

OROMIA HEALTH BUREAU FIRST ANNUAL RESEARCH CONFERENCE

Building a resilient health system to ensure the quality of health care during a public health emergency July 2022





Cordaid Ethiopia Last Mile Project





Presentation on Last Mile Project Baseline Assessment Findings

By Girma Abo

July 2, 2022





Outline of the presentation

- Introduction
- Rationale of Last Mile Project (Statement of the problem)
- Last Mile Project Objectives
- Baseline Assessment objectives
- Scope of the assessment
- Assessment methodology
- Results and Discussions of the finding
- Conclusion and Recommendation



Introduction

- © Cordaid, an international non-governmental organization, has extensive experience in health system strengthening, with a particular focus on performance-based financing (PBF) for the past two (2) decades.
- PBF contributes to better quality and higher utilization of health services, as well as more equitable and cost-effective health systems.
- It contributes to increasing transparency and accountability and it also gives some autonomy to individual health facilities.
- © Cordaid introduced PBF into the Ethiopian health sector in the Borana zone in 2015, and the Jimma zone in 2019 (both in Oromia Region).





Rationale for Last mile project

- Since October 2019, Cordaid has been implementing PBF in the Jimma zone (one of 22 zones in the Oromia region) with the aim of improving the availability and accessibility of good quality healthcare.
- While implementing the PBF, the non-availability of essential medicines and inefficiencies in the pharmaceutical supply chain and health information system were some of the main challenges.





- Access to medicines, under-budgeting, knowledge and skills of employees managing drugs, distance from resupply points, and physical infrastructures such as stores, or transportation issues can all contribute to low drug availability in public health facilities and these are important factors that influence product availability and access in a variety of health care settings.
- As a result, Cordaid planned to partner with I+ Solutions in Jimma zone through the Last Mile Project (LMP) with the objective of improving the availability of essential medicines in Jimma Zone health centers, Oromia region.
- This contributes to the progressive implementation of the health sector's five-year transformation strategic plan.
- Increasing the availability of essential medicines in health facilities is one of the targets of health sector transformation plan II.





Objective of the Last Mile Project

■ The objective of the Last Mile Project as a proof-of-concept pilot in Jimma Zone before scale-up is:

"Improved availability of essential medicines in Jimma Zone health centers through optimized pharmaceutical supply chain management," which contributes to the progressive implementation of the health sector's five-year transformation strategic plan.





■ The two interrelated targeted outcomes are:

- 1) strengthened supply chain management systems in four woredas of the Jimma Zone through:
 - I. Trained and regularly mentored pharmacy staff who understand and apply the principles of basic stock management, medicine storage and ordering.
- 2) Simplified and digital reporting of relevant supply chain data and ordering of medicines in 14 facilities of two woredas in the Jimma Zone, which is reflected through:
 - I. A fully functional electronic logistics management information system (eLMIS) that is integrated with EPSA HCMIS and the regional health bureau dashboard.
 - II. Electronic data capture, using smartphones and the Medexis app, is in use.



Objectives of the Baseline assessment

General objective:

To conduct a baseline assessment with the aim of identifying current gaps and missing links that lead to stock outs and expirations, planning intervention action, and monitoring pharmaceutical supply chain management performance progress.

Specific objectives:

- To assess the availability status of tracer medicines at the pilot Health centers
- To assess the implementation status of LMIS tools (Bin-card, IFRR, HPMRR, eLMIS)
- To determine the RRF data quality dimensions submitted to EPSA by the health centers.
- To explore the barriers in improving the accessibility of medicines in the health centers



Scope of the assessment

- The current state of pharmaceutical supply chain management practices, storage practices, the logistics management information system (LMIS), and the status of essential drug availability in 29 health centers (HCs) in Seka Chekorsa, Sokuru, Mana and Dedo woredas in Jimma Zone.
- Woredas are selected through the consultation of Jimma Zonal Health department considering:
 - ✓ Similarity in source budget for Pharmaceutical procurement
 - ✓ Similarity in service delivery level (All of them are Health centers)
 - ✓ Similarity in LMIS implementation (all are Paper based LMIS implementing sites)
 - ✓ Similarity in source of Pharmaceuticals (EPSA Jimma Hub)





Assessment Approach and methodology

- Both Quantitative and qualitative approach were used.
- The baseline data was collected using a checklist designed in accordance with the project's objective, a national pharmaceutical supply chain management M & E tool, and essential tracer medicines included in the Oromia regional health information system and PBF quality checklist.
 - ✓ The checklist was completed through document reviews, stock inventory, and inspection of storage conditions.
- In-depth interviews were conducted with health care staff. As supply chain issues are technical in nature and respondents should be conversant with the operations, the key informants (KIs) were selected with consideration for their service experience and roles or positions in the facilities.
- \odot A focus group discussion with patients (8 10 patients per HC) and exit interviews with volunteer clients at facilities were performed.





Two teams were set up to undertake the data collection. Each team is composed of data collectors from Cordaid Jimma field office, Jimma ZHD, and EPSA Jimma branch. A one-day orientation on the data collection methods and procedures was provided to the data collection team by LMP coordinator.





- The data collection was conducted using preprinted data collection tools.
- The analysis was done based on descriptive statistics.
- The quantitative data was sorted and coded, then captured in Microsoft Excel 2016 and analysed using it.
- The data was summarized using charts and tables. For the qualitative part, quotation (putting the idea of the respondent as said) was used to present the data.



KPI parts:

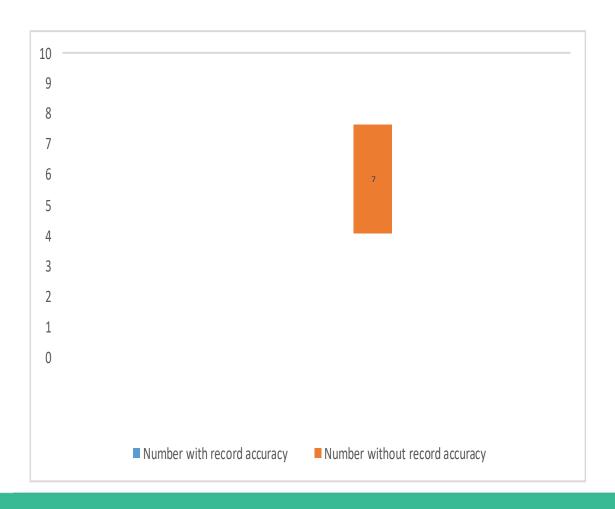
KPI 1:On time In Full (OTIF) deliveries from EPSA to health centers

The assessemt finding indicate that, None of the assessed HCs received orders in full, with most HCs having order fill rates of less than 35%.





KPI 2: % health centers with stock records matching physical record at monthly sample stock count.



The inventory accuracy was 31% when the most recent bin-card balance was compared to the physical count for selected products.





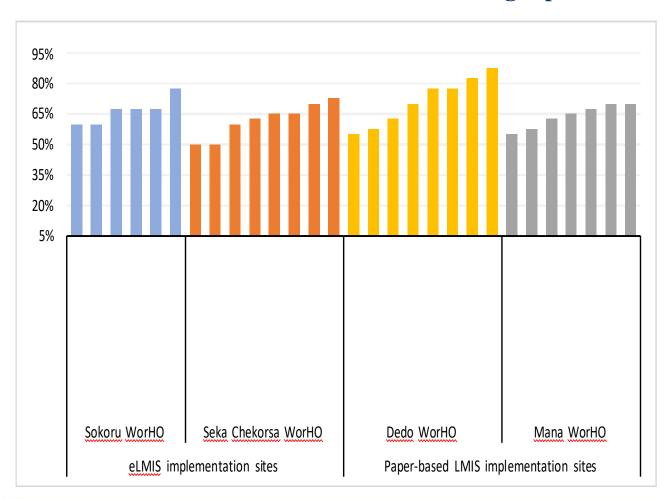
KPI 3: % Orders for submitted from health centers within the planned window for ordering.

TABLE

Only 34.5% of HCs send RRF to EPSA on time.



KPI 4: % Health centers with all target products in stock throughout the month (N = 40)



During the month preceding the survey, all HCs experienced a stockout of at least five essential medicines with an average of 65.9% tracer medicine availability.



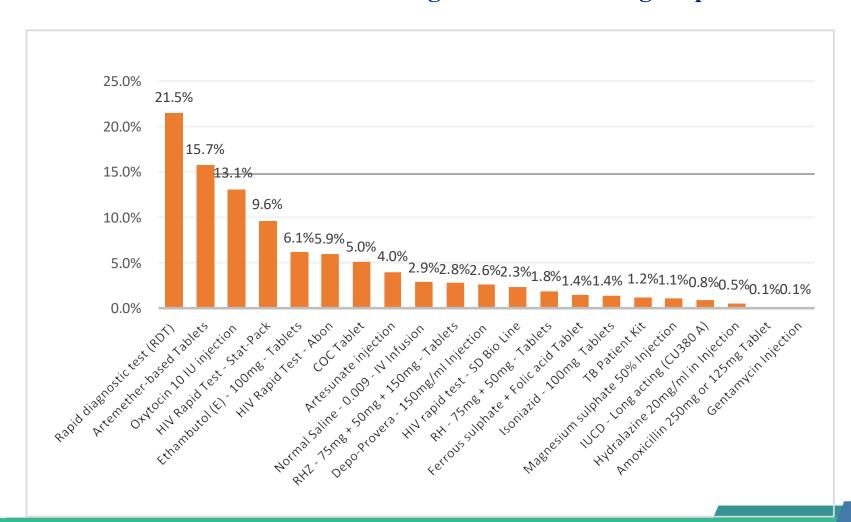


- **KPI 5:** Average % wastage of tracer drugs in a month
 - About 53% (21/40) of tracer medicines expired, totaling ETB 153,160.6 and resulting in a
 wastage rate of 2.4%.





KPI 6: Average % of tracer drugs expiries in a month

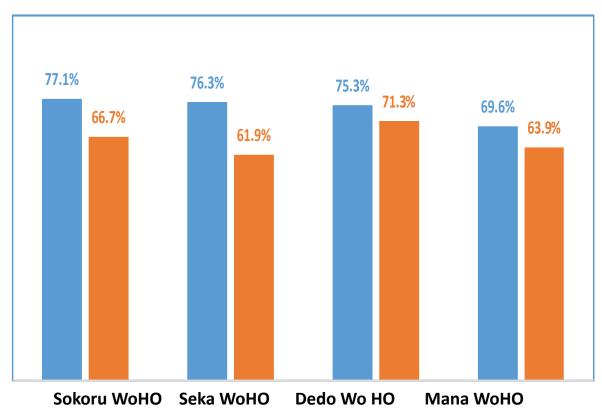


About 53% (21/40) of tracer medicines expired,
Oxytocin10 int. unit/ml
Injection accounted for 68% of total wastages in the HCs





KPI 7: Average % of tracer drugs in stock throughout the month



- Availability of TDs at the time of Survey
- Availability of TDs throughout the month

Despite health facilities' insufficient record and inventory accuracy in verifying product availability throughout the month preceding the assessment, this baseline found an average of 65.9% tracer medicine availability, which is far below the HSTP II targets (from 79.2% to 90%).





IPLS Implementation

- Logistics Management Information System Practices
- The availability and use of these standard tools are crucial supply chain indicators. At health centers, bin cards, the internal facility report and resupply form (IFRR), the Health Post Monthly Report and Resupply Form (HPMRR), and the Report and Requisition Form (RRF) [total n = 4] are used to record commodity transactions and report resupply amounts. In addition to these forms, standard operating procedures, and health post job aids were developed to assist professionals in managing their inventory.
- According to survey results, approximately 14% (4) of PHCUs (Buyo Kechema PHCU in Seka WorHO and Gera, Lalo, and Sheki PHCUs in Dedo WorHOs) have manual recording and reporting tools at the time of visit.





- Health centers are supposed to use the bin cards as a source of data when completing reports to higher levels. However, only four health centers (13.8%) in this survey used bin cards as a source of data while completing the report and requisition forms (RRFs): two from intervention woredas (Beke Gudo, Gebjiro HCs) and two from control woreda (Sheki, Gera HCs).
- In this survey, adherence to the schedule was evaluated by comparing the number of IFRRs reported by the major DUs (OPD dispensary, TB clinic, FP unit, MCH, and laboratory unit) against the number of reports expected considering their schedule.
- The percentage of health centers with at least 80% reporting rate (four out of the five major DUs considering their respective schedules) were considered to adhere to the schedule.
- However, only two health centers (6.9%) in this survey used IFRR to issue pharmaceuticals: one
 from intervention woreda (Beke Gudo) and another from control woreda (Gera).





- As a result, the implementation of IFRR was interrupted in most health centers surveyed, as well as no DUs used bin cards as a source of data while completing IFRR.
- Only four health centers (13.7%) resupply necessary items to health posts using the HPMRR: three health centers (10.3 %) from intervention woredas (Beke Gudo, Dabo Yaya, and Geta Beke − all from Seka Chekorsa WorHO) and one health center (3.4 %) from control woreda (Gera HC − Dedo WorHO). All reports were also unreliable as none of the current HPMRR reports' "Beginning Balance" matched the previous reports' "Ending Balance" at any of the health posts.





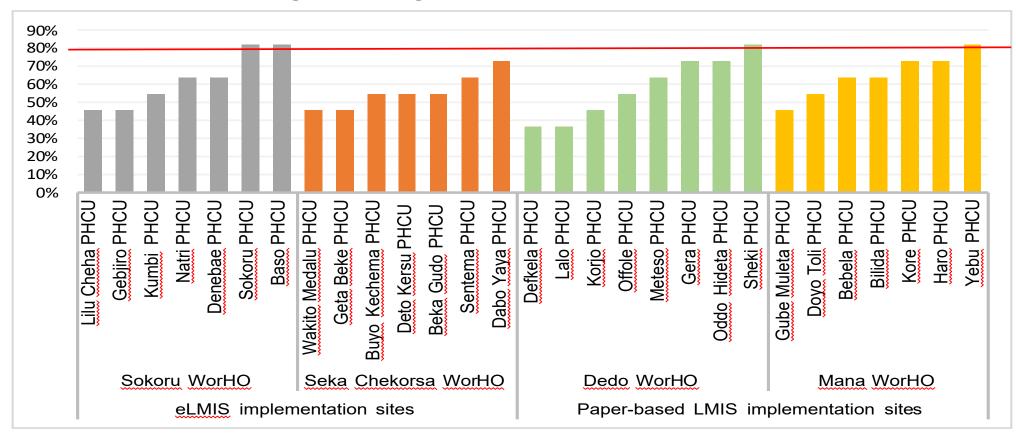
Storage practice

According to the results of this survey, 13.8 % (4) of health centers met more than 80 percent of the storage conditions (Fig. 6). Storage conditions continue to be a major challenge for IPLS, with 96.6 % of HCs lacking pallets or shelves, 41.6 % of HCs having insufficient storage space, 34.6 % of HCs having expired products in the store, and 51.7 % of HCs having a poor condition (no store cleaning schedule).





Percentage of Storage Conditions fulfilled at the PHCUs







The assessment indicated a 65.5% (38 pharmacy professionals available out of 58 expected staff) availability of pharmacy personnel in the health centers. Around 29% of pharmacy professionals were trained on the integrated pharmaceuticals logistics system (IPLS). Thus, as a part of the project, the staff in the health centers and at EPSA can be trained in person or in combination with e-learning in basic stock management.





Conclusion:

- There is currently a scarcity of pharmacists working in health centers, as well as substantial gaps in training. Pre-service commodities management training is not provided to non-pharmacy professionals. Ineffective stock management is a result of a shortage of trained professionals. A well-trained workforce is more familiar with the specifics of their profession and requires less or no supervision.
- A significant shortage of LMIS formats, non-usage and/or not updating bin cards, inaccurate, invalid, and incomplete RRFs, and flaws in storage conditions were identified as major challenges for IPLS implementation in the survey. This may have an impact on the flow of information as well as drug availability in health centers.





- An availability rate of 65.9 % for a basket of tracer medicines and order fill rates of less than 35% are concerning and show that more work is needed to improve the supply chain.
- © Cordaid (through PBF) has already made significant progress in improving access and equity of health care in the Jimma Zone.
- Indeed, according to LMP baseline findings, there is still a gap in product availability, recording and reporting, and inventory management.
- To tackle the identified gaps and further satisfy patients' needs, the last mile project will complement PBF in improving the availability of essential medicine through strengthening the supply chain management system through digitalization of LMIS and capacity building.





Recommendations:

- Based on the findings from this baseline, below are the key recommendations:
- Pharmacy personnel need to be trained in basic IPLS and DTC training in order to manage pharmaceuticals effectively
- Regular follow-up and monitoring of overall health center pharmaceutical supply chain management practices, including IPLS implementation, is required.
- The automation of LMIS recording and reporting would allow health centers' stock status information to be communicated to all stakeholders





THANKS !!!