# Qualitative Evaluation of PC-Solutions Strategy

### Background

We implemented a participatory community quality improvement (PC-Solutions) strategy in eight primary health care units of Ethiopia to improve utilization and quality of MNH services from March 2016 to October 2017. The evaluation of this strategy was conducted using quantitative methods which included 1) four rounds of cross-sectional surveys of the intervention area health centers; and, 2) a quasi-experimental study design using two rounds of cross-sectional household surveys. The analysis of the facility surveys showed access to and utilization of most maternal and newborn interventions improved over time. However, the BEmONC functions were not fully operational in most of the health centers. The analysis of the quasi-experimental study showed significant intervention effects for improving utilization of MNH practices including early care seeking of women for ANC and provision of PNC by providers.

We conducted a qualitative study to explain the findings of the quantitative study and to document what actually happened during the process of implementation and understood the barriers and facilitators of implementation of the strategy. The qualitative component would help to understand the factors and the mechanisms through which the intervention affect outcomes.

Therefore, the overall purpose of the study was to answer "what were the facilitators or hindrances of the project to achieve its objectives?"

Specific research questions included;

- 1. How has the PC-Solutions strategy implemented? Was it innovative? Participatory?
- 2. How could the strategy be better implemented so that it could be more effective?
- 3. What were the particular features (change ideas, tools, etc.) of the project that made a difference? Which ones were useful in improving quality of MNH care at facility and community level?
- 4. What has facilitated or hindered the project to achieve its objectives?
- 5. What were the biggest lessons in this endeavor?

#### **Methods**

#### Sampling methods

Primary data were collected through interviewing program implementers in the intervention areas. We selected one intervention PHCU from each region to gather detail and contextually relevant data. Accordingly, four PHCUs were selected purposively, one PHCU per each region. In each PHCU, the health center all the health posts and selected active women development armies (WDAs) in catchment kebeles were recruited for the study. The L10K 2020 technical specialists for the PC-Solutions strategy in each region were also interviewed.

Theoretical sampling technique was used to collect rich information from community health workers until saturation of categories with data is achieved [1]. In-depth interviews (IDIs) of HEWs and WDAs were conducted until saturation of information is reached [2].

### Data collection

This qualitative study conducted in September 2018 to gain a more nuanced understanding of the strategy being implemented. Primary methods of data collection were in-depth interviews of study participants. An interview guide with open-ended questions was used to capture the qualitative information from informants.

Four research assistants, one per region who speaks the local language, was recruited. In each selected PHCU, the research team recruited and interviewed the PHCU director, PHCU staff who were actively participated in the implementation of the PC-Solutions strategy, and those who facilitated the community level quality improvement (QI) cycle. Moreover, the research team invited health extension health workers (HEWs)/WDAs to participate in in-depth interviews. The research team approached the HEWs/WDAs through the facilitation of the PHCU director and our regional staff. A total of 51 IDIs were conducted with WDAs, HEWs, health center director, health center staff and L10K 2020 QI specialists who actively involved in the implementation of the PC-Solutions strategy. Consent was sought before conducting the IDIs.

# Data analysis

Audio records from IDIs were transcribed verbatim and the transcript texts coded. The data was analyzed thematically—a systematic approach to the analysis of qualitative data that involves identifying themes or patterns of cultural meaning; coding and classifying data, usually textual, according to themes; and interpreting the resulting thematic structures by seeking commonalities, relationships, overarching patterns, theoretical constructs, or explanatory principles.

The categories and the concepts emerged from an interview group were verified by consistently linking the emerging categories with the data received from another group of informants to improve the trustworthiness of the qualitative data analysis. These categories were also linked to quotes from the research key informants to ensure the reliability of the study [3].

# **Results**

#### **Study characteristics**

A total of 51 participants: Four L10K 2020 QI specialists, 12 health workers from the health center, 18 HEWs and 17 WDAs were interviewed in Amhara, Oromia, SNNP, and Tigray regions (Table 1).

Table 1: Outline of participants for qualitative research

Respondents category	Workplace	Number			Total	
		Amhara	Oromia	SNNP	Tigray	

L10K field QI specialists	L10K regional offices	1	1	1	1	4
Health workers	Intervention health centers	3	3	2	4	12
(nurse/midwives/HOs)	at primary health care level					
Community health						
workers						
HEWs	Frontline health workers at	5	4	5	4	18
	a grass root level					
WDAs	Community volunteers	4	4	4	5	17
Total		13	12	12	14	51

Five primary themes emerged regarding the process of implementation of the strategy and facilitators influencing the implementation of the strategy: 1) the innovation and its implementation mechanisms, 2) facilitators or barriers of the project to achieve its objectives, 3) implementation impacts and lessons learned, and 4) recommendations for future endeavor.

#### The innovation and its implementation mechanisms

#### Design of the innovation

Interview participants explained the project cycle started with a joint formative assessment conducted through a joint team consisting of L10K 2020, woreda health office, and health center staff. The team conducted community and facility assessments of the intervention areas using workflow mapping, document review, client exit interview, and focus group discussions. Focus group discussions were held with the WDAs to learn how they interact with HEWs and other pressing problems of MNH services at the community level and in-depth interviews were held with HEWs to realize how they communicate with their cluster health centers at health post level. At the health center level, on the other hand, MNH focused assessment was conducted to see the process of service provision.

Accordingly, respondents highlighted that the assessment exercise helped them to explore factors why pregnant women started ANC consultations in advanced pregnancy, gave birth at home, and did not receive PNC at all or received it late. They also mentioned that the major gaps identified during the assessment included late ANC booking, suboptimal quality of ANC, delivery including partograph use, and PNC services.

Following the assessment, a joint consultative meeting was organized involving all concerned parties including community members, HEWs, health center staff, woreda health office staff, and referral hospital staff.

During the meeting, the assessment findings were discussed to consolidate the points and to identify priority problems and their solutions. The root causes of the problems identified were delayed notification of pregnant women due to lack of a standard way of linking pregnant woman with HC and health post/HEW, skill gap of health workers to use partograph, and delayed notification of delivered women to HEWs by the HC for the deliveries taking place there and by the WDA for the deliveries taking place at home.

Mothers used to start ANC booking late due to late and unclear identification of pregnant women. The root causes of initiating ANC during late pregnancy were assessed to be (1)

mothers were not able to disclose their conception to someone due to poor awareness or their assumption of the likelihood of aborting if they tell early (2) WDAs didn't probe mothers well enough to identify early pregnancy. Furthermore, informants pointed out that cultural taboos to disclose pregnancy (i.e., communities believed that the pregnancy might end in an abortion if is disclosed earlier), low awareness of the community including WDAs on the importance of early ANC booking, cultural beliefs to get care during the early postpartum period, and late notification of births to the HEWs were discussed.

The assessment also found out that PNC was neglected intervention at health centers as well as there was loose communication among health post and health center in notifying to HEWs to perform early PNC. Regarding the home-based PNC by HEWs, one of the study participants (IDI332) described the finding as follows, "the *trend was just "to and fro" by HEWs or as simple as go and saying St. Mary blesses you. "— "*.

During the consultative meeting, prioritization exercise and context-specific action planning were done. In the first cycle of the project, early ANC, early PNC, continuity of ANC visits, and partograph use were prioritized and it was implemented over two years. However, quality of intrapartum care and newborn care were later introduced after conducting reassessment at the end of 2017 fiscal year.

As to participatory of the strategy, participants elucidated that the project was participatory throughout the project life cycle involving all relevant local stakeholders of the woreda level health system.

"The project brought new idea. It was participatory in that everyone who was supposed to be stakeholder was participating in the project and focused on continuous assessment of the problems and identifying potential solutions, plan accordingly and continues like this to get better results every time the team meets", participants **(**IDI42241) in Tigray.

Interview participants expressed that the participatory design and implementation strategy helped them to realize gaps and to identify real problems and design appropriate solutions to problems as well as create ownership and shared responsibilities to implement innovations. They particularly mentioned that consultative meeting was an important event that enabled them to 1) visualize MNH performances and validate the problems identified during the assessment, 2) share ideas and experiences, 3) introduce the strategy, 4) gain knowledge on action planning and develop change ideas, and 5) develop action plan and implementation strategy.

"The consultative meeting had many benefits among which I heard ANC 1<sup>st</sup> on 3<sup>rd</sup> months for the first time. We taught that early ANC can prevent damage or deformity of the fetus as well as pregnancy-related diseases for mothers." WDA in SNNP (HDA33231).

L10K QI specialists and health center staff explained that the approach of joint problem solving and consultative solutioning contributed to learning and confidence building, ownership, and shared responsibility.

"Both events enabled implementers to realize their own gaps if your program is inclusive, everyone is likely to take his/her share.", the L10K QI 2020 specialist (IDI332).

#### Implementation of the innovations

Early identification of pregnancy and postpartum mothers and introduction of ANC defaulter tracing mechanism through the WDAs, onsite training for health care providers using mentors and peer learning, introduction of automated monitoring tools at PHCUs to use data for decision making, establishing health facility QI teams that included the community, establishing the community level QI teams, and regular QI meeting are some of the interventions implemented as part of the strategy. Moreover, monthly follow up and coaching visit from L10K 2020 using checklist, QI monthly meetings at HC and community (HP/HEWs and WDAs) to review data and progress and quarter learning session, and QI refresher training for facilitators was implemented.

#### Early pregnancy identification and birth notification systems

Interview participants described that the strategy was innovative in using local wisdom to identify early pregnancies, use innovative pregnancy identification and notification system, as well as cross-breeding experiences from community to community.

The project followed a new approach in identifying mothers for early ANC by using local structures where women go, like hairdressers of women in Tigray, religious ceremonies and even monthly meetings with WDAs. The project used local wisdom in identifying mothers for pregnancy for early checks. Some of the signs that the WDAs were able to identify mothers for pregnancy were: mother could hate taking food or she could have vomiting, she could feel bad on the stomach, some of them could look bad on the face, and felt exhausted, and others could have a feel of comfort reflected on the face and still others could continuously feel headache. These all signs helped WDAs to suspect these women as pregnant and request them to visit a health facility, check for pregnancy, plan to deliver at the health facility and have early PNC.

This criterion of selecting a mother for pregnancy follow up was not available before since mothers were screened after four months when the mother had visible changes on her belly.

"It was agreed that the first ANC started late at 6 months or when belly became big and WDAs complained how they could force pregnant women to tell at 3 months (one of the change idea). A thorough discussion was held over this issue and action points were forwarded. Approaching and probing of suspected pregnant women, reinforcing pregnancy forums and strengthening referral system were among the tools to achieve the implementation of change ideas. Through time, we started to grade WDAs performances on referring pregnant women using card colors – if a WDA sends on or before three months, she gets green mark while if she sends on above 3 months, she gets a red mark on cards", HEWs in SNNP (HEW33234).

Moreover, experience sharing session among WDAs at the health post during meeting helped WDAs to share ideas and methods of approaching mothers at earlier months to disclose their pregnancy while they share the experience here at health post it became possible to identify

pregnancy on or before 3 months. HEWs and WDAs discussed with the hairdressers to report suspected pregnancies.

"Potential areas that mothers could be identified for pregnancy were in women hair dresser's where mothers share lots of information about lots of things in their life including health, for instance, a mother talks with this hairdresser about she stopped seeing menstrual cycle, the hairdresser could see the mother constantly spitting on the ground. Another potential area was the health post where mothers might stop using family planning. And the health extension worker could ask further ask why this happen. The other potential place where mothers could be screened for early ANC was at church while praying. If a mother was unable to stand for prayer and could feel a sense of vomit, it was taken as a sign to be screened for pregnancy checks. If a mother was unable to eat the usual meal and had no appetite, suspicion was taken and need for checkups was considered." HEWs in Tigray (HEW42242).

Pregnancy identification and birth notification cards were introduced as one of the L10K 2020 Platform strategies. Once the WDAs identified pregnant mothers in their catchment, they notified to HEWs using pregnancy identification cards for early ANC booking.

For birth notification, health center staff sent a birth notification card for WDAs/HEWs through mother's caretakers for facility births. For home births, the birth identification card was given to the WDAs brought it from the mother to the HEWs and it helped early PNC to be done by HEWs.

# Provide MNH related education to WDAs and communities

HEWs taught the community and mobilize mothers/communities to get their first ANC as early as possible. Moreover, the HEWs gave orientation the WDAs, who support them in sensitizing mothers to get these services on time, on early ANC booking and delivery notification for immediate PNC. The WDA networks closely followed their neighbors for pregnancy and asked the mothers to confirm if they got pregnant. Once WDAs got an orientation about early identification of pregnancy, they oriented 1:5 WDAs teams about the initiative and taught mothers and mobilized the community and the networks through different social events such as coffee ceremonies, using peers during marketing or other circumstances or they directly tell me. The WDAs encountered refusals from husbands and their mother-in-law at the beginning, especially among older-aged mothers, but later they got acceptance by mothers. One WDA in SNNP (HDA33233) described the situation,

"With regard to the first ANC, mothers, mostly aged ones, don't want to unveil their pregnancies on early months such as 3 months. If we suspect, we orient friends or 1 to 5 networks to probe the suspect when they go market together or meeting they hold. Once we confirm that suspect is pregnant, we tell again friends or network members to advise her to go to health post/center for <u>checkup</u>."

In some cases, WDAs notify HEWs to counsel mothers to start ANC if they refused them. WDAs got support from HEWs. They meet every month at the HP and made home visits.

"We get various supports from health extension workers; they (HEWs) explain more if we have doubt on certain activities [they give us immediate response when we request further explanation on some issues], they gather us every month and discuss on achievement and gaps in different packages every month, come to our 'Got' and train our network members during our meeting, visit households and observe our efforts, give vaccination and PNC at 'Got' level ...." WDA in SNNP (HDA33233).

Participants reported that after the implementation of the change ideas, they noticed that WHDAs became proactive in identifying and notifying pregnancies and births and work in close collaboration with HEWs.

#### <u>Continuous</u> quality improvement process

During the implementation phase, internal learning sessions, technical support and regular review of performance were there at HC and community level. Most of the technical staff from the health center participated in the implementation of the strategy. In each Kebele, one person from the HC was coordinating the community level implementation. Just after the consultative meeting, QI teams were established at the HC and at each community in collaboration with HEWs and WDAs at the kebele. Participants explained that they held meetings with concerned bodies on monthly basis to review performances, identify gaps, and prioritized problems and prepared short trainings for the WDAs, kebele managers & administrators, health center staff particularly for midwifery, outreach focal person, woreda health office staff.

Performance evaluation was conducted as per the thematic areas every quarter, i.e. thematic areas were divided and presented using charts by a group of staff which is followed by evaluation and re-orientation to improve performance better. *"We reviewed change ideas, evaluated performances, identified gaps and put directions or action plans for the future."* (IDI332). Participants said that they learned and motivated by the review meeting.

#### Support system

Regular technical support from L10K 2020 and woreda health office staff were conducted at both the health center and the community. Activities were evaluated during supportive supervision and onsite feedbacks were given. The support was mainly focusing on technical competence of the staff, the content of care, and quality measurement (record keeping, data analysis, and use). Moreover, performances were measured against aim statement; reasons or challenges which underpinned change ideas were identified; joint discussion was held to narrate action points, and way forward were directed.

#### Facilitators and barriers to implementation

#### Facilitators

Regarding particular features of the project that made a difference, participants explained that full participation stakeholders in all stages of the project, strong coordination, strong and robust support system, continuous review of performance, and staff commitment were some of the facilitators influencing implementation the strategy.

One of the key success factors of the innovation was high community engagement in the QI planning, implementation, and monitoring of the strategy. This brought community ownership of the program and facilitated active community involvement in the implementation of the strategy. Informants mentioned that having shared responsibilities at all levels of the woreda health system and detained micro-plan indicating who is responsible for what and when was one of the key success factors. They also indicated that the development of coordinated activities especially the communication between the community, WDAs, HEWs and health center staff was another success factor.

Regarding early PNC, the facilitators for the observed change was attributed to the commitment of HEWs and health center staff. HEWs were following newly delivered mothers traveling long distance and often difficult roads and terrains. Healthcare workers at the health center were also committed to ensuring early PNC. They encouraged mothers to stay at least 24 hours post-delivery so that the early PNC could be performed at the facility.

#### Barriers

The implementation of this strategy encountered several challenges. Staff turnover at the health centers, the workload of the health workers and HEWs, competing priorities of the health service providers and the WDAs, lack of motivation mechanism for the WDAs, and shortage of MgSO4 and vacuum extractor were some of the challenges encountered during the implementation of the strategy.

As mentioned, staff turnover was the most challenging problem in conducting QI. High turnover of staff which required 2-3 months to train newcomers – it is just equivalent to start the works again as described by L10K 2020 participants. Leadership change at the community level was also mentioned as a barrier to the implementation of the strategy. HEWs in SNNP (HEW33235) described, *"The kebele was not stable for the last two years; leadership was constantly changing. Due to this, QI committee was not working regularly and I can say it wasn't functional. Workload coupled with lack of HEW was hindering the QI project much; I am the only HEW in the kebele and have remote villages which are difficult to reach."* 

High caseload of clients at the health center was one of the reasons mentioned as a barrier for the proper implementation of the strategy. This load also would create birth attendants not attentively and frequently attend mothers during childbirth by which mothers possibly dissatisfied and that might be the reasons for low satisfaction score on delivery. Due to workload, contact-focused rather than content-focused care would be another reason for non-significant intervention effects observed for specific ANC indicators. Participants described poor quality of counseling and care might contribute to the low utilization of ANC services. Study participants added, if ANC counseling is not well organized for pregnant women or if they are not convinced to visit the health center again, the probability of coming for the next appointment becomes less.

Due to competing priorities such as campaigns, there was an irregularity of QI events mostly meetings. When staff were engaged in other assignments, quality of MNH services became compromised.

Shortages of inputs such as MgSO4 and vacuum extractor set which were not available at the market were some of the reasons for the low performance of BEMONC signal functions at health center level.

### Perceived impact of the intervention

Regarding impacts of the strategy, the following perceived impacts were identified 1) increased service utilization and quality of care, 2) enhanced knowledge of skill of health workers and provision of standardized care, 3) enhanced community involvement, 4) strengthened linkages between communities and the formal healthcare system, and 5) helped to measure and evaluate quality.

#### Improved service utilization and quality of care

As the below quote clearly indicates, informants mentioned that the project brought incredible changes noticeably seen in their village as a result of implementing this project.

WDA in SNNP (HDA33235) said, "Changes are untold compared to the past" ( )

This strategy inevitably increased seeking behavior of pregnant mothers. The community realized how important is to begin 1<sup>st</sup> ANC at three months in avoiding pregnancy-related risks. Mothers developed a trend of telling their pregnancy to networks/WDAs on early months and getting ANC 1<sup>st</sup> on the first trimester. Study participants perceived changes are registered with this regard and early ANC booking is becoming a norm.

Another impact noticed by participants were mothers developed adherence of the counseling taught them about the benefit of early ANC booking. Besides, fall outs across the continuum decreased following the implementation of the strategy.

# Enhanced the knowledge and skills of health workers

One of the perceived benefits of the intervention identified from the informants was enhanced the capacity of and engagement of health workers and communities on MNH services. The projects participatory design and continuous learning process enabled WDAs to get well aware of the quality of MNH services. This knowledge then transferred to 1:5 network to mothers subsequently.

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One participant described, "The good legacy of the strategy is it showed us what components of MNH services we should provide mothers and newborns.", participants in Amhara (IDI11413).
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As described by the participants, work standardization among health workers was observed, as skill gaps were minimized through training and technical assistance.

#### Strengthened linkages between communities and the formal healthcare system

Interview participants also reflected that the project approach helped to enhance linkages between HEWs and WDAs. It also strengthened the linkage between HC and HP. On the other side, this opportunity forged the linkages between communities with the health system. As a

participatory innovation, participants mentioned that WDAs created a strong link with HEWs and their communities.

The following quote from a participant clearly indicates the impacts of the strategy on strengthening the linkages.

"As positive consequences, ...we established a strong relationship among community, WDAs, HEWs, and health centers staff.', participants in SNNP (IDI33231).

Introduced quality of care indicators with the routine monitoring and evaluation systems of the PHCUs

Participants described that they used to evaluate coverage of MNH services; however, in this project, they started measuring and evaluating MNH services in view of quality.

Moreover, participants mentioned that they learned how to conduct formative assessment, design solutions, and how to measure performance. It is well described by the below quote,

*"From PC solution, I learned how to review my work with evidence and how to generate change ideas, if the work does not bring change",* participants in Amhara IDI11413.

# Recommendations for future endeavor

The importance of the support system has emerged as a critical component of the implementation of this participatory innovation. Woreda level joint review was a medium of evaluating PHCU's activities and identify gaps, and share and cross-bread local innovations between communities. It was also a good opportunity to motivate stakeholders and capacitate their knowledge for further engagement and keeping their momentum. As such, study participants recommended to have a regular review of performance.

Continuous refresher training and supportive supervision visits to monitor and coach were important to effectively deliver the expected outcomes. To be more effective, continual support would play a vital role in ensuring quality health care service.

Respondents mentioned that if there is commitment and can do mentality of the staff, we achieve excellence. Besides, if vibrant and skillful leaders are there, programs would move on the right track.

#### **Discussions**

This study synthesized to unpack the complex participatory community QI interventions in maternal and newborn health in context interviewing participants who actively involved in the design and implementation of the strategy. Researchers explored the extent of community engagement in the health system and motivating and demotivating factors for sustained engagement in the health system. As such, we believed the findings of the study would have paramount importance for similar QI projects and for stakeholders who intend to scale such interventions.

Interviewees clearly indicated that the strategy was innovative and participatory throughout the project life cycle. Using the community's wisdom to implement innovations would be helpful for its sustainability. Moreover, the importance of support system has emerged as a critical component of the implementation of this participatory innovation.

Study participants perceived that the project resulted in a number of incredible changes observed in the use and quality of MNH services. Interviews indicate that early care seeking pregnancy care, immediate postpartum care, and quality of MNH care improved following the implementation of the strategy. Participants described that the links between communities with the health system as well as the link between the health center, health post, and community were improved. Communication between WDAs and community members was also increased, according to the interviewees, as the WDAs' knowledge improved.

The strategy suggests community engagement in the design and implementation of QI would result improved MNH outcomes. Engaging communities in the design of the challenging intervention would contribute in designing local solutions for local problems. As such, scale-up of QI initiatives would benefit from the engagement of all relevant local stakeholders throughout the design and implementation of the strategy.

# References

 Willig C. Introducing qualitative research in psychology. McGraw-Hill Education (UK); 2013.
Creswell JW, Klassen AC, Plano Clark VL, Smith KC. Best practices for mixed methods research in the health sciences. Bethesda (Maryland): National Institutes of Health. 2011;2013:541-5.

3. Graneheim UH, Lundman B. Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. Nurse Education Today. 2004;24(2):105-12. doi:10.1016/j.nedt.2003.10.001.

# Annexes: In-depth Interview Guide for PC-Solutions Strategy Qualitative Evaluation

#### Introduction and Consent

Hello. My name is \_\_\_\_\_\_. We are here on behalf of JSI/L10K to evaluate the effectiveness of the participatory community solutions (PC-Solution) strategy which has been implemented in eight PHCUs including your health center and cluster kebeles. This qualitative component of the study is primarily aimed to well understand the drivers and barriers to implementing the PC-Solutions strategy and major lessons learned.

Your facility was selected to be included in this study. We will be asking about the project implementation approaches, barriers and drivers of project implementation and lessons learned during implementation to deepen the understanding of the effectiveness of the project implementation in bringing impacts on MNH use.

By participating in this study, you can contribute with valuable information to improve the MNH care and practices. This, in turn, will increase the quality of life of mothers and babies. The information you share may also be provided to researchers for analyses, however, any reports that use your data will only present information in aggregate form so that neither you nor your facility can be identified. We will also inform you regarding the survey results.

We assure you that all information will be treated as confidential and will be kept in a secure environment. The name of your facility will not be identifiable and it will not be possible for people other than the researcher to link the information to your specific facility. We undertake to give you feedback on the results and outcomes, once the study has been completed.

If you want any additional information, or when you want to lodge any complaint or concern about any aspect of the research, you are welcome to contact the survey coordinator:

Mr. Gizachew Tadele Tiruneh

Addis Ababa, Ethiopia

Cell phone: +251 912003624

E-mail: gizt121@gmail.com

I agree that the research may be conducted in the facility under the terms and conditions indicated above.

Facility director's signature:	 Date:

Interviewer's signature \_\_\_\_\_ Date \_\_\_\_\_

# IDI questions to L10K staff

Questionnaire ID:	
Date of Interview: [	Interviewer Name:
DD  MM	
Time interview Started::	Time interview ended::

As you well remember, this participatory community quality improvement (QI) project has been implemented with the support from woreda health office and L10K since March 2016. Now we are going to ask you about the process of the implementation of the strategy.

- 1. Can you please explain what your responsibilities were during the implementation of the strategy?
- 2. How has the project been implemented? Was it innovative? Participatory? (explain)
- 3. Were you a part of the initial mapping exercise and/or consultative meeting? If yes, in your opinion, what was the benefit of the mapping exercise and/ or consultative meeting? What worked well? What could have been done differently?
- 4. What were the change ideas implemented in the PHCUs?
- 5. Have you participated in the review of the implementation of the change ideas with the health center staff/quality improvement team? How often? Was it regular? Have you participated in the woreda level review meetings? If yes, how could have been done differently?
- 6. What type of support did you provide to PHCUs? How often?
- 7. The analysis of the quantitative study showed significant intervention effects for improving utilization of MNH practices including early care seeking of women for ANC and provision of PNC by providers. However, the intervention effects were not statistically significant for first ANC, complete ANC, four and more ANC visits, ANC counseling score, satisfaction with delivery care score, skilled delivery, and disrespect and abuse during childbirth. Moreover, the BEmONC functions were not fully operational in most of the health centers.

- a. What were the particular features (change ideas, activities, etc.) of the project that made a difference? Which ones were useful in improving quality of MNH care at facility and community level?
- b. What do you think are the reasons for non-significant results?
- 8. In your opinion, what has facilitated or hindered the project to achieve its objectives and outcomes? What worked best for whom, why and when?
- 9. Were there any consequences of the strategy? Both adverse consequences and positive behavioral changes?
- 10. What were the major challenges you were facing in relation to conducting this QI project? (Regularity of the QI events, capacity, workload, community participation, etc.)
- 11. How could the strategy be better implemented so that it could be more effective?
- 12. What were the biggest lessons in this endeavor?

#### Thank you very much for your time, indeed!!!

# IDI questions to health center staff

Questionnaire ID:	
Date of Interview: [	Interviewer Name:
DD  MM	
Time interview Started::	Time interview ended::

As you well know, this participatory community quality improvement (QI) project has been implemented with the support from woreda health office and JSI/L10K since March 2016. Now we are going to ask you about the process of the implementation of the strategy in your PHCU.

- 1. What is your current position? How long have you been in this position?
- 2. Can you explain what your responsibilities are here at the health center?
- 3. What were your specific responsibilities in relation to implementation of the strategy?
- 4. How has the project been implemented? Was it innovative? Participatory?
- 5. Did you participate in the initial mapping exercise that L10K conducted with the PHCU, HEWs and the community? If yes, in your opinion, what was the benefit of the mapping exercise? What worked well? What could have been done differently?
- 6. Did you participate in the consultative meeting that L10K conducted with PHCU and the community? If yes, in your opinion, what was the benefit of the consultative meeting? What worked well? What could have been done differently?
- 7. Following the consultative meeting, what were the change ideas that were implemented in this health center?
- 8. Did you review the process of implementation of these change ideas with the health center staff/quality improvement team? How often?
- 9. Have you observed any changes as the result of the implementation of the project? What were the particular features (change ideas, activities, etc.) of the project that made a

difference? Which ones were useful in improving quality of MNH care at facility and community level?

**Probe:** The analysis of the quantitative study showed significant intervention effects for improving utilization of MNH practices including early care seeking of women for ANC and provision of PNC by providers. However, the intervention effects were not statistically significant for first ANC, complete ANC, four and more ANC visits, ANC counseling score, satisfaction with delivery care score, skilled delivery, and disrespect and abuse during childbirth. Moreover, the BEmONC functions were not fully operational in most of the health centers.

- a. What do you think are the reasons for success and for non-significant results?
- 10. Have you participated in the woreda level review meetings that the PHCU conducted with HEWs, Woreda staff, L10K staff, and the community? If yes, how could have been done differently?
- 11. Have you facilitated in the kebele level QI cycles that the HEWs and community volunteers participated? How often? What were the change ideas implemented at the kebele level?
- 12. What support from the L10K team did your PHCU receive? How often did an L10K team member come to visit you? What type of support did L10K provide you?
- 13. In your opinion, what has facilitated or hindered the project to achieve its objectives and outcomes? What worked best for whom, why and when?
- 14. Were there any consequences of the strategy? Both adverse consequences and positive behavioral changes?
- 15. What were the major challenges you were facing in relation to conducting this QI project? (Regularity of the QI events, capacity, workload, community participation, etc.)
- 16. How could the strategy be better implemented so that it could be more effective?
- 17. What were the biggest lessons in this endeavor?
- 18. Is there anything else you would like to tell us?

#### Thank you very much for your time, indeed!!!

# **IDI** questions to HEWs

Questionnaire ID:	
Date of Interview: [	Interviewer Name
DD  MM	
Time interview Started::	Time interview ended::

As you well know, this participatory community quality improvement (QI) project has been implemented with the support from woreda health office and JSI/L10K since March 2016. Now we are going to ask you about the process of the implementation of the strategy in your Kebele.

- 1. How long have you served as an HEW?
- 2. What were your specific responsibilities in relation to implementation of the strategy?
- 3. How has the project been implemented? Was it innovative? Participatory?
- 4. Did you participate in the initial mapping exercise that L10K conducted with the PHCU and the community? If yes, in your opinion, what was the benefit of the mapping exercise? What worked well? What could have been done differently?
- 5. Did you participate in the consultative meeting that L10K conducted with PHCU and the community? If yes, in your opinion, what was the benefit of the consultative meeting? What worked well? What could have been done differently?
- 6. Following the consultative meeting, what were the change ideas implemented in your kebele?
- 7. Did you review the process of implementation of these change ideas with the WDAs/kebele cabinets? How often?
- 8. Have you observed any changes as the result of the implementation of the project? What were the particular features (change ideas, activities, etc.) of the project that made a difference? Which ones were useful in improving quality of MNH care at facility and community level?

- 9. Have you participated in the woreda level review meetings that the PHCU conducted with Woreda staff, L10K staff, and the community? If yes, how could have been done differently?
- 10. What support from the L10K and health center staff did you receive? How often did they come to visit you? What type of support did they provide you?
- 11. In your opinion, what has facilitated or hindered the project to achieve its objectives? What worked best for whom, why and when?
- 12. Were there any consequences of the strategy? Both adverse consequences and positive behavioral changes?
- 13. What were the major challenges you were facing in relation to conducting this QI project? (Regularity of the QI events, capacity, workload, community participation, etc.)
- 14. How could the strategy be better implemented so that it could be more effective?
- 15. What were the biggest lessons in this endeavor?
- 16. Is there anything else you would like to tell us?

#### Thank you very much for your time, indeed!!!

# **IDI** questions to WDAs

Questionnaire ID:	
Date of Interview: [	Interviewer Name:
DD  MM	
Time interview Started::	Time interview ended::

As you well know, this participatory community quality improvement (QI) project has been implemented with the support from woreda health office and JSI/L10K since March 2016. Now we are going to ask you about the process of the implementation of the strategy in your community.

- 1. How long have you served as WDA?
- 2. In relation to implementation of the strategy, what were your specific responsibilities?
- 3. Thinking of the women in your community, what are the main barriers for women to get early ANC, deliver in a facility, and receive PNC? What are the major challenges for you to let women in your community get early ANC, delivery in the facility and receive early PNC?
- 4. Were you a part of the initial mapping exercise that L10K conducted with the PHCU and the community? If yes, in your opinion, what was the benefit of the mapping exercise? What worked well? What could have been done differently? Did you feel you had a voice in the process?
- 5. Were you a part of the consultative meeting that L10K conducted with PHCU and the community? If yes, in your opinion, what was the benefit of the consultative meeting? What worked well? What could have been done differently? Did you feel you had a voice at the meeting?
- 6. Following the consultative meeting, what were the change ideas implemented in your kebele?
- 7. Have you participated in the review the process of implementation of these change ideas with the HEWs? How often? Was it regular? What support did the HEW provide to you? What additional support could she provide to you?

- 8. Have you seen changes regarding women's use early ANC, facility delivery, and early PNC care in your community? What were the particular features (change ideas, activities, etc.) of the project that made a difference? Which ones were useful in improving quality of MNH care at facility and community level?
- 9. Have you participated in the woreda level review meetings that the PHCU conducted with Woreda staff, L10K staff, and the community? If yes, what happened during these meetings? What types of issues were discussed?
- 10. In your opinion, what has facilitated or hindered the project to achieve its objectives (i.e. to let women seek care and practice behavior)?
- 11. What were the major challenges you were facing in relation to doing this QI project? (Regularity of the QI events, capacity, workload, community participation, etc.)
- 12. Is there anything else you would like to tell us?

#### Thank you very much for your time, indeed!!!