencies (56). Some mothers have opted to deliver from home or seek TBA services due to challenges and costs of arranging for transportation during referrals (57, 58). Having a feasible, cost effective, efficient referral systems highlights the vital functional referral services play in averting deaths.

One current strategy employed by the facility management across all the study sites sampled to improve quality of maternal and neonatal care, infection prevention and general service delivery was the in-clinic training and support by Life-Net International

Uganda. However, it is possible that even in the absence of Life-Net International training that providers would have learned about record keeping and data management, as these issues have become more important for all health organizations in the past few years.

The non-profit has operated in East Africa for the last decade providing logistics, financing, equipment and training services to existing faith-based health centers (18). The partnership offers training to midwives and nurses, provides logistic support for acquisition of essential EmOC drugs, supplies and equipment. Additionally, there is an administrative component of the training that aims at improving the records and book keeping, stores, logistics and supplies management.

In addition, the providers in Eastern Uganda partnered with another local faith-based initiative Family Life Education Program (FLEP). The program aims to increase access and utilization of quality and comprehensive reproductive health, TB and HIV/AIDs prevention, care and treatment services at the clinics and community. FLEP supports facilities with supplies and transportation means (a bicycle) among other for community outreach.

Contrasted with the challenges that were identified by the providers who had worked with Life-Net International for the last 6 months to 2 years, they still listed limitations in trainings, human resources, inadequate supplies, poor infrastructure as critical tasks. This is despite small gains and appreciation of the Life-Net International partnership, indicating that the current challenges in providing quality services is wider and may persist for some time despite such interventions.

The practice of providing quality maternal and neonatal care at lower level private facilities still faces many challenges and is not always consistent with both government guidelines and WHO packages (21, 22). Despite an increase in utilization of private and public facilities for deliveries, according to the World Bank (23), quality services continue to decline.

It is essential that both public and private health facilities are strong, and both need strengthening in Uganda in order to improve neonatal and maternal health. The private lower level facility providers in this study reported a variety of administrative, contextual, and clinical challenges. Based on other studies, these challenges appear similar to those faced by public facilities (21), despite public perceptions in Uganda that private facilities have more resources and higher quality care. This finding indicates that it is important to focus on strengthening health services for both public and private sectors simultaneously.

4.1 Implications for policy and practice

Two key findings from this study are that private lower level providers were not confident in their skills, private lower level providers have less access to training and lastly that clinical practice as reported did not always meet guidelines. More needs to be done to bring clinical practice in line with guidelines. Some urgently needed changes are structural, such as having adequate supplies at private lower level facilities and having more well-trained medical providers in Uganda. Training is another way to improve neonatal and maternal care. There are limited avenues for training for private providers, compared to their public counterparts (12).

Partly for this reason, the current partnership between the private facilities and Life-Net International Uganda is a unique opportunity to improve quality of care. The in-clinic medical and administrative trainings and the performance-based evaluation of the training (14) avail the private providers with a free opportunity to gain new skills while in practice. Private providers must not be overlooked in Uganda's healthcare system.

Thus, this study's findings suggest that the most urgent needs are:

- For both government and private providers to appreciate the instrumental role the private sector is contributing to improving quality of maternal and neonatal care;
- To provide training programs to private providers as well as public providers; and
- For the Uganda Ministry of Health to strengthen and implement the guidelines and minimum standards of Health Center II and IIIs practice and industriously supply them with necessary materials and supervise them to maintain standards of BEmOC.

4.2 Implications for further research

Future health systems studies in Uganda should be sure to include private facilities and not focus exclusively on public facilities. In addition, there is a need for both public and private provider training. Life-Net International's business-oriented and relational approach that strives to nurture behavior change and knowledge transference at the level of low-level private facilities is interesting and well-received by providers and management. There is need for more detailed health outcomes and cost effective studies on Life-Net International's interventions and any others that are similar.

4.3 Study strengths and limitations

The study has a few limitations which may affect the generalizability of these results. First, the study was carried out in only seven private facilities out of a total of 67 and 80 health centers in the relatively large districts of Jinja and Masaka found in the Eastern and Central regions of the country respectively (5). Second, the selection of the health facilities was not random and therefore not representative of all Ugandan private providers. There may be something unique about health facilities that are willing to engage in Life-Net International trainings. Third, the FGDs and SSIs relied on the knowledge and the perceptions of private providers regarding their experiences; the responses were not verified through direct independent observation. In addition, all providers interviewed had completed at least a module of the Life-Net International training, which may have changed their perspective on health care provision.

5.0 Conclusion

Private lower level facility providers will play one important piece toward improving neonatal and maternal healthcare in Uganda, and yet they are often not heard from. Private providers reported a need for additional training as well as resources. It is important to include both private and public facilities in Uganda's plans to improve quality of care.

Table 3: Qualitative analysis domains, themes, corresponding codes and frequencies.

Domains and Themes	Codes
<p>1. Health center supplies and equipment</p> <ul style="list-style-type: none"> - Most providers said they have inadequate supplies of health facility requirements - Most providers said lack of critical instrument and components lowered their quality of services - Most providers said they have records materials more than the other core supplies - Many providers said they lack many necessities and skills to fill the gaps, so believe the services are not of the best quality 	<p>Tools and supplies (33)</p> <p>Infrastructure (10)</p> <p>Quality Satisfaction (22)</p>
<p>2. Facility human resources</p> <ul style="list-style-type: none"> - Almost all the providers said the pay was inadequate - Many supervisors said it is hard to maintain and recruit workers for low pay - Many providers said that there was an inadequate work force in their facilities - Health workers were motivated to provide quality services despite limitations of equipment, pay and capacity - Most providers said they went to the in-charge for advice on any work or personal matter 	<p>Workload (45)</p> <p>Management support (29)</p> <p>Peer Support (14)</p> <p>Poor pay (10)</p> <p>Patient feedback (23)</p>
<p>3. Health center record keeping and data management</p> <ul style="list-style-type: none"> - Some providers said that data collection and management had improved at their facility - Providers stated that through Life-Net International trainings, they had come to understand the importance and use of data that they collected daily - Some providers stated that they don't know the expectation of those who use their medical and administrative data especially the district as they never provide them with feedback - Some providers said data collection has greatly improved on how they handle their finances 	<p>Daily Data Collection (13)</p>
<p>4. Facility connection to health system</p> <ul style="list-style-type: none"> - Providers said there was no system for feedback and recording referrals - Providers said there was no reliable ambulatory services and 	

<p>patients paid for transportation and any referral related expenses at almost all facilities</p> <ul style="list-style-type: none"> - Providers said they occasionally follow up with phone call especially the patients whom they refer in a critical state but rarely call to follow up others referred - Many providers said they believe they were giving patients the best suitable and professional care they can offer 	<p>Referrals (31)</p>
<p>5. In clinic patient care at ANC, labor, birth and PNC</p> <ul style="list-style-type: none"> - Providers emphasized importance of attending both ANC and PNC. Some patients attend ANC elsewhere and come to the facility for delivery or vice versa. - Socio-economic and socio-cultural barriers were the main factors affecting poor utilization of their services. - Providers indicated that traditional cultural beliefs and the active operation of the traditional birth attendants (TBAs) were barriers to coming to facilities. - Some providers said some patients start from smaller facilities and come later to their facilities with worse conditions - Many providers said they provided ANC and PNC services on selected days consistently despite fluctuating attendances - Many health workers demonstrated awareness of the processes, procedures and who to refer the patient to both within and outside when they come for ANC and PNC - Providers said they were not confident in handling emergency obstetric care in their facilities - Most providers said there were inadequate skills and knowledge from both the mothers and providers regarding quality neonatal care 	<p>ANC and PNC (20)</p> <p>Birth Admissions (17)</p> <p>Improved births (22)</p> <p>Successful births (26)</p> <p>Unsuccessful births (31)</p> <p>Delivery factors (22)</p> <p>Utilization factors (16)</p> <p>Emergency care (26)</p> <p>Neonatal care (23)</p>
<p>6. Life-Net International training experiences</p> <ul style="list-style-type: none"> - Most providers said they attend Life-Net International trainings to attain new skills and knowledge to improve quality of care - Many providers said they have had some prior exposure to whatever Life-Net International is training them but not put them to practice or forgotten - Providers indicated good acceptability of Life-Net International trainings and curriculum - Most providers said improvements in standard of quality of care at their facility was due to Life-Net International training - Some providers felt that the trainings took too long and interrupted their daily patient rounds 	<p>Life-Net International training (27)</p> <p>Training benefits (6)</p> <p>Training disincentives (16)</p> <p>Training improvements (24)</p>

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