

Data Workshop on Monitoring and Evaluation of PC-NTD Programmes

DAY 3

Brazzaville, 12 – 16 August, 2024





Wrap up Day 2

Mali team

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Résumé de la deuxième journée (2)

La deuxième journée a commencé par la lecture du résumé de la première journée. Les présentations de cette deuxième journée ont porté sur :

1. Prévision et la précision

Les prévisions et planification des produits de santé

- Basé sur la quantification des produits, nécessitant de définir les besoins et l'estimation des quantités;
- Existe plusieurs prévisions : à courte terme, à moyen terme et longue terme ;

Exemple de prévision à courte terme : JRSM

La prévision à long terme est utile pour les firmes pharmaceutiques, permet de mieux répondre aux besoins des demandeurs

- Certaines données sont nécessaires pour faire une prévision
 - La démographie
 - Données historiques (consommation antérieure)
 - La consommation de service
- La précision de la prévision est calculée en faisant la différence entre la commande actuelle et la commande antérieure/la commande actuel x 100

Résumé de la deuxième journée (2)

2. Intégration de la logistique dans le système national de gestion des informations logistiques (LMIS)

- Les pays la Mozambique, le Ghana et la Tanzanie ont partagé avec les autres pays sur l'utilisation du Cycle logistique LMIS

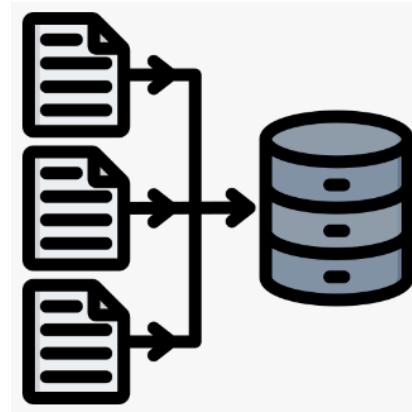
3. Elaboration de prévision sur 3 ans

Cette option est sollicitée pour des raisons de temps à donner aux firmes pharmaceutiques et de faire face aux crises d'approvisionnement.

4. Les outils d'information

Deux outils qui permettent d'avoir des informations et de prendre des décisions ont été présentés :

- **CrossRoad Data**
- **Country Health Information Platform (CHIP)**



Day 3: Data Integration

Morning session: Country NTD databases & accessing data from external systems

NTD Data integration: Overview of day 3

- We started the integration discussion on day two when we discussed NTD integration into the logistics management information system (LMIS).
- Today, we are going to continue that discussion.
 - The morning session will focus on national NTD databases (part 1) and accessing data from external systems (part 2).
 - The afternoon session will focus on HMIS integration.

Approach for the morning session

- Morning session is broken into two parts.
- For each part, I will briefly introduce the topic so that we all have the same baseline knowledge.
- From there, we will break into groups and discuss three questions on the topic that will allow you apply and share your unique experiences and insights.
- Groups will have 30 min to discuss and 15 min to share highlights from their discussion with the larger group.

Part 1

National NTD databases



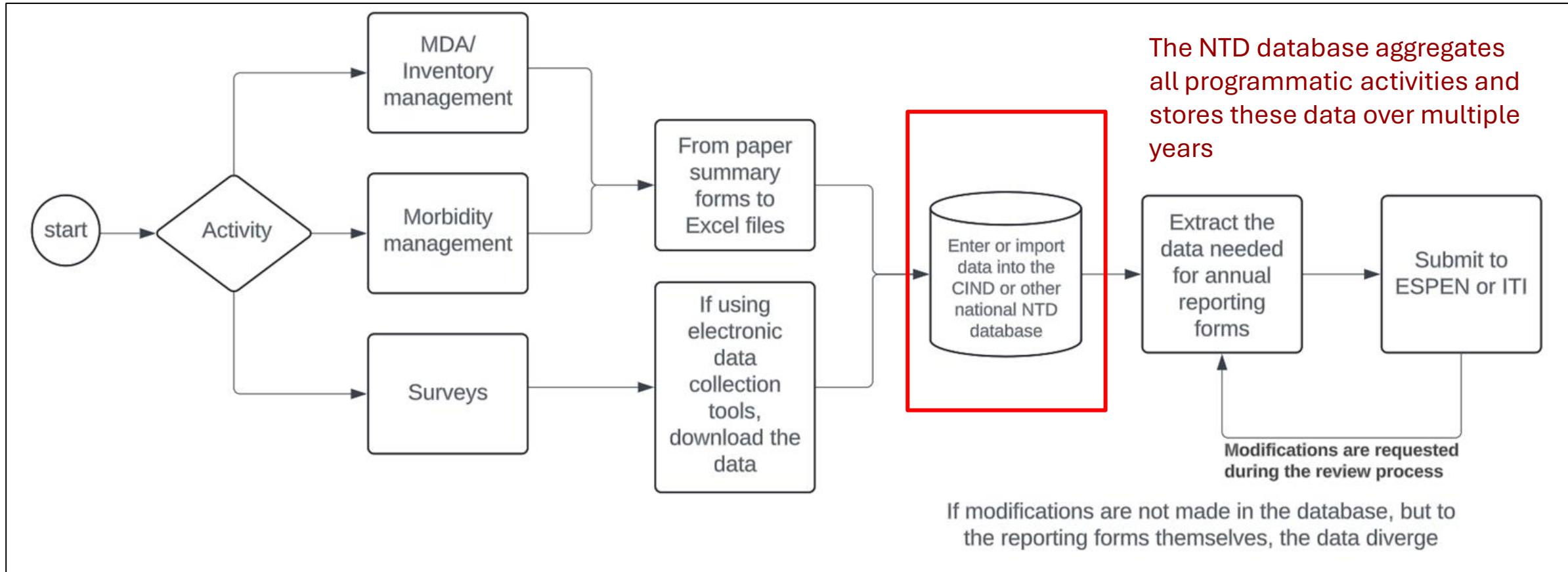
21. Does your organization access data from national data systems?

Yes	36
No	13
Don't know	1
Not applicable	5



Why an NTD database is important

Programmatic decisions are made based on surveys, morbidity management, and the number of effective MDA rounds.



Various models to support national NTD databases

Example #1: Country Integrated NTD Database (CIND)

https://apps.who.int/neglected_diseases/ntddata/ntd_database/

- WHO supported national NTD database
- Lots of funding to support training and documentation
- Most countries were not able to sustain the NTD database

Various models to support national NTD databases

Example #2: Country Health Information Platform (CHIP)/ESPEN Portal

<https://espen.afro.who.int/tools-resources/chip>

- Standard country database that contains the data that countries submit each year on annual reporting forms
- Updated yearly for everyone automatically by ESPEN

Various models to support national NTD databases

Example #3: NTD data repositories (using DHIS2 software)

- The latest effort to establish a national NTD database
- DHIS2 can support integration of external systems and proves built in data management and data visualization tools.
- Development and maintenance can be supported by a global network of consultants (HISP)

Various models to support national NTD databases

Example #4: Annual reporting forms (using MS Excel software)

- Includes a wide range of programmatic activities including: endemicity, treatments, stock, morbidity, surveys
- Cross-sectional reporting vs longitudinal decision making
- Standardized and uses familiar software

Break into groups to discuss the following

1. What are the relative strengths and weaknesses of the 4 example NTD databases that were discussed? Which model would you want to implement and why?
2. CHIP and the ESPEN Portal provide annual reporting form data over time and present data using visualizations. However, these tools are reliant on the annual reporting cycle and therefore are delayed. What impact does that have compared to a national NTD database on use?
3. Data divergence occurs when the same data are stored in separate systems and modified independently. Do you have examples of data divergence in your work? What are some processes you can put in place to limit data divergence?
4. A large number of you said on the pre-meeting survey that you do access data from national system. Briefly describe which systems, how those data are accessed, and the benefit of accessing those data from those systems.



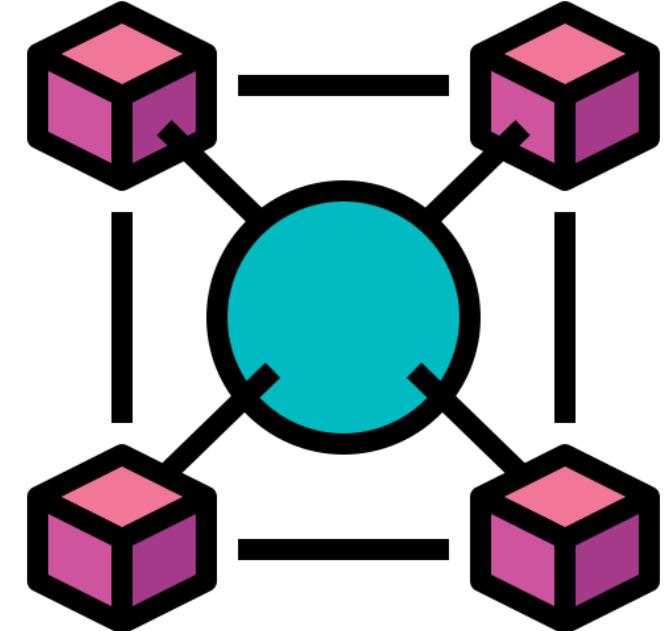
Group Roles: Assign specific roles within each group, such as a facilitator, and a note-taker to ensure a structured discussion and effective reporting.

Time Management: Allocate a specific amount of time (5-10 min) for each question. This will help keep the discussion focused and balanced.

Reporting Back: The facilitator from each group should prepare to present their findings to the larger group. Encourage them to highlight the most critical points

Part 2

Sharing data between systems



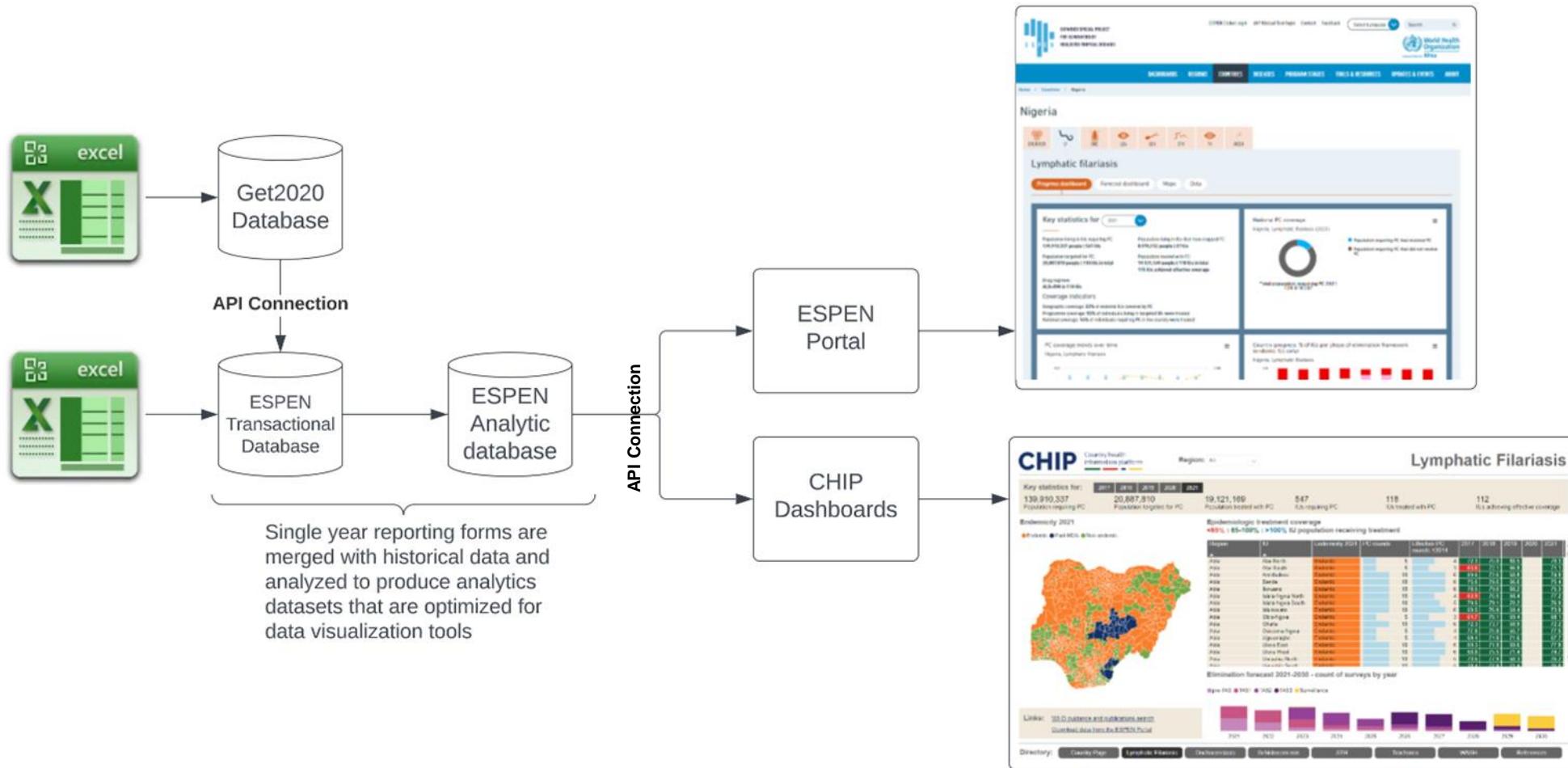
22. Does your organization integrate data from the ESPEN Portal via the ESPEN APIs?

Yes	23
No	18
Don't know	8
Not applicable	6



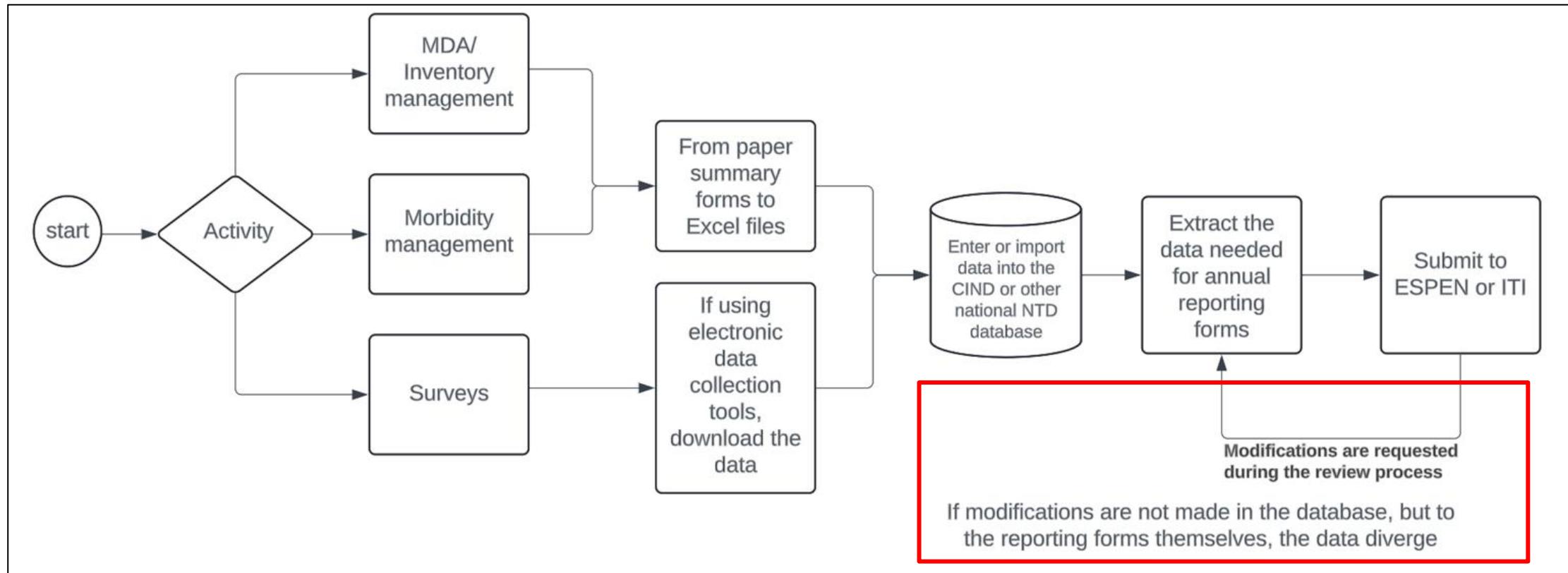
Advantage of an API vs a copy of the data

When you download a copy of the data, any work you do on your copy of the data will not be reflected in the original source data. When this happens data are said to have “diverged”. Here, all systems share data via an API connection so they will reflect the data in the source database.



When data are managed outside of the system

Here is the data flow to add data to a natural NTD database, such as the CIND. The data in the CIND is the same data used to complete the original annual reporting forms. However, during the review of the annual forms by ITI and ESPEN, these forms may be requested to be modified. If the same change is done outside of the the national NTD database then the database no longer reflects the data submitted on final annual reporting forms.



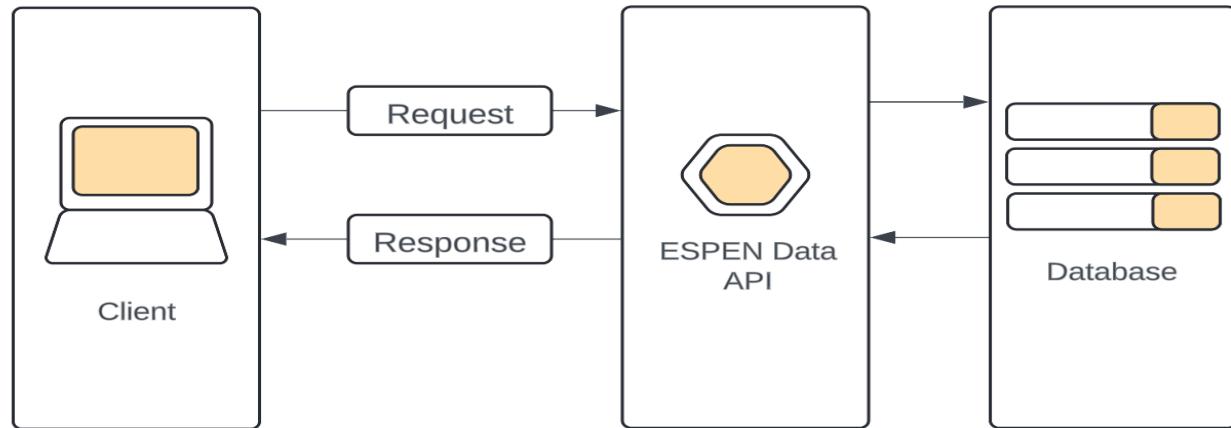
What is an Application Programming Interface (API)?

An API allows data to be shared securely and consistently between systems.

Users determine which data an API will return by using input parameters.

We can look at the ESPEN Data API for an example of user input parameters.

To access the ESPEN API you will need to register for your own API key. You can do so on the ESPEN Developer page.



ESPEN Data API uses the following parameters:

Note: The order is optional

<https://admin.espen.afro.who.int/api/data?>

disease=*trachoma*&

specify the disease

Level=*iu*&

specify the level

type=*mda_pc_rounds*&

specify the data

iso2=*KE*&

specify the location

api_key=<*you will have your own*>

What do APIs have to do with national NTD database or HMIS integration?

The ESPEN Data API and ESPEN Collect API allow data in those systems to be shared via the **maps and graphs you see on the ESPEN Portal** and via the **Metabase dashboard that you access as part of ESPEN Collect**.

The ESPEN APIs are also used for systems such as the **Country Health Information Platform (CHIP)**. ESPEN APIs can also be integrated into national NTD databases, as was done in Ethiopia, and could be integrated into national health management information systems, as is planned for both Benin and Nigeria.

Let's look at ways to access the ESPEN API

Using the URL format that I shared on the previous slide, you can use a wide range of software to return data from the ESPEN Data API. Here are three examples:

1. Your browser
 2. Microsoft Excel – Data > From Web
 3. Business Intelligence software such as Power BI

Here are three examples:

1. Your browser
2. Microsoft Excel – Data > From Web
3. Business Intelligence software such as Power BI

The screenshot displays three examples of data retrieval:

- Browser Example:** Shows a JSON API response for trachoma survey data from Kenya. The response includes fields like ID, Country, Region, District, Sub-District, Geoclient ID, Survey Year, and various survey categories and types.
- Microsoft Excel Example:** Shows the 'Data' tab with the 'From Web' option selected. A modal window shows the URL used to fetch data from the 'From Web' source.
- Power BI Example:** Shows a dashboard titled 'Nigeria Country Page (2021)' with data on NTD endemicity. It includes a map of Nigeria color-coded by implementation unit (IU) endemicity, and tables for the number of endemic NTDs and population.

Hands on exercise

Step 1

If you don't already have one, register for a API Key

The first step in working with the ESPEN APIs is to go to the developer page and review the documentation and register for an API key.

- Documentation: <https://espen.stoplight.io/>
- API Key registration form: <https://admin.espen.afro.who.int/docs/api>

This screenshot shows the 'Data API' section of the ESPEN API documentation. It includes a brief description of the API's purpose, parameters (disease, level), and a note about filtering by country. Below this is a 'Params' table with examples for country, iso3, disease, and level.

Params
country: country name, e.g. Ghana iso3: country ISO3 code, e.g. GH disease: (if onch lea sch sth trachoma coendemity) level: (lu sitelevel) year: forecast year (optional)

Step 2

Access data on the web using the API

You can access the data via the API using a wide range of tools. Here we will demonstrate the use of Microsoft Excel.

- There are lots of online resources that walk you through how to access data from the web.
- Excel - click Data and click from web
- URL is the format the we discussed earlier that includes your API key from Step 1

This screenshot shows the 'Import data from the web' dialog box in Excel. It displays a preview of the data from the ESPEN API, which includes columns for 'Country', 'District', 'Year', and 'Value'. A note at the bottom of the dialog box provides instructions for users of Excel 2016 or later.

Step 3

Analyze the data and gain insights

Now that you have the data returned by the API call in your analytics tool, you can analyze and summarize the data as you would in any Excel spreadsheet.

- The API data needs to be converted to a table and loaded into Excel
- Once loaded, you can work with the data as you normally would. Here we will show how you can use PivotTable to quickly gain insights

This screenshot shows a Microsoft Excel spreadsheet with a PivotTable. The PivotTable is set up to analyze data from the 'Column Survey 2, 2017, Category 30-49' sheet. The 'PivotTable Fields' pane on the right shows the fields used for the analysis, including 'Column ID', 'Column Country', 'Column District', 'Column Disease', 'Column Sub-District', 'Column Survey 1, 2016, Year', and 'Column Survey 2, 2017, Year'. The main table displays data for various districts and years.

Hands on exercise: 1 (API Key)

The screenshot shows the homepage of the ESPEN Portal. At the top, there's a navigation bar with links for 'ESPEN Collect login', 'JAP Upload Tool login', 'Contact', 'Feedback', 'Select Language', 'Search', and the 'World Health Organization' logo. Below the header, there's a banner with a photo of a child holding a banner and text about accelerating NTD elimination by 2030. The main content area displays three key statistics: 1.5 billion people affected worldwide, 39% of the global NTD burden in Africa, and 600 million people requiring treatment in Africa. A callout box below these stats states: 'The ESPEN Portal enables health ministries and stakeholders to share, and exchange subnational programme data, in support of the NTD control and elimination goals.' At the bottom, there's a link to 'Browse 16,578 maps and data'. The right side of the page has a sidebar with 'TOOLS & RESOURCES' and 'UPDATES & EVENTS' sections, with 'Developer tools' highlighted and circled in red.



<https://admin.espen.afro.who.int/docs/api>

The screenshot shows the 'API DOCUMENTATION' page for the ESPEN API. It features the ESPEN logo and title at the top. Below that is a section titled 'ESPEN API' with a brief introduction. It then details the three APIs: Data, Cartographies, and Maps, with links to their respective documentation. Under the 'Data API' section, it explains that it can be used to retrieve disease and mapping data. The 'Authentication' section is highlighted with a red circle around the 'Request API Key' button. Below this, instructions say to use the 'api_key' parameter in requests, with an example provided: 'e.g. /api/data?api_key=XXXXX'. A 'Root Domain' link is also present at the bottom.

Hands on exercise: 2.0 (Access data)

We will use the exact API call example we shared at the start of this presentation.

<https://admin.espen.afro.who.int/api/data?>

disease=[trachoma](#)&

level=[iu](#)&

level

type=[mda_pc_rounds](#)&

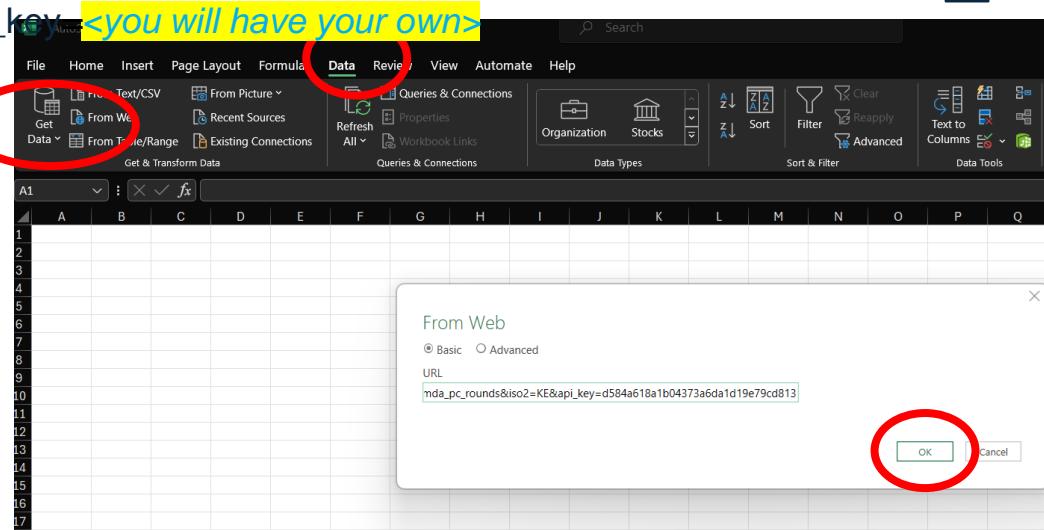
data

iso2=[KE](#)&

location

api_key <[you will have your own](#)>

- specify the disease
- specify the
- specify the
- specify the



Record
1 Record
2 Record
3 Record
4 Record
5 Record
6 Record
7 Record
8 Record
9 Record
10 Record
11 Record
12 Record
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21 Record
22 Record

Hands on exercise: 2.1 (Transform data)

The screenshot shows the Microsoft Power Query Editor interface. The title bar indicates the file is named "data?disease=trachoma&level=iu&type=mda_pc_rounds&iso2=KE&api_key=d584a618a1b043". The ribbon menu is visible with tabs like File, Home, Transform, Add Column, and View. The Home tab is selected.

In the center, a dialog box titled "Column1" is open. The dialog lists various columns from the source data, each with a checked checkbox. A red circle highlights the "ABC 123" button at the top left of the dialog. At the bottom of the dialog, there is a warning message: "⚠ List may be incomplete." followed by "Load more" and "OK" and "Cancel" buttons.

The main workspace below the dialog shows a table with 32 rows, all labeled "Record".

```
= table.FromList(Source, Splitter.SplitByNothing(), null, null, ExtraValues.Error)
```

Hands on exercise: 2.2 (Load data)

Screenshot of the Power Query Editor interface showing a table of data from Kenya. The 'Close & Load' button in the ribbon is circled in red.

The table has the following columns:

- Column1.ID
- Column1.Country
- Column1.Region
- Column1.District
- Column1.Sub_District
- Column1.Geoconnect_ID
- Column1.Survey_1_BS_Year

The data shows survey results for various districts in Kenya, with Survey Year 2004 and 2011 indicated. Many rows have 'null' values in the Geoconnect_ID and Survey Year columns.

	Column1.ID	Column1.Country	Column1.Region	Column1.District	Column1.Sub_District	Column1.Geoconnect_ID	Column1.Survey_1_BS_Year
1	5325	Kenya	Baringo	Baringo Central		null	18885 2004
2	5326	Kenya	Baringo	Baringo North		null	18886 2004
3	5327	Kenya	Baringo	Baringo South		null	18887 2004
4	5328	Kenya	Baringo	East Pokot/Tiatiy		null	18888 2011
5	5329	Kenya	Baringo	Koibatek	Eldama Ravine	18890	n
6	5330	Kenya	Baringo	Koibatek	Mogotio	18891	n
7	5331	Kenya	Baringo	Koibatek		18889	n
8	5332	Kenya	Baringo		null	18884	n
9	5333	Kenya	Bomet	Bomet Central		18893	n
10	5334	Kenya	Bomet	Bomet East		18894	n
11	5335	Kenya	Bomet	Chepalangu		18895	n
12	5336	Kenya	Bomet	Konoin		18896	n
13	5337	Kenya	Bomet	Sotik		18897	n
14	5338	Kenya	Bomet		null	18892	n
15	5339	Kenya	Bungoma	Bumula		18899	n
16	5340	Kenya	Bungoma	Kabuchai		18900	n
17	5341	Kenya	Bungoma	Kanduyi		18901	n
18	5342	Kenya	Bungoma	Kimili		18902	n
19	5343	Kenya	Bungoma	Mount Elgon		18903	n
20	5344	Kenya	Bungoma	Sirisia		18904	n
21	5345	Kenya	Bungoma	Tongaren		18905	n
22	5346	Kenya	Bungoma	Webuye East		18906	n
23	5347	Kenya	Bungoma	Webuye West		18907	n
24	5348	Kenya	Bungoma		null	18898	n
25	5349	Kenya	Busia	Budalangi		18909	n
26	5350	Kenya	Busia	Butula		18910	n
27	5351	Kenya	Busia	Funyula		18911	n
28	5352	Kenya	Busia	Matayos		18912	n
29	5353	Kenya	Busia	Nambale		18913	n
30	5354	Kenya	Busia	Teso North		18914	n
31	5355	Kenya	Busia	Teso South		18915	n
32	5356	Kenya	Busia		null	18908	n
33	5357	Kenya	Elgeyo Marakwet	Keiyo North		18917	n
34	5358	Kenya	Elgeyo Marakwet	Keiyo South		18918	n
35	5359	Kenya	Elgeyo Marakwet	Marakwet East		18919	n
36	5360	Kenya	Elgeyo Marakwet	Marakwet West		18920	n
37	5361	Kenya	Elgeyo Marakwet		null	18916	n
38	5362	Kenya	Embu	Manyatta		18922	n
39	5363	Kenya	Embu	Mbere North		18923	n

Hands on exercise: 2.3 (Format for analysis)

Screenshot of Microsoft Excel showing a data analysis setup.

The ribbon is visible with the "Insert" tab selected. The "Tables" icon in the "Tables" group is circled in red.

The main area displays a data table with columns: Column1.ID, Column1.Country, Column1.Region, Column1.District, Column1.Sub_District, Column1.Geoconnect_ID, Column1.Survey_1_BS_Year, and Column1. (partially visible).

To the right of the table is a "Queries & Connections" pane:

- Queries tab: 1 query listed.
 - data?disease=trachoma&level=iu&ty...
346 rows loaded.
- Connections tab: None listed.

Hands on exercise: 3 (Gain insights)

Screenshot of Microsoft Excel showing a PivotTable Fields pane open on the right side of the screen.

The PivotTable Fields pane displays the following fields:

- Choose fields to add to report:
 - Column1.ID
 - Column1.Country
 - Column1.Region
 - Column1.District
 - Column1.Sub_District
 - Column1.Geoconnect_ID
 - Column1.Survey_1_BS_Year
 - Column1.Survey_1_BS_TF_category
- Drag fields between areas below:
 - Filters: Column1.Survey_1_BS_...
 - Columns: Column1.Survey_1_BS_...
 - Rows: Column1.District
 - Values: Count of Column1.Distr...

The main worksheet area shows a PivotTable with the following data:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Column1.Survey_1_BS_TF_category	30-49.9												
2														
3	Count of Column1.District		Column Labels											
4	Row Labels		2004	2010	2011	Grand Total								
5	East Pokot/Tiaty			1		1								
6	Segment 1		1			1								
7	Segment 2		1			1								
8	Segment 3		1			1								
9	Segment 4		1			1								
10	Segment 5		1			1								
11	Turkana East			1		1								
12	Turkana North & Kibish			1		1								
13	Turkana South			1		1								
14	(blank)													
15	Grand Total		5	3	1	9								
16														
17														
18														
19														
20														
21														
22														
23														
24														
25														
26														
27														
28														

Bottom navigation bar: < > Sheet2 | data disease=trachoma&level=iu& | Sheet1 | +

Break into groups to discuss the following:

1. You can use the ESPEN Portal to download datasets or you can use the ESPEN APIs to access those data. What are the benefits and limitations of both methods?
2. A large number of you said in the survey that you do integrate data from the ESPEN Portal. Briefly explain what data, how you integrate it, and what is the benefit?
3. What are some other uses of the ESPEN APIs besides getting data into Excel Pivot Tables for analysis? (*hint: what about other databases or analytic tools*)



Group Roles: Assign specific roles within each group, such as a facilitator, and a note-taker to ensure a structured discussion and effective reporting.

Time Management: Allocate a specific amount of time (10 min) for each question. This will help keep the discussion focused and balanced.

Reporting Back: The facilitator from each group should prepare to present their findings to the larger group. Encourage them to highlight the most critical points



**Coffee break
Starting back at 11:15**



**World Health
Organization**

African Region

UHC/UCN

Universal Health Coverage/Communicable
and Noncommunicable Diseases

Groups presenting results of Session 1: NTD Databases

Working Group Discussion



Group 1 presenting results of Session 1: NTD Databases

Working Group Discussion



Day 3: NTD databases

1. What are the relative strengths and weaknesses of the 4 example NTD databases that were discussed? Which model would you want to implement and why?

	Strengths	Challenges
CIND (now outdated)	<ul style="list-style-type: none"> Potentially a one stop shop for NTD projects that can maintain a wide range of data (i.e. is comprehensive in scope (should application succeed)) 	<ul style="list-style-type: none"> Preparation for use is onerous as is a rigid format - rather cumbersome, slow and buggy. Offline tool difficult to link to other databases. Limited support available for use. Requires installation which presents security challenges for many organisations.
CHIP	<ul style="list-style-type: none"> Fully functional, and links to latest available ESPEN data via API. Standardised across all countries and NTDs (as applicable) Open access and free to use. 	<ul style="list-style-type: none"> Not possible to export data Inherent lag in data availability. Only available in the local language of the country.
NTD data repositories (using DHIS2)	<ul style="list-style-type: none"> Interconnectivity/interoperability of system - i.e. national HMIS and national NTD database. Broad familiarity with DHIS2, so training needs are reduced. Easy to build dashboards for the visualisation of data. App hub available - customised apps to extend functionality. 	<ul style="list-style-type: none"> Requires internet availability. Not explicitly designed for NTDs, so requires customisation (may lack standardisation comparing NTDs with other HMIS data) Capacity issues for at lower use levels. Limited API access requires administrative support.
Annual reporting forms	<ul style="list-style-type: none"> Easy to use (familiarity with Excel) Easy to add on content. 	<ul style="list-style-type: none"> Cross-sectional. Easy to accidentally delete content.

Day 3: NTD databases

2. CHIP and the ESPEN Portal provide annual reporting form data over time and present data using visualizations. However, these tools are reliant on the annual reporting cycle and therefore are delayed. What impact does that have compared to a national NTD database on use?

- Use of CHIP/Portal may be limited where programmatic decisions are conditional on use of the most recent available data.

Day 3: NTD databases

3. Data divergence occurs when the same data are stored in separate systems and modified independently. Do you have examples of data divergence in your work? What are some processes you can put in place to limit data divergence?

Examples

- If updates are made to national data, but resubmission of JAP forms is not actioned, there will be divergence in national programme data vs CHIP (for example).
- Geographic boundaries, populations, and administrative unit names may differ between systems.

Processes

- Interoperability between databases is a solution to divergence issues i.e. DHIS2 all users at any administrative levels have access to the same data.
- Integration with annual reporting forms may be explored as another solution.

Day 3: NTD databases

4. A large number of you said on the pre-meeting survey that you do access data from national system. Briefly describe which systems, how those data are accessed, and the benefit of accessing those data from those systems.

HMIS used in all instances discussed in group 1 was DHIS2
NTD database was DHIS2, or an Excel based system.

Group 2 presenting results of Session 1: NTD Databases

Working Group Discussion



Day 3: NTD databases (group 2)

- What are the relative strengths and weaknesses of the 4 example NTD databases that were discussed? Which model would you want to implement and why?

	Strengths	Weaknesses	Comments
WHO CINTD	<ul style="list-style-type: none"> Treatment, assessment, survey baseline etc in one location 	<ul style="list-style-type: none"> Training a long time ago Desktop app Difficult to use 	<ul style="list-style-type: none"> None of our group are using it.
CHIP & ESPEN Portal	<ul style="list-style-type: none"> Projections by disease by year. District level info (rather national) 	<ul style="list-style-type: none"> Capacity building around opportunities, strengths and features Old data, not up-to-date. Issues with shape files. SCH isn't sub-district 	<ul style="list-style-type: none"> Mainly used by partners and country offices who have been changed it. Some haven't used. Partners are aware of CHIP, but not national programs.
NTD data repositories, e.g. DHIS2	<ul style="list-style-type: none"> Same offices that are using HMIS are using DHIS2, so familiar with the software. Comments exchanged easily within DHIS2 Incorporate data from multiple sources, eg. WASH, Trachoma TT. Can customise for your needs 	<ul style="list-style-type: none"> Instances can be standalone from the national. In Nigeria, doesn't cover all the states, is used as data storage and isn't being used for reporting, because for example required excel files for this. 	<ul style="list-style-type: none"> Nigeria has a standalone instance Ghana are using it.
JAP forms	<ul style="list-style-type: none"> Easy to use Can see all your data 	<ul style="list-style-type: none"> Single year, no trends Only visible with the NTD fraternity. Not to policy makers for example 	<ul style="list-style-type: none"> Some access the JAP forms

Day 3: NTD databases (group 2)

2. CHIP and the ESPEN Portal provide annual reporting form data over time and present data using visualizations. However, these tools are reliant on the annual reporting cycle and therefore are delayed. What impact does that have compared to a national NTD database on use?

- Cannot use ESPEN/CHIP alone as the source of information and need to find data elsewhere
- Becomes unreliable
- Useful for a presentation
- National NTD database is up-to-date

Day 3: NTD databases (group 2)

3. Data divergence occurs when the same data are stored in separate systems and modified independently. Do you have examples of data divergence in your work? What are some processes you can put in place to limit data divergence?

- Yes, reporting within country still insist on excel which is produced en route to DHIS2.
- Have to refer back to the source documents to solve divergence
- There is no national standard for how validation standards work
- Figures presented at the national level are not the same as the state level.
- There are plenty of examples of data divergence.
- Data through ESPEN Collect and flow to DHIS2. Data in 2 places.

Limit data divergence:

- Reviews of data, send changes back to lower level.
- Do the review at a lower level.
- Use ESPEN collect
- Saved in a cloud and version control

Day 3: NTD databases (group 2)

4. A large number of you said on the pre-meeting survey that you do access data from national system. Briefly describe which systems, how those data are accessed, and the benefit of accessing those data from those systems.

- Nigeria – Excel
- Zimbabwe – DHIS2
- Tanzania – Own national platform
- South Sudan – DHIS2, excel.
- Generally DHIS2

Benefits:

- Campaigns, easier to monitor coverage daily data, if you're using data collection.
- Cost effective
- Accessibility
- Sustainability
- In-country ownership

Group 3 presenting results of Session 1: NTD Databases

Working Group Discussion



Day 3: NTD databases

1. What are the relative strengths and weaknesses of the 4 example NTD databases that were discussed?
Which model would you want to implement and why?

	Strengths	Weaknesses
CIND	<ul style="list-style-type: none"> Was able to generate two of the JAP forms (JRF & EPIRF) – which was a big win. Centralized NTD data 	<ul style="list-style-type: none"> Siloed Internet connectivity issues WHO stopped making updates, difficult to get support if you ran into issues Data loss (WHO updates stopped) Bug heavy
CHIP (on ESPEN)	<ul style="list-style-type: none"> Country interactive dashboards from data already submitted on ESPEN Single source of data and is harmonized Data visualizations are strong and reliable 	<ul style="list-style-type: none"> Internet connectivity issues Annual updates – not updated in real-time
NTD data repositories using DHIS2	<ul style="list-style-type: none"> Allows for multi-user access Is not siloed and therefore reduces fragmentation Ensure data security Ability to export from DHIS2 to ESPEN (using the API) Allows for JAP development (for some) Real-time access to data Standardized system that is used across multiple disease programs (an enabling environment exists to support and ensure sustainability) 	<ul style="list-style-type: none"> Limitations around data elements that can and cannot be included Internet connectivity issues / accessibility issues – User-log in required is required to access – so limited access Aggregated data is collected (e.g. population data, though possible through DHIS2 tracker) Limited number of users have access to DHIS2 Competing health needs – only a certain number of indicators can make it on to the HMIS
Annual reporting forms (using MS Excel software)	<ul style="list-style-type: none"> For continuity of reporting countries use Excel Error prone File corruption/can be lost/stored in individual laptops 	<ul style="list-style-type: none"> Data divergence Siloed, sitting on one computer

Day 3: NTD databases

2. CHIP and the ESPEN Portal provide annual reporting form data over time and present data using visualizations. However, these tools are reliant on the annual reporting cycle and therefore are delayed. What impact does that have compared to a national NTD database on use?

- Delay means that there can be a mismatch between data what is in CHIP and ESPEN. Data at the country level is more useful – timeliness is a big weakness. Data divergence.
- Data visualization is quite powerful – though because of the delay in updating, there is no way for the countries to be interact with that in real-time.

Day 3: NTD databases

3. Data divergence occurs when the same data are stored in separate systems and modified independently. Do you have examples of data divergence in your work? What are some processes you can put in place to limit data divergence?

- Population that you extract from DHIS2, if you use the country HMIS population compared to anything else, you will find a difference in coverage. In DHIS2 – there are different sources of population data.
- School-age population, different numbers from everywhere (Unicef, WHO, etc)
- Processes:
 - Use the population data that is coming from the lowest level (e.g. facility) – and making sure that is updated on an annual basis.
 - Centralize pre-MDA census – central population data that has information from malaria, immunization, NTDs.
 - Different programs share enumeration data (e.g. Malaria program shares population data with the NTD program).

Day 3: NTD databases

4. A large number of you said on the pre-meeting survey that you do access data from national system. Briefly describe which systems, how those data are accessed, and the benefit of accessing those data from those systems.

- Most countries have access, but limited data reporting through the systems.
- Need log-in credentials can be created at sub-national level for wide-spread accessibility.
- Need for a standardized list of NTD indicators that can be included on DHIS2

Groupe 4 présente les résultats de la Session 1 : Bases de données des MTN

Working Group Discussion



Jour 3: Bases de données MTN

1. Quelles sont les forces et les faiblesses relatives des 4 exemples de bases de données sur les MTN qui ont été discutées ? Quel modèle souhaiteriez-vous mettre en œuvre et pourquoi?

BASE DES DONNES	FORCES	FAIBLESSES
BDIM	<ul style="list-style-type: none"> Centraliser les données d'endémicité, d'enquête et TDM; Partager la base Access; 	<ul style="list-style-type: none"> Difficile à installer et à paramétrier; Absence de tableau de bord
CHIP	<ul style="list-style-type: none"> Centraliser les données de toutes les MTN-CTP & WASH Visualisation sous format (tableau, graphique et carte) Accessible en ligne et capitalisation des données du JAP 	<ul style="list-style-type: none"> Retard d'actualisation des données; Impossibilité de télécharger directement les carte et graphique
DHIS2		

Jour 3: Bases de données MTN

1. Quelles sont les forces et les faiblesses relatives des 4 exemples de bases de données sur les MTN qui ont été discutées ? Quel modèle souhaiteriez-vous mettre en œuvre et pourquoi?

	FORCE	FAIBLESSE
DHIS2	<ul style="list-style-type: none"> Centraliser les données d'endémicité, d'enquête et TDM; Centraliser les données de toutes les MTN-CTP & WASH Visualisation sous format (tableau, graphique et carte) Accessible en ligne 	<ul style="list-style-type: none"> Processus de mise en place du DHIS2 qui nécessite l'intervention de plusieurs départements (compétences techniques externes au programme MTN)

Jour 3: Bases de données MTN

1. Quelles sont les forces et les faiblesses relatives des 4 exemples de bases de données sur les MTN qui ont été discutées ? Quel modèle souhaiteriez-vous mettre en œuvre et pourquoi?

On a choisi le DHIS2 car :

- Il tient compte de tous les besoins des programmes MTN en matière de Collecte, centralisation et gestion des données
- L'Access permanent qui ne nécessite pas un service externe

Jour 3: Bases de données MTN

2. CHIP et le portail ESPEN fournissent des données de formulaire de rapport annuel au fil du temps et présentent les données à l'aide de visualisations. Cependant, ces outils dépendent du cycle de rapportage annuel et sont donc retardés. Quel impact cela a-t-il par rapport à une base de données nationale sur les MTN sur l'utilisation?

Jour 3: Bases de données MTN

3. La divergence des données se produit lorsque les mêmes données sont stockées dans des systèmes distincts et modifiées indépendamment. Avez-vous des exemples de divergences de données dans votre travail? Quels processus pouvez-vous mettre en place pour limiter la divergence des données?

Jour 3: Bases de données MTN

4. Un grand nombre d'entre vous ont déclaré lors de l'enquête préalable à la réunion que vous accédiez aux données du système national. Décrivez brièvement quels systèmes, comment ces données sont accessibles et les avantages d'accéder à ces données à partir de ces systèmes.

Groupe 5 présente les résultats de la Session 1 : Bases de données des MTN

Working Group Discussion



Jour 3: Bases de données MTN

1. Quelles sont les forces et les faiblesses relatives des 4 exemples de bases de données sur les MTN qui ont été discutées ? Quel modèle souhaiteriez-vous mettre en œuvre et pourquoi?

- Ancienne base de données de l'OMS- BDIM
 - Stockage et archivage des données
 - Requête de données sous format excel
 - Complexité dans l'importation des données dans le BDIM
 - Absence de tableau de bord
 - Absence de flexibilité dans les niveaux
- Plateforme de visualisation CHIP
 - Présence d'un tableau de bord à utilisation intuitif
 - Fournie des informations sur la programmation des activités d'enquête
 - Délai de mise à jour des données (données de 2021 disponibles actuellement)
 - Impossibilité de télécharger les données ou des visuels

Jour 3: Bases de données MTN

1. Quelles sont les forces et les faiblesses relatives des 4 exemples de bases de données sur les MTN qui ont été discutées ? Quel modèle souhaiteriez-vous mettre en œuvre et pourquoi?

- Répertoire des données MTN sur DHIS2
 - Personnalisable selon les besoins des programmes
 - Facile à utiliser
 - Familiarité des agents de santé avec le DHIS2
 - Capacité de visualisation des données
 - Hierarchisation de la saisie et la visualisation des données
 - Contrôle de la saisie et de la modification des données
 - Tracabilité de la modification des données
 - Risque d'accès limité à toute les parties prenantes
 - Hébergement externe des données

Jour 3: Bases de données MTN

1. Quelles sont les forces et les faiblesses relatives des 4 exemples de bases de données sur les MTN qui ont été discutées ? Quel modèle souhaiteriez-vous mettre en œuvre et pourquoi?

- Base sous format Excel
 - Facilité dans l'utilisation
 - Discordance avec les données des niveaux décentralisés
 - Traçabilité limité sur la modification des données

Integration of NTD data and indicators into Health Management Information Systems (HMIS)

Facilitator:

Kevin McRae-McKee

**Senior Director, Measurement, Evaluation and
Learning**



African Region



Morning session recap: Country databases and ESPEN APIs

Part 1: National NTD databases

- Why is having an NTD database important?
- Four examples of models that support national NTD databases
- Breakout groups
 1. Strengths and weaknesses
 2. NTD databases vs other tools (e.g. ESPEN portal)
 3. Data divergence

Part 2: Sharing data between systems

- What is an API?
- APIs vs copies of the data
- ESPEN API example
- Breakout groups
 1. Benefits and limitations to using the ESPEN API
 2. Challenges in sharing data
 3. Other uses of the ESPEN API

Morning session recap: Country databases and ESPEN APIs

Part 1: National NTD databases

- Why is having an NTD database important?
- Four examples
- Breakout group:
 1. Strengths
 2. NTD data
 3. Data sharing

We are now going to go one step further and discuss why the data managed by NTD programs (or elements thereof) should be integrated with the broader national HMIS

Part 2: Sharing data

- What is an API?
- APIs vs copilot
- ESPEN API
- Breakout group:
 1. Benefits
 2. Challenges in sharing data
 3. Other uses of the ESPEN API

Background and motivation

The 2030 NTD roadmap makes a clear call to move from vertical to integrated programs and systems.

This shift will be increasingly important as NTD programmes approach elimination and will require surveillance activities that will need to be integrated within the broader surveillance system.

As resource requirements may increase as we approach elimination, reaching efficiencies created through the integration of programs and systems are likely to be necessary.

Background and motivation

The 2030 NTD roadmap makes a clear call to move from vertical to integrated programs and systems.

This shift will be increasingly important as NTD programmes approach elimination and will require surveillance activities that will need to be integrated within the broader surveillance system.

As resource requirements may increase as we approach elimination, reaching efficiencies created through the integration of programs and systems are likely to be necessary.

NTD budgets are often not prioritized in national-level ministry discussions – integration with existing, established programs and systems will assist in changing this narrative, serve as an advocacy tool, and may result in domestic resource mobilization.

Given the differences across countries in how NTD data is currently managed, how the ministry of health is structured, which non-government stakeholders are involved, among others, it is clear that the solution to the question of HOW data from NTD programs can be integrated into national HMIS will not be one size fits all. Nonetheless, many of the challenges faced and benefits seen by NTD programs will be similar.

Agenda

Overview of the challenges and opportunities associated with NTD data integration within HMIS (Kevin McRae-McKee)

Practical examples: Country presentations on HMIS integration

Presenter	Country	Organization & role	Presentation title
Dickson Kioko	Kenya	M&E Manager, Ministry of Health, Department of Vector Borne and Neglected Tropical Diseases (DVBNTD)	Integration of NTDs into HMIS in Kenya
Ladislas Nshimiyimana	Rwanda	NTD Research Senior Officer, Rwanda Biomedical Centre	HMIS Data Integration in Rwanda: Focusing on NTDs
Christophe Nassa	Burkina Faso	Attaché de santé et épidémiologie, Responsable de l'unité suivi-évaluation du Programme national de lutte contre les MTN	Intégration des données sur les maladies tropicales négligées dans le DHIS2
Ernest Mensah Q&A / Panel discussion	Ghana	M&E Manager, Ministry of Health	Integration of NTD Data into Routine HMIS in Ghana

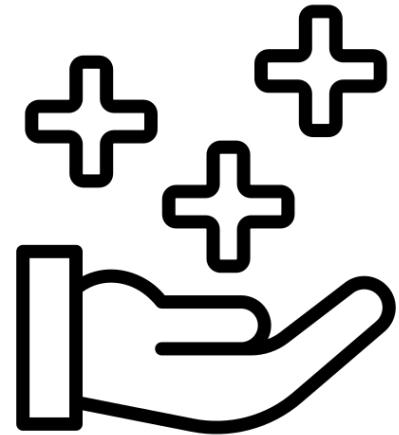
Benefits of HMIS integration

Provides the ability to track progress against national and global goals

Serves as an enabling platform for NTD advocacy activities and domestic resource mobilization

Enables the sharing of costs resulting in resource efficiencies

Enables task shifting away from manual aggregation and report generation to implementation and data review



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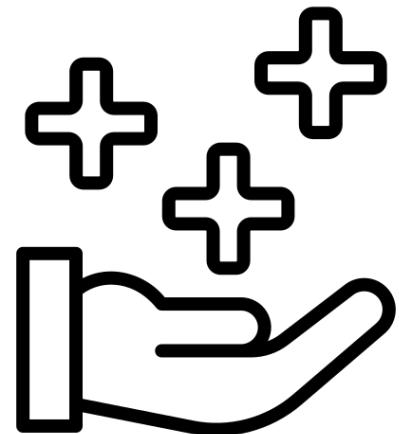
Enables task shifting away from manual aggregation and report generation to implementation and data review

Introduces opportunities for integrated approaches with other ministry departments/programs (e.g. WASH, vector control)

Introduces opportunities to leverage existing, national level data resources (WASH, nutrition) allowing for learning best practices from the joint use of datasets

Increases the accessibility of NTD health facility and community data collection tools including the digitization of community health workers

...Among many others!



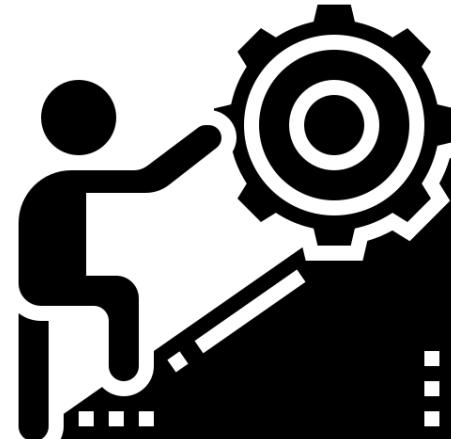
Challenges with HMIS integration

HMIS development has come a long way. HMIS platforms are more robust and HMIS teams have high expectations when it comes to supporting documentation (e.g. data standards), supporting team structure, etc so it is important to be thorough during the planning phase.

Complete HMIS integration is long, iterative process with costs associated with each stage. Consistent funding will be crucial in ensuring that end goals are achieved.

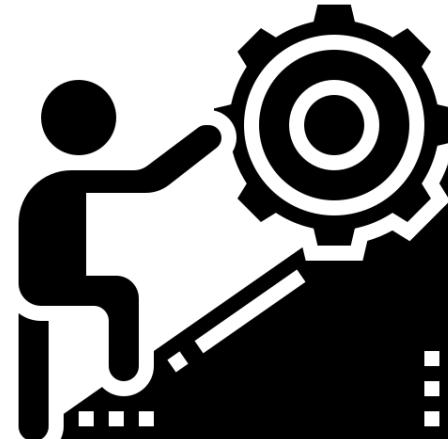
Coordination with other national health departments/programs (e.g. national HMIS teams) may be cumbersome and time consuming at first but will likely provide efficiencies in the long run. Similar early-stage challenges may occur with non-government partners/stakeholders (e.g. WHO, partners)

Ensuring that demands on human resource and technical capacity are met and are sustainable. This include ongoing training to account for staff turnover, adequate coordination with national HMIS team for ongoing maintenance and update, among others.



Challenges with HMIS integration

Transition plan: How do you plan on moving from vertical to integrated systems over time? Will it happen all at once, or gradually over time? Will there be a phase during which there is parallel reporting as a form of backup? There are many ways to go about this (again, not one size fits all) so it important to think about what is best for your context.



Balancing highly detailed NTD data needs for programming with high-level HMIS limitations. For example, there will be limits to the number of indicators that you can include in HMIS. Which ones are absolutely necessary (e.g. relating to annual reporting forms dossier preparation) versus those that are “nice-to-haves”?

This will also have implications on what legacy/historical data will need to be imported. What data should be managed exclusively in an NTD-specific database (e.g. survey data)? Where should it come from (e.g. annual reporting forms)?

How will you resolve any data inconsistencies across programs/departments? How will you calculate coverage if the NTD program uses different population numbers? How will you resolve any discordance in the coding and boundaries used for administrative units by other programs/departments when trying to leverage existing data sources for NTD programming?

What role can partners play in the process?

-  YE Provide technical assistance/input based on experience implementing end-to-end internal data systems
 S
-  YE Provide financial support
 S
-  YE Advise on monitoring and evaluation of the integration process
 S

What role can partners play in the process?

-  **YE** Provide technical assistance/input based on experience implementing end-to-end internal data systems
 **S**
-  **YE** Provide financial support
 **S**
-  **YE** Advise on monitoring and evaluation of the integration process
 **S**
-  **MAYB** Support the coordination between NTD programs, HMIS teams, and other stakeholder (e.g. HISP) to ensure a holistic view of the end goal
 **E**
-  **MAYB** Advise on key data elements, indicators – what belongs in HMIS and what does not – ensuring alignment with WHO tools and processes
 **E**
-  **MAYB** Support the current state assessment including existing systems, tools and key stakeholders
 **E**

What role can partners play in the process?

-  **YE** Provide technical assistance/input based on experience implementing end-to-end internal data systems
-  **S**
-  **YE** Provide financial support
-  **S**
-  **YE** Advise on monitoring and evaluation of the integration process
-  **S**
-  **MAYB** Support the coordination between NTD programs, HMIS teams, and other stakeholder (e.g. HISP) to ensure a holistic view of the end goal
-  **E**
-  **MAYB** Advise on key data elements, indicators – what belongs in HMIS and what does not – ensuring alignment with WHO tools and processes
-  **E**
-  **NO** Implement the integration outside of standard ministry processes and tools

Agenda

Practical examples: Country presentations on HMIS integration

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Dickson Kioko	Kenya	M&E Manager, Ministry of Health, Department of Vector Borne and Neglected Tropical Diseases (DVBNTD)	Integration of NTDs into HMIS in Kenya
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Q&A / Panel discussion



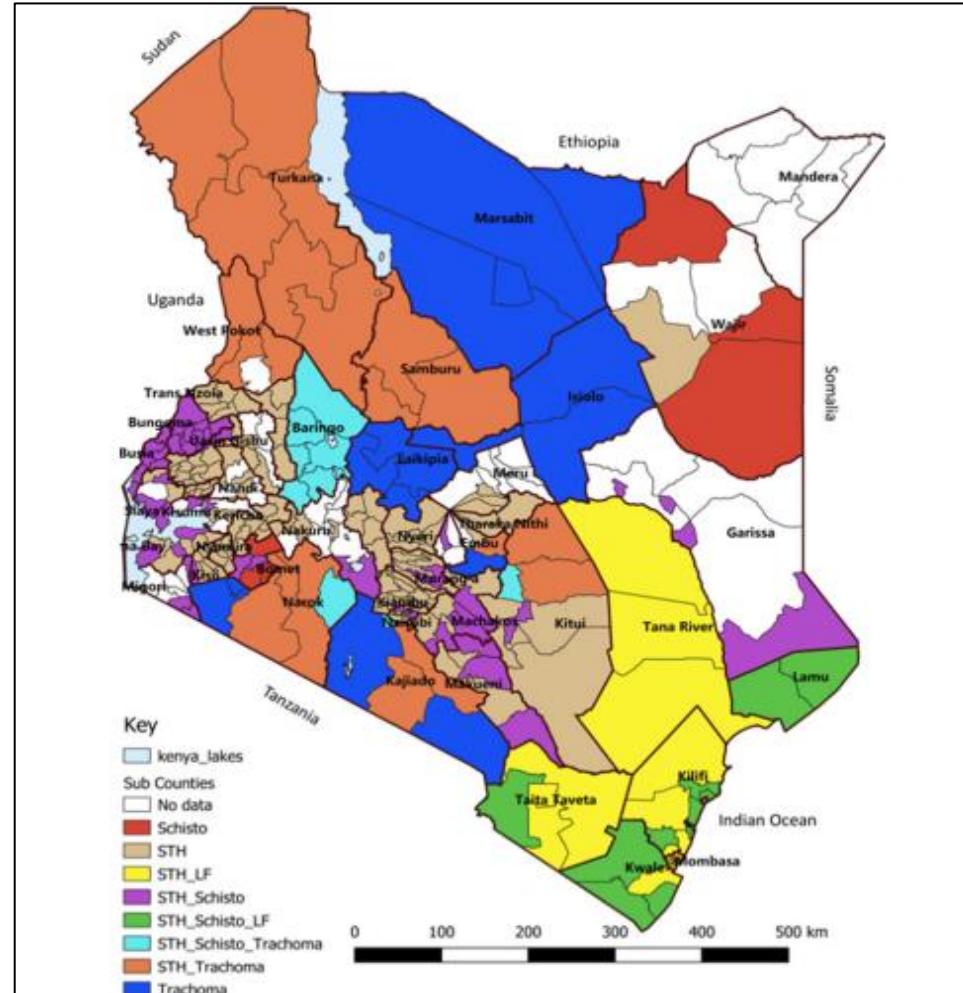
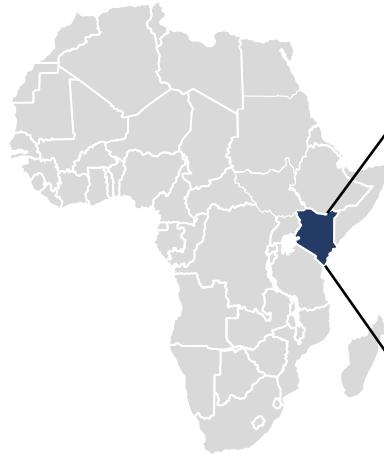
Ministry of Health

Integration of NTDs into HMIS in Kenya

Dickson Kioko
Monitoring and Evaluation Manager - VBNTDU
Kenya

Data Workshop on Monitoring and Evaluation of PC-NTD Programmes
Brazzaville, Republic of Congo - Day 3 - 14 July, 2024

Introduction to NTDs in Kenya



Administrative information

- Divided into 47 counties, 290 sub counties, 1450 wards, 12,714 health facilities, 5,215 community units
- Estimated population in 2024: 52,428,290

NTDs are heterogeneously distributed in Kenya

- NTDs confirmed/suspected: 16
- STH: 16.6 million at risk
- SCH: 6 million at risk
- Leishmaniasis: 6.8 million

Health system structure, organization and access to care

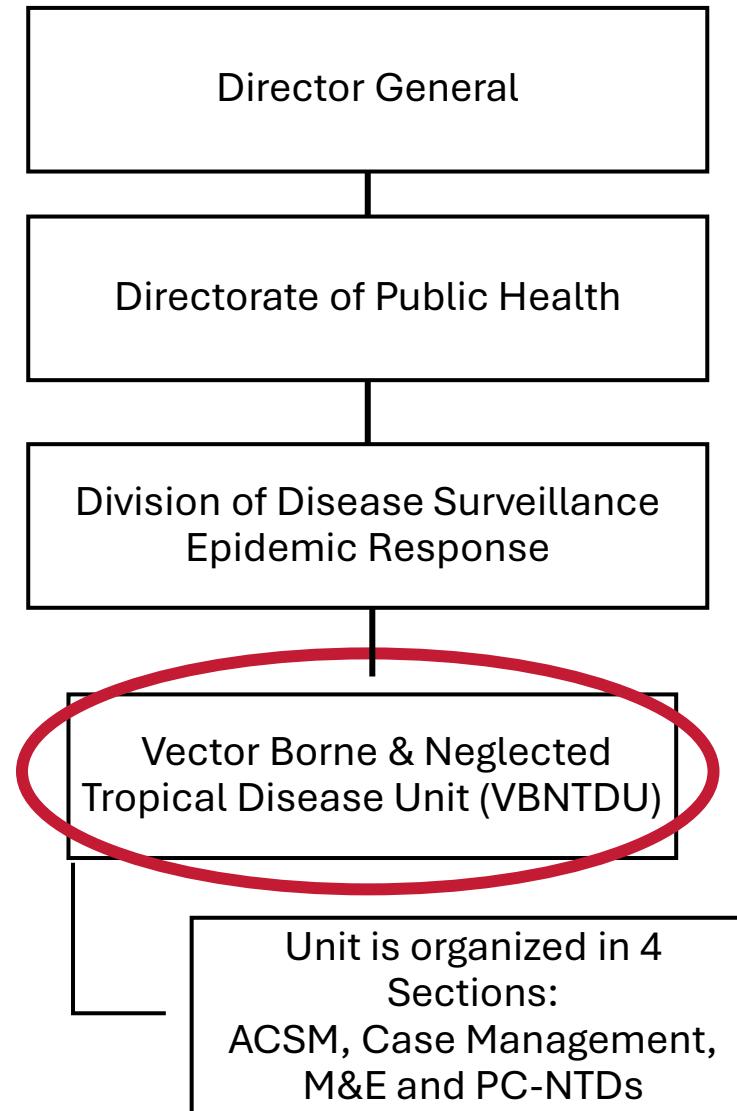
National Structure Kenya Health Policy 2014-2030

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

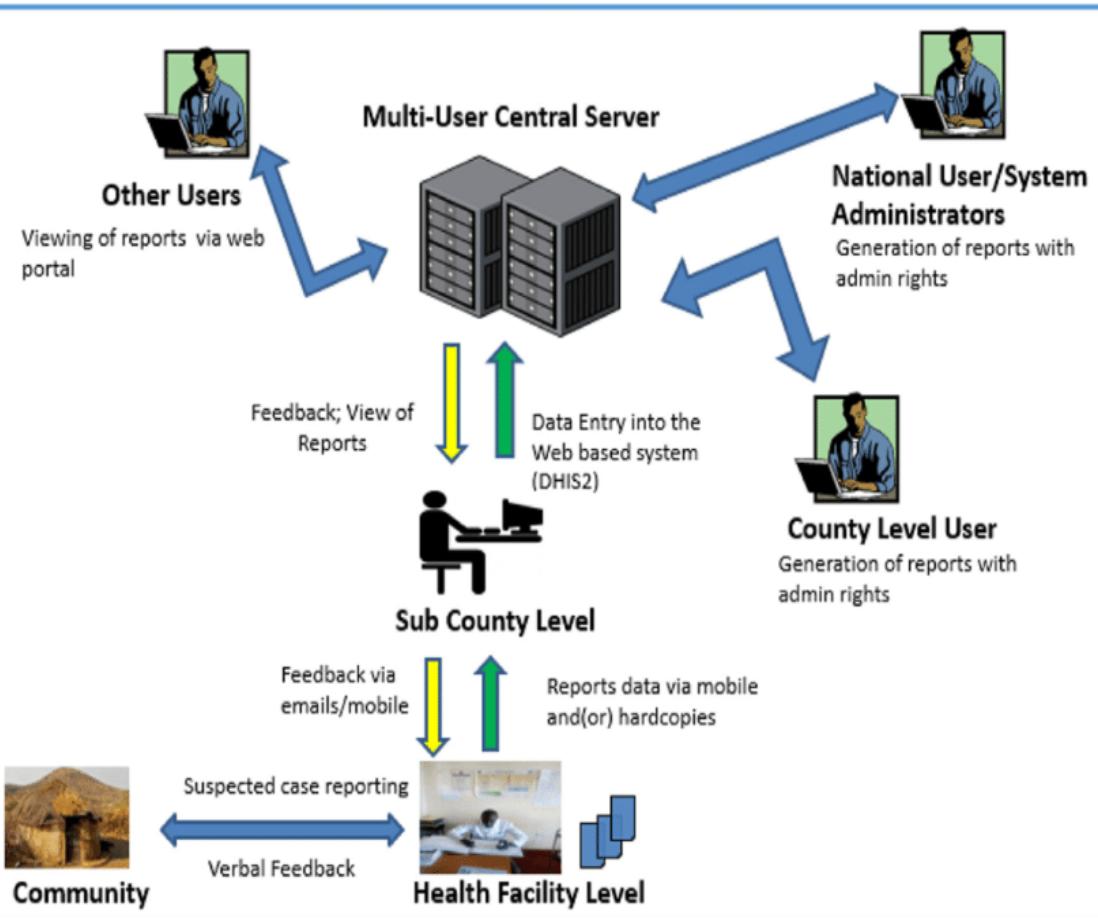
Roles & Responsibilities

- **National Government:** policies, regulations, capacity building, national referral health facilities and providing technical assistance to counties
- **County Governments:** county health facilities and pharmacies, preventive and promotive health care, implementation and service delivery.

MOH Structure



Kenya has operated a web-based Health Information System, dubbed Kenya Health Information System (DHIS2 based) from the year 2010



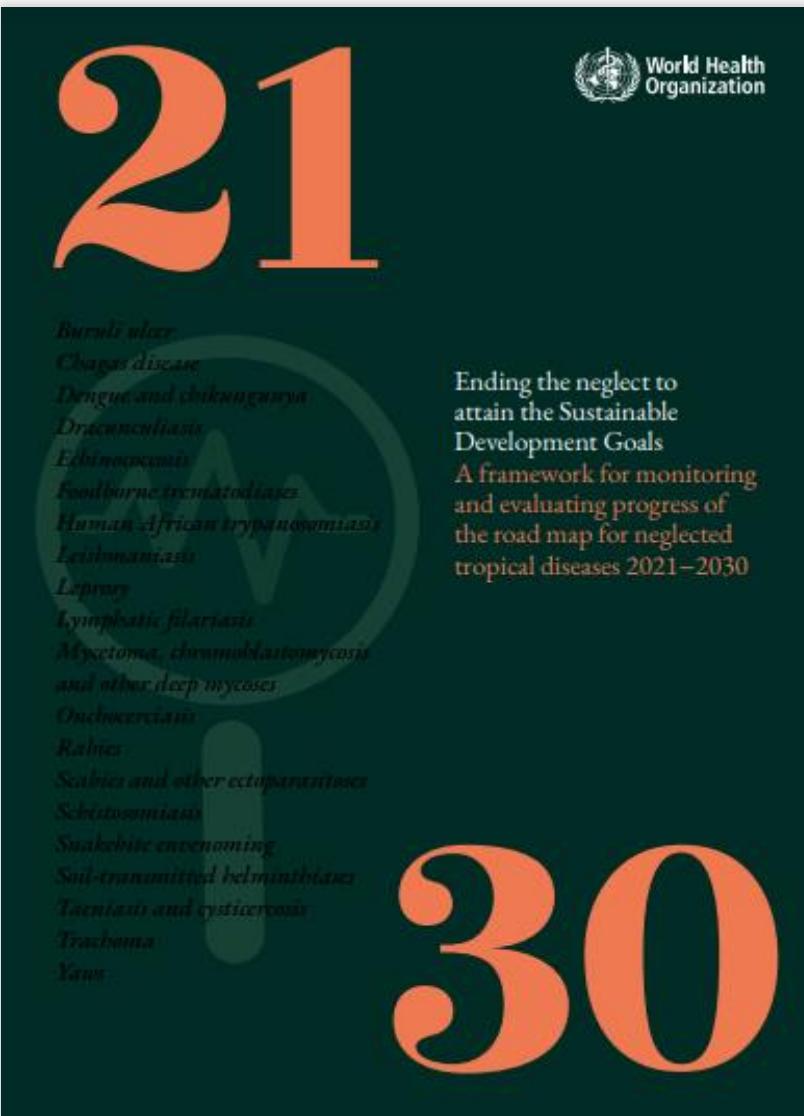
- Community level**
 - Monthly reports from the Community Units, summarized by community health assistants (CHAs) and cascaded to the link health facility.
- Health Facility**
 - Limited delivery & aggregate community unit data is reviewed & summarized by facility in-charge/HARIO
 - Physical reports completed and cascaded to 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 HARIO
- 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.

However, the KHIS was not customized to report majority of NTD program data e.g. Mass Drug Administration Data (treatment and stock data), with the available routine indicators not well standardized for program use.

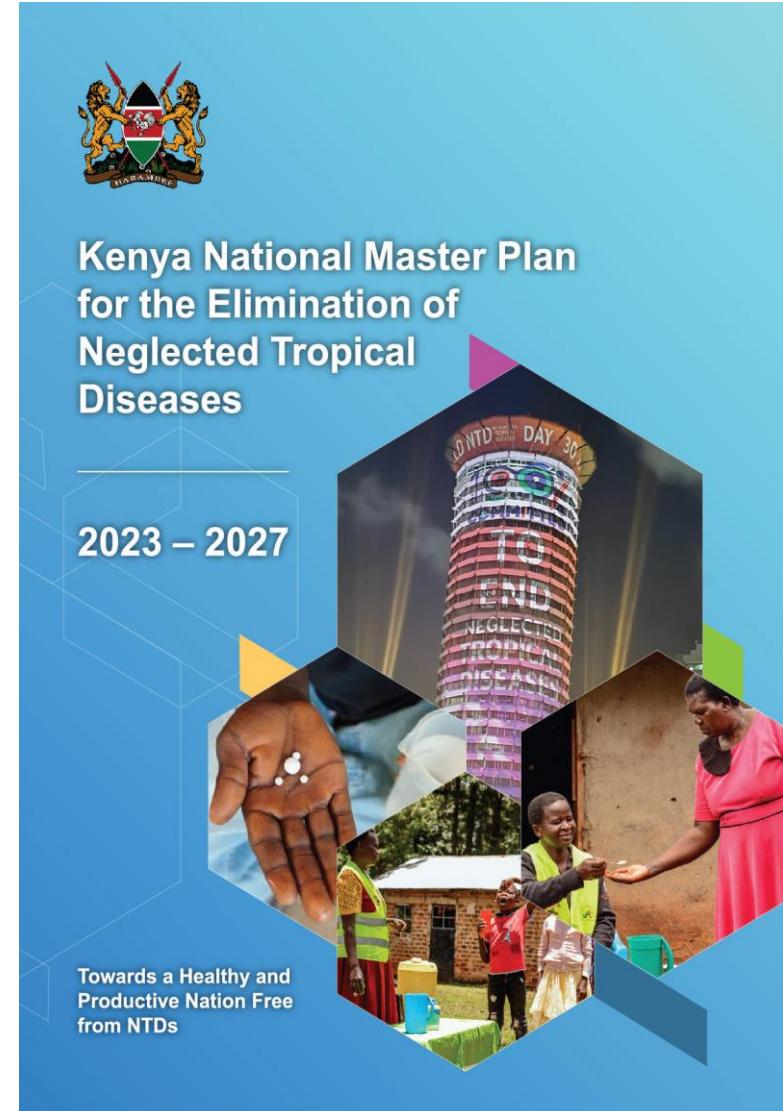
As a result, partners supporting the NTD unit developed multiple data capture & storage solutions, none of which fed into a central, government-owned database

Database name	CIND (Access database)	ASCEND/ARISE DHIS2/WHO	Tropical data	REVEAL	Google sheet	ESPEN /CHIP
Author	WHO	ASCEND/ARISE /WHO	ITI-GET 2020	AKROS	MOH & partners	WHO/Sightsavers
Platform						 Sightsavers
NTDs covered	PC-NTDs	SCH, Trachoma, LF, Leish	Trachoma	SCH (Vihiga, 2021, 2022)	PC-NTDs	PC – NTDs and WASH
Data included	Prevalence MDA Drug supply Morbidity NTD programmatic	MDA MMDP Case Management	Prevalence	MDA Supply Chain	MDA Prevalence data	Prevalence MDA WASH
Core issues	<ul style="list-style-type: none"> Data has to be manually uploaded to CIND; no automated process. Does not link to a central data source owned by the NTD program or the MoH. Offline platform domiciled on laptops. 	<ul style="list-style-type: none"> Does not link to a data source owned by the NTD program or the MoH. Holds data from ASCEND, ARISE & Leish projects only. 	<ul style="list-style-type: none"> Trachoma survey data only. Does not link to a data source owned by the NTD program. 	<ul style="list-style-type: none"> Reveal does not link to a data source owned by the NTD program or the MoH. Reveal has only been used for SCH/STH campaign in one county 	<ul style="list-style-type: none"> Data collection processes are not standardized or digitized . Data is not stored in a central place; access is limited. Limited data use. 	<ul style="list-style-type: none"> Currently does not link to a data source owned by the NTD program or the MoH. Program submits data to ESPEN but do not routinely use outputs.

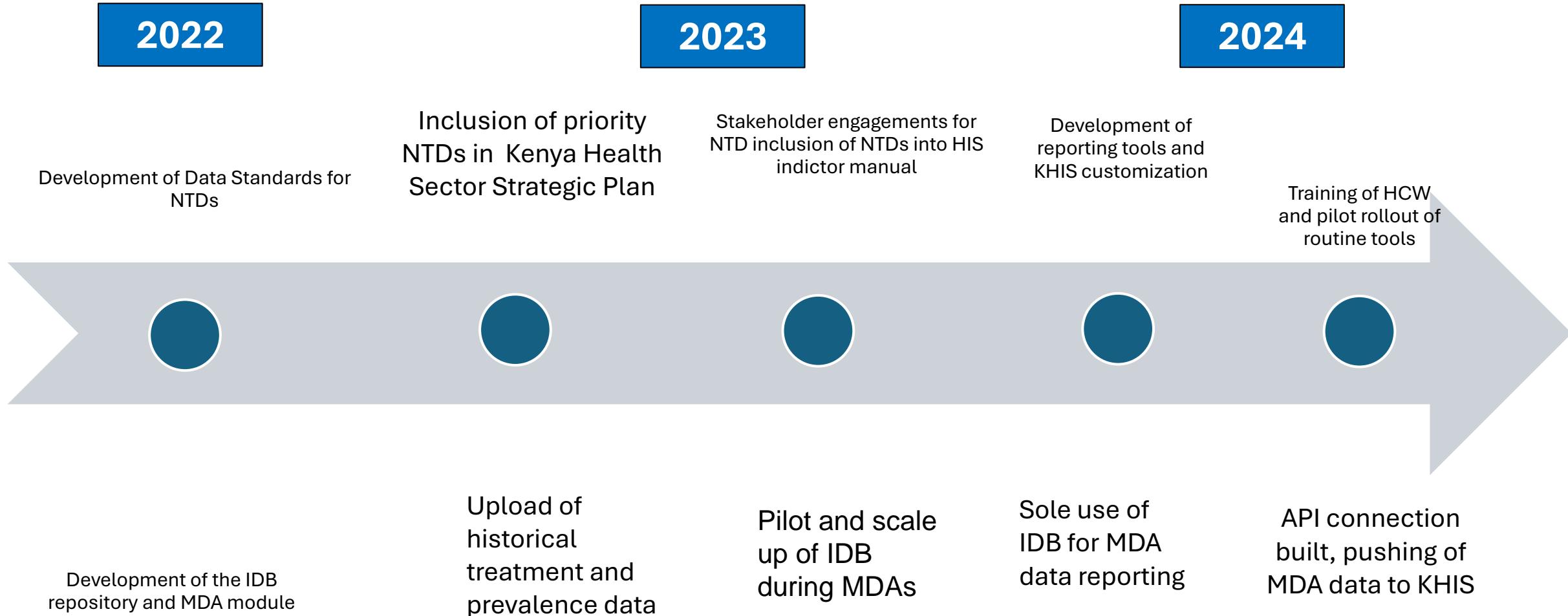
To try solve the siloed approach, the NTD program lists a Government owned integrated NTD database (IDB) within the Kenya NTD Masterplan 2023-2027



- Aligns with **pillar II** of the WHO roadmap that emphasizes **cross cutting** approaches by NTD programmes
 - Will create a **repository** of all NTD data
 - Allows importation of **historical NTD** data
 - Available data to improve **surveillance** activities
 - **Dashboards** for program analytics
- **Integration** with the Kenya Health Information System
 - Data sharing between KHIS and IDB as systems are **interoperable**



As a result, the NTD program began the journey to digitize and integrate and NTD program data



Priority NTD routine, laboratory and commodity indicators have been updated on KHIS

Filter in section	Category	Stool Examination	Number Positive	Commodities expiring in less than 6 months
	Quantity	Days to expiry		
Cutaneous leish.		3.5 Taenia spp.		
Visceral leishm.		3.6 Hymenolepis nana		
Jiggers (Tungiasis)		3.7 Hookworm		
Dengue		3.8 Roundworm		
Chikungunya		3.9 S. mansoni		
Rabies		3.10 Trichuris trichura		

Supply chain data is grouped into Case Management, Preventive chemotherapy and paediatric formulations. These are to be reported monthly and will inform consumption data for integration with eLMIS

Case management integrated into facility reporting by age category and sex, to be reported on a monthly basis

NTDs

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

The dashboard displays various campaign and commodity indicators. For SCH, it shows data for Bungoma County and Mombasa County, including total treated, coverage, and targeted numbers. For STH, it shows data for Genze Sub County, including dewormed counts by age group (1 Yr, 2-4 Yrs, 5-14 Yrs, 15+ Yrs) and gender (Male, Female) across Bamburi Ward, Ganze Ward, Jariabuni Ward, and Sokoke Ward.

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
Mombasa County	498 811	84.5	178 236	145 297	81.5	411 830	353 514	85.8

Treatment data captured on the IDB has been mapped onto KHIS

Similarly, commodity data has been mapped onto KHIS

How gender, race, and other demographic factors have been pushed collection to begin at a lower implementation level for synchronization with KHIS

The Data Entry interface shows the configuration for the NTD Campaign Tool. It includes fields for Organisation Unit (Genze Sub County), Data Set (NTD Campaign Tool), and Period (July - December 2024). Below this, there are two tables: "STH Dewormed" and "SCH Dewormed", each with four age groups (1 Yr, 2-4 Yrs, 5-14 Yrs, 15+ Yrs) and two genders (Male, Female) for four wards (Bamburi Ward, Ganze Ward, Jariabuni Ward, Sokoke Ward).

With CHAI support, Kenya has enhanced the Ministry's Community Health Information System (eCHIS), aiming to fully digitize NTD campaigns

Campaign Service

Campaign Service Results Page

Be sure you Submit to complete this action

Person's Details

Johnstone Mulwa
29 years and 6 months old

Received Services

Schistosomiasis (Bilharzia/Kichochcha) Treatment given

Instruction

Ask Johnstone Mulwa to inform you, if he experience any side effects/adverse events as it happens.

They can also call 0795743049 or dial *#111# their phone to report the adverse events.

Please sync after submitting this form to your health facility to receive this information.

< Prev

chp_area_name	count_mebendazole_tablets_given
Esther B. Mogaka Area	0
Susan Muhia	0
Janet Kiptoo Area	0
Persila Adhiambo Konani Area	0
Dorica Naliaka Walamuyaka Area	0
Caroline Selim Area	0
Mary Ocholla Area	0
Partricia Tituya Area	0

- eCHIS aims 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

Challenges and Mitigation Strategies with integrating NTD data into HMIS

Challenges	Mitigation Strategies
Data Standardization	<ul style="list-style-type: none">▪ 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	<ul style="list-style-type: none">▪ 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	<ul style="list-style-type: none">▪ 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

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 6/47 counties



Pilot implementation on integrated NTD reporting

Proposed 90 health facilities for routine reporting over 6 months



Scale up use of the integrated NTD database for campaign reporting

Test integration pipeline for data visualization of MDA data during campaigns

Acknowledgements



Ministry of Health



<https://www.youtube.com/watch?v=QhJygdEtHC0>

HMIS Data Integration in Rwanda: Focusing on NTDs

Presenter:
Ladislas Nshimiyimana
**NTD Research Senior Officer, Rwanda Biomedical
Centre**





BURKINA FASO



Atelier sur le suivi et l'évaluation des programmes MTN

Brazzaville, République du Congo - Jour 3 - 14 juillet 2024



The image shows the sign-in page for the DHIS2 application. It features a dark blue header with the "dhis2" logo. Below the header is a "Sign in" section with two input fields: one for "ProgrammeMTN" and another for a password, indicated by a redacted text. There is also a checkbox for "Connexion à l'aide d'une authentification à deux facteurs" and a "Entrer" button. At the bottom left, there is a link for "Mot de passe oublié?" and a welcome message in a light blue box: "Bienvenu sur l'Entrepôt de données du Ministère de la Santé".

NASSA Christophe
*Responsable de l'unité planification,
suivi-évaluation du PNMTN*

Introduction

Aperçu sur le système de gestion des données de routine

Description du système de rapportage MTN avant l'intégration

Processus d'intégration des données de morbidités MTN dans le DHIS2

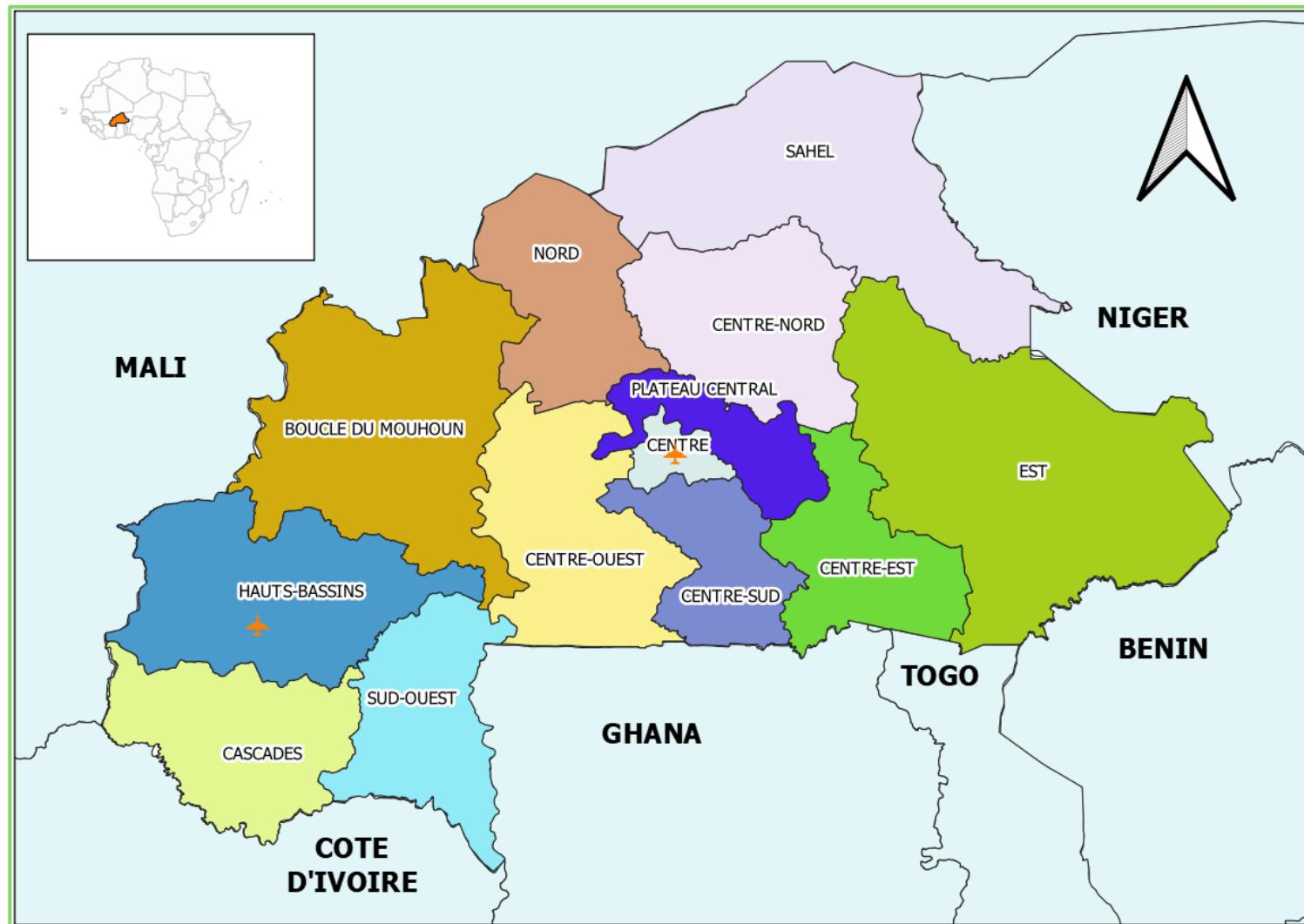
Processus d'intégration des données TDM dans le DHIS2

Défis liés à l'intégration des données MTN dans le DHIS2

Leçons apprises et possibilités d'amélioration

Conclusion

Introduction



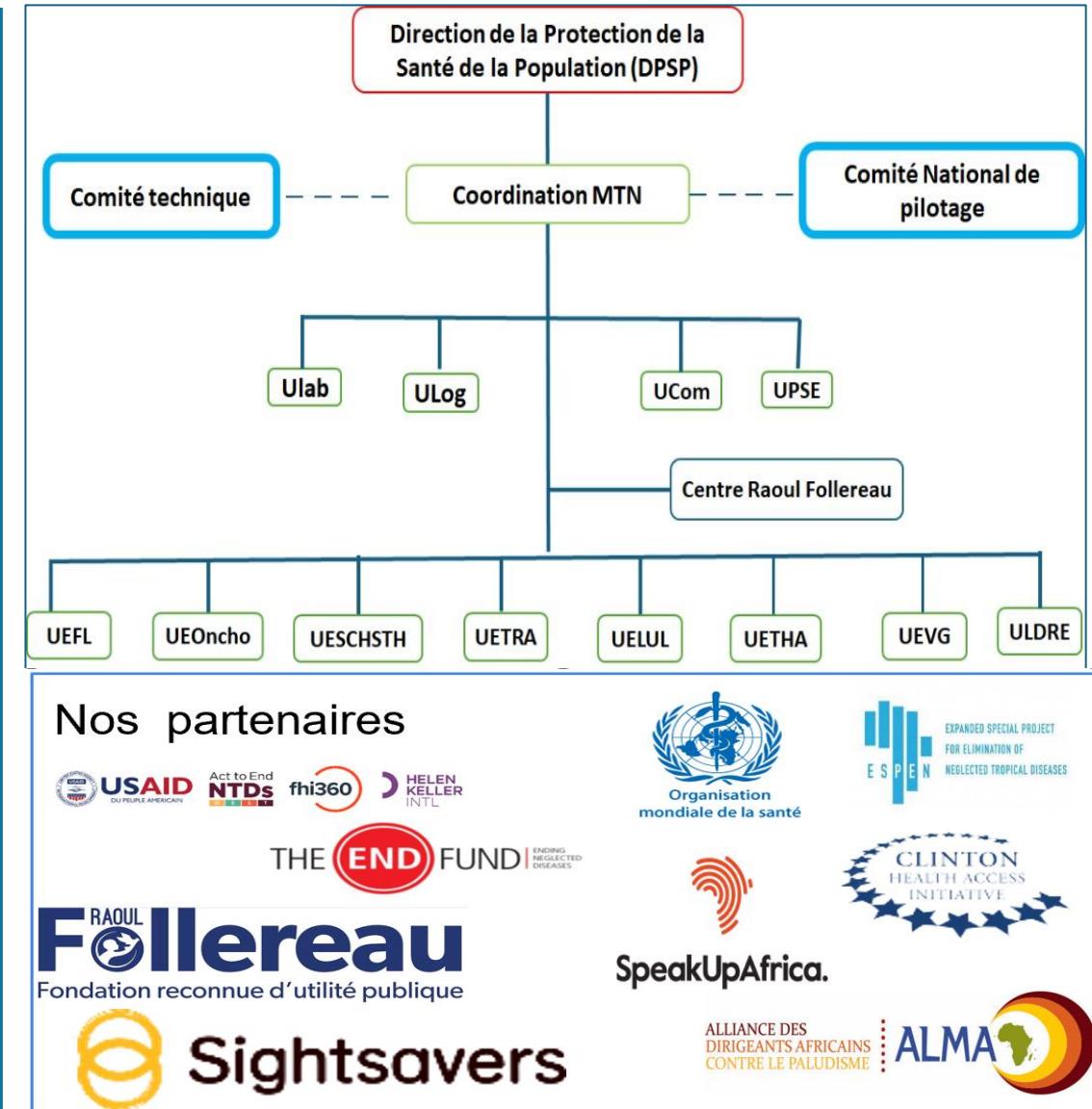
- **Burkina Faso (Afrique de l'Ouest):**
 - **Superficie : 274 000 km²**
 - **Total population 2024 : 23 592 836**
 - **13 régions sanitaires**
 - **70 districts sanitaires**
 - **6 Centres hospitaliers universitaires**
 - **09 Centres hospitaliers régionaux**
 - **56 Hôpitaux de districts (CMA)**
 - **2 349 Formations sanitaires périphériques (CM/CSPS)**

Introduction

Aperçu du programme MTN du Burkina Faso

Création d'un programme national de lutte contre les MTN en 2013 : Fusion des programmes spécifiques existants

- **Tutelle:** Direction de la protection de la santé de la population de la Direction Générale de la santé et de l'hygiène publique
- **Unités transversales:** Logistique, Laboratoire, Communication, Planification et S&E
- **Unités spécifiques:** FL, Oncho, Trachome, Schisto/STH, Lèpre-UB-Leishmaniose, THA, Ver de Guinée, Dengue-rage et envenimation par morsures de serpents
- **Organes d'appui:** comités technique et de pilotage



Aperçu sur le système de rapportage de routine au Burkina Faso

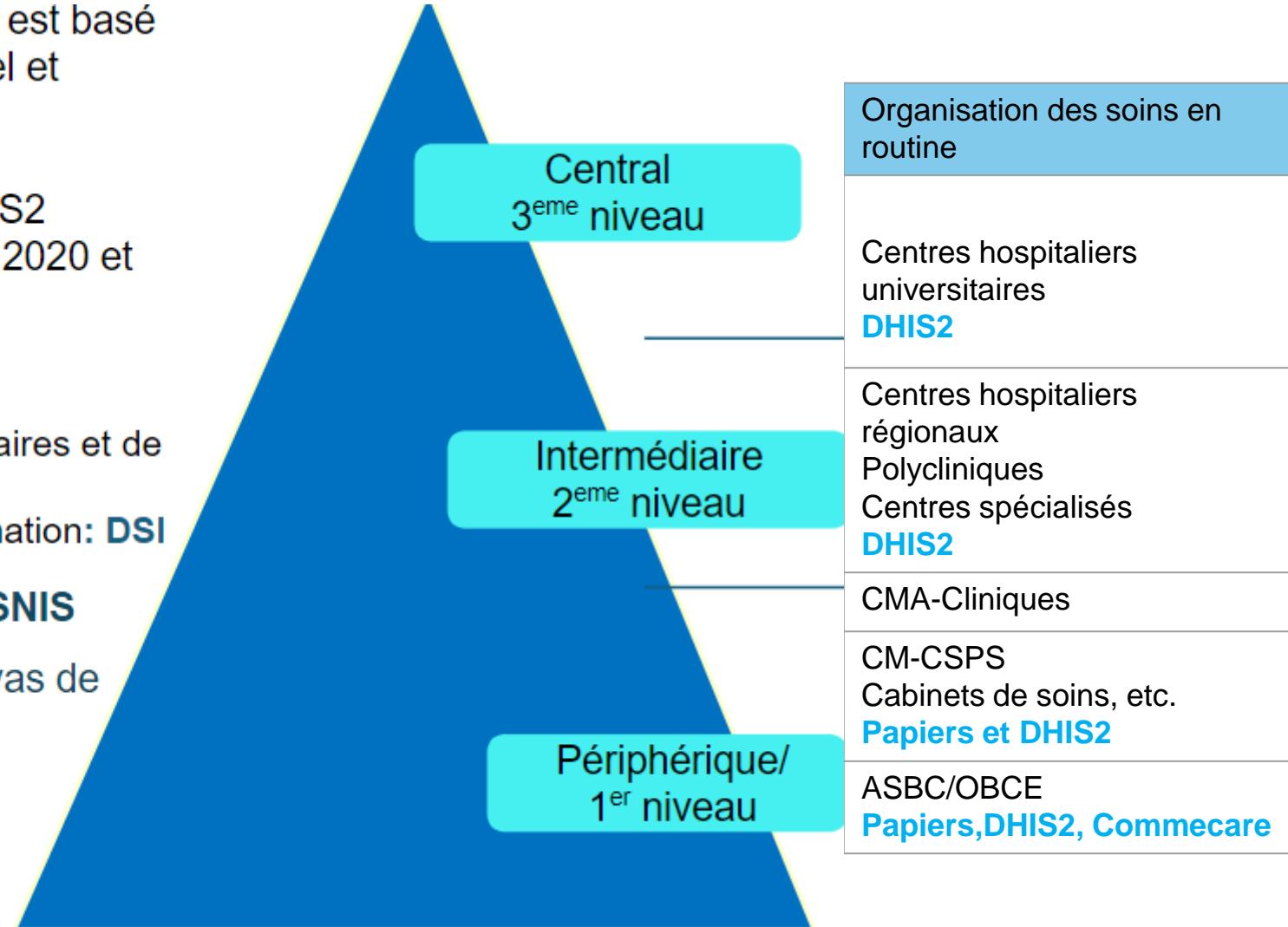
- Avant 2011: Gestion du SNIS est basé sur les rapports papiers, Excel et Access
- 2011: début du DHIS2
- 2013: Mise à l'échelle du DHIS2
- Révisions périodiques: 2016, 2020 et 2023

Encrage institutionnelle

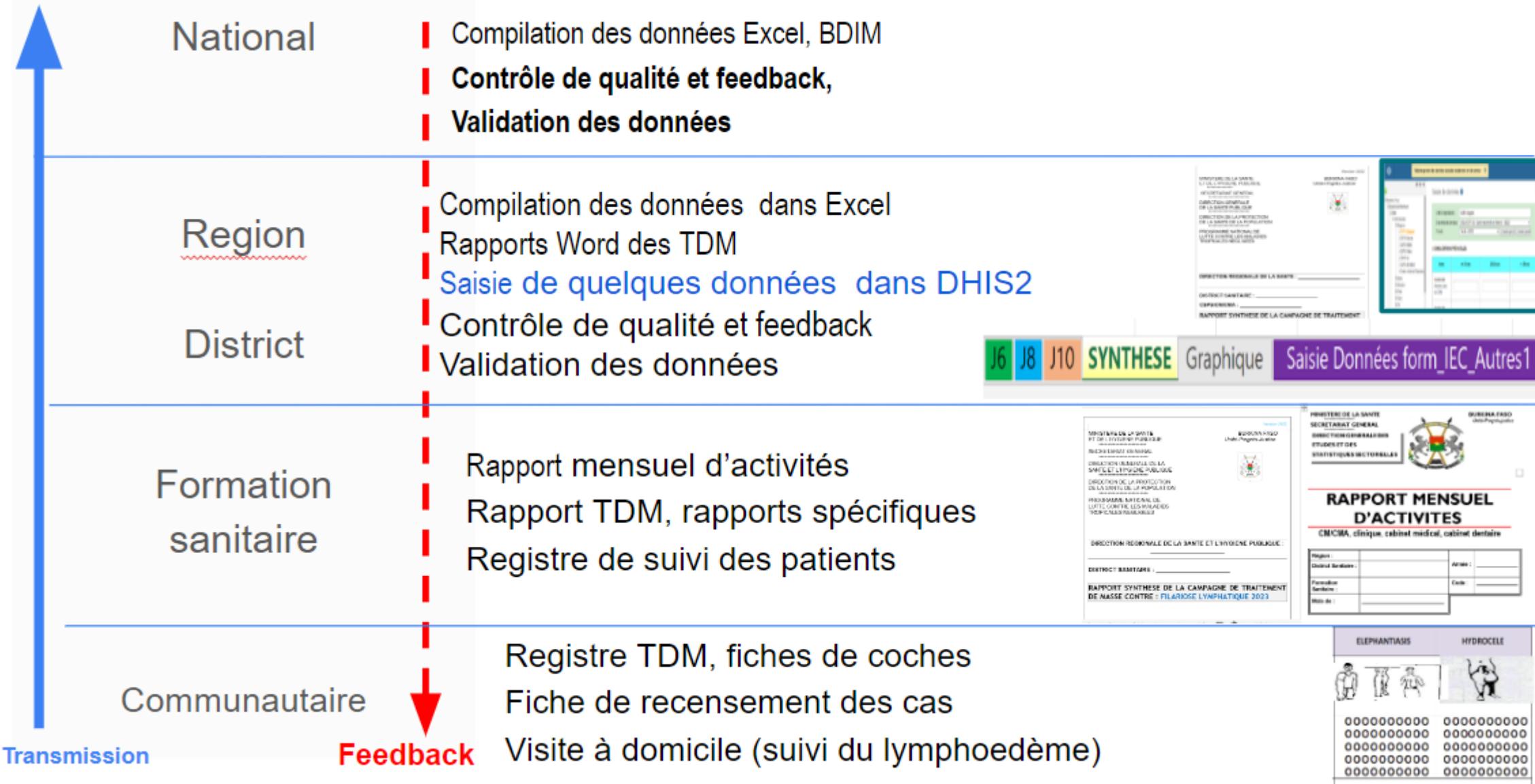
- Direction des Statistiques Sanitaires et de l'évaluation: **DSSE**
- Direction des systèmes d'information: **DSI**

Principaux outils utilisés du SNIS

- Supports primaires et canevas de rapports en format papier
- DHIS2
- CommeCare



Description du système de rapportage MTN avant l'intégration



Processus d'intégration des données de morbidités MTN dans le DHIS2

□ Avant 2016

- Quelques indicateurs dans les tableaux nosologiques des supports de routine
- Prise en compte de quelques indicateurs dans le DHIS2
- Pas de données spécifiques MTN dans l'annuaire statistique en dehors de la lèpre et la chirurgie de l'hydrocèle.
- Mise en place de supports parallèles pour collecter les données de prise en charge des cas

□ 2016

- ❖ Révision/Elaboration de supports de collecte des données: morbidités FL et trachome en faveur de la mise en œuvre du projet MMDP/USAID
- ❖ Révision de supports du SNIS 2016 : intégration des indicateurs MTN (prise en compte de certains indicateurs)
- ❖ Tableaux spécifiques aux MTN dans les annuaires statistiques du MS
- ❖ Mise en place de favoris sur les MTN dans DHIS2
- ❖ Poursuite de la collecte parallèle : session de validation des données morbidités (2017-2020)
- ❖ Crédit d'un compte d'accès pour le PNMTN

Processus d'intégration des données de morbidités MTN dans le DHIS2

2018:Préparation du processus d'intégration

- ❖ Révision de supports de collecte et de rapportage de la morbidité MTN
- ❖ Définition d'une feuille de route pour la phase pilote de l'intégration des données morbidités MTN dans le DHIS2 avec la DSSE

2020:Révision périodique des outils du SNIS

- ❖ Prise en compte de certains indicateurs définis lors de la phase pilote
- ❖ Mise en place d'un formulaire spécifique MTN
- ❖ Mise à jour des tableaux de bord et favoris MTN

2019-2020: Mise en œuvre de la phase pilote

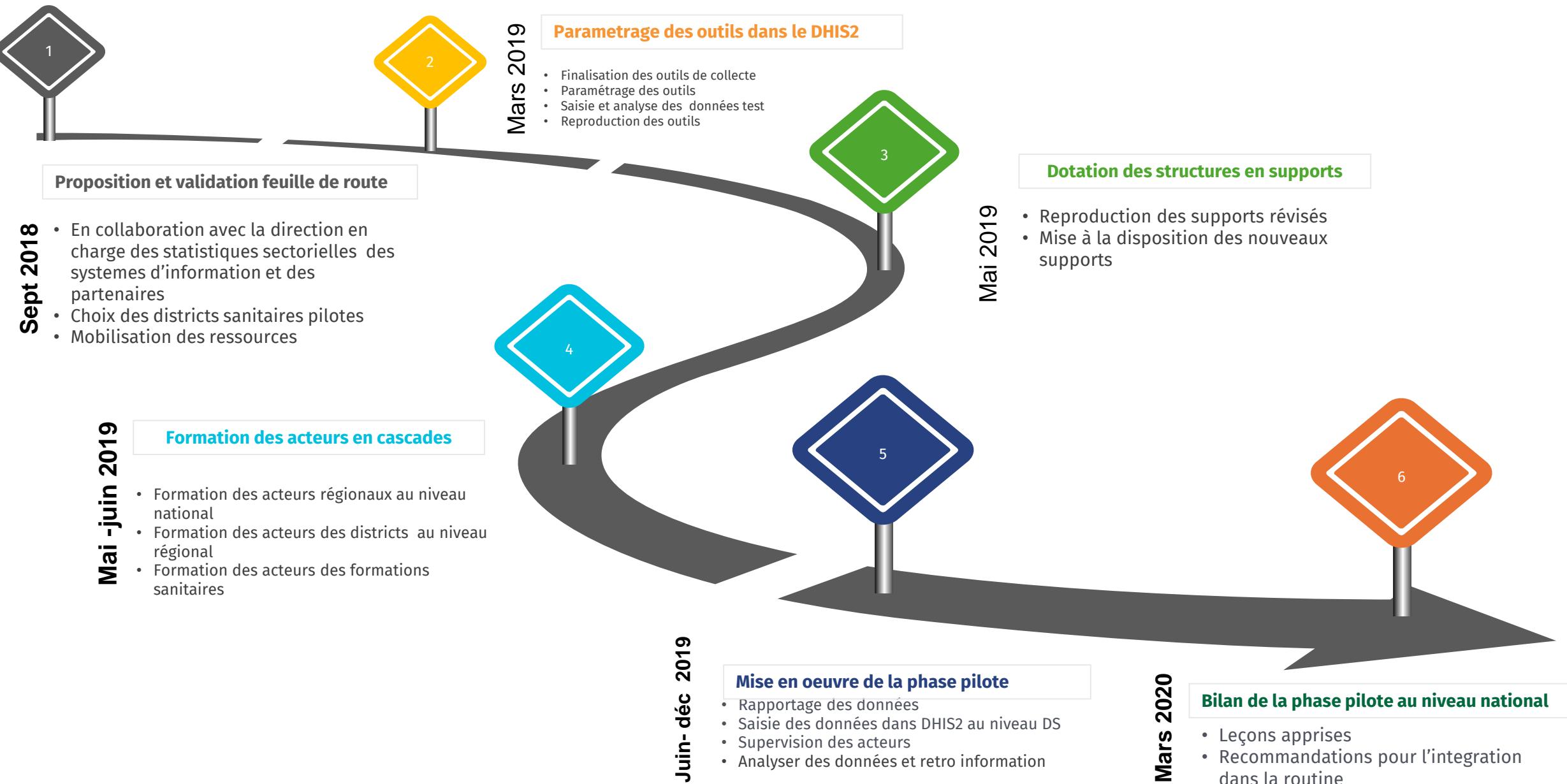
- ❖ Mise en œuvre d'une phase pilote d'intégration des indicateurs de la morbidité MTN dans le DHIS2 : 2 régions, 6 districts et 243 formations sanitaires

2023: Révision périodique des outils du SNIS

- ❖ Révision des indicateurs MTN dans le DHIS2
- ❖ Intégration d'autres indicateurs de routine
- ❖ Mise à jour des tableaux de bord et favoris MTN



Etapes clés de la pilote de l'intégration des données de la morbidité MTN dans le DHIS2, en 2019 au Burkina Faso



Processus d'intégration des données TDM MTN dans le DHIS2

□2022

- ❖ Planification de la digitalisation des TDM MTN: intégration des données TDM dans le DHIS2 et collecte mobile dans le cadre du financement de ARISE2 avec END FUND
- ❖ Définition d'une feuille de route pour l'intégration des données TDM dans le DHIS2 avec l'ensemble des parties prenantes.

□2023:Conduite du processus

- ❖ Révision des canevas de rapports TDM
- ❖ Paramétrage des rapports TDM dans le DHIS2
- ❖ Formation des acteurs sur les canevas de rapports révisés: intégrée à la formation sur la mise en œuvre des TDM
- ❖ Présentation en ligne des rapports paramétrés sur le DIHS2 aux gestionnaires des données des régions et des DS
- ❖ Saisie des données de la campagne au niveau district
- ❖ Bilan du processus: intégration à la session de validation des données au niveau national

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

- Déclaration de nouveaux de MTN et des décès en routine

VIII. MORBIDITE

8.1. Maladies tropicales négligées

Items	<5 ans	5- 14 ans	15 ans et +
Nombre de patients avec lymphœdèmes/éléphantiasis			
↳ dont ayant présenté des crises aiguës	██████████		
Nombre de cas d'hydrocèle enregistrés			
Nombre de cas d'hydrocèles opérés			
Nombre de cas de trichiasis trachomateux dépistés			
Nombre de cas de trichiasis trachomateux diagnostiqués			
Nombre de cas de trichiasis trachomateux opérés	██████████		
Nombre de nouveaux cas d'ulcère de Buruli			
Nombre de nouveaux cas de Trypanosomiase Humaines Africaine (THA)			
Nombre de nouveaux cas de leishmanioses cutanées enregistrés			
↳ dont confirmés par le laboratoire			
Nombre de nouveaux cas d'envenimation par morsures de serpents enregistrés			
Nombre de nouveaux cas de rage enregistrés			
Nombre de nouveaux cas de Bejel enregistrés			
Nombre de nouveaux cas de pian enregistrés			
Nombre de nouveaux cas de schistosomiasis			
Nombre de nouveaux cas d'onchocercose			
Nombre de nouveaux cas de gale			

❑ Surveillance de Laboratoire

9.3. Examens réalisés au laboratoire

Examens	Total réalisé	Dont Anormal/Positif
Pasitologie-Mycologie		
Goutte épaisse (GE)		
Recherche d'œufs de schistosomes		
Recherche de <u>W.Bancrofti</u>		
Recherche d'œufs de géo-helminthiase (ascaris, ankylostome, <u>trichiuris</u>)		
Examen des selles (KOP)		

❑ Prise en charge des cas

- ✓ Suivi lymphoedème
- ✓ chirurgie de l'hydrocèle
- ✓ Chirurgie du TT
- ✓ Suivi des patients opérés d'hydrocèle
- ✓ Suivi des cas de lèpre: nouveaux et anciens cas

❑ Données TDM: FL, Oncho et Schisto

- Formation
- Communication
- Personnes traitées par sexe et groupe d'âge
- Gestion des médicaments
- Effets indésirables
- supervision

Intégration des données dans le DHIS2 et les coûts associés

Pourquoi d'intégrer les données sur les MTN au DHIS2

- S'adapter à l'évolution des outils du SNIS
- Renforcer la qualité et l'accessibilité des données MTN

Coûts directs

- Intégration des données liées à la morbidité MTN , Banque mondiale dans le cadre du projet de lutte contre les MTN et le Palu au Sahel: **26 009 250 F CFA**
- Intégration des données TDM, End Fund dans le cadre du Projet ARISE2: **4 825 000 F CFA**

Existence de système parallèle

- Liste nominative des cas: *lymphoedème, Hydrocèle*
- Données de mise en œuvre de certaines activités: Formation, dotation en intrants
- Enquête: *ESPEN, Tropical Data, KoboToolBox*
- Données de suivi des patients: *TT, lymphoedème, Hydrocèle*

Défis liés à l'intégration des données sur les MTN dans le DHIS2

1-Disponibilité des outils de collecte et de rapportage

- Révision des outils et guide de remplissage
- Reproduction des outils
- Intégration des MTN dans les outils du SNIS

2-Renforcement de compétences des acteurs :diagnostic, prise en charge des et remplissage des supports

- Révision des directives
- Développement de modules,
- Intégration des formations à tous les niveaux

3-Qualité des données dans le DHIS2

- Supervision acteurs
- Production des bulletins sur la qualité des données avec feedback
- Sessions de validation des données
- DQA des données MTN du DHIS2

Mesures d'atténuation des défis

Appui des partenaires : CHAI, Sightsavers, Helen Keller Intl

- Disponibilité des données dans une base unique
- Disponibilité des données MTN désagrégées par structure
- Reduction des délais de transmission des données
- Amélioration de la qualité des données
- Archivage et sécurité des données
- Visualisation des données à travers le tableau de bord
- Renforcement de la prise en compte des MTN dans les politiques de santé

Leçons apprises et possibilités d'amélioration

□ Leçons apprises

- l'intégration des données MTN dans le DHIS2 est un processus souvent long nécessitant l'implication des différentes parties prenantes (PNMTN, Partenaires, Directions en charge du DHIS2)
- Les coûts de l'intégration des données MTN peuvent être réduits par une bonne planification et une intégration des activités aux paquets d'interventions sur les MTN existants.

□ Les impacts à court et à long terme

- Intégration plus accrue dans MTN dans le système de santé
- Appropriation des données MTN par le pays
- Renforcement de l'utilisation des données MTN

□ Les prochaines étapes:

- Poursuite l'intégration des données MTN dans le DHIS2
- Digitalisation des interventions MTN: Collecte mobile des données TDM (KoboToolBox), suivi des patients (**Hydrocele tracker**), interventions communautaires (**Esante.com**)
- Mise en place d'un tableau de Bord MTN sur le DHIS2
- Evaluation de la qualité des données de routine

□ Besoins du soutien des partenaires :

Technique et financier

CONCLUSION

- Au Burkina Faso, le programme national de lutte contre les MTN s'est engagé à intégrer les principaux indicateurs MTN dans le DHIS2,
- Un processus inclusif a permis d'intégrer progressivement d'une part les indicateurs de prise en charge et de surveillance dans le rapportage de routine depuis 2016 et d'autre part les données de traitement de masse à partir de 2023
- Il est nécessaire de consolider les acquis et de renforcer la qualité des données et l'accessibilité pour la prise de décision
- En perspective: la mise à l'échelle de la collecte mobile des TDM, la digitalisation du suivi individuel des cas (hydrocèle et lymphoedème), le DQA
- Nos remerciements à l'ensemble de nos partenaires pour leur soutien



MERCI POUR VOTRE ATTENTION!



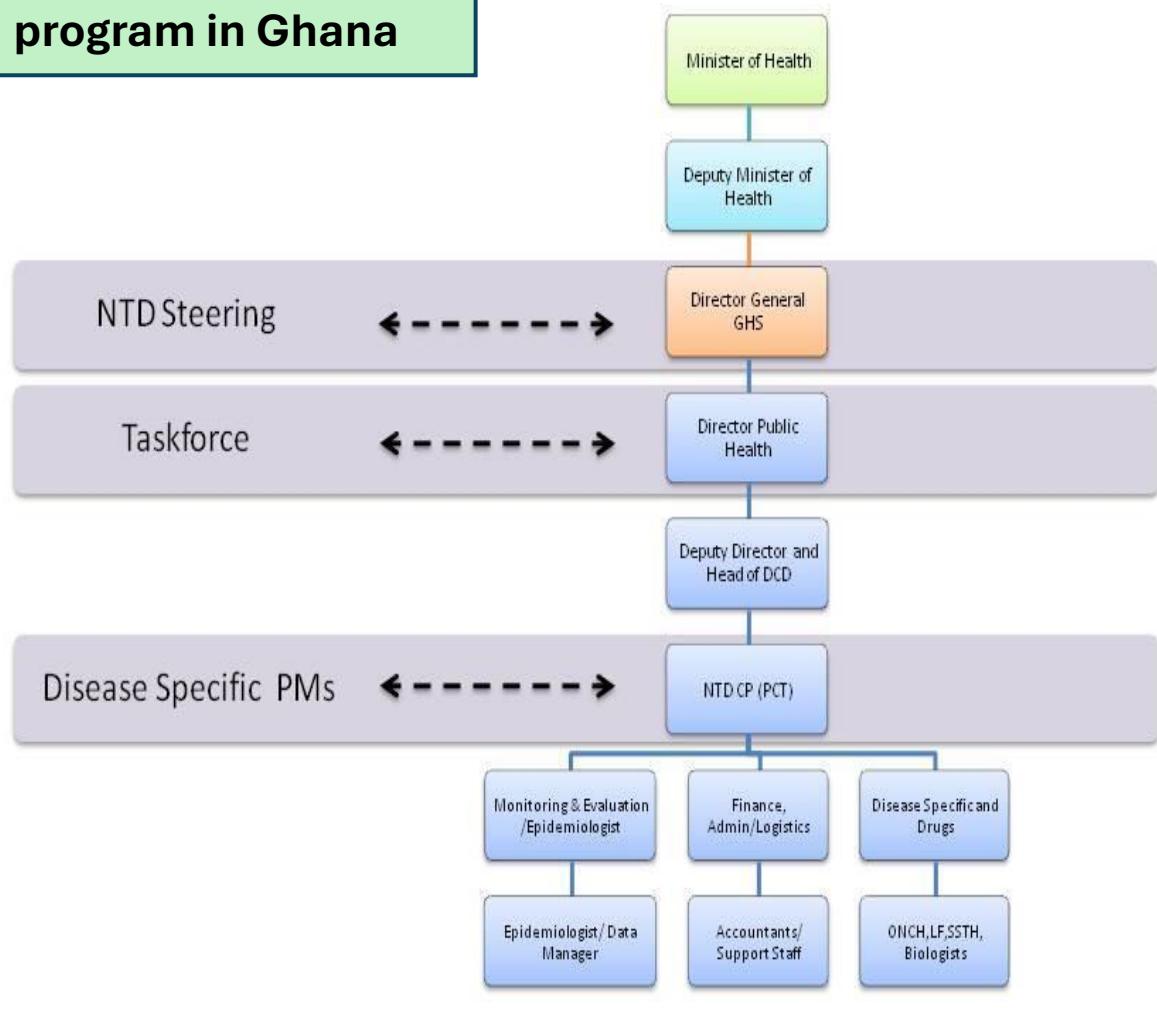
Integration of NTD Data into Routine HMIS in Ghana

Mr. Ernest Mensah
Monitoring and Evaluation officer-GHS/NTDP



Country context

Structure of the NTD program in Ghana



NTD Data Availability

- DHIMS 2 captured morbidity data on Onchocerciasis, Trachoma, Schistosomiasis/STH
- NTD Excel Reporting Templates were used to capture some data on MDAs for Onchocerciasis, Lymphatic Filariasis, Schistosomiasis/STH

NTD Data Challenges

- Untimely and Incomplete submission of NTD Reports at all levels (National, Regional and District Levels)
- No NTD Program reporting form available on DHIMS 2 to capture Data on MDAs and other related activities of the program
- Lack of Proper storage (archiving) of past Data on NTD program activities (MDAs, DSAs, etc.)
- Shortage of Registers, Forms and other related logistics for data collection, collation and reporting at the District and Facility levels

Country context

NTD Data Challenges

- Inadequate Supervision from the Regional and District levels during planned activities (MDAs, etc)
- Lack of collaboration on the part of NTD Focal Persons and RHIOs in some Regions and Districts
- There was the need to change to a more reliable, fast ,responsive and secure data management system
- **To integrate NTD services into primary healthcare using the home visit register**
- Act West provide the needed financial and logistical support
- Massive improvements started in late 2019 (2023 for the Home Visit Registers)

HMIS integration - overview, process and key considerations

- The NTDP planned to get all its data from all activities (routine services , MDAs and DSAs) captured using the DHIMS 2 system
- The main goal for the Integration was to have a secure , reliable ,timely , complete and very responsive NTD data management system

Phase 1

- ✓ **Phase 1 – Routine Morbidity and MDA**
Data: by introducing Monthly and Quarterly Data collection forms on DHIMS 2
- ✓ **Phase 1 – Data quality monitoring / Development of SOP**
- ✓ **Phase 1 – Document the data integration processes for phase 1 and share lessons**

Phase 2

- ✓ **Phase 2 – Integrate NTD services into primary healthcare using the home visit register**

- Phase 2 – Step I:** Preliminary technical workshop- identification and prioritization of key NTD data elements for integration
 - Step II: Training of field teams on piloting tools
 - Step III: Roll-out of Piloting
 - 12 weeks (September to December 2023)
 - Mid-line and endline evaluations
 - Step VI: M&E: Review, learning & evaluation sessions / high-level advocacy session

Phase 3

- ✓ **Phase 3 – Introduce data capturing forms for LF, SCH/STH and OV DSAs**
- ✓ **Phase 3 – Document the data integration processes for phase 2 and share lessons)**

1

C/UCN

1st Coverage/Communicable
and noncommunicable Diseases



2

/ high-level advocacy session

3

HMIS integration - overview, process and key considerations

The main stakeholders



Internal Stakeholders (NTD core staff including PM, NTDP desk officers)



Batch 1: External Stakeholders
(MOH, GHS
DG, PPME, GES, ICCC and
GOEC)



Batch 2: External Stakeholders (Sub national NTD coordinators, Sub national health information officers, selected Ghana education service staff ,DHIMS 2 technical team , GHS IT staff, Act West Staff for technical support)

HMIS integration - overview, process and key considerations

- Phase 1:
 - NTD Monthly Morbidity and Quarterly MDA data capturing forms have been introduced with all its associated trainings at all levels
 - This has improved the availability of NTD Morbidity and MDA data at all levels
 - Documentation of Integration process has been completed with support from GHS Regional Health information Officers , Regional NTD Coordinators and Act West Consortium
- Data Quality monitoring and improvement is still ongoing
- Phase 2 : To integrate NTD services into primary healthcare using the home visit register
- Phase 3 : Discussions have started on the inclusion of DSA data into DHIMS 2 with the technical team

HMIS integration - overview, process and key considerations

Trainings on newly introduced forms

- Cascaded trainings were conducted for all staff who handled NTD data on the monthly morbidity and quarterly MDA forms (regional teams ,district teams and sub-district teams)
 - Forms were printed and distributed with support from Act West program
 - Follow up coaching and mentoring has been conducted by NTDP and Act West to support areas with some reporting challenges
- **NTD data report for the monthly morbidity form started January 2021**
- **NTD data report for the quarterly MDA started 3rd Quarter 2021 after the MDA was implemented in June /July 2021**
- **Integrate NTD Data Element into the Home visit Register**
 - Training of field teams on piloting tools
 - Step V: Roll-out of Piloting
 - 12 weeks (September to December 2023)

Challenges with integrating NTD data into HMIS

Difficulties/Challenges

- Even though the Health system is functioning to improve access to health facilities in communities, there are **large data gaps** for NTDs due to gaps in reporting systems, lack of equipment, low case reporting at facilities, stigmatization among others.
- Internet challenges in some part of the country affects NTD data entry into DHIMS 2
- Lack of desktop computers/laptops to facilitate data entry
- More trainings had to be done due to high staff attrition in some areas
- Too many competing activities leading to the neglect of NTD data management activities

Next Steps and Lessons with integrating NTD data into HMIS

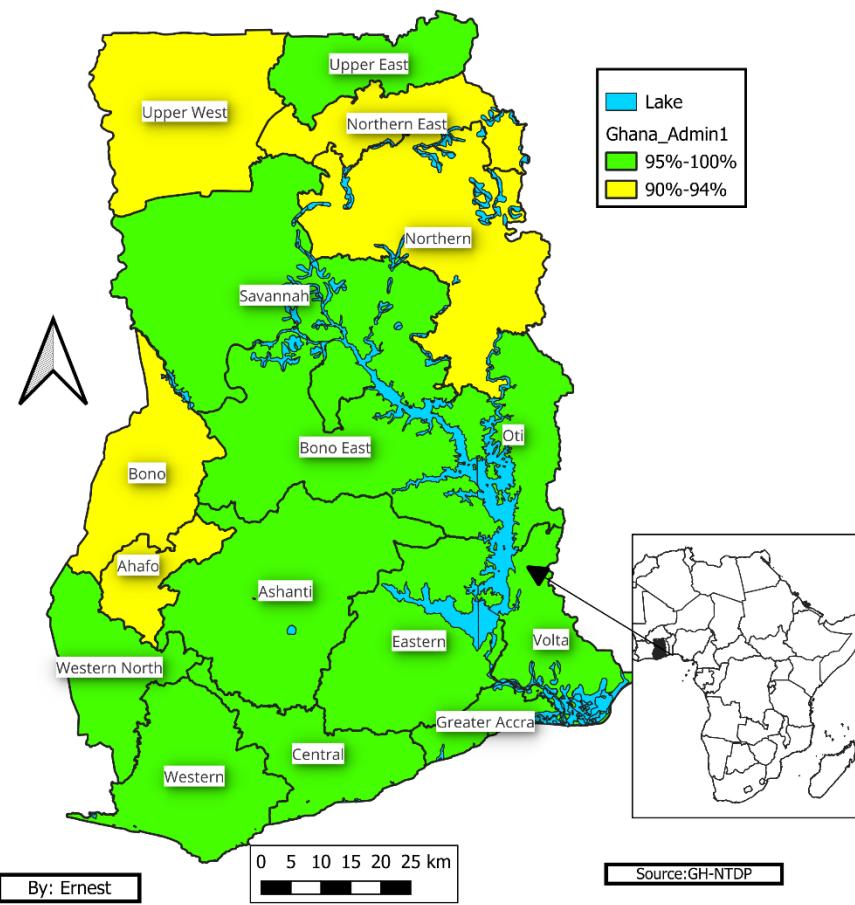
- Continue activities that have started for phase 3
 - Introduction of DSA data capturing forms in DHIMS 2
 - Documentation of phase 3 activities and share lessons
- We hope to complete phase 3 by the end of December 2024

Lessons

- Strong commitment from NTD Program manager , Desk officers and other NTD sub national officers towards the integration process speeds up activities
- Engaging stakeholders during the integration documentation process has also given rise to other activities such the adoption of EDC tools for MDAs

Benefits to integrating NTD data into HMIS

DHIMS 2 Monthly NTD Report -2024 2ND Quarter Reporting Rate%



2nd Quarter -Monthly Neglected Tropical Diseases Report 2024					
Regions	Actual reports	Expected reports	Reporting rate	Actual reports on time	Reporting rate on time
Upper West	1,578	1,722	91.64	1,504	87.34
Ashanti	3,470	3,588	96.71	3,242	90.36
Central	1,772	1,821	97.31	1,758	96.54
Greater Accra	2,242	2,265	98.98	2,183	96.38
Volta	1,443	1,443	100	1,437	99.58
Northern	1,267	1,350	93.85	1,232	91.26
Eastern	3,090	3,090	100	3,078	99.61
Oti	714	714	100	714	100
Bono East	834	876	95.21	745	85.05
Savannah	469	495	94.75	438	88.48
Western North	710	711	99.86	709	99.72
Upper East	1,504	1,566	96.04	1,476	94.25
Western	1,543	1,581	97.6	1,542	97.53
Ahafo	358	399	89.72	351	87.97
North East	343	375	91.47	343	91.47
Bono	805	873	92.21	781	89.46
Ghana	22,142	22,869	96.82	21,533	94.16

Benefits to integrating NTD data into HMIS

- NTD Monthly Morbidity and Quarterly MDA data capturing forms have been introduced with all its associated trainings at all levels
- The integration has improved reporting and case detection on suspected NTD conditions, as well as referral rates in the respective Health facilities
- Visibility / Capacity on diagnosis of NTDs among Health Workers
- This has improved the availability of NTD Morbidity and MDA data at all levels
- Increase awareness of NTD

Lessons learned and opportunities for improvement

- The Magnitude of NTDs is more than what is estimated just that most of them do not seek care at health facilities.
- Some clients with hydrocele feel shy disclosing to health workers
- Health system at lower level not robust enough to address the needs of NTD patients. (feeling of hopelessness due to several appearance made at H/Fs and still no sign of improvement)
- Psychotherapy is essential in the management of chronic and disfiguring NTD cases.
- Integration of NTDs to all other Primary Health Care services will lead to sustainability.

Success Story / Achievement

How did you benefit from the health worker training on NTDs and Health Information Management (e-tracker)?

- ✓ It has brightened my knowledge on skin conditions and also to differentiate the various types of NTDs which I used to mix.
- ✓ Before the training, it was difficult to identify skin diseases and how to best manage them. But now, I'm able to educate my clients to understand these conditions.
- ✓ It has built my capacity on the NTD case detection.
- ✓ It has given me much knowledge to educate my community members on early detection and treatment of cases and it has also given me the opportunity to educate them on the myths associated with the NTDS.

Challenges with integrating NTD data into HMIS

Ghana MOH

GHS

GES

WHO

USAID's Act to End NTDs | West Program

Sightsavers

WVI

Merck

GSK

Anesvad



THANK YOU



**World Health
Organization**

African Region

UHC/UCN

Universal Health Coverage/Communicable
and Noncommunicable Diseases



Panel discussion Q&A



World Health
Organization

African Region

UHC/UCN

Universal Health Coverage/Communicable
and Noncommunicable Diseases



Lunch
Starting back at 14:30



World Health
Organization

African Region

UHC/UCN

Universal Health Coverage/Communicable
and Noncommunicable Diseases

Overview on use of ESPEN Collect

Data Workshop on Monitoring and Evaluation of NTDs programmes
Brazzaville, Congo Republic, August 14th 2024



Outline

Full package of support of epidemiological and coverage surveys

What are the main components of ESPEN Collect?

Progress until March 2024

Data collection and reporting

Pain points and what is working well

ESPEN Collect team

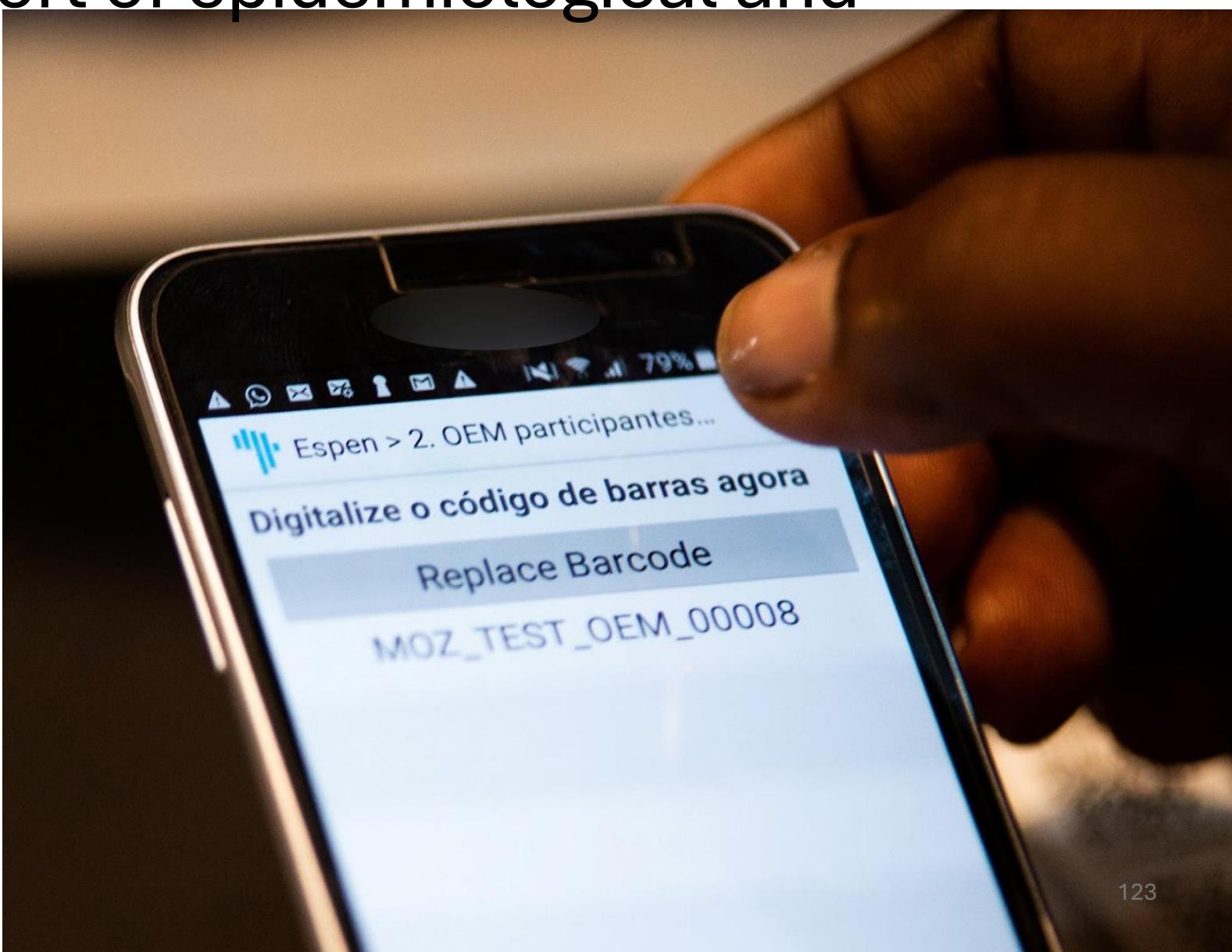
Partner support is needed to be sustainable

ESPEN Collect roadmap

Break out groups

Full package of support of epidemiological and coverage surveys

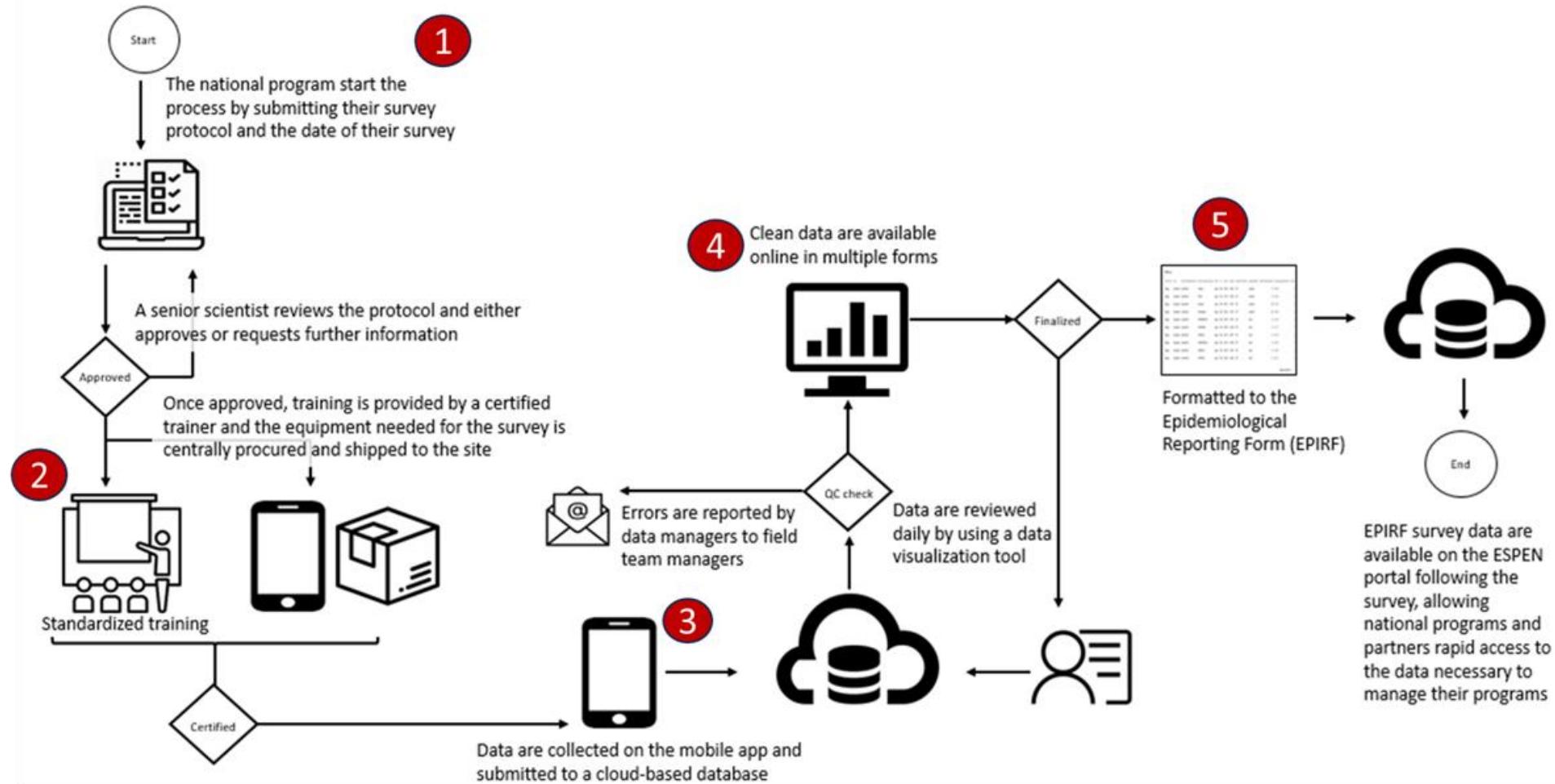
- Launched in 2018, it has facilitated nearly **200 surveys across 31 countries**, focusing on LF, onchocerciasis, schistosomiasis, and soil-transmitted helminthiasis.
- ESPEN Collect provides thorough support for surveys, including protocol reviews by experts, standardized tools, and training materials.
- It offers assistance with field team training and supplies cell phones for data collection.
- A centralized data manager supports the process, and a supervisor dashboard allows real-time monitoring of field data.
- Program managers receive pre-filled epidemiological report forms with survey results.



What are the main components of ESPEN Collect?

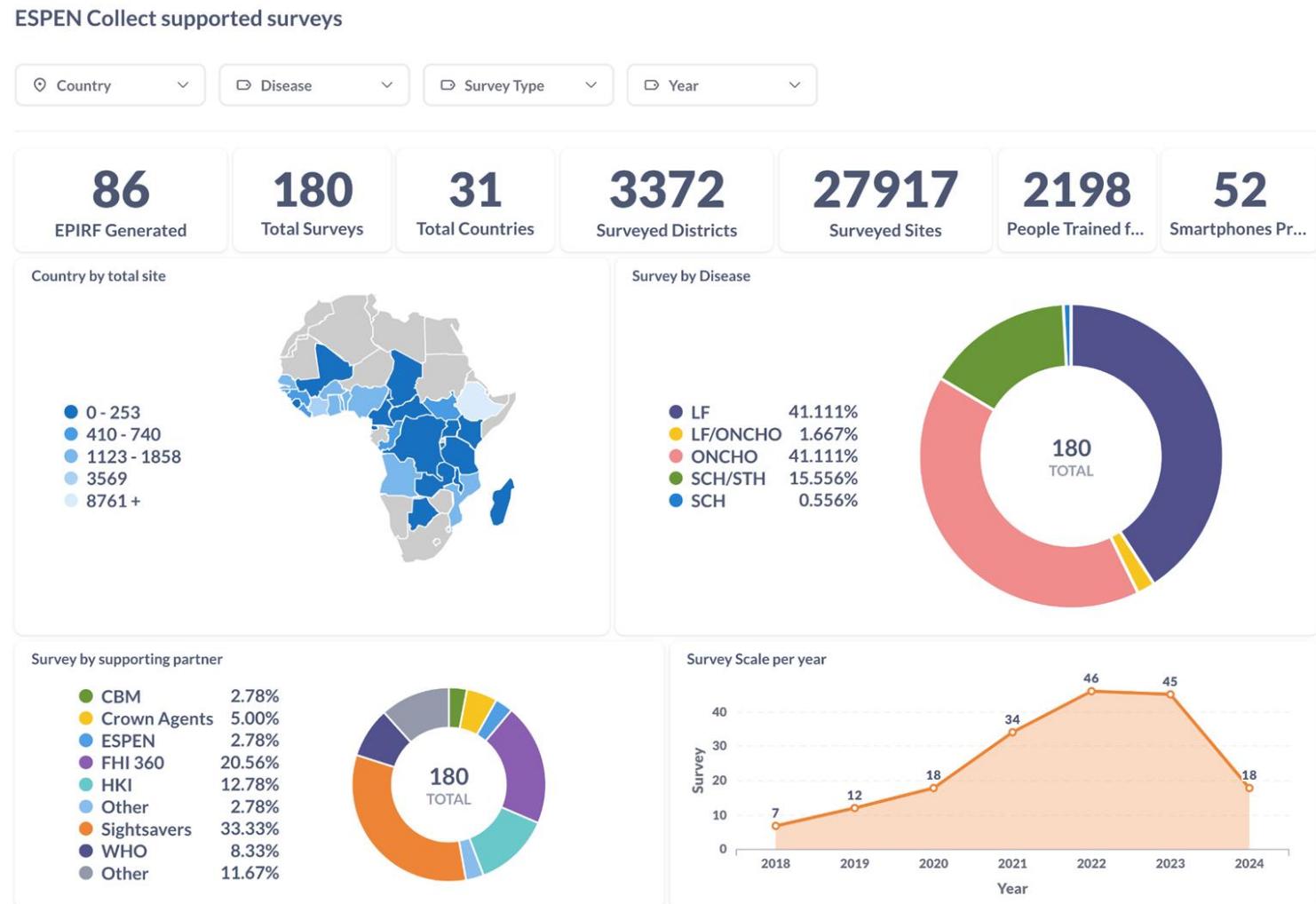
There are **five main components** of the ESPEN Collect survey support services:

- 1 Registration
- 2 Training
- 3 Data collection
- 4 Online dashboard for quality control
- 5 Generation of the EPIRF



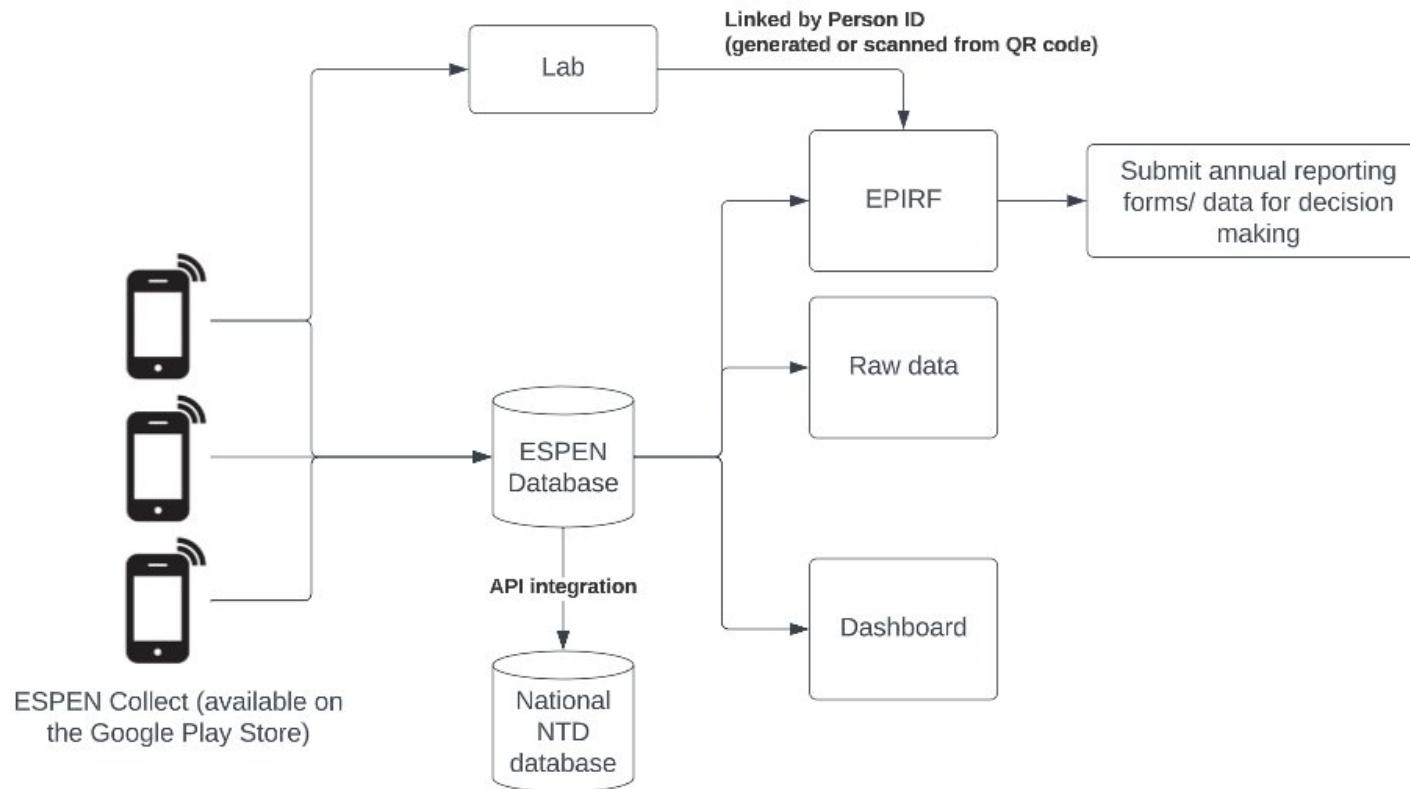
Progress until March 2024

- ESPEN Collect has supported a total of **180 surveys**, including **76 for LF**, **75 for ONCHO**, **29 for SCHISTO**, and **STH**.
- ESPEN Collect has **generated 86 EPIRFs** for annual reporting, aiding in decision-making and analysis.
- **Over 2,100 peoples** have been trained to use ESPEN Collect.
- ESPEN Collect has supported surveys in **over 28,000 schools and communities** across the African region.



<https://metabase.espen.securedatakit.com/public/dashboard/6a7f9a50-bd0f-46bc-99c9-f1cf25ee0bc3>

Data collection and reporting



- ESPEN Collect allows data to be integrated into a national database.
- At the end of the survey, ESPEN Collect generates the EPIRF.
- If data goes through a laboratory, ESPEN Collect generates the EPIRF and sends it to the country, where the lab data is added before final integration.

ESPEN Collect team

System Administration

- Dyesse YUMBA
- Jorel BOULINZAN

Disease Expert

- Dr. Didier Bakajika
- Dr. Pauline Mwinzi

Future team member

- <hiring a new data manager> - RLMF funding
- <hiring a new survey coordinator>
- <hiring francophone regional trainer> - RLMF funding
- <hiring anglophone regional trainer> - RLMF funding

Pain points and what is working well

Pain points

- ESPEN Collect faces challenges due to limited human resources, making it difficult to meet the growing demand for surveys.
- The mobile application is not yet compatible with Apple systems (iOS and iPad OS).
- On-ground support needs to be strengthened for countries lacking a strong data management team or experience with mobile data collection.

what is working well

- Partners and countries are becoming accustomed to using ESPEN Collect, leading to active participation in surveys and continuous improvement.
- Countries have access to their data throughout the entire survey process and retain full control over who can access this data.
- Disease experts assist in the review of protocols, ensuring high-quality and accurate surveys.
- Flexibility in designing forms allows for customization to meet specific survey needs.

Partner support is needed to be sustainable

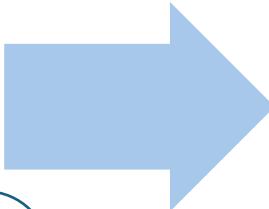
Financial and technical support is needed to ensure ESPEN Collect provides quality at scale. Perhaps a **technical advisory group could** be established with the aim of ensuring the sustainability of ESPEN Collect

ESPEN Collect has shown to be a powerful resource for a wide range of data collect, data analysis, and reporting functions. More partner and country engagement can ensure that ESPEN Collect is continuing to meet the needs of its users

ESPEN Collect roadmap

Research

- Support for precision mapping surveys for schistosomiasis.
- Support for onchocerciasis prospection surveys.



Next Step

- utilization of ESPEN Collect in MDA campaigns.

Break out groups



Discuss various models for financial and technical support to ensure ESPEN Collect can provide quality at scale



What is working well and what isn't working as well and what are the financial implications of improving the service



Discuss and share experience from partners' perspective and countries' perspective on the ESPEN Collect survey support service (registration process, training, setup, implementation, data management, access to data, EPIRF generation, integration of lab data, integration with external systems)

Group Roles: Assign specific roles within each group, such as a facilitator, and a note-taker to ensure a structured discussion and effective reporting.

Time Management: Allocate a specific amount of time (5-10 min) for each question. This will help keep the discussion focused and balanced.

Reporting Back: The facilitator from each group should prepare to present their findings to the larger group. Encourage them to highlight the most critical points

Groups presenting results of Session 2: ESPEN Collect Services

Working Group Discussion



Group 1 presenting results of Session 2: ESPEN Collect Services

Working Group Discussion



Day 3: ESPEN Collect

1. Discuss various models for financial and technical support to ensure ESPEN Collect can provide quality at scale

Financial

- An expansion of staff is required to facilitate both service continuity - but is this enough considering upcoming survey needs? (both as an IT, analytic and training need)
- Donors/funding managers should commit to the use of ESPEN Connect if this is feasible.
- A portion of funding allocated for surveys could possibly be channelled to ESPEN Collect (built in overhead cost for the associated data management needs)

Technical

- Investment in the use of iOS queried - due to the breadth of Android, this could be deprioritised.
- Decentralised training support (follow Tropical Data model) – i.e. training of country

Day 3: ESPEN Collect

2. What is working well and what isn't working as well and what are the financial implications of improving the service

Working Well	Issues and suggestions where not working well
Wide uptake of the tool is noted as a positive.	Team is insufficient for current support (and will struggle with the scale of upcoming surveys)
	Error flag/check. Challenges in getting a response from the ESPEN team when fixes requiring a back-end update required.
	Consider use of other open-source tools (ODK Collect) as the underlying software of ESPEN Connect.
	Is there a way to push results/directly integrate with national systems (DHIS2) so the country programme has results available for timely review.

Note, Tropical Data is highlighted as providing best practice in survey support.

Day 3: ESPEN Collect

3. Discuss and share experience from partners' perspective and countries' perspective on the ESPEN Collect survey support service (registration process, training, setup, implementation, data management, access to data, EPIRF generation, integration of lab data, integration with external systems)

- Registration process is noted as timely and efficient.
- Training is provided to country staff who subsequently train fieldworkers (ToT model), however the lead time for the training is long at 2-3 months.
- EPIRF generation is a positive feature of ESPEN Collect (but noted this can be replicated in other platforms)

Group 2 presenting results of Session 2: ESPEN Collect Services

Working Group Discussion



Day 3: ESPEN Collect

1. Discuss various models for financial and technical support to ensure ESPEN Collect can provide quality at scale

- When new use cases arise, can partners step in to support financially (examples of integrating tropical data, funding ESPEN collect)
- Giving some level of access to data to partners might help support the financial support problem (but need to be careful here – it is not their data)

Day 3: ESPEN Collect

2. What is working well and what isn't working as well and what are the financial implications of improving the service

- There are issues with communication with both parties feeling like they are always waiting for feedback from each other
 - Solution? Ticketing system
 - Solution? Portal for reviews
- Relying on ESPEN support can cause issues when surveys are implemented over the weekend and require rapid feedback and input
- There are things that ESPEN Collect does already (like builds the forms themselves) that countries feel that they could do themselves. Is there a way for countries to get a template to use to build the forms themselves.

Day 3: ESPEN Collect

3. Discuss and share experience from partners' perspective and countries' perspective on the ESPEN Collect survey support service (registration process, training, setup, implementation, data management, access to data, EPIRF generation, integration of lab data, integration with external systems)

- NTD programs feel like there is a lack of country ownership and find it unjust that they can only “view” their data and can’t “access” it
 - Before the current process, two possible solutions, but neither was fully fit for purpose:
 1. ESPEN send a file to MOH for full cleaning and review to send back
 2. ESPEN provides full database access to clean directly
- Example of Nigeria and Kenya where laws were passed in 2024 where data is not allowed to be sent outside of the country to be processed only to be sent back in. This may become more and more common. If partners can champion abiding by these regulations/expectations, that will serve as an example for others to follow. There will be a need to look for a sustainability model that can begin to account for the fact that some of these regulations are still to come or will be getting more strict.
- Is there a way for ESPEN to still coordinate, review protocols, provide dashboards and real-time feedback, etc, but leave the data in country and access it via an API instead of store it themselves and sharing it back. All countries would have to do is share the EPIRF at the end of the day.
- can there be some form of coordinating/working group, LED BY THE MINISTRY (like to Onchocerciasis Elimination Committee), that involves partners that allows for a similar process to happen, but very clearly led by the ministry
- Related to this, we discussed the possibility of having ESPEN country entities (e.g. ESPEN Nigeria) as a concept that helps facilitate the implementation of a “country ownership” model
- Integration into HMIS would be a great benefit

Group 3 presenting results of Session 2: ESPEN Collect Services

Working Group Discussion



Day 3: ESPEN Collect

1. Discuss various models for financial and technical support to ensure ESPEN Collect can provide quality at scale
 - Leverage partner support in country to provide technical support for the ESPEN surveys
 - Partner support to build technical capacity in country to use ESPEN Collect tools
 - Pay for MOH M&E staff to attend any trainings related to ESPEN

Day 3: ESPEN Collect

2. What is working well and what isn't working as well and what are the financial implications of improving the service

- **Working well:**
 - ESPEN provided a lot of support for new surveys to ensure – SCH practical precision assessment
 - Easy to download hard copies of forms – provides a back-up and for data validation
- **Not working well:**
 - ESPEN Collect takes time to provide feedback, no real time support. Increased time increases the cost of the survey.
 - Since there is no real time support, you cannot make changes to the tools later in the process.
 - Limited access to the server during a survey.
 - Countries changing their data protections laws, will not allow PII stored in another country
- **Cost of improving services:**
 - Hire more full-time staff
 - ESPEN staff that can travel and provide support in-country

Day 3: ESPEN Collect

3. Discuss and share experience from partners' perspective and countries' perspective on the ESPEN Collect survey support service (registration process, training, setup, implementation, data management, access to data, EPIRF generation, integration of lab data, integration with external systems)

- **Registration/training/setup**
 - Registration (3 months)
 - Training – depends on in-person or virtual (in-person takes additional time)
 - Setup – dependent on timeline for review of protocol and ethical clearance both in the country of planned survey and WHO AFRO
- **Implementation/data management/access to data**
 - Lack of access to data during the survey
 - Dependent on # of EUs/Focus/Zone
 - Dependent on available funding for analysis (OV)
- **EPIRF/integration of lab data/integration with external systems**
 - Useful for generating the EPIRF
 - Delays on getting results from OV samples
 - No experience with integration yet

Groupe 4 présente les résultats de la Session 2 : ESPEN Collect

Working Group Discussion



Jour 3: ESPEN Collect

1. Discutez de divers modèles de soutien financier et technique pour garantir qu'ESPEN Collect puisse fournir une qualité à grande échelle.

Propositions de modèle de soutien financier et technique pour une offre de services de qualité à grande échelle	Implications
ESPEN va renforcer les capacités techniques des équipes pays (programme et partenaires) pour alléger la demande d'assistance technique lors de la mise en œuvre des enquêtes	Ressources humaines (formateurs) Ressources financières (participants et formateurs)
Identifier un point focal au niveau du pays qui sera en charge de paramétriser les questionnaires et de faire le suivi de la qualité des données tout au long des enquêtes	Ressources humaines (formateur et point focal) Pas de nouveau recrutement

Jour 3: ESPEN Collect

2. Qu'est-ce qui fonctionne bien et qu'est-ce qui ne fonctionne pas aussi bien et quelles sont les implications financières de l'amélioration du service?

Ce qui fonctionne bien

Le processus de demande d'assistance est assez facile à suivre et disponible en ligne

L'application même est assez facile à utiliser pour la collecte des données et leur soumission

Accès facile et permanent aux données collectées

Possibilité d'utiliser l'application en mode offline

Possibilité de générer les identifiants des participants de manière automatique

Disponibilité d'un tableau de bord pour le suivi de la collecte de données

Jour 3: ESPEN Collect

2. Qu'est-ce qui fonctionne bien et qu'est-ce qui ne fonctionne pas aussi bien et quelles sont les implications financières de l'amélioration du service?

Ce qui fonctionne moins bien	Implications financières de l'amélioration du service
Difficulté à exploiter la carte des sites produite dans Metabase	Aucune
Lenteur dans le feedback	Oui, recrutement staff au niveau ESPEN
Paramétriser certains indicateurs afin qu'ils figurent sur le dashboard	Aucune

Jour 3: ESPEN Collect

3. Discuter et partager l'expérience du point de vue des partenaires et du point de vue des pays sur le service d'assistance aux enquêtes ESPEN Collect (processus d'enregistrement, formation, configuration, mise en œuvre, gestion des données, accès aux données, génération EPIRF, intégration des données de laboratoire, intégration avec des systèmes externes)

Volet auquel s'applique le service d'assistance	Expérience du point de vue pays et améliorations souhaitées	Expérience du point de vue partenaire et améliorations souhaitées
Processus d'enregistrement	Bonne mais l'exigence d'avoir la validation du comité éthique avant de démarrer le processus retarde Mettre en place un système de notification de la demande d'assistance à toutes les parties prenantes	
Formation	Moyenne, difficulté à avoir une formation en présentiel par un personnel ESPEN Procurer une certification au personnel du pays formé	
Configuration	Bonne	Bonne mais par moments beaucoup de tours de correction requis.

Jour 3: ESPEN Collect

3. Discuter et partager l'expérience du point de vue des partenaires et du point de vue des pays sur le service d'assistance aux enquêtes ESPEN Collect (processus d'enregistrement, formation, configuration, mise en œuvre, gestion des données, accès aux données, génération EPIRF, intégration des données de laboratoire, intégration avec des systèmes

Volet auquel s'applique le service d'assistance	Expérience du point de vue pays et améliorations souhaitées	Expérience du point de vue partenaire et améliorations souhaitées
Mise en œuvre	Bonne, parfois lenteur de rétroaction sur les données soumises	
Gestion des données	Bonne	
Accès aux données	Bonne Proposition de partager le tableau de bord avec d'autres acteurs que ceux qui sont autorisés à avoir un accès complet aux données	
Génération EPIRF	Bonne	
Intégration des données de laboratoire	Intégrer les données en lien avec les enquêtes entomologiques et épidémiologiques	
intégration avec des systèmes externes	Bonne	

Groupe 5 présente les résultats de la Session 2 : ESPEN Collect

Working Group Discussion



Jour 3: ESPEN Collect

Directives pour les Groupes de Travail

Rôles dans le Groupe: Attribuez des rôles spécifiques au sein de chaque groupe, tels qu'un facilitateur et un preneur de notes, pour garantir une discussion structurée et un compte-rendu efficace.

Gestion du Temps: Allouez un temps précis (5-10 minutes) pour chaque question. Cela aidera à maintenir la discussion concentrée et équilibrée.

Rapportage: Chaque groupe doit se préparer à présenter ses résultats au groupe élargi. Encouragez-les à mettre en avant les problèmes les plus critiques et les solutions réalistes.

1. Discutez de divers modèles de soutien financier et technique pour garantir qu'ESPEN Collect puisse fournir une qualité à grande échelle.
2. Qu'est-ce qui fonctionne bien et qu'est-ce qui ne fonctionne pas aussi bien et quelles sont les implications financières de l'amélioration du service?
3. Discuter et partager l'expérience du point de vue des partenaires et du point de vue des pays sur le service d'assistance aux enquêtes ESPEN Collect (processus d'enregistrement, formation, configuration, mise en œuvre, gestion des données, accès aux données, génération EPIRF, intégration des données de laboratoire, intégration avec des systèmes externes)

Jour 3: ESPEN Collect

1. Discutez de divers modèles de soutien financier et technique pour garantir qu'ESPEN Collect puisse fournir une qualité à grande échelle.
 - Financement de la formation en présentiel des points focaux dans chaque pays (administrateurs, enregistreurs)

Jour 3: ESPEN Collect

2. Qu'est-ce qui fonctionne bien et qu'est-ce qui ne fonctionne pas aussi bien et quelles sont les implications financières de l'amélioration du service?

Ce qui fonctionne bien

- Disponibilité de l'équipe ESPEN à apporter un appui technique aux pays pendant la collecte des données des enquêtes
- Financement de l'achat des tablettes adaptées à la collecte des données pour les pays
- Enregistrement des données off-line
- Production des EPIRF après les enquêtes
- Gratuité du stockage des données
- Evolutivité de l'application

Ce qui ne fonctionne pas bien

- Absence des formations en présentiel pour des points focaux des programmes et partenaires
- Dépendance des pays vis-à-vis de Espen pour l'élaboration des tableaux de bords spécifiques

Implication financière

Renforcement du personnel de Espen

Jour 3: ESPEN Collect

3. Discuter et partager l'expérience du point de vue des partenaires et du point de vue des pays sur le service d'assistance aux enquêtes ESPEN Collect (processus d'enregistrement, formation, configuration, mise en œuvre, gestion des données, accès aux données, génération EPIRF, intégration des données de laboratoire, intégration avec des systèmes externes)

Processus d'enregistrement: **Immédiat dès la soumission du rapport**

Formation: **Privilégier les formations en présentiel**

Configuration: **Adaptée au protocole d'enquête**

Mise en œuvre: **Existence des QR code pour faciliter le matching entre les données de terrain et les données de laboratoire**

Integration avec les systems externes: **Aucune experience**

Merci
Thank you