ESPEN workshop on data systems, tools and processes for PC-NTD programmes

8 – 12 December 2025

Brazzaville, Congo Republic

World Health Organization
African Region

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Attendance: 9 December 2025

Day 2 - Integrating PC-NTD Data into HMIS and Strengthening M&E Synergies Across Health Programs

Brazzaville, 9 December 2025

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Wrap Up Day 1

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Opening Remarks

Dr. Amir Kello, representing Dr. Benido Impouma, delivered the opening remarks

- ✓He emphasized the strategic importance of this training, which aligns with the ESPEN 2026–2030 strategic plan cycle
- ✓Key points included the challenges of shrinking donor support, the essential role of accessible, high-quality data, and the ESPEN strategy's focus on integrating PC-NTD data into national Health Management Information Systems (HMIS) and logistics
- ✓This integration aims to shift data management from fragmented systems to a harmonized and consistent approach
- ✓Additionally, Dr. Amir stressed the need for establishing a dedicated M&E technical team to support enhanced M&E

Workshop Objectives & Expected Outcomes

- Jorge outlined the workshop's objectives, emphasizing its interactive and applied nature

- **General Objective:** Strengthen regional coordination, data quality, forecasting capacity, and integration of PC-NTD M&E systems within national health information structures

- **Specific Objectives:**
  - Enhance data quality assurance
  - Support integration of PC-NTD indicators into national HMIS
  - Strengthen forecasting for PC-NTD commodities and logistics
  - Promote regional harmonization by sharing experiences, tools, and SOPs
  - Foster cross-programmatic M&E integration
  - Operationalize the regional M&E Technical Committee and working groups

Data Quality Challenges

A group photo was taken, followed by a coffee break

Overview of Data Quality Challenges

Honorat Zouré presented a detailed data quality issues affecting PC-NTD M&E across the region-Key challenges include:

Demographic Issues:

Outdated census data, often 20–30 years old
Population mobility due to migration and displacement
Inconsistent recording of age groups by Community Drug Distributors (CDDs)
Reliance on inaccurate official denominators

Paper-based Systems and Manual Processes:

Lost or incomplete paper registers
Transcription errors during multiple aggregation steps
Long delays due to manual reporting chains

Data Quality Challenges

Reporting Errors:

- Intentional figure modifications to match expectations
- Missing reports from low motivation or delayed payment
- Lack of systematic data verification before national submission

Partner Harmonization Issues:

- Diverse reporting templates among NGOs
- Variable disaggregation standards causing inconsistent data sets

Consequences:

- Incorrect drug quantification leading to stock imbalances
- Misleading epidemiological indicators affecting decisions
- Delayed annual reports impacting logistics and shipments

Diagnosing Problems through Data Flow Mapping

- Andrea Owan (CHAI) introduced a framework to map the data flow from community level through health facilities, districts, and national systems to WHO/ESPEN

- To identify where delays and errors occur

- Using the MDA process as an example, she emphasized root cause analysis through iterative questioning

Group Work I – Mapping National Data Flows and Identifying Gaps

- Country teams diagrammed their data flows for key NTD components (CM, MDA, morbidity, surveillance, commodities)

Common themes emerged:

- Longest delays and errors occur at community-to-facility and facility-to-district levels
- Wide variation in reporting formats influenced by partners
- Limited digitalization outside select districts
- Weak feedback mechanisms preventing correction at lower levels

Country Experience and Panel Discussion

Countries shared practical insights:

- **Côte d'Ivoire:** Piloting DHIS2 integration for morbidity data; plans for national scale-up
- **Ghana:** Mixed digital and paper reporting; strong reverse logistics demonstrated using GIMMIS and ArcGIS; notable delays at community levels
- **Burkina Faso & Senegal:** Addressing denominator discrepancies with microplanning
- **Angola:** Administrative reforms complicating denominator updates

Following these presentations, a lunch break was observed

Country experience- Practical Solutions to improve data quality

- **Burkina Faso MOH:** Showcased a fully digitized post-MDA dashboard tracking consumption and stocks in real time across hundreds of health areas and villages

- **South Sudan MOH:** Discussed challenges including limited trained personnel, unreliable network infrastructure, and delayed DHIS2 adoption; outlined plans to improve human resources and reporting tools

- **Sightsavers:** Provided a virtual guided demo on conducting Data Quality Assessments (DQA) and drafting Data Quality Improvement Plans (DQIP)

Group Work II – From Insights to Action: Planning for Data Quality Improvements

- Facilitated by Andrea and Jorge, participants prioritized key issues and drafted actionable DQIP steps

Launch of Regional M&E Working Groups

- The workshop closed the day by introducing five thematic regional M&E working groups under the forthcoming M&E Technical Committee

- Participants selected their preferred groups for contribution via QR code before the final coffee break

Overall Summary

Day 1 set a strategic and technical foundation for regional collaboration in PC-NTD data systems

It revealed widespread recognition of common challenges, highlighted innovative country solutions, and energized participants toward advancing harmonized, integrated, and data-driven PC-NTD program management

Why Integrate PC-NTD Data into HMIS? Setting Priorities for Harmonized Surveillance?

Alex Pavluck, MBAn, MPH

Sightsavers

World Health Organization

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The Current Reality

NTD programmes have historically operated as **vertical systems—separate staff, separate databases, separate reporting**. As the WHO 2030 Roadmap recognizes, NTDs remain neglected partly because they're invisible in national systems. When NTD data lives on individual laptops rather than in national HMIS, we face three fundamental problems:

1. **Access NTD data is limited**
2. **The NTD team needs to handle all aspects (collection, cleaning, storage, analysis, and use/reporting)**
3. **For domestic resource allocation, NTDs remain invisible during resource allocation discussions**

The Challenge: Volume vs. Value

A tension we must address honestly: **integration will reduce data volume**. Most national HMIS platforms simply cannot accommodate the detailed programmatic data that vertical NTD systems captured.

QUESTION:

So, how do you decide what goes into the HMIS and how are data collected and stored if they remain outside of the HMIS?

A Prioritization Framework

So how do we prioritize? I propose we focus on indicators that serve three essential functions:

- **First: Annual reporting forms** Capture data required for WHO annual reporting—the Joint Application Package and TEMF forms—and elimination dossiers.

- **Second: Programmatic decision-making.** Include indicators essential for program supervision and management.

- **Third: Advocacy and resource mobilization.** Prioritize indicators that make the case for domestic financing. When NTDs are represented in HMIS alongside maternal health, immunization, and other priorities, they become visible in planning cycles and resource allocation discussions.

QUESTION:
Do you agree with these functions? Did I miss any others?

Overview of today's session

We will hear from several national programmes on their experience with integrating NTD data into the HMIS and we will hear about resources available to define the indicators to add to the HMIS.

Questions?

If you need help when implementing these approaches, reach out!

apavluck@sightsavers.org
Alex Pavluck, MBAn, MPH
Sightsavers

THANK YOU
MERCI BEAUCOUP
OBRIGADO

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Deciding What and How to Integrate: Collaborating with HMIS Units for Effective NTD Data Inclusion

Kenya

Burkina Faso

Ethiopia

Angola

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ESPEN workshop on data systems, tools and processes for PC-NTD programmes

Day 2
Deciding What and How to Integrate: Collaborating with HMIS Units for Effective NTD Data Inclusion

Dickson Kioko

KENYA NATIONAL PUBLIC HEALTH INSTITUTE

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Ministry of Health

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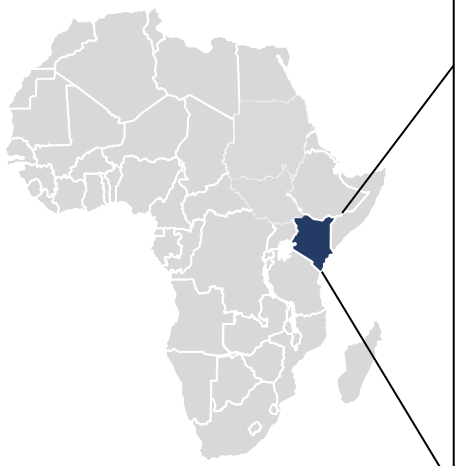
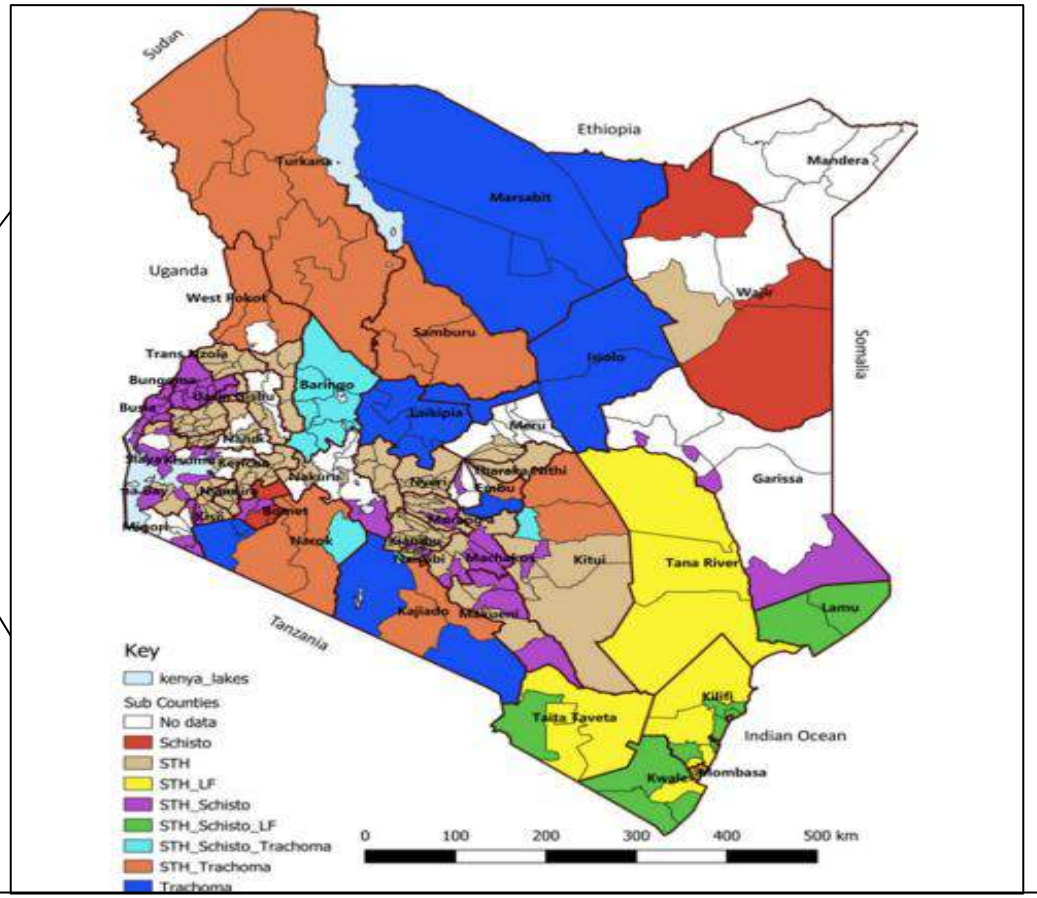
Digitization and Integration of NTDs into HMIS in Kenya

Dickson Kioko
Monitoring and Evaluation Manager
Vector Borne and Neglected Tropical Disease Unit
Kenya

Neglected Tropical Diseases in Kenya





47	Counties
290	Sub Counties
1450	Wards
12714	Health Facilities
5215	Community Units

NTDs are heterogeneously distributed, with **16 confirmed/suspected in Kenya**. Over **16 million** risk for **STH, 6.8 million** risk **Leishmaniasis, 6 million at risk for SCH** and **Trachoma NTD Masterplan seeks to eliminated at least 4NTDs by 2030**

Health system structure, organization and access to care

National Structure Kenya Health Policy 2014-2030

Policy Tiers of Kenya	Corresponding levels of care at beginning of policy	Desired levels of care by end of policy
Tier 1: Community	Level 1: Community	Level 1: Community
Tier 2: Primary Care	Level 2: Dispensaries and Clinics Level 3: Health centres	Level 2: Primary health care facilities
Tier 3: Secondary referral	Level 4: primary health care hospitals Level 5: Secondary care hospitals	Level 3: County Hospitals
Tier 4: Tertiary referral	Level 6: Tertiary care hospitals	Level 4: National referral hospitals

MOH Structure

Director General

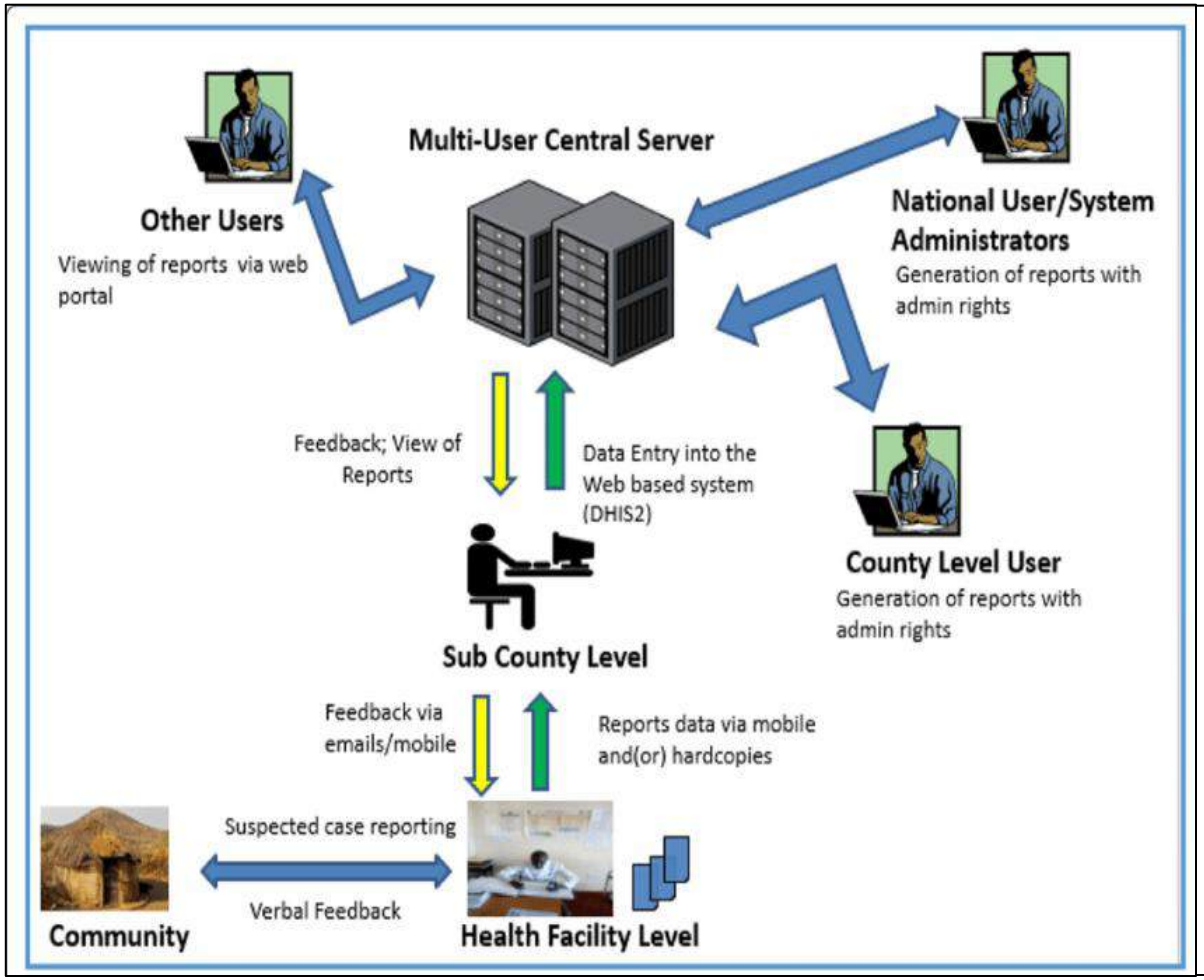
KENYA NATIONAL PUBLIC HEALTH INSTITUTE

Division of Disease Surveillance Epidemic Response

Vector Borne & Neglected Tropical Disease Unit (VBNTDU)

Unit is organized in 4 Sections:
ACSM, Case Management, M&E and PC-NTDs

Kenya Health Information System(KHIS); a DHIS2 based platform was implemented in 2010 for health reporting



Community level

Monthly reports from the Community Units, summarized by community health assistants (CHAs) and cascaded to the link health facility.

Health Facility

Service delivery & aggregate community unit data is reviewed & summarized by facility in-charge/HRIO

Physical reports completed and cascaded to the sub county

Sub County

Collate information from all health facilities in the sub county

Data validation & entry into Kenya Health Information System (KHIS) by Sub County HRIO

County/National

Generate, validate & view reports using summative data from lower levels

Case data is captured on multiple MOH tools, with notable gaps in accuracy hindering its use by the NTD program for decision making.

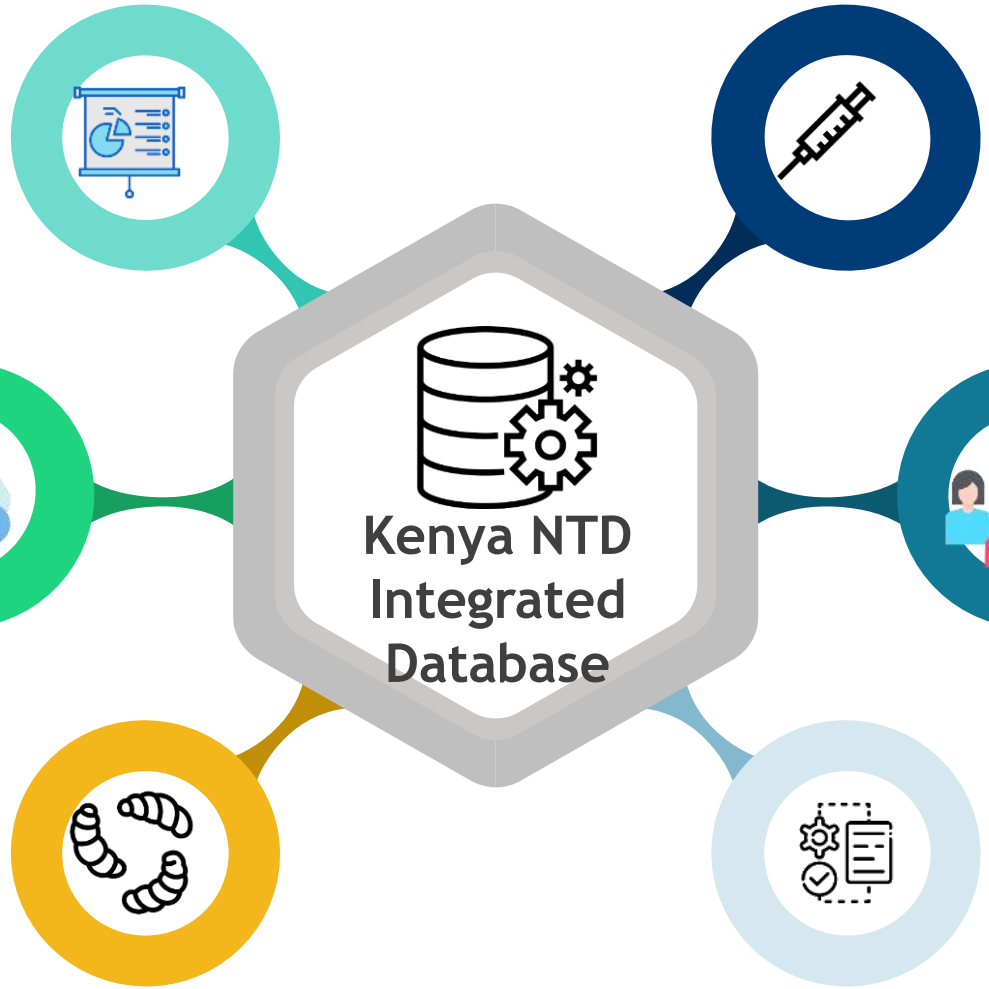
KHIS was not customized to report majority of NTD program data with routine indicators not customized and standardized for program data use.

THE VISION
Current status versus anticipated future status of IDB

Case Management & Surveillance
Routine public & private Health facility data.

Supply Chain
Commodity tracking, drug accountability,& inventory data

Entomology
Breeding sites, species composition.



Interventions
MDA, & WASH data

Population
Disaggregated population data

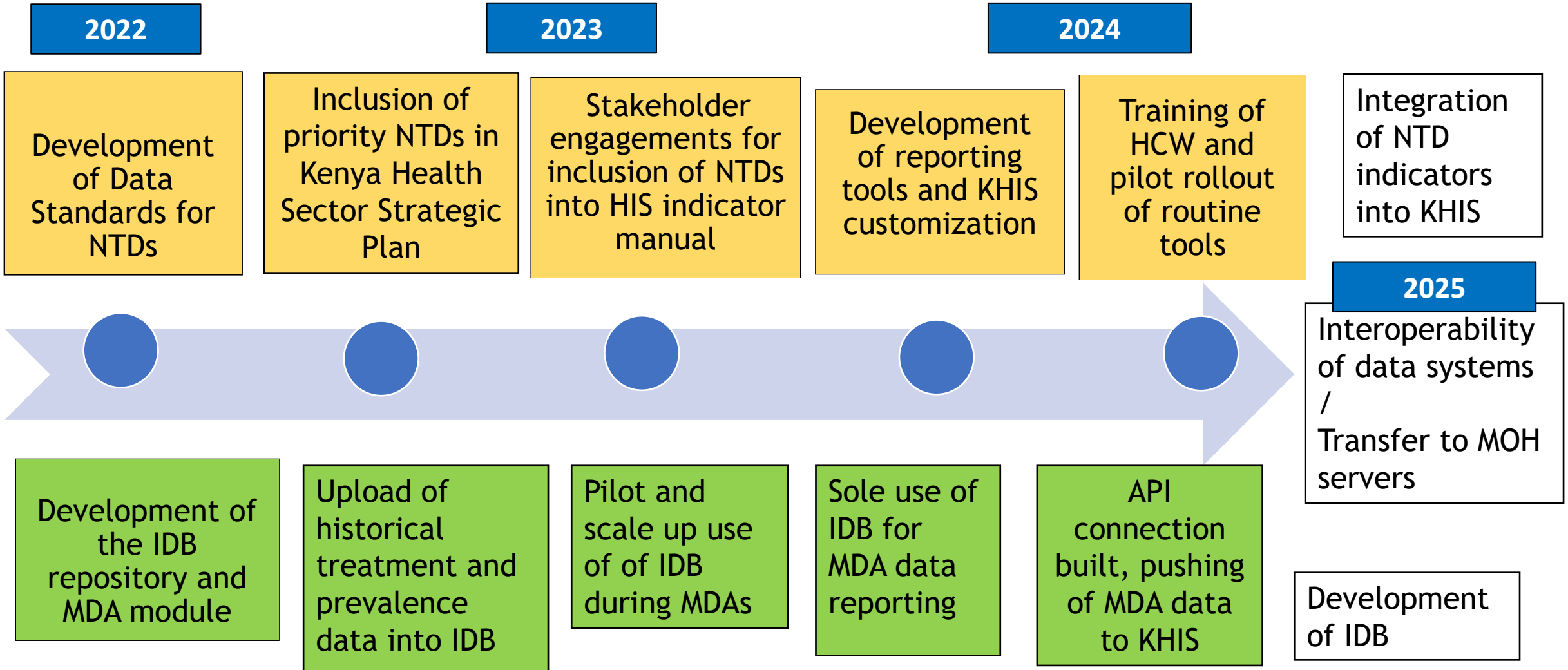
Surveys
Prevalence (SCH/STH), Pre-TAS, TAS (LF)

Completed

In Progress

Not Started

The NTD program began the process to digitize and integrate NTD data capture and reporting into DHIS2 platforms



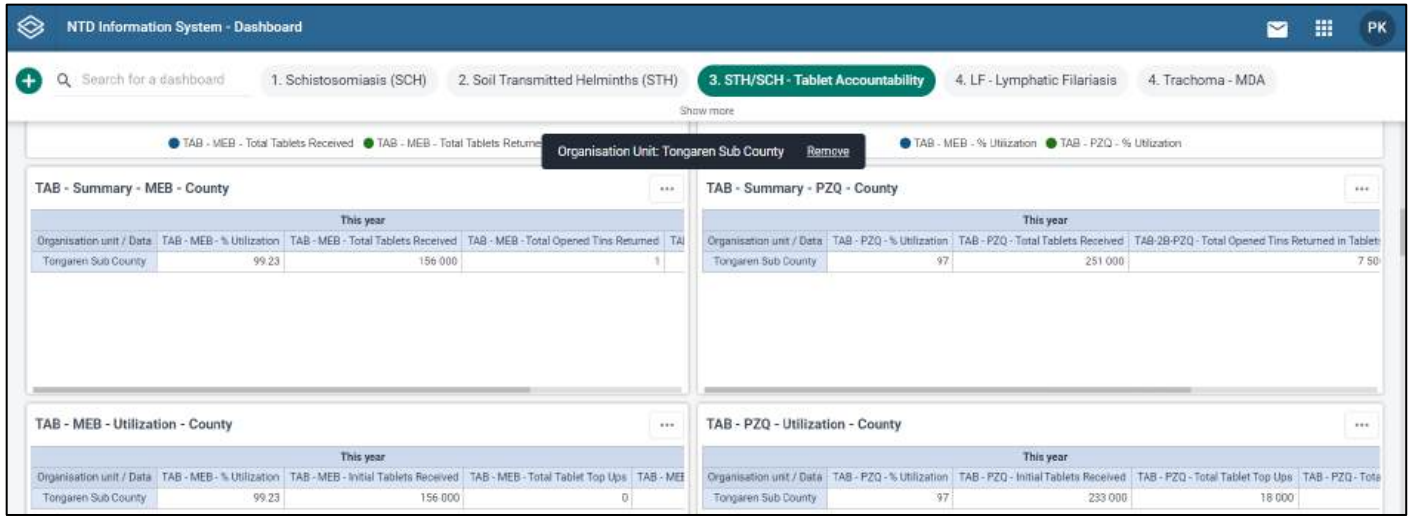
NTD systems were mainly partner supported, run parallel/ independent with no centralized NTD solutions for data capture and storage

Database name	Google sheet	CIND - (Access database)	ASCEND/ARISE DHIS2/WHO	Tropical data	REVEAL	ESPEN /CHIP
Author	**MOH & partners**	**WHO**	**ASCEND/ARISE /WHO**	**ITI-GET 2020**	**AKROS**	**WHO/Sightsavers**
NTDs covered	**PC-NTDs**	**PC-NTDs**	**SCH, Trachoma, LF, Leish**	**Trachoma**	**SCH/STH (Vihiga, 2021, 2022)**	**PC - NTDs and WASH**
Data included	MDA Prevalence data	Prevalence MDA Drug supply Morbidity NTD programmatic	MDA MMDP Case Management	Prevalence	MDA Supply Chain	Prevalence MDA WASH
Core issues	• Data collection processes are not standardized or digitized. • Data is not stored in a central place; access is limited. • Limited data use.	• Manually upload of data into CIND; • Not linked to a central data source owned by the NTD program or the MoH. • Offline platform domiciled on laptops.	• Not linked to a data source owned by the NTD program or the MoH. • Holds data from ASCEND, ARISE & Leish projects only.	• Trachoma survey data only. • Not linked to a data source owned by the NTD program.	• Not linked to a data source owned by the NTD program or the MoH. • Only been used for SCH/STH campaign in one county	• Not linked to a data source owned by the NTD program or the MoH. • Program submits data to ESPEN but do not routinely use outputs.

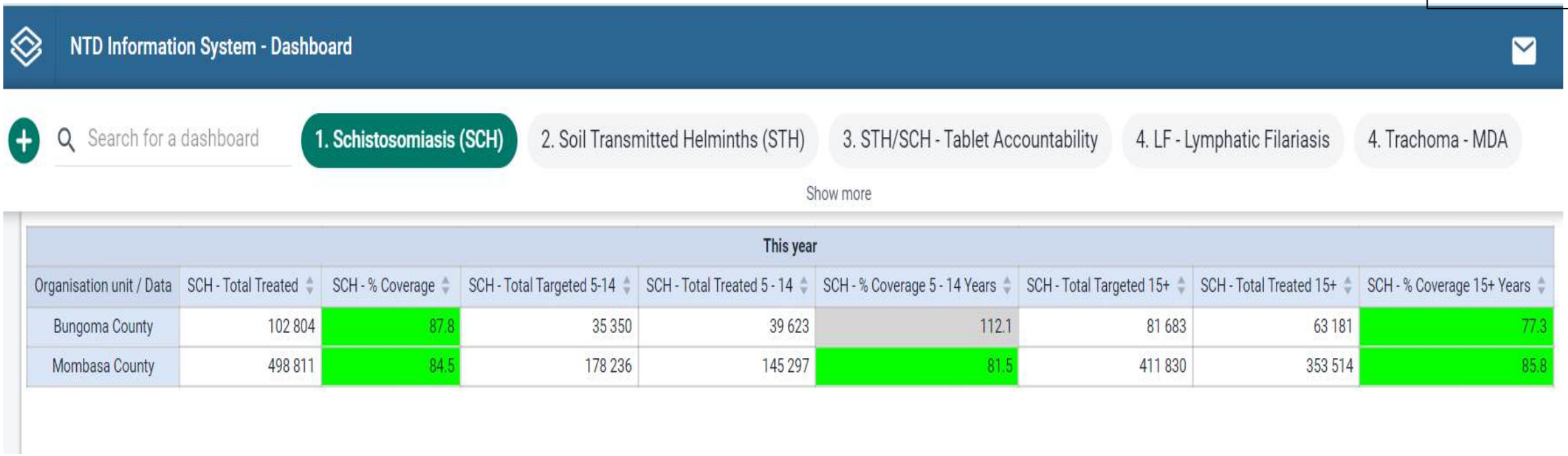
KHIS: Priority NTD routine indicators have been updated;(Case Management commodity and laboratory indicators to be reported on a Monthly basis

Filter in section	<5			5-14	
	Male	Female	Intersex	Male	Female
Cutaneous leishmaniasis					
Visceral leishmaniasis					
Jiggers (Tungiasis)					
Dengue					
Chikungunya					
Rabies					
Snake bites					
Scabies & other ectoparasites					
Lymphatic filariasis					
Lymphoedema due to Lymphatic Filariasis					
Hydrocele due to Lymphatic Filariasis					
Bacterial mycetoma (Eumycetoma)					
Fungal mycetoma (Actinomycetoma)					

NTD IDB: Campaign and commodity indicators captured on the IDB have corresponding fields on KHIS for data integration

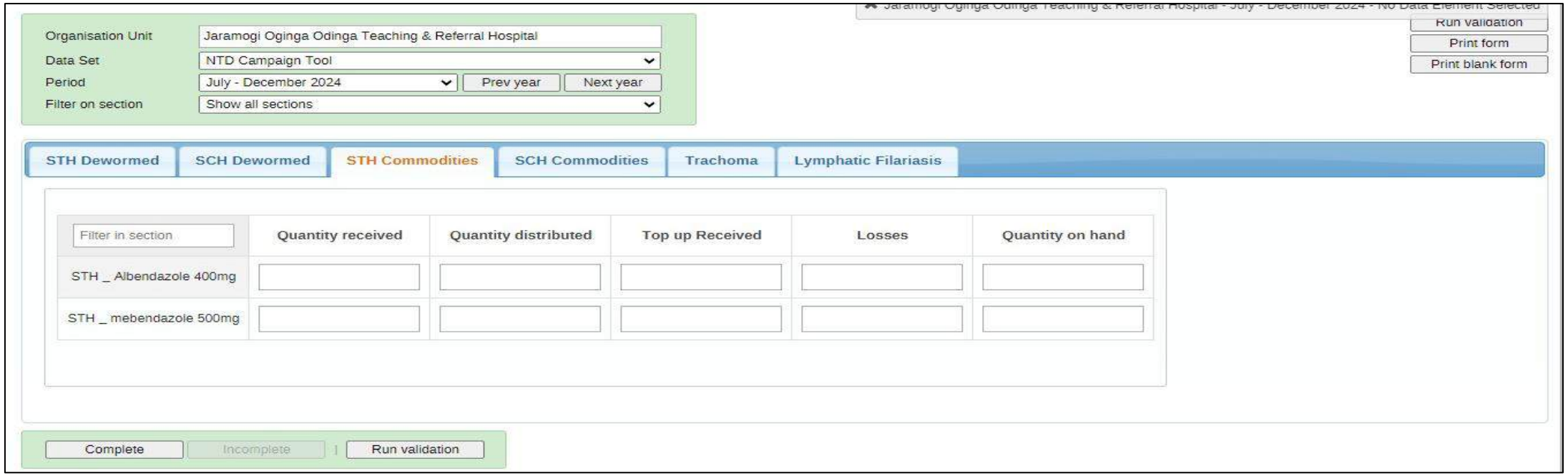


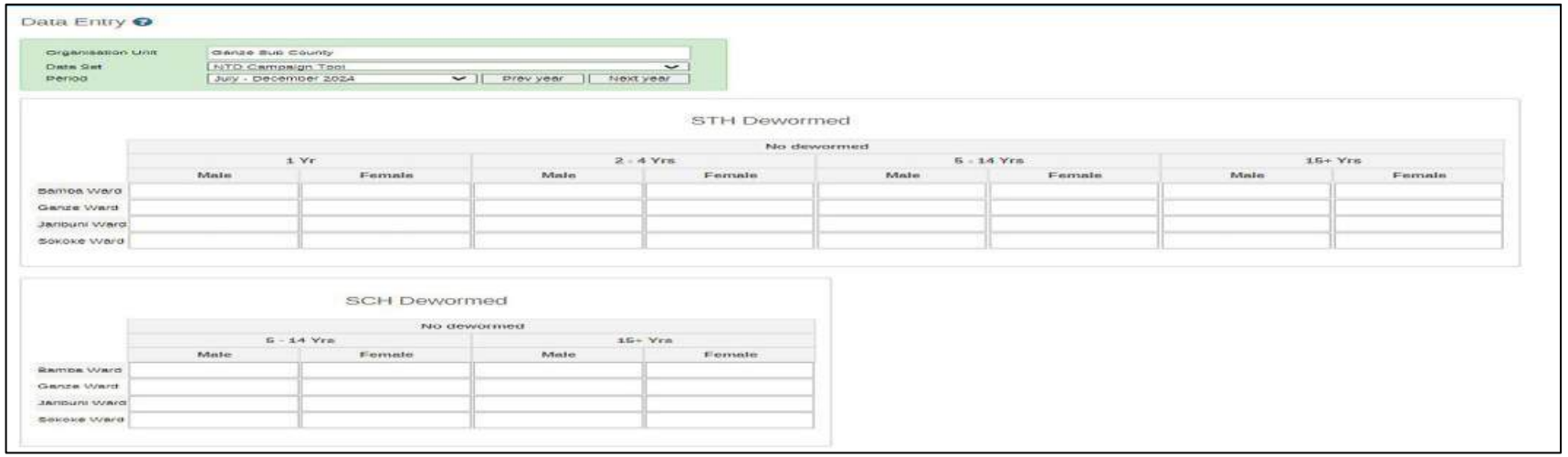
Treatment data captured on the IDB, disaggregated by age and gender, has been pushed successfully to KHIS



	This year							
Organisation unit / Data	SCH - Total Treated	SCH - % Coverage	SCH - Total Targeted 5-14	SCH - Total Treated 5 - 14	SCH - % Coverage 5 - 14 Years	SCH - Total Targeted 15+	SCH - Total Treated 15+	SCH - % Coverage 15+ Years
Bungoma County	102 804	87.8	35 350	39 623	112.1	81 683	63 181	77.3
Mombasa County	498 811	84.5	178 236	145 297	81.5	411 830	353 514	85.8

NTD IDB: Campaign and commodity indicators captured on the IDB have corresponding fields on KHIS for data integration





Similarly, commodity data has been mapped on KHIS. However, data requires collection to begin at a lower implementation level for synchronization with KHIS

Kenya Health Information System (KHIS) dhis2	Integrated NTD databases (IDB) dhis2
Campaign indicators MDA – Trachoma, STH/SCH, LF	Campaign indicators MDA – Trachoma, STH/SCH, LF
Treatment data captured on the IDB, disaggregated by age and gender, has been pushed successfully to KHIS	Treatment data captured on the IDB, disaggregated by age and gender, has been pushed successfully to KHIS
Commodity indicators mapped (collected at the lowest level of implementation -ELMIS	Commodity indicators mapped (collected at the lowest level of implementation -ELMIS

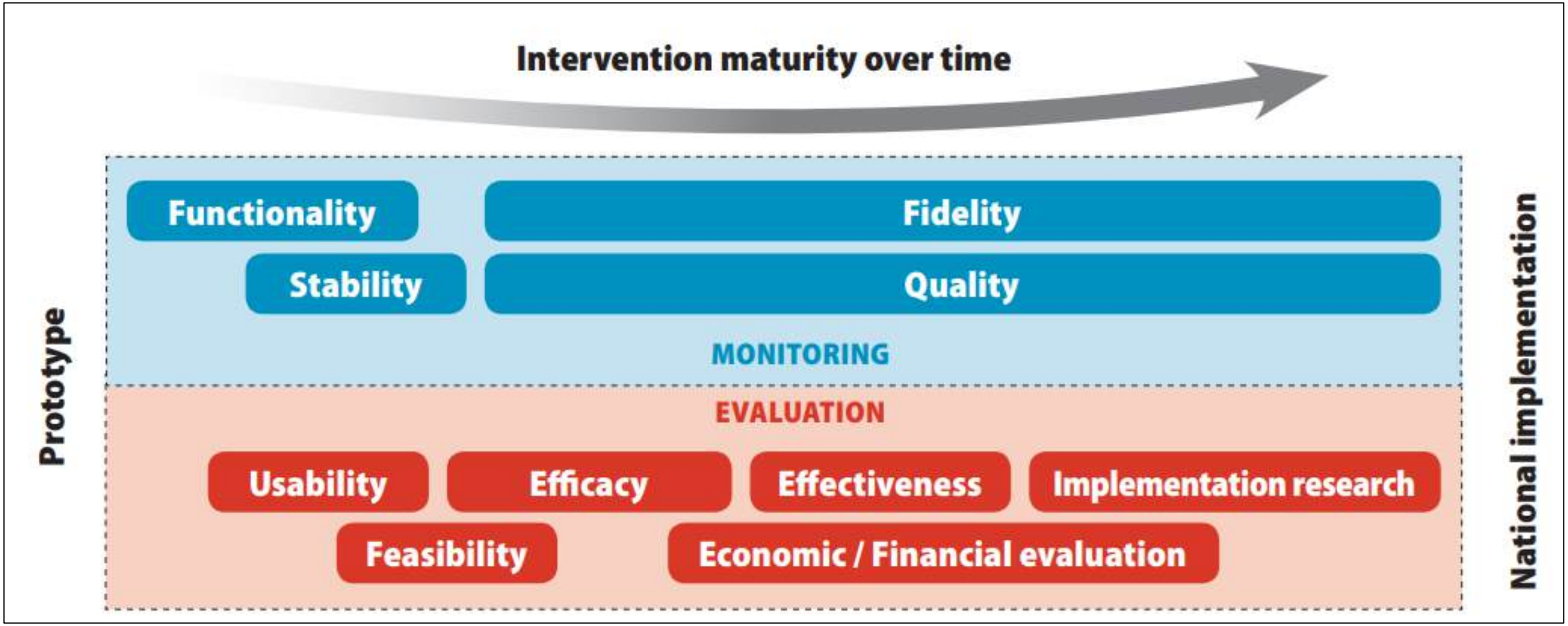
NTD indicators have been integrated into Ministry of Health e-CHIS, which collect data at the community level

AIM:

- Fully digitize NTD campaigns to ensure 100% geographical coverage during MDAs.
- Near real time MDA monitoring and supervision at all levels through interactive dashboards
- Collection of consumption data for drug accountability

FLOW: Data collected by CHPs into ECHIS into Dashboards linked to KHIS / IDB

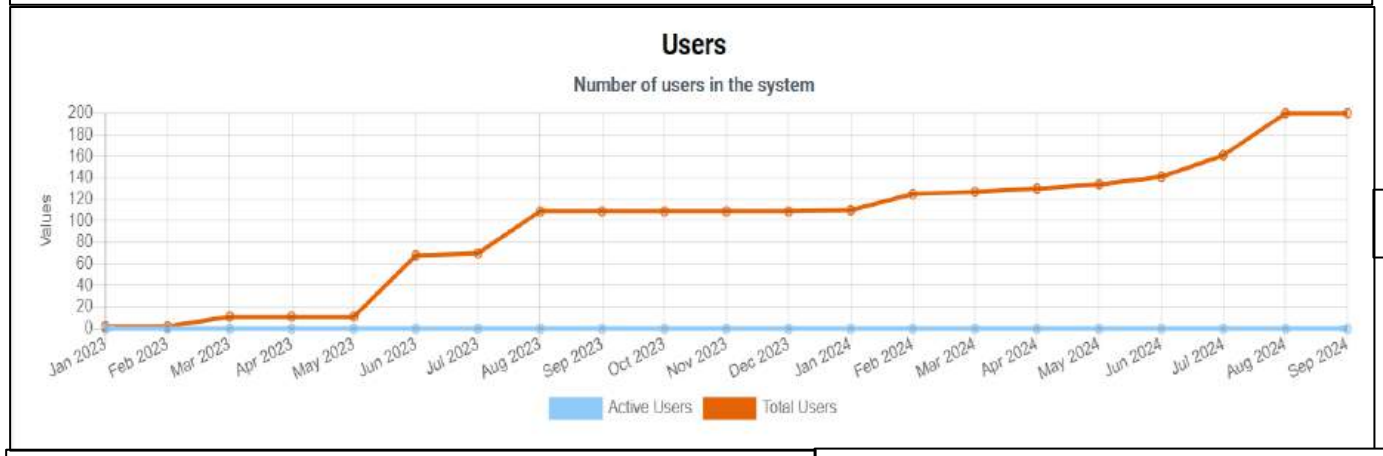
Monitoring and evaluation the use of new digital health platforms within the health sector



Source: Monitoring and evaluating digital health interventions: a practical guide to conducting research and assessment. Geneva: World Health Organization; 2016. Licence: CC BY-NC-SA 3.0 IGO.

Monitoring and evaluation the use of new digital health platforms within the health sector

increase in the number of users over time within the IDB from prototype development to pilot use during MDAs

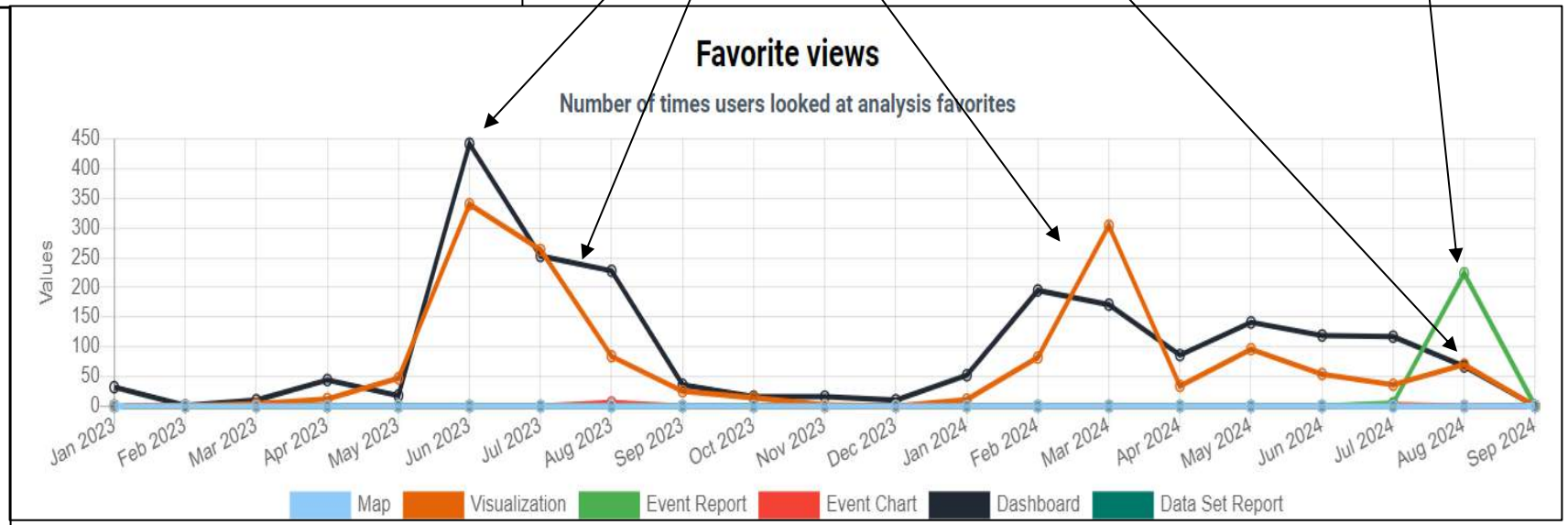


Assessment shows IDB is **functional** and **stable** during development and pilot use, with **minimal system downtime** during MDAs

Mass Drug Administrations

Pilot testing of Trachoma TT case finding

Sub national MDA data review meeting



System Usability Scale (SUS) Questionnaire administered to 13 sub national users of the IDB

- 13/13 (100%) familiar with use of DHIS2
- 12/13 (92%) Strongly agree or agree that the system is easy to use
- 11/13 (87%) would use the system frequently

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Financing the HMIS integration initiative

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Cost Driver	How and where were existing HMIS funds leveraged	Where was additional funding required?
Platform hosting on servers	KHIS – Platform Hosted by the Ministry Health Servers NTD database initially hosted by CHAI servers (Transfer to MOH servers completed)	CHAI under ARISE 2 Funding
Developer staff or consultants	Clinton Health Access Initiative	Ministry of Health Developers
Meetings and workshops	Clinton Health Access Initiative	ENDFUND, CIFF, INSUPPLY, AIHD, AMREF
Printing of registers/forms	Clinton Health Access Initiative	ENDFUND, CIFF, INSUPPLY, AIHD, AMREF
Hardware for reporting (computers or mobile devices_	Ministry of Health	CHAI
Internet or data bundles	CHAI	AMREF
End user training	CHAI	SIGHTSAVERS, ENDFUND, AMREF, AIHD, INSUPPLY
Supervision	CHAI	[...]
DQA and data review meetings	CHAI	[...]

Challenges and Mitigation Strategies with integrating NTD data into HMIS

Challenges	Mitigation Strategies
Data Standardization	▪ Multi-stakeholder engagement in development of data standards ▪ Internal and external validation of data standards, including Division of HIS ▪ Alignment with WHO NTD roadmap indicators
Human, Financial and Technological Resources	▪ Diversification of funding streams in the development process ▪ Capacity building a large pool of healthcare workers to facilitate cascade ▪ Leveraging on multiple partners to support MOH in technological development
Coordination and competing interests	▪ Prioritization of integration within the NTD Masterplan, Health Sector Plan ▪ Anchoring the coordination of integration within the NTD M&E section ▪ Capitalizing on government goodwill on healthcare digitization
Transfer of the IDB to MOH servers /Digital Health Authority	▪ Multi-stakeholder engagement in development through out the process of development

Benefits of integrating NTD data into HMIS

Improved Disease Surveillance & Response	▪ Widespread access to near real time data to facilitate decision making ▪ Better tracking of disease patterns and assessment of control interventions ▪ KHIS data will be required for certification of disease elimination
Strengthened health system capacity	▪ Continuous adoption of best practices to improve NTD data processes ▪ Integration with eLMIS for enhanced supply chain management ▪ Wider access to NTD data, enhancing data use, quality & feedback loops
Enhanced policy and program development	▪ Data availability informs policy makers in the development of health interventions ▪ Data access allows for continuous monitoring and evaluation

Lessons Learnt and way forward

Collaboration and harmonized implementation among partners is key

Alignment of workplans with the overall Ministry objectives

Continued training cascade of healthcare workers on the NTD tools

Need for additional resources to scale up; TOT training done for 15/47 counties

Pilot implementation on integrated NTD reporting

Scale up use of the integrated NTD database for campaign reporting

Test integration pipeline for data visualization of MDA data during campaigns

Governance and maintenance

- All HMIS are under the Digital Health Authority (DHA) a state cooperation created to manage all Health data (custodian of all systems and servers with Health data. They are responsible for maintenance of all Health systems and conduct compliance Audits

- Any changes to NTD HMIS Components are done by the Digital Health Authority

- User Challenges are reported, captured and acted by the managers of the system. In addition more feedback is collected during capacity building workshops

Pending improvements for NTDs in the HMIS

- The Country has stated the process of using electronically managed registers (EMRs). Health facilities are will no longer be using paper-based forms. The integration process is ongoing

- 32 out of 47 Counties are yet to be trained on the NTD forms and the integration process. 15 counties partially trained on the NTD registers and Summary tools

- Changes are needed on the registers and summary forms after feedback we got from users during the trainings

- Interoperability of IDB with other systems currently ongoing- Ministry of Health, Ministry of Education, iLMIS. KHIS, ECHIS, WHO (Leishmaniais)


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World Health
Organization


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INVESTMENT FUND
FOUNDATION


THE END FUND


ARISE
Fund
a project of THE END FUND


BILL & MELINDA
GATES foundation


Sightsavers

Lessons, reflections, and advice for others

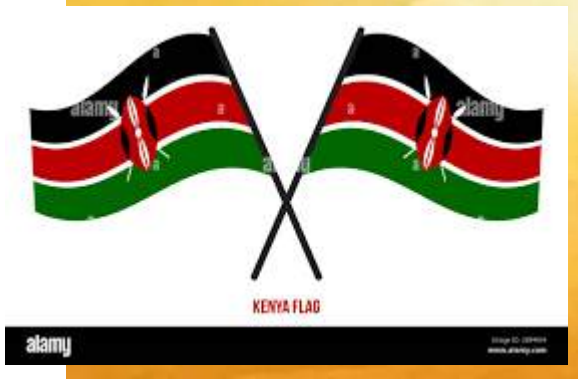
Making the HMIS team understand NTDs, resources required for the development process from tools to training. The indicators needed for monitoring of NTDs were many and choosing the key indicators was a challenge.

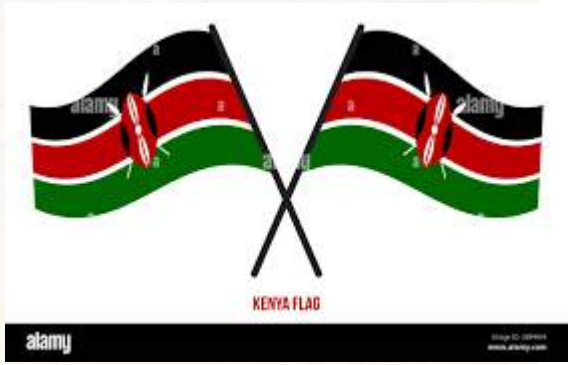
- Reflecting on the training and rollout process: what went well? What would you do differently if you were starting over?

- NTDs are now recognized as part of the Healthcare system and are covered as part of the Universal Health care (UHC).

- More initiative are ongoing to integrate NTDs in the community Healthcare system and initiatives are ongoing to capture NTDs data as part of the Free Health care from facilities.
- NTDs mapping is ongoing for MMDP cases in the Coastal region for follow up of cases

Thank You





Atelier ESPEN sur les systèmes de données, les outils et les processus pour les programmes PC-NTD

Jour 2
Décider quoi et comment intégrer : collaborer avec les unités SNIS pour une inclusion efficace des données sur les NTD

NASSA Christophe
PNMTN/Burkina Faso

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Plan de présentation

EXPANDED SPECIAL PROJECT FOR ELIMINATION OF NEGLECTED TROPICAL DISEASES

- Aperçu du pays
- Intégration du SNIS (quoi, quand, processus)
- Renforcement des capacités des acteurs
- Leçons apprises , défis liés à l'intégration avec le SNIS
- Données nécessaires mais non collectées par le SNIS

Présentation du pays

- **Nouveaux découpage adminitratif**

- **Burkina Faso (Afrique de l'Ouest):**
- **Superficie : 274 000 km2**
- **Population totale 2025 : 24 315 686**
- **Régions administraives: 17**
- **Régions sanitaires: 13**
- **Districts sanitaires: 70**
- **Centres hospitaliers universitaires: 06**
- **Centres hospitaliers régionaux :10**
- **Hôpitaux de districts (CMA): 46**
- **Formations sanitaires périphériques publiques(CM/CSPS) : 2 410**

Description du système de rapportage MTN avant l'intégration

National

Compilation des données Excel, BDIM

Contrôle de qualité et feedback, Validation des données

Saisie des données de routine dans https://endos.minsante.bf/ (DHIS2)

Region

District

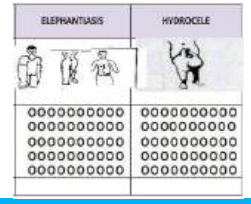
Compilation des données dans Excel
Rapports Word des TDM
Saisie des données de routine dans https://endos.minsante.bf/ (DHIS2)
Contrôle de qualité et feedback
Validation des données

Formation sanitaire

Rapport mensuel d'activités (Données de routine)
Rapport TDM, rapports spécifiques
Registre de suivi des patients

Communautaire

Registre TDM, fiches de coches
Fiche de recensement des cas
Visite à domicile (suivi du lymphoedème)

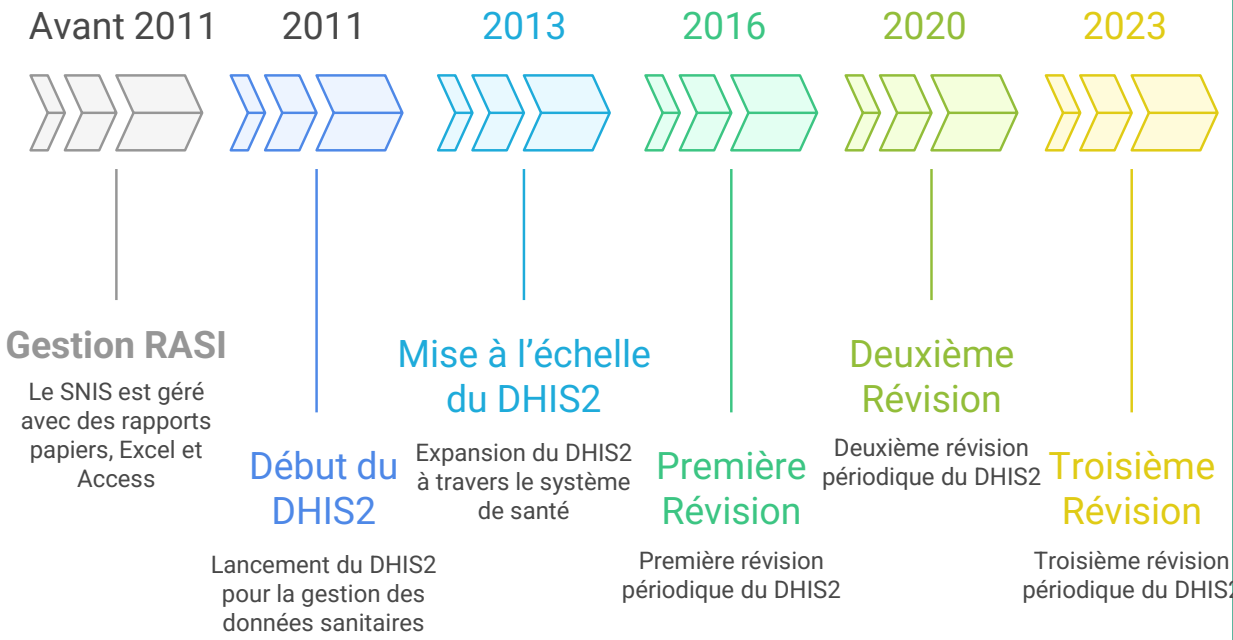


Transmission

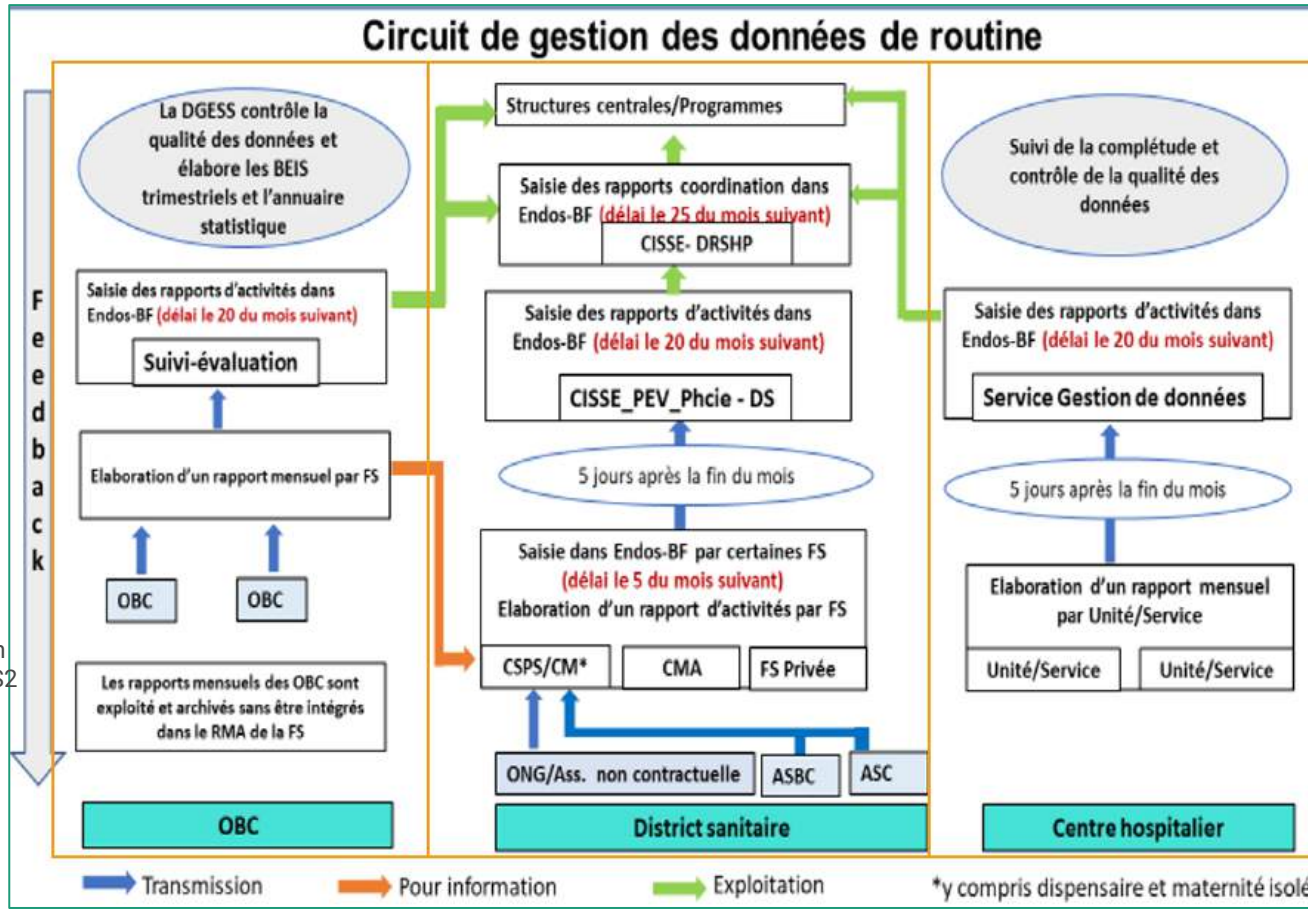
Feedback

Présentation du SNIS

Évolution du Système National d'Information Sanitaire (SNIS)



Circuit de gestion des données de routine



Quels sont les indicateurs MTN actuellement intégrés dans le SNIS au Burkina Faso?

Données MTN intégrées dans le DHIS2 au Burkina Faso

❑Nosologies des cas

10.4 Maladies Tropicales Négligées (MTN)

Items	< 5 ans	5-14 ans	>=15 ans
Nombre de patients avec lymphœdèmes/ éléphantiasis (nouveaux cas)		0	106
Nombre de malades de lymphœdèmes/ éléphantiasis suivis		13	488
Nombre de malades de lymphœdèmes/ éléphantiasis ayant présenté des crises aigues		0	33
Nombre de cas d'hydrocèles enregistrés		3	111
Nombre de cas de trichiasis trachomateux dépistés		0	2
Nombre de nouveaux cas d'ulcère de Buruli	14	4	53
Nombre de nouveaux cas de Trypanosomiase Humaines Africaine (THA)	0	0	9
Nombre de nouveaux cas de leishmaniose cutanée	0	2	13
Nombre de nouveaux cas de morsures de serpents enregistrés	53	381	893
Nombre de morsure de chien enregistrés	43	152	150
Nombre de nouveaux cas de rage enregistrés	0	4	4
Nombre de nouveaux cas de Bejel enregistrés	18	0	0
Nombre de nouveaux cas de pian enregistrés	0	0	0
Nombre de nouveaux cas de schistosomiase	1	8	43
Nombre de nouveaux cas d'onchocercose	9	0	0
Nombre de nouveaux cas de gale	9	0	90

❑Données TDM: FL, Oncho et Schisto

V. DONNEES DE TRAITEMENT DE MASSE CONTRE LA SCHISTOSOMIASE

5.1. Résultats de traitement

Tranche d'age	Population traitée	
	Femme	Homme
Population 5-14 ans traitée	157979	149984
Population 15 ans et plus traitée	62224	53651

5.2. Résultats traitement villages frontaliers

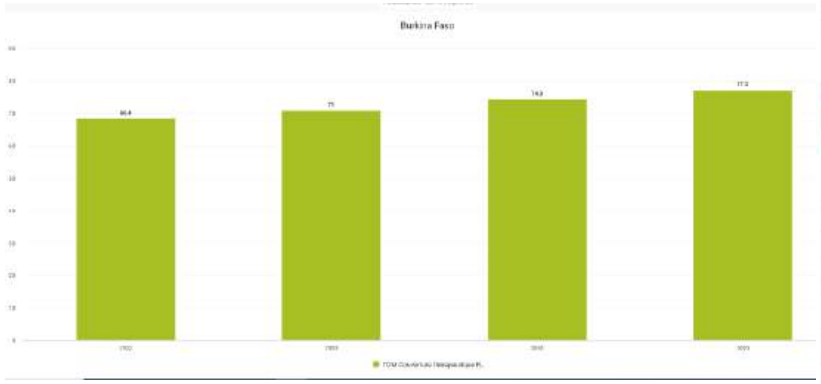
Item	Valeur
Population villages frontaliers	6122
Population Femmes traitée	4063
Population Hommes traitée	4028

❑Surveillance de Laboratoire

12.2. Examens réalisés au laboratoire

Examens	Total réalisé	Dont Anormal/Positif
Parasitologie-Mycologie		
Goutte épaisse (GE)	16149	3512
Recherche d'œufs de schistosomes	470	1
Recherche de W.Bancrofti	0	0
Recherche d'œufs de géo-helminthiase (ascaris, ankylostome, trichiuris)	40	0
Examen des selles (KOP)	132	38
Autres examens de parasitologie-Mycologie	0	0
Hématologie-Immunologie		

❑Données historiques TDM 2001-2022



❑Prise en charge des cas

16.2 Personnes opérées pour quelques interventions spécifiques

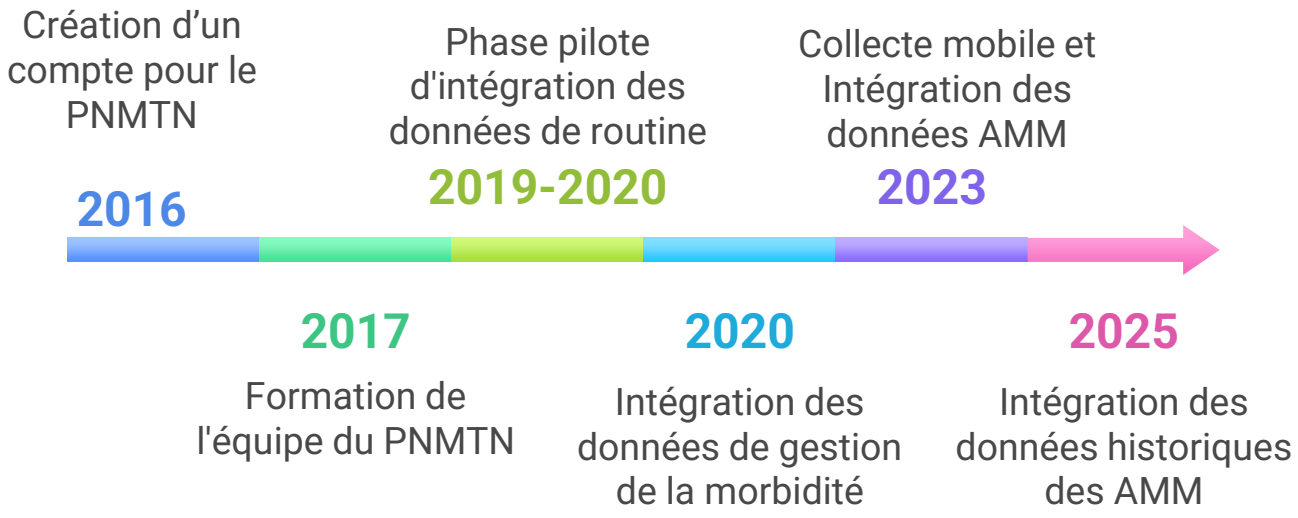
Items	Valeur
Nombre de personnes opérées pour hydrocèle	71
Nombre de patients opérés d'hydrocèle reçus pour la première visite de suivi	7
Nombre de personnes opérées pour trichiasis trachomateux	1
Nombre de personnes opérées pour cataracte	88

Collaboration avec l'unité SNIS et justification du choix

- **Coordination de la gestion des données MTN**
- Mise en place d'une équipe de gestion des données MTN à la création du PNMTN en 2013
- Etat des lieux des données MTN: **faible prise en compte des données MTN dans le SNIS**
  - ➢Quelques indicateurs dans les tableaux nosologiques des supports de routine et dans le DHIS2
  - ➢Pas de données spécifiques MTN dans l'annuaire statistique en dehors de la lèpre et la chirurgie de l'hydrocèle.
  - ➢Plusieurs de supports parallèles pour collecter les données de prise en charge des cas

Intégration des données MTN dans SNIS au Burkina Faso : collaboration avec la direction en charge du SNIS

- Rencontres d'échanges et de plaidoyer : présentation de la situation, orientations pour l'intégration, prise en compte du PMTN dans le processus de révision des outils du SNIS
- Priorisation des besoins: données de routine, données de campagnes et données historiques



Processus d'ajout des MTN dans le HMIS – formulaires de déclaration électroniques

World Health Organization
African Region

ESPEN EXPANDED SPECIAL PROJECT FOR ELIMINATION OF NEGLECTED TROPICAL DISEASES

Formulaires dans le DHIS2

- **Données morbidités de routine:** Modification des formulaires existents et creation de nouveaux formulaires
- **Données AMM**: Création de nouveaux formulaires
- **Données historistiques**: affectation aux éléments de données existants

Processus d'intégration

Mise en place d'un groupe de travail: Conception des formularies et les règles de validation

- Présentation des formulaires aux parties prenantes
- Test des formulaires: phase pilote
- Finalisation des formulaires: Prise en compte des observations
- Déploiement des formulaires

Maladies de la peau
Erysipèle
Dermatophytose
Leishmaniose cutanée
Gale
Bejel
Pian
Anthrax
Ulcère de Buruli
Leishmanioses cutanées
Autres maladies de la peau

V. DONNEES DE TRAITEMENT DE MASSE

5.1. Résultats de traitement

Tranche d'age	Rural		Urbain	
	Femme	Homme	Femme	Homme
Population 5-14 ans traitée				
Population 15 ans et plus traitée				

5.2. Population cible et résultats traitement villages frontaliers

Item	Valeur
Population villages frontaliers	
Population Hommes traitée	
Population Femmes traitée	

Processus d'ajout des MTN dans le HMIS – tableaux de bord et rapports

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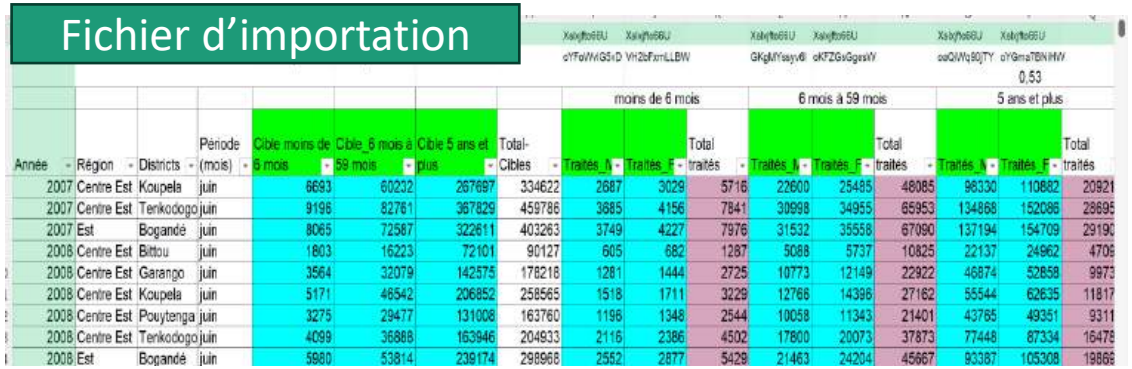
Données historiques

- Collecte des données historiques sur un canevas Excel
- Importation des données dans la base
- Extraction, analyse et correction des erreurs

Fichier d'importation



									moins de 6 mois			6 mois à 59 mois			5 ans et plus		
Année	Région	Districts	Période (mois)	Cible moins de 6 mois	Cible_6 mois à 59 mois	Cible 5 ans et plus	Total-Cibles	Traités_M	Traités_F	Total traités	Traités_M	Traités_F	Total traités	Traités_M	Traités_F	Total traités
2007	Centre Est	Koupela	juin	6693	60232	267697	334622	2687	3029	5716	22600	25485	48085	98330	110882	20921
2007	Centre Est	Tenkodogo	juin	9196	82761	367829	459786	3685	4156	7841	30998	34955	65953	134868	152086	28695
2007	Est	Bogandé	juin	8065	72587	322611	403263	3749	4227	7976	31532	35558	67090	137194	154709	29190
2008	Centre Est	Bittou	juin	1803	16223	72101	90127	605	682	1287	5088	5737	10825	22137	24962	4706
2008	Centre Est	Garango	juin	3564	32079	142575	178218	1281	1444	2725	10773	12149	22922	46874	52858	9973
2008	Centre Est	Koupela	juin	5171	46542	206852	258565	1518	1711	3229	12766	14396	27162	55544	62635	11817
2008	Centre Est	Pouytenga	juin	3275	29477	131008	163760	1196	1348	2544	10058	11343	21401	43765	49351	9311
2008	Centre Est	Tenkodogo	juin	4099	36888	163946	204933	2116	2386	4502	17800	20073	37873	77448	87334	16478
2008	Est	Bogandé	juin	5980	53814	239174	298968	2552	2877	5429	21463	24204	45667	93387	105308	19868

Données importées

	TDM-FL-Oncho-Population traitee pour FL									
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Burkina Faso	10490288	11125349	11613507	12041890	12326897		12825582	12472093	9968933	8838991
Bankui	615927	620743	658304	601997	684878		672653	731735	737513	785957
Djoro	489336	520673	525628	540775	550391		571513	603106	1216494	1279124
Goulmou	253569	308998	335653	340493	344873		353773	383100	388147	398808
Guiriko	1156856	1258659	1323162	1379559	1331194		1358810	270332		
Kadiogo	1114287	1292623	1334833	1411174	1636150		1713415	1871262	482362	527730
Koulsé	885751	904354	942002	969086	1059323		1073870	1146130	1169919	1204228
Liptako	474715	485481	497872	514035	538343		571368	587271	638048	169049

Processus d'ajout des MTN dans le HMIS – tableaux de bord et rapports

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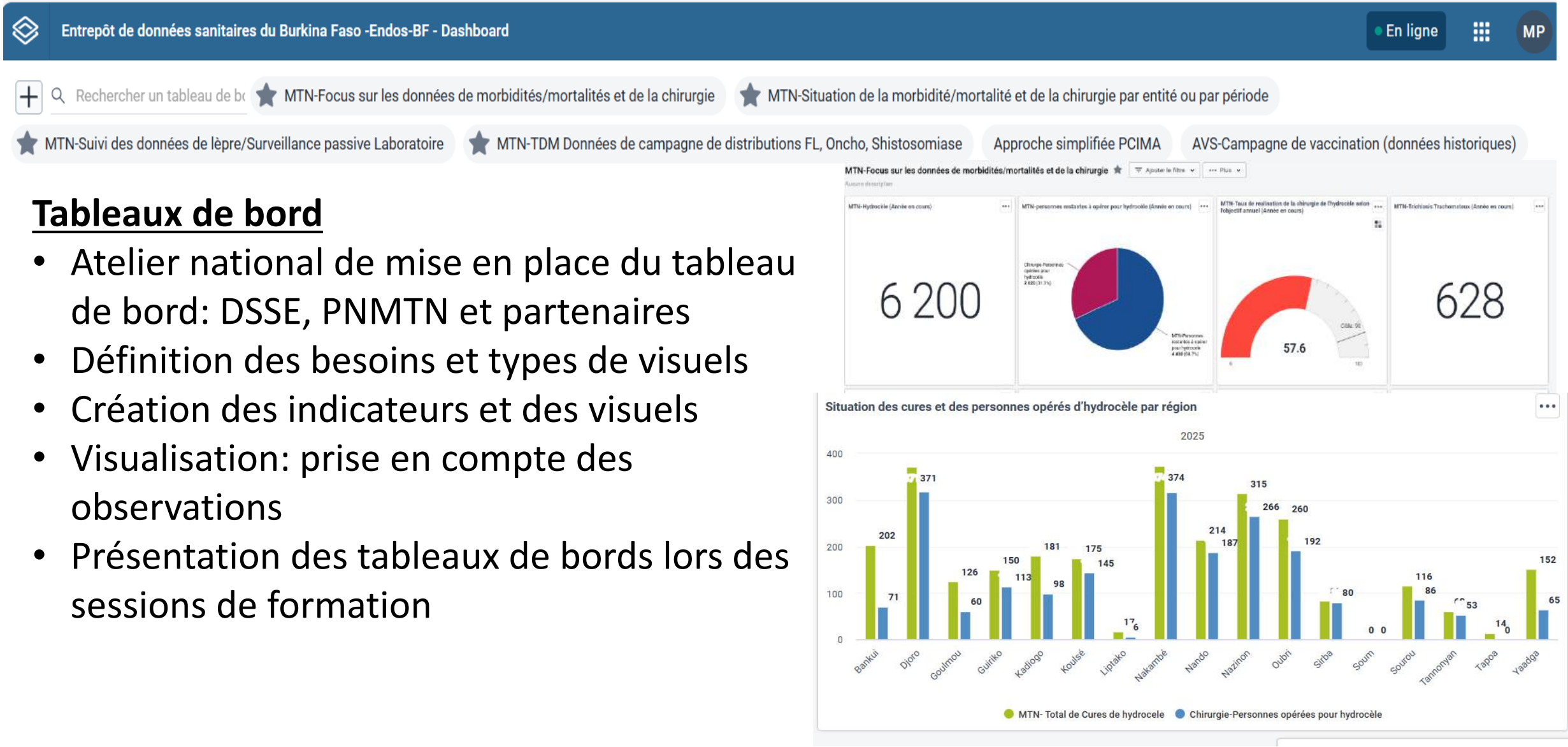

Tableaux de bord

- Atelier national de mise en place du tableau de bord: DSSE, PNMTN et partenaires
- Définition des besoins et types de visuels
- Création des indicateurs et des visuels
- Visualisation: prise en compte des observations
- Présentation des tableaux de bords lors des sessions de formation

Formation et déploiement

- Formation en cascades des acteurs : gestionnaires des données, prestataires;
- Intégration à la formations et supervision du SNIS à tous les niveaux;
- Intégration du renforcement des acteurs sur les données lors activités spécifiques du PNMTN: formations spécifiques et supervision
- Sessions d'orientation en ligne des gestionnaires des données;
- Principaux rôles déjà définis dans le flux: saisie, analyse et contrôle et feedback
- Problèmes rencontrés lors du déploiement : Retard dans la formation à l'échelle, insuffisance de supervision

Gouvernance pour la maintenance du HMIS

- La DSSE sont en charge dans la gouvernance nationale
- Chaque programme/structure est responsable du suivi et du contrôle de qualité
- Appui de la DSI pour les mises à jour

Procédure pour demander et mettre en œuvre des modifications aux composantes du NTD HMIS ?

- Analyser les données existantes et identifier les besoins
- Discuter avec la DSSE
- Phase pilote si nécessaire
- Intégration au processus de révision périodique du SNIS tous les 3 ans

Processus mis en place pour traiter les problèmes des utilisateurs et/ou leur fournir un retour d'information

- L'équipe des DSSE assure un soutien assistance technique
- L'équipe du PNMTN assure le suivi contrôle qualité et rapporte également les éventuels problèmes.
- Bulletin trimestriel de la qualité des données: Feedback aux utilisateurs

Leçons, réflexions et conseils pour les autres

Leçons apprises

- Coordination des parties prenantes (PNMTN, Partenaires, Directions en charge du DHIS2)
- **Mutualisation des ressources:** une bonne planification et une intégration des activités aux paquets d'interventions sur les MTN existants;
- **Equipe de gestion des données du programme MTN** : collaboration efficace avec les acteurs du SNIS

- **Conseils pratiques**: renforcement des compétences sur les MTN, disponibilité des directives et outils de collecte primaires standardisés avant de commencer le processus

- **Facteurs de succès**: Bonne connaissance par les gestionnaires de données du DHIS2, alignement de nos priorités avec les objectifs des partenaires (CHAI, END Fund), appui technique des partenaires

- **Ce qui n'a pas bien marché:** phase pilote initiale assez longue, insuffisance de supervision

Gestion des données non prises en compte dans le SNIS

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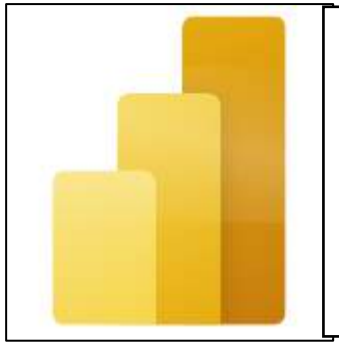
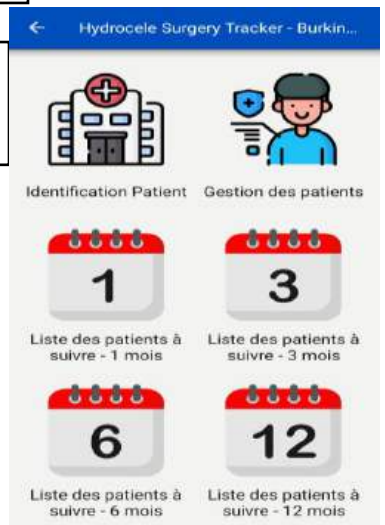
Enquêtes d'impact &surveillance (FL, Oncho, Schisto)



Visualisation des données AMM

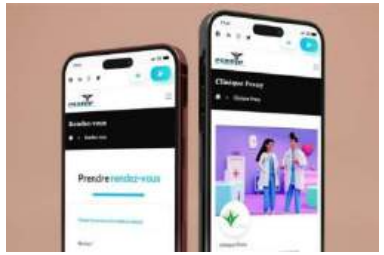
TROPICAL DATA

Enquêtes trachome



Chirurgie de d'hydrocele et suivi individuel

Recensement des cas de complication de la FL, déclaration des cas de la lèpre, Digitalisation AMM



Suivi Communautaire des cas de lymphoedème

MERCI
MERCI BEAUCOUP
OBRIGADO

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NEGLECTED TROPICAL DISEASES

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MINISTRY OF HEALTH - ETHIOPIA

ESPEN workshop on data systems, tools and processes for PC-NTD programmes

Ethiopia Experience on Inclusion of NTDs in the HMIS

World Health Organization
African Region

Gedefaw Ayenew/Daniel Teferi
Ethiopia

ESPEN
EXPANDED SPECIAL PROJECT FOR ELIMINATION OF NEGLECTED TROPICAL DISEASES

Agenda

- NTD programme overview
- HMIS integration (what, when, process)
- Data that are needed by not collected by HMIS (what, how, where)
- Challenges of integration with HMIS
- Lessons learned

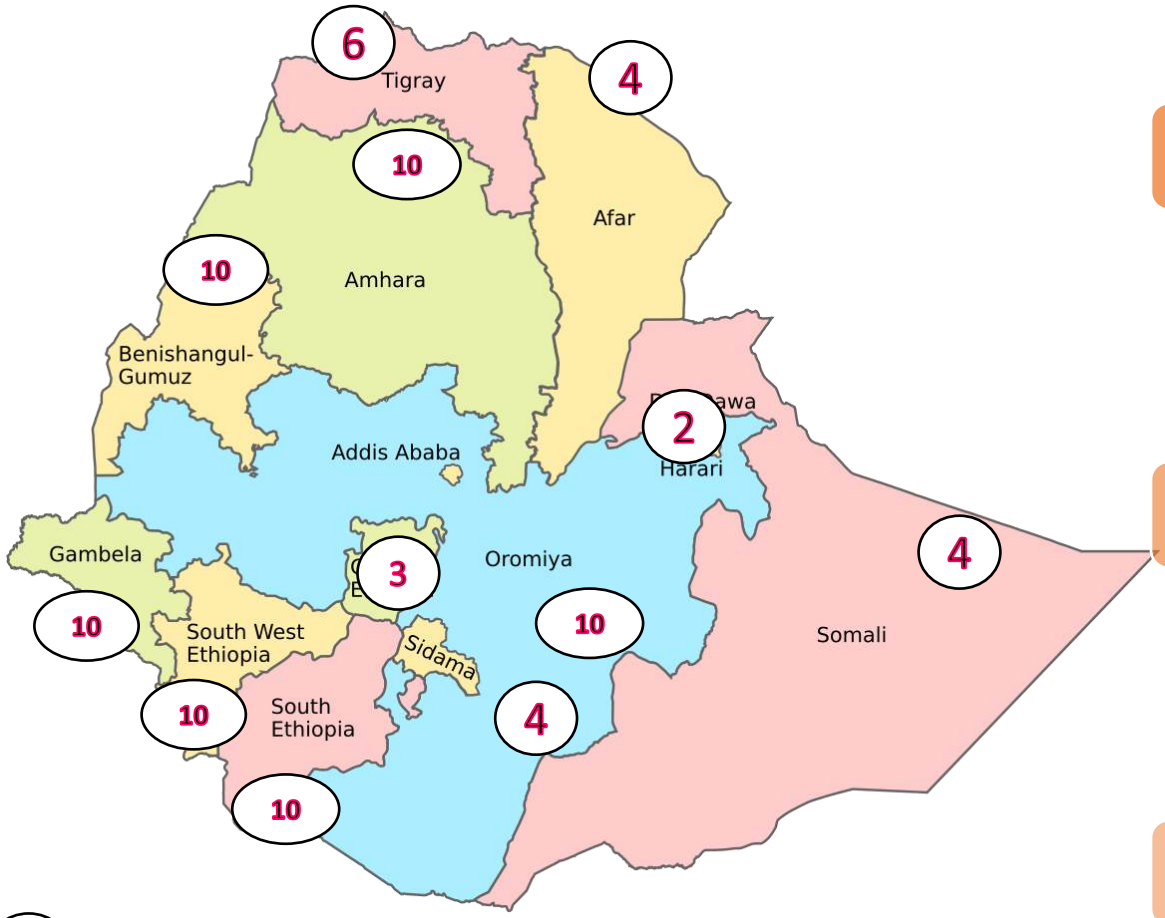
NTD program overview-Ethiopia

Priority NTDs under the current strategic Plan

Preventive Chemotherapy	Case-management	Recently included
• Trachoma • Onchocerciasis • Schistosomiasis • Soil Transmitted Helminthiasis • Lymphatic Filariasis	• Leishmaniasis • Podoconiosis • Guinea Worm • Scabies	• Rabies • Leprosy • Chikungugnea and dengue fever • Human African trypanosomiasis (HAT)

Ethiopia adopted about 12NTDs with inclusion of Podo, not included in the WHO roadmap

NTD program overview…



Administrative Overview of Ethiopia

- 1.1 million sq. km area
- 12 regional states and 2 city administrations
- 1,189 districts
- >130 million population

Endemicity of PC NTDs

- 801 districts and close to 95 Million population is endemic for Trachoma
- 595 districts and close to 70 million population is endemic for STH
- 479 districts and close to 54 million population is endemic for SCH
- 316 districts and close to 27 million population is endemic for ONCHO
- 112 districts and close to 8 million population is endemic for LF

Endemicity of other diseases

- 2 districts and close to 300,000 population is endemic for Guinea Worm
- 170 districts and close to 6.4 million population is at risk for CL
- 67 districts and close to 3.4 million population is at risk for VL
- 340 districts and close to 35 million population is endemic for Podoconiosis
- Scabies, Rabies, Leprosy, Dengue and chikungunya

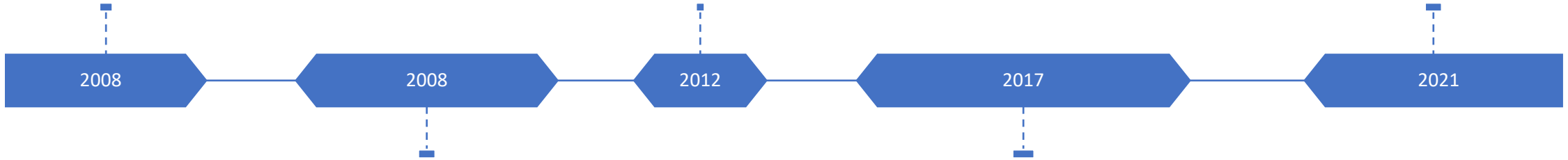
More than 20 implementing partners and donors involved in fighting against NTDs

HMIS Overview-Ethiopia

In 2008, the Ethiopian government, launched several initiatives. One of the imitative was HMIS rollout. As a result, MOH,

Digitalization began using DHIS2.

System revised—25 data element and 8 NTD indicators remains the same



MoH, launched HMIS, Initially paper-based with 108 core indicators, including 2 NTD indicators.

By 2017: revised and 8 NTD indicators and 25 data elements included .

Data needed but not collected in HMIS

Survey data (for all five PC NTDs survey)

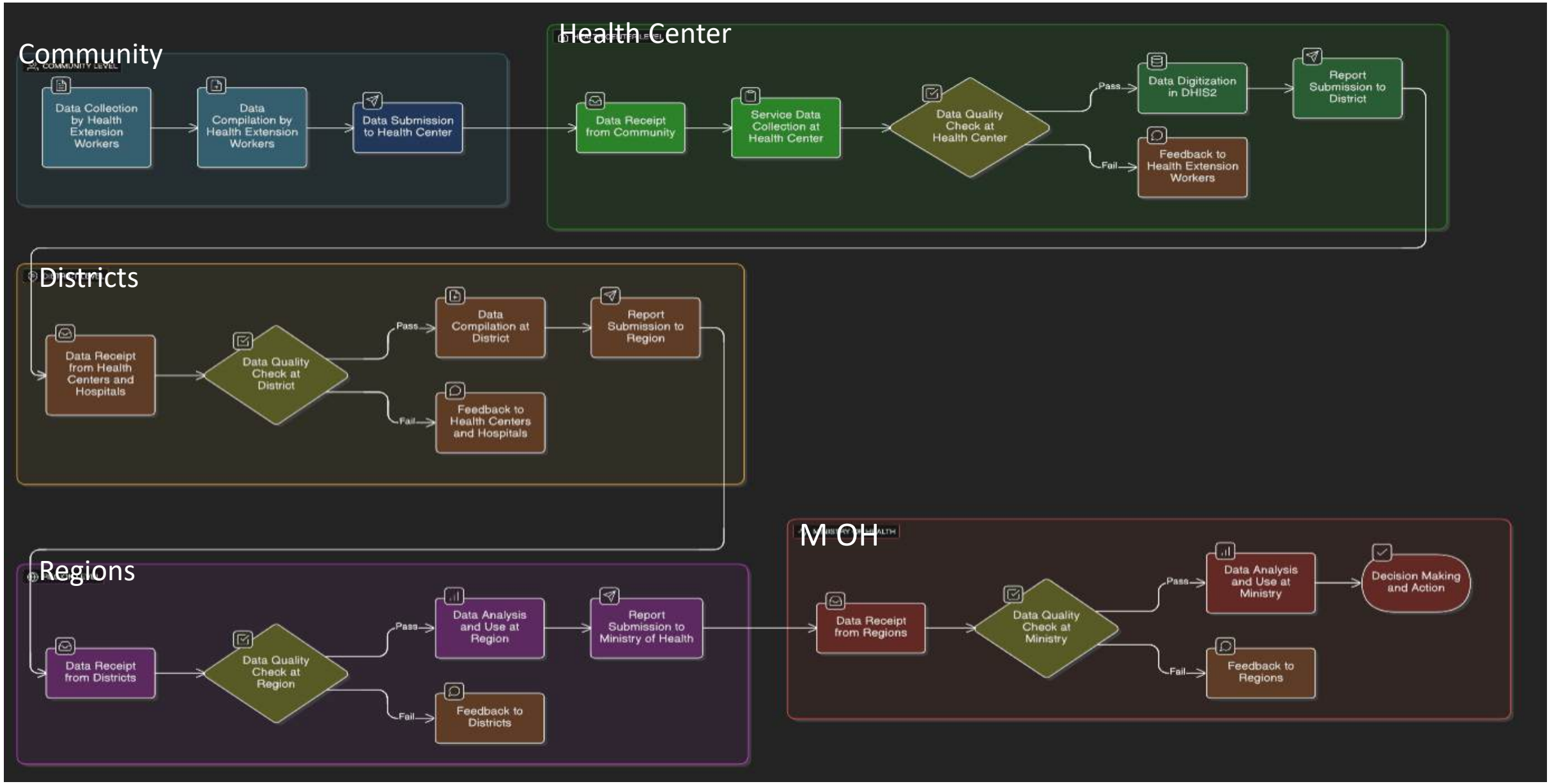
Service data from other NTDs (GWDs, Scabies,…)

Drug management by disease type

Other operational studies

Used other additional data sources

HMIS data flow



Before Integration HMIS

Fragmented data system

Paper based reporting

Limited data quality checks

Delayed reporting

Difficulty in accessing national-level data

Lack of digital tools

NTD data before and after HMIS integration

Category	Data Sets/ tools	Storage method, Before Integration	Storage method, After Integration
Case Management/treatment register	All NTD data collection tools at the community level	Paper based	Paper based
Case Management	Summary for Leishmaniasis case treatment	Paper based and Excel	DHIS2
	Summary for TT surgery	Paper based and Excel	DHIS2
MDA	Inegrated MDA treatment register	paper based	eCHIS being piloted
Mass Drug Administration (MDA)	Treatment summaries	Separate paper and excel based for each disease	Integrated for all five PC NTDs, DHIS2
Surveys and surveillance	Survey (Coverage, Impact, Pre-TAS…)	hybrid (paper based and electronic)	Digitized using ODK central, ESPEN collect
Commodities	MDA Drug consumption summary	paper and excel based	paper and excel based

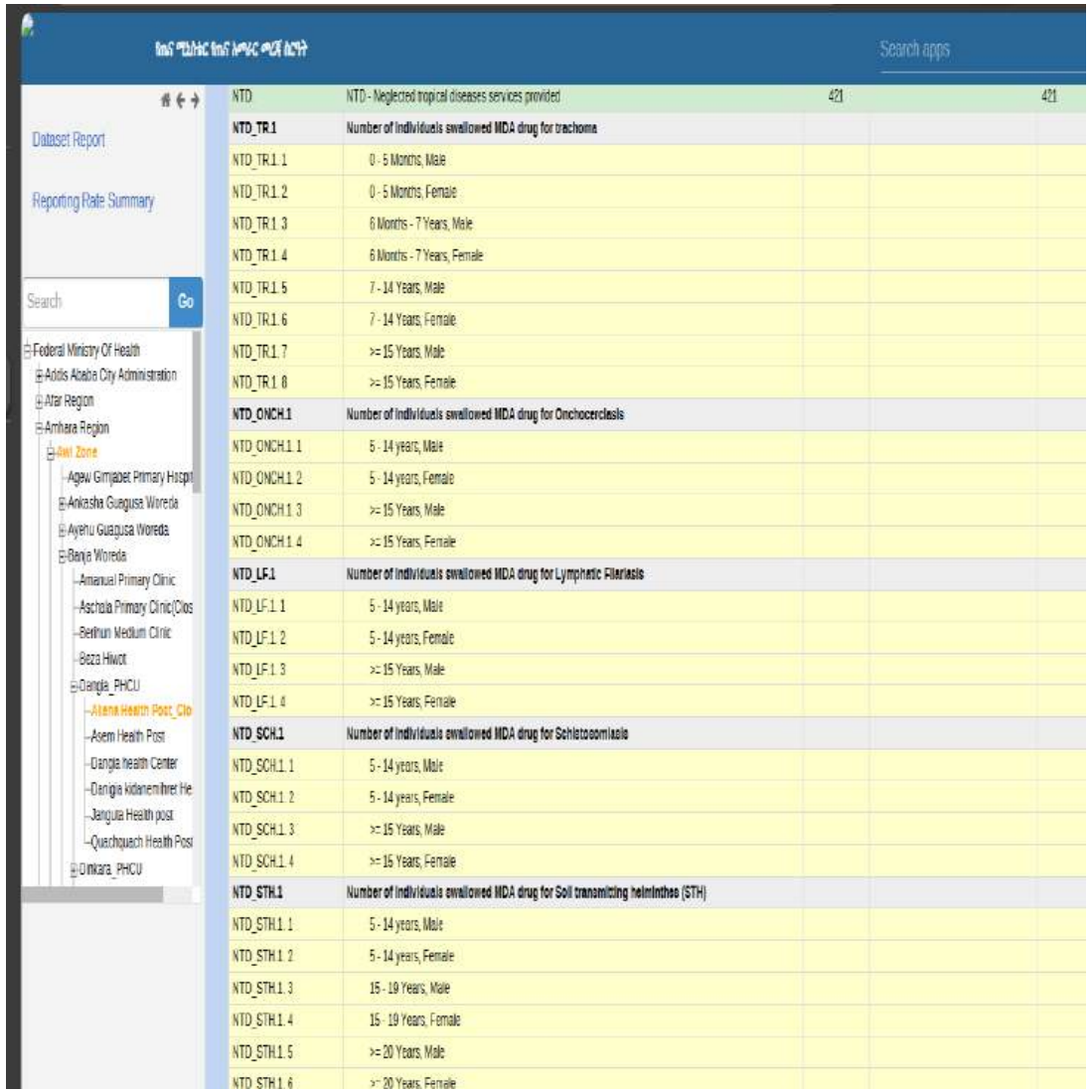
Engagement with HMIS unit and rationale behind selection

- The NTD program like other health program works closely with the HMIS unit.
  - NTD team engage with the HMIS unit
    - During revision of HMIS, Performance management, Review meeting, and Planning meeting
- The selection of data elements for all program follows the same principles and criteria applied to all programs within the MoH

Process of adding NTDs into the HMIS – electronic reporting forms

Electronic reporting Forms development

- Reporting forms were developed or revised through a consultative process
  - involving regional, NTD teams, HMIS personnel, and implementing partners
  - Tools we used: key informant interview, Group discussion, document review, field visit, and Workshop
- Field testing was conducted
- Feedback was incorporated and rollout



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Process of adding NTDs into the HMIS – dashboards and reports

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ESPEN

Programs identified priority indicators, reporting needs, and decision-making requirements.

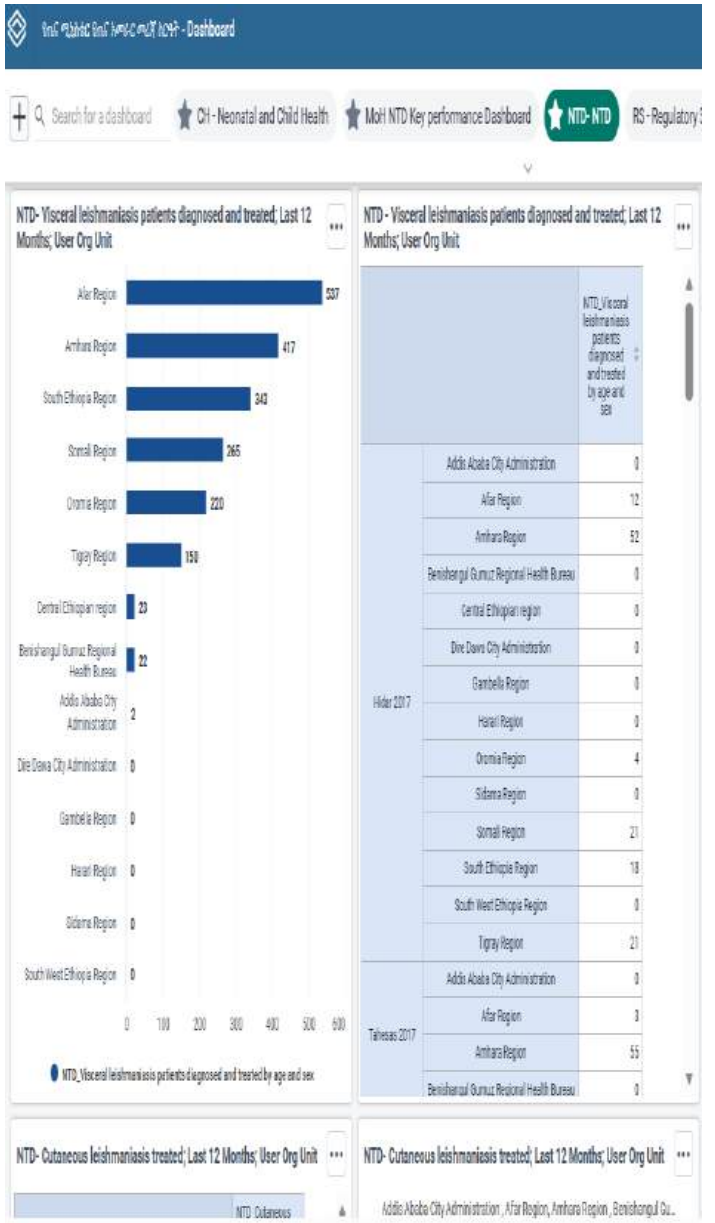
HMIS unit collected input on data elements, visual needs, reporting frequency, and user groups.

Joint sessions with HMIS, program teams, and partners shaped dashboard layout, visuals, and analytics.

Final dashboards were published on DHIS2 and made accessible to national and regional users.

Trainings were conducted for program staff to use and interpret dashboards.

Dashboards updated regularly based on program feedback and new data needs.



Training and Rollout

Training

- **Kik off meeting was conducted**
- **ToT was provided** at national and regional levels, followed by **cascading training** to zonal and district.
  - **NTD Program** led coordination of all training activities with support from partners.
  - **HMIS Unit** provided technical guidance throughout the training process.
  - **Partners** contributed **financial and technical support** to ensure successful delivery.

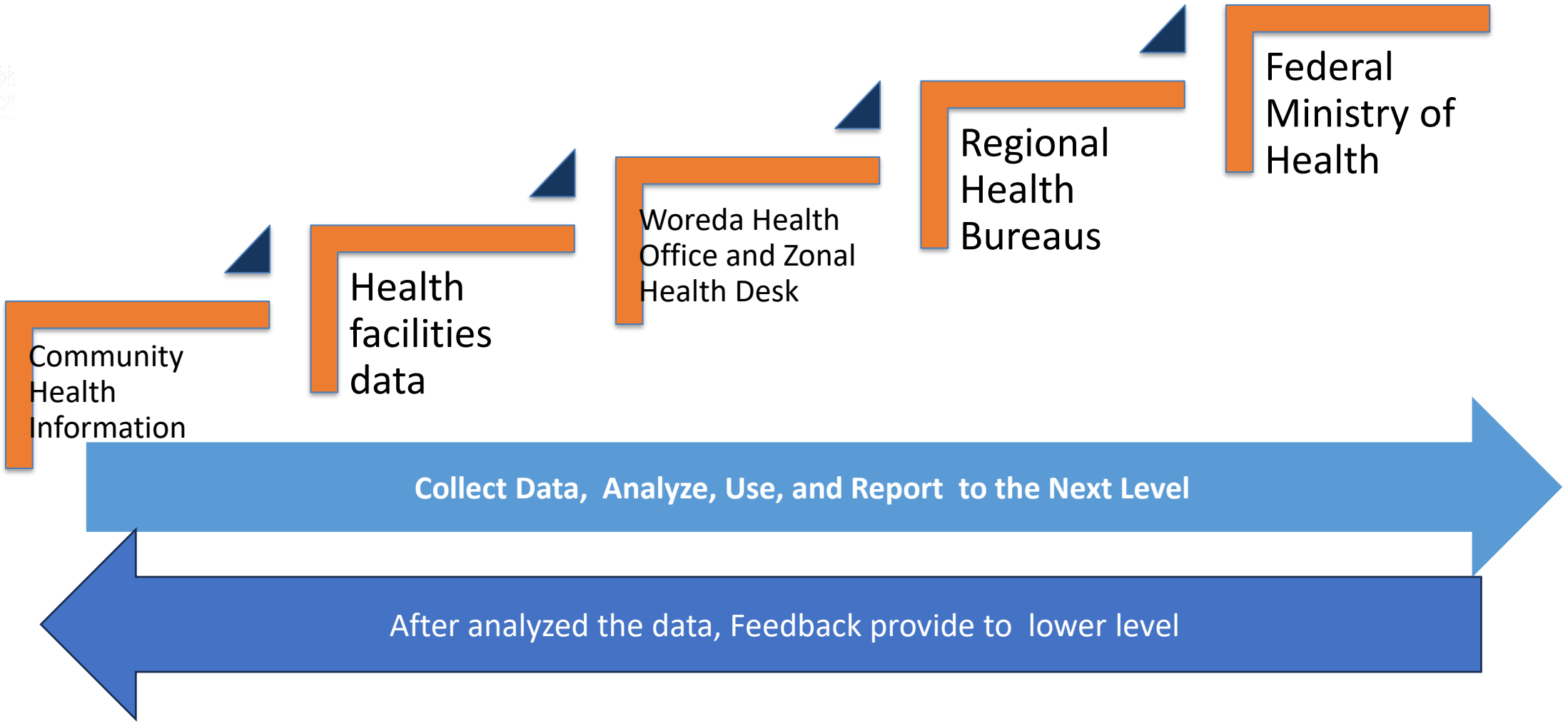
Rollout & Implementation

- **Frequent supervision and onsite mentoring** were done to strengthen the implementation during the rollout.

Issues Encountered & Actions Taken during training

- **Connectivity problems** → Adjusted training approach, provided offline materials, and encouraged local IT troubleshooting.
- Limited computer access
- Power disruption

NTD data flow



Financing the HMIS integration initiative

Cost Driver	How and where were existing HMIS funds leveraged
Platform hosting on servers	MoH and JSI Ethiopia
Developer staff or consultants	MoH, JSI Ethiopia
Meetings and workshops	Implementing Partners, and MoH
Printing of registers/forms	MoH
Hardware for reporting (computers or mobile devices	MoH
Internet or data bundles	MoH
End user training	Implementing Partners and MOH
Supervision	Implementing Partners and MoH
DQA and data review meetings	Partners and MOH

Governance and maintenance

HMIS governance is led by the *Ministry of Health*

Supported by (TWG), regions, and partners

- working together to keep the HMIS functional, and efficient

Revision is conducted in every three- five yrs

Steps for revision

Submission of a Request for revision

Review and Approval by the HMIS Unit

Testing / Piloting

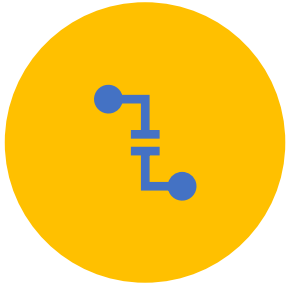
Roll-out

Governance and maintenance....

- Feedback mechanism

Users at each level report problems/issues to HMIS unit

HMIS unit reviews and issue is fixed or resolved



Feedback is returned to the user

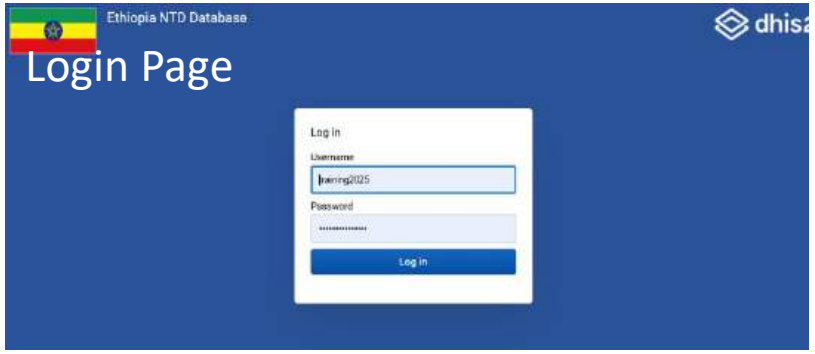
Issues are documented for reference.

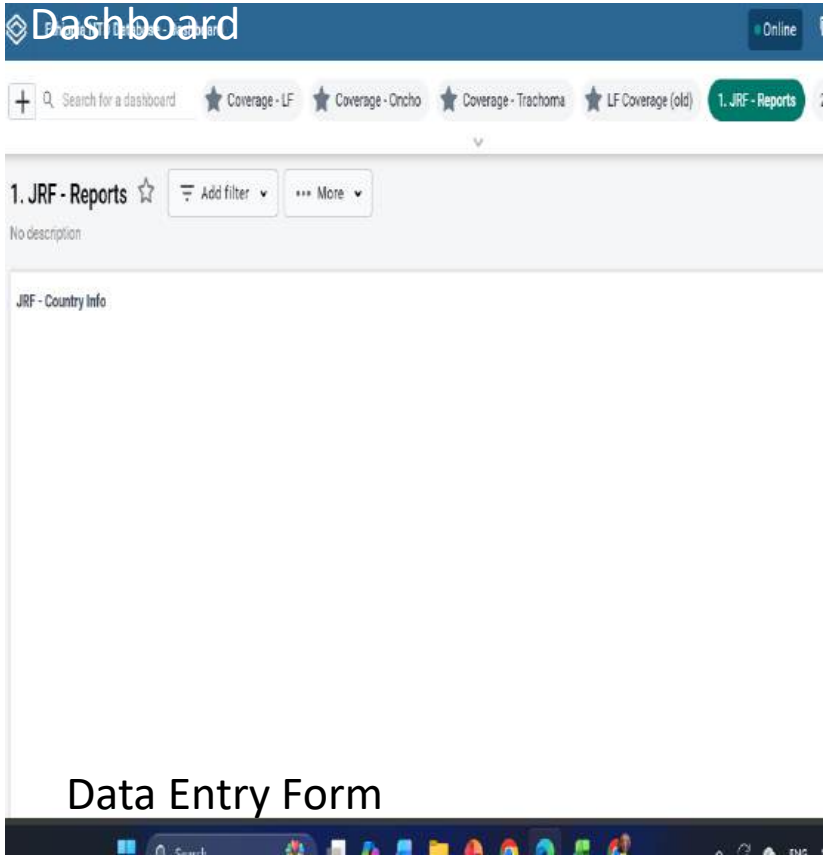
Pending improvements for NTDs in the HMIS

- National HMIS lacked key NTD program data
  - (e.g., GWD, Scabies, other disease data)
  - MDA Drug management,
  - SAEs,
  - Recently added NTDs like Noma, HAT, snakebite.

Current improvements for NTDs data management

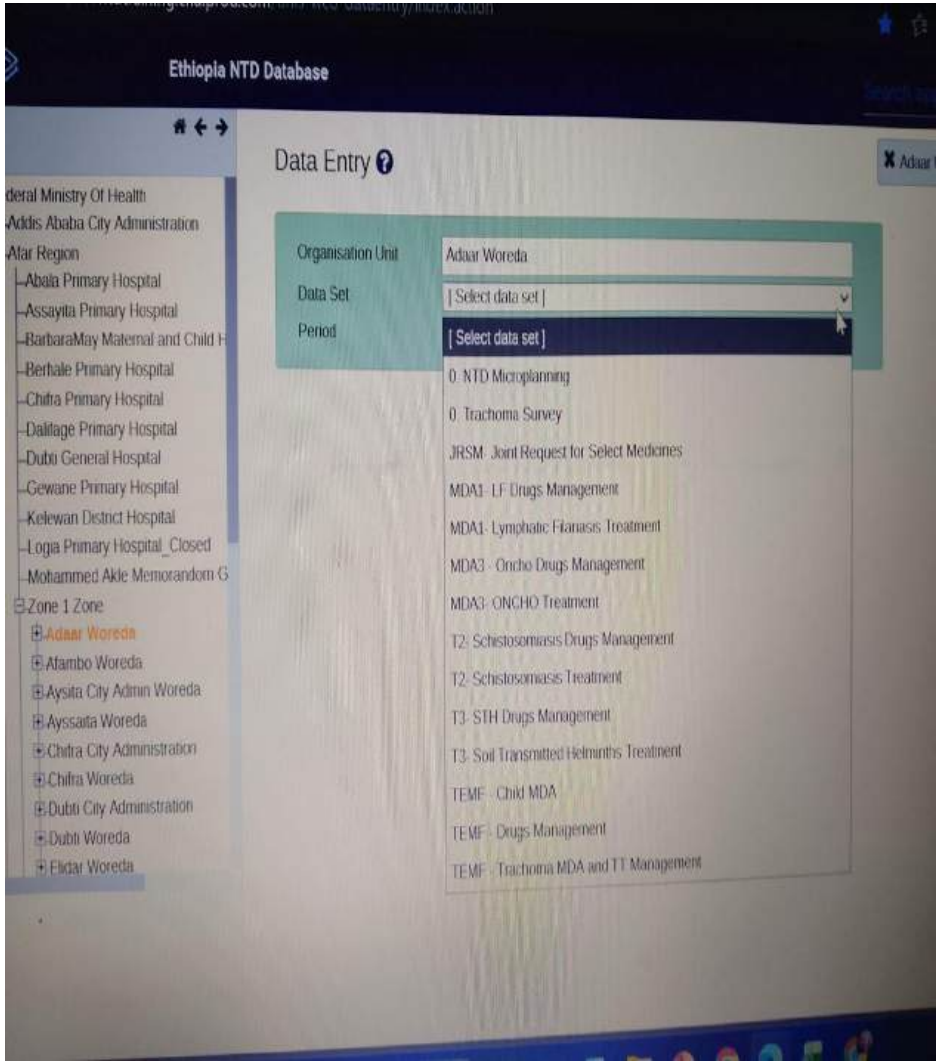
- The NTD Program requested the HMIS Unit to use the **new integrated NTD database using DHIS2**, and the unit approved the request after a series of discussion.
- It is a standalone database to some extent integrated with HMIS
- The objectives are:
  - To use as repository of NTDs data
  - To generate JAP and TEMF report
- Currently, this NTD Database development is **finalized and ready for installation/launch**.





Current improvements for NTDs …

- All **data sets and reporting forms** were designed and developed in collaboration with ***implementing partners.***
- ToT **training** was provided for regional staff and partners.
  - Cascading training for zonal and woreda levels is currently underway



Challenges of Implementing in the HMIS

- Connectivity problem.
- Staff turnover
- Denominator challenges
- District splitting

Lessons, reflections, and advice for others

- HMIS integration has saved time and resources, improved data quality and availability,.
- The deployment of **HIT personnel** to health centers since 2008, supported by the Ministry of Health, ensure the sustainability of routine HMIS.
    - There is a program at the government colleges to strengthen the HMIS system by training Health Information Technicians (HITs).
- Strong collaboration among partners, regional offices, and the MoH contributed to successful training and rollout.
- The MoH integrates the NTD program in the same way as other health programs, with indicator prioritization and inclusion following the same management processes.

NTD Data collection tool at community level

- Trachomatous trichiasis
- Lymphedema
- Hydrocele
- Leishmaniasis (CL and VL)
- Dracunculiasis
- STH& SCH
- Onchocerciasis

NTD Screening

Federal Ministry of Health

Individual ID	Sex	Age		NTD Cases (v)									Linked for treatment *	Treatment out-come (Improved, the same, dead)	Remark
			Screening date	Trachomatous trichiasis (TT)	Lymphedema	Hydrocele	Cutaneous Leishmaniasis (CL)	Visceral Leishmaniasis (VL)	Dracunculiasis	SCH	STH	Onchocerciasis (Oncho)			

Integrated MDA register for five PC NTD

Federal Democratic Republic of Ethiopia
Ministry of Health

Integrated PC-NTD Elimination/Control Program Treatment Register

HH Identification No: .....

S.N	Name in full (individual, father, grandfather)	Sex (M/F)	Year of Rx	Age (Mo/Yr)	Dosage given by Treatment year									Person Treated For 1,2,3,4,5	Adverse event		Screening			Remark
					1-IVM TAB		2-ALB TAB	3-PZQ TAB	4-MEB Tab		5-ZITHROMAX		TEO		ADR (Yes/No)	For Which Drug (1,2,3,4,5)	TT	Lymphedema < 7 years; >7 years	Hydrocel	
					(R1)	(R2)			(R1)	(R2)	TAB	POS								
			2009																	
			2010																	
			2011																	
			2012																	
			2013																	

Number of individuals who swallowed drugs by disease type

TT case identification Register

TT Cases Screening Form

Zone ---------- Woreda ---------- Kebele ----------

Sr. No.	Name of Patient	Age	Sex	Address			TT Condition							
							Right Eye				Left Eye			
				Gott	Dev. Team	1-to-5 leader	History of epilation (Yes)	1-2 lashes	3-5 lashes	over 5 lashes	History of epilation	1-2 lashes	3-5 lashes	over 5 lashes

Trachomatous Trichiasis (TT) Surgery Register

Ministry of Health

Identification							Modalities : 1=Static, 2=Mobile, 3=Outreach (write code)	Diagnosis-check as appropriate (√)				Post op Follow up * write code				Treatment offered (1=Zithromax Tab*; 2=TEO)	PITC				Name of IECW/ Surgeon	Remark
Personal information						Address		Upper Lid		Lower Lid		7 - 14 days		3 - 6 Month			HIV Test Offered (√)	HIV Test performed (√)	Targeted population category	HIV Test result (P or N)		
S.N	Reg. Date (DD/MM/YY)	MRN	Name in full / Father, grandfather	Age	Sex	Woreda, Kebele, Gott, HDA, House No		RUL	LUL	RLL	LLL	RUL / RLL	LUL / LLL	RUL / RLL	LUL / LLL							
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23

Leishmaniasis Register

Leishmanises (VL) Register

Federal Democratic Republic of Ethiopia
Ministry of Health

Registration																				
SN	Date of admission (DD/MM/YY)	MRN	Name in full (individual, father, grandfather)	Age	Sex (M/F)	Address: Woreda Kebele HNo.	Pregn-ancy (Yes/ No/ NA)	Travel Histroy	No. of Months sick before admi-ssion	Diagnosis / Treatment Regimen	Lab Result (DAT/ RDT/ Aspirate/ Skin scraping	Nutritional Status / Management	HIV Sero-status	Other Opportunistic infection / Treatment for Opportunistic Infection	Complications / Drug Side Effect	Date of Discharge (DD/MM/YY)	Treatment outcome/ Date (DD/MM/YY)	Test of Cure	Remark
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)

Acknowledgements

WHO/ESPEN

Donors

All Partners, especially involved on NTDs implementation

World Health Organization
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THANK YOU

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MINISTRY OF HEALTH - ETHIOPIA

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NEGLECTED TROPICAL DISEASES

Workshop ESPEN sobre sistemas de dados, ferramentas e processos de dados para programas de Doenças Tropicais Negligenciadas passíveis de Quimioterapia Preventiva

Dia 2
Decidindo o quê e como integrar: colaboração com Unidades SIS para uma integração eficaz dos dados de DTNs

Rilda Epifânia

Tania Ferreira

David da Costa

ANGOLA

World Health Organization
African Region

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Agenda

- Visão geral do programa de DTNs
- Integração no SIS (o quê, quando, processo)
- Dados necessários mas não recolhidos pelo SIS (o quê, como, onde)
- Desafios da integração com o SIS
- Benefícios da integração com o SIS

Introdução

O Programa Nacional de DTN faz parte do Departamento de Controlo e de Doenças da Direção Nacional de Saúde Pública, Ministério de Saúde.

Atividades prioritárias: AMM para SCH, HTS, ONCHO, LF; mapeamento, monitoramento e avaliação; pesquisa operacional; qualidade dos dados; vigilância comunitária ativa para a verme da Guiné

Parceiros: Organização Mundial da Saúde, The End Fund / The MENTOR Initiative, The Carter Center

Visão Geral do SIS em Angola

- **Nome do SIS**: SIS-Angola
- **Software**: DHIS2
- **Gestão:**
  - Departamento de Estatística e Planeamento (administrativo)
  - Departamento de Tecnologia e Informação em Saúde (técnico)
- **Fluxo de dados:**
  - Anteriormente: Folhas de contagem → Folhas de compilação → Access/Excel → Email → Relatórios
  - Atualmente: Folhas de contagem → Folhas de compilação → Inserção de dados em DHIS2 → Dashboards
- **Introdução dos dados de DTNs no SIS:**
  - Desenvolvimento iniciado em 2020
  - Piloto em 2022
  - Implementação nacional em 2023 integrando ONCHO, LF, SCH, HTS

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Situação dos dados das DTNs antes da integração no SIS

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Professor/ Distribuidor | **Nivel Municipal** | **Nivel Provincial** | **Nivel Nacional**

Paper sheet

Tally sheet
- Nome
- Idade
- Sexo
- Nº comprimidos tomados

Paper sheet

Resumo do tratamento oferecido

Access/Excel database

Entrada de dados nas formularios de compilação para Access/Excel

Email

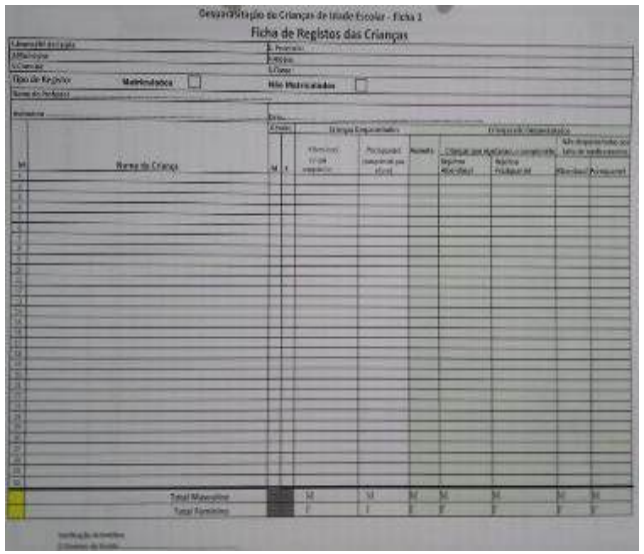
Analise de dados

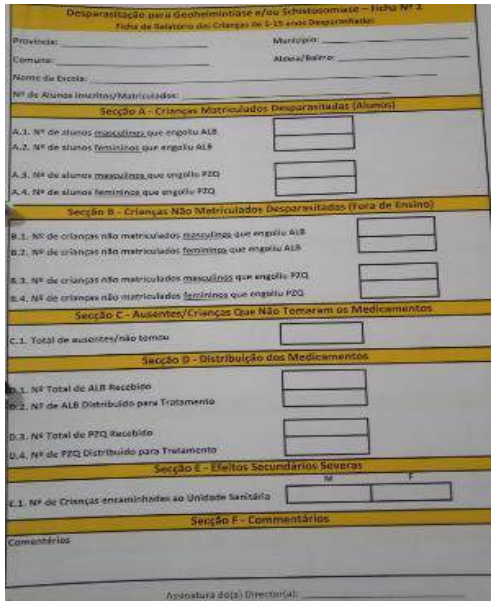
Feedback Email

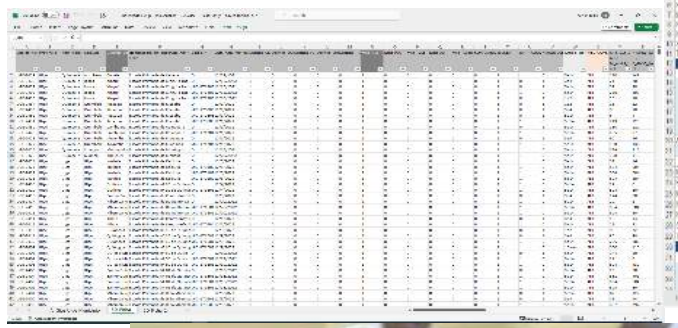
Feedback Email

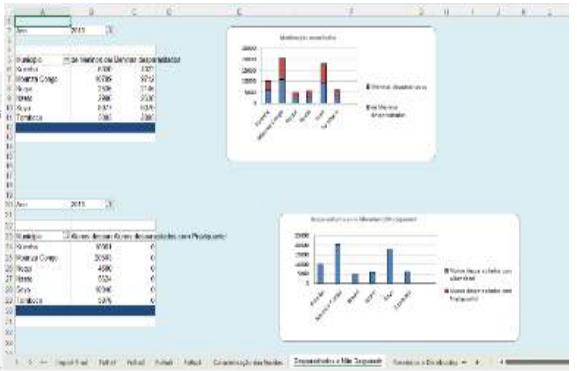
Excel

Apresentação dos Resultados









Situação dos dados das DTNs atualmente no SIS

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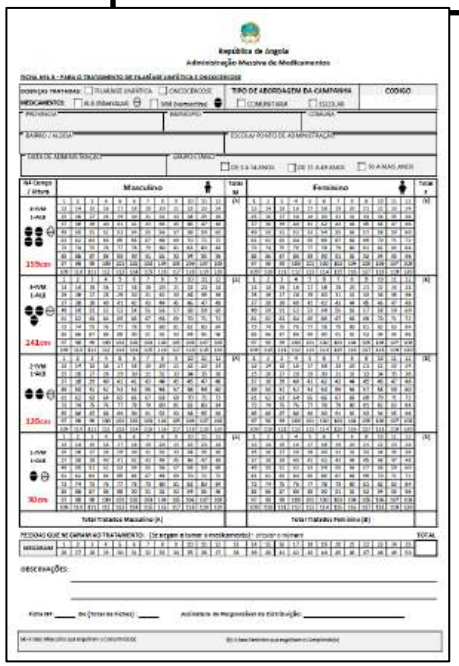
Distribuidor comunitário | **Nível Municipal** | **Nível Províncial** | **Nível Nacional**

Apresentação dos Dados
Visualização de Dados , Resultados de Campanha

Distribuição

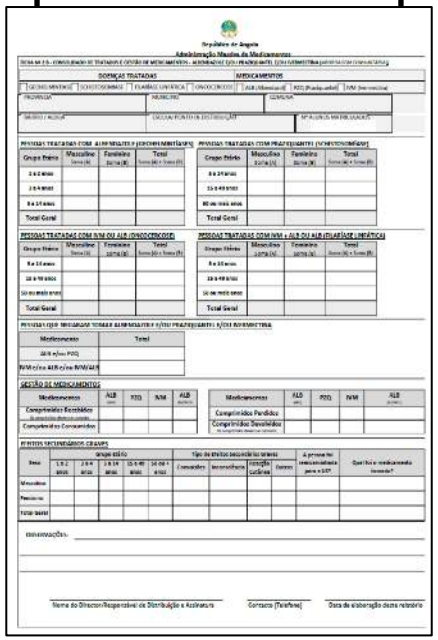
Formulário

Formulário
Nº Tratamento
Desagregado Por:
Idade, sexo,
Medicamento



Formulário

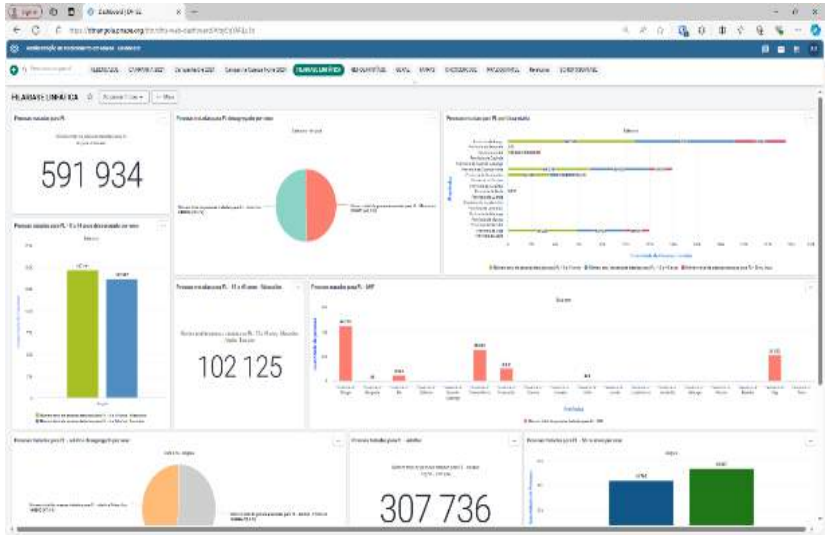
Resumo dos tratamentos oferecidos por Distribuidor Comunitário



Tablets

Entrada de dados dos formulários de compilação para o DHIS2

Limpeza de dados e anaálise de dados



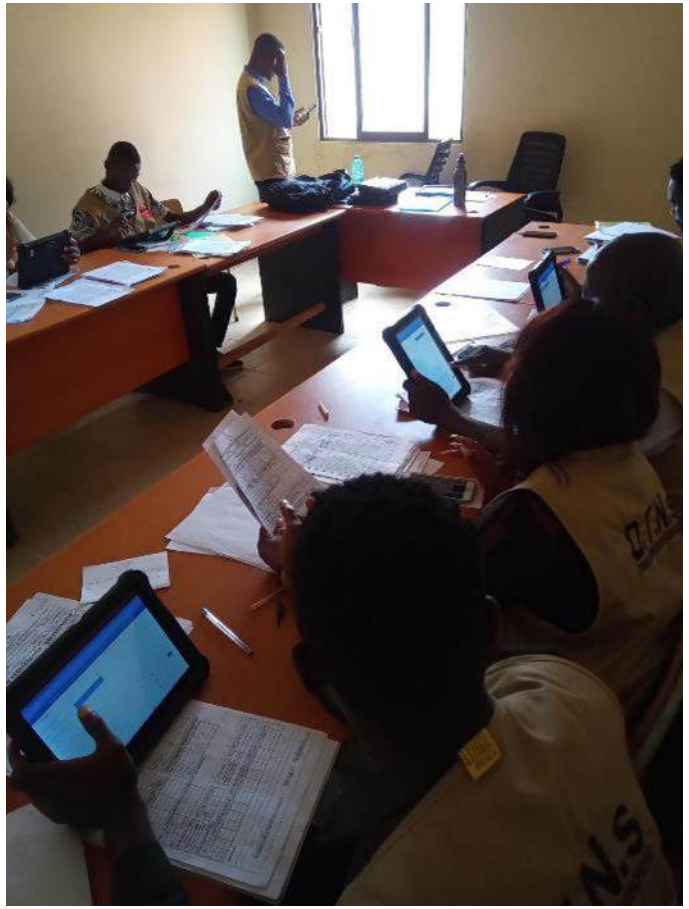
Envolvimento com a unidade de SIS e justificação da seleção

- Envolvimento através de um Grupo Técnico de Trabalho: Ministério da Saúde, Saudigitus, MENTOR
- Necessidade limitada de advocacia; alinhamento com o SIS-Angola aumentou o interesse
- Grupo técnico de trabalho acordou:
  - Indicadores
  - Ferramentas de recolha de dados
  - Regras de validação
  - Perfis de acesso dos utilizadores
- Priorização baseada na exequibilidade e na necessidade de unificar sistemas fragmentados

Processo de adição das DTNs ao SIS – formulários electronico de relatório

Formulários eletrónicos

- Formulários desenhados colaborativamente pelo Grupo técnico de trabalho
- Revisão e padronização das folhas de contagem e compilação
- Criação/modificação dos formulários de entrada de dados no DHIS2
- Implementação de regras de validação
- Piloto em duas províncias em 2022
- Sistema ajustado com base no feedback



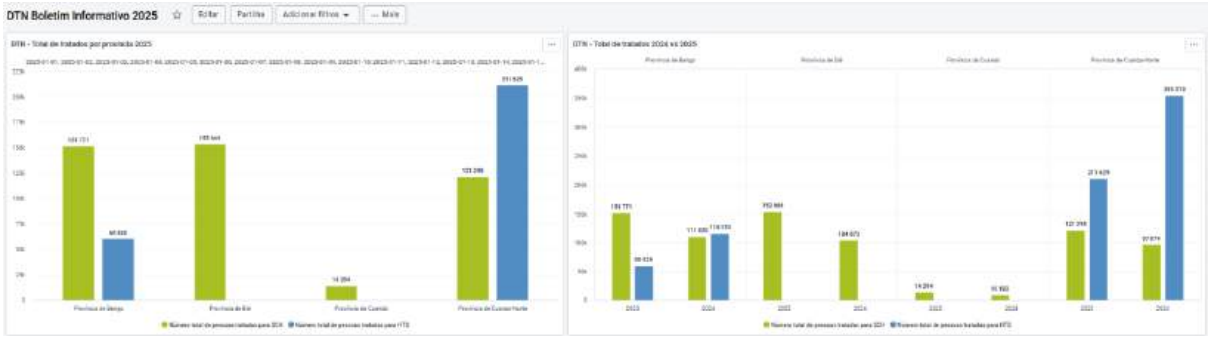
Processo de Adição das DTN ao SIS – Dashboards e Relatórios

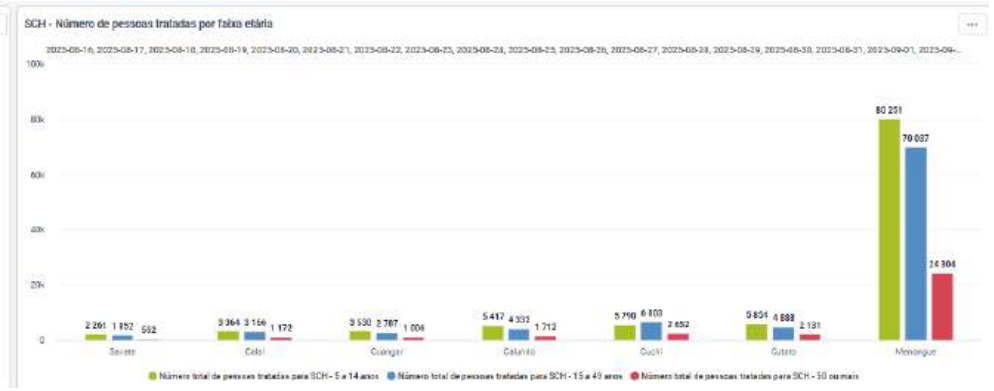
Dashboards

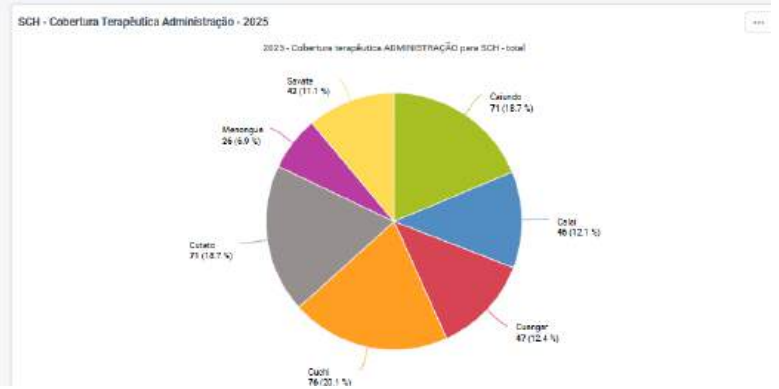
- Criados para resultados de AMM, visualização de dados e monitorização do desempenho
- Testados no piloto; ajustados para o lançamento nacional

Dados históricos

- Migrados de Access/Excel após limpeza
- Melhor visualização dos resultados das campanhas em todos os níveis







Formação e implementação

- Formação para supervisores nacionais e das 18 províncias
- Repositório AMM em DHIS2 implementado nacionalmente em 2023
- 54 tablets distribuídos por 9 províncias apoiadas
- Supervisão contínua e apoio técnico
- Desafios: necessidade de reforço da capacidade dos digitadores

Fluxo resultante de dados das DTNs no SIS

1. Folhas de contagem preenchidas por distribuidores comunitários
2. Folhas de compilação preparadas ao nível municipal
3. Entrada de dados no DHIS2 ao nível municipal/provincial (tablets e computadores)
4. Aplicação automática de regras de validação
5. Dashboards nacionais disponíveis para visualização
6. Acesso mais rápido a resultados fiáveis de AMM permite decisões oportunas

Financiamento da iniciativa de integração no SIS

- Desenvolvimento do sistema apoiado pela MENTOR/ The END Fund (servidor/alojamento)
- Implementação supervisionada por departamentos do Ministério da Saúde
- Plano futuro: migrar totalmente o servidor para o SIS-Angola- comunitário
- Necessidade contínua de investimento em formação e infraestrutura

Governança e Manutenção

- Liderança governamental:
  - Gabinente de Estudos, Planeamento e Estatística
  - Gabinete de Tecnologias de Informação em Saúde

- O Grupo Técnico de Trabalho supervisiona:
  - Ajustes aos components de DTNs no DHIS2
  - Atualizações das regras de validação
  - Resolução de desafios dos utilizadores
  - Receção e síntese de feedback das províncias

Melhorias pendentes para DTNs no SIS

- Ajustes finais na estrutura da plataforma
- Integração total do repositório no SIS-Angola
- Formação adicional em visualização e análise de dados
- Desenvolvimento dos formulários de gestão de casos no DHIS2
- Necessidade de reforçar o uso do sistema ao nível municipal

Lições, reflexões e recomendações

Sucessos

- Forte apropriação nacional
- Reporte integrado para todas as PC-DTN
- Resultados de AMM disponíveis mais rapidamente
- Repositório centralizado com melhor segurança de dados

Desafios

- Harmonização de sistemas anteriormente verticais
- Capacidade limitada de entrada de dados nos níveis inferiores
- Necessidade de ajustes iterativos

O que faria de forma diferente

- Investir mais cedo na capacitação de digitadores
- Testes mais estruturados antes da implementação nacional

Iniciativas complementares

- Reforço da capacidade de análise de dados
- Digitalização dos formulários de gestão de casos.

Agradecimentos

Minístério de Saúde de Angola

Departamento de Controlo de Doenças

Gabinente de Estudos, Planeamento e Estatística

Gabinete de Tecnologias e Informação de Saúde

Saudigitus

OMS

The END Fund

The MENTOR Initiative

World Health Organization

African Region

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THANK YOU
MERCI BEAUCOUP
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Coffee Break

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75 HEALTH FOR ALL
ESPEN

Tools and Resources for Integrating PC-NTDs into HMIS Platforms

Sameen Babur

Director, Digital Health, Malaria & NTDs (CHAI)

World Health Organization
African Region

75 HEALTH FOR ALL

ESPEN

Tools and Resources for Integrating PC-NTDs into HMIS Platforms

In this session we will cover:

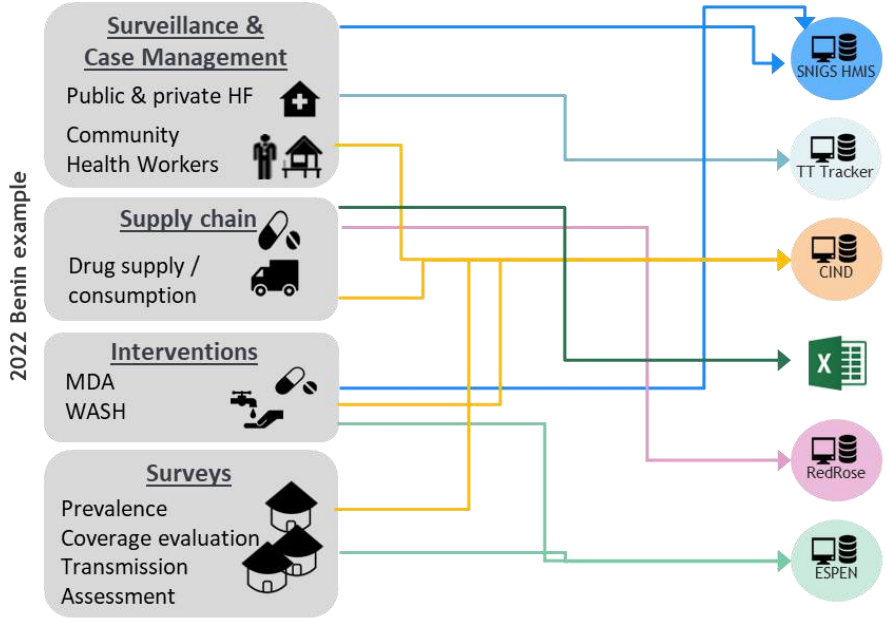
1. What are the challenges with current NTD data management methods?

1. What is a DHIS2 software package? What is inside it?

1. How can existing DHIS2 software packages help me incorporate NTDs into my HMIS?

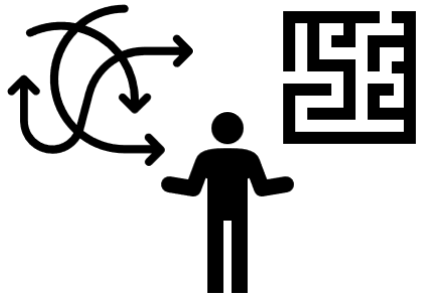
NTD data management is still extremely fragmented and manual across countries, making it complicated to analyze data and generate reports

Fragmented data systems Over-reliance on Excel



NTD programs often do not have a robust "home" for managing their NTD data – a platform where they can manage their primary collection, reporting, and analysis workflows and needs

Complex and manual data compilation and analysis



This makes analyzing, using, and sharing data complicated – staff spend more time compiling, cleaning, mapping, calculating, and preparing data than they do reviewing and responding to data

Challenges submitting timely high-quality reports

WHO reports

World Health Organization

ESPEN reports

EXPANDED SPECIAL PROJECT FOR ELIMINATION OF NEGLECTED TROPICAL DISEASES

Programs then struggle to submit WHO and ESPEN reports.

ESPEN reports are a particular concern, as these are required for countries to receive drug donations

We will discuss two main resources that can catalyze integration of NTD modules into the HMIS, or any DHIS2-based system

1

WHO HMIS resources (including standard DHIS2 packages)

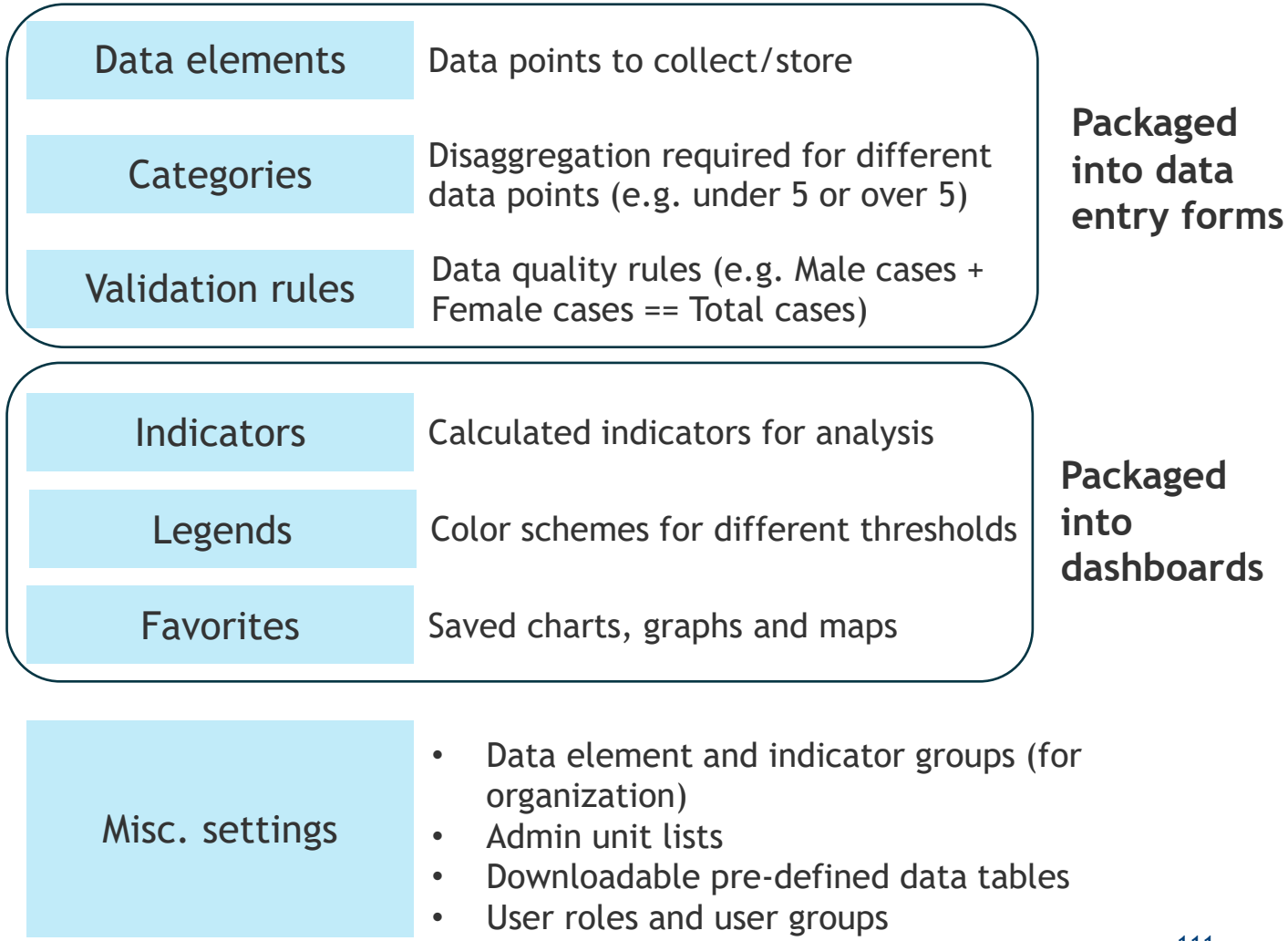
from the evolving Routine Health Information Systems toolkit (RHIS), targeting **routine health facility-based indicators**

2

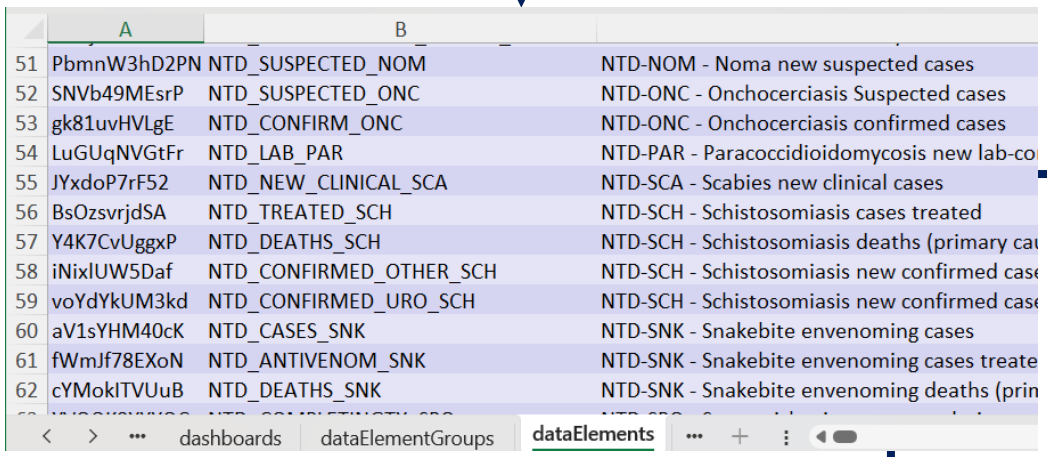
Supplemental partner resources (including DHIS2 packages)

developed to improve the connection and harmonization between **country-level data management processes and ESPEN reporting needs**

What is in a DHIS2 package?

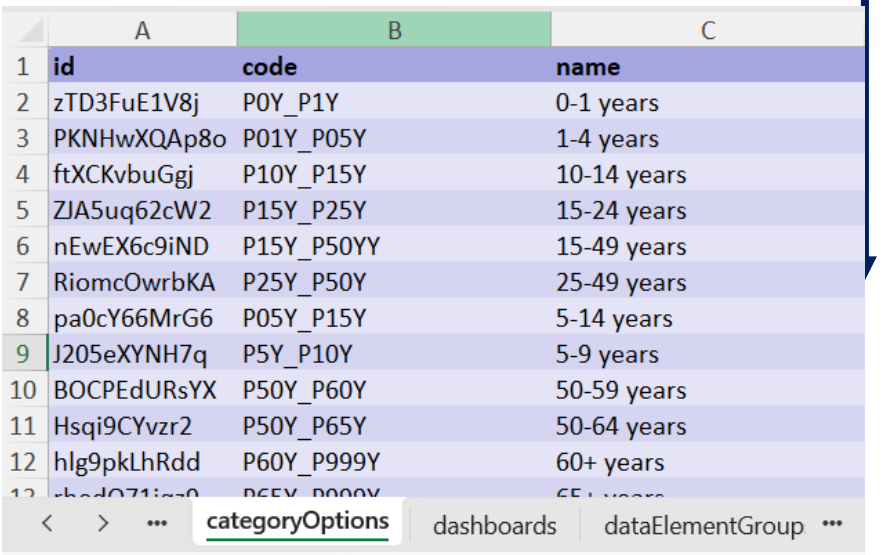


What is in a DHIS2 package?



	A	B	
51	PbmnW3hD2PN	NTD_SUSPECTED_NOM	NTD-NOM - Noma new suspected cases
52	SNVb49MEsrP	NTD_SUSPECTED_ONC	NTD-ONC - Onchocerciasis Suspected cases
53	gk81uvHVLgE	NTD_CONFIRM_ONC	NTD-ONC - Onchocerciasis confirmed cases
54	LuGUqNVGtFr	NTD_LAB_PAR	NTD-PAR - Paracoccidioidomycosis new lab-co
55	JYxdoP7rF52	NTD_NEW_CLINICAL_SCA	NTD-SCA - Scabies new clinical cases
56	BsOzsvrjdSA	NTD_TREATED_SCH	NTD-SCH - Schistosomiasis cases treated
57	Y4K7CvUggxP	NTD_DEATHS_SCH	NTD-SCH - Schistosomiasis deaths (primary cau
58	iNixlUW5Daf	NTD_CONFIRMED_OTHER_SCH	NTD-SCH - Schistosomiasis new confirmed case
59	voYdYkUM3kd	NTD_CONFIRMED_URO_SCH	NTD-SCH - Schistosomiasis new confirmed case
60	aV1sYHM40cK	NTD_CASES_SNK	NTD-SNK - Snakebite envenoming cases
61	fWmJf78EXoN	NTD_ANTIVENOM_SNK	NTD-SNK - Snakebite envenoming cases treate
62	cYMokITVUuB	NTD_DEATHS_SNK	NTD-SNK - Snakebite envenoming deaths (prin

dashboards | dataElementGroups | dataElements



	A	B	C
1	id	code	name
2	zTD3FuE1V8j	P0Y_P1Y	0-1 years
3	PKNHwXQAp8o	P01Y_P05Y	1-4 years
4	ftXCKvbuGgj	P10Y_P15Y	10-14 years
5	ZJA5uq62cW2	P15Y_P25Y	15-24 years
6	nEwEX6c9iND	P15Y_P50YY	15-49 years
7	RiomcOwrbKA	P25Y_P50Y	25-49 years
8	pa0cY66MrG6	P05Y_P15Y	5-14 years
9	J205eXYNH7q	P5Y_P10Y	5-9 years
10	BOCPEdURsYX	P50Y_P60Y	50-59 years
11	Hsqi9CYvzr2	P50Y_P65Y	50-64 years
12	hlg9pkLhRdd	P60Y_P999Y	60+ years

categoryOptions | dashboards | dataElementGroup

Packaged into data entry forms

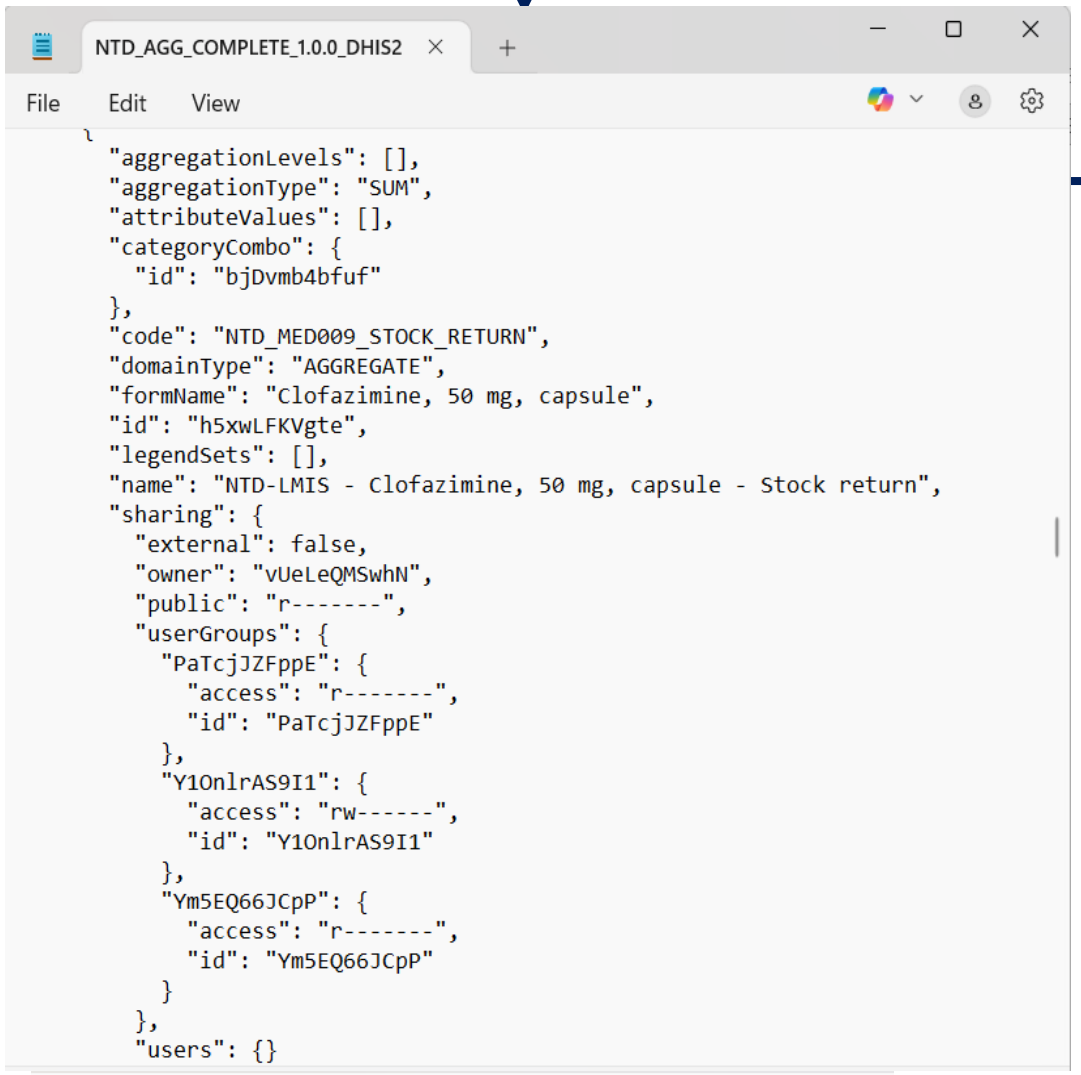
Data elements	Data points to collect/store
Categories	Disaggregation required for different data points (e.g. under 5 or over 5)
Validation rules	Data quality rules (e.g. Male cases + Female cases == Total cases)

Packaged into dashboards

Indicators	Calculated indicators for analysis
Legends	Color schemes for different thresholds
Favorites	Saved charts, graphs and maps

Misc. settings	• Data element and indicator groups (for organization) • Admin unit lists • Downloadable pre-defined data tables • User roles and user groups

These settings are all the building blocks of DHIS2, represented by software code behind-the-scenes



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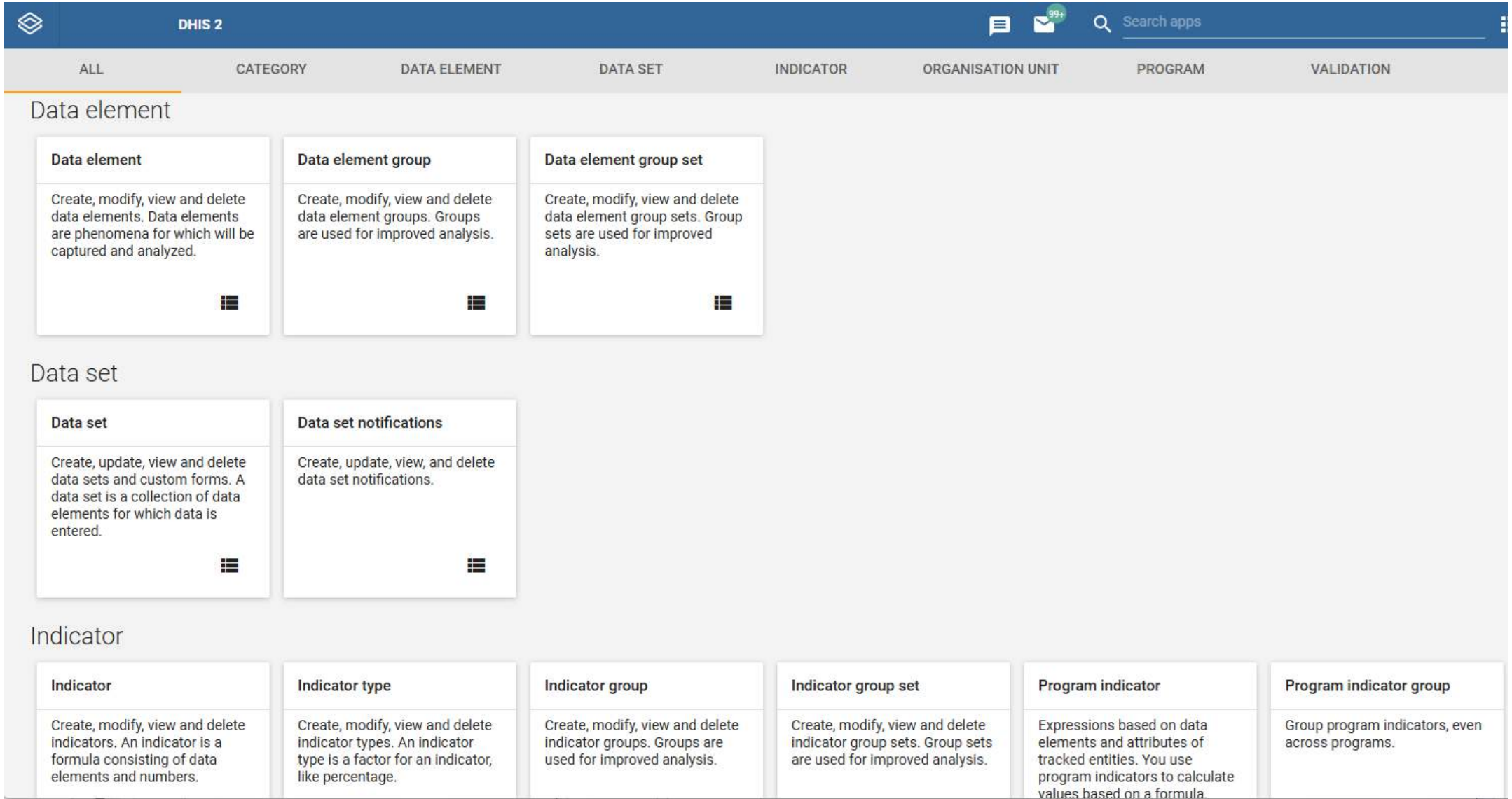
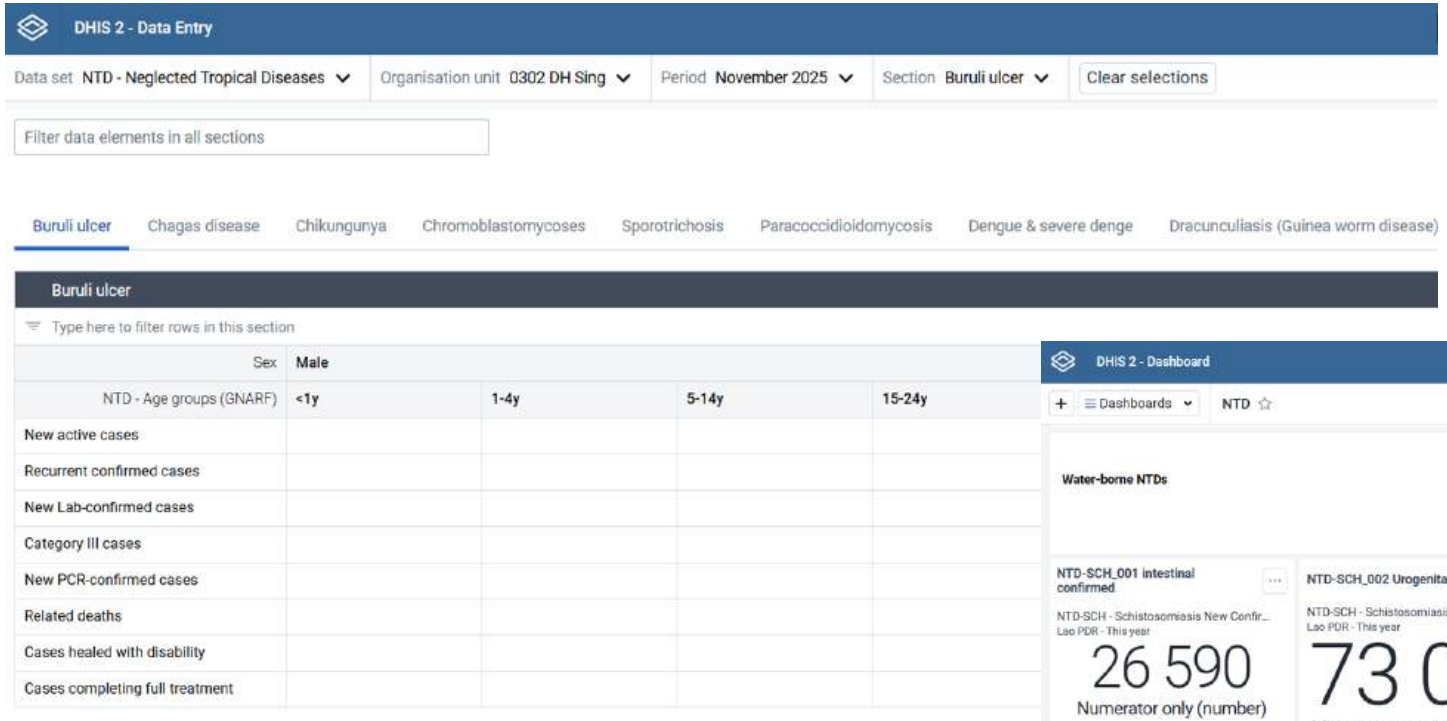
Packaged into dashboards

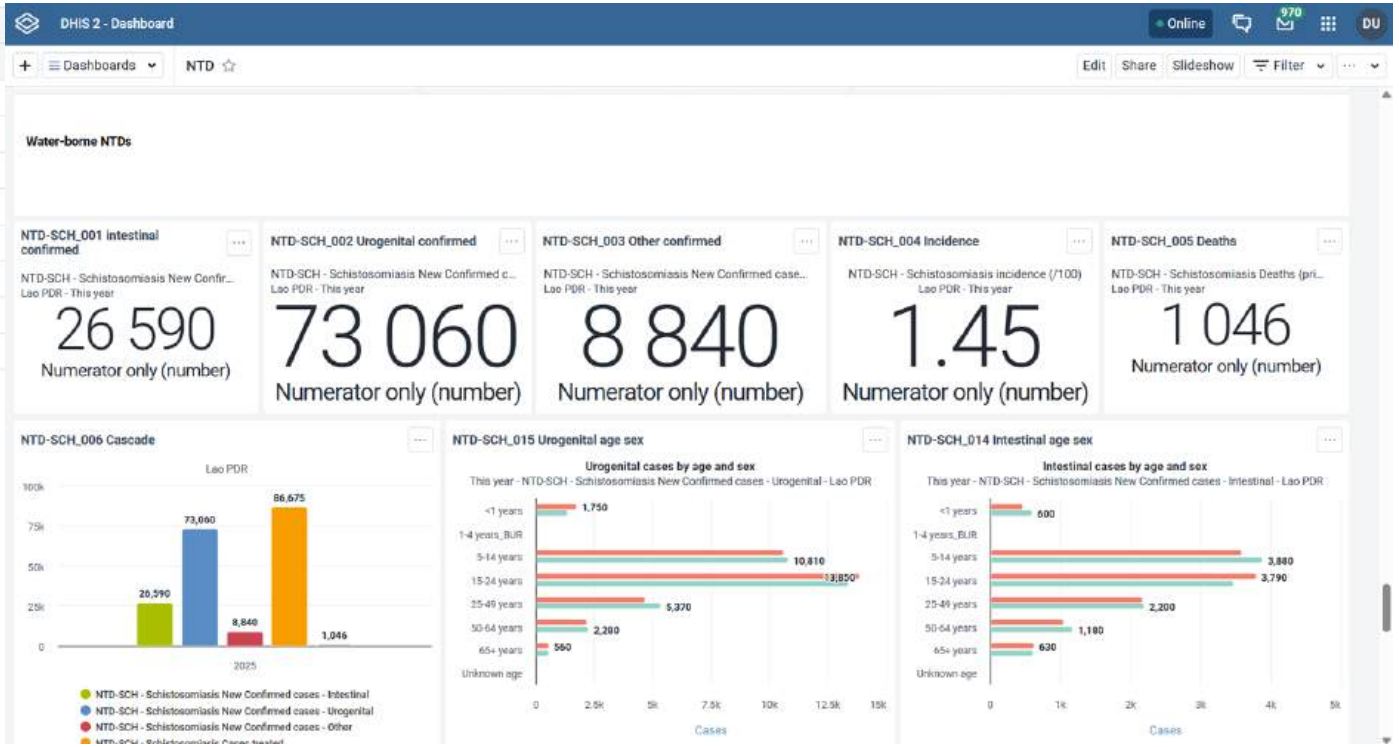
Misc. settings	• Data element and indicator groups (for organization) • Admin unit lists • Downloadable pre-defined data tables • User roles and user groups

Everything in DHIS2 is made up of building blocks that developers assemble in different ways – this is how forms, user groups, dashboards, etc. get built

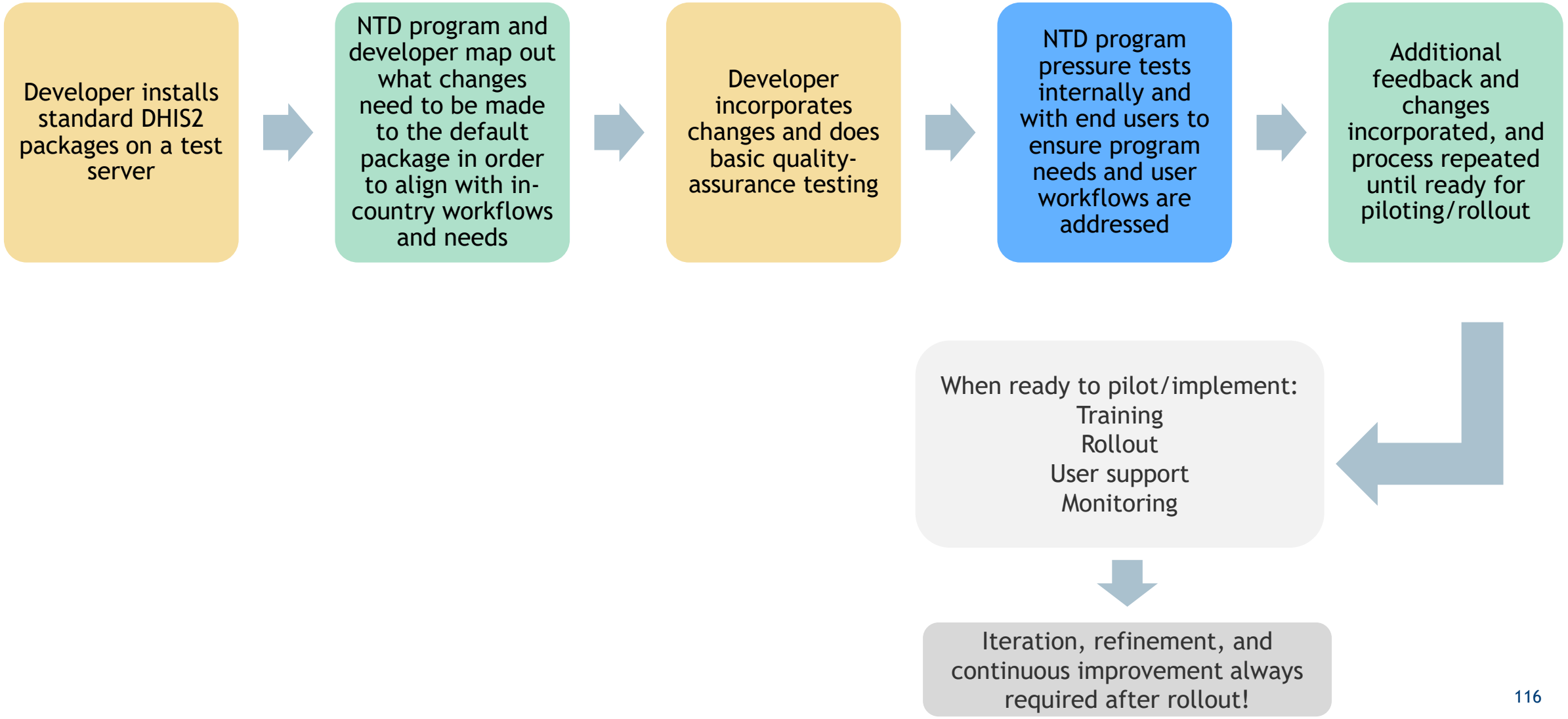


Installing these packages means your DHIS2 will have *generic* forms and dashboards, but they need to be *tailored* to meet the country workflows





What is required to effectively leverage DHIS2 software/metadata packages?



What is required to effectively leverage DHIS2 software/metadata packages?

Developer installs standard DHIS2 packages on a test server

NTD program and developer map out what changes need to be made to the default package in order to align with in-country workflows and needs

Developer incorporates changes and does basic quality-assurance testing

NTD program pressure tests internally and with end users to ensure program needs and user workflows are addressed

Additional feedback and changes incorporated, and process repeated until ready for piloting/rollout

To be successful, strong collaboration and engagement is required from both the NTD program and developer

NTD program: sharing workflows and requirements, making design decisions, brainstorming solutions

Developer: understanding and documenting requirements, requesting clarifications, validating assumptions, soliciting decisions, architecting solutions based on system's framework

When ready to pilot/implement:
Training
Rollout
User support
Monitoring

Iteration, refinement, and continuous improvement always required after rollout!

We will discuss two main resources that can speed up integration of NTD data into the HMIS and any DHIS2-based system

1

WHO HMIS resources (including standard DHIS2 packages)

from the evolving Routine Health Information Systems toolkit (RHIS), targeting **routine health facility-based indicators**

2

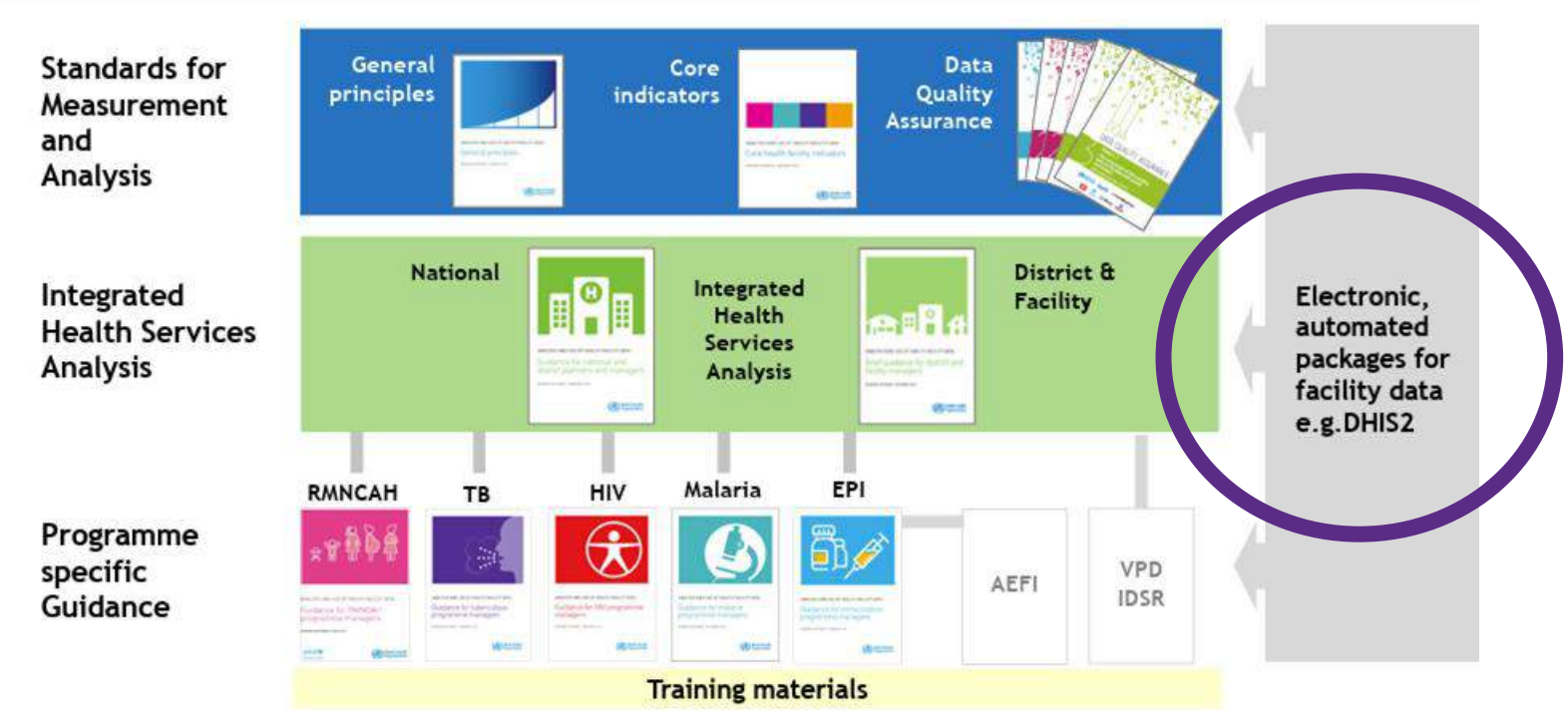
Supplemental partner resources (including DHIS2 packages)

developed to improve the connection and harmonization between **country-level data management processes and ESPEN reporting needs**

1 WHO HMIS resources (including standard DHIS2 packages)

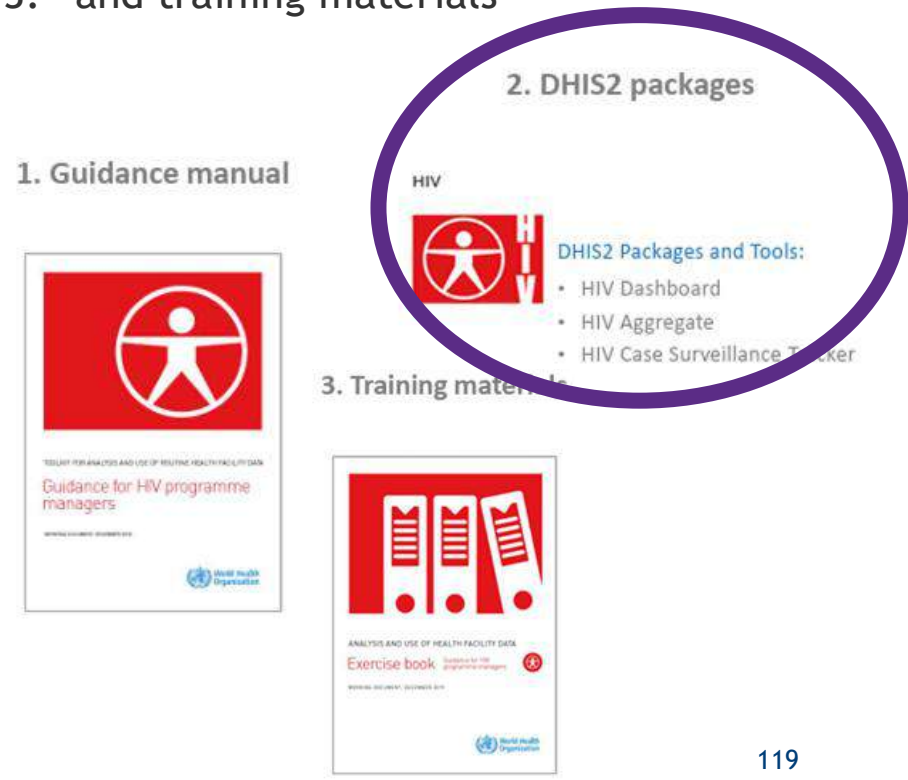
The Routine Health Information Systems toolkit is made of **principles, standards, and guidelines for integrated health data analysis**, with supplemental program-specific guidance as well. These are guidelines that can be used with any software.

Standard DHIS2 metadata packages are included as well, given so many countries use DHIS2 – these help speed up DHIS2 configuration and ensure all DHIS2 configurations adhere to WHO standards



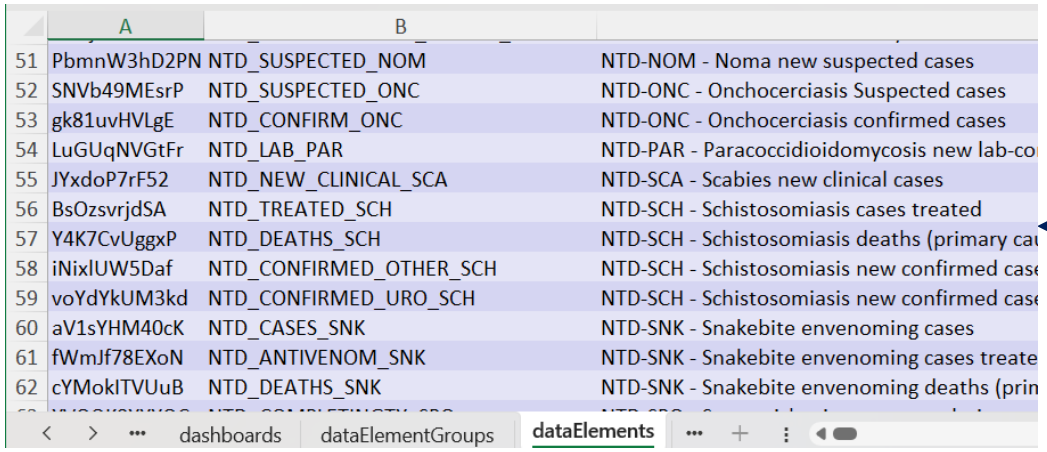
Each "module" (i.e. HIV module, and for our purposes, the **NTD module**, consists of a

1. guidance manual
2. DHIS2 standard packages
3. and training materials



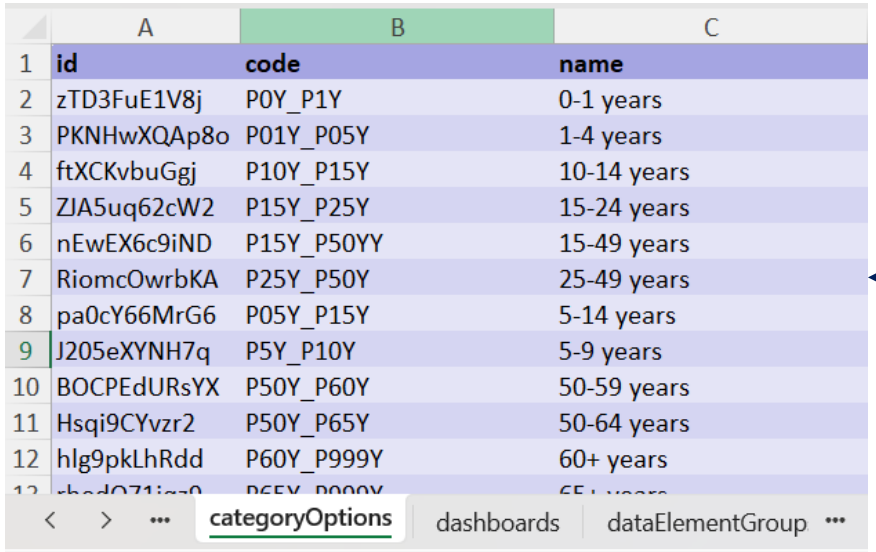
1 WHO HMIS resources (including standard DHIS2 modules)

The DHIS2 packages contain building blocks and standard forms / dashboards, all in alignment with the principles, standards, guidelines defined in the RHIS toolkit



	A	B	
51	PbmnW3hD2PN	NTD_SUSPECTED_NOM	NTD-NOM - Noma new suspected cases
52	SNVb49MEsrP	NTD_SUSPECTED_ONC	NTD-ONC - Onchocerciasis Suspected cases
53	gk81uvHVLgE	NTD_CONFIRM_ONC	NTD-ONC - Onchocerciasis confirmed cases
54	LuGUqNVGtFr	NTD_LAB_PAR	NTD-PAR - Paracoccidioidomycosis new lab-co
55	JYxdoP7rF52	NTD_NEW_CLINICAL_SCA	NTD-SCA - Scabies new clinical cases
56	BsOzsvrjdSA	NTD_TREATED_SCH	NTD-SCH - Schistosomiasis cases treated
57	Y4K7CvUggxP	NTD_DEATHS_SCH	NTD-SCH - Schistosomiasis deaths (primary ca
58	iNixlUW5Daf	NTD_CONFIRMED_OTHER_SCH	NTD-SCH - Schistosomiasis new confirmed case
59	voYdYkUM3kd	NTD_CONFIRMED_URO_SCH	NTD-SCH - Schistosomiasis new confirmed case
60	aV1sYHM40cK	NTD_CASES_SNK	NTD-SNK - Snakebite envenoming cases
61	fWmJf78EXoN	NTD_ANTIVENOM_SNK	NTD-SNK - Snakebite envenoming cases treate
62	cYMokITVUuB	NTD_DEATHS_SNK	NTD-SNK - Snakebite envenoming deaths (prin

dashboards | dataElementGroups | dataElements



	A	B	C
1	id	code	name
2	zTD3FuE1V8j	P0Y_P1Y	0-1 years
3	PKNHwXQAp8o	P01Y_P05Y	1-4 years
4	ftXCKvbuGgj	P10Y_P15Y	10-14 years
5	ZJA5uq62cW2	P15Y_P25Y	15-24 years
6	nEwEX6c9iND	P15Y_P50YY	15-49 years
7	RiomcOwrbKA	P25Y_P50Y	25-49 years
8	pa0cY66MrG6	P05Y_P15Y	5-14 years
9	J205eXYNH7q	P5Y_P10Y	5-9 years
10	BOCPEdURsYX	P50Y_P60Y	50-59 years
11	Hsqi9CYvzr2	P50Y_P65Y	50-64 years
12	hlg9pkLhRdd	P60Y_P999Y	60+ years

categoryOptions | dashboards | dataElementGroup

Data elements	Data points to collect/store
Categories	Disaggregation required for different data points (e.g. under 5 or over 5)
Validation rules	Data quality rules (e.g. Male cases + Female cases == Total cases)

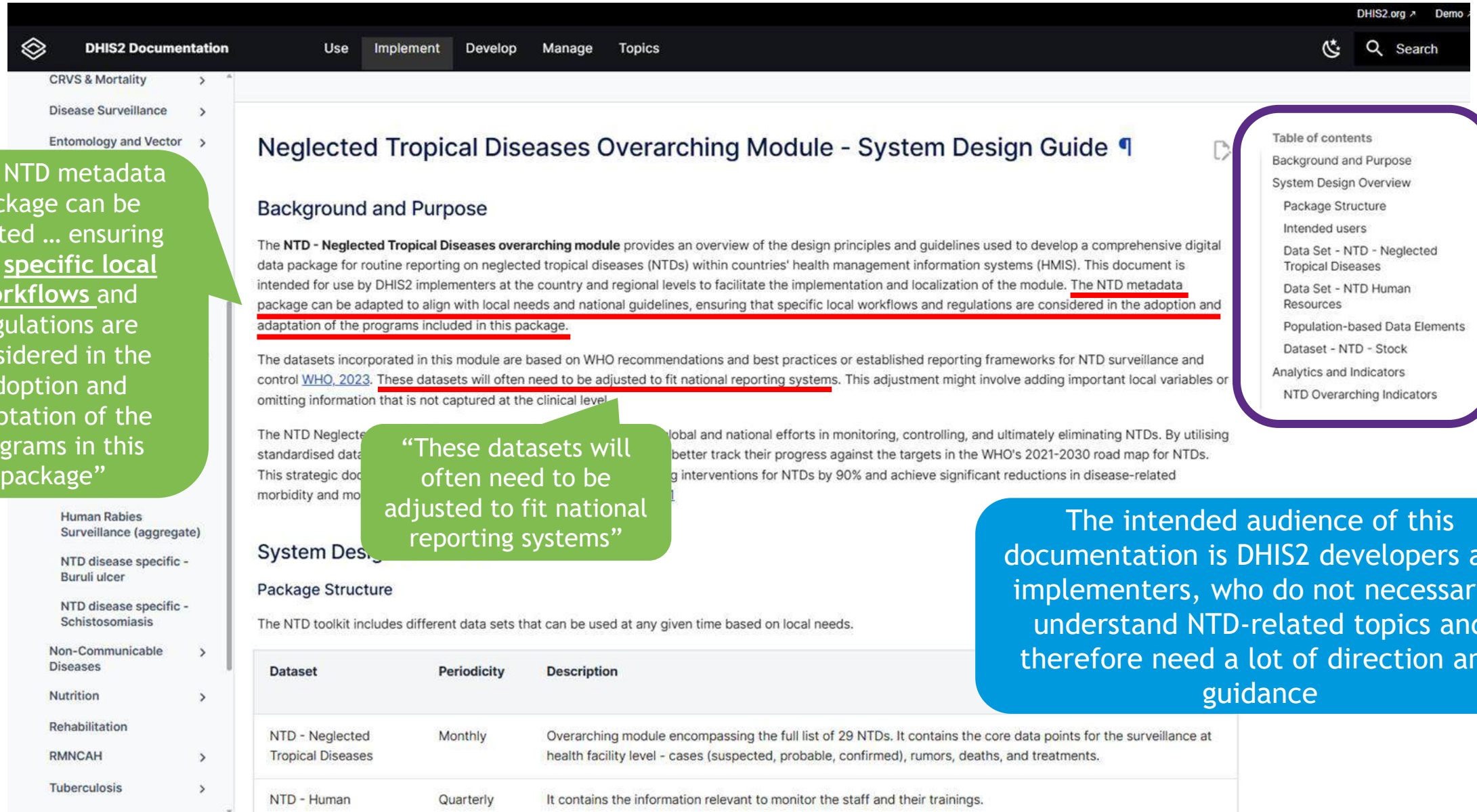
Packaged into data entry forms

Indicators	Calculated indicators for analysis
Legends	Color schemes for different thresholds
Favorites	Saved charts, graphs and maps

Packaged into dashboards

Misc. settings	• Data element and indicator groups (for organization) • Admin unit lists • Downloadable pre-defined data tables • User roles and user groups

DHIS2 documentation explains the structure and contents of these packages



"The NTD metadata package can be adapted … ensuring that **specific local workflows** and regulations are considered in the adoption and adaptation of the programs in this package"

"These datasets will often need to be adjusted to fit national reporting systems"

The intended audience of this documentation is DHIS2 developers and implementers, who do not necessarily understand NTD-related topics and therefore need a lot of direction and guidance

Remember: implementation is only successful if there is strong collaboration, input, and involvement from the NTD program throughout the entire process

During design and development

NTD program
- sharing workflows and requirements
- making design decisions
- brainstorming solutions

Developer:
- understanding and documenting requirements
- requesting clarifications
- validating assumptions
- soliciting decisions
- architecting solutions based on system's framework

Rollout and post-rollout

Continuous refinement

NTD program:
- review incoming data and identify data quality issues
- respond to user challenges
- identify additional visualization and reporting outputs needed
- Improve guidelines and SOPs

Developer:
- Improve form design
- Fix bugs
- Modify indicators
- Expand/update dashboards and reports
- Improve training materials

continuous improvement is needed to make the reporting system strong

There will always be challenges with data quality when a digital tool such as a DHIS2 module is implemented

It is essential to review the incoming data and ask yourself:

- Do the right dashboards and visualizations exist for me to monitor and respond to data easily?
- Do other users have access to the visualizations and reporting outputs they need?
- Can I easily assess data quality?
- Are there improvements to the forms needed?

Work with the developer to implement identified improvements!

1

WHO HMIS resources (including standard DHIS2 packages)

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2

Supplemental partner resources (including DHIS2 packages)

developed to improve the connection and harmonization between **country-level data management processes and ESPEN reporting needs**

There are 3 main NTD-related data sets in the RHIS NTD DHIS2 package

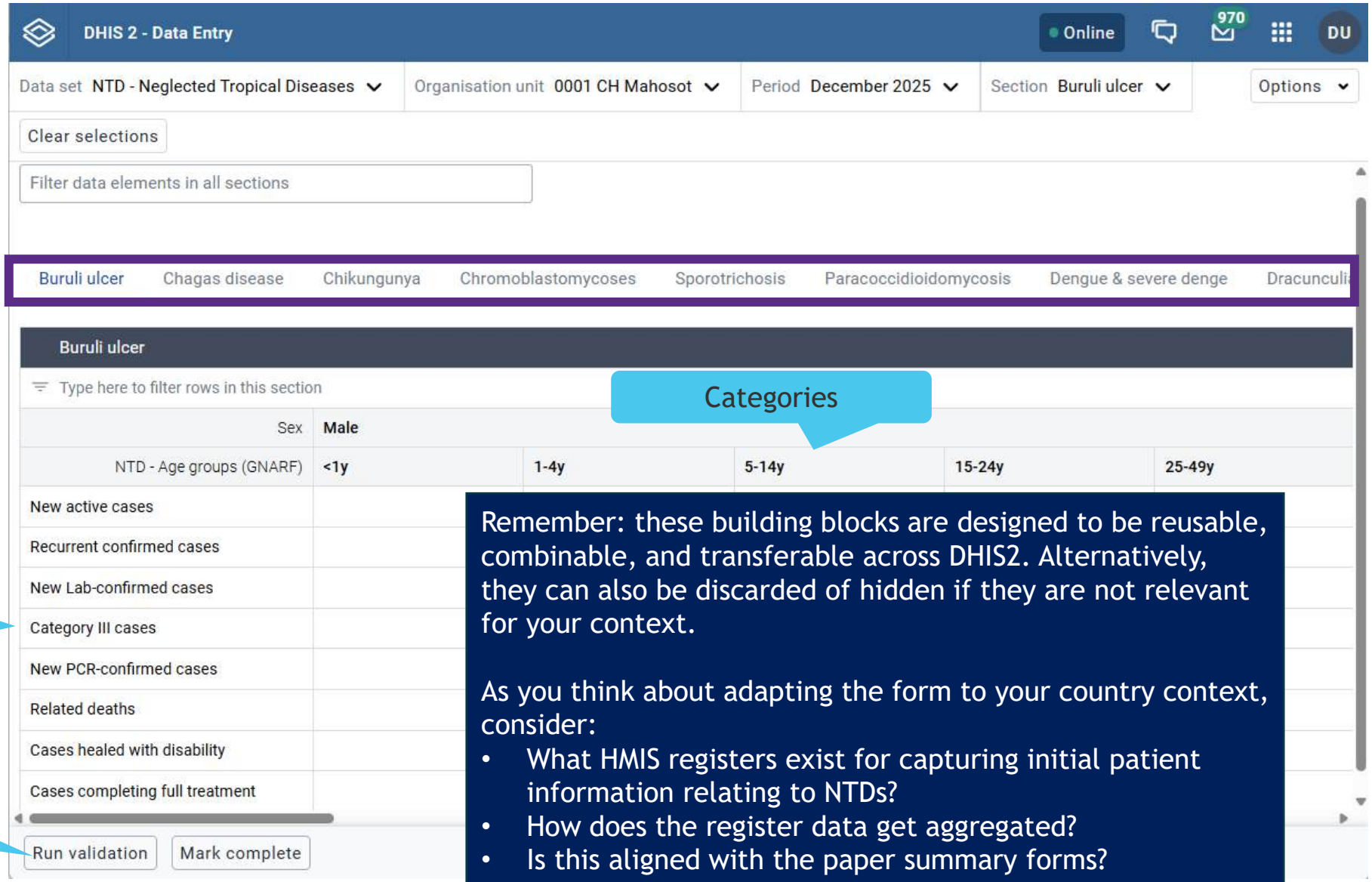
Dataset	Periodicity	Description
NTD - Neglected Tropical Diseases	Monthly	Overarching module encompassing the full list of 29 NTDs. It contains the core data points for the surveillance at health facility level - cases (suspected, probable, confirmed), rumors, deaths, and treatments. It is aligned with the WHO Global NTD Annual Reporting Form (GNARF)
NTD - Human Resources	Quarterly	It contains the information relevant to monitor the staff and their trainings.
NTD - Stock	Monthly	Standard LMIS module available for the collection of NTD-related medical items.

Intended users:

- **Health facility users:** capture and report key data on malaria activities
- **District-level information officers:** may be responsible for supporting data entry, validation, and analysis
- **Program managers:** managers at national and sub-national level may be responsible for supporting data entry and analysis.
- **National and local health authorities:** to monitor and analyze the surveillance of data through dashboards and analytics tools, to conduct risk assessments and plan response measures; to generate reports for regional and global reporting

RHIS NTD Module Data Set 1: NTD - Neglected Tropical Diseases

- NTD - Neglected Tropical Diseases
- Monthly
- Overarching module encompassing the full list of 29 NTDs. It contains the core data points for the surveillance at health facility level - cases (suspected, probable, confirmed), rumors, deaths, and treatments.



Categories

Data elements

Validation rules may perform logic checks to flag errors

Remember: these building blocks are designed to be reusable, combinable, and transferable across DHIS2. Alternatively, they can also be discarded of hidden if they are not relevant for your context.

As you think about adapting the form to your country context, consider:

- What HMIS registers exist for capturing initial patient information relating to NTDs?
- How does the register data get aggregated?
- Is this aligned with the paper summary forms?

RHIS NTD Module Data Set 2: NTD - Human Resources

Hired staff

Type here to filter in this section

NTD - HR	Nurse	Medical assistant	Doctor	CHW
Health workers				

Skin diseases

Type here to filter in this section

NTD - HR	Nurse	Medical assistant	Doctor	CHW
Trained for Buruli ulcer				
Trained for Chromoblastomycoses				
Trained for CL				
Trained for Leprosy				
Trained for Lymphatic filariasis				
Trained for ML				
Trained for Mycetoma				
Trained for Noma				
Trained for Onchocerciasis				
Trained for Paracoccidioidomycosis				
Trained for Scabies				

Other NTDs

Type here to filter in this section

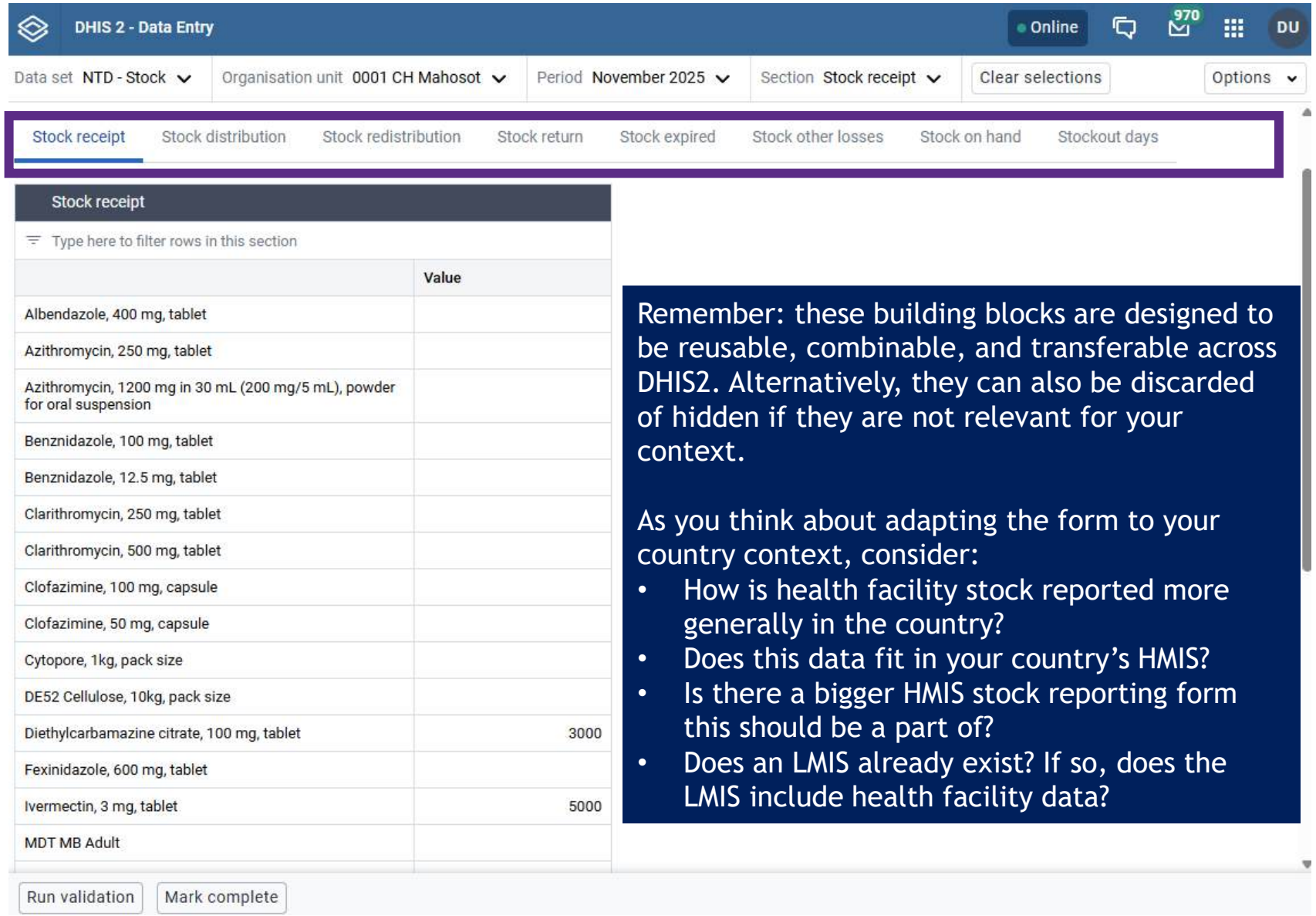
NTD - HR	Nurse	Medical assistant
Trained on Chagas disease		
Trained on Chikungunya		
Trained on Cystic echinococcosis		
Trained on Dengue & severe denge		
Trained on Dracunculiasis (GWD)		
Trained on Foodborne trematodes		
Trained on gHAT		
Trained on VL		
Trained on rHAT		
Trained on Schistosomiasis		
Trained on Snakebite envenoming		
Trained on Soil-transmitted helminthiasis		

Remember: these building blocks are designed to be reusable, combinable, and transferable across DHIS2. Alternatively, they can also be discarded of hidden if they are not relevant for your context.

As you think about adapting the form to your country context, consider:

- How are human resources reported more generally within the MoH and HMIS?
- Is there a broader HMIS form this should be put in, instead of an NTD-specific form?
- Is there another system altogether where human resources are reported that should be considered?

RHIS NTD Module Data Set 3: NTD - Stock



Remember: these building blocks are designed to be reusable, combinable, and transferable across DHIS2. Alternatively, they can also be discarded of hidden if they are not relevant for your context.

As you think about adapting the form to your country context, consider:

- How is health facility stock reported more generally in the country?
- Does this data fit in your country's HMIS?
- Is there a bigger HMIS stock reporting form this should be a part of?
- Does an LMIS already exist? If so, does the LMIS include health facility data?

The guiding principle of the DHIS2 logistics concept is using mainly a separate national eLMIS for managing all logistics processes and collecting only the data which is generated at the healthcare facility with DHIS2.

DHIS2 is not a full LMIS; it is simply a potentially synergistic tool to be used at health facility or frontline level only for some basic stock availability and consumption reporting

Why potentially synergistic?
Health facility users are typically already familiar with DHIS2, and it may be cumbersome to introduce multiple tools at health facility level

In many countries, it may still make more sense to use the eLMIS if it is being rolled out at health facility level.

There are additional detailed disease modules for Buruli ulcer and schistosomiasis

Dataset	Periodicity	Description
NTD - Neglected Tropical Diseases	Monthly	Overarching module encompassing the full list of 29 NTDs. It contains the core data points for the surveillance at health facility level - cases (suspected, probable, confirmed), rumors, deaths, and treatments. It is aligned with the WHO Global NTD Annual Reporting Form (GNARF)
NTD - Human Resources	Quarterly	It contains the information relevant to monitor the staff and their trainings.
NTD - Stock	Monthly	Standard LMIS module available for the collection of NTD-related medical items.
NTD – Buruli Ulcer	Monthly	Designed to support routine collection, reporting, and analysis of Buruli ulcer data at health facility levels.
NTD – Schistosomiasis screening	Monthly	Contains the information extrapolated during surveys and outreach screening activities on burden, examinations, and treatment.
NTD – Schistosomiasis surveillance	Monthly	Contains the key variables for the monitoring of the burden of the disease, treatment, and an overview of the disease location.
NTD – Schistosomiasis IVM	Monthly	Contains the key information on water treatment and the monitoring of vectors (by snail spp.).

Buruli Ulcer

DHIS 2 - Data Entry | Online | 970 | DU

Data set: NTD-BUR-DS - Buruli ulcer | Organisation unit: 0001 CH Mahosot | Period: December 2025 | Section: Burden of disease | Clear selections | Options

Filter data elements in all sections

Burden of disease

Type here to filter rows in this section

Sex	Male						
NTD - Age groups (GNARF)	<1y	1-4y	5-14y	15-24y	25-49y	50-64y	65+y
New reported cases	7	4	6	5	10	8	
Suspected cases	8	7	8	6	6	16	
Lab-confirmed cases	5						
Recurrent cases	2						
Imported cases	1						
Cases healed with disability	0						
	Value						
Related deaths	2						

Case classification

Type here to filter rows in this section

Suspected/confirmed	Suspected	Confirmed	Totals
Category I	6	6	12
Category II	6	6	12
Category III	2	2	4
Tota			

Treatment

Type here to filter rows in this section

Suspected/confirmed	Suspected	Confirmed	Totals
Cases completing full treatment	5	12	17

Schistosomiasis surveillance

DHIS 2 - Data Entry | Online | 970 | DU

Data set: NTD-SCH-DS - Schistosomiasis surveillance | Organisation unit: 0001 CH Mahosot | Period: December 2025 | Section: Burden of disease | Clear selections | Options

Filter data elements in all sections

Burden of disease

Type here to filter rows in this section

Sex	Male						
NTD - Age groups (GNARF)	<1y	1-4y	5-14y	15-24y	25-49y	50-64y	65+y
Suspected cases	12	22	13	12	29	12	
Tested cases	26	21	23	23	16	21	
Confirmed cases	15	7	6	7	3	4	
Reported deaths							
Cases receiving clinical treatmer							
Imported cases							

Cases by diagnostic method

Type here to filter rows in this section

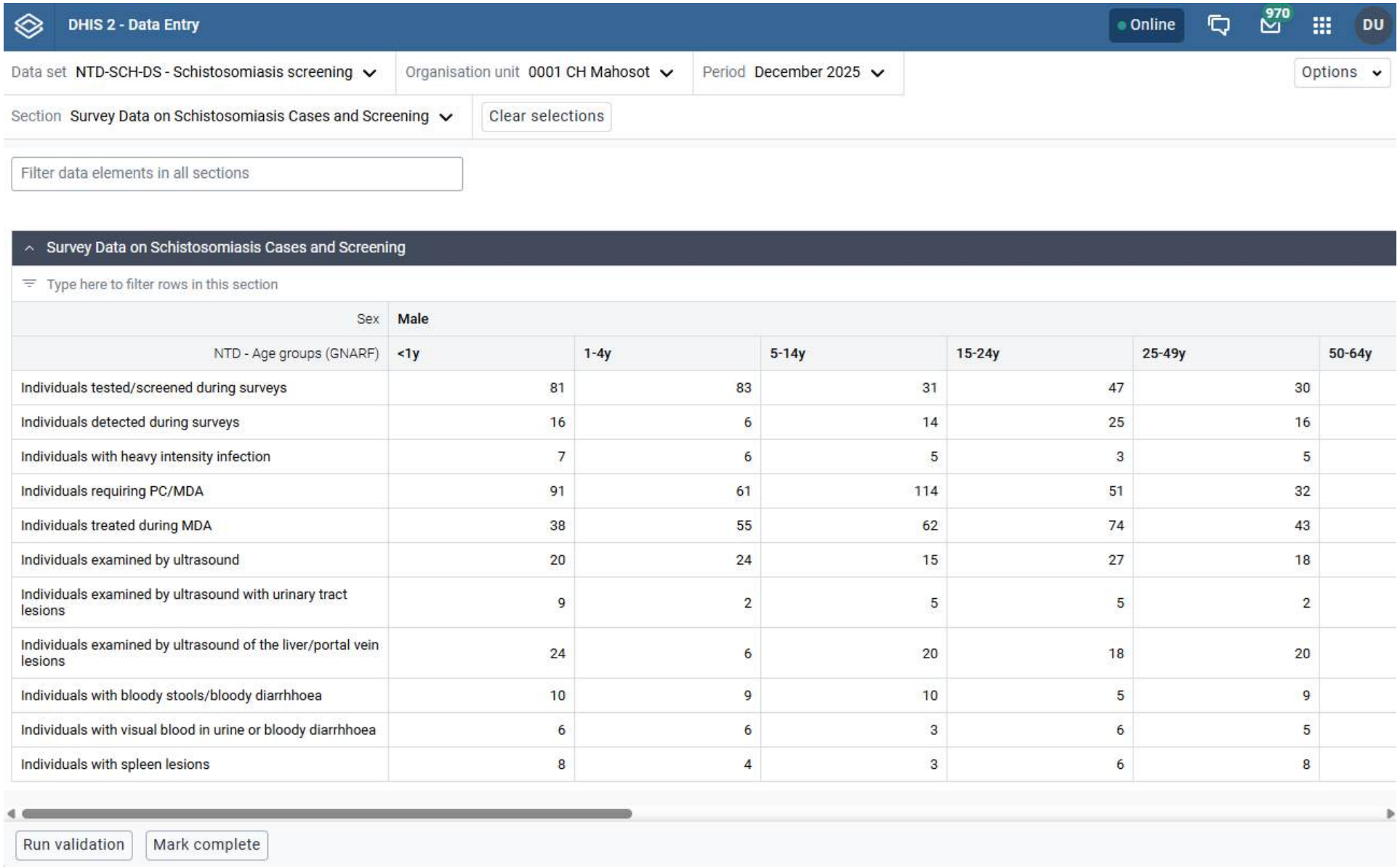
SCH diagnostics	Dipstick	Kato Katz	CCA	CAA	Biopsy	PCR
Confirmed cases by diagnostic method	25	13	27	16	30	

Cases by species

Type here to filter rows in this section

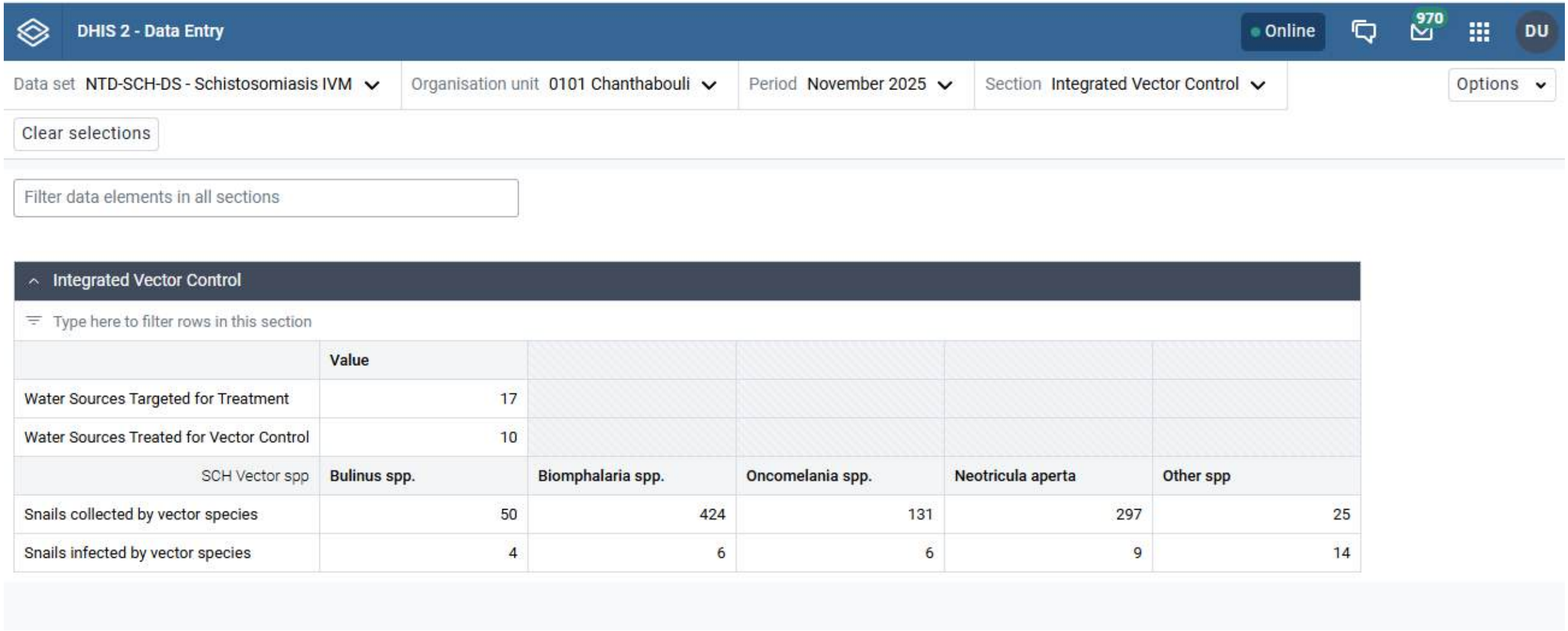
SCH species	S. haematobium	S. mansoni	S. japonicum	S. intercalatum	S. mekon
Confirmed cases by spp.	14	8	9	9	

Schistosomiasis screening



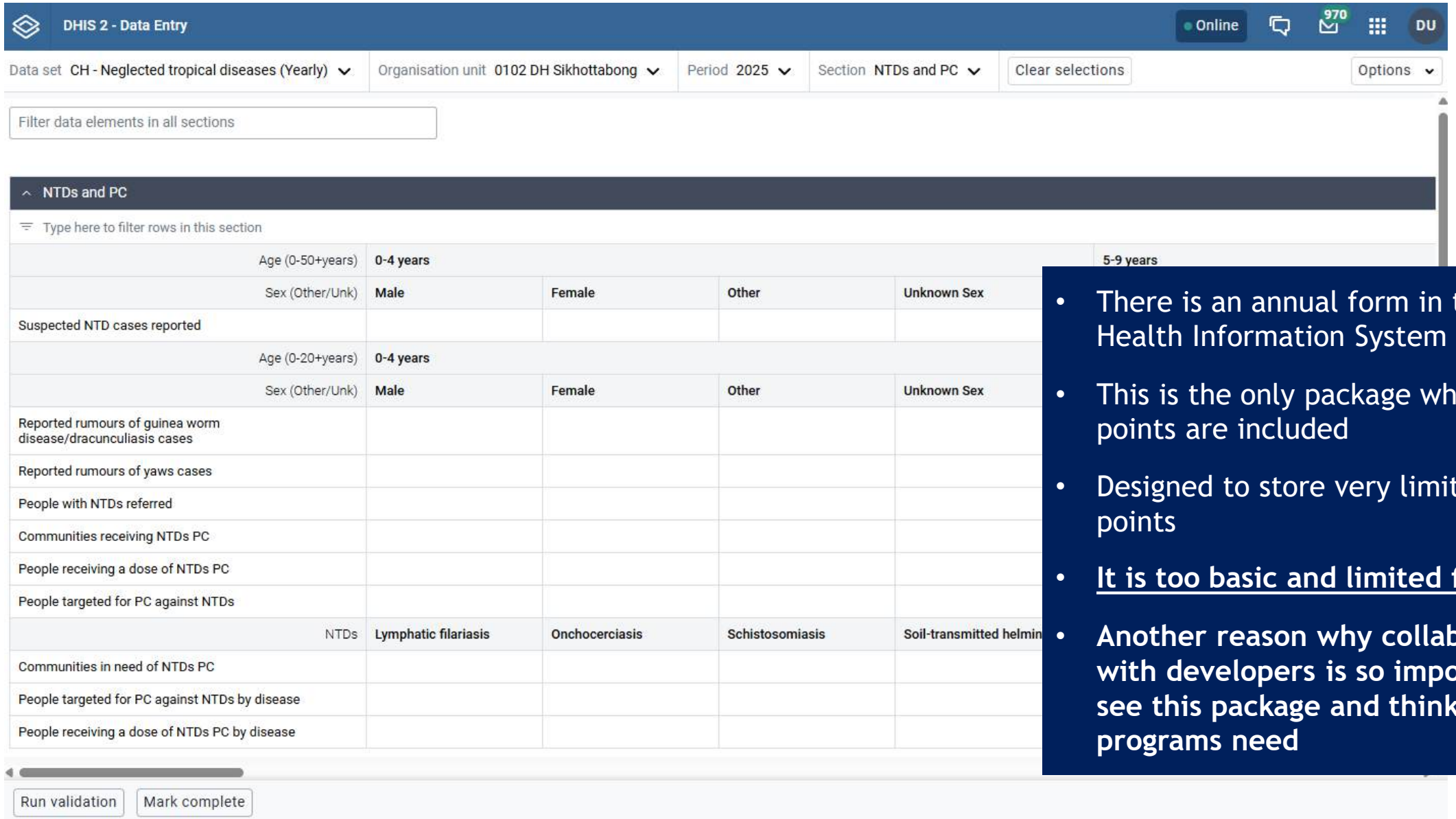
Sex	Male					
NTD - Age groups (GNARF)	<1y	1-4y	5-14y	15-24y	25-49y	50-64y
Individuals tested/screened during surveys	81	83	31	47	30	
Individuals detected during surveys	16	6	14	25	16	
Individuals with heavy intensity infection	7	6	5	3	5	
Individuals requiring PC/MDA	91	61	114	51	32	
Individuals treated during MDA	38	55	62	74	43	
Individuals examined by ultrasound	20	24	15	27	18	
Individuals examined by ultrasound with urinary tract lesions	9	2	5	5	2	
Individuals examined by ultrasound of the liver/portal vein lesions	24	6	20	18	20	
Individuals with bloody stools/bloody diarrhhoea	10	9	10	5	9	
Individuals with visual blood in urine or bloody diarrhhoea	6	6	3	6	5	
Individuals with spleen lesions	8	4	3	6	8	

Schistosomiasis IVM



	Value				
Water Sources Targeted for Treatment	17				
Water Sources Treated for Vector Control	10				
SCH Vector spp	**Bulinus spp.**	**Biomphalaria spp.**	**Oncomelania spp.**	**Neotricula aperta**	**Other spp**
Snails collected by vector species	50	424	131	297	25
Snails infected by vector species	4	6	6	9	14

There are also some NTD components in the Community Health Information System DHIS2 package, but it is extremely limited



- There is an annual form in the Community Health Information System DHIS2 package
- This is the only package where MDA data points are included
- Designed to store very limited annual data points
- **It is too basic and limited for NTD programs**
- **Another reason why collaborating closely with developers is so important – they might see this package and think this is all NTD programs need**

The WHO NTD DHIS2 packages from the RHIS toolkit are not aligned or adapted to ESPEN reporting, which thus remains a major data management gap

1

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from the evolving Routine Health Information Systems toolkit (RHIS), targeting **routine health facility-based indicators**

2

Supplemental partner resources (including DHIS2 packages)

developed to improve the connection and harmonization between **country-level data management processes and ESPEN reporting needs**

A rough comparison of the data elements and indicators in the WHO RHIS DHIS2 package vs. the ESPEN JRF/JRSM/EPIRF reports reveal additional needs

Metric	Count	Percentage
Total ESPEN Variables	267	100%
Good Matches	15	5.6%
Partial Matches	114	42.7%
Gaps (Not in WHO RHIS)	138	51.7%

BREAKDOWN BY ESPEN SOURCE

Source	Total	Matches	Gaps
EPIRF	134	59	75
JRSM	61	34	27
JRF	72	36	36

BREAKDOWN BY DATA TYPE

Data Type	Total	Matches	Gaps
Other	70	22	48
Morbidity Management	19	12	7
Survey/Epidemiology	70	24	46
MDA Treatment	49	25	24
Population/Planning	**49**	**38**	**11**
Stock/Logistics	10	8	2

The following categories of ESPEN data elements have no direct equivalent in the WHO RHIS package:

CATEGORY 1: Survey/Epidemiology Data (46 gaps)

These variables capture detailed survey and mapping data:

- *Survey methodology (site selection, sampling methods)*
- *Pre-control prevalence data*
- *Infection intensity classifications (heavy/moderate/light)*
- *Community Microfilarial Load (CMFL) for Onchocerciasis*
- *Vector surveillance data (black flies, crabs)*
- *Detailed age-specific examination results*
- *Survey decision outcomes (stop/continue MDA)*

CATEGORY 2: MDA Treatment Details (24 gaps)

- *Treatment round tracking (1st round, 2nd round)*
- *PC implementation type codes (MDA1, MDA3, MDA4, T1, T2, T3)*
- *Age-specific coverage percentages*
- *Effective coverage calculations*
- *Treatment dates*

CATEGORY 3: Administrative/Planning Data (48+ gaps)

- *Endemicity status classifications*
- *Number of treatment rounds planned*
- *Loa loa co-endemicity status*

CATEGORY 4: LF Morbidity Management (7 gaps)

- *IU-level patient tracking (known/unknown/pending)*
- *Patient estimation methods and dates*
- *Facility assessment status*
- *Number of facilities providing essential care*

IMPLICATION

Implementing the WHO NTD DHIS2 module will not result in a data system that can meet ESPEN reporting needs.

NTD programs still need to design additional data system capacity.

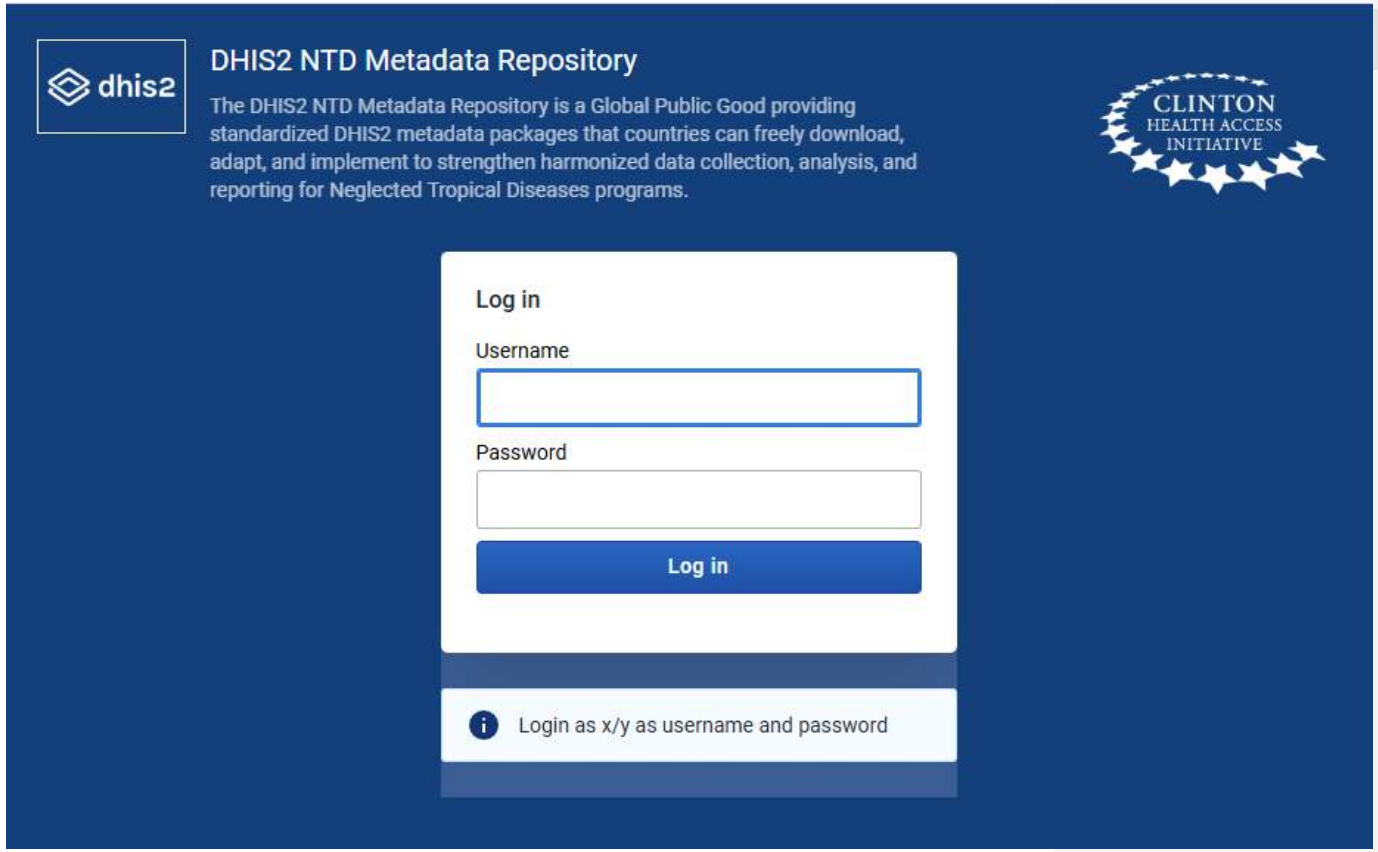
A rough comparison of the data elements and indicators in the WHO RHIS DHIS2 package vs. the ESPEN JRF/JRSM/EPIRF reports reveal additional needs

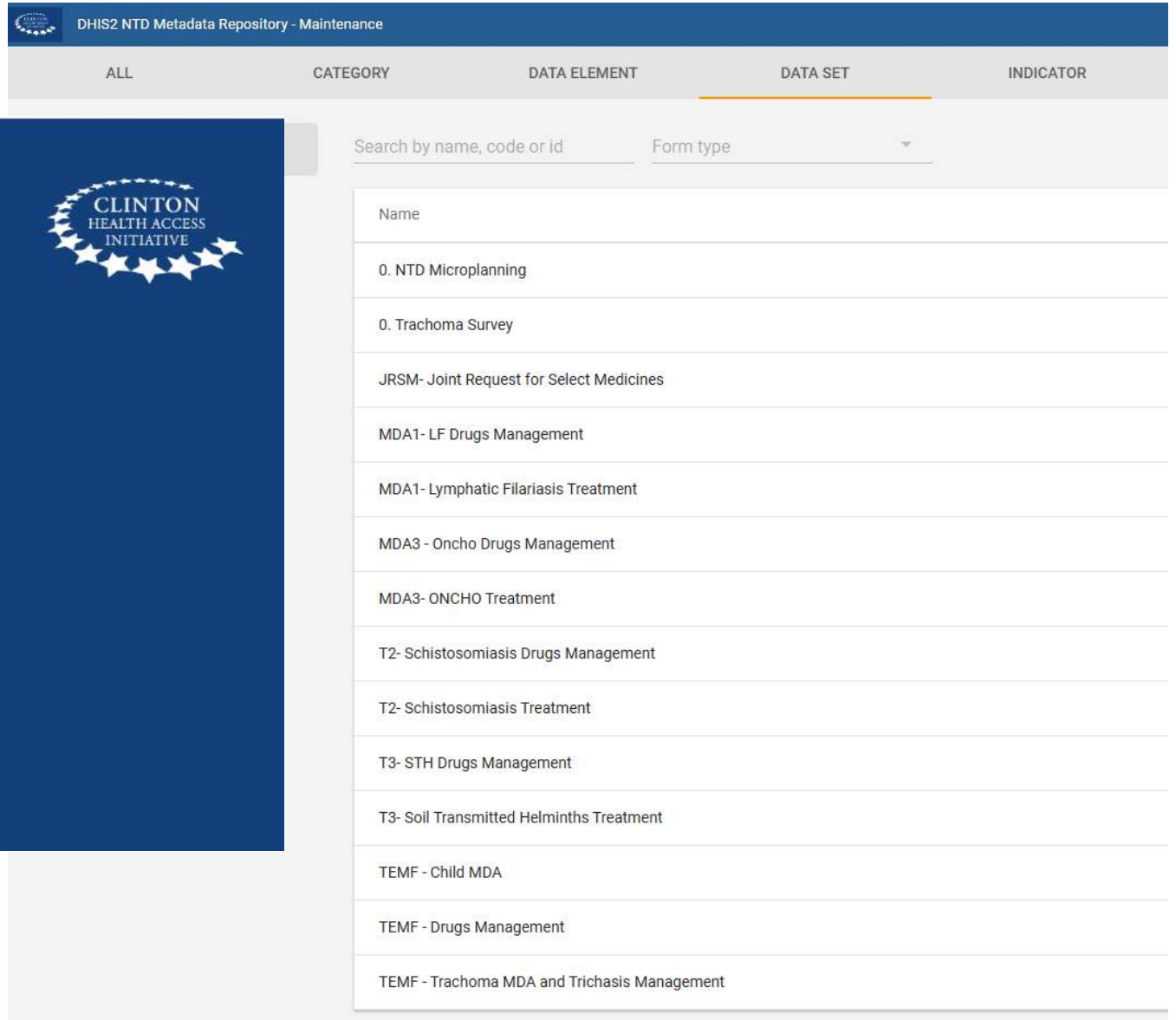
ESPEN Source	Disease	ESPEN Category	Data Type	ESPEN Variable	WHO Equivalent Code(s)	WHO Equivalent Name(s)	Alignment Status
				providing care	NTD_LYMPHO_FIL; NTD_TREATED_SCH	lymphodema patient; NTD-SCH - Schistosomiasis cases treated	
EPIRF	LF	Morbidity/Disability	Morbidity Management	Cumulative number of lymphoedema patients	NTD_LYMPHO_FIL; NTD_LYMPHO_CARE_FIL	NTD-FIL - New lymphodema patient; NTD-FIL - Lymphodema patients who received clinica...	Good Match
EPIRF	LF	Morbidity/Disability	Morbidity Management	New lymphoedema patients identified in the reporting year	NTD_LYMPHO_FIL; NTD_LYMPHO_CARE_FIL	NTD-FIL - New lymphodema patient; NTD-FIL - Lymphodema patients who received clinica...	Good Match
EPIRF	LF	Morbidity/Disability	Morbidity Management	Number of lymphoedema patients who received care in the reporting year	NTD_LYMPHO_FIL; NTD_LYMPHO_CARE_FIL	NTD-FIL - New lymphodema patient; NTD-FIL - Lymphodema patients who received clinica...	Good Match
EPIRF	LF	Morbidity/Disability	Morbidity Management	Cumulative number of hydrocele patients	NTD_HYDRO_FIL; NTD_HYDRO_SURGERY_FIL	NTD-FIL - New hydrocele patient; NTD-FIL - Hydrocele patient who had surgery	Good Match
EPIRF	LF	Morbidity/Disability	Morbidity Management	Number of hydrocele surgeries reported in the year	NTD_HYDRO_FIL; NTD_HYDRO_SURGERY_FIL	NTD-FIL - New hydrocele patient; NTD-FIL - Hydrocele patient who had surgery	Good Match

ESPEN Source	Disease	ESPEN Category	Data Type	ESPEN Variable	WHO Equivalent Code(s)	WHO Equivalent Name(s)	Alignment Status
EPIRF	STH	Survey/Epidemiology	Survey/Epidemiology	Percent positive - Ascaris	NTD_CONFIRMED_ASCAR_STH	NTD-STH - STH confirmed cases - ascariasis	Partial Match
EPIRF	STH	Survey/Epidemiology	Other	Percent with heavy intensity - Ascaris	NTD_CONFIRMED_ASCAR_STH	NTD-STH - STH confirmed cases - ascariasis	Partial Match
EPIRF	STH	Survey/Epidemiology	Other	Percent with moderate intensity - Ascaris	NTD_CONFIRMED_ASCAR_STH	NTD-STH - STH confirmed cases - ascariasis	Partial Match
EPIRF	STH	Survey/Epidemiology	Survey/Epidemiology	Number of people examined - Hookworm	NTD_CONFIRMED_HOOK_STH	NTD-STH - STH confirmed cases - hookworm infection	Partial Match
EPIRF	STH	Survey/Epidemiology	Survey/Epidemiology	Number of people positive - Hookworm	NTD_CONFIRMED_HOOK_STH	NTD-STH - STH confirmed cases - hookworm infection	Partial Match
EPIRF	STH	Survey/Epidemiology	Survey/Epidemiology	Percent positive - Hookworm	NTD_CONFIRMED_HOOK_STH	NTD-STH - STH confirmed cases - hookworm infection	Partial Match

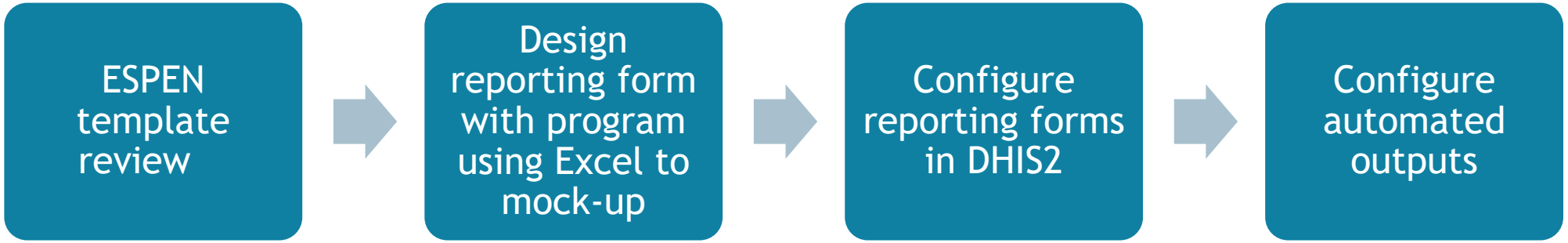
ESPEN Source	Disease	ESPEN Category	Data Type	ESPEN Variable	WHO Equivalent Code(s)	WHO Equivalent Name(s)	Alignment Status
JRF	STH	MDA Treatment	MDA Treatment	PreSAC in need treated (STH)			Gap - Not in WHO
JRF	STH	MDA Treatment	MDA Treatment	PreSAC coverage (%) STH			Gap - Not in WHO
JRF	STH	MDA Treatment	MDA Treatment	SAC in need treated (STH)			Gap - Not in WHO
JRF	STH	MDA Treatment	MDA Treatment	SAC coverage (%) STH			Gap - Not in WHO
JRF	STH	MDA Treatment	MDA Treatment	Total in need treated (STH)			Gap - Not in WHO
JRF	STH	MDA Treatment	MDA Treatment	Coverage (%) STH			Gap - Not in WHO

CHAI has developed additional DHIS2 packages designed around ESPEN data management needs





This ESPEN-tailored DHIS2 package is based on collaborative engagement with country programs



JRF example

JRF data entry
- Targeting
- Treatment
- Drugs management

JRF outputs

Designed to work with practical in-country workflows governing how data is generated, collected, and reporting

JRF digitization example - *targeting* component

MDA 1 - Ivermectin (IVM) and Albendazole (ALB)

Administrative structure, population requiring PC by age group, population treated by age group and coverage

Estimate by age group | Data validation | Undo

TOTAL			Run MDA1 macro			640,499	1,261,213	1,901,712		493,634	515,357	1,008,991		77.07	40.86	53.06
Country administrative structure			PC implemented	Date	Population targeted for MDA 1				Population treated				Programme coverage (%)			
Country	Province/State	District			PreSAC	SAC	Adults	Total	PreSAC	SAC	Adults	Total	PreSAC	SAC	Adults	Total
Angola	BENGUELA	BAIA FARTA														
Angola	BENGUELA	BALOMBO														
Angola	BENGUELA	BENGUELA														
Angola	BENGUELA	BOCOIO														
Angola	BENGUELA	CAIMBAMBO														

MDA 3 - Ivermectin (IVM)

Administrative structure, population requiring PC by age group, population treated by age group and coverage

Estimate by age group - Round 1 | Estimate by age group - Round 2 | Data validation | Undo

TOTAL			Run MDA3 macro		1,094,933	2,156,048	3,250,981	1,062,647	1,102,252	2,164,899				1,062,647	1,102,252	2,164,899	97.05	51.12	66.5
Country administrative structure			PC implemented	Date	Population targeted for MDA 3			Population treated - 1st round			Population treated - 2nd round			Population treated			Programme coverage (%		
Country	Province/State	District			SAC	Adults	Total	SAC	Adults	Total	SAC	Adults	Total	SAC	Adults	Total	SAC	Adults	Total
Angola	BENGO	AMBRIZ																	
Angola	BENGO	BULA ATUMBA																	
Angola	BENGO	DANDE																	
Angola	BENGO	DEMBOS																	
Angola	BENGO	NAMBUANGONGO																	

T 3 - Albendazole (ALB) or Mebendazole (MBD) - R

Administrative structure, population requiring PC by age group, population treated by age group and

Select medicine used for treatment of STH for each age group: ALB | ALB

Estimate by age group | Select the category of Adults | Data validation | Undo

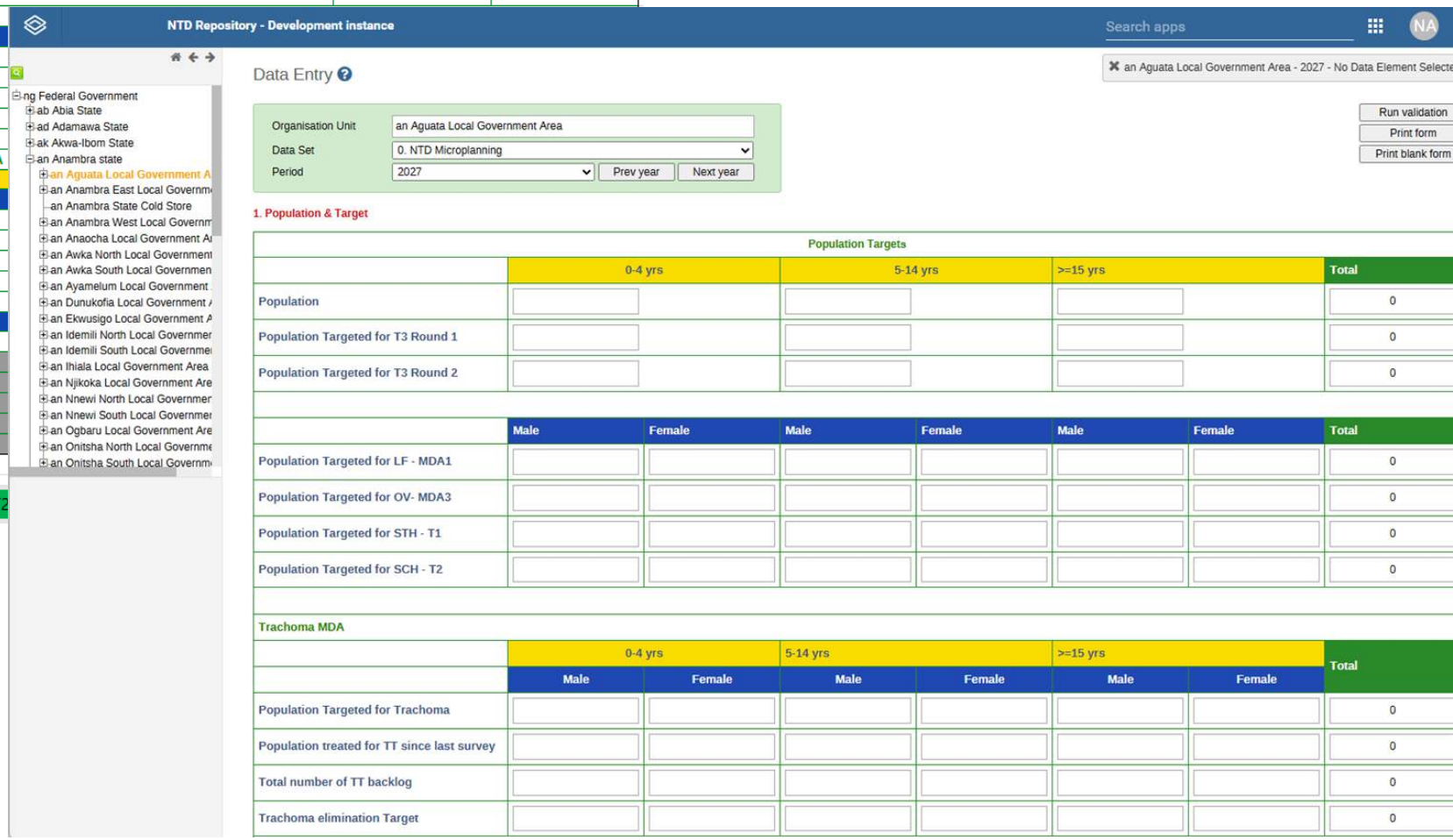
TOTAL			Run T3 macro		8,424	1,678,073		1,686,497	7,812	967,420		975,232	92.74	57.65		57.83
Country administrative structure			PC implemented	Date	Population targeted for T3				Population treated				Programme coverage (%)			
Country	Province/State	District			PreSAC	SAC	Adults	Total	PreSAC	SAC	Adults	Total	PreSAC	SAC	Adults	Total
Angola	BENGO	AMBRIZ														
Angola	BENGO	BULA ATUMBA	T3 (ALB/MBD)	June 2024	2,605			2,605	2,975			2,975	114.20			114.20
Angola	BENGO	DANDE														
Angola	BENGO	DEMBOS	T3 (ALB/MBD)	June 2024	5,819			5,819	4,837			4,837	83.12			83.12
Angola	BENGO	NAMBUANGONGO														

INTRO | COUNTRY_INFO | MDA1 | MDA3 | MDA4 | T1 | T2 | T3_R1 | T3_R2 | T3_R3 | DISTRICT | SUMMARY

JRF digitization example - *targeting* component

In the system				
1. Population & Target				
	Population Targets			
	PreSAC	SAC	Adults	Total
Population				
Population Targeted for T3 Round 1				
Population Targeted for T3 Round 2				
	Male	Female		
Population Targeted for LF - MDA1				
Population Targeted for OV- MDA3				
Population Targeted for STH - T1				
Population Targeted for SCH - T2				
			Trachoma MDA	
	PreSAC			
	Male	Female		
Population Targeted for Trachoma				
Population treated for TT since last survey				
Total number of TT backlog				
Trachoma elimination Target				
			Male	
Number of Persons Targeted for TT Surgery				
TEC Request				
TEC conditionally approved				
TEC request approved				
Intervention status				
Type of Modified MDA Strategy				

0. NTD MicroPlanning | 1. Oncho Treatment MDA3 | 2. LF (MDA1) | 3. SCH (T2



NTD Repository - Development instance

Search apps

ng Federal Government
ab Abia State
ad Adamawa State
ak Akwa-Ibom State
an Anambra state
an Aguata Local Government A
an Anambra East Local Governm
an Anambra State Cold Store
an Anambra West Local Governm
an Anaocha Local Government A
an Awka North Local Government
an Awka South Local Governmen
an Ayamelum Local Government
an Dunukofia Local Government
an Ekwusigo Local Government A
an Idemili North Local Governmer
an Idemili South Local Governme
an Ihiala Local Government Area
an Njikoka Local Government Are
an Nnewi North Local Governmer
an Nnewi South Local Governme
an Ogbaru Local Government Are
an Onitsha North Local Governme
an Onitsha South Local Governm

Data Entry

an Aguata Local Government Area - 2027 - No Data Element Selecte

Organisation Unit: an Aguata Local Government Area
Data Set: 0. NTD Microplanning
Period: 2027 | Prev year | Next year

Run validation | Print form | Print blank form

1. Population & Target

	Population Targets						
	0-4 yrs		5-14 yrs		>=15 yrs		Total
Population							0
Population Targeted for T3 Round 1							0
Population Targeted for T3 Round 2							0
	Male	Female	Male	Female	Male	Female	Total
Population Targeted for LF - MDA1							0
Population Targeted for OV- MDA3							0
Population Targeted for STH - T1							0
Population Targeted for SCH - T2							0
Trachoma MDA							
	0-4 yrs		5-14 yrs		>=15 yrs		Total
	Male	Female	Male	Female	Male	Female	
Population Targeted for Trachoma							0
Population treated for TT since last survey							0
Total number of TT backlog							0
Trachoma elimination Target							0

JRF digitization example – *treatment* component

MDA 1 - Ivermectin (IVM) and Albendazole (ALB)

Administrative structure, population requiring PC by age group, population treated by age group and coverage

Estimate by age group | Data validation | Undo

TOTAL			Run MDA1 macro			640,499	1,261,213	1,901,712		493,634	515,357	1,008,991		77.07	40.86	53.06
Country administrative structure			PC implemented	Date	Population targeted for MDA 1				Population treated				Programme coverage (%)			
Country	Province/State	District			PreSAC	SAC	Adults	Total	PreSAC	SAC	Adults	Total	PreSAC	SAC	Adults	Total
Angola	BENGUELA	BAIA FARTA														
Angola	BENGUELA	BALOMBO														
Angola	BENGUELA	BENGUELA														
Angola	BENGUELA	BOCOIO														
Angola	BENGUELA	CAIMBAMBO														

MDA 3 - Ivermectin (IVM)

Administrative structure, population requiring PC by age group, population treated by age group and coverage

Estimate by age group - Round 1 | Estimate by age group - Round 2 | Data validation | Undo

TOTAL			Run MDA3 macro		1,094,933	2,156,048	3,250,981	1,062,647	1,102,252	2,164,899				1,062,647	1,102,252	2,164,899	97.05	51.12	66.5
Country administrative structure			PC implemented	Date	Population targeted for MDA 3			Population treated - 1st round			Population treated - 2nd round			Population treated			rogramme coverage (%		
Country	Province/State	District			SAC	Adults	Total	SAC	Adults	Total	SAC	Adults	Total	SAC	Adults	Total	SAC	Adults	Total
Angola	BENGO	AMBRIZ																	
Angola	BENGO	BULA ATUMBA																	
Angola	BENGO	DANDE																	
Angola	BENGO	DEMBOS																	
Angola	BENGO	NAMBUANGONGO																	

T 3 - Albendazole (ALB) or Mebendazole (MBD) - R

Administrative structure, population requiring PC by age group, population treated by age group and

Select medicine used for treatment of STH for each age group: ALB | ALB

Estimate by age group | Select the category of Adults | Data validation | Undo

TOTAL			Run T3 macro		8,424	1,678,073		1,686,497	7,812	967,420		975,232	92.74	57.65		57.83
Country administrative structure			PC implemented	Date	Population targeted for T3				Population treated				Programme coverage (%)			
Country	Province/State	District			PreSAC	SAC	Adults	Total	PreSAC	SAC	Adults	Total	PreSAC	SAC	Adults	Total
Angola	BENGO	AMBRIZ														
Angola	BENGO	BULA ATUMBA	T3 (ALB/MBD)	June 2024	2,605			2,605	2,975			2,975	114.20			114.20
Angola	BENGO	DANDE														
Angola	BENGO	DEMBOS	T3 (ALB/MBD)	June 2024	5,819			5,819	4,837			4,837	83.12			83.12
Angola	BENGO	NAMBUANGONGO														

INTRO | COUNTRY_INFO | MDA1 | MDA3 | MDA4 | T1 | T2 | T3_R1 | T3_R2 | T3_R3 | DISTRICT | SUMMARY

JRF digitization example – *treatment* component

As it is in the system

1. TREATED

Population Treated for Lymphatic Filariasis (LF)							
	PreSAC		SAC		Adults		Total Treated
Number of persons treated for LF	Male	Female	Male	Female	Male	Female	

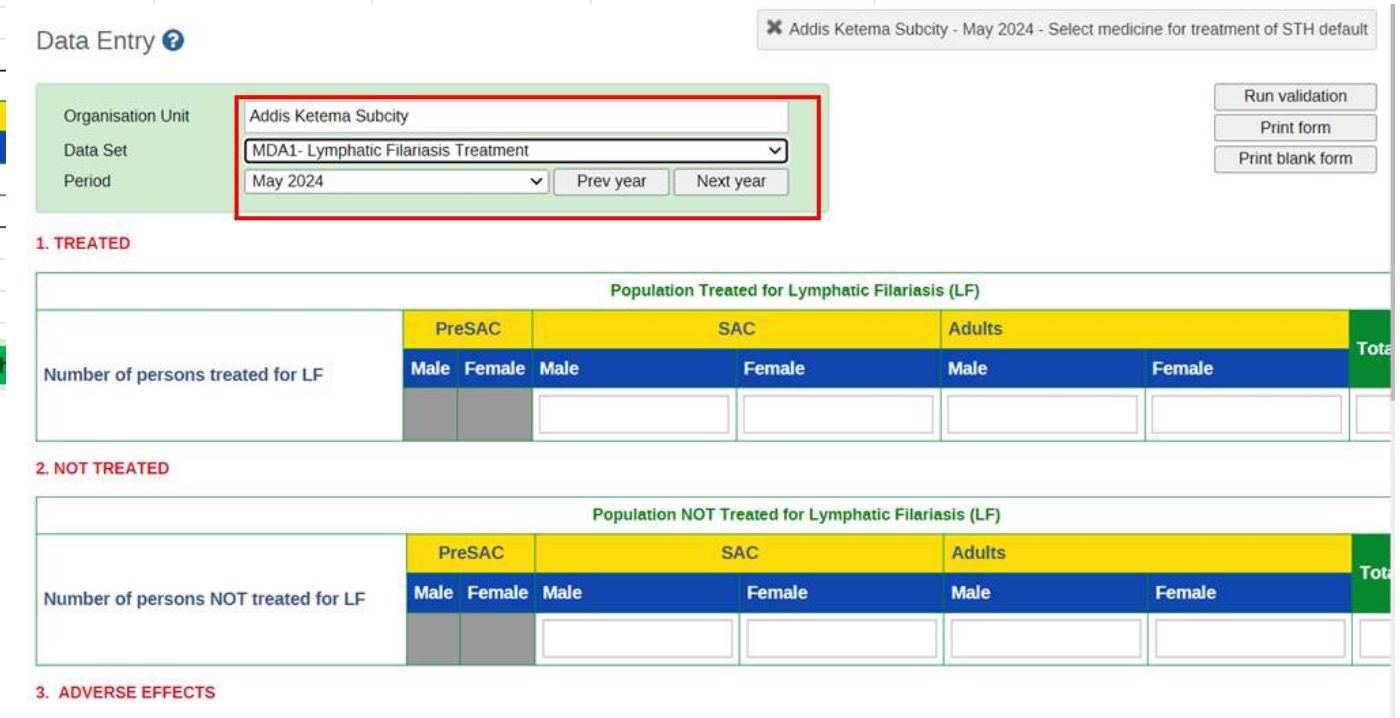
2. NOT TREATED

Population NOT Treated for Lymphatic Filariasis (LF)							
	PreSAC		SAC		Adults		Total NOT Treated
Number of persons NOT treated for LF	Male	Female	Male	Female	Male	Female	

3. ADVERSE EFFECTS

	Adverse Effects			
	PreSAC		SAC	
	Male	Female	Male	
Serious Events				
Serious Events Referred				

0. NTD MicroPlanning | 1. Oncho Treatment MDA3 | 2. LF (MDA1) | 3. SCH (T2) Treatment | 5. Trach



JRF digitization example – *drug management* component

Inventory of PC medicines in the country						
	IVM	DEC	ALB (LF)	ALB (STH)	MBD	PZQ
Available	10,256,577		5,055,000	4,137,753		918,681
Distributed	8,157,597		1,003,749	2,031,149		5,319,681
Wasted	275,081		260,022	34,091		
Received	11,031,500					4,401,000
Remaining	12,855,399		3,791,229	2,072,513		

Please indicate the medicine has been used to treat PreSAC for STH and delivery channels					
PC medicine		Delivery channels		Source	

Additional information
Les districts d'endémie de l'onchocercose ou de la filariose lymphatique qui n'ont pas été traités en 2024, c'est en raison de l'absence de

INTRO | COUNTRY_INFO | MDA1 | MDA3 | MDA4 | T1 | T2 | T3_R1 | T3_R2 | T3_R3 | DISTRICT | SUMMARY

In the system		
1. Availability and Distribution		
	Ivermectin	ALB
# of tablets available		
# of tablets issued		
# of tablets distributed		
2. Wastage		
	Ivermectin	ALB
# of tablets wasted		
# of tablets lost		
# of tablets expried		
3. Remaining Drugs		
	Ivermectin	ALB
# of tablets remaining		
Expiry date of remaining medicine of previous MDA		
Expire dates of remaining medicine from current MDA		

2. LF (MDA1) | 3. SCH (T2) Treatment | 5. Trachoma Treatment | 1. ONCHO Drug Management | 2. LF Drug Management

Organisation Unit: Addis Ketema Subcity
Data Set: MDA1- LF Drugs Management
Period: May 2024 | Prev year | Next year

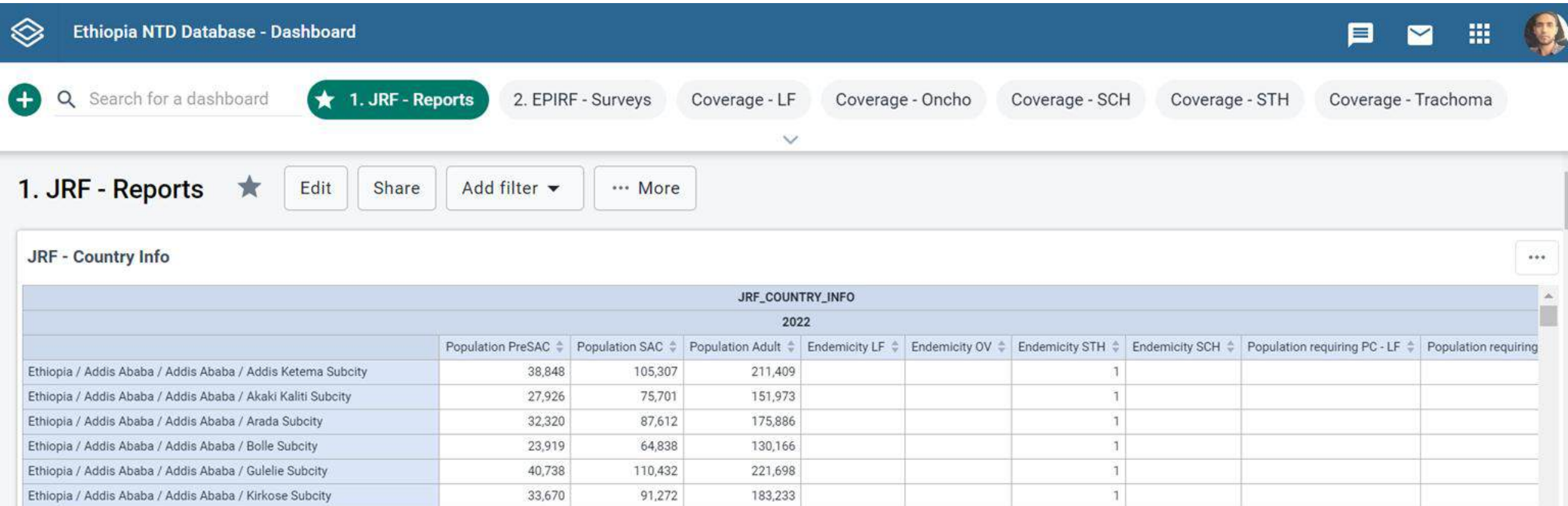
1. Availability and Distribution

	Ivermectin	ALB
# of tablets available		
# of tablets issued		
# of tablets distributed		

2. Wastage

	Ivermectin	ALB
# of tablets wasted		
# of tablets lost		
# of tablets expried		

JRF digitization example – *formatted outputs to facilitate ESPEN reporting*

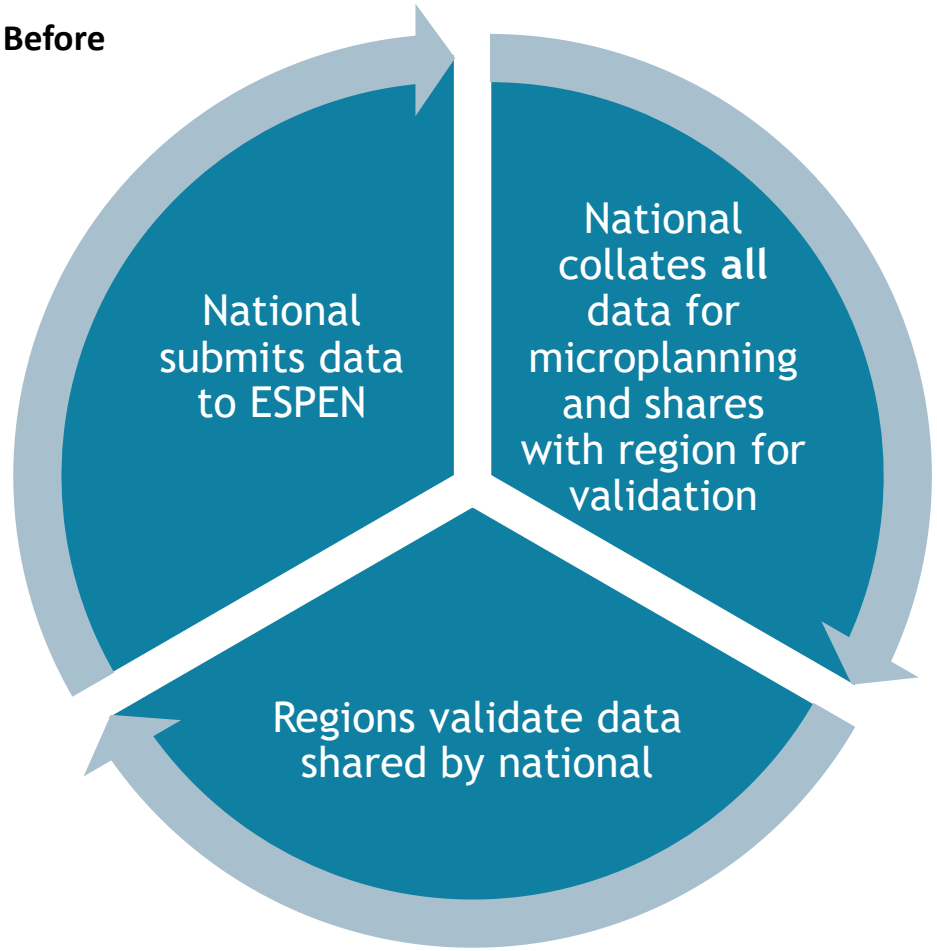


JRF_COUNTRY_INFO									
2022									
	Population PreSAC	Population SAC	Population Adult	Endemicity LF	Endemicity OV	Endemicity STH	Endemicity SCH	Population requiring PC - LF	Population requiring
Ethiopia / Addis Ababa / Addis Ababa / Addis Ketema Subcity	38,848	105,307	211,409			1			
Ethiopia / Addis Ababa / Addis Ababa / Akaki Kaliti Subcity	27,926	75,701	151,973			1			
Ethiopia / Addis Ababa / Addis Ababa / Arada Subcity	32,320	87,612	175,886			1			
Ethiopia / Addis Ababa / Addis Ababa / Bolle Subcity	23,919	64,838	130,166			1			
Ethiopia / Addis Ababa / Addis Ababa / Gulelie Subcity	40,738	110,432	221,698			1			
Ethiopia / Addis Ababa / Addis Ababa / Kirkose Subcity	33,670	91,272	183,233			1			

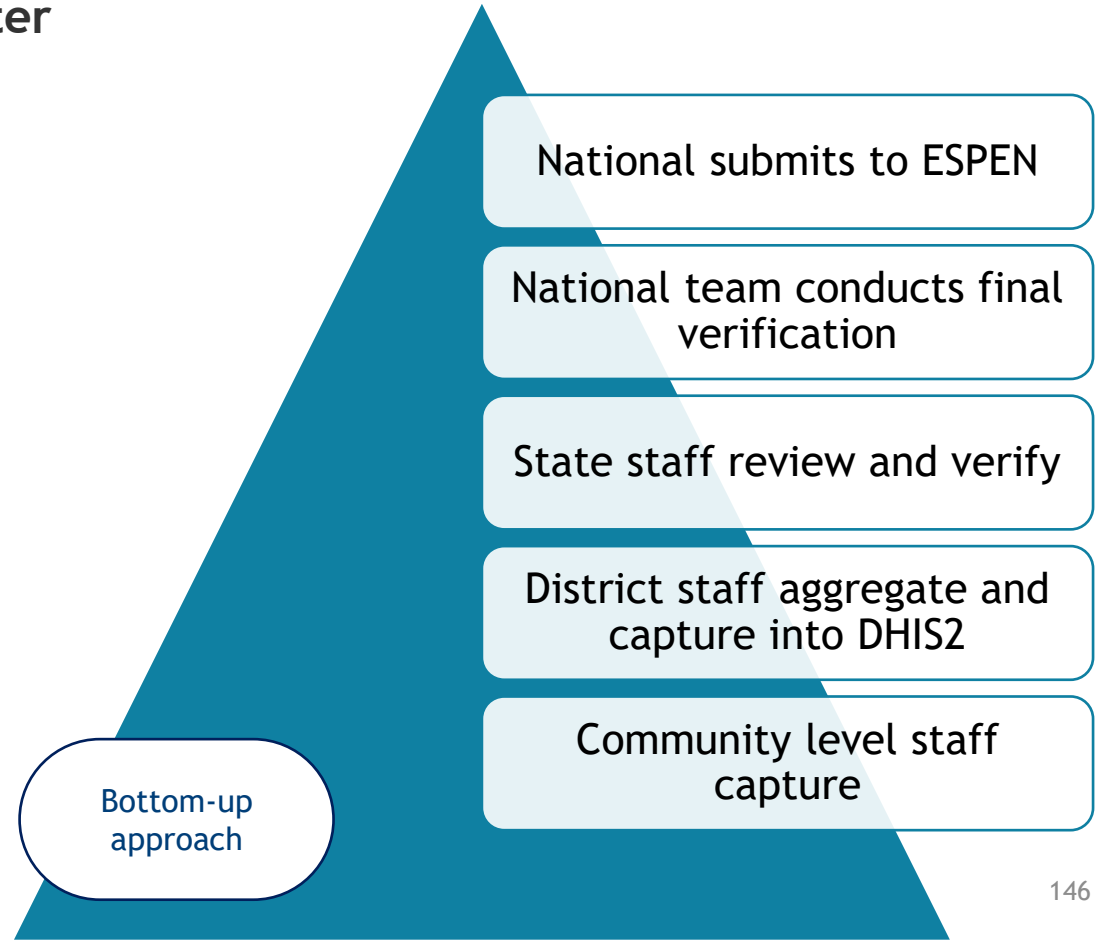
This can be used at subnational level, with staff entering data into DHIS2 instead of Excel files, improving data quality, visibility, and outputs

If a lot of data compilation and data wrangling is happening at national-level, consider how better bottom-up reporting systems can help.

Before



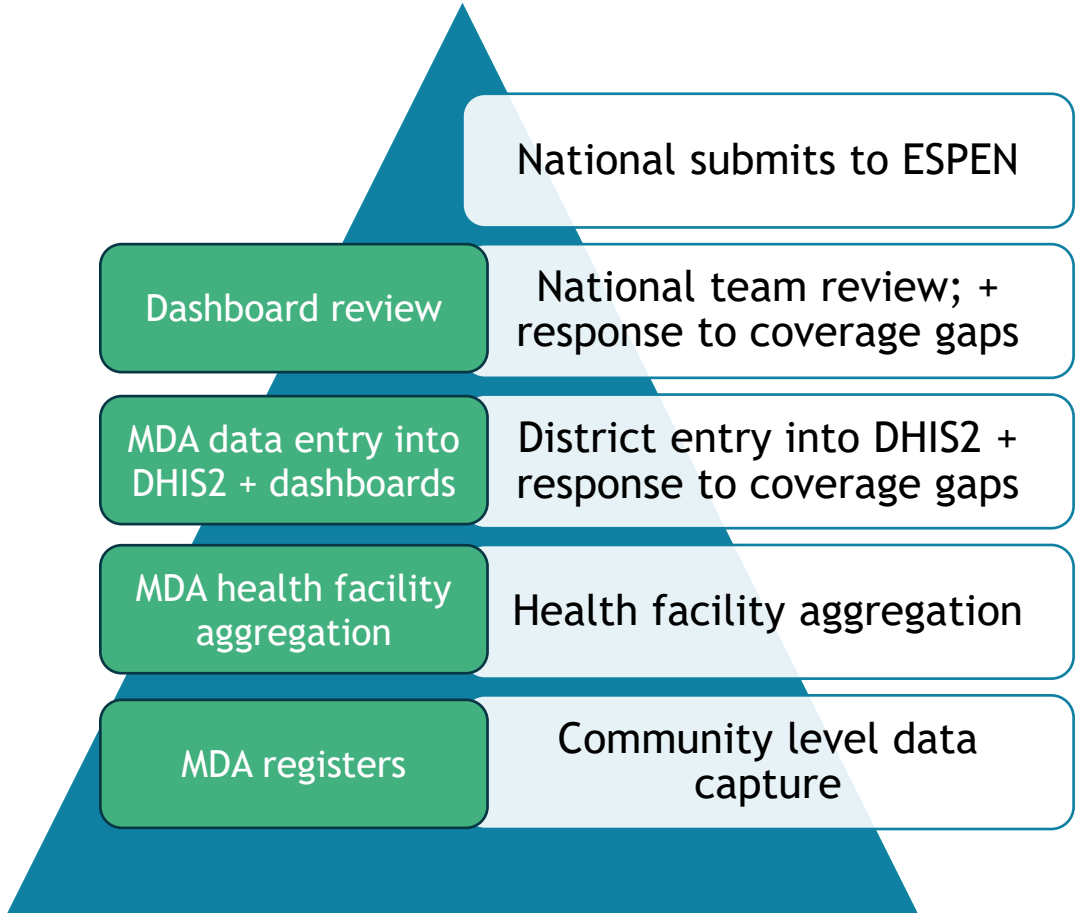
After

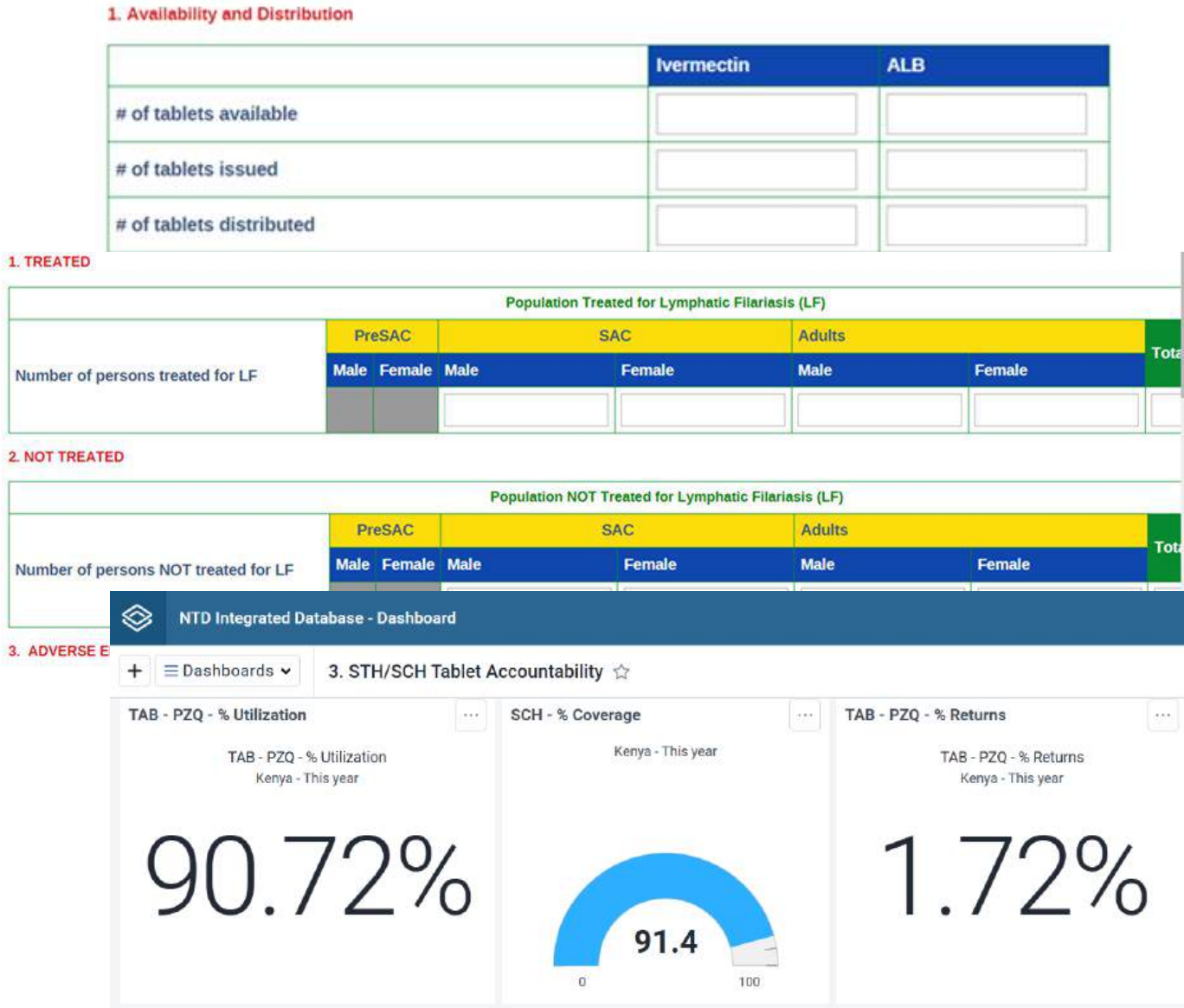


These forms could also be adapted to enable basic aggregate MDA digitization during campaigns – for example, daily reporting into DHIS2 instead of Excel

This can offer a **very simple MDA campaign digitization option** in contexts where funding for more sophisticated/granular digitization is not possible.

Remember: you should still adapt for your context!





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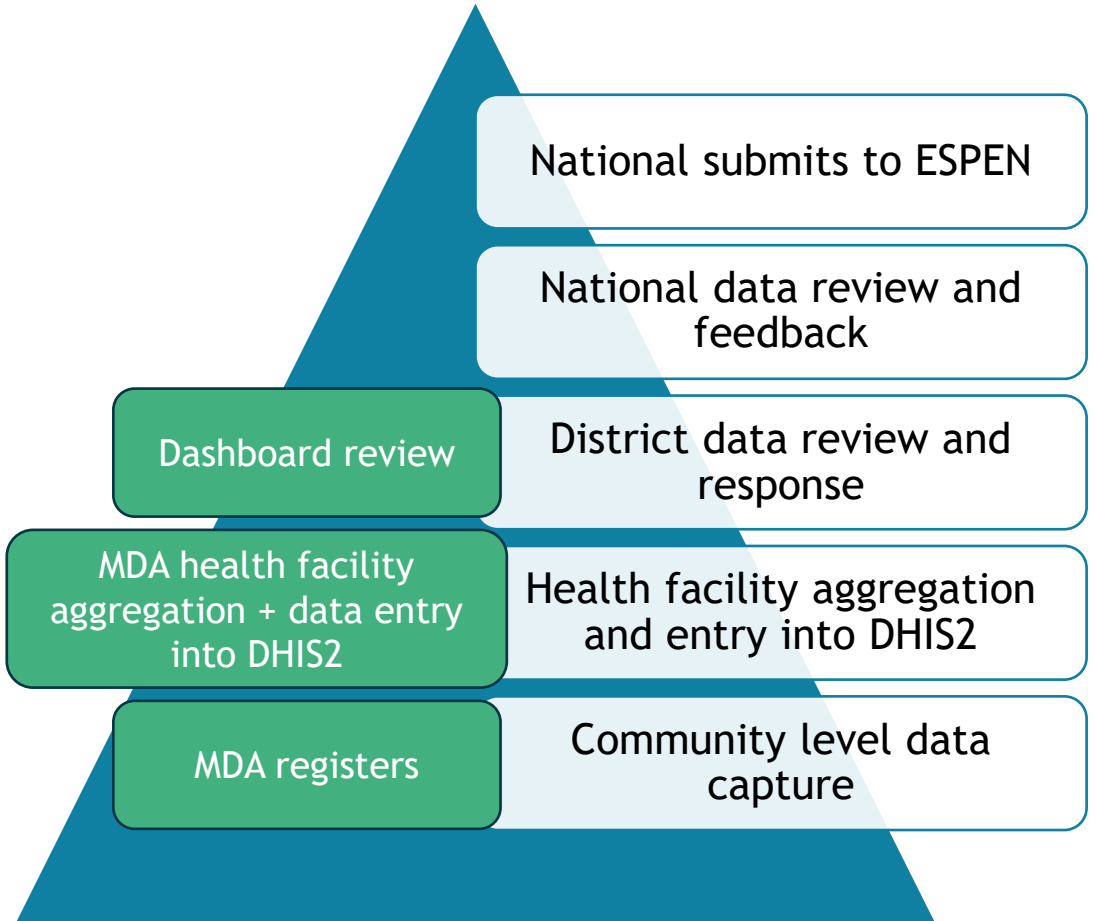


1. Availability and Distribution

	Ivermectin	ALB
# of tablets available		
# of tablets issued		
# of tablets distributed		

1. TREATED

Population Treated for Lymphatic Filariasis (LF)

	PreSAC		SAC		Adults		Tota
Number of persons treated for LF	Male	Female	Male	Female	Male	Female	

2. NOT TREATED

Population NOT Treated for Lymphatic Filariasis (LF)

	PreSAC		SAC		Adults		Tota
Number of persons NOT treated for LF	Male	Female	Male	Female	Male	Female	

3. ADVERSE E

Links to resources discussed in this presentation

1

WHO HMIS resources (including standard DHIS2 packages)

from the evolving Routine Health Information Systems toolkit (RHIS), targeting **routine health facility-based indicators**

1. UiO documentation on standard WHO NTD DHIS2 packages + links to download https://docs.dhis2.org/en/implement/health/neglected-tropical-diseases/ntd-overarching-module/design.html#ntd-agg-design

1. WHO DHIS2 demo instance where you can access and play around with the default standard packages: https://demos.dhis2.org/hmis/dhis-web-commons/security/login.action

2

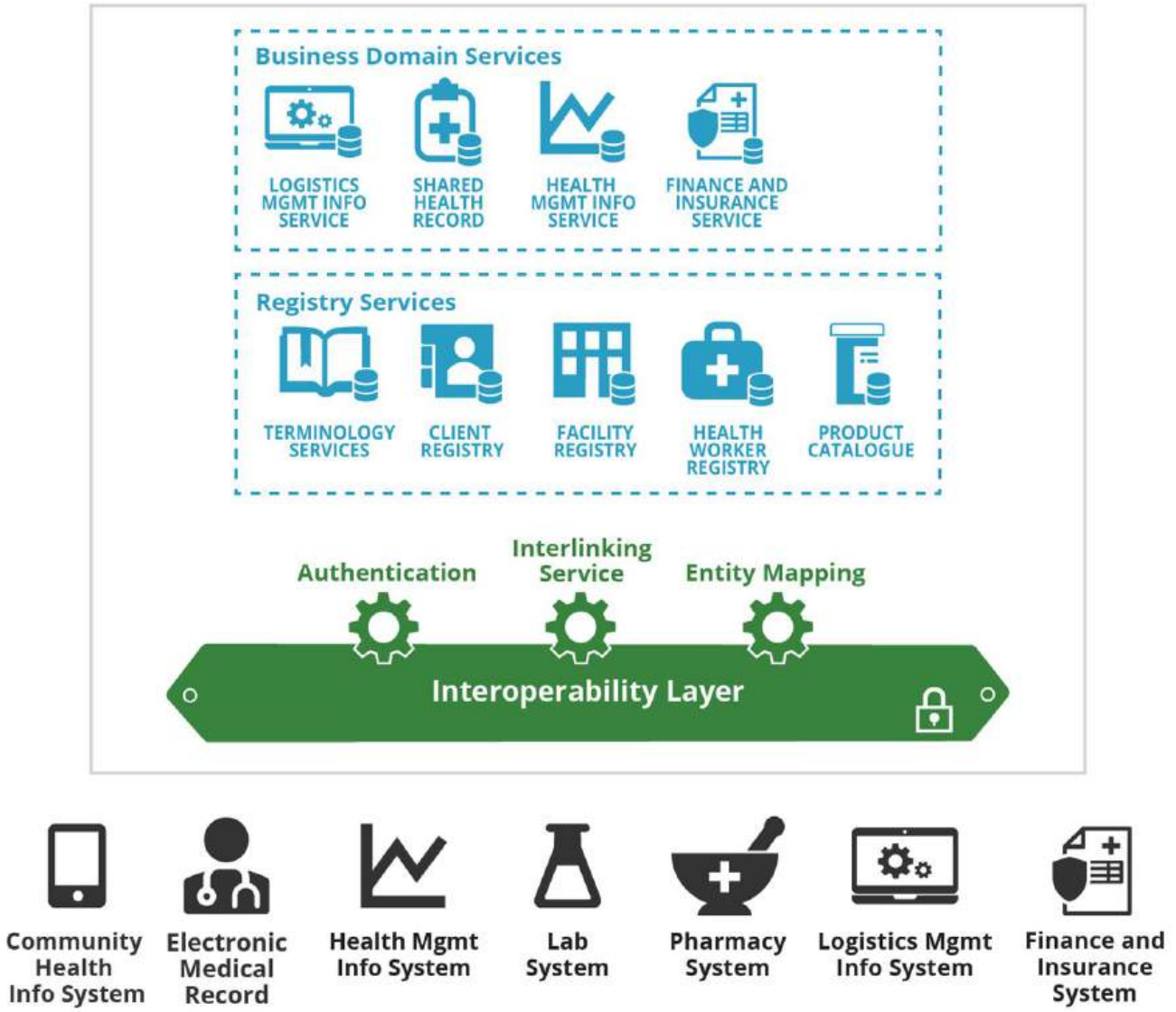
Supplemental partner resources (including DHIS2 packages)

developed to support NTD programs with their **data management needs for ESPEN reporting**

1. CHAI-developed DHIS2 ESPEN-tailored global goods package: https://ntd-repo.chaiprod.com/dhis-web-login/

Still being made publicly available. Reach out to sbabur@clintonhealthaccess.org in the meantime for credentials

The HMIS is just one system - many Ministries of Health are advancing with new Digital Health Departments and architectures



So it helps to discuss all your data management needs and have a dialogue about where these workflows can fit it longer-term

Module	Name of Form, Data Set, or Report	Description	Current electronic storage method
Case surveillance	Monthly lymphatic filariasis (LF) report	Aggregated lymphatic filariasis data from health facility registers	Excel
	Monthly leprosy report	Aggregated leprosy case data from health facility registers	Excel
	TT Tracker	Trachomatous trichiasis (TT) surgery and patient follow-up	SightSavers CommCare
	LF Hydrocele Tracker	Hydrocele treatment and patient follow-up	SightSavers CommCare
Stocks and commodities	Monthly health facility stock requisition report	Monthly stock requisition	eLMIS OpenLMIS
	MDA Community Drug Distributor (CDD) stock report	Drug stock received and distributed	Excel
	MDA Reverse Logistics form	Excess MDA drug supply returned	Excel
Population	Census Data	Population	HMIS DHIS2
Mass Drug Administration	Oncho MDA coverage report	Population visited and covered during Oncho MDA campaign (implemented by NTD program)	Excel
	SCH MDA coverage report	Same as above, for SCH	Excel
	STH MDA coverage report	Same as above, for STH	Excel
	Oncho MDA register	Population visited and covered during Oncho MDA campaign (implemented by partner in select areas)	Partner Redrose
	Combined MDA register	Population visited and covered during Oncho, SCH, and/or MDA campaign	Partner DHIS2
Entomological Surveillance	Blackfly surveillance	Monthly stock requisition	Partner Commcare
Surveys	Oncho Phase (Pre-Stop MDA) Surveillance	Disease-specific survey to evaluate MDA targeting	EspenCollect ODK
	SCH Impact Assessment	Disease-specific survey to evaluate MDA targeting	EspenCollect ODK

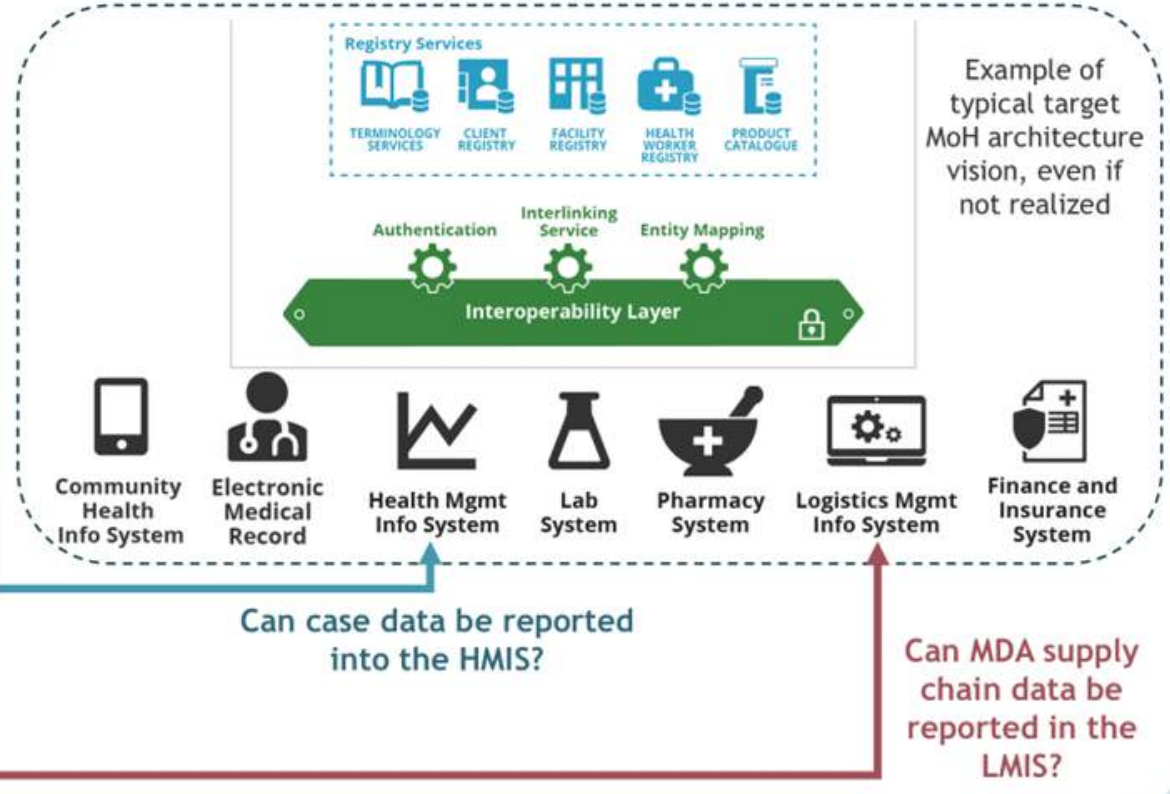


Figure adapted from OpenHIE framework

So it helps to discuss all your data management needs and have a dialogue about where these workflows can fit it longer-term

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Stocks and commodities	Monthly health facility stock requisition report	Monthly stock requisition	eLMIS OpenLMIS
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	SCH MDA coverage report	Same as above, for SCH	Excel
	STH MDA coverage report	Same as above, for STH	Excel
	Oncho MDA register	Population visited and covered during Oncho MDA campaign (implemented by partner in select areas)	Partner Redrose
	Combined MDA register	Population visited and covered during Oncho, SCH, and/or MDA campaign	Partner DHIS2
Entomological Surveillance	Blackfly surveillance	Monthly stock requisition	Partner Commcare
Surveys	Oncho Phase (Pre-Stop MDA) Surveillance	Disease-specific survey to evaluate MDA targeting	EspenCollect ODK
	SCH Impact Assessment	Disease-specific survey to evaluate MDA targeting	EspenCollect ODK

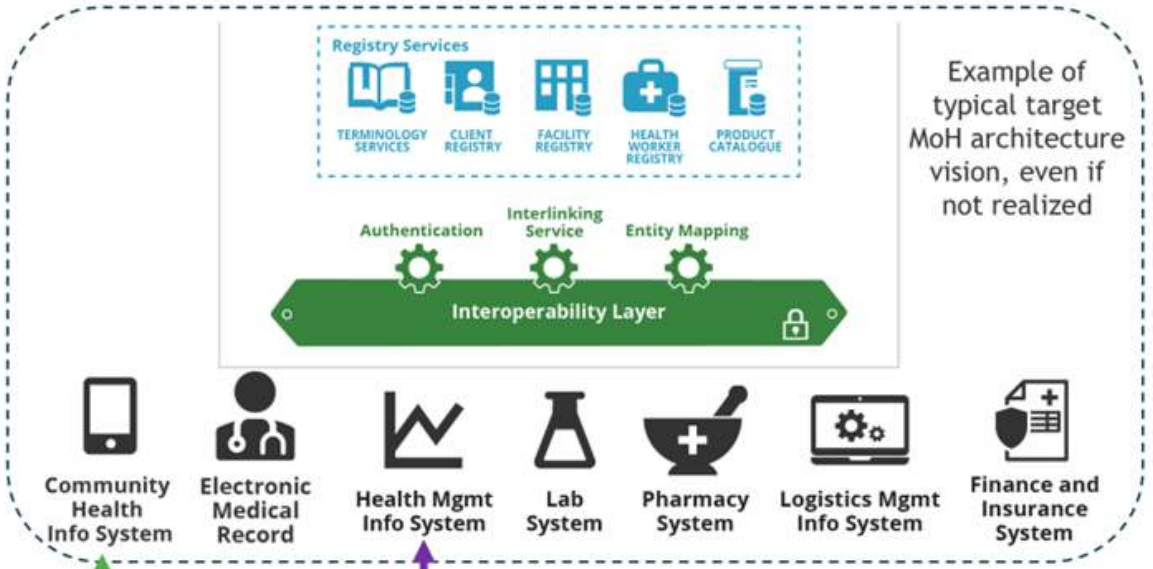

Figure adapted from OpenHIE framework

Overwhelmed?

Don’t be!

The building blocks are there for you to adapt, test, and iterate

Don’t worry about trying to do everything at once

Wherever your country is in this journey, **pick somewhere to start**

During the group work session, **we will focus on selecting and prioritizing integration opportunities**

THANK YOU
MERCI BEAUCOUP
OBRIGADO

World Health Organization

African Region

ESPEN

EXPANDED SPECIAL PROJECT
FOR ELIMINATION OF
NEGLECTED TROPICAL DISEASES

Lunch Break

World Health Organization
African Region

75 HEALTH FOR ALL

ESPEN

Group work I: Mapping NTD Data Flows for Integration and prioritization of integration within each country context

Andrea Rowan

Epidemiologist, CHAI

Sameen Babur

Director, Digital Health, Malaria & NTDs (CHAI)

World Health Organization African Region

75 HEALTH FOR ALL

ESPEN

World Health Organization
African Region

Data Quality Improvement Plan

EXPANDED SPECIAL PROJECT FOR ELIMINATION OF NEGLECTED TROPICAL DISEASES

1. Madagascar
2. Angola
3. South Sudan
4. Ethiopia
5. Kenya

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DQI-Plan: Madagascar

EXPANDED SPECIAL PROJECT FOR ELIMINATION OF NEGLECTED TROPICAL DISEASES
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Issue	Root Cause	Proposed Action	Responsible Party	Resources Needed	Timeline	Indicator of Success
Problème de fiabilité données AMM niveau District	*Délai limité de préparation*	*PLANIFICATION DES ACTIVITES AMM pour les volets liés aux DONNEES:* *-Mise à jour des outils de gestion à temps (masques Excel, Kobo Collect, Fiche de suivi médicaments, SMS Type, fiche de pointage)* *-Test des outils* *- Elaboration de guide d'utilisation simplifié* *-Orientation des acteurs sur le volet DATA* *-Harmonisation des données de base (nombre de population,*	*Programme MTN PTF* *Responsable DATA du Service* *Acteurs externes aux programmes* *Programme* *Programme* *Service Statistique* *Equipes Périphéries*	*Chronogramme d'activités détaillé (qui fait quoi quand ?)* *Comité préparatoire composé de l' Equipe du Programme et les PTF avec des sous-comités liés aux données :* *-Data et S/E* *-Intrant* *-Coordination* *-Finance* *-PTFs*	*Minimum 6 mois avant campagne .*	*Enquête de couverture indépendante post-campagnes (recommandée aux programmes faisant de l'AMM)*

DQI-Plan: Angola

Issue	Root Cause	Proposed Action	Responsible Party	Resources Needed	Timeline	Indicator of Success
Discrepância nos Dados populacionais	Angola usa os dados censo 2014	Utilizar os dados que são fornecidos pelas administrações municipais	*Minsa/GPS/Parceiros*	São recursos existentes porque cada administração municipal regista a sua população anual	Já esta acontecer porque terminou o cenco	A realização da campanhas de 2026
Insuficiência de técnicos formados na área de DTNS	Situação de orçamento no sector da saude	Realização de concurso publico na saude	Minsa	Orçamento geral do estado	2026	Novos técnicos para o programa

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DQI-Plan: South Sudan

EXPANDED SPECIAL PROJECT FOR ELIMINATION OF NEGLECTED TROPICAL DISEASES

Issue	Root Cause	Proposed Action	Responsible Party	Resources Needed	Timeline	Indicator of Success
Human Resource skills gaps at different levels	Low literacy levels Poor selection	Program and NTD & M&E to ensure literate HRs are selected for MDA	PC-NTD director working with M&E Director	1) Frequent Meetings 2) Community engagement/stakeholders	Q1 2026	Improvement in data quality
Fragmented data reporting sources.	Donor dependence	Integration of all PC-NTD data reporting forms	PC-NTD director working with M&E Director	Engage MoH M&E TWGs	Q1 2026	Integrated reporting tool
Infrastructural Limitations (ICT equipment)	Inadequate budget	Procurement of Tablets, Computers, data collection and reporting tools	PC-NTD Partners	Funding	Q1 2026	Improvement in Reporting
Data quality issues (Delays, Inaccuracies, Incompleteness)	Paper based recording and reporting system	Digitalize reporting and recording systems	PC-NTD director and M&E director	1) ICT equipment 2) Training	Q1 2026	Improvement in data quality

See Preventive Chemotherapy: Tools for improving the quality of reported data and information for more guidance

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DQI-Plan: Ethiopia

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Issue	Root Cause	Proposed Action	Responsible Party	Resources Needed	Timeline	Indicator of Success
Data entry problem at HF	Capacity Lack commitment	Training Supportive supervision	NTD M&E TWG	Budget Staff time	Feb-April 2026	Completeness. Timeliness and accuracy data
Drug delay	• Incomplete submission of JAP, • Separate source for EPIRF data, • delay IU planner submission, • late receive of data for JRF report	Training Review of regional data and submit Complete JAP	WHO/ESPEN MoH Partners	Budget	March 2026	Receive drug on time

See Preventive Chemotherapy: Tools for improving the quality of reported data and information for more guidance

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DQI-Plan: Kenya

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Issue	Root Cause	Proposed Action	Responsible Party	Resources Needed	Timeline	Indicator of Success
Fluctuating population estimates	1. Internal migration (-, +), 2. Use of national growth rate not applicable to specified sub national regions, 3. Unavailable updated population estimates	1. Enhance surveillance on population flows 2. Registration and updating of population before campaigns by CHPs	MOH, County Community Health Strategy Focal Person, CHPs	Budget allocation for capacity building and support supervision	1 month before the campaign	Validated population estimates Accurate Treatment coverage

See Preventive Chemotherapy: Tools for improving the quality of reported data and information for more guidance

Group work: Exploring integration

1. **Building on yesterday's work**: Fill in remaining details on your data flows (forms, digital tools and databases used, processes)

2. **Identify opportunities to integrate data collection, processing, and reporting**
   - **Within NTDs**: Where could different disease programmes share data collection or reporting processes?
   - **Within the HMIS**: Where could NTD data processes integrate into the HMIS?
   - **Within other core Ministry of Health platforms**: Where could NTD data processes be integrated into other crosscutting digital platforms, such as the LMIS, eCHIS, or other systems?

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Data flow template

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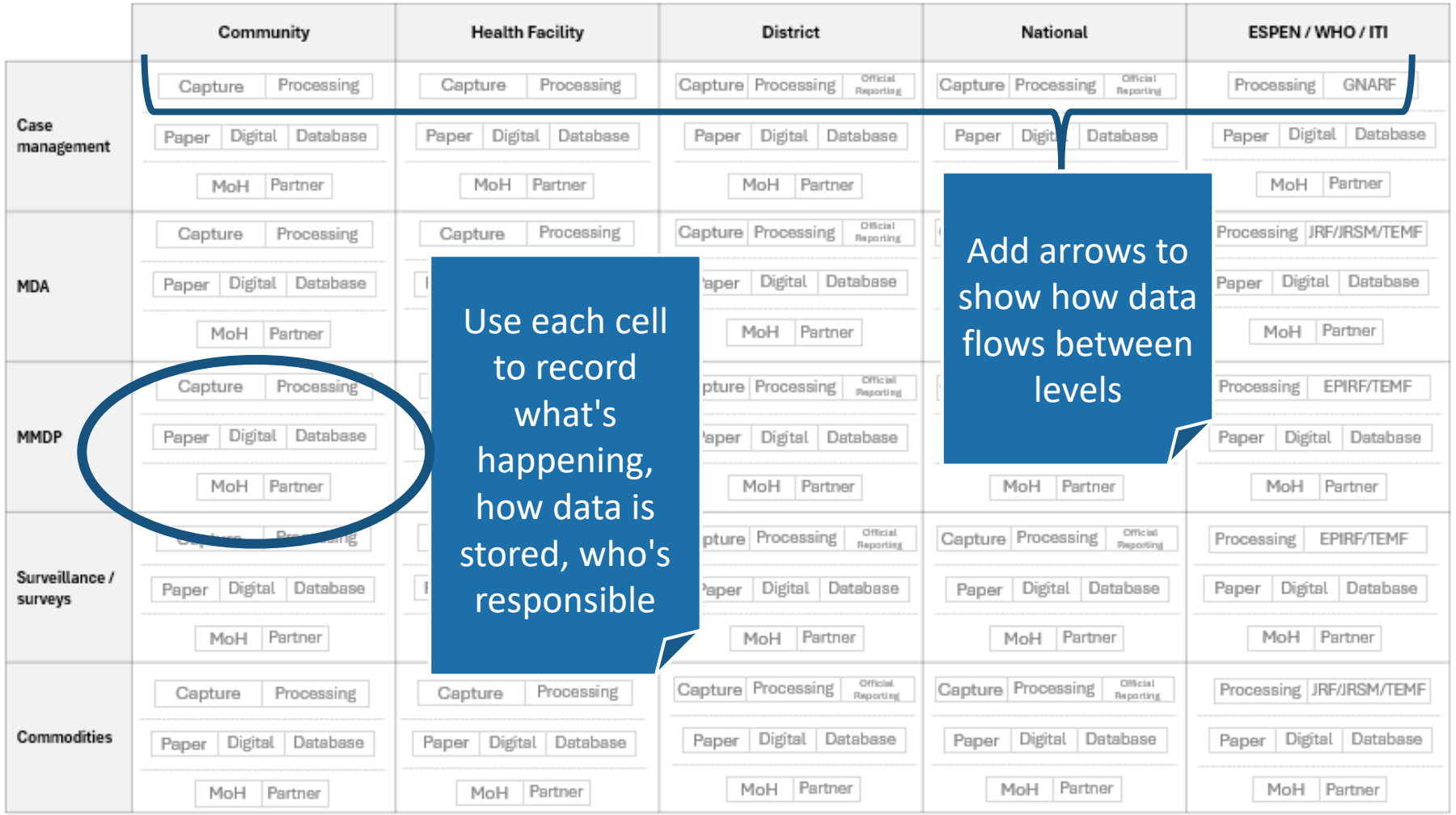
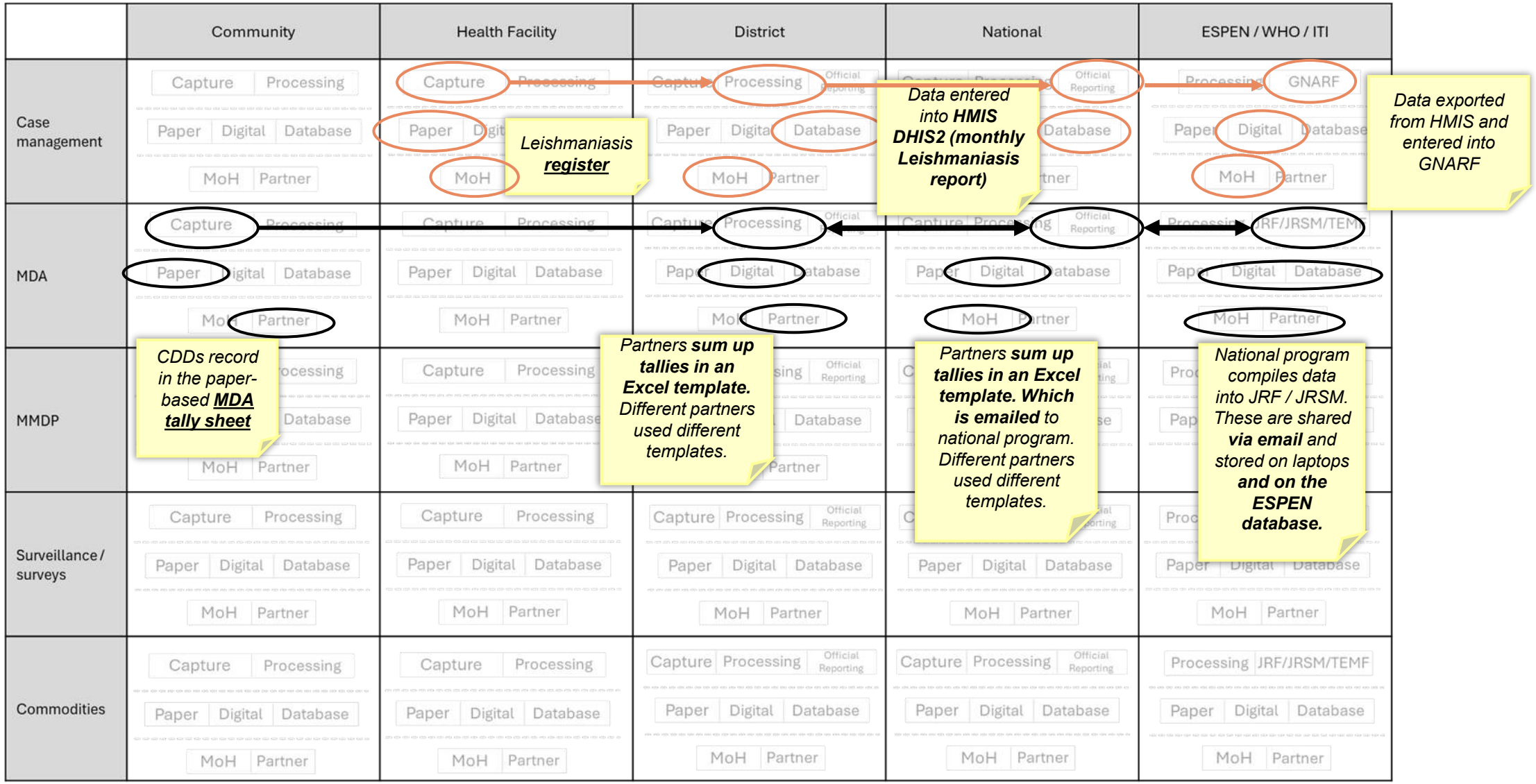
Each row represents a different data flow



Use each cell to record what's happening, how data is stored, who's responsible

Add arrows to show how data flows between levels



NOTES

PC-NTDs pathway (all follow the same pathway).

Leishmaniasis

Data flow descriptions

Definitions

Process type:

- **Capture:** Recording or entering raw data for the first time – could be on paper (register) or digital tool (mobile application)
- **Processing:** Working with existing data (aggregating, entering into Excel files or database systems, checking for errors)
- **Official Reporting:** Populating reports for government, WHO, or partner organizations

Method:

- **Paper:** Physical forms, registers, written records
- **Digital:** Computer files, spreadsheets, email (not connected to a database)
- **Database:** Direct entry into systems like HMIS DHIS2, other DHIS2, KoboCollect, ODK, CommCare, DIGIT, etc. using a computer or mobile app

Process owner:

- **MoH:** Ministry of Health conducts this process
- **Partner:** A partner organization conducts this process

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Integration Opportunity Matrix

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- Fill out 3-5 integration opportunities
- Focus on concrete, specific opportunities rather than vague ideas

Data/Process to integrate	Integration Platform	Benefits / Value	Dependencies
(What data or process?)	*(HMIS, LMIS, vaccines campaign platform, NTD ODK)*	*(Why integrate?)*	*(What's needed?)*

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Integration Feasibility-Impact Grid

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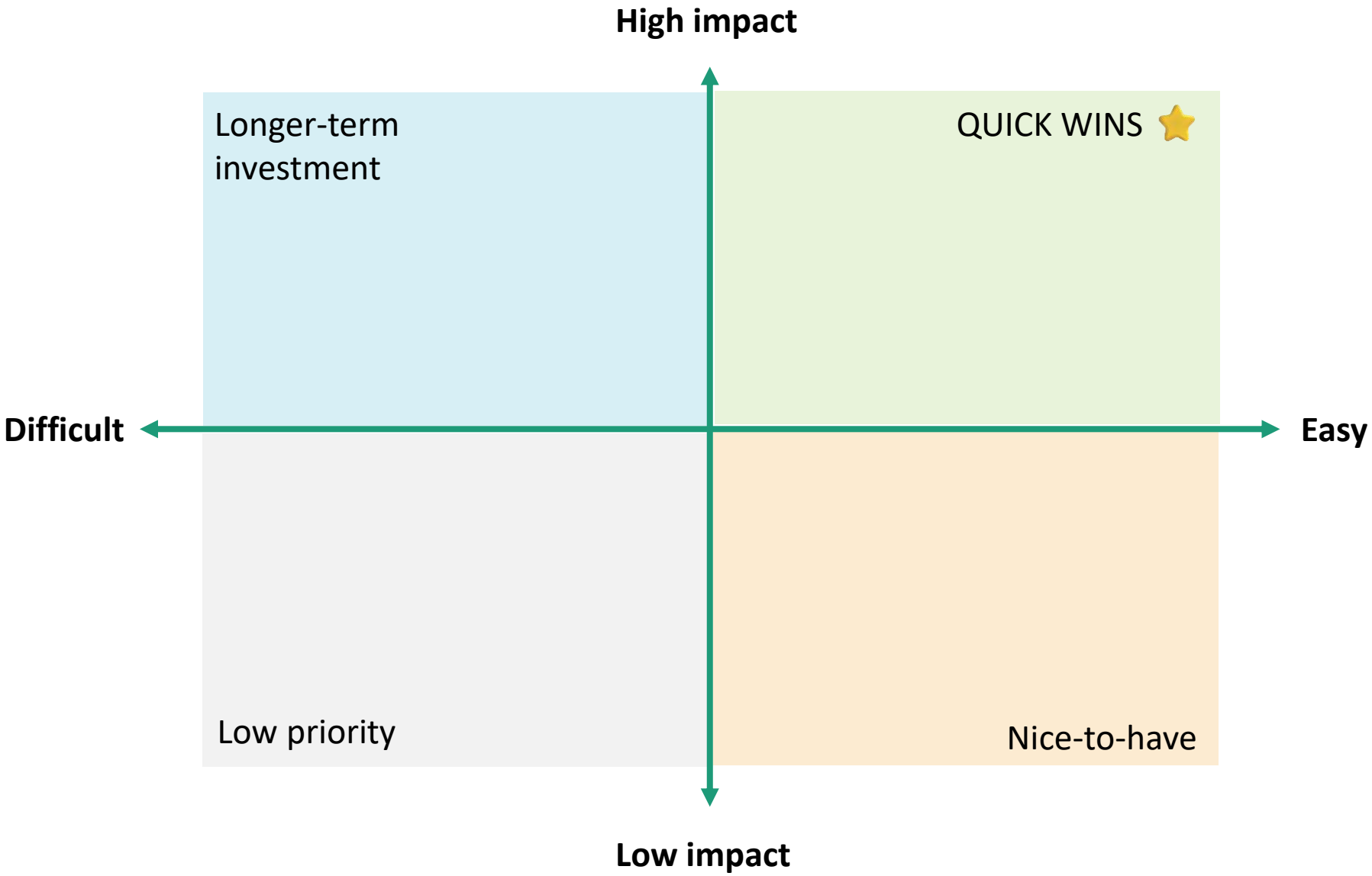

How to use:

1. Write each integration opportunity on a post-it note
2. Discuss as a group:
   - How easy is it to implement?
   - How much value will it bring?
3. Place the post-it in the appropriate quadrant
4. Focus first on Quick Wins

THANK YOU
MERCI BEAUCOUP
OBRIGADO

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Coffee Break

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Preview Day 3: Connecting integration on HMIS and integration of supply chain of PC-NTD medicine into national SC systems (LMIS)

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Objectives Day 3

- **Strengthen national capacity to forecast medicine and commodity** needs for PC-NTD interventions using both consumption-based and population-based approaches.
- **Improve the use of real-time supply chain data and performance indicators** to support planning, decision-making, and timely responses before, during, and after MDA campaigns.
- **Promote the use of digital tools and dashboards** to enhance visibility, accuracy, and accountability in inventory tracking and forecasting.
- **Encourage country-led reflection and application of forecasting tools** through practical exercises and peer learning on resilience, integration, and innovation in supply chain systems.
- **Build foundational understanding of how forecasting and supply planning relate to financial needs**, delivery timelines, and overall MDA effectiveness.

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