Ethiopia’s experience on strengthening community health information systems, data quality and data use

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Southern Sun Mayfair Hotel, Nairobi, Kenya
Health system

- Specialized Hospitals (3.5 – 5.0 million)
- General Hospital (1.0 – 1.5 million)

**Urban**
- Health Centers (40,000)
- Primary Hospital (60,000 – 100,000)
- Health center (15,000 – 25,000)
- Health Post (3,000 – 5,000)

**Rural**
- Tertiary Level Health Care
- Secondary Level Health Care
- Primary Level Health Care
Over view of Health Management Information System (HMIS) of Ethiopia

• The HMIS has been rolled out to all public (included health posts) and selected private health facilities.

• Community Health Information System (CHIS) is designed to assist in the management functions of health programs including:
  – collects data on basic demographic statistics,
  – health service delivery and
  – utilization based on the health extension package in health posts.

• CHIS is part of the broader HMIS reforms, which is designed and implemented within the framework of the Health Extension Programme (HEP).

• CHIS is implemented mainly using a unified data collection tool called family folder (FF).
CHIS...

- CHIS works through creating of FF to each House Hold at kebele level.
- Family folders are files and folders assigned to
  - each household at the lowest administrative unit and
  - provides detailed information in the status RMNCH and other Health Extension Program.
- CHIS also provides a unique opportunity for accelerating the Birth registration efforts in the country.
- CHIS is currently rolling out to 77% of the health posts in the country.
Trend of rural CHIS implementation from 2013-2015 (in %)

- Agrarian:
  - 2013: 45
  - 2014: 72
  - 2015: 86

- Emerging:
  - 2013: 2
  - 2014: 9
  - 2015: 9

- Ethiopia:
  - 2013: 40
  - 2014: 65
  - 2015: 77
CHIS captures the following main information

Performance indicators at Health Post level -

- **Family Planning Coverage**:
- **Antenatal care coverage (ANC1 &4)**:
  - Total number of expected pregnancies is calculated as 3.7% of the total population
- **Deliveries attended by HEW**
  - \[
  \frac{\text{[number of deliveries attended by HEW} \times 100]}{\text{[total number of expected deliveries]}}
  \]
  - Total number of expected deliveries is calculated as 3.6% of the total population
- **Post natal Care Coverage** (1\text{st}day, 3\text{rd}day & 7\text{th} day):
- Community Maternal death
- Community early neonatal death
• Child immunization coverage, e.g. pentavalent 3rd dose coverage
  – [number of children received 3d dose of pentavalent vaccine before 1st birthday x 100] ÷ [total number of surviving infants]
  – Total number of surviving infants is calculated as 3.1% of total population
• Households with LLITN
  – [households in the kebele with LLITN available x 100] ÷ [total number of households in the kebele]
• Households with latrine facility
  – [households in the kebele with latrine available x 100] ÷ [total number of households in
... CHIS captures

ICCM services:
• Number of children with pneumonia treated.
• Number of children with diarrhea treated.
• Number of children with confirmed malaria cases treated.
• Number of fever cases tested for malaria.
ICCM/Global Fund indicators

- Number of HEWs trained on ICCM
- Number of children with pneumonia treated
- Number of children with diarrhea treated
- Proportion of suspected malaria cases that received a parasitological test
- Number of children with confirmed malaria cases treated
- Percentage of children with a fever who sought treatment from a facility/health provider the first 24 hours onset of fever (survey)
- Proportion of health facilities with no stock out of key commodities in the previous one month.
CHIS Reporting, Bottom up

- Health post
- Health centre/PHCU
- District Health Office
- Zonal Health Office
- RHB
- FMOH

Monthly
HMIS/e-HMIS

- eHMIS is currently implemented in more than 3,000 health care facilities and administrative levels.
  - eHMIS allows entry of data at different levels and shows both aggregate and disaggregate data for further analysis.
  - major aim of automating the HMIS to e-HMIS is to improve data quality:
    - Timeliness
    - Completeness
    - Accuracy of reporting and
    - Encourage Data Use for decision making
CHIS

• Digitalize the family folder is on plan.

• Global Fund/ HSS allocated resources US$ 10,367,826
  – Tablet computers with solar chargers and operational fund for training to digitalize the FF for more than 16,000 health posts.
Complementary source of data mainly during translation period

Objective: To track progress, document and share data for decision making proposed by the National TWG and FMOH requested UNICEF to provide TA for management.

Indicators: about 20 indicators, coverage (coordination, HR, Supply and logistics, service delivery- quality, coverage and community).

Tools: Registers, supervision checklists, and Data extraction forms.

Data source:
- Supportive supervision (Observation and interview)
- Performance review and clinical mentoring at PHCU
- Operational researches
- Evaluation surveys

Data Use: Information regularly shared to national TWG, regional, zonal, woreda and PHCU to inform decision and refine plans.
Data quality

• Use LQAS, performance monitoring team (PMT) and ISS,

• Lot Quality Assurance Sampling (LQAS) is a technique useful to assess whether the desired level (80%) of quality has been achieved or not.

• Data quality is an issue and put as transformation agenda “Information Revolution”.
Challenge

- Though ICCM register is the only register permitted at health post level, some health posts use other registers.
- Completeness and timeliness problems.
- Lack of updating FF data at health post;
- There is no clear guide on how to manage data at health post level in pastoral and semi-pastoral areas.
- Some HEWs are not performing LQAS as per the standard;
- Shortage and high turnover of trained staffs in e-HMIS;
- Low coverage of electric power supply and frequent interruption for effective implementation of e-HMIS.
- Poor internet connectivity for e-HMIS implementation.
Lessons learned

✓ Unified the data
✓ Easy to up dating the kebele profile/ Health post
✓ Make easy to find card of the family and time saving tool
✓ Assist to in organizing of the report,
✓ Assist to get in detail information of the community.
Opportunity

• Political commitment is in place

• Partners are committed to support in technical and financial (GF, UNICEF, WHO, USAID and others).

• Other governmental and non-governmental sectors are using as a resources data, like vital events registration agency, agriculture, administration, etc…
Way forward

• Roll out CHIS across all health posts in the country.

• Introduce and scale up digitalizing CHIS for timely and quality data reporting & etc....

• Introduce iCCM in RMNCH score card monitoring.

• Improve utilization of data at all level for decision making.
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Thank you!

Lalibela, Ethiopia

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Thank you!

Aksum, Ethiopia