

# IMMUNIZATION DATA IMPROVEMENT PLAN

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Better Immunization Data Learning Network Meeting Lusaka, Zambia



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# **Background**



- Data Quality Self-Assessment (DQSA) conducted August 2013
- Data Improvement Team (DIT) strategy was developed to implement recommendations from the DQSA by the Uganda Ministry of Health (Resource Center and UNEPI) with support from partners WHO, UNICEF, CDC and GAVI
- The DIT strategy was launched in 2014 using a cascading approach and rolled out one region at a time
- **Key Objectives:** Develop capacity of district and health facility level staff to improve quality and use of routine immunization data
  - Build sustainability, ownership and understanding of the importance of immunization data at all levels
  - Develop specific, targeted recommendations that are actionable and result in sustainable improvement







# **DIT Team Composition**



- Members of Data Improvement Teams are deployed in pairs and include district and Health Sub-District Staff (District Biostatistician, District Surveillance Officer, District EPI Focal Person, and in some districts also sub-district staff)
- One officer from the Makerere University School of Public Health (MSPH) or Health Informatics (MSHI) is assigned as a member of the Data Improvement Team in each district





# **DIT Strategic Approach**





Funded under the Gavi Partnership engagement Framework (PEF) through CDC/AFENET



**Closing in April 2020** 

Gavi The Vaccine Alliance





	Round 1 (2014-2016)	Round 2 (2016 to present)
No. of regions	17	10 /17 (as of April 2019)
No. of districts	116	89/132
No. of health facilities	3443 (89% of all immunizing facilities)	2628 (97% of all immunizing facilities)
No. of DITs trained and deployed	438	430
Average time spend on data collection at HF	1 hour 5 minutes	1 hour 20 minutes
Average time spend on mentorship at HF	1 hour 37 minutes	1 hour 37 minutes







# Accomplishments (Knowledge and practice – District level) (1)



Selected Key Indicator	Indicator definition
Proportion of districts with paper copies of the HMIS105 forms archived and easily accessible	<ul> <li>The district must:</li> <li>1) Have monthly HMIS 105 forms safely filed e.g. in a box file, and the file must clearly be labeled</li> <li>2) HMIS 105 forms in the files should be arranged in chronological order, with the most recent month's form placed at the top</li> <li>3) HMIS 105 forms should stored in a safe place, e.g. a storage shelf or filing cabinet, and must be easy to retrieve when required</li> </ul>

Round 1 (2014- 2016)	Round 2 (2016 to present)	Potential reasons/factors contributing to the change/observation
62/81 (77%)	74/89 (83%)	<ul> <li>Inadequate resources to purchase files for storage of forms</li> <li>Inadequate attitude towards record keeping</li> <li>Lack of knowledge by newly recruited staff on standard archiving practices</li> <li>Inadequate external and internal supportive supervision and follow up at all levels</li> <li>Low motivation to routinely conduct standard data archiving practices</li> </ul>







# Accomplishments (Knowledge and practice – District level) (2)



Selected Key Indicator	Indicator definition
Proportion of districts with documented evidence that routine immunization data is used to inform EPI activities	<ul> <li>The district must:</li> <li>1) Have at lease ONE of the following examples of analyzed data: RED Categorization, immunization monitoring chart, catchment area maps completed following micro planning etc.</li> <li>2) Have at least ONE example of action taken based on analyzed facility data (e.g. monthly meeting minute, other documentation). Probe for explanation of how analyzed data use for action</li> </ul>

Round 1 (2014- 2016)	Round 2 (2016 to present)	Potential reasons/factors contributing to the change/observation
58/81 (73%)	72/89 (81%)	<ul> <li>Inadequate knowledge on EPI data analysis and use</li> <li>Inadequate attitude/apathy towards data analysis and use</li> <li>Insufficient feedback from supervisors on data submitted to the next reporting level</li> <li>Inadequate external and internal supportive supervision and follow up at all levels</li> </ul>







# Accomplishments (Knowledge and practice – District level) (3)



Selected Key Indicator	Indicator definition
Proportion of districts with Penta 3 coverage charted, displayed and up-to-date (Round 2 only)	<ul> <li>The district must:</li> <li>1) Have an EPI monitoring chart showing evidence of analyzed and plotted EPI data for a specified antigen</li> <li>2) Have the monitoring chart plotted with monthly data up to the most recent HMIS 105 reporting month</li> </ul>

Round 1 (2014- 2016)	Round 2 (2016 to present)	Potential reasons/factors contributing to the change/observation
N/A	25/89 (28%)	<ul> <li>Inadequate knowledge by newly recruited staff on EPI data analysis and use</li> <li>Dependency on district Biostatistician to conduct all analysis, including EPI performance monitoring</li> <li>Inadequate attitude/indifference towards data analysis and use</li> <li>Inadequate external and internal supportive supervision and follow up at all levels</li> <li>Irregular feedback from supervisors on analyzed data</li> <li>District management not allowing charts to be displayed on walls</li> </ul>







# Accomplishments (Knowledge and practice – Health Facility) (4)



#### 10 Regions Overall



NTSF









# Accomplishments (Knowledge and practice – Health Facility) (5)



Indicator: Standardized Immunization Tools

#### **Definition**:

Standard immunization tools refer to EPI tools that have been designed, developed and issued by the Ministry of Health, as described in the MoH HMIS health facility procedure manual, and include:

- Immunization Child Register (HMIS Form 073)
- Child Tally Sheet (HMIS Form 076)
- Health Unit Monthly Report (HMIS 105)

In addition, vaccine stock management was assessed by reviewing the MoH issued Vaccine and Injection Materials Control Book (VIMCB) at district and health facility level

### <u>10 Regions Overall</u>



#### % HFs with standardized immunization tools







# Accomplishments (Knowledge and practice – Health Facility) (6)







### % HFs charting and displaying Penta 3 coverage



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# Accomplishments (Knowledge and practice – Health Facility) (7)



10 Regions Overall

By Region



#### % of HF using RI data for action



% of immunizng HFs



# Accomplishments (Immunization Data Quality) – (1) <u>10 Regions Overall (for one assessment month)</u>



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### Congruence of Penta3 doses between different recording & reporting sources vs. DHIS2



forms. However, the use of child register is still low.

# Accomplishments (Immunization Data Quality) – (2) 10 Regions Overall (for one assessment month)

#### Congruence of MR doses between different recording & reporting sources vs. DHIS2



Data agreement for measles doses in round 2 improved, especially between DHIS and the HMIS105 forms. However, the use of child register is still very low.





## **Implementation Challenges (1)**



# Governance/policy

- Staffing norms/High work load at large facilities making it difficult to document all children
- ✓ Government's push for integrated supportive supervision
- ✓ Limited human resources for data management and use at national level (DHI & VID)
- Administrative/logistical
  - Limited provision for continued supervision by District Health Team
  - ✓ Limited provision for archiving for records management under routine support to districts and health facilities
  - Unavailability of updated EPI HMIS tools at the facility levels



Too many partners providing different facilitation



### **Implementation Challenges (2)**



## Technical



- Limited background knowledge on data analysis and use for action and health worker poor attitude towards data
- ✓ Unreliable denominators
- Low awareness on EPI metrics by non health stakeholders at district and lower levels







### **Lessons learned (1)**



- Awareness by non health leaders drives their passion and accountability hence demand for data quality and use improvement
- District level staff are newly trained and need constant orientation
  - 64% EPI Focal Persons are newly trained
  - 51% Biostatisticians are newly trained
  - 45% Surveillance Focal Persons are newly trained







### **Lessons learned (2)**



- Engagement of more health workers from HSD level as supervisors increases interest and passion for capacity building in their HSDs
- System change on data quality is long term and requires patience; therefore a multi year improvement plan
- There is general infrequent supportive supervision on data management and data quality









 Conduct data desk review of immunization data in August 2019

Next Steps (1)

- Obtain approval of immunization data improvement plan 2019-2024 (October 2019)
- Complete implementation of second phase of DIT (April 2020)
- Facilitate Districts with funds to conduct mentorship on data use with clear performance metrics August 2019





## Next Steps (2)



- Develop and implement the rollout plan for WHO data quality apps with support from HISP Uganda
- Start implementation of the roll out plan for WHO apps
- Procure and distribute immunization monitoring charts and files for archiving for health facilities by December 2019
- Procure and distribute new EPI HMIS tools to health facilities October 2019
- Create awareness among non-health stakeholders on EPI Metrics (Performance and data quality) – HSS2 Jan-Mar 2020







# ANNEX





# **FINDINGS-2018**



- Child Register: not user friendly especially updating and outreaches; this has led to use of tally sheets as primary data tools
- Supply and use of HMIS tools: erratic supplies, frequent stock outs/overstocking.
- Lack of catchment area and target population
- Micro plans: lack of development and use of micro plans including updating them
- EPI data quality control: lack of regular activities of quality improvement teams
- Under staffing vis-à-vis the increased and increasing workload including HMIS.
- Lack of EPI data quality checks and discussion of EPI in data cleaning exercises
- Lack of a data element description manual

# FINDINGS-2018 – c'td



- Multiple versions of HMIS tools: printing of HMIS tools by IPs leading to multiple versions
- Lack of reporting by PFP and PNFP facilities and registration on DHI2 platform
- Limited internet/telephone connectivity and coverage especially in rural areas
- Poor and delayed equipment maintenance and repair and safety of solar panels increased
- Inactive Data Improvement Teams (DITs)
- Lack of vigilance EPI focal persons to push the EPI agenda including the demand for quality data and reports



### **Objective 1. To ensure data governance and system** integration

Ensure harmonisation of EPI tools within DHIS – Continuous

engagement with HMIS department

- Develop and disseminate manuals, guidelines and tools for EPI data quality improvement
- Establish a functional Data Improvement team
- Active participation to Health Data Collaborative
- Advocacy for systematic reporting of EPI data by the private sector



**Objective 2. To increase quality and use of data in decision** making

- Enhance capacity for quality, data analysis and use at all levels (WHO standard data analysis and use modules EPI, HIV, MAL, TB, RMNCAH, etc.., Partnership with institutions MUSPH)
- Conduct regular data quality review at all levels
- Develop strategies to improve target population estimation
- Promote use of dashboard at all levels
- Conduct annual data desk review and develop annual DIP
- Regular monitoring of the implementation of the annual DIP (quarterly DIT meeting)



**Objective 3. To Strengthen the National HMIS** 

- Expand the server capacity for rapid DHIS2 processes
- Advocate for sufficient number of qualified data personnel at all levels
- Advocate for diversification for internet providers to ensure larger access
- Establish a complete Health Facilities Master List-
- Provide sufficient quantity of HMIS tools to all required structure
- Expand the ongoing work on DHIS2 (Apps, dashboard...



**Objective 4. To improve financial sustainability for data agenda** 

- Advocate for increased commitment and effective financing for Data Improvement agenda by the national government
- Mobilize adequate resources for the implementation of the DIP from HSS (Budget line allocation and effective release)
- Expand resource mobilization for data agenda across the other partners
- Coordination of partner support to avoid duplication of effort
- Update the cMYP with the strategic Data Improvement Activities
- Update the Annual EPI action plan with the data activities from the Annual DIP