Measurement Matters!
Improving Routine Reproductive, Maternal, Newborn, Child, and Adolescent Health Data for Better Outcomes

Barbara Rawlins
Monitoring and Evaluation Team Lead, MCSP
Today we would like to share....

• Recent advances in globally recommended routine reproductive, maternal, newborn, child and adolescent health (RMNCAH) metrics and how these can translate to the country level

• Promising practices to improve the content and functioning of national health information systems (HISs) to better align with RMNCAH standards and guidelines

• Strategies and results of promoting analysis, visualization and use of data at the point of care at facility and community levels

• Lessons learned regarding how to strengthen routine RMNCAH data for action and recommendations for the future
<table>
<thead>
<tr>
<th>Cascade</th>
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<th>Percentage</th>
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<td>Capacity</td>
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Evolution of Globally Recommended Routine RMNCAH Metrics

Measurement Matters! Improving Routine Reproductive, Maternal, Newborn and Child and Adolescent Health Data for Better Outcomes Webinar

Allisyn Moran
World Health Organization, Geneva
Data needs are increasing . . .

• Countries face increasing demands for data e.g.
  - National / subnational strategies and plans
  - Programme management
  - Partner needs
  - Regional / Global indicators: SDGs, UHC

• Types of data needed:
  - Population
  - Births and deaths
  - Disease prevalence / incidence
  - Health systems performance
  - Environmental issues, etc…
## Sources of data

<table>
<thead>
<tr>
<th>Population-level data</th>
<th>Birth and death data</th>
<th>Health service data</th>
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</thead>
<tbody>
<tr>
<td>Population census</td>
<td>CRVS</td>
<td>Routine facility reporting systems (aggregate/ patient-based)</td>
</tr>
<tr>
<td>Population-based surveys</td>
<td>Hospital death registration</td>
<td>Health facility surveys</td>
</tr>
<tr>
<td>Surveillance systems</td>
<td>Community death reporting</td>
<td>Administrative systems (finance, workforce, LMIS)</td>
</tr>
</tbody>
</table>

**Special studies**
‘Comprehensive’ Health Information System:
Not just facility service data!!

Source: UNICEF, Adapted from M Landry WHO SEARO
What is meant by routine health facility data?

Routine health facility data are collected at clinics, hospitals, and other health service points (public; private; community-based) at the time that services are provided. These data are processed at the health facility and summary reports are sent to the appropriate administrative authority.

The system for collection, management and reporting on these routine data is sometimes referred to as the Health Management Information System (HMIS).
Strengthening Health Facility & Community data

Health Data Collaborative working group (WHO/Global Fund/University of Oslo/USAID ++)

Objectives

1. **Address critical gaps/needs to** analyse and use data for action

2. **Catalyse joint support** to countries for a comprehensive facility data system that responds to country and programmatic needs

3. Identify ways **that investments can be better aligned** to ensure scale-able sustainable systems

**Global deliverables**

- Package of data standards & tools (indicators, metadata, data quality, ICD coding, master facility lists, analytical outputs, template forms)
- A comprehensive curriculum on analysis & use of data
- A standard Health App for DHIS2

**Country deliverables**

- Alignment of financial and technical support to scale up and strengthen facility systems
- 6 country demonstration and learning (Athens kick off)
- Scale up to other countries (2018-2019)
Facility data standards

Reference health data standards based on programmatic standards

- Core facility indicators
- Guidance on master facility lists
- Cause of death reporting (ICD) based on Start up Mortality List
- Standard reporting frameworks (e.g. TB)
- Harmonized data quality tools
- Guidance on analysis and use of data
  - National and district planning modules
  - Programme specific (HIV, TB, malaria, immunization) and RMNCAH
  - NCDS, NTDs in progress
  - Nutrition, Birth and death registration in process
- A Health App menu for DHIS, based on international reference standards
- Future priorities:
  - Standard registers & reporting forms
Module includes:

- Core indicators
- Proposed methods for assessing data quality
- Suggested data visualizations
- Guidance on data use
- Reference documentation

Each module includes a limited number of core indicators and guidance on analysis and data visualization for these indicators.
Process to develop RMNCAH HMIS Toolkit

Reviewed global initiatives:
- EPMM/ENAP, PPFP TWG
- Child Health Task Force
- QED Core List
- MoNITOR, CHAT, GAMA

Reviewed what data elements exist in HMIS systems:
- MCSP review – 24 countries
- Other research initiatives, DHIS2
- Other modules

Feedback from regional and country workshops:
- HMIS workshop in Nepal, October 2017
- Saving Newborn Lives, Indonesia, November 2017
- QED Network, Tanzania, December 2017
- MoNITOR, CHAT, GAMA
- Tanzania, Uganda, Zimbabwe country workshops, 2018
Core Indicators

Maternal and Newborn:
- Antenatal client 1st visit before 12 weeks gestation
- Antenatal client syphilis screening
- Antenatal client haemoglobin measured
- Prevention of mother-to-child transmission (PMTCT) - testing coverage rate
- Intermittent preventive therapy for malaria during pregnancy (IPTp)
- Iron supplementation for pregnant women
- Immediate uterotonic after birth to prevent PPH
- Delivery type
- Birth notification
- Babies with documented birthweight
- Low-birth weight
- Newborns breastfed within one hour of birth
- Postnatal care visit for women
- Postnatal care visit for newborns

Sexual and Reproductive Health:
- Contraceptive first time user
- Postpartum family planning acceptor

Child and young adolescent:
- Antibiotic treatment for pneumonia
- Diarrhea treatment
- Malaria treatment
- Vitamin A coverage
- Childhood TB
- Malnutrition

Facility-based Mortality:
- Maternal deaths in health facilities
- Newborn deaths in health facilities
- Child deaths in health facilities
- Stillbirth rate in health facilities
- Maternal deaths reviewed
- Perinatal deaths reviewed
Other indicators

- Suggested indicators if individual level data are available
  - ANC4+, ANC8+, Blood pressure measurement during third trimester, Syphilis treatment

- Suggested indicators using population-based denominators (at higher levels of health system)
  - CYP, ANC4+, ANC8+, TT2+, C-section rate, institutional delivery, immunization coverage

- Additional indicators (for more advanced health systems)
  - FGM, abortion care, PPFP counselling, PE/E treatment, Newborns on KMC, Newborns resuscitated, Newborns treated for sepsis, Pre-term birth
Next Steps

- Working Draft for Disseminating at country level
  - Country level workshops
  - Regional workshops
  - Linking with other partners
- Plans to update in September 2019
  - Child indicators after CHAT meeting June 2019
  - Strengthening adolescent component
- Key challenges
  - Standardizing data elements
  - Encouraging data use
THANKS!
Questions?
Improving the RMNCAH Content of National Health Management Information Systems (HMISs)

Barbara Rawlins, Monitoring and Evaluation Team Lead, MCSP
Betuel Sigauque, Technical Director, MCSP-Mozambique
The Problem

• To further improve reproductive, maternal, newborn, child and adolescent health (RMNCAH) outcomes, countries need to identify and apply new methodologically and robust routine indicators that can be used to drive quality improvement efforts and monitor progress.

• Achieving consensus on the most meaningful RMNCAH indicators and how best to integrate them into national health information systems remains a challenge.
Global Context

• WHO and global partners have endorsed a number of new RMNCAH indicators (Every Newborn Action Plan; Ending Preventable Maternal Mortality; Quality, Equity, Dignity; 100 Core Health indicators)

• These require further study or testing for feasibility, acceptability, and usefulness to countries

• Following testing, advocacy may be needed for inclusion into HMIS
The Approach: Field-Testing New RMNCAH Indicators and Measurement of Key Domains

Acceptability
Extent to which those who are being assessed and those responsible for collecting and using the indicator find it acceptable

Validity
The extent to which the indicator measures what it is supposed to measure

Feasibility
The extent to which the indicator can be collected, calculated and used for clinical care or service management within existing health information system structures, health facilities or population-based survey programs

Relevance and usefulness
The extent to which the indicator is relevant and useful to those who are collecting it and those with whom the information is shared

Reliability
Degree of consistency of the data across sites and individuals
How were the results intended to be used?

• **Country level**: To understand which new data elements/indicators the MOH may want to incorporate into national HMIS or health facility surveys to assist them with site-level QI and/or monitoring subnational or national progress.

• **Broader level**: To contribute to wider understanding of which RMNCAH indicators can practically be applied across countries for global and national monitoring and some of the associated challenges.
Three Country Examples of Indicator Testing

<table>
<thead>
<tr>
<th>Madagascar</th>
<th>Nigeria</th>
<th>Mozambique</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 indicators</td>
<td>11 indicators</td>
<td>21 CH indicators</td>
</tr>
</tbody>
</table>
| • Newborn resuscitation  
  • Postpartum family planning  
  • Uterotonic immediately after birth of baby | • Antenatal care  
  • Labor and delivery care  
  • Management of maternal and newborn complications  
  • Postpartum family planning  
  • Sick child care | • Sick child care (#12) and  
  • Well child visits (#9) |
The Problem in Madagascar and Nigeria

• Lack of routine indicators on the quality and content of routine labor and delivery care, management of birth asphyxia, and postnatal care at health facilities prior to discharge after birth - that could be used to guide quality improvement efforts and measure progress
## The Process in Madagascar and Nigeria

### Step 1
Selecting indicators and deciding on collection process

- Select indicators for testing with MOH and identify geographical areas
- Develop/adapt required formats for data collection
- Define the numerator, denominator, and data source

### Step 2
Testing and gathering feedback

- Identify with MOH the target health facilities
- Orient providers to data collection, visualization, analysis and use. Provide supportive supervision
- Conduct interviews with providers and district and regional managers on feasibility, acceptability, and usefulness of indicators

### Step 3
Revising HMIS and rolling out changes

- Share lessons learned and advocate for changes to HMIS at national revision meetings
- National scale-up, including changes in forms and other supporting materials

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Photo Credit: MCHIP

Photo Credit: Kate Holt/MCSP
Results

• Madagascar:
  • Both providers (n=51) and district/regional (n=9) staff interviewed found the three tested indicators to be useful and feasible to collect.
  • However, they said greater efforts should be made to consistently calculate and use the data at all levels in order to improve care for beneficiaries.

• Nigeria:
  • Both providers (n=24) and district officials (n=15) interviewed in Kogi and Ebonyi states found most of the tested indicators useful and feasible to collect.
  • They also said they should be captured through official registers and additional guidelines on collection and calculation should be provided.

A provider in Madagascar noted, “The data on newborn resuscitation is important because when we see bad results, we can study the reasons for them and improve them”.

A provider in Nigeria noted that feasibility of capturing the PPFP indicators will improve “if we can make it part of the L&D register”.
Success Following Indicator Testing: Indicators Added to National HMIS

### Madagascar
- # and % of women who delivered at the health facility who **received a uterotonic** immediately after the birth of the baby
- # and % of newborns not breathing or crying after birth who were **successfully resuscitated**
- # and % of women who delivered at the health facility and **initiated a modern FP method** prior to discharge

### Nigeria
- # and % of women who delivered at the health facility who **received a uterotonic** immediately after the birth of the baby
- # and % of newborns not breathing or crying after birth who were **successfully resuscitated**
- # and % of women accepting specific **postpartum family planning methods** prior to discharge
- # and % of newborns with **Chlorhexidine applied to the umbilical cord** immediately after birth
The Problem in Mozambique

- Lack of standardized tools for routine data collection in primary health centers and hospitals for integrated management of childhood illness
- Some routine child health and illness data were collected in parallel data collection tools
- Data collection, reporting, and use of routine child health data in general needed improvement

District and MCHIP personnel discussing data with health providers at a health facility in Mozambique
Child Health Registers Development & Implementation Process

- Redesign child health registers with MCSP support
- Child health register piloted in target MCSP provinces
- Printing of child health registers, training, and child health indicators in DHIS2
- Full implementation of the new register

2016 2017 2018 2019
MCSP supported MOH to pilot test new child health indicators in new facility registers

- Pilot start: Jan 2017
- Locations: 5 provinces (Nampula, Zambezia, Sofala, Inhambane, Maputo)
  - Nampula and Sofala provinces supported by MCSP
  - One rural and one urban health facility per province identified for testing
- Total: 10 health facilities
Child Health Register and Selected Indicators

- Nutritional status indicators among children under five:
  - Low birth weight rate
  - Exclusive breastfeeding < 6m
  - Vitamin A supplementation
  - Wasting
- % of cases with diarrhea, pneumonia, or malaria treated
- % of cases with diarrhea, pneumonia, or malaria referred to a hospital
- % of cases with diarrhea, pneumonia, or malaria referred that received pre-referral treatment
Data collection and supportive supervision at health facilities

MOH and MCSP during joint supportive supervision for child health registers in Anchilo health Centre, Nampula.

Photo credit: Patricia Perres
Data Flow

**Community Health Workers and Traditional Birth Attendants**
- Complete daily register
- Identify “health issues” and inform the health facility
- Monthly report of data to health facility

**Health facilities**
- Complete daily register
- Data Review Days to analyze the data quality, chart data and analyze trends
- Monthly report of data to district

**District Health Directorate**
- Monthly summary report of health facility data entered into SISM-A
- Monthly Data Review Days to analyze the data quality, chart data and analyze trends
- Data for decision timely informed decisions
- Feedback to health facilities on data quality and completeness

**Provincial Health Directorate**
- Review health facility/district SISM-A data
- Quarterly Data Review Days – to analyze the quality of data, analyze trends, and chart data
- Take timely informed decisions
- Give feedback to Districts and Health Facilities
- Correct data, as needed, and report monthly to Ministry of Health

**Ministry of Health**
- Review health facility, district, and provincial SISM-A data
- Quarterly Data Review Days to analyze the quality of data, analyze trends, and chart data
- Give feedback to provinces and, when necessary, to districts and health facilities
- Take timely informed decisions

**Data Flow**
- Paper (register) reports to district level
- Electronic SISM-A reports (DHIS2)

Planned roll out of UpScale via Community Health Workers – community data to DHIS2
Sample of DHIS2 January 2019 data

<table>
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<tr>
<th>Item</th>
<th>PF</th>
<th>BM</th>
<th>TOTAL</th>
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<tr>
<td>Total Masculinos</td>
<td>227495</td>
<td>4254</td>
<td>231749</td>
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<tr>
<td>Total Femininos</td>
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<td>86377</td>
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<td>38670</td>
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<td>Crescimento Insuficiente</td>
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## Select national child health indicators from DHIS2

<table>
<thead>
<tr>
<th>CH Selected Indicators</th>
<th>Total Observed</th>
<th>Cases</th>
<th>Percent</th>
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<tbody>
<tr>
<td>Pneumonia cases treated with antibiotics</td>
<td>31,925</td>
<td>28,878</td>
<td>90%</td>
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<tr>
<td>Diarrhea cases treated with oral rehydration salts and zinc</td>
<td>19,914</td>
<td>12,196</td>
<td>61%</td>
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<tr>
<td>Diarrhea cases treated with only oral rehydration salts</td>
<td>19,914</td>
<td>6,688</td>
<td>34%</td>
</tr>
<tr>
<td>Malaria cases (confirmed) and treated</td>
<td>119,360</td>
<td>116,883</td>
<td>98%</td>
</tr>
<tr>
<td>HIV positive among unknown HIV status cases</td>
<td>46,779</td>
<td>2,539</td>
<td>5%</td>
</tr>
<tr>
<td>Children under 5 with acute malnutrition</td>
<td>155,523</td>
<td>3,223</td>
<td>2%</td>
</tr>
</tbody>
</table>

Completeness: 91% (10 provinces out of 11) in January 2019
Lessons Learned in Mozambique

• It is important to incorporate key data elements and indicators in the national HMIS to ensure that:
  • Revised policies, strategies, and guideline revisions are evidence-based
  • Interventions are properly monitored and documented to support an informed and timely process for scale-up

• Improving data quality requires an intensive process to:
  • Conduct regular supportive supervision at health facilities
  • Ensure timely monthly reporting and meetings to discuss data at district levels
  • Conduct data validation/quality assurance exercises
Overall Conclusions and Lessons Learned

• Strengthening the national HMIS instead of creating parallel reporting systems is a good investment for sustainability

• Pilot testing of new registers and indicators on a small scale is a necessary precursor to advocating for changes to national HMIS

• Documenting and sharing provider and district manager perspectives on the usefulness and feasibility of the indicators tested during national HMIS revision meetings is helpful for advocacy and final decision making

• Providers need appropriate orientation to new indicators and follow-up supportive supervision
Strengthening the Functioning of Health Information Systems (HIS)

Derek Kunaka, Senior HIS Advisor/Country Director South Africa, MEASURE Evaluation

Kate Gilroy, Senior Technical Advisor, Child Health and Measurement, Monitoring, Evaluation and Learning, MCSP

Photo credit: Karen Kasmauskii/MCSP. Wandi Village, Nigeria 2018
Why HIS Strengthening?

• National HIS are complex and fragmented
• Leadership, governance, and institutionalized management systems are dependencies for data collection and reporting
• High-quality data should be available and used to make decisions to improve the health system and RMNCAH outcomes
• Special focus is moving to Community Health Information Systems (CHIS) within the overall HIS
MEASURE Evaluation Example: Madagascar

- Support the transition of Access-based health information software to a web-based portal that communicates with DHIS 2

- Support development of an HIS strengthening joint action plan
- Support creation of a technical working group to standardize national data quality assurance practices

- Implement cascade trainings for central, regional, and district staff on use of the data collection platform and data quality assurance

- Conduct a national HIS assessment to inform planning for HIS strengthening
- Create a data-quality assurance protocol and supervision tools

- Support the DLP to produce an ongoing monthly malaria bulletin

Improved stakeholder coordination, along with the development of standardized protocols for data analysis, presentation, and review, will improve availability of high-quality data and lead to better programmatic decisions, especially in the face of disease outbreaks.
MCSP
Example: Namibia

• Revitalize the Technical Working Group under leadership of Ministry of Health and Social Services (MOHSS) Health Information and Research Directorate

• Build Master Facility List

• Assist MOHSS to develop Health Extension Program Indicator Definitions Manual

• Support MOHSS to develop Health Extension Program recording and reporting forms

• Assist MOHSS to develop HEP Data Management Procedures Manual

• Develop Data Quality Standard Operating Procedures for the National HIS

• Improved stakeholder coordination and scale-up of the national CHIS

• Built capacity of Health Extension Workers in data collection, reporting and use.

• Integrated Health Extension Program CHIS into national HIS (DHIS2)
MCSP Example:
Tanzania

- Conceptualized eHealth architecture for the health sector
- Initiated a technical working group on Enterprise Architecture to guide design and implementation of digitization initiatives
- Assist MOH in improving data visualization of hospital data on length of stay, services provided, revenue collected, death by cause.
- Assist MOH adopt data standards
- Electronic data exchange from hospitals for MOH, MFR to other systems, eLMIS and Vaccine Management Information System to DHIS2
- Design and implement the Health Information Mediator
- Build a national Vaccine Management Information System
- Support rollout of Integrated Disease Surveillance and Response
- Health Information Mediator supports data exchange between 12 systems and rapidly increasing (including eLMIS to DHIS2; facility updates from MFR to DHIS2 and eLMIS)
- Built capacity of MOH staff in data exchange
- Improved data systems for immunization
- Developed an integration design of Integrated Disease Surveillance and Response with National HMIS
Community Health Information System (CHIS) Strengthening

Global progress

• Countries moving from fragmented CHIS supported by development partners to national-level CHIS

• Global work to support CHIS strengthening, e.g.
  • Health Data Collaborative community data group
  • DHIS2 CHIS guidelines

Much more to do

• CHIS are “younger” than overall HMIS and functioning is usually weaker

• Countries at different levels of CHIS development require diverse types of support across the model dimensions

CHIS Strengthening Components

**Enabling Environment:**
- System design
- Leadership and governance
- System management

**Information Generation:**
- Data sources
- Data management
- Information products & dissemination

**System Performance:**
- Data quality
- Data use

**Human Element:**
- Capacity building
- Supportive supervision
- Mentoring
- Harmonized reporting
- Motivation

**Stakeholders:**
- National government
- Local government
- Facility staff
- CSOs
- CBOs/NGOs
- CHWs
- Households
- Individuals

**Contextual Factors**
CHIS Strengthening: Nigeria

Designing systems with users in mind in Nigeria

MCSP worked with the Federal MOH (FMOH) and stakeholders to pilot test FMOH national CHIS tools and proposed data flows among Patent and Proprietary Medicine Vendors (PPMVs) trained in integrated Community Case Management (iCCM).

• Feedback was given to FMOH on tools and data flows to inform scale-up of national CHIS
• Community-level data from private sector can be entered into DHIS2 instance compatible with national system
• FMOH national iCCM training modules now include CHIS data module

Data validation at a PPMV outlet in Ebonyi state.
Photo credit: Abimbola Olayemi/MCSP.
Expanding and supporting the functionality of CHIS in remote areas

MCSP worked with the Ministry of Public Health to improve the functioning of the CHIS within the national HMIS in Tshopo and Bas-Uele provinces. As part of the community programming at 119 sites with child health and family planning services, MCSP:

• Provided CHIS registers and reporting forms
• Trained CHWs and supervisors in data needs
• Trained district data clerks
• Provided support for regular data review meetings
• Provided laminated poster boards to community sites to track child health and family planning data
• Facilitated the revitalization of community action committees that oversee CHWs and community data
Building integrated systems and capacity for digital data in Egypt

MCSP worked with the Ministry of Health and Population and stakeholders to develop a digital CHIS for Raedat Refiat (RR) to schedule and carry out their RMNCH work, report on activities and improve knowledge. It has scaled up to 4 governorates and includes a health worker registry. Capacity was built at all levels to ensure:

- RR and their supervisors have basic hardware and IT skills and can use the system
- Ministry of Health and Population central and district level IT staff can manage the system
Summary

• Improving HIS performance requires strengthening of interrelated factors, such as leadership, coordination, integrated interventions and human capacity

• Advancing HIS from fragmentation to integration can be done, but even more efforts are needed

• Moving to digital systems requires that efforts are accompanied by capacity building at all levels

• Tailoring CHIS design and strengthening approaches to each country context is crucial given the diversity of community programming

• Including mechanisms to facilitate data use and feedback, especially at lower levels, needs to be strengthened in most systems
Promoting Analysis, Visualization, and Use of Routine RMNCAH Data for Action at the Point of Care

Dr. Chibugo Okoli, Nigeria Deputy Chief of Party, MCSP
Dr. Asnakew Tsega, Senior Technical Advisor for Immunization, MCSP
Technical Areas
- Maternal and Newborn Health
- Family Planning
- Child Health
- Child Health
- Immunization
- HIV
- Malaria
- IPC
- Postnatal Care
- Nutrition

* Dashboards expanded to non-MCSP facilities or regions
† PNC indicators relevant to the Zika response

Data dashboard use across MCSP-supported countries
Country Examples: Nigeria and Malawi
Nigeria Facility Example
Background

- Indicators on quality of care (QoC) on the day of birth not included in MOH facility registers and summary forms
- Needed to monitor performance of core set of day-of-birth QoC indicators in facilities in Kogi and Ebonyi states to see if improvement interventions supported by MCSP and the MOH were working
The Approach:
Develop and Introduce Poster and Electronic Data Dashboards

**Stakeholder engagement**
- Initial stakeholders’ meetings to identify and select QoC indicators to be tracked
- Involved State MOH, LGAs, and representatives of health facilities

**Electronic dashboard development**
- Developed QI tally sheet and QI form to summarize QI data from client case notes and MOH facility registers and monthly summary forms
- Excel-based dashboard created and linked to data entry template

**Orientation and data tracking**
- MCSP field staff and MOH QI teams at state and LGA levels oriented on data capturing
- Quarterly facility visits by QI team and data upload to dashboard

**Deployment**
- Electronic dashboard deployed in June 2017, covering 91 QI facilities by 2018
- Laminated dashboard poster templates developed and distributed to a total of 256 facilities out of 321 facilities. These facilities were also trained on its use to track some ANC, child birth indicators and essential commodities stock out
Electronic QI Dashboard
Sample Laminated Facility Data Dashboard Poster
How were the dashboards used?

- Reviewing performance of semi-annual QI learning platform with service providers, facility managers, health facility QI team, and MCSP
- Informing targeted supervision with facilities
- Identifying necessary issues to be resolved in facilities e.g. distribution of supplies to facilities
- Improving facility-level discussions and decision-making, e.g. informed procurement of CHX and re-ordering oxytocin in facilities
- Sharing QI results with stakeholders at various meetings
- Using results to form part of quarterly reports to USAID
Lessons Learned & Sustainability

• Stakeholders’ participation in identifying and selecting indicators is crucial
• Need to ensure availability of complete QoC data in source documents
• Building QI skills of providers in record keeping, data visualization, and use in decision making is key
• Periodic onsite visits using existing structures such as integrated supportive supervision are necessary to support data visualization and use
• The HMIS units at facility, LGA and state levels must be engaged
• State and LGA MOH’s commitment to data visualization, building upon scorecard process, was critical
• QI reports are routinely sent to State HMIS Officer to enter into the QI dashboard
• Laminated dashboards are still being used in facilities and are reusable beyond the life of MCSP
Malawi Community Example
Engaging Communities to Track Immunization of Infants

Dr. Asnakew Tsega,
Snr Technical Advisor - Immunization
Malawi has historically had high levels of immunization coverage.

Due to economic challenges that affected operational issues and community uptake between 2011 and 2016, immunization coverage declined in Dowa and Ntchisi districts. Both districts declined to <80% DPT3 coverage & target was >80%.

MCSP worked with the MOH Expanded Program in Immunization (EPI) and district health management teams (DHMT) to implement the Reaching Every Child (REC) approach in the Dowa and Ntchisi districts to increase timely vaccination with valid dose and immunization coverage and lower drop-out rates.

As part of REC, MCSP and partners engaged communities and their leaders to monitor the immunization status of infants to better reach target populations.
The Community Engagement Approach: “My Village My Home” (MVMH) Tool

- MVMH is a poster dashboard used by volunteers and community officials to record the births and monitor vaccination dates of every infant in a community.

- Developed in 2003 in India under USAID’s BASICS program, MVMH has been implemented in six countries: India, Timor Leste, Zimbabwe, Tanzania, Nigeria, and Malawi.

- The poster is hung in a public place such as a community center or kept at the community leader’s house.

- The MVMH tool is intended to create a social expectation that families will keep their children up-to-date on vaccinations.

https://www.mcsprogram.org/resource/community-monitoring-of-individual-childrens-vaccinations/
The process of how MVMH tool was used

**District level processes**
- DHMT conduct microplanning at district and health facility level
- MCSP and DHMT adapt, test, print, and distribute MVMH tool
- Orient DHMT, health workers, supervisors, Area Development Committee and Traditional Authorities on tool

**Community level processes**
- Health Surveillance Assistants (HSAs) identify village heads and volunteers
- HSAs and Village Heads map and list villages
- Village Heads (VHs) and volunteers:
  - Conduct house to house visits to register infants on MVMH tool (with names, dates of birth, doses administered)
  - Update the MVMH tool with newborns and newcomers
  - Reconcile data with facility records
  - Add new vaccinations to tool during household visits and after outreach sessions

**Community level data use**
- VHs and volunteers use the displayed data to:
  - Identify and trace defaulters
  - Monitor the immunization status of children
  - Actively mobilize families for vaccination by sharing data at community meetings and household visits
Results: Documentation and qualitative assessment

• Village heads and volunteers feel responsible for ensuring their community’s children are fully vaccinated and are proud of their community’s coverage.

• Collaboration between HSAs/volunteers and Village Heads (VHs) improved over time.
  • > 90% (~1,800) of the VHs monitored immunization status of children in their communities.

• Many mothers are extremely well-informed on immunization.

• Most fathers encourage and remind their wives about vaccination. Some buy beauty aids so wives look good at outreach.

• Families are embarrassed by “defaulter” visits and try to avoid them.

• More children received their vaccinations on time.
Increases in the percentage of children aged 12-23 months who were fully immunized by one year of age with card

<table>
<thead>
<tr>
<th>District</th>
<th>Baseline 2015</th>
<th>Endline 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dowa</td>
<td>68%</td>
<td>91%</td>
</tr>
<tr>
<td>Ntchisi</td>
<td>75%</td>
<td>88%</td>
</tr>
</tbody>
</table>

N=300/district
Lessons Learned & Sustainability

• Engagement of community leaders has significantly improved the utilization of primary health care services

• Relationships between the community and health workers has improved and as a result, cancelled sessions have become extremely rare

• Some volunteers did not update the tools on time due to weak supervision by some of the HSAs – supervision is crucial

• The experience was shared with all districts and with follow up project

• The approach and tools have been included in national level guidelines
For more information, please visit www.mcsprogram.org

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