360 Country Perspective on Digital Health Development

Malawi Case Study
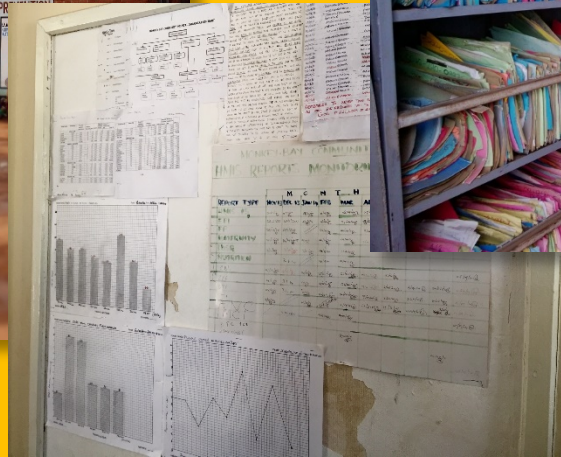
Session Format

- Moderator: Introduction & Overview (5 mins)

- Panelists Discussion (40 mins)

- Audience Questions (15 mins)

- Moderator close (2 mins)

Overview

❑ There is a lot of opportunity to transform health systems with digital technology.

❑ Given all the possibilities, how does a country select & prioritize its health technology activities?

❑ How has Malawi created a cohesive vision and actionable strategy?

❑ What are the challenges, lessons learned, and successes that Malawi can share from its experience to date with other countries?

Five Domains

1) **Policy & Vision**

2) **Coordinating Partners & Stakeholders**

3) **Data Quality & Streamlining**

4) **Technology & Tools**

5) **Data Use & Decision-making**

COOPER / SMITH

What does the enabling policy look like?

What kind of structures, approaches, incentives can be used to realize the benefits of digital solutions?

Director of Policy & Planning, Ministry of Health: Emma Mabvumbe

The Malawi National eHealth Strategy

2011 - 2016

April 2014
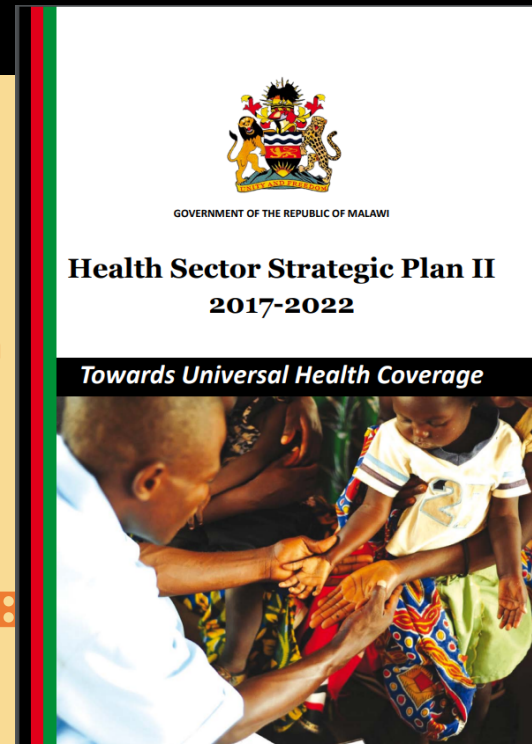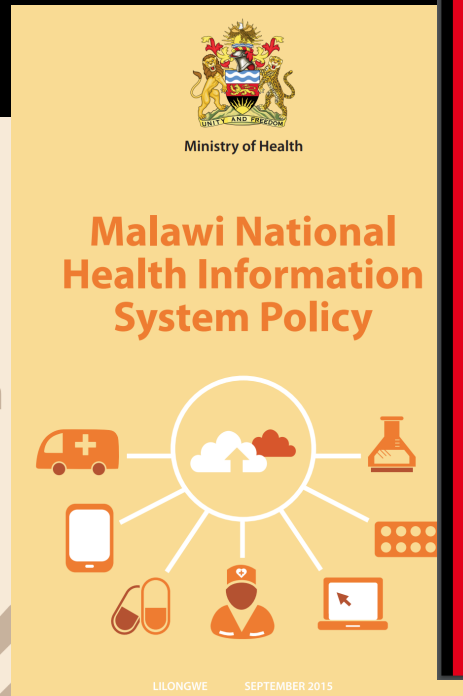
Ministry of Health

Malawi National Health Information System Policy

LILONGWE   SEPTEMBER 2015

GOVERNMENT OF THE REPUBLIC OF MALAWI

Health Sector Strategic Plan II
2017-2022

Towards Universal Health Coverage

GOVERNMENT OF THE REPUBLIC OF MALAWI

2) Coordinating Partners & Stakeholders

Electronic Health Information System (HIS) Landscape for HIV/AIDS in Malawi

MINISTRY OF HEALTH (MoH)

Baobab Health Trust (BHT)	Health and Technical Support Services (HTSS)	Department of HIV/AIDS (DHA)	Central Monitoring and Evaluation Division (CMED)	Human Resource Department (HR)	Clinton Health Access Initiative (CHAI)	Drug Resource Enhancement Against AIDS and Malnutrition (DREAM)
Baobab Health — Electronic Health Record (EHR); Demographic Data Exchange (DDE)	Logistics Management Information System (LMIS)	DHA Management Information System (DHA-MIS)	dhis2 — Health Management Information System (HMIS)	Integrated Human Resources Information System (iHRIS)	CLINTON HEALTH ACCESS INITIATIVE — Laboratory Information Management System (LIMS)	dream Community of Sant'Egidio — Electronic Health Record (EHR)

Laboratory Information Management System (LIMS)

cStock — Logistics Management Information System (LMIS)[1]

Logistics Management Information System (LMIS)

MINISTRY OF FINANCE (MoF)

Department of Economic Planning & Development (EP&D)	Accountant General Office (AGO)
Local Authority HIV and AIDS Reporting System (LAHARS); Part of District Data Bank (DDB)	EPICOR — Integrated Financial Management Information System (IFMIS); Serenic Navigator — Integrated Financial Management Information System (IFMIS)

OFFICE OF THE PRESIDENT AND CABINET (OPC)

Department of Human Resource Management and Development (HRMD)
Global Payroll & HR Expert Edition — Human Resources Management Information System (HRMIS)

PRESIDENT'S EMERGENCY PLAN FOR AIDS RELIEF (PEPFAR)

DATIM — Health Management Information System (HMIS)

Note: Systems represented include only those that are nationally implemented or operated as of June 2016, does not include localized pilot systems

[1] Only system used at community level; not currently used for HIV/AIDS commodities

http://www.vitalwave.com   © 2016 Vital Wave
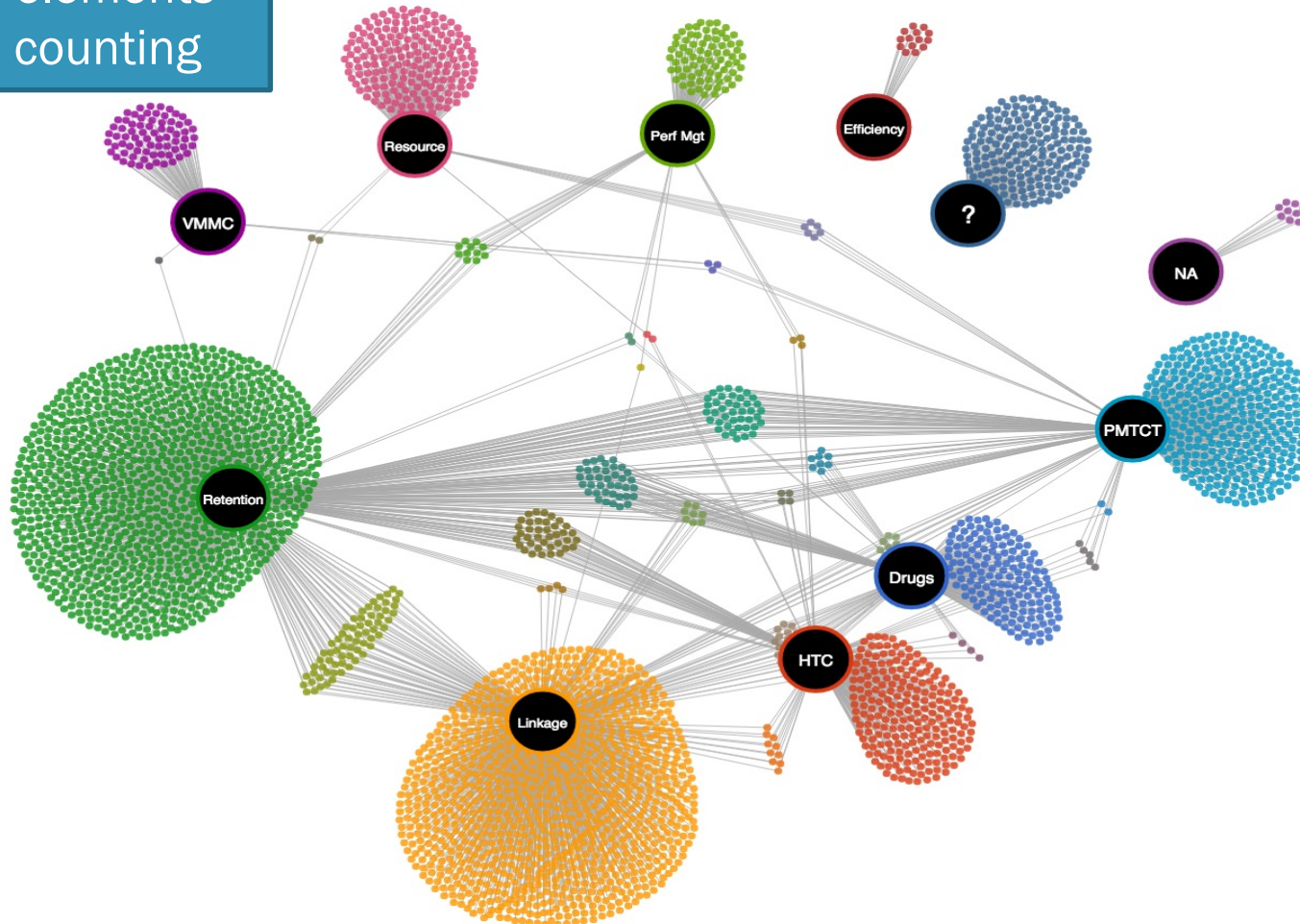

How do partners align & coordinate?

Director of Policy & Planning, Ministry of Health:
Emma Mabvumbe

GOVERNMENT OF THE REPUBLIC OF MALAWI

3) Data Quality & Streamlining

Over 5,000 +
health related
data elements
and counting

How to consistently
improve data quality &
reduce production
burden?

Central Monitoring & Evaluation
Division, Ministry of Health:

Simon Ndira (GIZ TA)

4) Technology & Tools

What technologies & tools are being used?

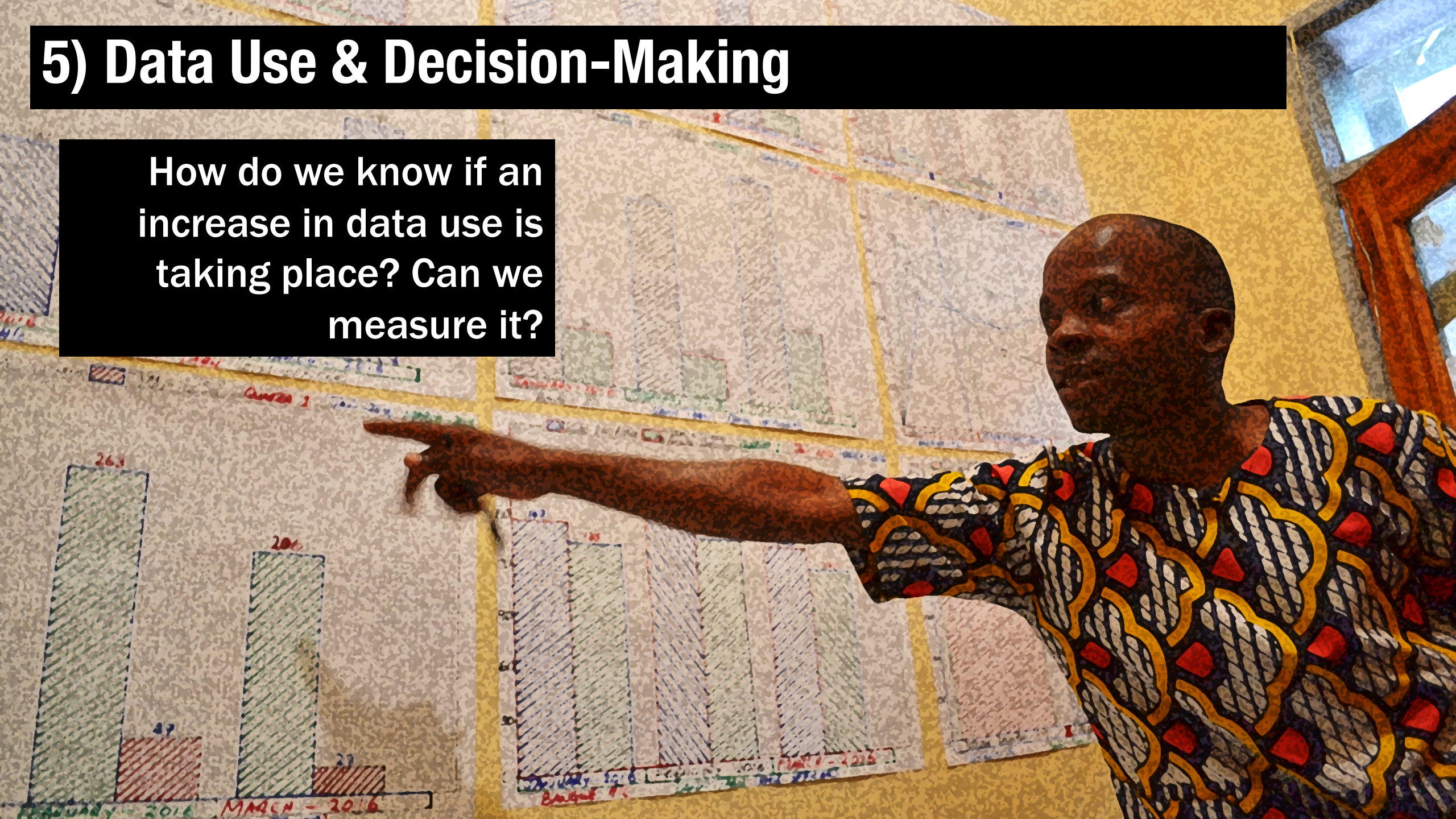Baobab Health Trust , Executive Director: Martha Kwataine

Luke International Norway – Malawi: Technical Advisor: Joseph Wu

5) Data Use & Decision-Making

How do we know if an increase in data use is taking place? Can we measure it?

Appendix

Ministry of Health

Malawi National Health Information System Policy

Information for action, action for improving efficiency, quality and equitable coverage

Purpose: Provision of information for evidence-based decision making in the planning and management of health services.

Vision: A health sector with quality health management information ensuring each management decision is evidence-based.

Mission: To continuously strengthen the capacity of information producers and information users to exploit their full potentials in enhancing quality and making the best use of health information.

Objective: To generate quality information (accurate, complete, timely, relevant, and reliable) and make them accessible to all intended users.

Overall guiding principles: The policy takes into account the 5-Point Call to Action and the Common Agenda for Measurement and Accountability for Results in Health in the post-2015 SDG era and is valid for public and private health sector alike.

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Selected Policy Stipulations

1. The responsibility to coordinate data collection, consolidation, analysis and dissemination is vested with CMED.

2. HIS resources and infrastructure to be coordinated by CMED in collaboration with the MOH ICT Department through the HI TWG.

3. All systems used for data collection shall be designed in compliance with approved national standards and guidelines on health data management.

4. A comprehensive list of national health indicators shall be maintained and these shall inform data sources.

5. Data privacy and confidentiality shall be enforced without compromising safety and knowledge sharing.

6. Designated focal persons shall be responsible for compiling data at health facility / Institution level and generating detailed and summary reports for analysis.

7. Each health institution or office shall conduct appropriate data analysis responding to pertinent key performance questions.

8. The head of facility and all administrative staff shall be fully accountable for quality of data they disseminate.

9. Each health facility or office is responsible for safe data storage and easy retrieval of their records; and any health related data shall be stored only within the borders of Malawi.

10. Use of data shall be limited only to the purpose it was intended. Access to personal data by research shall require ethical clearance.

11. The ownership of any health data shall rest with MOH.

HSSP M&E Costing Summary- Malawi

Enter Cost

Budget Difference

|		
Projected Budget	(Projected minus expenses)	($129,803,181)
Actual Commitments	(Actual minus expenses)	($46,699,534)
Difference	(Actual minus projected)	**$83,103,647**

Projected vs. Actual Cost

Total Partner Commitments	$46,699,534
MoH Projected Budget	$129,803,181

Strategic Intervention Area Summary

Strategic Intervention Area	Projected Cost	Actual Cost	Difference
Analysis & Dissemination	1,067,000	9,766,283	-8,699,283
CRVS, Census & HH surveys	41,165,166	6,824,693	34,340,473
Health Facility & Community	81,524,715	4,251,876	77,272,839
Health Systems & Multisectoral	2,515,000	6,685	2,508,315
Planning and Coordination	1,509,200	498,593	1,010,607
Review & Use	2,022,100	6,692,661	-4,670,561
Grand Total	**129,803,181**	**28,040,791**	**101,762,390**

Total

Projected budget vs. Actual
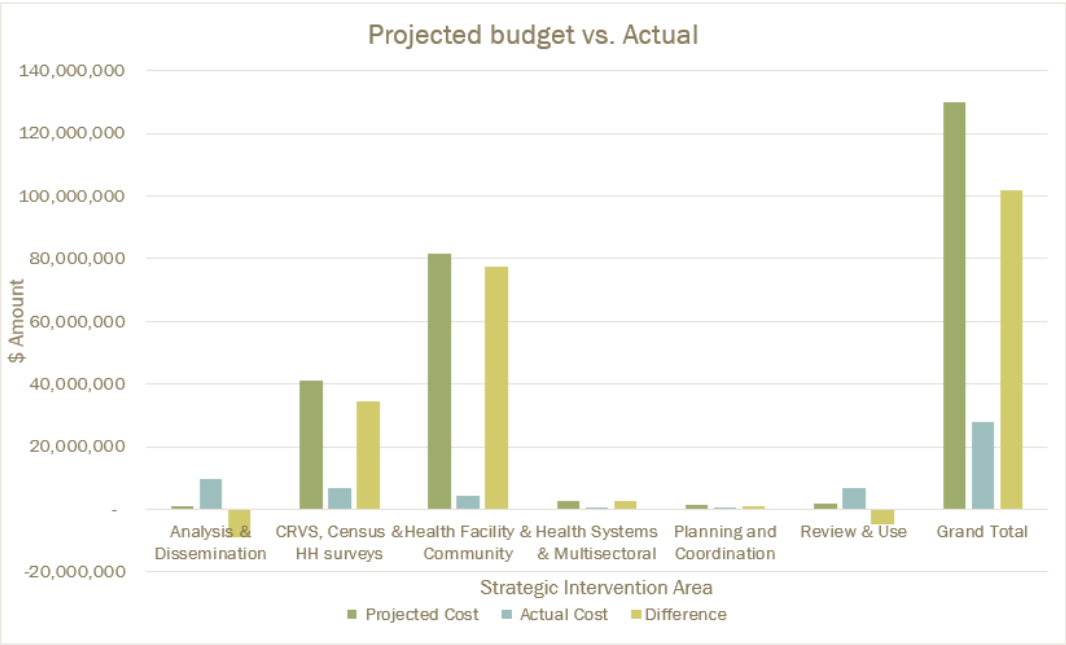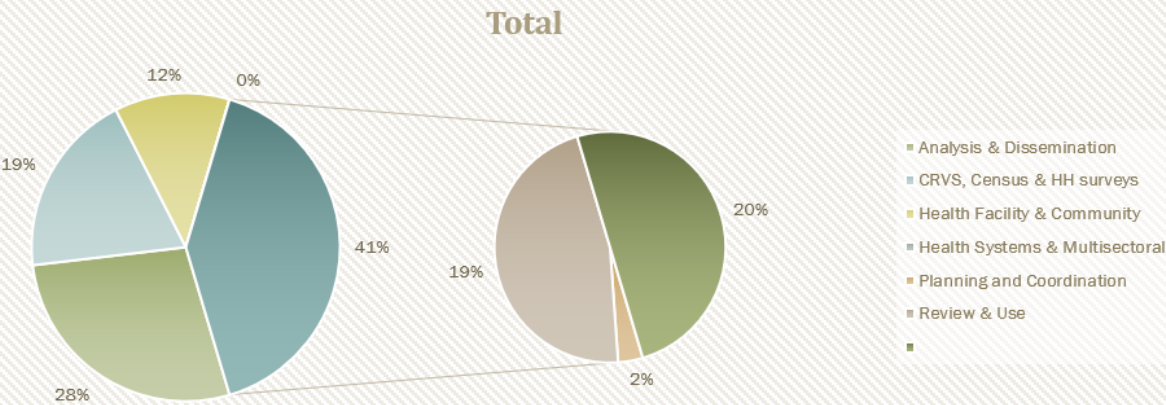
What were the top decisions identified?

Click on a goal or level to filter the list of decisions ranked by the number of times that decision was associated with that goal or level or click on a decision to see which goals and levels were associated with that decisions. Double click to undo.
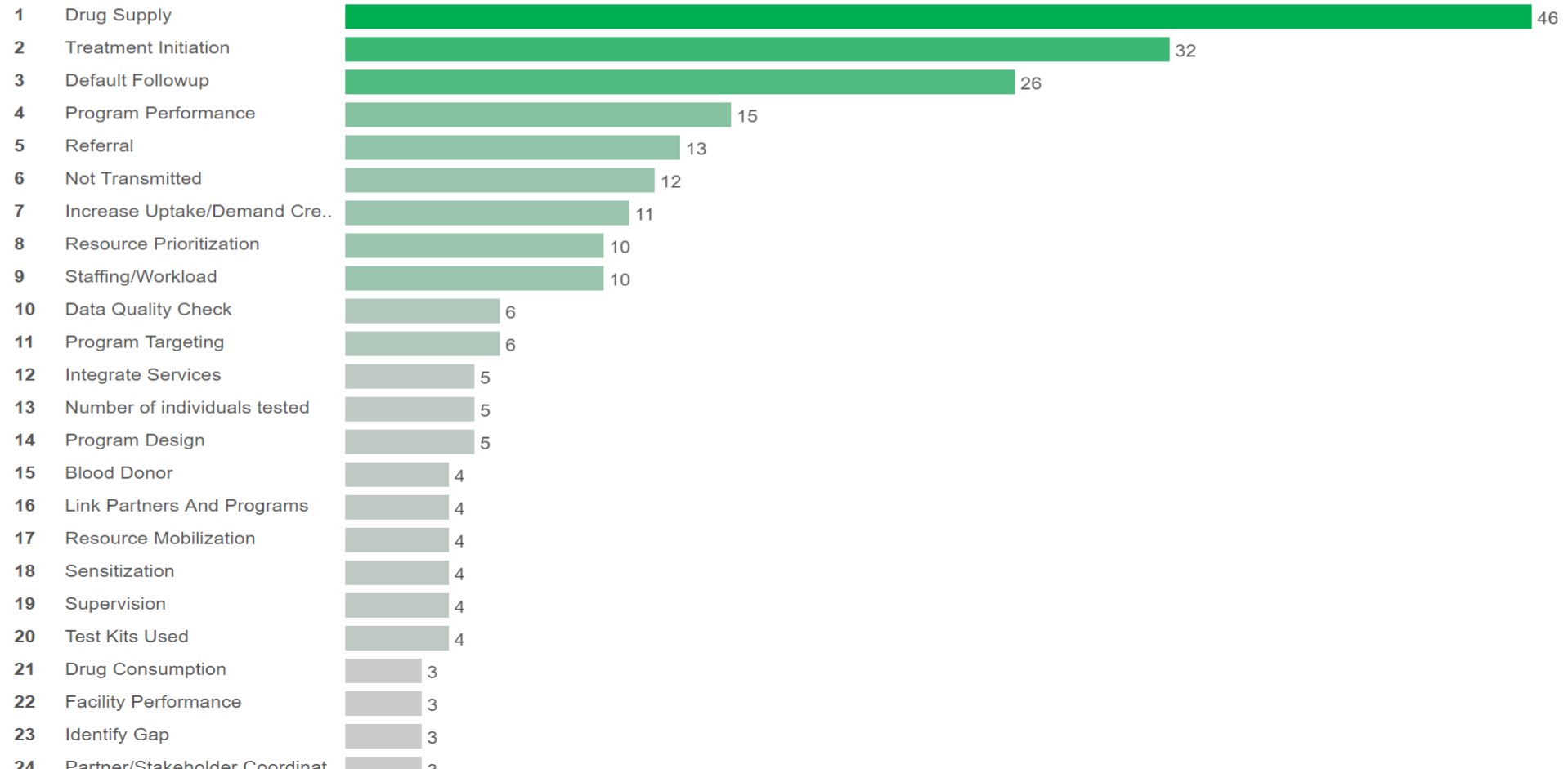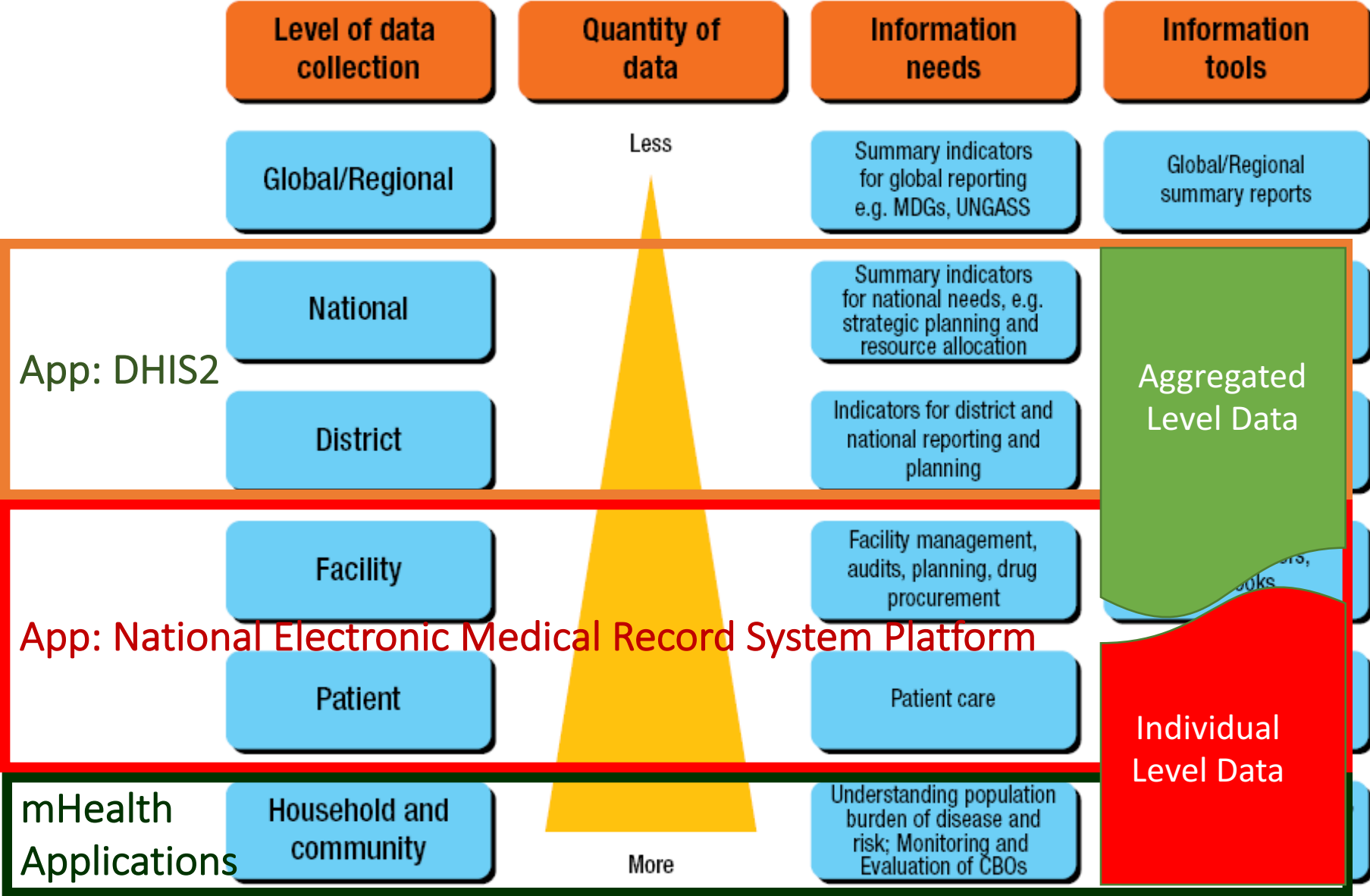
GOALS

USER LEVELS

NATIONAL | DISTRICT | FACILITY

DECISIONS RANKED

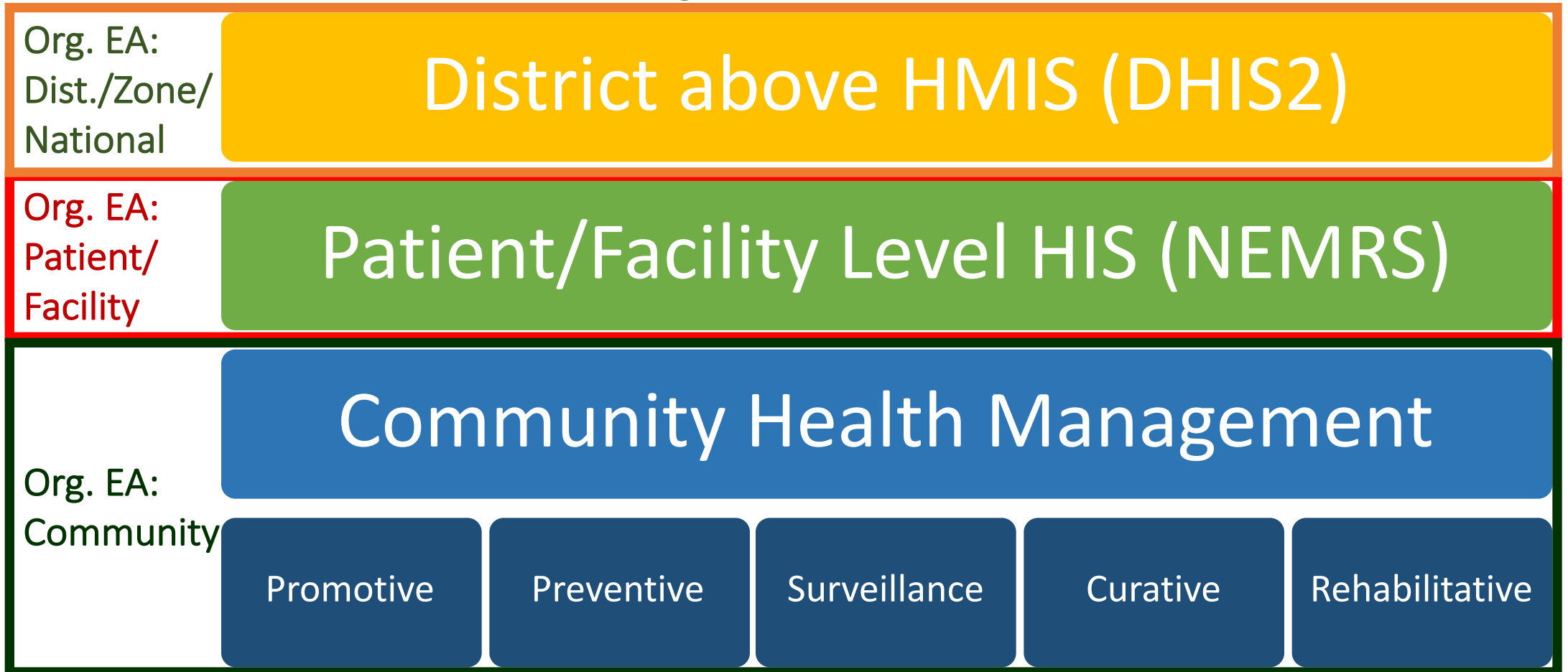| #	Decision	Value
1	Drug Supply	46
2	Treatment Initiation	32
3	Default Followup	26
4	Program Performance	15
5	Referral	13
6	Not Transmitted	12
7	Increase Uptake/Demand Cre..	11
8	Resource Prioritization	10
9	Staffing/Workload	10
10	Data Quality Check	6
11	Program Targeting	6
12	Integrate Services	5
13	Number of individuals tested	5
14	Program Design	5
15	Blood Donor	4
16	Link Partners And Programs	4
17	Resource Mobilization	4
18	Sensitization	4
19	Supervision	4
20	Test Kits Used	4
21	Drug Consumption	3
22	Facility Performance	3
23	Identify Gap	3
24	Partner/Stakeholder Coordinat..	3

Malawi HIS Architecture and Application Concept Standards, 2017

Malawi Integrated Community Health Information System Architecture

Org. EA: Dist./Zone/National	District above HMIS (DHIS2)
Org. EA: Patient/Facility	Patient/Facility Level HIS (NEMRS)
Org. EA: Community	Community Health Management

Promotive	Preventive	Surveillance	Curative	Rehabilitative

Note: mHealth artifact building blocks are categorized according to HSSP2, National Community Health Strategy and CHWs Tasks List

MOH MALAWI - INDICATOR DOCUMENTATION TOOL

Search for an indicator | Search

STATISTICS   ABOUT   CONTACT   Log in

Current Indicators

http://dhis2.health.gov.mw:8000/

Click to print indicators

Filter By: **Indicator Code:** [indicator Code]   **Custodian:** [Select ▾]   **Alignment:** ☐ HSSP I ☐ HSSP II ☐ SDG ☐ Global 100

Indicator Type: [Select ▾]   **HIS Sub-system:** [Select ▾]   **Calculability:** [Select ▾]

Other pertinent dimentions: [Select ▾] [Filter]

Code	Name	Type	Department	Numerator	Denomenator	More
CHD03.1N	Pentavalent III coverage (HMIS-based)	NHI	Child Health	Number of children under-1 of age that r...	Estimated mid-year population under 1-ye...	Details pdf
CHD03N	Penta III coverage (survey-based)	NHI	Child Health	Number of surveyed children age 12-23 m...	Total number of children from 12-23 mont...	Details pdf
TB04N	HIV-positive TB patients on ART during TB treatment	NHI	Tubercolosis	Number of HIV-positive TB patients who r...	Total number of HIV-positive TB patients...	Details pdf
CHD02.1N	Percentage of under-1 year-old children fully immunized (HMIS-based)	NHI	Child Health	Total number of children who have been f...	Estimated under-1 midyear population...	Details pdf
TB03N	TB Treatment success rate	NHI	Tubercolosis	Number of notified TB cases registered i...	All TB cases notified to the health faci...	Details pdf
TB02N	Second line treatment coverage among MDR-TB cases	NHI	Tubercolosis	Number of notified TB patients who have ...	Total number of confirmed MDR-TB patient...	Details pdf