Disclaimer

Session Objectives

1. Discuss the importance of integrating NTD data into national HMIS

2. Share various country, disease and process examples for integration

3. Provide an opportunity for dialogue and discussion

Session Outline

- Overview of context, benefits and opportunities for DHIS2 integration (Act | West Perspective)

- Country presentations from Mali, Côte d'Ivoire Mozambique, Ethiopia and Ghana.

- Overall considerations and lessons learned for NTD data integration into HMIS.

- Breakout Group discussions – Q&A with panelists

Enhancing data ownership through mainstreaming NTD data into national repository platform: opportunities and challenges

David Glohi MD, MPH
Regional HSS Advisor, FHI 360
USAID's Act to End NTDs | WEST Program

Contents

- Background

- Mainstreaming and country ownership

- Benefit of integrating NTD data into DHIS 2

- Overview of Act | West supportive countries progress

- Challenges & opportunities

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Background

- NTD programs are all progressing toward elimination and control of most PC-NTDs

- USAID's Act | West program supports 11 countries in West Africa to sustain these gains through the development and implementation of an NTD sustainability plan

- Mainstreaming NTD key functions into national systems is a priority for all countries

- Mainstreaming NTDs into NHMIS in Act West 's supported countries, includes storing and managing NTD data in DHIS-2

Mainstreaming and Ownership of NTD Data

- Rely on a government health data management platform

- DHIS2 is populated at the health facility level by the health facility providers, using data collected during health activities

- Data are controlled, analyzed and used at HD and national levels to support decision making and assess performance;

- Provides data availability in real-time and enhances data quality

- Integrated data on MOH platform with shared protocols and health system technical resources for data management

Benefit of integrating NTD data into DHIS 2

- Use of DHIS 2 provides a single data repository platform at District, Regional and National levels

- DHIS 2 is deployed at all levels of the health pyramid: Central, Regional, District and Health facility

- DHIS 2 is used to plan, manage, and advocate for health activities

- Use of DHIS 2 = Integrating NTD interventions into district planning

- Decision made at all level of the health pyramid

Overview and status of mainstreaming process in 9 countries

Country	Selection of NTD indicators to mainstream	Setting up NTDs modules into DHIS 2	NTD data entry into DHIS 2	Use of data for decision making	Interoperability between DHIS2 and existing NTDs stand alone database
Benin	X	X	X		X
Burkina Faso	X	X	X		
Cote d'Ivoire	X	X	X		X
Ghana	X	X	X	X	
Mali	X	X	X		
Niger	X	X			
Senegal	X	X	X	X	X
Sierra Leone	X	X			
Togo	X	X	X		

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Challenges

- NTD Program service data not captured completely in DHIS 2

- Incomplete data collection of NTD indicators and non-routine analysis of data for decision-making or program evaluation

- Continuous challenges on training health workers on the diagnosis of various NTDs

- Integrate DHIS 2 into health district planning for disease surveillance

- Unreliable internet connection countrywide

Opportunities

- Evidence-based decision-making at all levels of the health pyramid

- Quality assurance and security of NTD data

- Anticipate the challenges of post-elimination NTD surveillance by including integration into the national surveillance system

- Improved program planning, monitoring and evaluation

- Internal and external evaluation to assess health sector performance

- Reduce the burden on Health Staff doing Service Data Reporting

Thank you

Process and Indicator Selection to Integrate NTDs into DHIS2

The case of Mali

Dr. Mamoutou DIABATE, Director of the Center of Documentation, Planning, Training and Health Information (CPDFIS), Mali
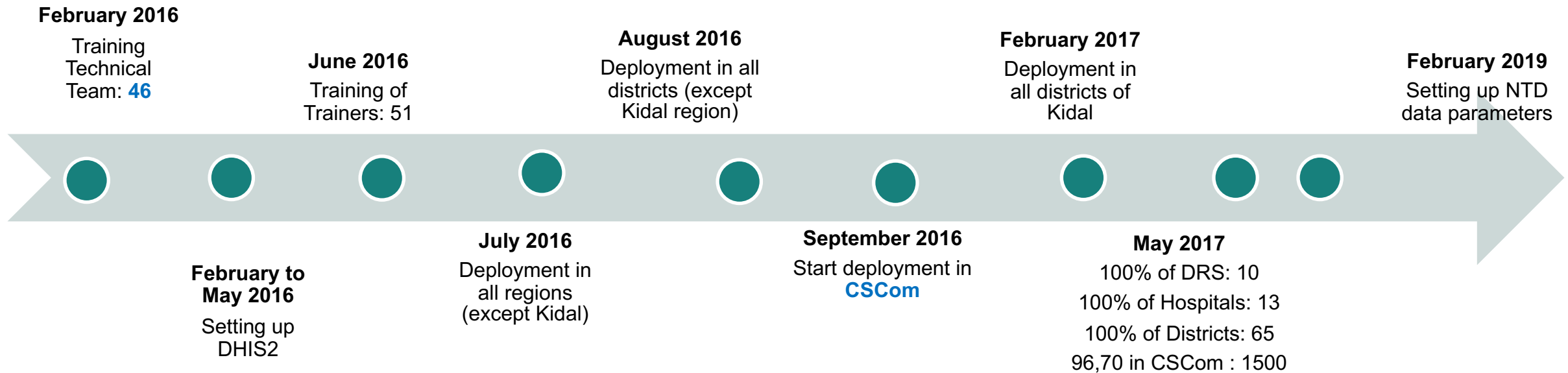
Roll out of DHIS2 in Mali

February 2016

Training Technical Team: **46**

June 2016
Training of Trainers: 51

August 2016
Deployment in all districts (except Kidal region)

February 2017
Deployment in all districts of Kidal

February 2019
Setting up NTD data parameters

February to May 2016

Setting up DHIS2

July 2016
Deployment in all regions (except Kidal)

September 2016
Start deployment in **CSCom**

May 2017

100% of DRS: 10

100% of Hospitals: 13

100% of Districts: 65

96,70 in CSCom : 1500

Provision of :
-   1102 laptop computers
-   472 internet connection keys
-   14 Flybox routers

• Post-training follow-up & SLIS supervision
• Data entry workshop
• Multiplication of collection media

Types of Data Collected

Level Collected	Aggregate data	Individual data
Region	x	
District	x	x
Health Center	x	x
Community	x	x

The data of all programs are integrated in the platform

Process to include NTDs in DHIS2

- Entering historical NTD data

- Setting up NTD tools in DHIS2

- Training of NTD programs on DHIS2

- Training of focal points in the intervention zones of the NTD/Malaria project in the Sahel :
  - **Kayes**: DRS, Keniéba, Kita
  - **Koulikoro:** DRS, Kati, Kangaba
  - **Sikasso:** DRS, Bougouni, Kadiolo, Kolondièba, Koutiala, Sikasso, Yorosso
  - **Ségou**: DRS, Tominian
  - **Mopti**: DRS, Bankass, Douentza, Koro
  - **Tombouctou**: DRS, Tombouctou, Gourma rhaous
  - **Gao**: DRS, Ansongo
  - **Kidal**: DRS, Tin Essako
  - **Taoudenit**: DRS, Taoudenit
  - **Ménaka**: DRS, Ménaka

NTD Indicators in DHIS2 (1/3)

Two workshops were held with NTD programs and other stakeholders.

The following forms were set up:

- **PNSO:** Forms for surveys, trichiasis surgery, facial cleaning and environmental change;

- **PNLO:** Village reporting form for mass treatment of onchocerciasis, simuliidae breeding site mapping survey form, prospecting surveys, entomological and epidemiological pre-stop MDA and stop MDA surveys;

- **PNLSH:** Mass treatment forms (neighborhood village report), schisto geo-helminthiasis evaluation form and TAS filariasis and geo-helminthiasis;

- **PNEFL:** Lymphatic Filariasis assessment form (TAS), village/neighborhood mass treatment report form; hydrocele surgery and lymphedema management form;

- **Drug Management** : Delivery form.
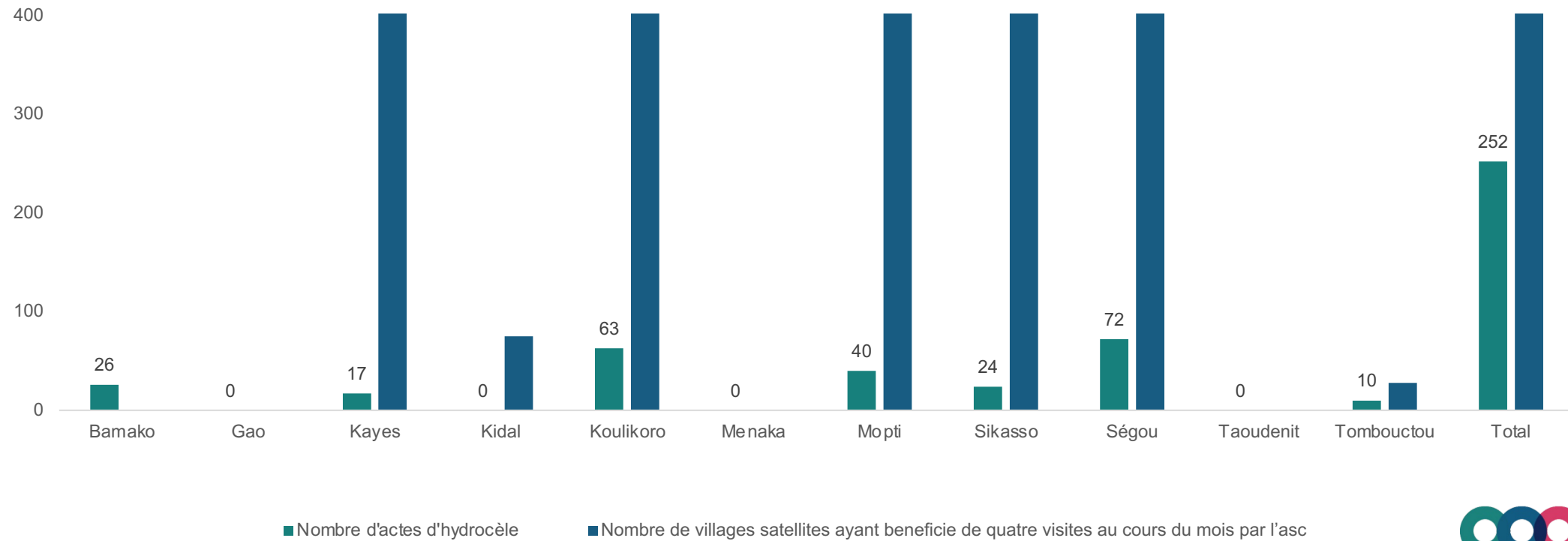
NTD Indicators in DHIS2 (2/3)

Disease-specific assessment indicators have been created:

- **PNSO:** Prevalence of TT and TF, number of children with clean faces, number of people with access to water.

- **PNLO:** Village report form for onchocerciasis mass treatment, simuliid breeding site mapping form, survey form, entomological and epidemiological pre-stop MDA and stop MDA surveys.

- **PNLSH:** Prevalence of urinary schistosomiasis; prevalence of intestinal schistomiasis; prevalence of geo-helminthiasis; intensity of urinary schistosomiasis; intensity of intestinal schistosomiasis;

- **PNEFL:** Number of FTS positive children, number of villages surveyed.

- **Drug Management**: Delivery form.

Challenges

Technical Challenges in Using DHIS2

- Low internet connectivity at some levels for users ;
- Electricity;
- Development of digital data input by CHWs ;
- Maintenance and renewal of equipment.

Non- technical:

- Coordination and collaboration (insufficient data from private sector).

Behavior Change

- Need for improvement at all levels for data completeness and timeliness.

THANK YOU

Process, including challenges and lessons learned, from integrating LF and trachoma MMDP indicators into DHIS2.

Dr Julien Ake, MD, Associate Director COPTIMENT

NNN Meeting – September 2022

Background

The Programme National de Lutte Contre les Maladies Tropicales Negligees a Chimiotherapie Preventive (PNLMTN-CP) Cote d'Ivoire has **expressed as a priority the integration of MMDP data into HMIS/DHIS2.**

→ Recommendations a situation analysis of LF and trachoma MMDP
→ Sustainability plan 2021-2023
→ Strategic plan 2021-2025 of LF and Trachoma MMDP

Background

Act to end NTDs West project funded by USAID through the Technical support of FHI360 and ALM/AIM Initiative supported the **PNLMTN-CP** and the Direction de l'Information et de l' Informatique Sanitaire **(DIIS)** to Integrating LF and Trachoma MMDP data into DHIS2.

The purpose is to ensure that the country **avails secured, quality data integrated and managed by the HIMS/ DHIS2 for surveillance and the elimination dossier of LF and Trachoma**

Process of the integration: 6 phases

Phase 1:

Review of existing LF and Trachoma MMDP data collection tools and data integrated into HIMS/DHIS2.

→ poor specificity and exhaustivity of data into the system.

Process of the integration: 6 phases

Phase 2:

Selection LF and Trachoma MMDP data and indicators to inform surveillance and elimination dossier.

→ Data and indicators for DHIS2 – **13**
→ Data and indicator for program decision making
→ Data and indicators for specific reports

WHO Cote d'Ivoire - WHO Afro – Other NTDs Program across Africa

Process of the integration: 6 phases

Phase 3:

Definition of selected data.

→ Inclusion in the national **health indicators dictionary.**

Process of the integration: 6 phases

Phase 4:

Development of data collection tools that will be used at all level of the health system.

→ Primary and secondary data collection tools
→ Guide to fill in the data in the tools

Process of the integration: 6 phases

Phase 5:

Testing in the field of the data collection tools (pending 2023)

→ Validated tools
- → Register NTDs MMDP
- → Register lymphoedema patient follow up
- → Lymphoedema patient follow up card
- → Monthly NTDS MMDP

Process of the integration: 6 phases

Phase 6:

Setting of the host of data/indicator in DHIS2 (pending 2023)

→ The country will review in 2023, the whole HIMS/DHIS2.

Challenges

- Competing agenda with various programs working for integration data into HMIS/DHIS2.

- Costly process in an environment where HMIS at the peripheral level is not computerized:
  - Printing of data collection tool
  - Training of health workers

- Complex and long process started in 2021

Lessons learned

- Getting the data/indicators in National Dictionary of Health Indicators is a crucial phase in the process.

- Coordinated intervention with other programs willing to integrating their data into DHIS2 to reduce cost and pressure on the division in charge of DHIS 2.

- Align the integration process with the agenda of revision of HMIS led by the MoH improve cost effectiveness.

Acknowledgement

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Analyzing Integration

Mozambique's experience integrating leprosy specific indicators into the national DHIS2 system

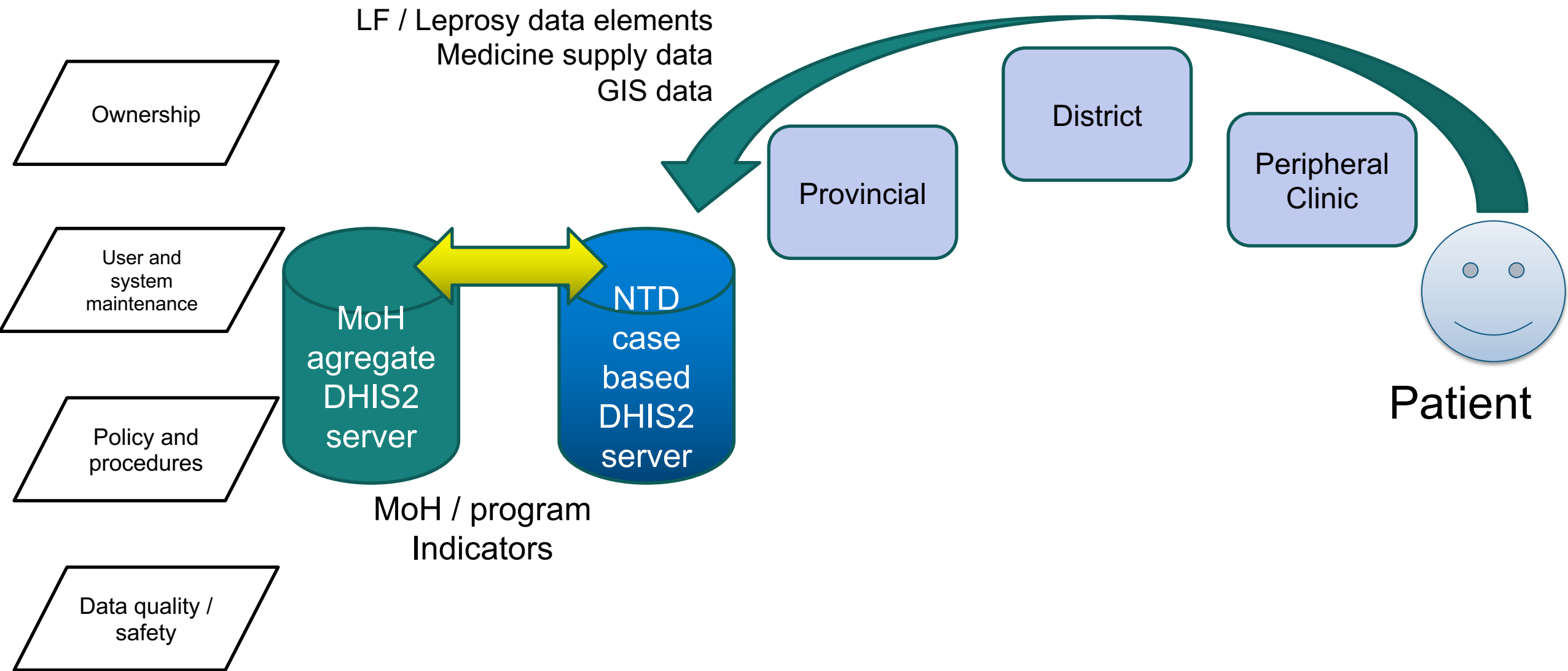**Dr. Arie de Kruijff, The Leprosy Mission International Mozambique Country Manager**
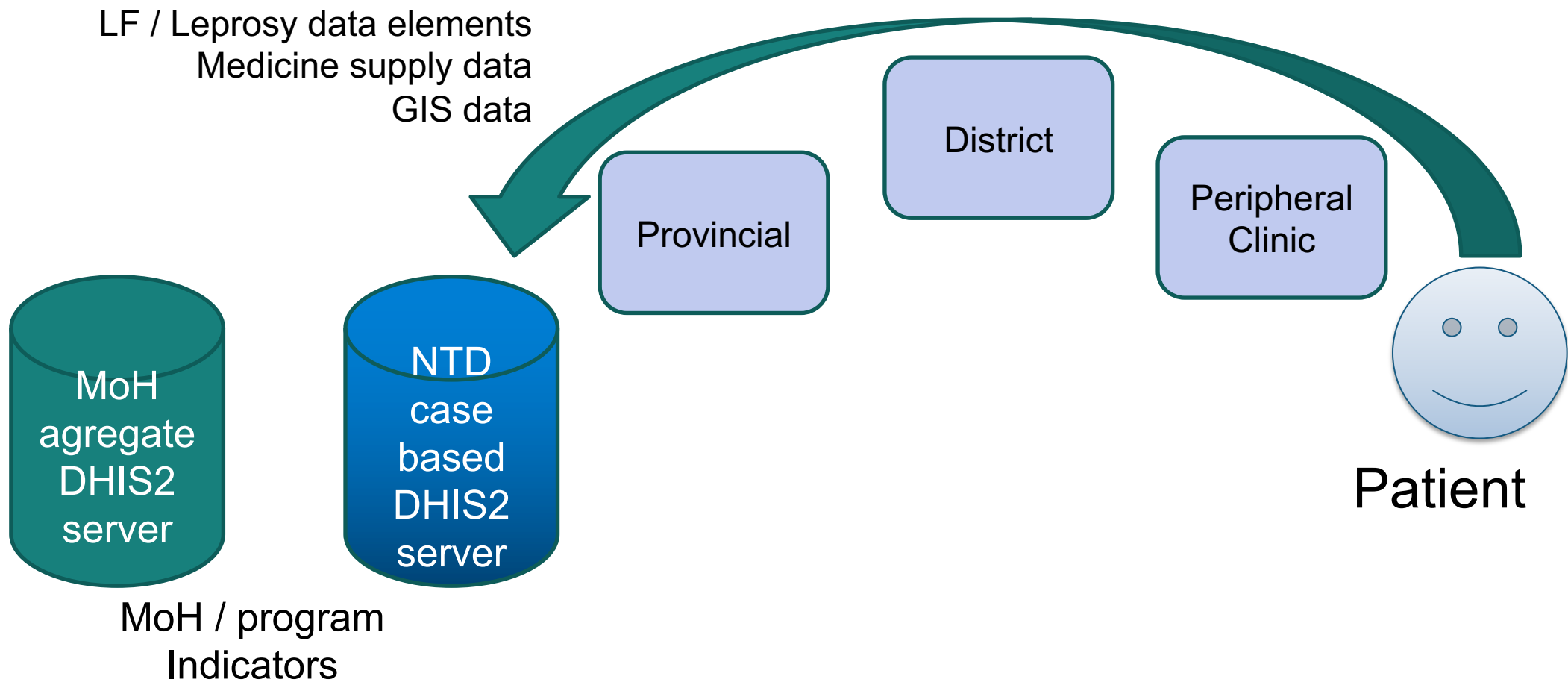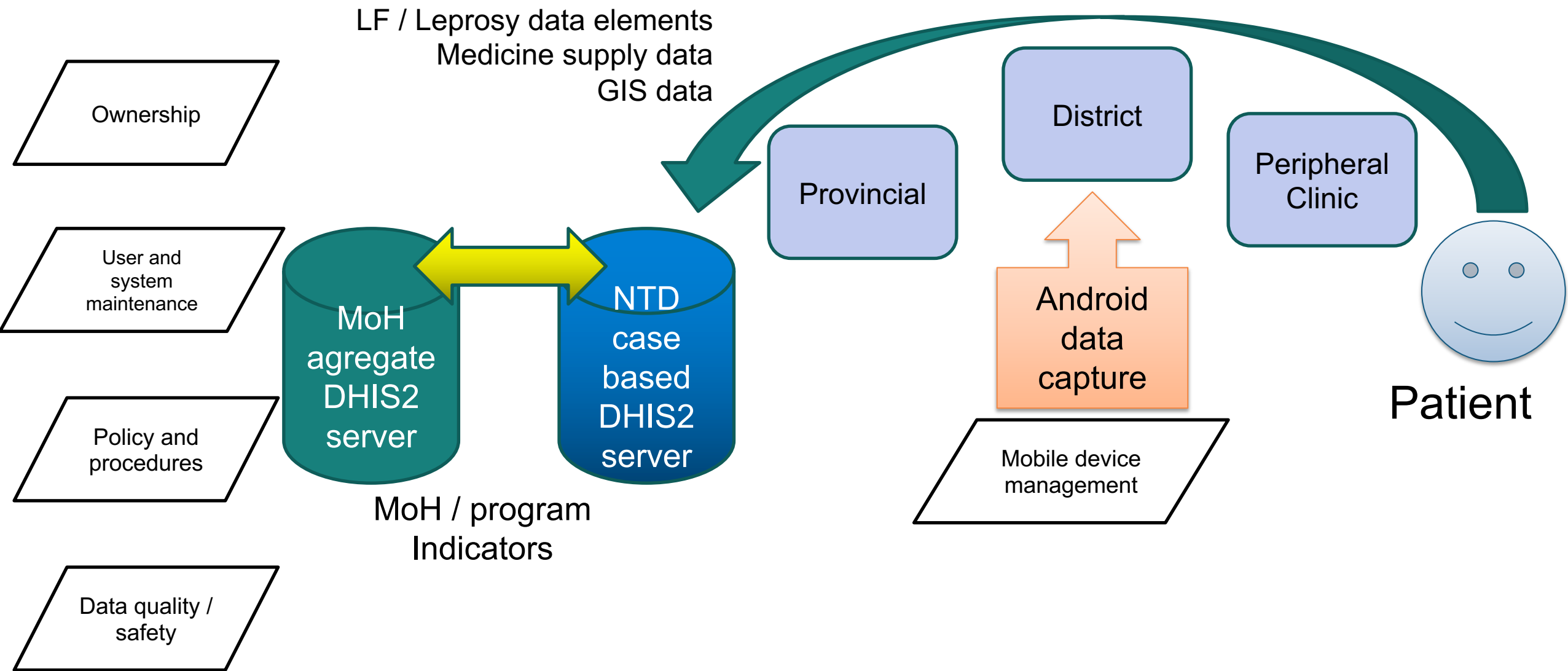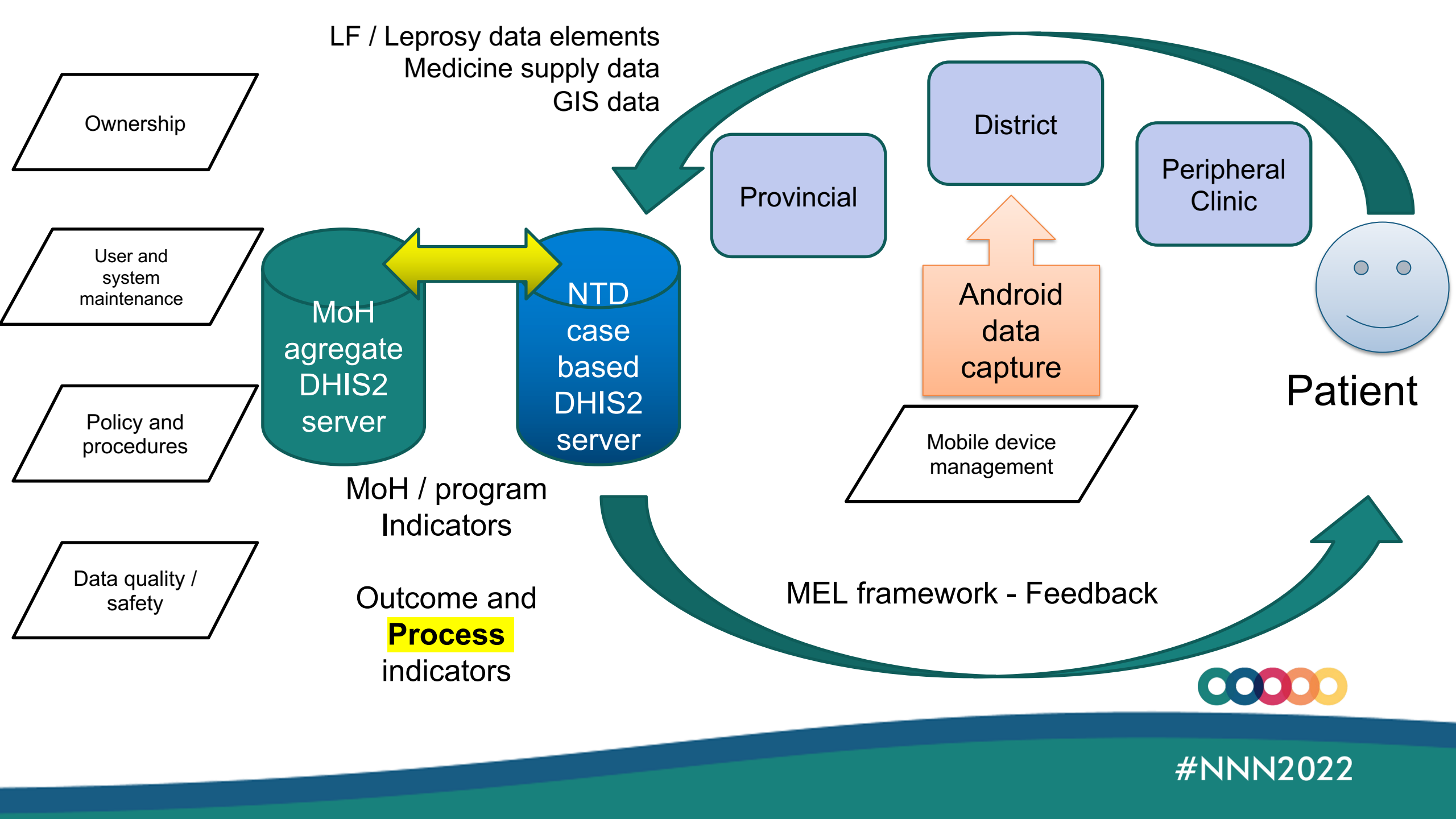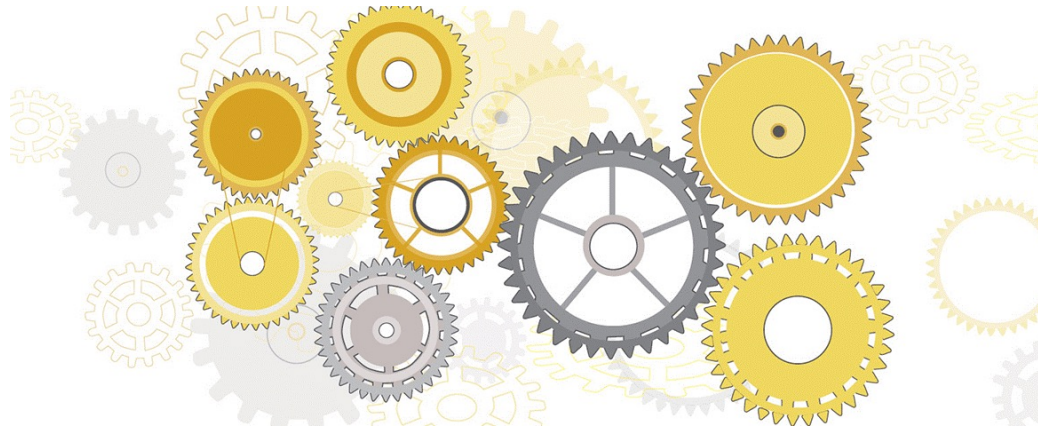
In summary…

- A systems analysis is an essential step.

- Sufficient DHIS2 / support capacity.

- Design thinking approach.

- Integration is multi faceted.

- Processes and process indicators.

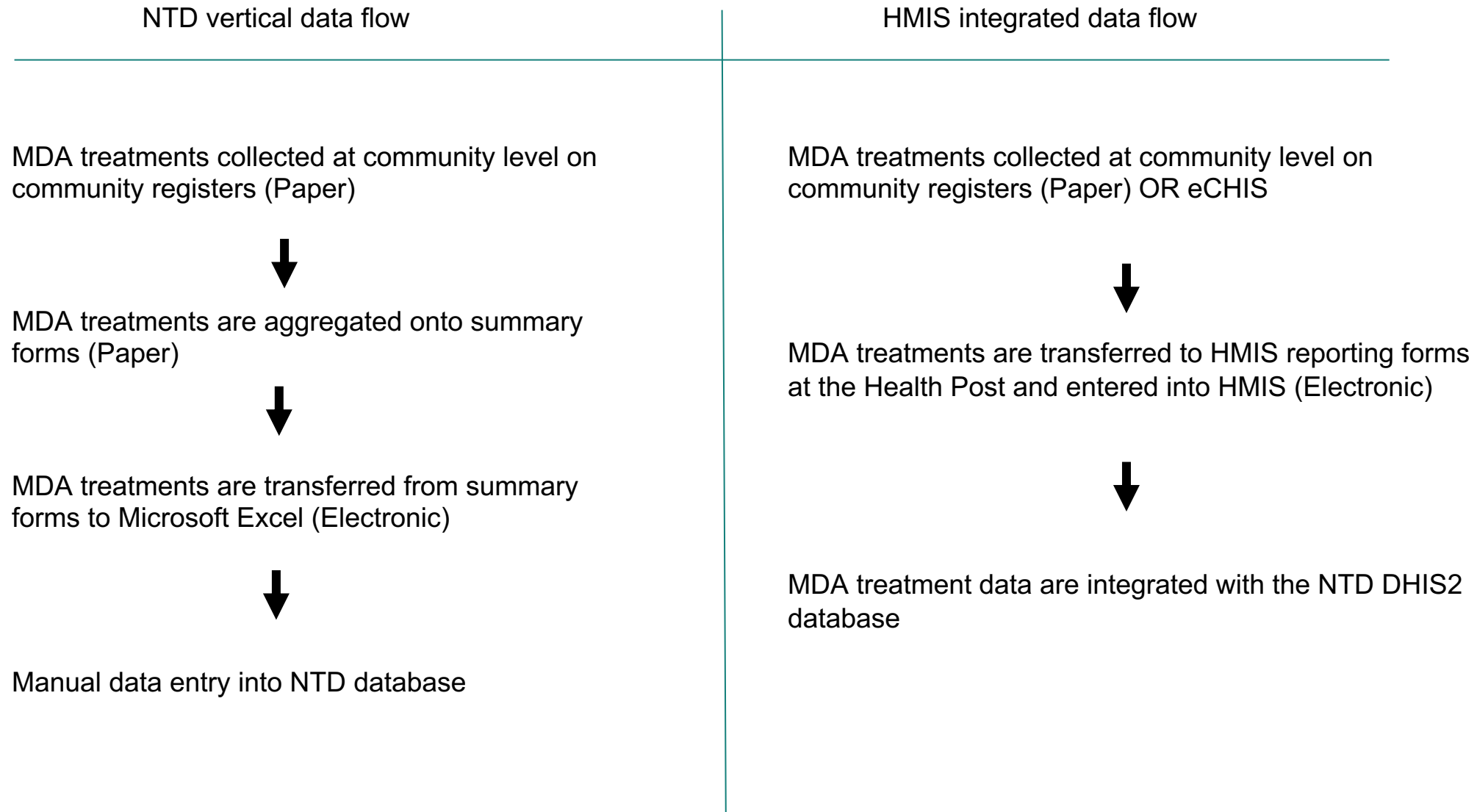- Stay focussed on the final goal --> Feedback

Vertical vs HMIS reporting for PC NTD treatments and morbidity

NTD vertical data flow

MDA treatments collected at community level on community registers (Paper)

↓

MDA treatments are aggregated onto summary forms (Paper)

↓

MDA treatments are transferred from summary forms to Microsoft Excel (Electronic)

↓

Manual data entry into NTD database

HMIS integrated data flow

MDA treatments collected at community level on community registers (Paper) OR eCHIS

↓

MDA treatments are transferred to HMIS reporting forms at the Health Post and entered into HMIS (Electronic)

↓

MDA treatment data are integrated with the NTD DHIS2 database

**Run in parallel during this transition and evaluate data routinely** #NNN2022

What NTD indicators should be included in HMIS?

- Number of individuals swallowed MDA drug for trachoma (age/gender disaggregated)
- Number of individuals swallowed MDA drug for Onchocerciasis (age/gender disaggregated)
- Number of individuals swallowed MDA drug for Lymphatic Filariasis (age/gender disaggregated)
- Number of individuals swallowed MDA drug for Schistosomiasis (age/gender disaggregated)
- Number of individuals swallowed MDA drug for Soil transmitting helminths (STH) (age/gender disaggregated)

- Number of hydrocele cases operated (due to lymphatic filariasis)
- Number of lymph edema cases managed (Podoconiosis and lymphatic filariasis)
- Number of people with TT cases received corrective TT surgery
- Total Number of clients with Post op follow up within 7- 14 days after the procedure in the reporting period
- Total Number of clients with Post op follow up within in 3- 6 month after the procedure
- NTDs medicine at stock (post MDA)

- Number of cutaneous/Muco-Cutaneous leishmaniosis patients treated
- Number of Visceral leishmaniosis patients treated

Five NTD Indictors DHIS2 Reporting Rate From 2018 -2021

%(DHIS2/VERTICAL)- REPORTING RATE
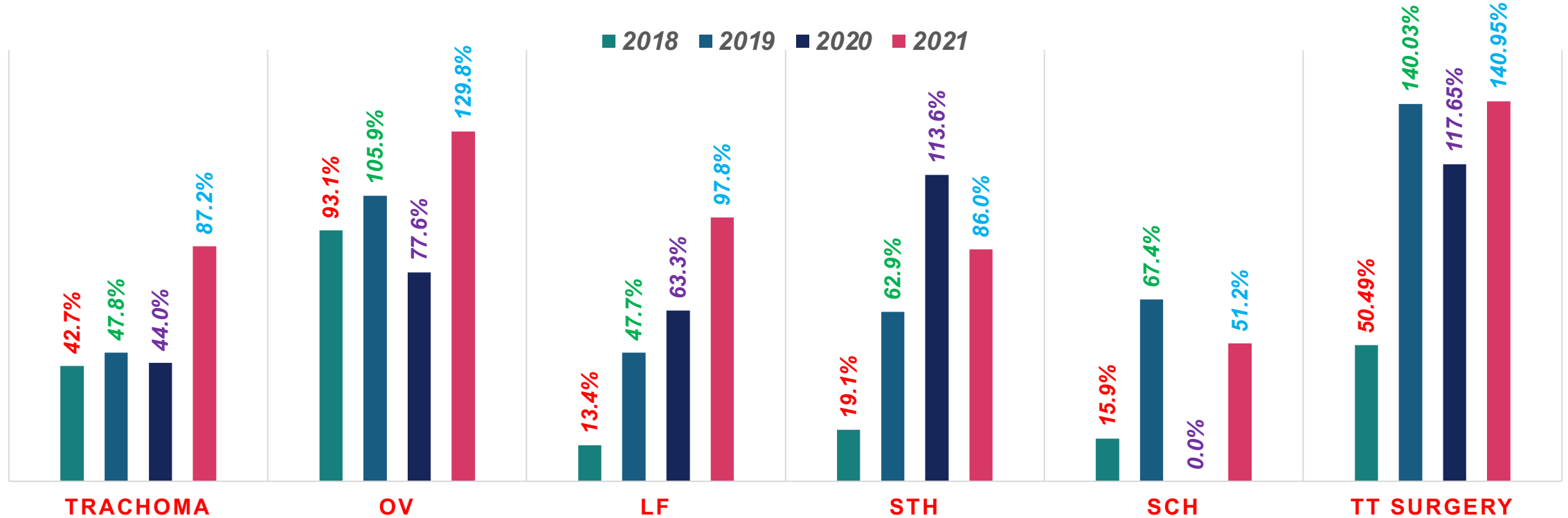
Transition implementation

Capacity building Trainings on data use and analysis

1,034 HITs, NTD officers, implementing partners M&Es trained on NTD Data use and analysis from National to Zonal levels.

Transition challenges (running both systems in parallel)

- Inconsistent population denominator and redistricting in HIMS-DHIS2 and NTD DHIS2 creates complexity in system integration

- DHIS2 not fully customized to detect errors

- Limited coordination between HIT and Program team to address common bottlenecks

- Fragmented and non standardized NTD data systems

- Major delays in data entry at district level

- Poor infrastructural conditions and lack of uniform infrastructure development at various levels of care

- Knowledge and skill gaps of HIT in NTD indictors and data elements

- No M&E focal and allocated budget for M&E in the Regions, Zones, Districts to facilitate data review and use

- Limited attention and support from higher management team

Key achievements

- HIMS-DHIS2 data used for decision making for morbidity management data

- 8 Key NTD Performance indictors are mainstreamed into National health information system

- NTDs are part of HMIS quarterly reports starting in 2018

- Both event and routine historical data captured in NDT DHIS2 starting from 2015/2016

- Working on NTD-DHIS2 database hosting in the country to sustain the system

Future perspectives

- Integration of eCHIS, biometric data and other NTD data into HMIS-DHIS2

- Finalized NTD Database hosting in the country

- Prepare NTD Scorecard

- Zero Torrance on Vertical reporting and strengthen integrated approach

- Import NTD historical data sets into system

- Continue capacity building on NTD data use culture, reporting and quality

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Thank You !!!

Why NTD Data Integration into DHIS2 is Important for Sustainability.

The Ghana Context

Charles Brown-Davies, Monitoring & Evaluation Advisor, FHI 360
Act to End Neglected Tropical Diseases (NTD) | West Program

Presentation Outline

- Introduction

- Goal and Objectives of NTD Data integration

- What data has been integrated so far

- Benefits and Why Integration of NTD Data is Important for Sustainability

Introduction

- The integration of data on NTDs and its related activities into the routine HMIS (DHIS 2) in Ghana is part of a series of actions aimed at improving the quality, timeliness and completeness of NTD Data.

- The integration also offers diverse opportunities in
  - ✓ Improved utilization of NTD Data for program planning (MDAs, DSAs etc.) and decision making
  - ✓ Improved NTD Data availability and security to facilitate the conduct of planned surveillance and post elimination activities

- Ghana's NTD data integration into the GHS DHIS 2 processes started in 2019 and "went live" in 2021.

Goal and Objectives of NTD Data integration

- The main goal of Integrating NTD Data into DHIS2 in Ghana was to streamline NTD data Collection and Reporting to ensure sustainable, reliable, timely and complete NTD information to allow for evidence-based decision making and Planning at all levels of the health delivery.

- The main Objectives of Integrating NTD Data into DHIS2 include the following
  - ✓ Improve NTD data quality, timeliness and completeness
  - ✓ Increase utilization ofNTD data and information for NTD programmatic decision-making and planning at all levels
  - ✓ Improve NTD data availability and security
  - ✓ Improve NTD data availability for post elimination survelliance activities

What data has been integrated so far

- NTD Service Data
  - ✓ Mass Drug Administration (MDA) Data on LF, OV, SCH/STH
  - ✓ NTD Morbidity Data (Lymphedema, STH, SCH e.g. FGS, Scabies cases etc.)
  - ✓ Data on Disease Specific Assessments and Evaluations for LF, OV, SCH/STH (Yet to be integrated but processes have started)
- All NTD Data elements that are being captured as part of the integration have clearly defined indicators in DHIS 2 to facilitate Tracking of NTD activities
  - ✓ e.g. OV/LF and SCH/STH Coverage during an MDA

Benefits and Why Integration is Important for Sustainability

- Advocate for more Budgetary and logistical Support towards NTD activities from the Ministry of Health, GHS leadership at all levels, ie National , Regional and District levels and Development partners.

- Wide variety and visibility of NTD Data at all Levels of Health delivery for Planning, Monitoring, Evaluation, Learning and and also for Decision Making- not only centralized at the NTD program level

Benefits and Why Integration is Important for Sustainability

- Integrated Data can be used as part of the country's Holistic Assessment indicators for Health Sector Performance, strengthening the sector's performance on NTDs
- Track progress of activities towards Control and Elimination of NTDs in the country
- Increase Coordination and Communication with other Health Programs within the Health Sector (Malaria Control Program, EPI, RCH etc.)

Thank You

The challenges and facilitating factors associated with integration of NTD indicators into HMIS may differ from country to country, but there are many commonalities and opportunities to learn from past and ongoing efforts

Contents

- Direct implementation vs. integration
- Challenges & overcoming them
- Facilitating factors & leveraging them

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Direct Implementation vs. Integration

- Does an established NTD database already exist?
- Approach to inclusion/integration will differ form country to country
- Examples from Tanzania, Kenya, Ethiopia, and Sudan

	Kenya	Tanzania	Ethiopia	Sudan
National HMIS	dhis2	dhis2	dhis2	dhis2
NTD database	ESPEN Integrated NTD database	MySQL	dhis2	None

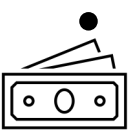# Challenges & overcoming them

- Limited HMIS human resource and high turnover → Intuitive, user-friendly digital systems and tools

- Complex nature of NTDs (e.g. EUs for certain DSAs) → E.g. complete, linked record of admin units over time

- How to measure integration? → E.g. Number of indicators, frequency of reporting
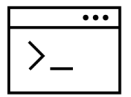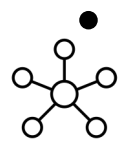
Challenges & overcoming them

- Intermittent investment → • Transferable processes (e.g. gap assessments, SOPs)

- Hardware/software limitations → • Fit-for-purpose solutions (e.g. offline data entry/collection)
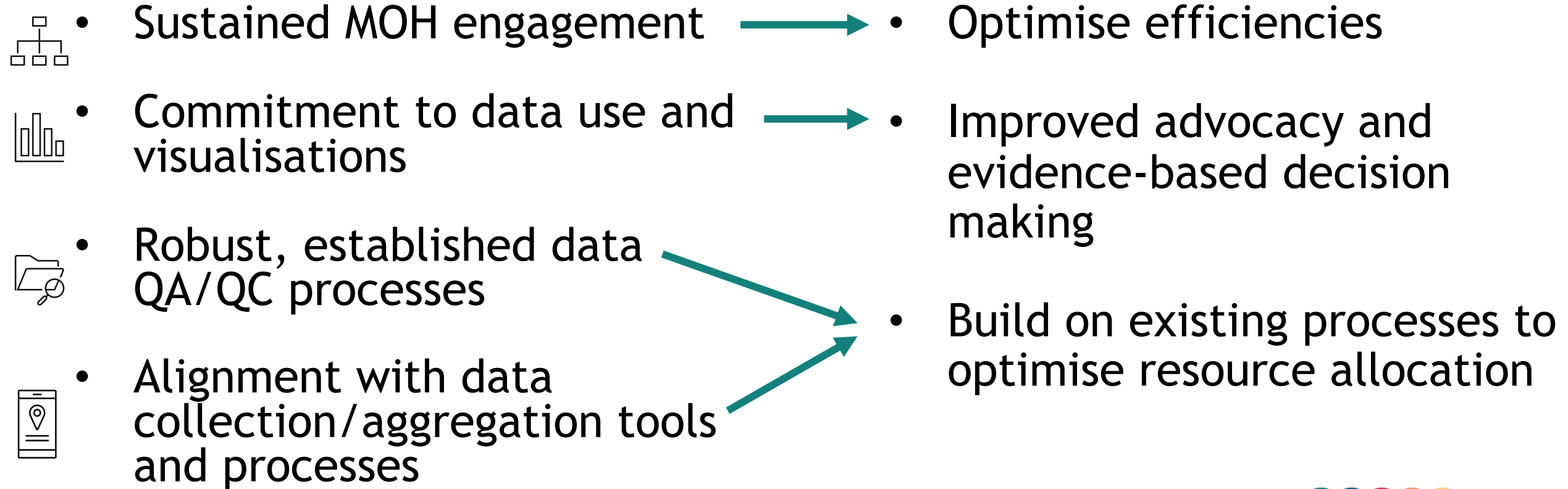
- Integration/interoperability with other data systems → • Standardisation of processes

Facilitating factors & leveraging them

- Sustained MOH engagement → • Optimise efficiencies

- Commitment to data use and visualisations → • Improved advocacy and evidence-based decision making

- Robust, established data QA/QC processes

- Alignment with data collection/aggregation tools and processes

- Build on existing processes to optimise resource allocation

Breakout Groups

- **Group One:** Virtual (English)
- **Group Two:** Virtual (French)
- **Group Three:** In-person (English/French)