Improving the Reporting System of the Access to Infant and Maternal Health
(AIMH) Project
World Vision Uganda

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Declaration

We, Gilbert Muyambi and Allen Amanya do hereby declare that this end-of-project report entitled ‘Improving the Reporting system of the Access to Infant and Maternal Health project’ has been prepared and submitted in fulfillment of the requirements of the Medium-Term Fellowship Program at Makerere University School of Public Health and has not been submitted for any academic or non-academic qualifications.

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Acknowledgments

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In addition, a thank you to Mr Joseph Matovu our academic mentor whose practical approach to mentorship opened our minds and leaves us with a more hands on perception of monitoring and evaluation.

We also wish to thank our institutional mentor Mr Robert Kanwagi; the former Associate Director for Health, HIV and AIDS in World Vision Uganda for the day to day guidance that shaped the implementation of this project.

Gilbert Muyambi & Allen Amanyia
### List of Abbreviations

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<th>Abbreviation</th>
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<tr>
<td>AIMH</td>
<td>Access to Infant and Maternal Health</td>
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<td>CDFs</td>
<td>Community Development Facilitators</td>
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<td>DHE</td>
<td>District Health Educator</td>
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<td>DME</td>
<td>Design, Monitoring and Evaluation</td>
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<td>DHI</td>
<td>District Health Inspector</td>
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<td>DHO</td>
<td>District Health Officer</td>
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<td>DHT</td>
<td>District Health Team</td>
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<td>HC</td>
<td>Health Center</td>
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<td>HMIS</td>
<td>Health Management Information System</td>
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<td>M&amp;E</td>
<td>Monitoring and Evaluation</td>
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<td>ttC</td>
<td>Timely and Targeted Counseling</td>
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<td>VHT</td>
<td>Village Health Team</td>
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Executive Summary

Access to Infant and Maternal Health (AIMH) is a four-year project implemented in six sub-counties of Busia and Kabale Districts.

Although the project had a monitoring and evaluation (M&E) plan, this plan did not provide for data collection tools and data management. Project staff and implementing partners did not have adequate skills in using Health Management Information System (HMIS) tools, yet reporting about project activities had to be done using the HMIS tools. This created reporting gaps with no illustration of progress towards achieving project outputs and outcomes making it difficult to track effectiveness of project models.

This intervention was designed to improve the reporting system for the AIMH project through review and adopting monitoring tools, revising the M&E plan to include a data management component and building capacity of staff to use reporting tools. Specifically, the fellows reviewed the ttC register, ttC summary form and AIMH quarterly reporting format and adopted tools from HMIS.

There is an improvement in the flow of data from the community to the project secretariat as a result of developing a data flow chart and operationalising the reporting structure. This is demonstrated by an increment in the percentage of VHTs reporting on time from 0% at the start of the intervention (first quarter) to 93% in the third quarter. There is increased availability of quantitative data on output indicators for reporting with two quarterly reports completed with data on all project indicators which was not available before the intervention. In addition the VHT reporting structure has been operationalised in the project target areas and revised tools have been adopted by all health projects in World Vision.

A key lesson learnt is that strengthening already existing government systems instead of creating new ones eases reporting. This project calls for a need to provide support and mentorship to district health teams to conduct data verification.
1.1. Introduction

Many developing countries lack reliable data coupled with inadequate appreciation and use of available information in planning and management of health services. Uganda has one of the worst health care records in the world (Annie Kelly: theguardian.com, April 2009).

Systems used to gather information for the management of health services are normally too many and uncoordinated while most are not able to produce the information required for management decision making. Data is of poor quality and rarely used in planning and management of health services. Collection of data for performance monitoring and evaluation is not a priority especially at the district level. Information related to diseases, vital statistics, maternal, child and reproductive health indicators, and tracking of financial resource allocations is neither systematized nor easily accessible for proactive analysis or planning purposes (Chet N Chaulagai et al. 2005)

Information systems are important for measuring and improving the quality and coverage of health services. The available evidence calls for a need to design interventions aimed at improving the quality of reports received, including completeness, accuracy and timeliness of such reports. With the above information therefore, this project was designed within the Health Division of World Vision Uganda to improve the reporting system of the Access to Infant and Maternal health project.

1.2. Background

World Vision Uganda is a Christian founded organization with field operations in 37 districts. World Vision Uganda runs four major programs ranging from Health, Livelihoods, Education and Child Protection. The implementation of these programs is through the Area Development Programs (ADPs) which is the equivalent of a Sub-county. These ADPs implement some or all of the above programs. According to the National Office Strategy (2012 – 2015), each of these programs has specific outcome level indicators that show the contribution of World Vision Uganda to child well-being. The ADPs contribute to the National Office Strategy through a
number of interventions and activities at the community level. There is a performance monitoring plan for the National Office Strategy and each sector, health inclusive; has developed a sector strategy that feeds into the National Office Strategy (NOS).

In addition to implementing activities stated within the NOS, ADPs may implement parallel projects and this happens when the ADP on top of its running program, receives a grant project. These grant projects have their own monitoring and evaluation frameworks that are separate from the indigenous health programs or other programs. The reporting for the projects is equally unique to the ADP/Cluster programming model.

Access to Infant and Maternal Health (AIMH), one of the parallel projects running at ADP level is a four-year project implemented in six sub-counties of Rwamucuucu and Kashambya in Kabale, and in Busia the sub-counties of Lunyo, Busiime, Sikuda, Busitema. The purpose of the AIMH project is to contribute to maternal, neonatal and child health outcomes in the above mentioned districts. Like all other parallel projects, AIMHH has been operating with a partial monitoring and evaluation (M&E) system with a log frame summarising the goal, outcomes and project indicators and a monitoring and evaluation plan. But these aspects were delinked from the main M&E strategy for the NOS.

One year into implementation, there were challenges experienced by project staff while reporting on output indicators. These challenges were affecting the attribution of project work to changes in health outcomes. This was attributed to the incomplete monitoring system which did not provide for data collection tools and data management. It was against this background therefore that an intervention was designed to improve the reporting system of the AIMH project, and this formed the focus of the project undertaken by the two Fellows.
2. Statement of the Problem & Project Justification

2.1. Statement of the Problem

The main problem with reporting under the AIMH project was the lack of data collection tools and a data management plan to guide staff in the collection of data, data analysis, data use and storage. This created gaps in terms of reporting because the reports focused on activities done and not on the results of these activities, no monitoring reports were available and there was no illustration of progress towards achieving project outputs and outcomes. For example, out of the 8 reports produced by the project in the first year, none of them showed progress towards achievement of outputs while no quarterly reports were written.

In addition, through the AIMH Project, World Vision is piloting new models that include the "timed and targeted counselling"(ttC) model. The ttC register which is the main tool used for routine monitoring by the project only tracked activity level data like mothers who have been enrolled but not uptake of/or access to the required services. As a result, there was difficulty in tracking the effectiveness of the models being promoted by World Vision, and attributing the desired change to project interventions and making decisions.

The goal of the AIMH project is a 25% reduction in infant and maternal death; however, with the project in its second year of implementation, it was not clear what contribution had so far been made to achieve this target inspite of the financial investment (USD 1,000,000) that had already been spent on direct project activities.

Furthermore, the AIMH Project as part of the health systems strengthening strategy for health services, supports the Ministry of Health to operationalize module 6 (Community Module) of the Health Management Information System (HMIS) using the Village Health Teams (VHTs). However, by the time of the start of this intervention, there were no reports received out of the expected 29 reports from the supported districts of Busia and Kabale. This was attributed to lack of monitoring tools that are supposed to summarize data from the VHT register to the Health facility from where the project can extract the information.
Under this project therefore, an intervention was designed to improve the reporting system for the AIMH project. This was done to increase availability of quality project data by improving the quality reports through ensuring completeness, accuracy and timely submission.

**Illustration of the Problem**

![Diagram of Cause, Problem, Effect](image)

**Figure 1: Illustration of Problem**

At the center of the above diagram is a “poor reporting system”. This is due to the fact that data flow processes are not well defined, absence of data storage and management guidelines, inadequate capacity of staff, no reporting tools and an incomplete M&E Plan. As a result, poor quality reports or sometimes no reports at all are generated, and this creates difficulties in making informed decisions, makes it difficult to justify the models of implementation used or even evaluate them, and also makes it difficult to track the progress of the project in achieving its goal.
This intervention was aimed at addressing the problem of poor reporting in order to make informed decisions, give justification of the models being used and also provide a framework to track the progress of the project.

2.2. **Justification/Rationale of the Project**

This project intended to improve the Monitoring and Evaluation system (M&E) system for the AIM Health Project because there have been challenges in generating data on output indicators which has affected the attribution of project work to changes in health outcomes.

Furthermore, World Vision International has developed health models that are being piloted here in Uganda and specifically by the AIMH project. However there was no system in place to collect monitoring data on the performance of these models to be able to ascertain their effectiveness.

This project is hinged on community systems strengthening and the performance of the VHTs in data collection and reporting which showed that although the VHTs are in place and being supported in most of the areas, data collection and reporting was a challenge. The VHTs are the first line of reporting within the health system of Ministry of Health and although the Ministry has in place Module six of the HMIS, Operationalisation of this module has been minimal or nonexistent. This project has demonstrated data flow from the community using VHTs to the national level. The Ministry of Health and districts can adopt the systems put in place by this project to improve VHT reporting in the rest of the country.

The project will additionally be of great use to World Vision in collecting evidence to support achievement of its Child Wellbeing aspirations as enshrined in the National Office Strategy 2012 – 2015.
3. Project Objectives

3.1. General Objective

To improve the reporting system of the AIMH project

3.2. Specific Objectives

i. To develop monitoring and data collection tools aligned to key project indicators

ii. To develop a data use and management plan for the AIMH project

iii. To build the capacity of AIMH project staff and partners in data management

4. Methodology

4.1. Review and revision of tools

One meeting was held with World Vision staff from the M&E and health units during which a review and revision of the AIMH project logframe and M&E plan was done. Indicator definitions, data sources and frequency of reporting were revised and finalized. Specifically, this entailed reviewing the ttC register to include the column that tracks uptake of ANC and Postnatal services by the pregnant women and newborns that are the project primary targets.

Initially the tool only tracked the number of women registered while the project reporting requirements went beyond just tracking the number of pregnant women. They included tracking the effectiveness of the ttC Model. Therefore, by including the column, the register was able to generate the required information to show this effect.

This project further improved the register from mere papers stapled together into an organized and user friendly register that can be used over a period of time. (Appendix I)
The project also developed a summary form which aggregates all the data in the ttC register onto one form for easy management and entry into the database.

The tools were revised in consultation with the National Monitoring and Evaluation specialist, maternal and child health specialist, HIV infectious disease specialist, the Associate Director for health World Vision Uganda, district health educators and health assistants.

The ttC registers were then pretested in six sub-counties of Rwamucuucu and Kashambya in Kabale. During the pre-test, the two fellows trained the district officials on the use of these tools who later trained the VHTs. A sample of two parishes was done in each ADP where the VHTs identified the pregnant women and tested these tools on them over a period of three weeks. The data was summarised into the ttC summary form, thereafter a feedback meeting was organised during which adjustments were made and tools finalised.

As part of systems strengthening, the project adopted the Ministry of Health HMIS data collection tools. Two stakeholder workshops were organized and attended by World Vision staff and district officials (information officers, health assistants, HMIS focal persons, District Bio statisticians) from the project’s area of operation (Kabale & Busia) were held. In these workshops, existing Ministry of Health HMIS tools that are in line with project indicators were identified and adopted. This aligned the project reporting system to the existing MoH structure and was a contribution to operationalisation of module six of the Ministry of Health HMIS system.

The adopted tools include:
1. HMIS form 095 (Appendix 11)
2. HMIS form 097 (Appendix 11I)
3. HMIS form 105 (Appendix IV)
4. HMIS form 106a (Appendix V)

This project also developed a quarterly reporting tool for the project that was not available before. This reporting format lists all the project indicators as provided by the results based
monitoring and evaluation framework of the project and provides quarterly updates on the progress of each indicator. This has enabled the project to get the status of the project per quarter for quick decision making. (Appendix V1)

4.2. **Staff Capacity Building**

The fellows held two five day training workshops for 30 district health officials who included the district biostatistician, health assistant, HMIS focal persons, HCIII information officers and in charges of health facilities. The training covered aspects including mentorship on completing VHT registers, summarizing information on the VHT register, simple (manual) data analysis. Participants were also given an overview of HMIS and its objectives. The training was then replicated to 887 VHTs by the participants.

*One of the fellows describing the process during a workshop*
4.3. **Data Flow Process Improvement**

The training workshops were also used to discuss and agree on reporting roles and responsibilities. A data flow chart was developed in consultation with the stakeholders with the intent to improve the flow of data from the community to the health centers, district and national level.

Data is collected by the VHTs from households (20-30 households per VHT) on a monthly basis using the HMIS form 095(VHT register) and ttC register. Each VHT summarizes information from their respective households and submits to the VHT team leader at the village level. The VHT team leader summarizes the data from all VHTs in the village using HMIS form 097 and the ttC summary form and submits to the VHT parish coordinator. The VHT parish coordinator summarizes information from all VHT team leaders in the parish using HMIS form 097 and submits to the health assistant at the sub county level.

The health assistant summarizes data from all focal VHTS in the sub county using HMIS form 106a and submits to the information officer at the HCIII who incorporates this report into the health facility report; HMIS form 105 and submits to the district. AIMH accesses this data from the district from which it populates its quarterly reporting form.
4.4. **Mentoring and support visits**

Six mentoring visits were conducted to ensure accuracy in data entry, address challenges being experienced by VHTS in data collection and collect feedback. During the visits, it was found that some VHTS could not read and write. Peer groups were formed to support these VHTS in data collection.

4.5. **Improving data Storage and Analysis**

A data base was developed using Ms Access with assistance from a reporting and documentation specialist on secondment from World Vision USA. The data base constitutes all AIMH project indicators. The data base is updated every quarter using information from the AIMH quarterly reporting form that provides a summary of progress on each indicator. Data is entered by community development facilitators who are the field staff for the AIMH project. It is sent to the project's Monitoring and Evaluation officer who then holds quarterly
validation exercises with the community development facilitators to ensure accuracy of data entered.

Figure 3: Data Base Screen

5. Project Outcomes

5.1. Improved data flow processes

There is an improvement in the flow of data from the community to the project secretariat as a result of developing a data flow chart and operationalising the reporting structure. The AIMH project works through the VHT structure to implement its model. Although there was an existing reporting structure prior to the intervention it was not operational.

VHTs collected data but it was never summarized and reported on to the health facilities. Health workers and information officers did not know their roles and responsibilities. For example, VHTs were not following the proper HMIS reporting structure which made aggregation of data
difficult. In addition HMIS forms were not available for reporting to the VHTs. All three projects implementing the ttC model had different versions of the ttC register.

Pieces of paper that were previously used as ttC registers

The new VHT ttC Register

After the training and reassigning of roles, the reporting structure has been operationalised; VHTs now summarize data at the village level which was not there before and then send it to
the focal VHT at the parish level. The focal person summarizes parish level data and submits a parish report to the health assistant who summarizes a report and submits the report to the in-charge of the health facility that incorporates it in the health unit quarterly report for submission to the district.
HMIS Form that was adopted by the project

In addition unlike before where VHTs who were supporting AIMH to implement ttC were required to report directly to World vision, the new data flow which operationalises the HMIS structure allows them to report directly to the district where the AIMH project then extracts the data. The AIMH project is now compliant with the proper government reporting system as opposed to trying to create a parallel reporting structure which has lessened the workload of VHTs as well as eliminating duplication.

Resultantly VHT reporting has been improved. For example, whereas 0% of the VHTs were reporting on time prior to the intervention, 93% of the VHTs reported on time in the third quarter of the year after the intervention. This was due to the introduction of the ttC and HMIS reporting tools and clear understanding of roles and responsibilities between VHTs, focal
VHTs, health Assistants, district officials and World Vision staff. The capacity of the VHTs was also improved to understand how to fill the relevant registers, summary forms and in understanding the reporting channels for particular information.

5.2. Improved availability of quantitative data on project indicators

Prior to the intervention VHTs submitted narrative reports that did not provide uniform data on indicators; this made aggregation difficult. There was no data on ttC for the AIMH project. With increased availability of data collection tools, there is increased availability of data. Two quarterly reports with updated data on output indicators are available.
5.3. Increased Use of data

Data use, storage and analysis have been improved with the development of an access data base. This in turn is informing decision making on project implementation strategies. For example, analysis of data collected for Quarter III showed that VHTs were not using the ttC model correctly which will affect its effectiveness.

Data quality issues were in addition revealed for example while VHTs reported supporting a total of 517 pregnant women with ttC in Kabale, monitoring data indicated only 103 women were reported as registered at project initiation. Because of availability of data these discrepancies were identified. A decision has been made to hold refresher trainings on the ttC model and increase mentoring visits to the VHTs.
6. Lessons learned

A key lesson learnt is that strengthening already existing government systems instead of creating new ones eases reporting. Previously the AIMH project had its own tools and reporting structure although the project was working through VHTs which is a government structure. Aligning the project’s reporting structure to the HMIS improved reporting.

7. Challenges experienced

a. A major challenge faced is that HMIS officers are not well versed with data collection procedures. The intervention supported orientation of the officers on HMIS.

b. Government does not provide most of the HMIS tools. Through the intervention, hard copies of HMIS tools were provided to health facilities the AIMH project is working with.

c. Owing to the different levels at which data is summarized; the team faced a challenge of inaccurate data being provided due to inaccurate recording. The team was unable to address this during the period of intervention.

8. Recommendations & Conclusion

8.1. Recommendations

- Support the district health teams to hold support supervision and mentorship to health workers on data recording to ensure data quality.

- The government should support the VHT system by continuously providing the requisite HMIS tools.
8.2. Conclusion

This project set out to improve the reporting system of the AIMH project by developing data collection tools, developing a data use and management plan and building the capacity of AIMH project staff and partners in data management. The project successfully built the capacity of VHTs and other player on their roles and responsibilities, operationalised HMIS module six, developed data collection and reporting tools and clearly defined the interaction between these processes through the data flow chart.

As a result, it was understandably clear that most times projects struggle to build systems capable of providing data. However, there are systems already in place that can be improved and supported to meet government and partner data requirements. The success in improving VHT reporting from 0% to 93% in this project is a clear demonstration of a true health systems strengthening approach.
9. References


10. Appendices

10.1. Summary Form

10.2. HMIS form 095 (Appendix 111)

10.3. HMIS form 097 (Appendix 1V)

10.4. HMIS form 105 (Appendix V)

10.5. HMIS form 106a (Appendix V1)

10.6. Quarterly Reporting Format