TB DIAH

TUBERCULOSIS DATA, IMPACT ASSESSMENT AND COMMUNICATIONS HUB

New Tools, Platforms and Resources for TB Data Capture, Visualization and Use

August 1, 2024

USAID
FROM THE AMERICAN PEOPLE

TB DIAH
Tuberculosis Data, Impact Assessment and Communications Hub

Introductions and Housekeeping

TB DIAH

TUBERCULOSIS DATA, IMPACT ASSESSMENT AND COMMUNICATIONS HUB

- Part of the USAID Global Accelerator to End TB
- Global, five-year (2018-2024) associate award, $36M cooperative agreement
- Small team of M&E and TB experts working to clarify TB data in way that helps USAID monitor its TB investments in its TB priority countries
- Helps countries use data to share their story

What does TB DIAH do?

1 Surveillance (Data)

Result 1: Strengthen the collection, analysis, and use of routine and surveillance TB data

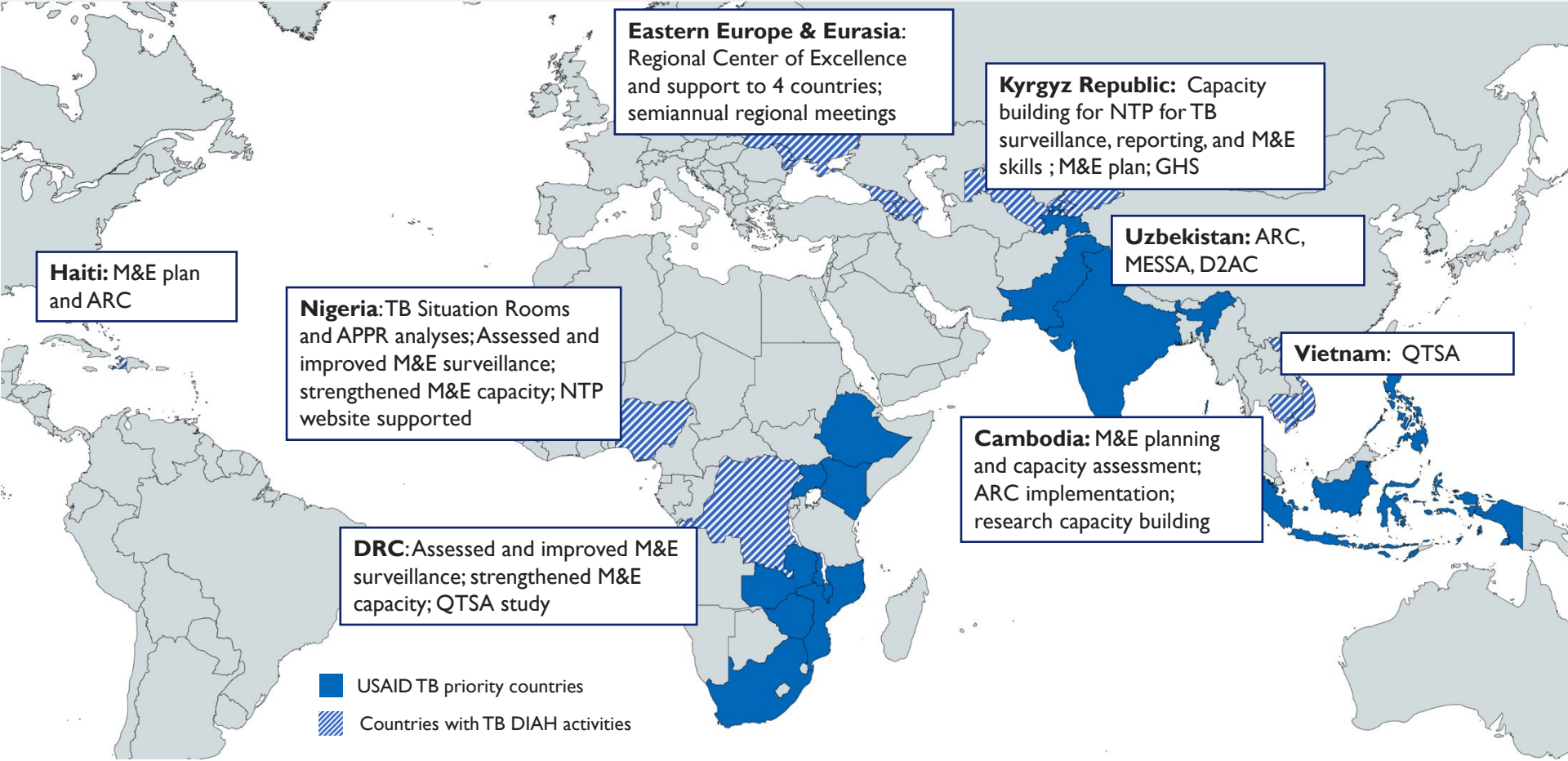
2 Reporting (Information)

Result 2: Improve performance-based (M&E) frameworks and information gathering processes: tools, methods, and technical guidance to meet user needs

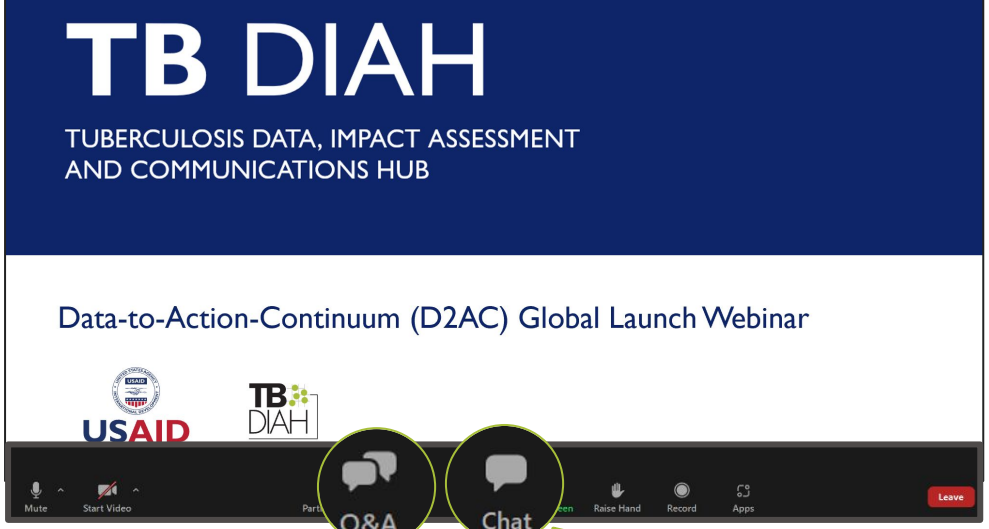
3 Communications (Knowledge)

Result 3: Strengthen reporting and communication to address knowledge gaps and share methods, tools, and approaches

Where does TB DIAH work?



HOUSEKEEPING



Please **use the Q&A for all questions.**

Please **tell us who you are and where you're from in the chat.**

Questions will be addressed during and at the end of the webinar.

The webinar is being recorded and a link to the recording and presentation will be shared with all attendees and registrants tomorrow by a Zoom link and email.

Speakers and agenda

1.5 hour

Stephanie Mullen Project Director, TB DIAH Project	• Introductions and Housekeeping
Dr. E. Mushota Kabaso, PhD National M&E Advisor for the National TB and Leprosy Programme with the Zambia Ministry of Health	• Zambia's TB Situation Room
Dr. Obioma Chijioke-Akaniro Senior Monitoring and Evaluation Manager for Nigeria's National Tuberculosis, Leprosy, and Buruli Ulcer Control Programme	• Nigeria's TB Situation Room
Dr. Abiodun O. Hassan MD, MPH, ABD Nigeria Project Director/Team Lead and Mission Point of Contact, TB DIAH Nigeria	• Nigeria's Automatic Partners Progress Report
Kola Oyediran Senior M&E Advisor, TB DIAH Project	• Introducing the TBSR Management and Implementation Guidance
Ann Fitzgerald Field Services Manager and Deputy Director, TB DIAH Project	• Q&A

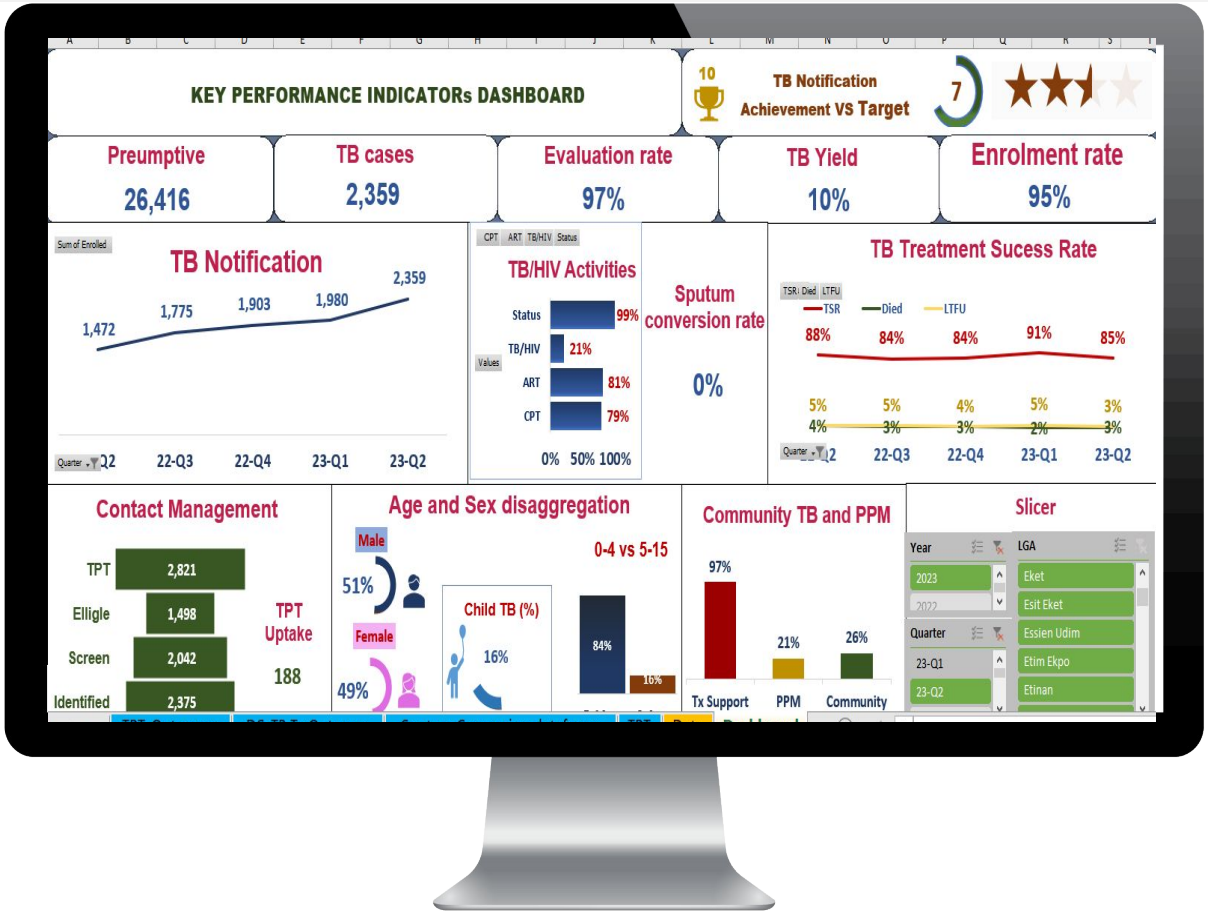
What is a TBSR? And why is it important?

A TBSR:

- Collates and generates visuals of multi-sourced TB data (EMR, program data, diagnostics and laboratory, drugs and supplies etc.)

TBSRs are important because they can:

- Provide decision makers and implementers with easy-to-understand access to TB data from different sources in one place
- Allow for the review, analysis, and interpretation of data in as near to real time as possible



Zambia's TB Situation Room

THE WEEKLY TB SITUATION ROOM:

EXPERIENCE FROM ZAMBIA

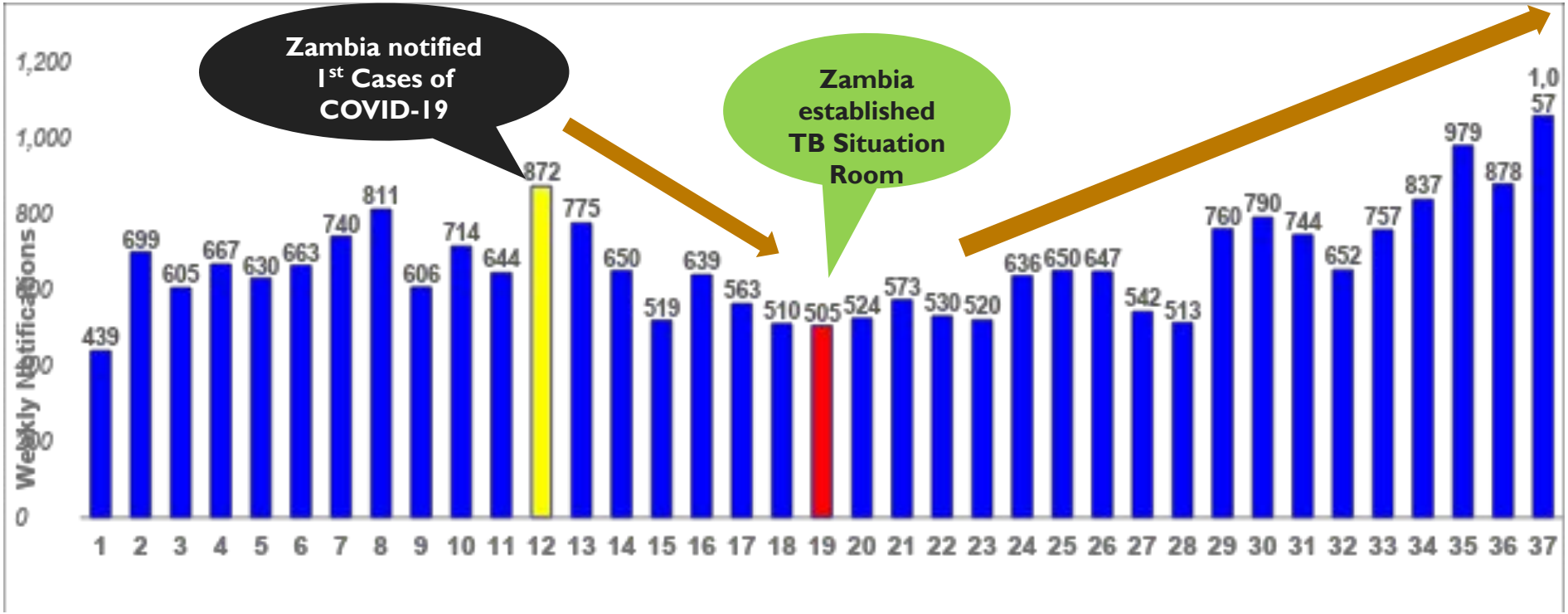
E Mushota Kabaso, PhD
USAID National TB M&E Advisor
Ministry of Health
Zambia

WHAT IS TBSR

The TB Situation Room (**TBSR**) is

- An initiative of the NTLP in Zambia's Ministry of Health
- Designed to track the weekly performance of the TB program across the country
- Key performance indicators in the TB program (examples)
    - Drug Susceptible TB Notifications
    - DR TB Notifications
    - # of presumptive cases screened in the lab
    - # with bacteriologically confirmed TB
    - # of clinically diagnosed TB; etc.

ORIGINS OF THE ZAMBIA TBSR



HOW IT IS DONE : TBSR FORMAT AND AUDIENCE

Format

- Zambia TBSR is a virtual meeting via Zoom

Attendees

- Health Care Workers
  - Provincial
  - District
  - Facility
- NTLP staff
- TB cooperating and implementing partners (USAID, CDC, WHO, etc.)
- Civil society

HOW IT IS DONE : DATA MANAGEMENT

- Data collected on a simple **weekly** template
- TB treatment and diagnostic facilities in all districts
- HFs submit to District TB coordinators
- Districts submit to Provincial TB coordinators
- Ten provincial reports received at National HQ for processing and updates
- Data quality is assured in the back and forth between health facility/district/National levels

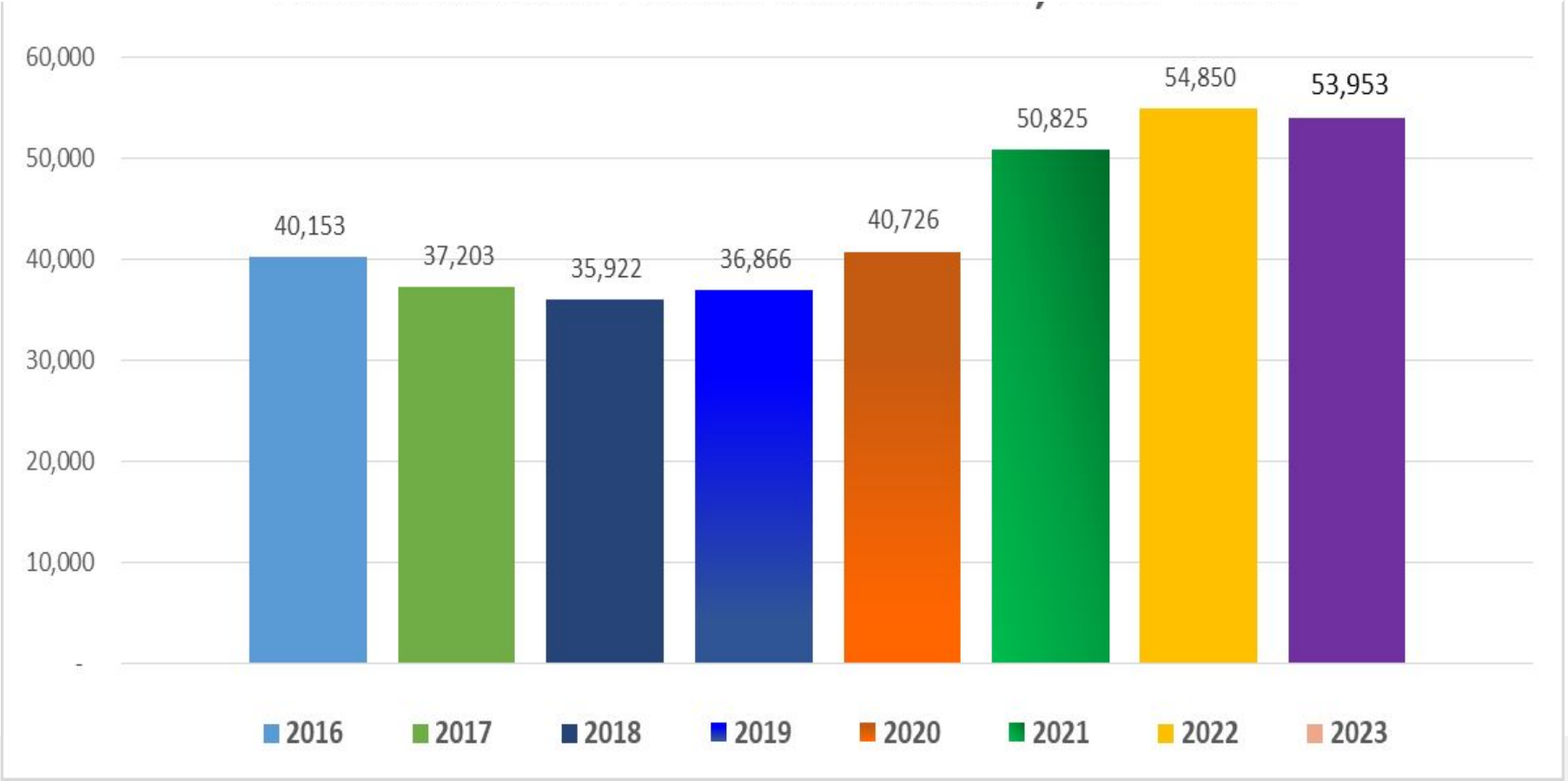
HOW IT IS DONE : DATA ANALYSIS & VISUALIZATIONS

- Analysis of specific metrics of importance
- Pivot tables developed for the meeting on pre-determined template/dashboards
    - Proportion of pediatric notifications
    - Proportion of DR TB
    - Proportion of bacteriologically confirmed TB
    - Tracking of the weekly performance against established **targets per week**
    - Tracking Cumulative performance from beginning of the year **up to the week in review**
    - This summary is then shred with all districts before the SR meeting for validation and analysis for inclusive participation.

HOW IT IS DONE : BEYOND THE DATA

- The forum is used as a platform to
  - Showcase high performing facilities/districts/provinces
  - Share initiatives/activities yielding positive results
  - Share activities they did differently in the week before
  - Replicate positive initiatives/activities elsewhere
  - Low-performing facilities/districts/provinces encouraged to catch up and contribute to national targets in the process
  - Lively debate usually ensues with more than 80 participants logging into the Zoom call on a weekly basis at 2:00 pm every Thursday.
  - **Link to TBSR Report Week 38 2023**

THE RESULT:
TOTAL NOTIFICATIONS IN ZAMBIA, 2016 - 2023



CHALLENGES AND VISIONS FOR THE FUTURE

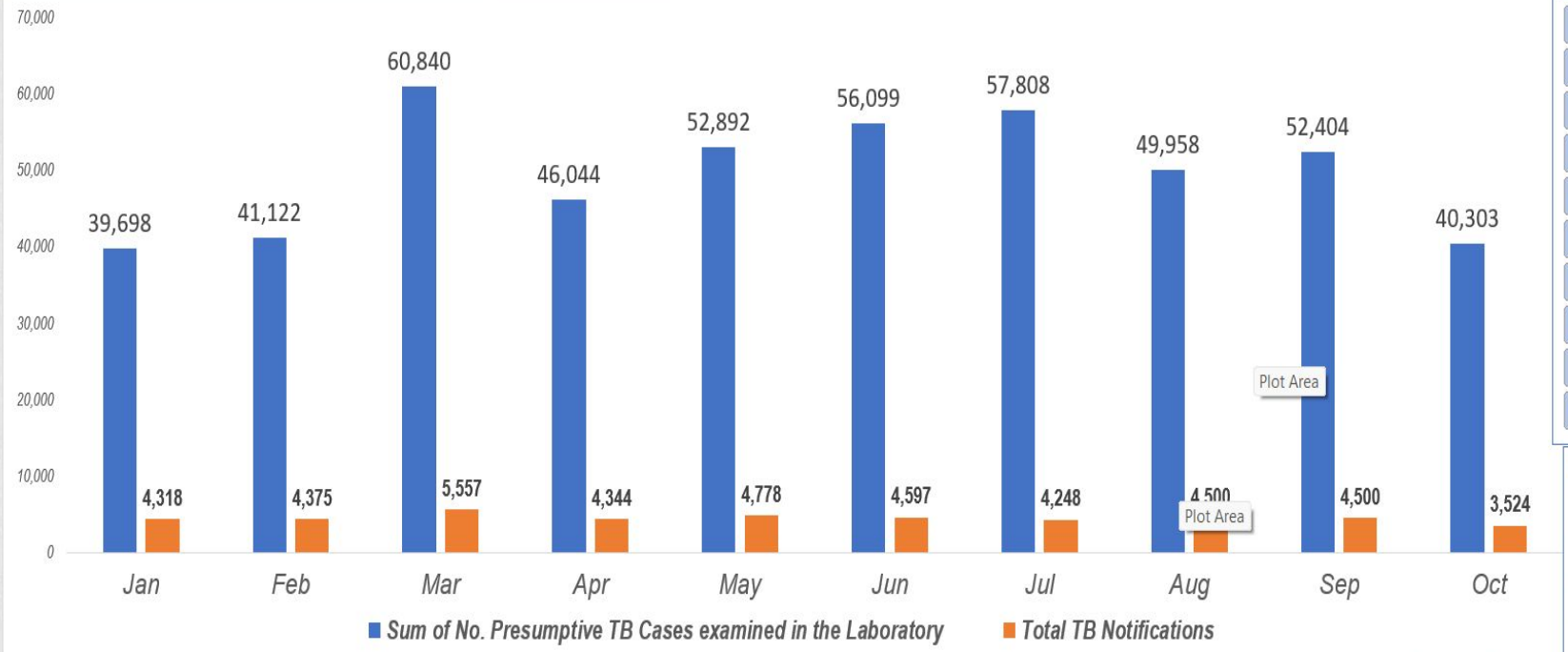
The TB Situation Room is conducted 11 times each week in the country

- Provincial teams conduct their versions **before** the national meeting
- Technological considerations critical
  - 26,600 records in excel is not very efficient
  - Web-based applications recommended option
  - DHIS2
  - Power BI
  - Other API capable solutions
- If possible, align TBSR KPI data with routine notification formats
- An important tool for case finding in TB programming (program and project level)

Optional Slides

TB Weekly Surveillance Dashboard_1

1. Monthly trends - Presumtpive TB & notificatio *(Up to 22 October, 2023)*



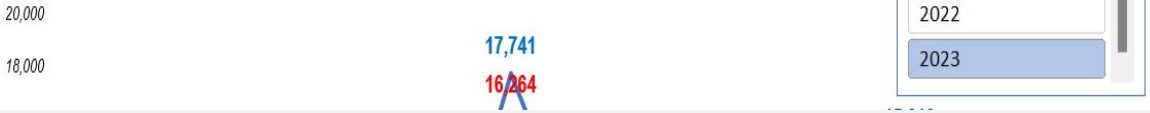
Province

- Central
- Copperbelt
- Eastern
- Luapula
- Lusaka
- Muchinga
- Northern
- North-Western
- Southern
- Western

District

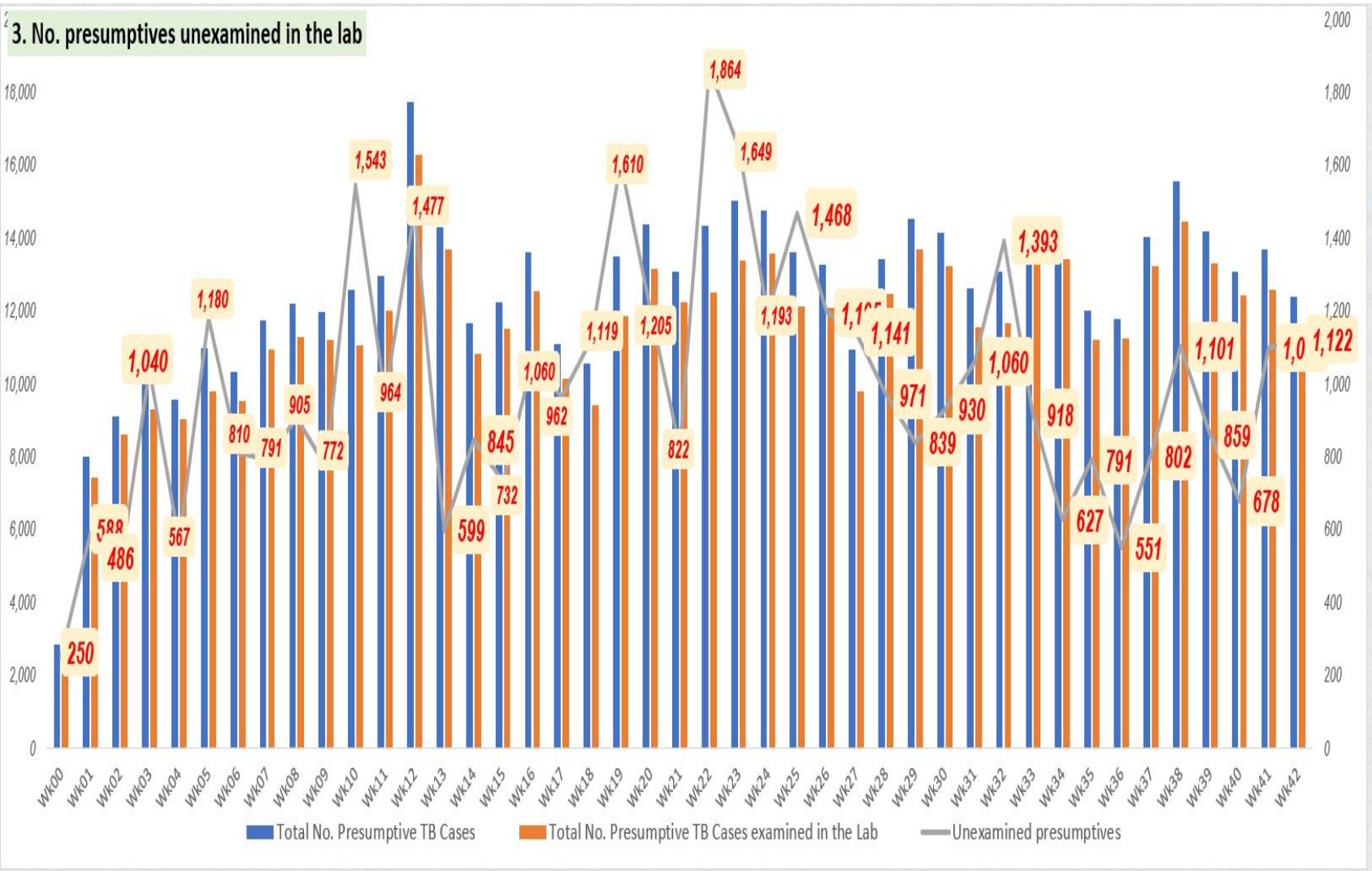
- Chama
- Chasefu
- Chavuma
- Chembe
- Chibombo
- Chiengi
- Chifunabuli
- Chikankata
- Chilanga

2. Trends - Presumptive TB cases identified vs examined in the lab



Year

- 2021
- 2022
- 2023



Province

Central | Copper... | Muchinga | Northern

District

Chadiza | Chama | Chibo... | Chiengi

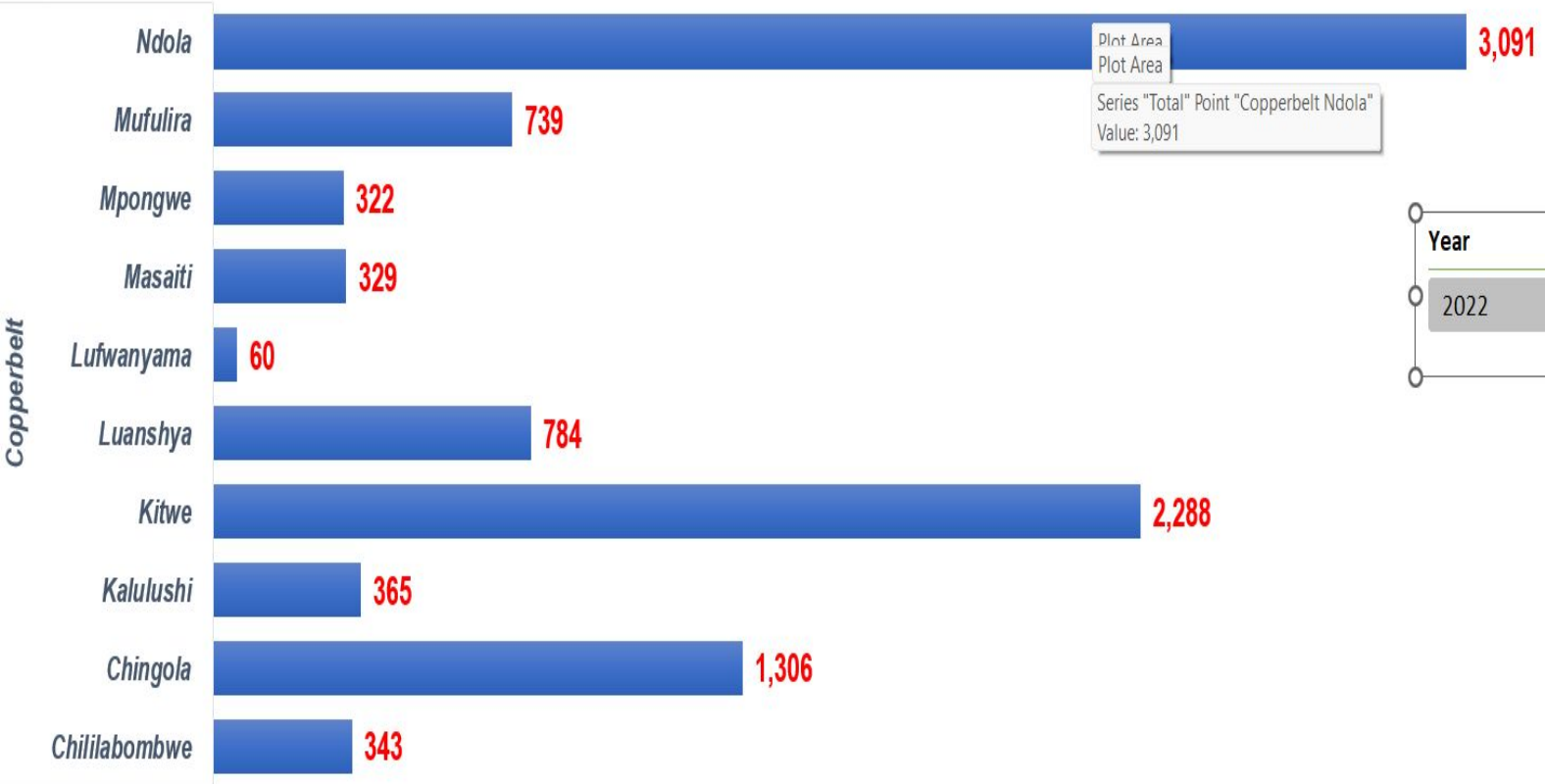
Year

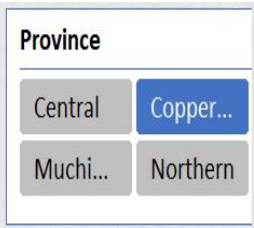
2021

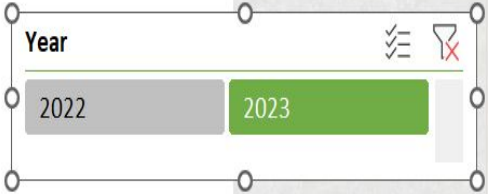
2022

2023

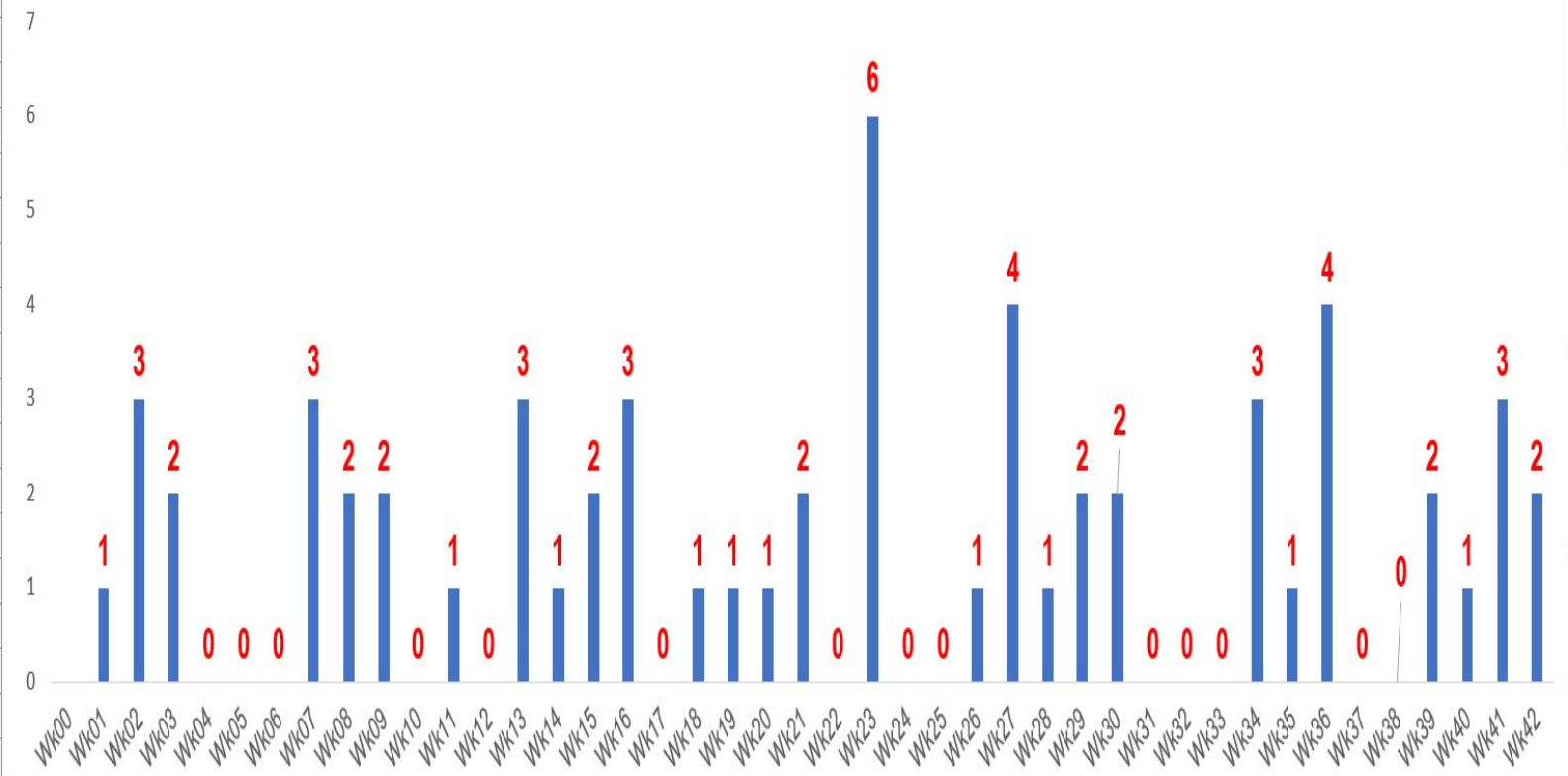
11. Total TB notifications (Province & District)







12. Weekly Trends - TB notifications



Province

Coppe... | Central | Eastern
Muchi... | North... | North-...

District

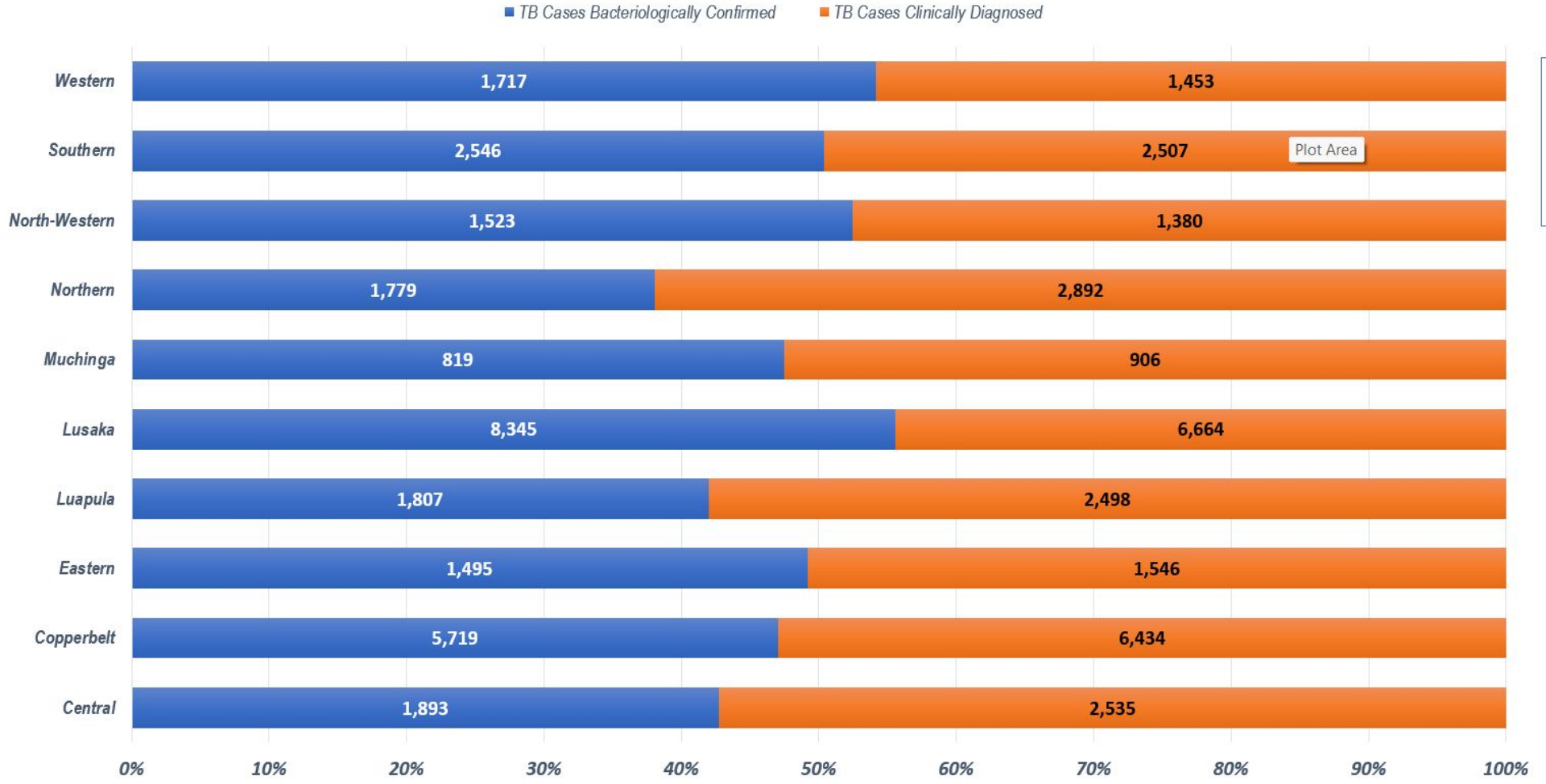
Chililabo... | Chingola | Kalulu
Luanshya | Lufwany... | Masai
Mufulira | Ndola | Chadi
Chasefu | Chavuma | Chem
Chiengi | Chifunab... | Chika

Lufwanyama

Year

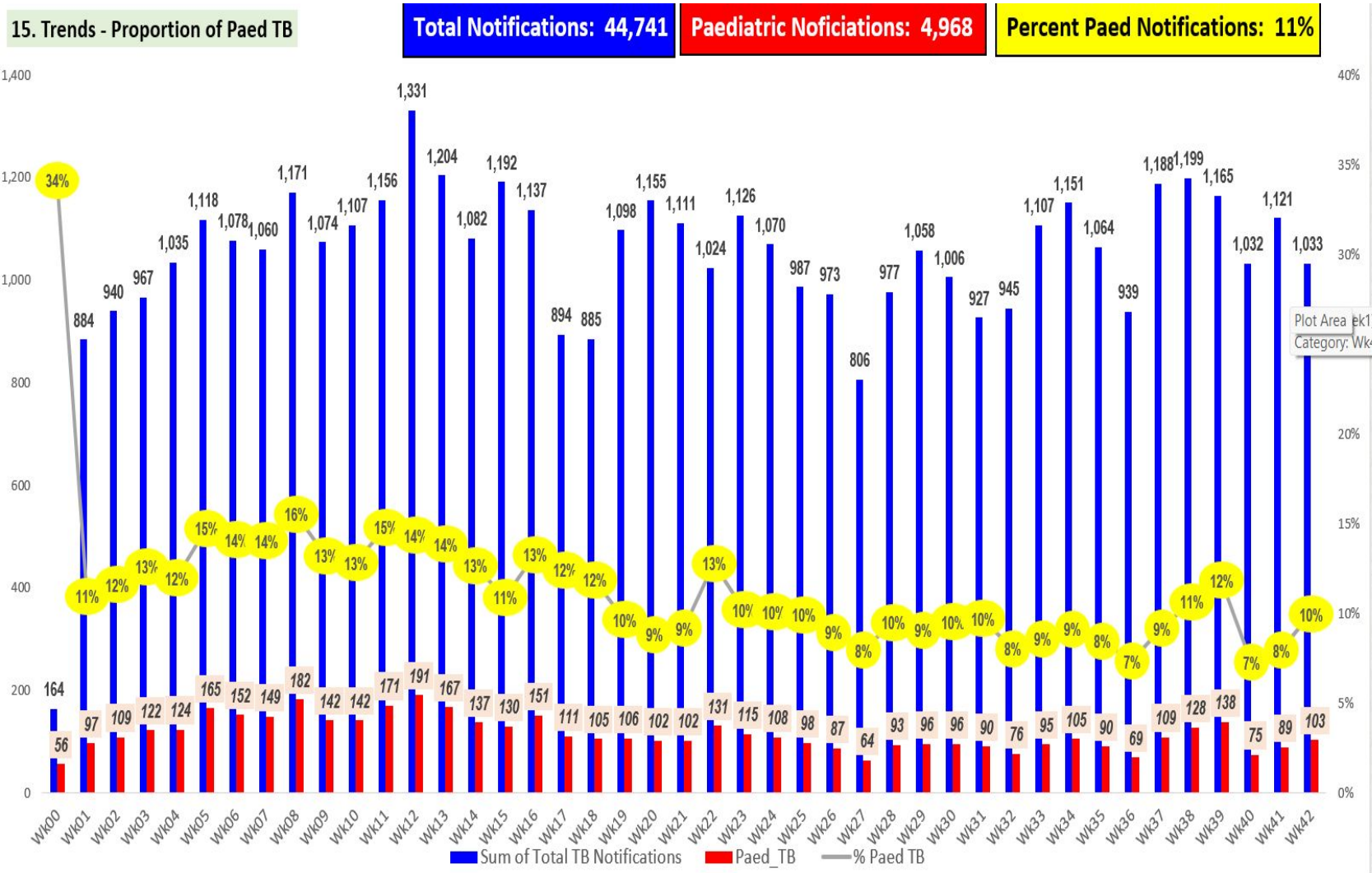
2022
2023

14. - Bacteriologically confirmed Vs Clinically Diagnosed



15. Trends - Proportion of Paed TB

Total Notifications: 44,741 | **Paediatric Noficiations: 4,968** | **Percent Paed Notifications: 11%**



Province

Central | Copper..
Muchinga | Northern

District

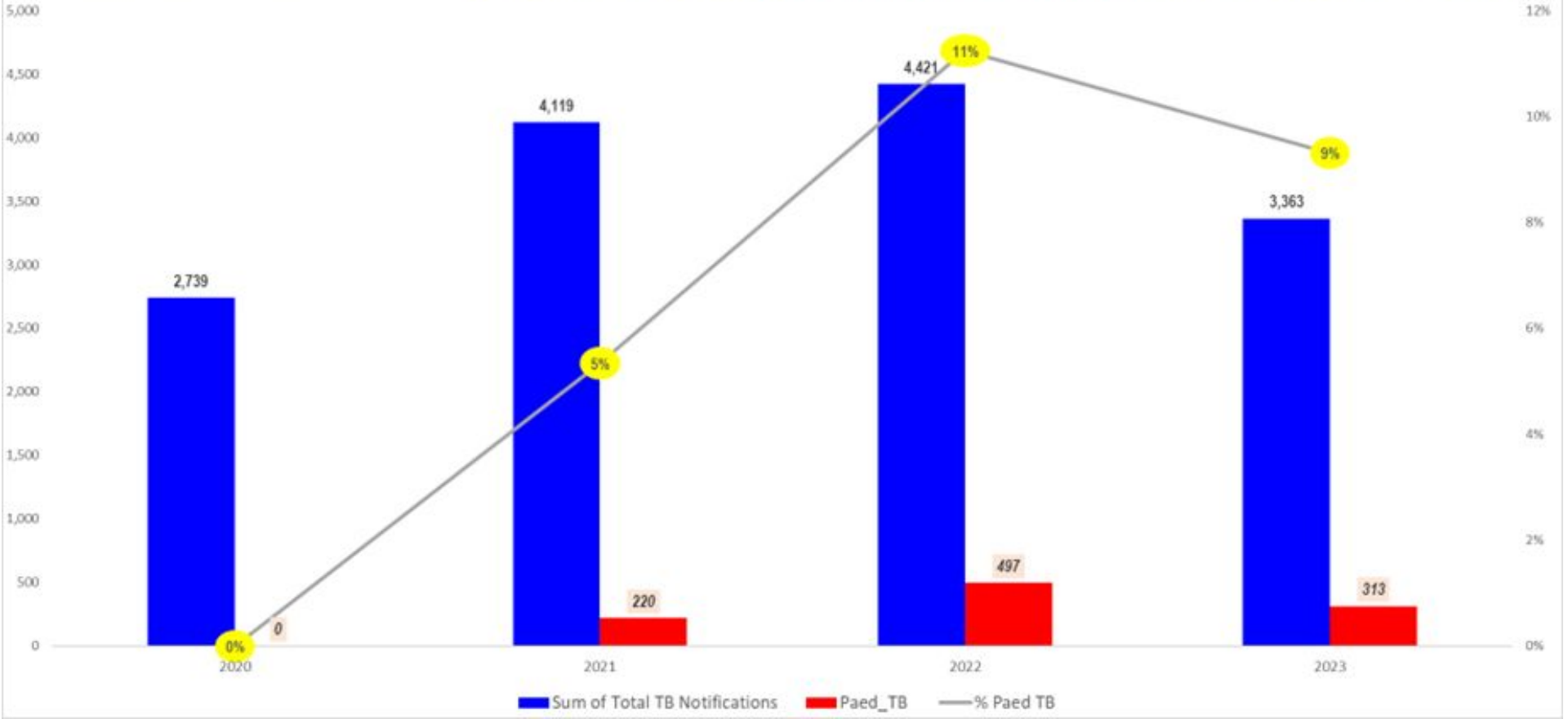
Chadiza | Chama
Chibo... | Chiengi
Chililab... | Chilubi
Chipata | Chipili
Choma | Chongwe
Itezhi-... | Kabompo
Kalomo | Kalulushi
Kapiri ... | Kaputa

Year

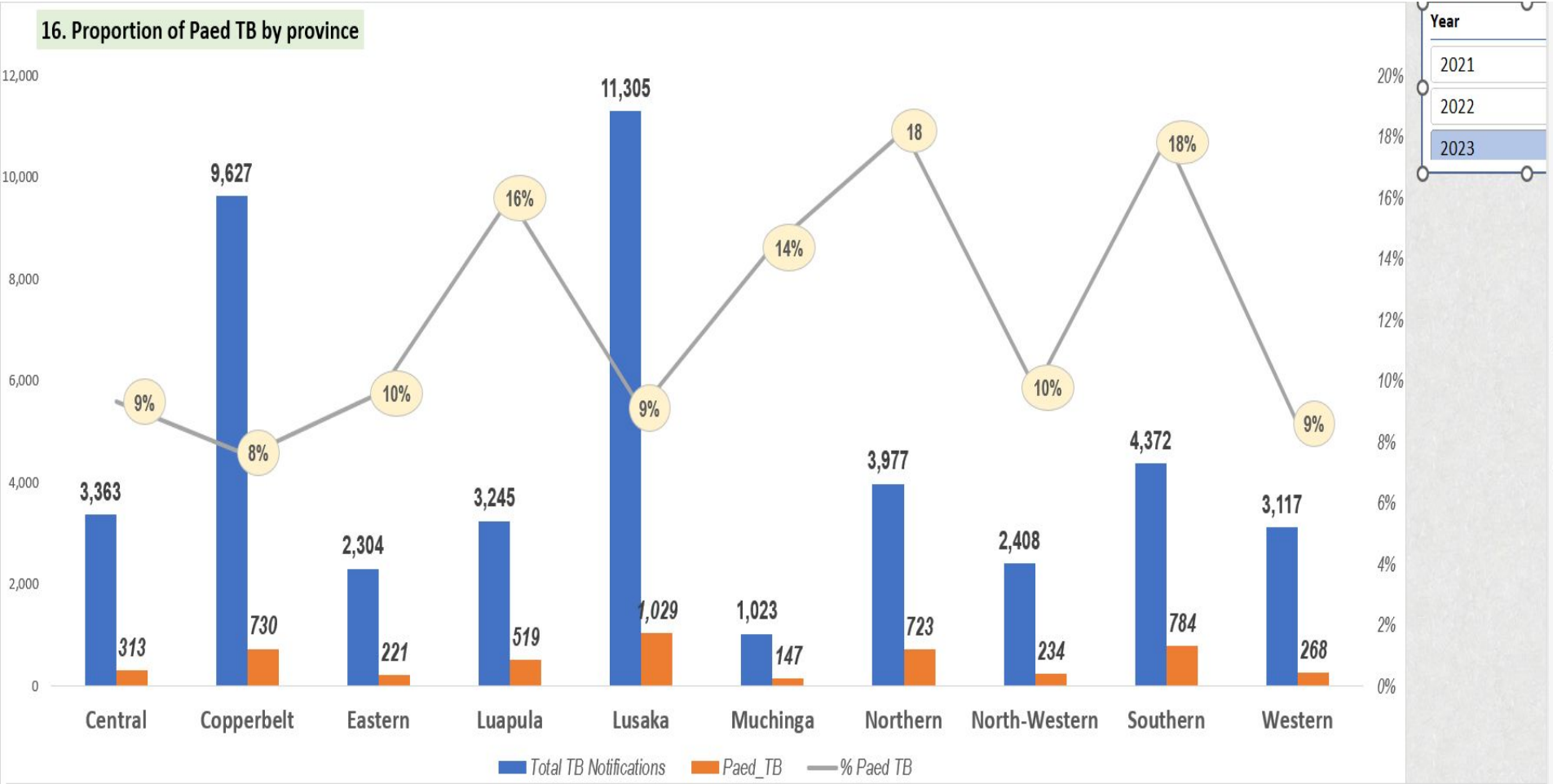
2022
2023

15. Trends - Proportion of Paed TB

Total Notifications: 14,642 | **Paediatric Noficiations: 1,030** | **Percent Paed Notifications: 7%**

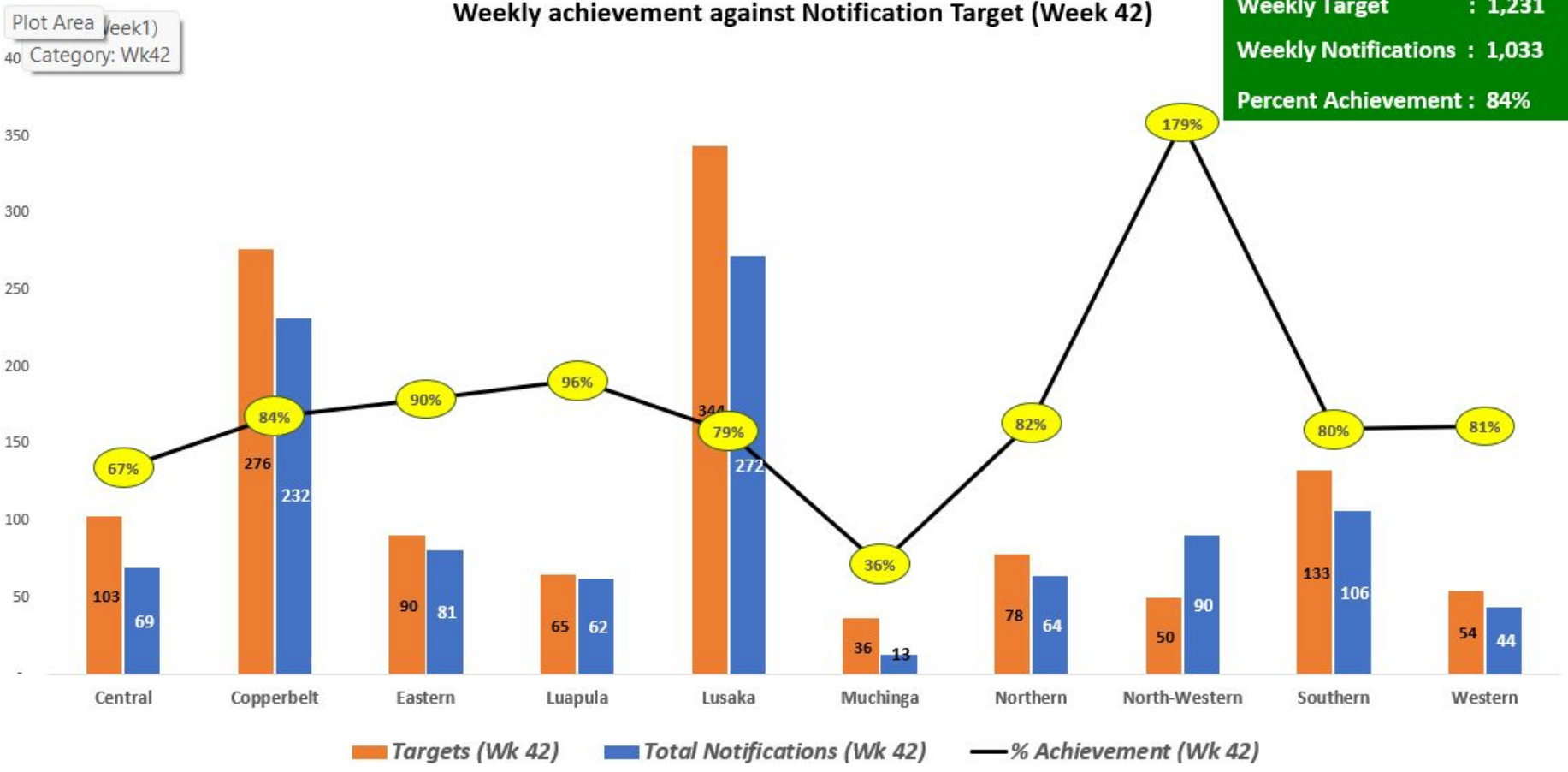


16. Proportion of Paed TB by province

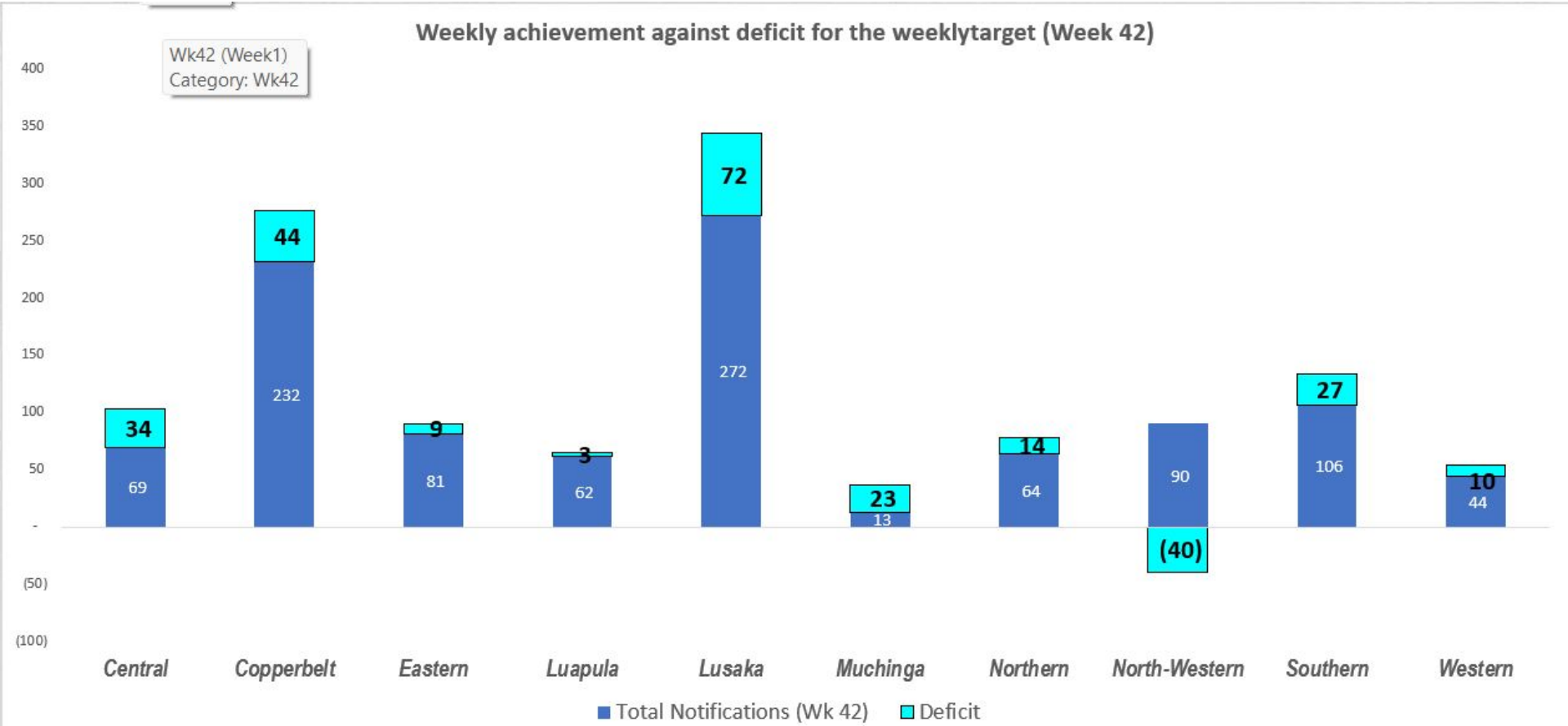


Weekly achievement against Notification Target (Week 42)

Weekly Target : 1,231
Weekly Notifications : 1,033
Percent Achievement : 84%



Weekly achievement against deficit for the weeklytarget (Week 42)

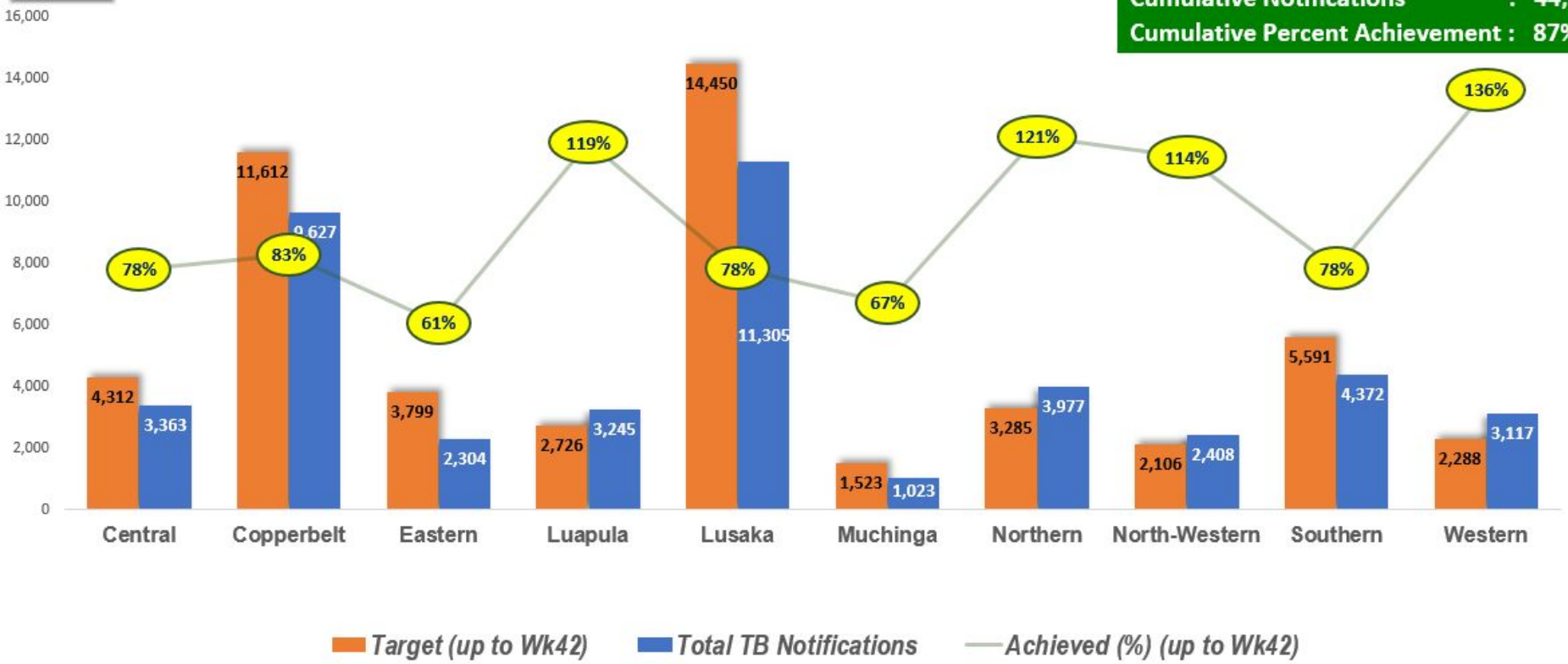


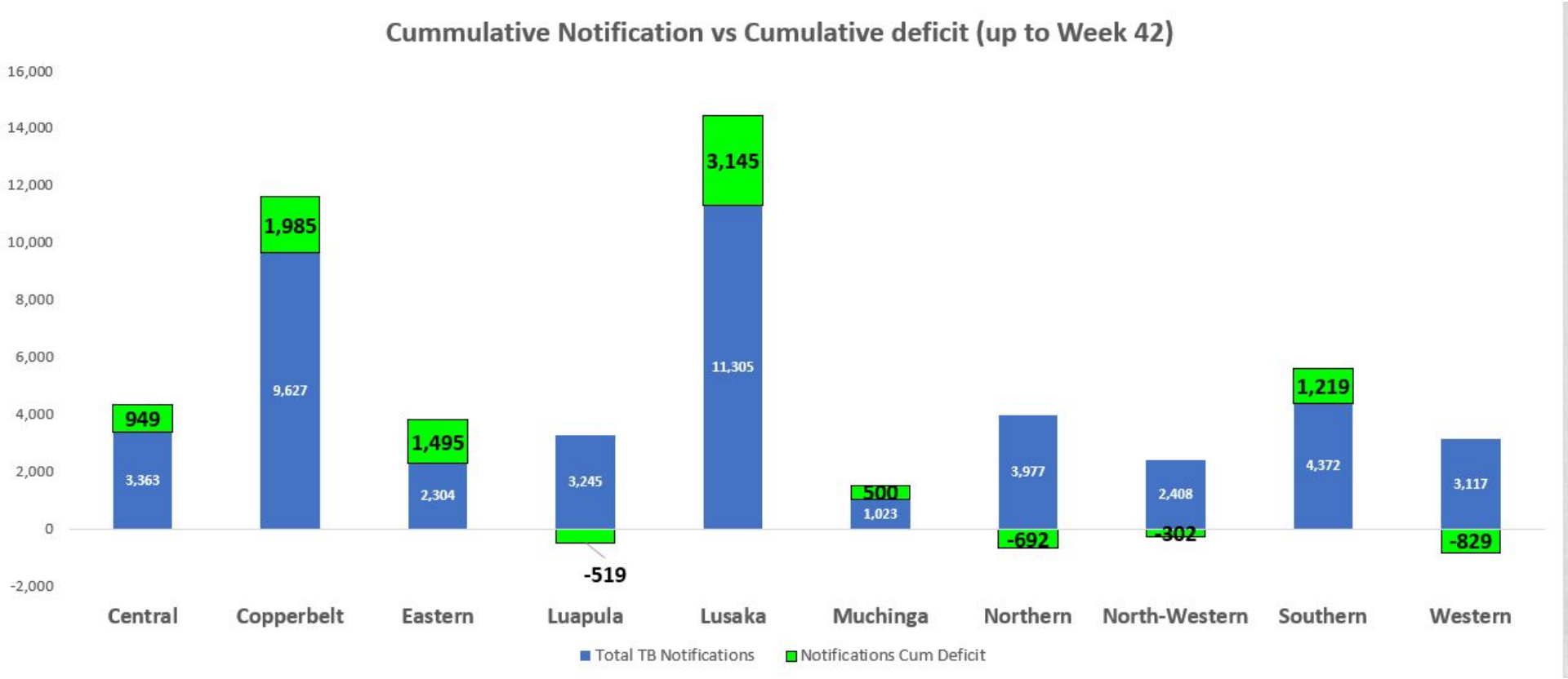
Category: Wk42

Chart Area

Achievement against Notification Target (up to Week 42)

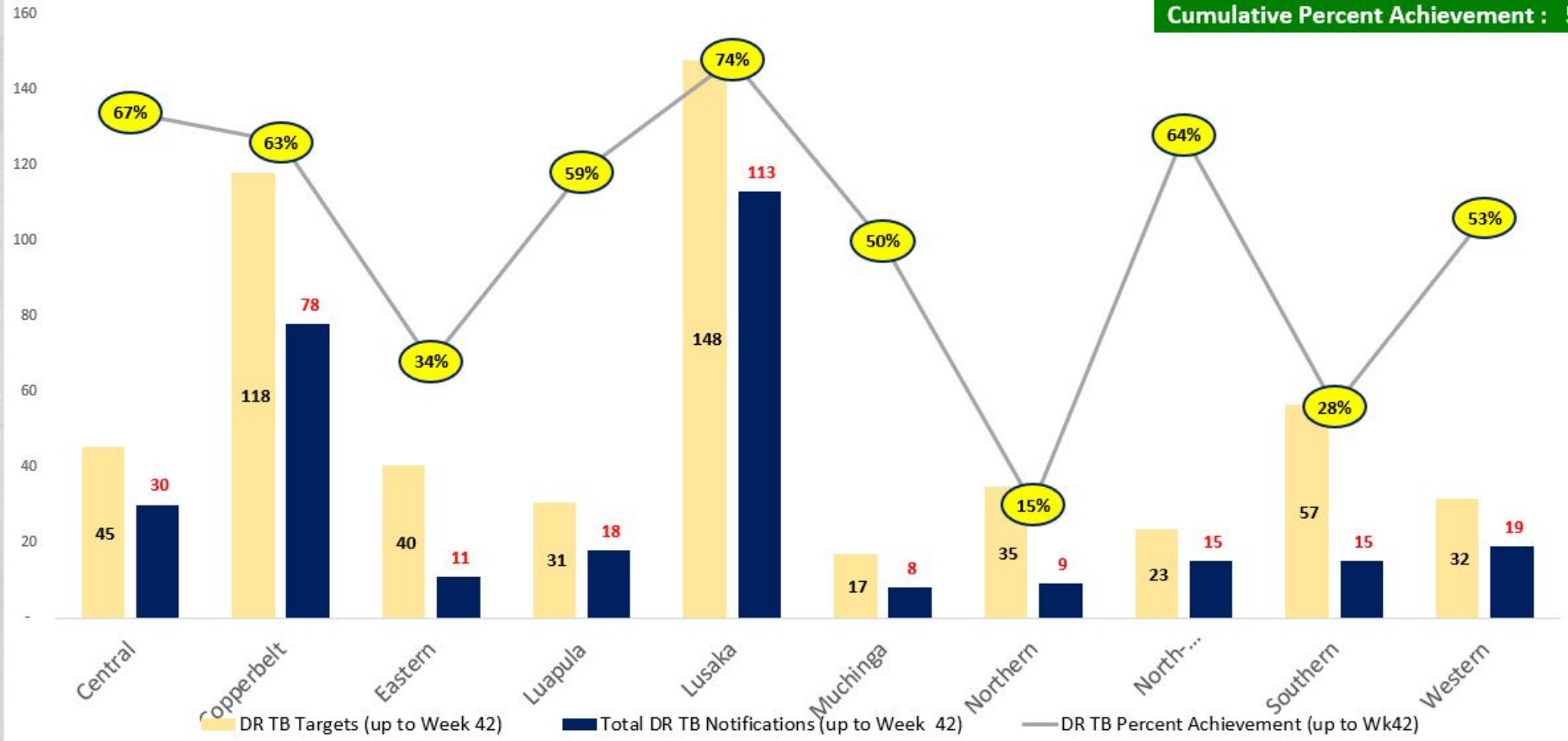
Cumulative Target	:	51,692
Cumulative Notifications	:	44,741
Cumulative Percent Achievement	:	87%




Cummulative Notification vs Cumulative deficit (up to Week 42)
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
-2,000
949
3,363
1,985
9,627
1,495
2,304
3,245
-519
3,145
11,305
500
1,023
3,977
-692
2,408
-302
1,219
4,372
3,117
-829
Central
Copperbelt
Eastern
Luapula
Lusaka
Muchinga
Northern
North-Western
Southern
Western
Total TB Notifications
Notifications Cum Deficit

Achievement against DR-TB Notification Target (up to Week 42)

Cumulative Target	:	545
Cumulative Notifications	:	316
Cumulative Percent Achievement	:	58%



Thank You

Nigeria's TB Situation Room

Nigeria TB Situation Room

…… for real-time decision making

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FROM THE AMERICAN PEOPLE

TB DIAH
Tuberculosis Data, Impact Assessment and Communications Hub

National Tuberculosis and Leprosy Control Programme

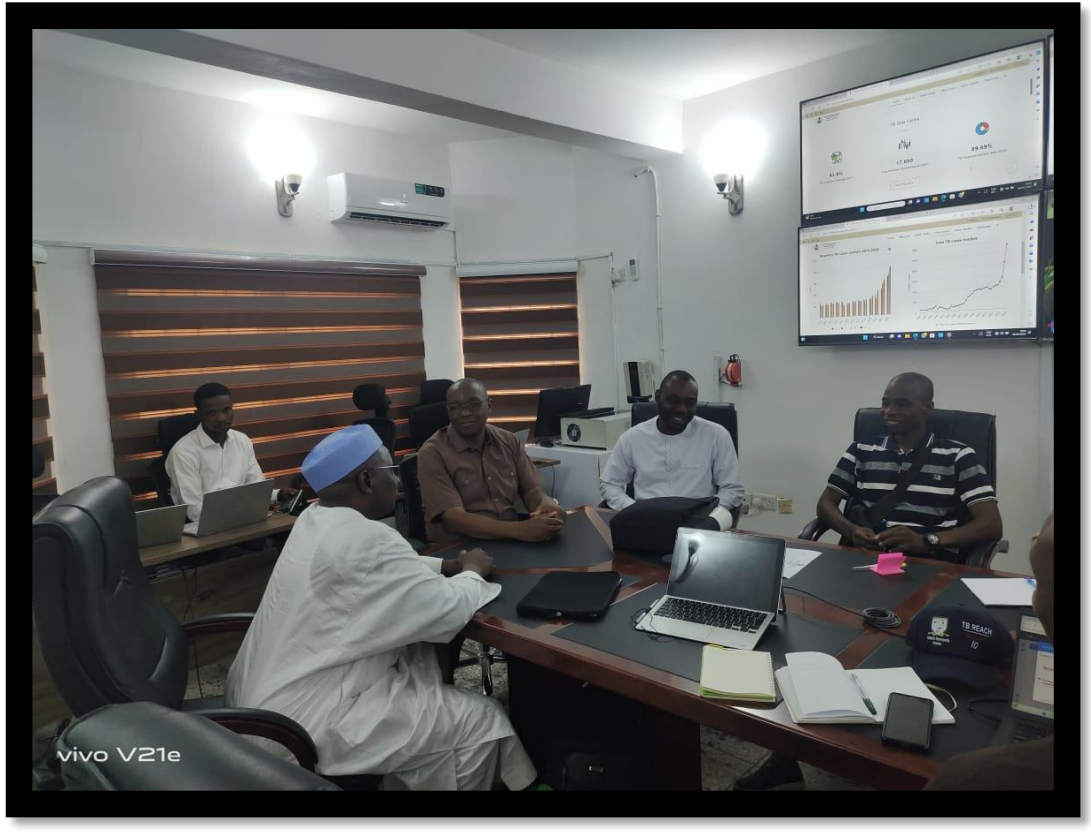
Dr. Obioma Chijioke-Akaniro
National Tuberculosis, Leprosy and Buruli Ulcer Control Programme

Collaboration, Communication & Control

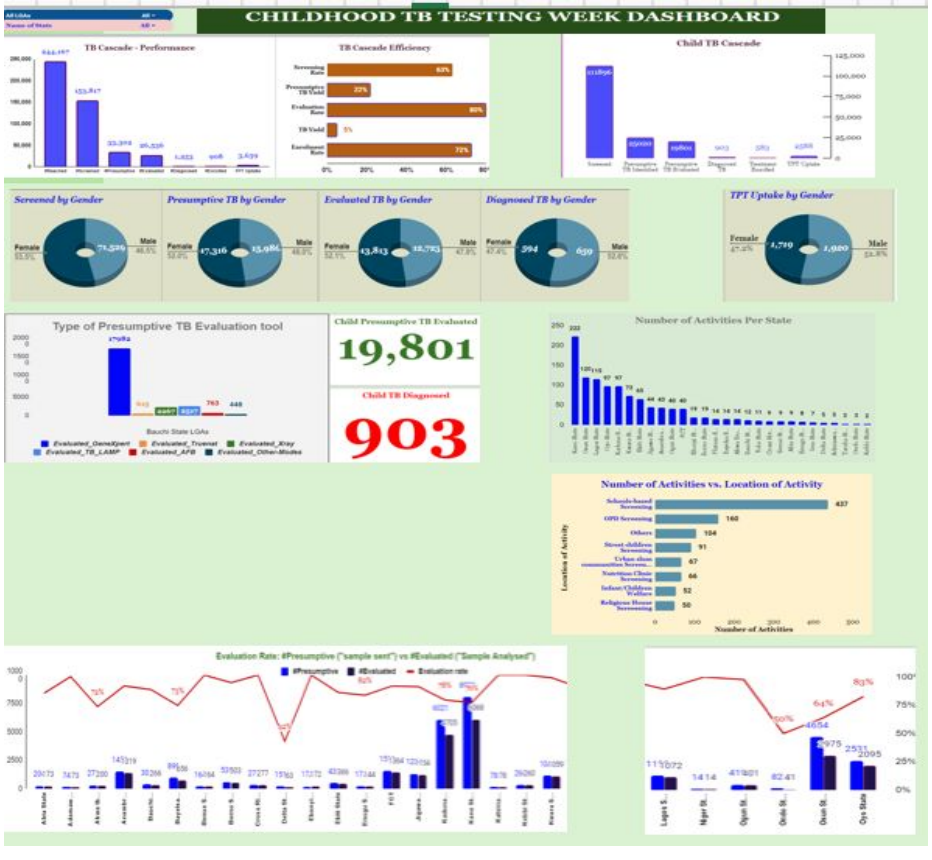
Our TBSR has become a discovery place for us
A cozy quiet place where everything makes a meaning
Real time tracking (DRS, Child Testing Week, Triangulations)

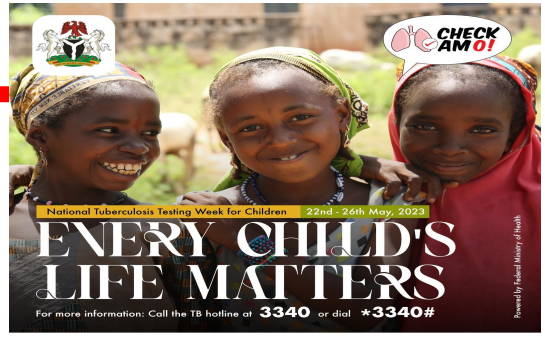
The Drug Resistance Survey Data management room using Tele-conference Teleconference

- Validation of each entry
- Tele-connect for any flagged site
- Everyone views the flagged entry
- Corrections real-time



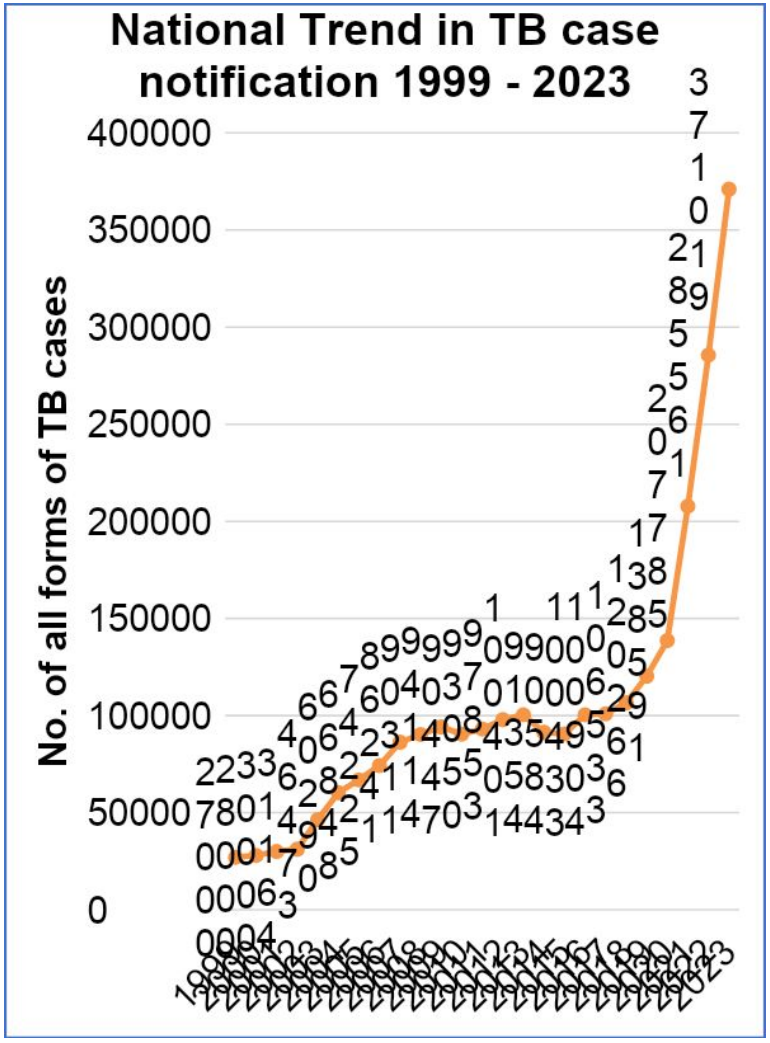
Disaggregated CHILD TESTING WEEK result recived so far





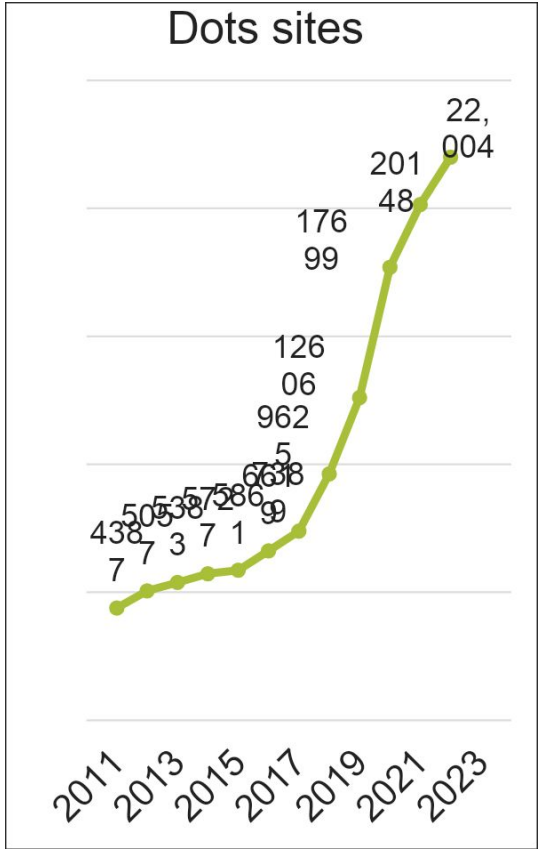
School based screening, OPD screening, street children and Nutrition clinics topping the chart

Location of activity	Child TB diagnose	Percentage
Religious Centre	69	5.7%
OVC	15	1.2%
Children ward	15	1.2%
Community management of Acute malnutrition	13	1.1%
Hard to reach community screening	41	3.4%
IDP Camps	5	0.4%
Infant/children welfare	9	0.7%
Nutrition clinic screening	153	12.7%
OPD Screening	243	20.1%
School based screening	340	28.1%
Street children screening	212	17.5%
Uban slum community screening	93	7.7%
Total	1208	



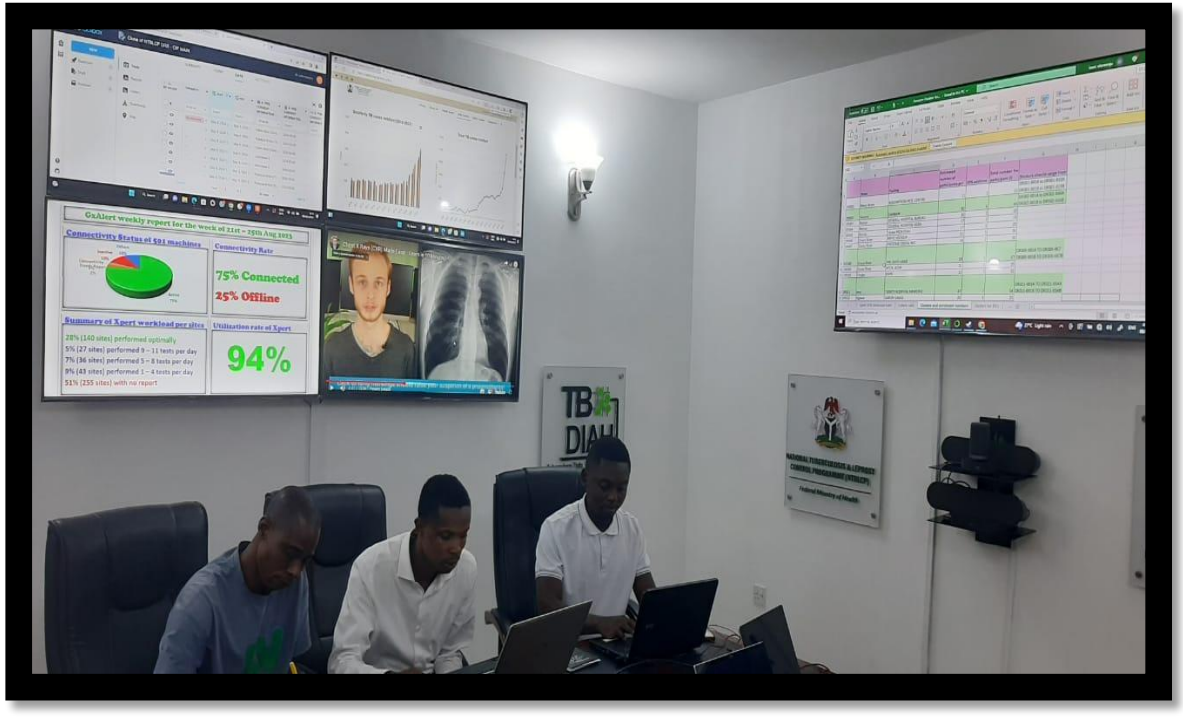
Why Nigeria established a TBSR.....LARGE DATA, Numerous entry points

- A country of >200Million pop.
- TB burden of almost 500,000
- Screening cascade starts with millions of person requiring analysis
- Data input growing as more patients were identified requiring Visibility along care cascade
- Loads of indicators fed by different variables along care continuum

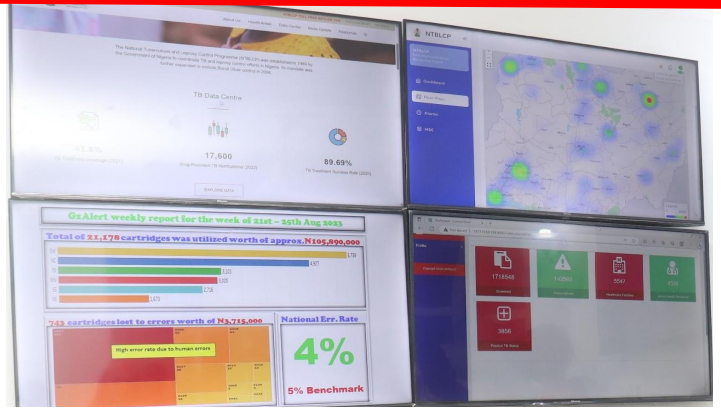


The Format Nigeria TBSR takes: Virtual, Physical

- Data entry, more than 22,000 facilities Public & PPM)
- More than 3000 community TB workers Nationwide,
- About 500 Xpert sites



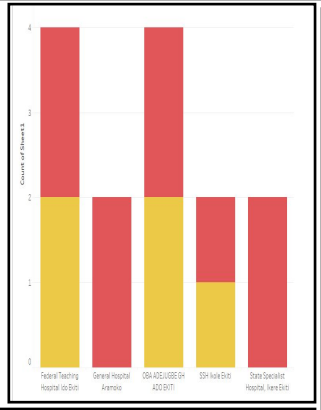
Launching of the situation room

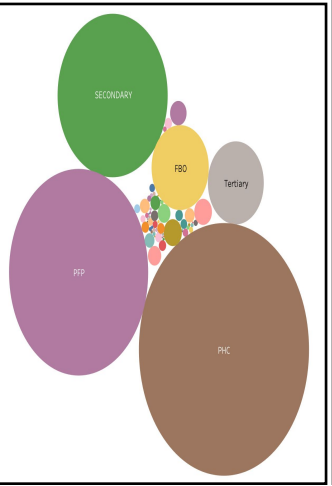


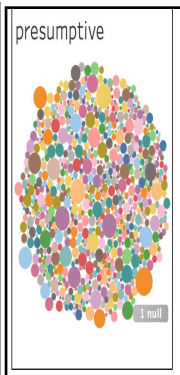
Web and Electronic App Dashboards: MATS, EWORS, NTBLCP website

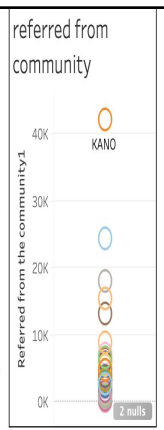
NTBLCP Tableau Dashboard

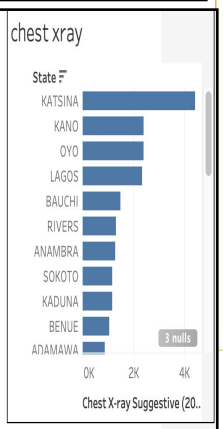
Interactive Data visualization

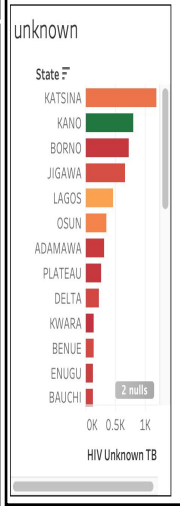


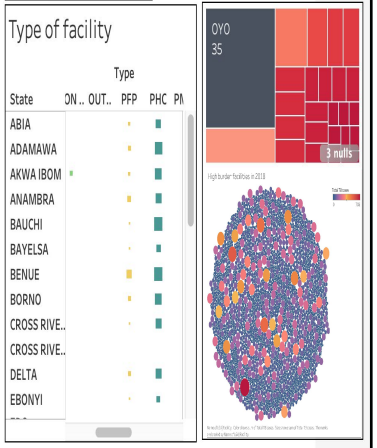


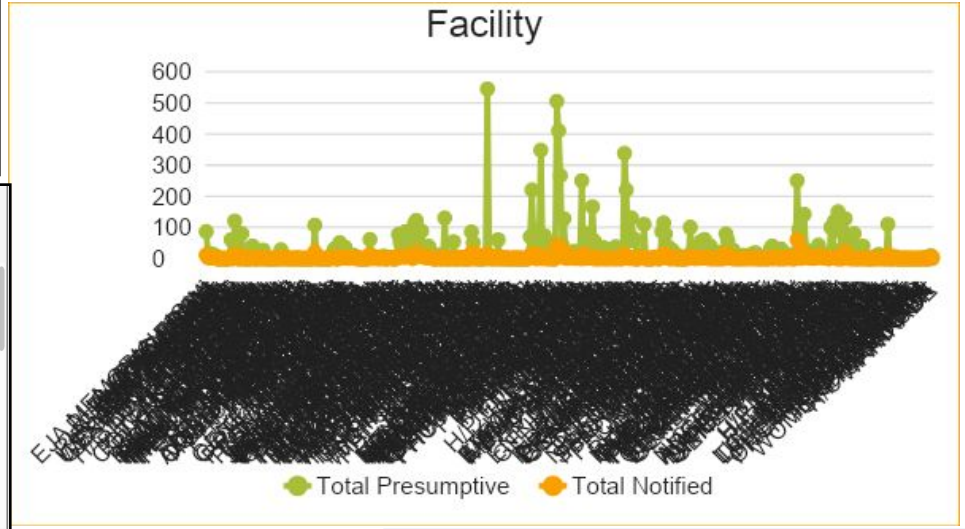


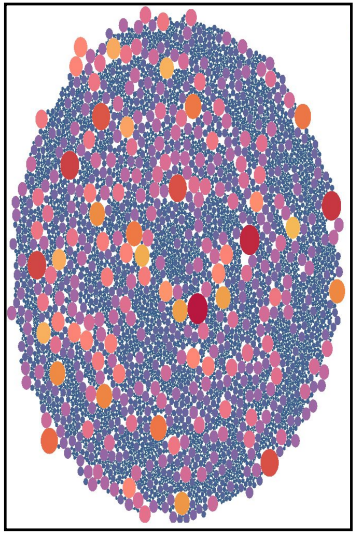


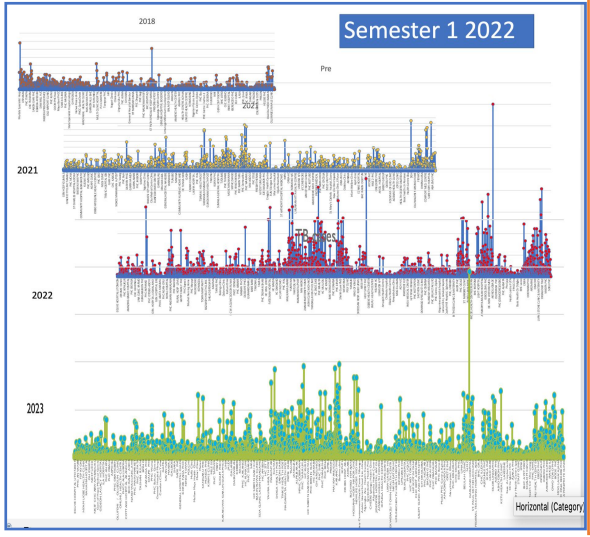




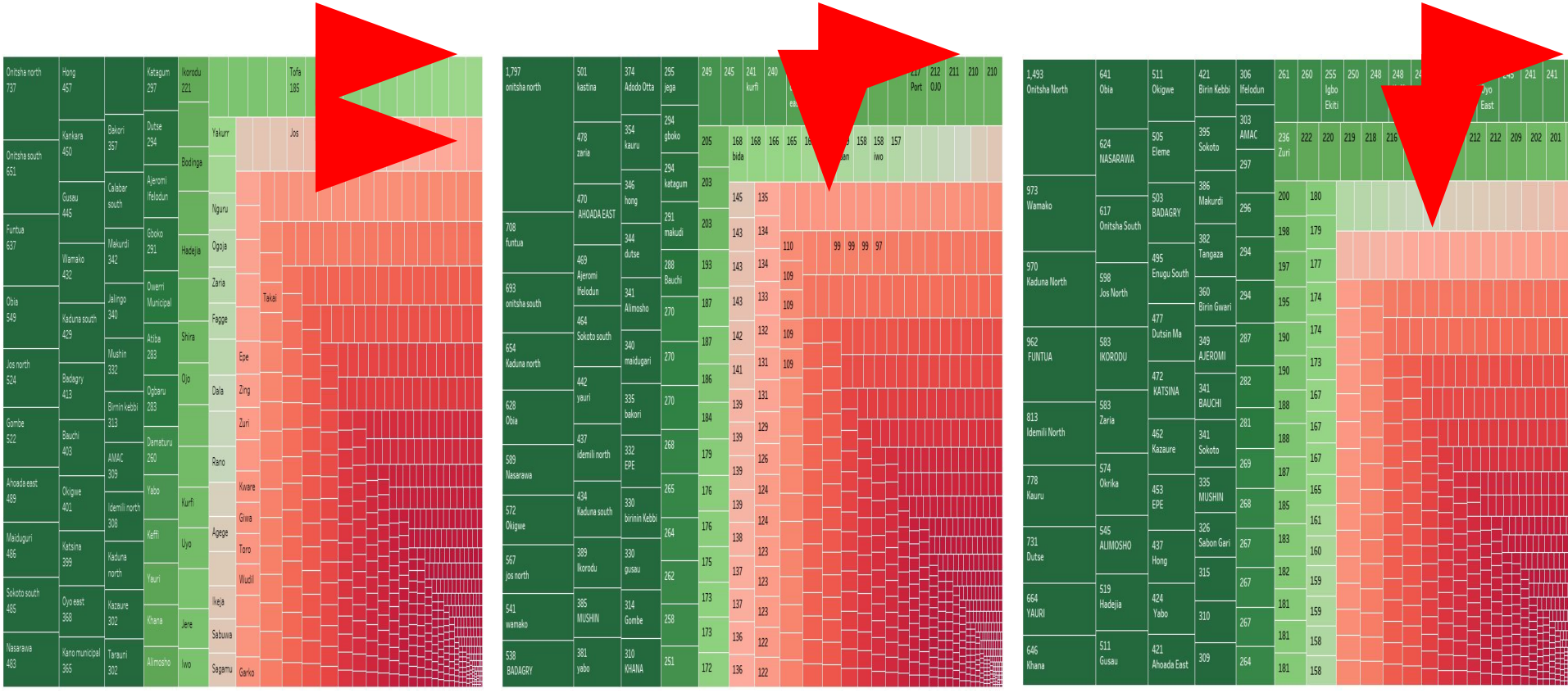








Utilization of chest X ray in 2021, 2022, 2023

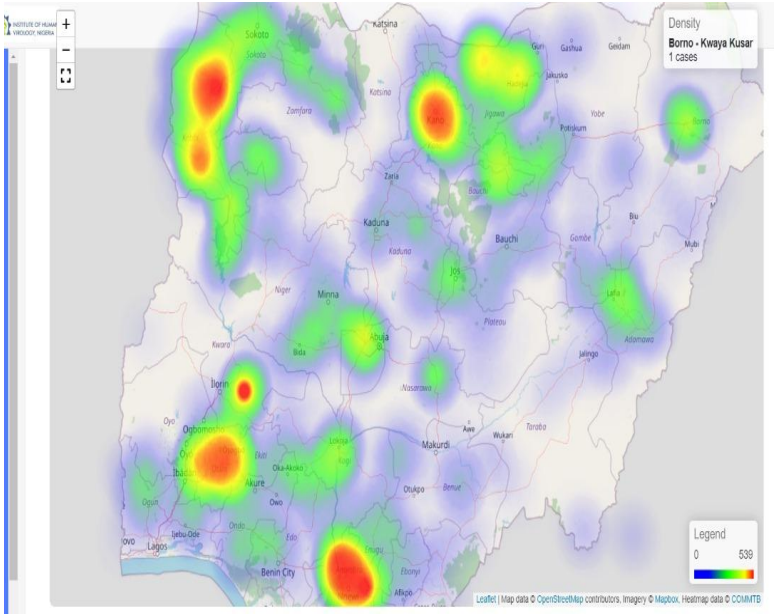


LIVE & REAL TIME

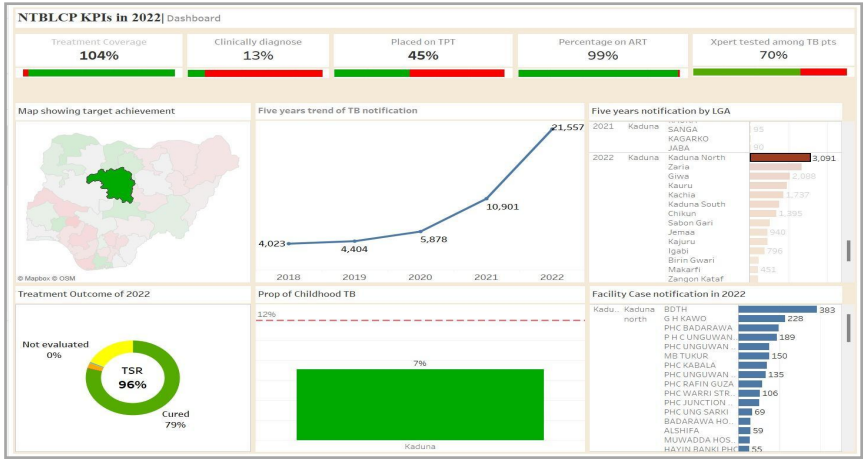
Comm-TB maps hotspot by

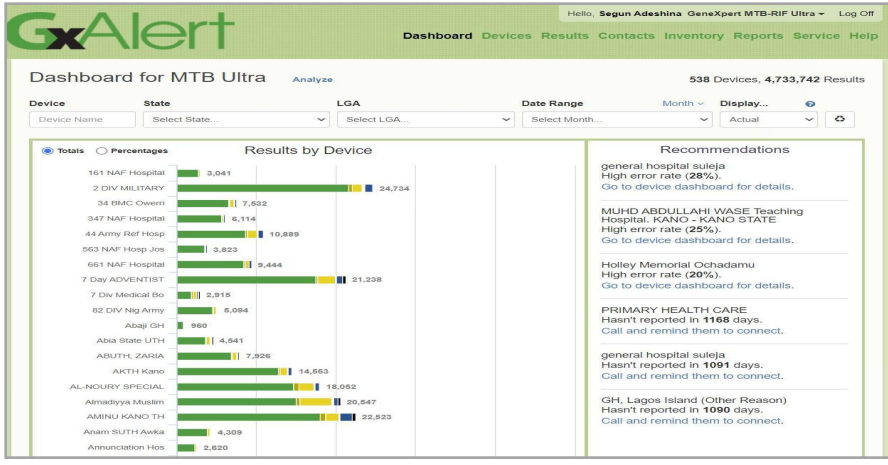
community/ward level in the EWORS

More precise for targeted case finding



Multi- layered data review and analysis

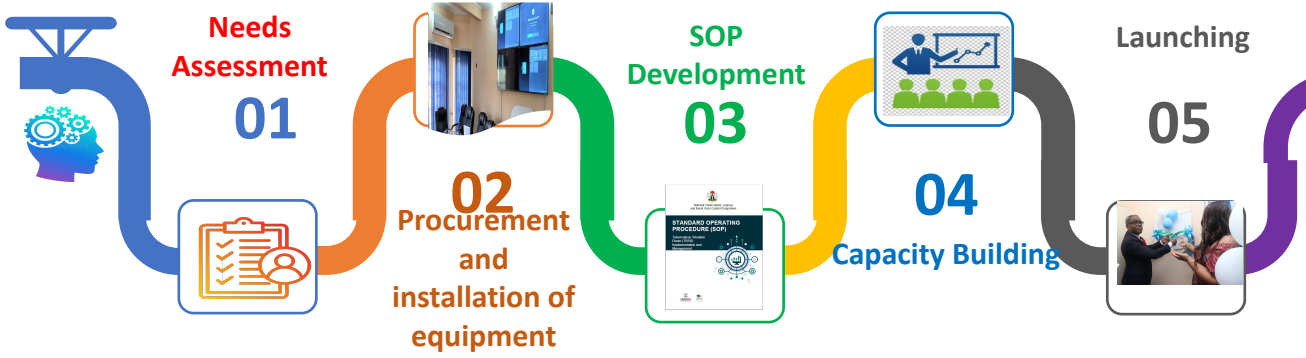


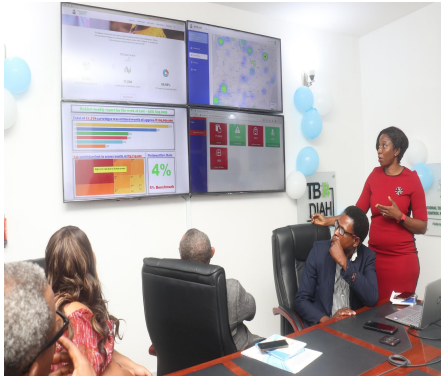


Set up and its challenges;

Overcame the challenges

Have a common goal and a plan



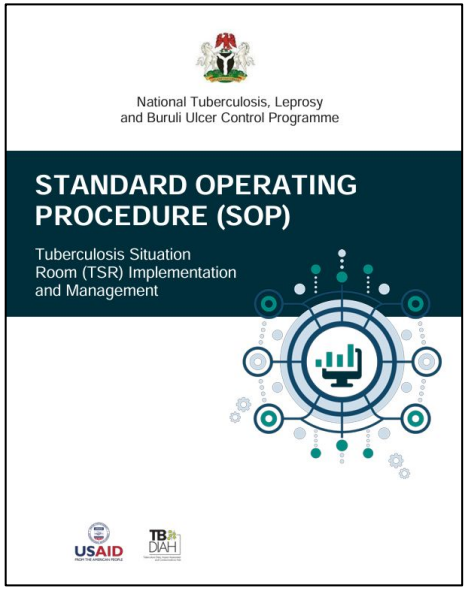


Key Features

- *Access to real-time or near real-time data*
- Multi- layered data review and analysis
- *Data visualization*
- *Collaboration and communication tools:*
- *Data security and privacy*

TB Situation Room: *Data sharing platform, enables the display of information in dashboards, enhance data use and decisions making to improve the quality of TB services.*

SOP helps for maintenance and mitigating misuse

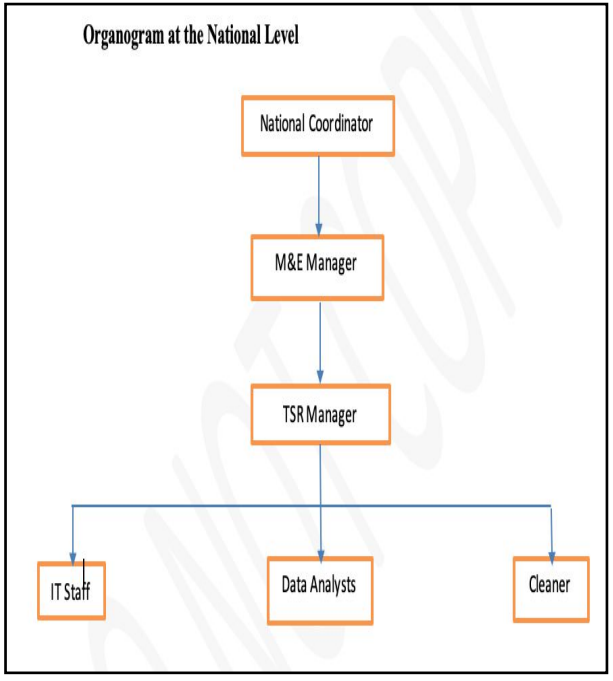


Safeguard against tempering by unauthorized users

Keep door to the TSR always locked when not in use. Visitors must have a scheduled appointment to access the TSR Make available a visitor register and visitors must sign in and out whenever they visit the TSR. Non staff must be accompanied by a staff while in the TSR. Non staff must be granted permission before operating any of the TSR devices

Coordination:

The NC will coordinate the activities of the TSR through the M&E unit of the programme. A bi-monthly coordination meeting will be held with the staff of the TSR to monitor progress, achievements, identify and address affecting optimal functioning of TSR and data use.



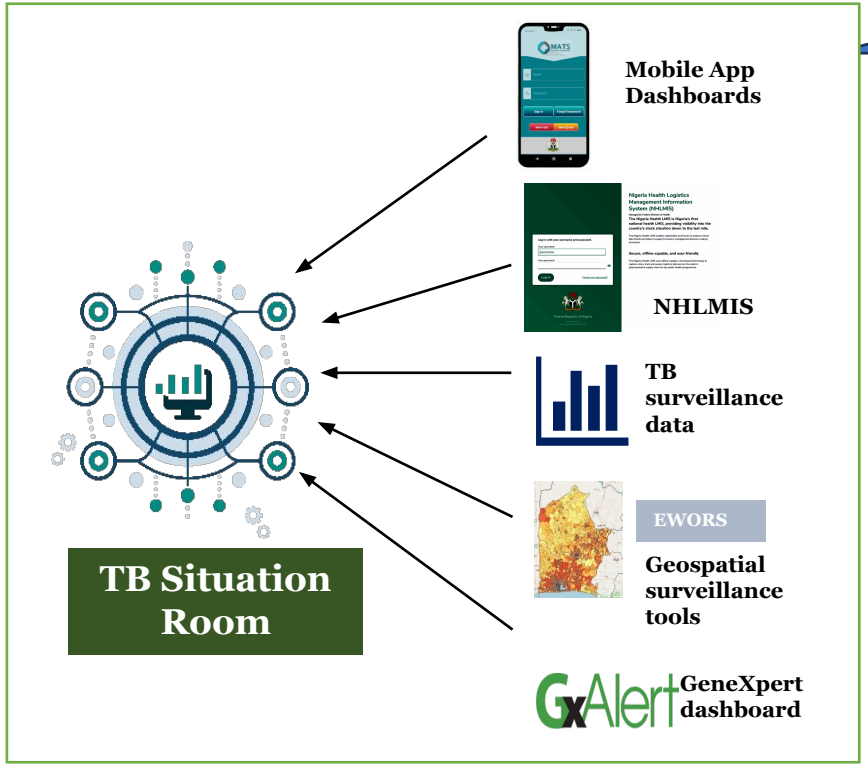
Version : 1 Effective Date: 1st Oct. 2022

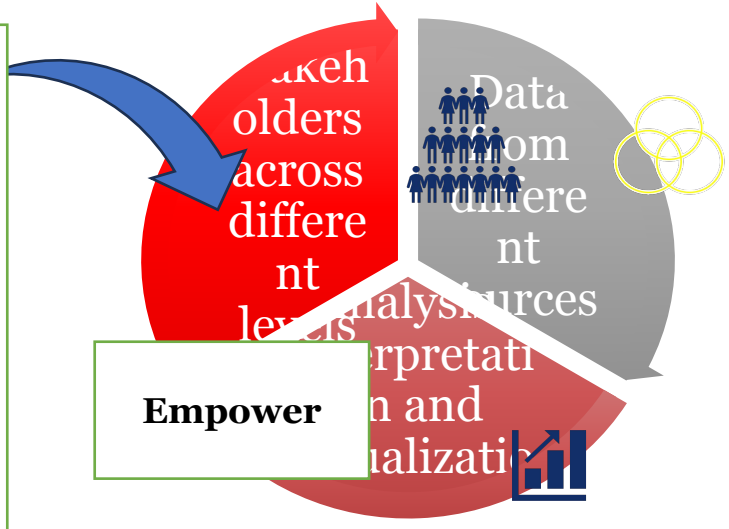
The roles and responsibilities of the TSR staff are as follows

Staff	Roles
TSR manager	• Ensure effective functioning and administration of the TSR • Develop weekly meeting schedules to analyses data, develop & track action plans and provide feedback. • Develop weekly/monthly report on activity of the TSR and disseminate as appropriate. • Identify training needs of the data source (facilities, LGA & communities) • Organize monthly data use meetings with all stakeholders • Produce actions plan, monthly & quarterly bulletin. • Perform any other duties that may be assigned by STBLCPM/M&E Officer.
Data Analyst	• Review data sent in from the data source (facility, LGA, State, Community, partners and other programs). • Identify and communicate gaps in the data to the source within a day • Support the source to correct and address the gaps as appropriate • Conduct data analysis and visualization of agreed indicators on the monitor using the standard template. • Identify capacity gaps of the data source and communicate to the TSR manager • Ensure electrical appliances are switched off at the end of the day • Always ensure data security and confidentiality • Ensure regular back up of data on the cloud and other sources • Provide weekly/monthly report to the TSR manager • Perform any other TSR related duties assigned by the
IT officer	• Provide IT support to ensure effective functioning of the TSR including holding of schedule meetings • Ensure safeguard and maintenance of IT equipment always • Ensure functionality and regular maintenance of the equipment, electrical appliances, laptops, monitors, etc in the TSR • Provide regular update of software, internet facilities in the TSR • Perform any other TSR related duties assigned by the TSR manager
Cleaner	• Ensure regular cleaning of TSR and good ambience for meetings. • Ensure TSR is appropriately locked at the close of business and submit key to the assigned security unit. • Perform any other TSR related duties assigned by the TSR manager

Results and Opportunities

utilization: NTP Manager and team





Empower

Integrate

Strengthen

Lesson Learnt

From Establishment

- Set an agreeable goal
- A rapid assessment isn't a waste of time
- Don't assume the process of use and maintenance, have an SOP handy developed with stakeholders
- SOP is the tool to mitigate misuse

TBSR

- You haven't seen it all until its view is interactive
- Situation room-Justification room-conviction room-strategy room
- Have your keys focal persons in the room for reviews (informed decision)

NATIONAL TUBERCULOSIS, LEPROSY AND BURULI ULCER CONTROL PROGRAMME (NTBLCP)
Federal Ministry of Health

National Tuberculosis, Leprosy and Buruli Ulcer Control Program, Nigeria

Thank You

Nagode

Sosongh o

Avo

Anya

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Imela

Daalu

Sam o

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Una do well

Msugh

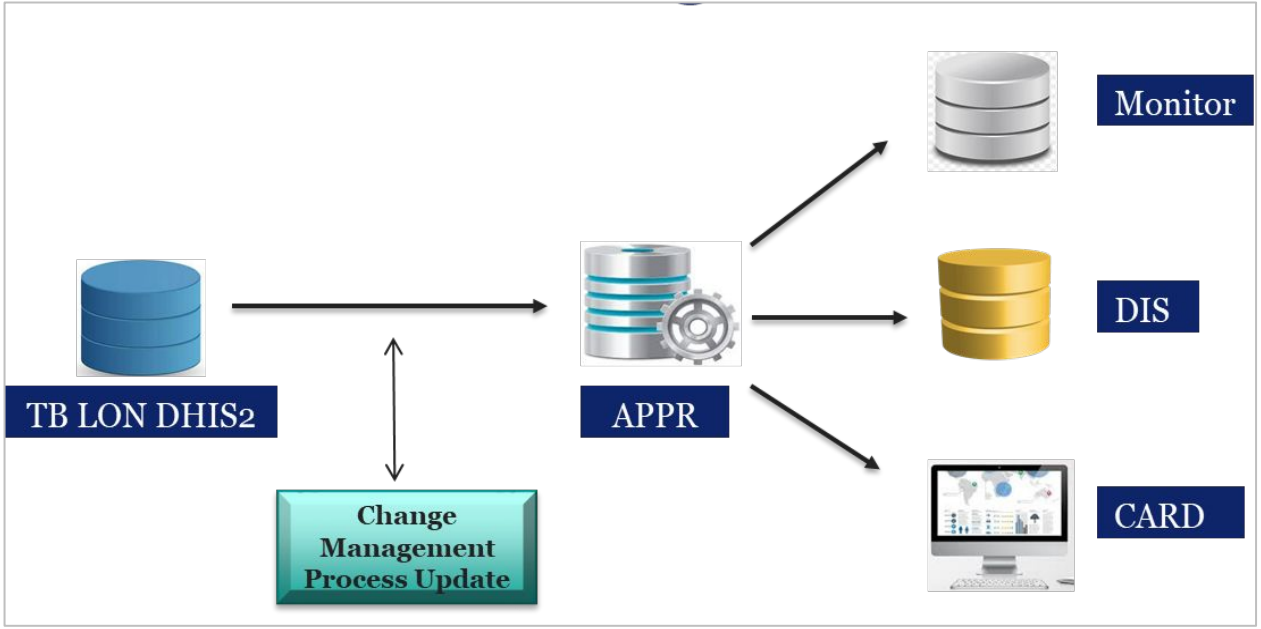
Nigeria's Automatic Partners Progress Report (APPR)

Outline

- Introduction to the APPR
- APPR development and process flow
- APPR architecture
- Alignment of Performance Based Monitoring and Evaluation Framework (PBMEF) and APPR—indicators and data elements
- APPR administrative maintenance
- Data quality in APPR
- Benefits of APPR

APPR: What is it?

USAID HIV/AIDS & TB Office (HAT) data management platform configured on a DHIS2 backbone and architecture that enables seamless data integration across different data platforms and improves data quality by minimizing manual entries and data imputation errors



Key:

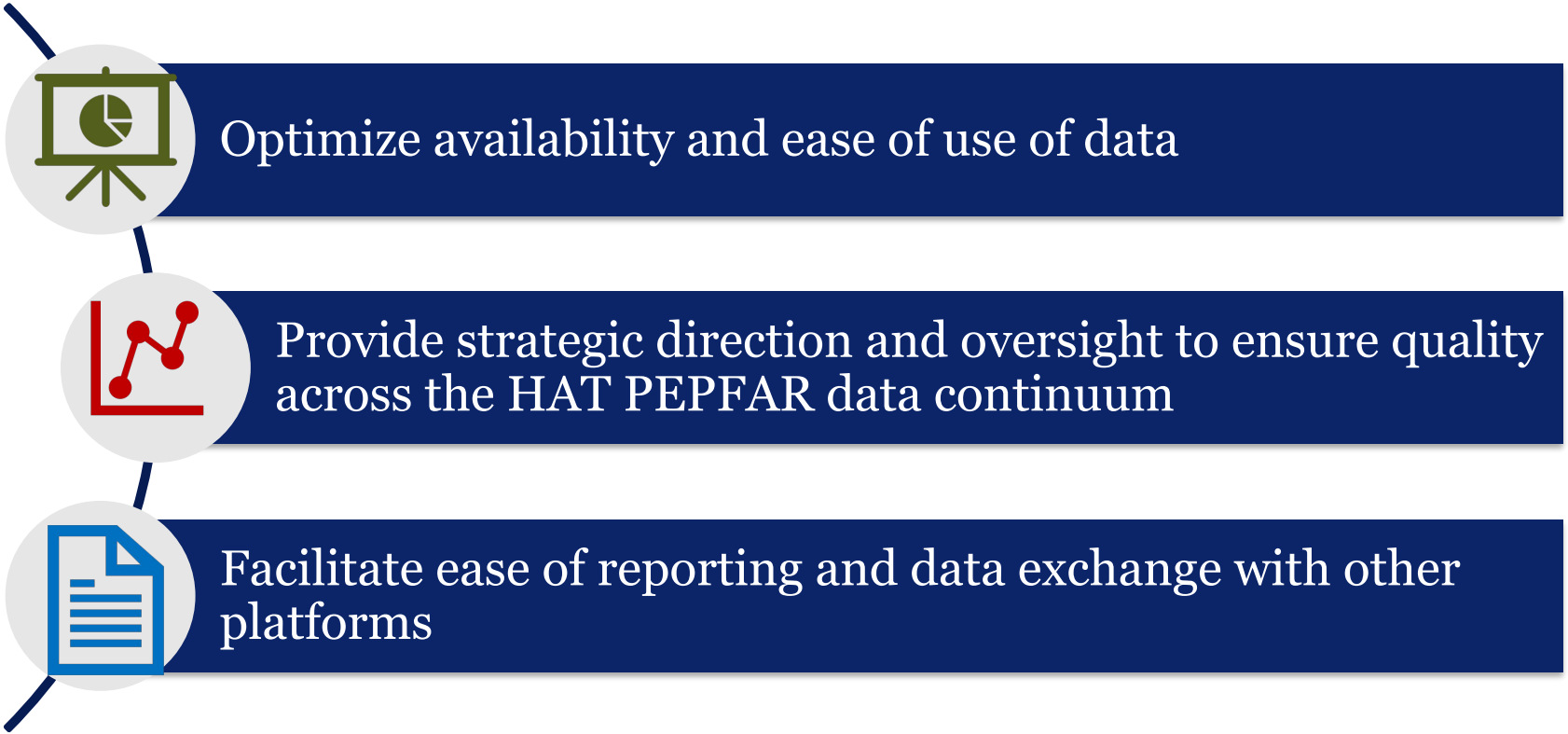
TB LON: Tuberculosis Local Organization Network

APPR: Automated Partners Progress Report

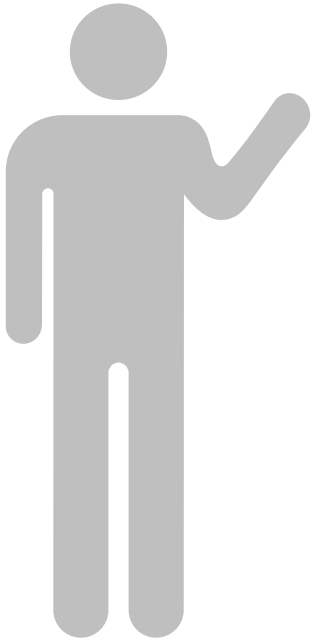
DIS: Development Information Solution

CARD: Comprehensive Access and Review Dashboard portal

APPR: Objectives



Why APPR?



Data Visibility

- Data visibility is enhanced so that the donor, and stakeholders can visualize the dashboard, performance indicators, and targets

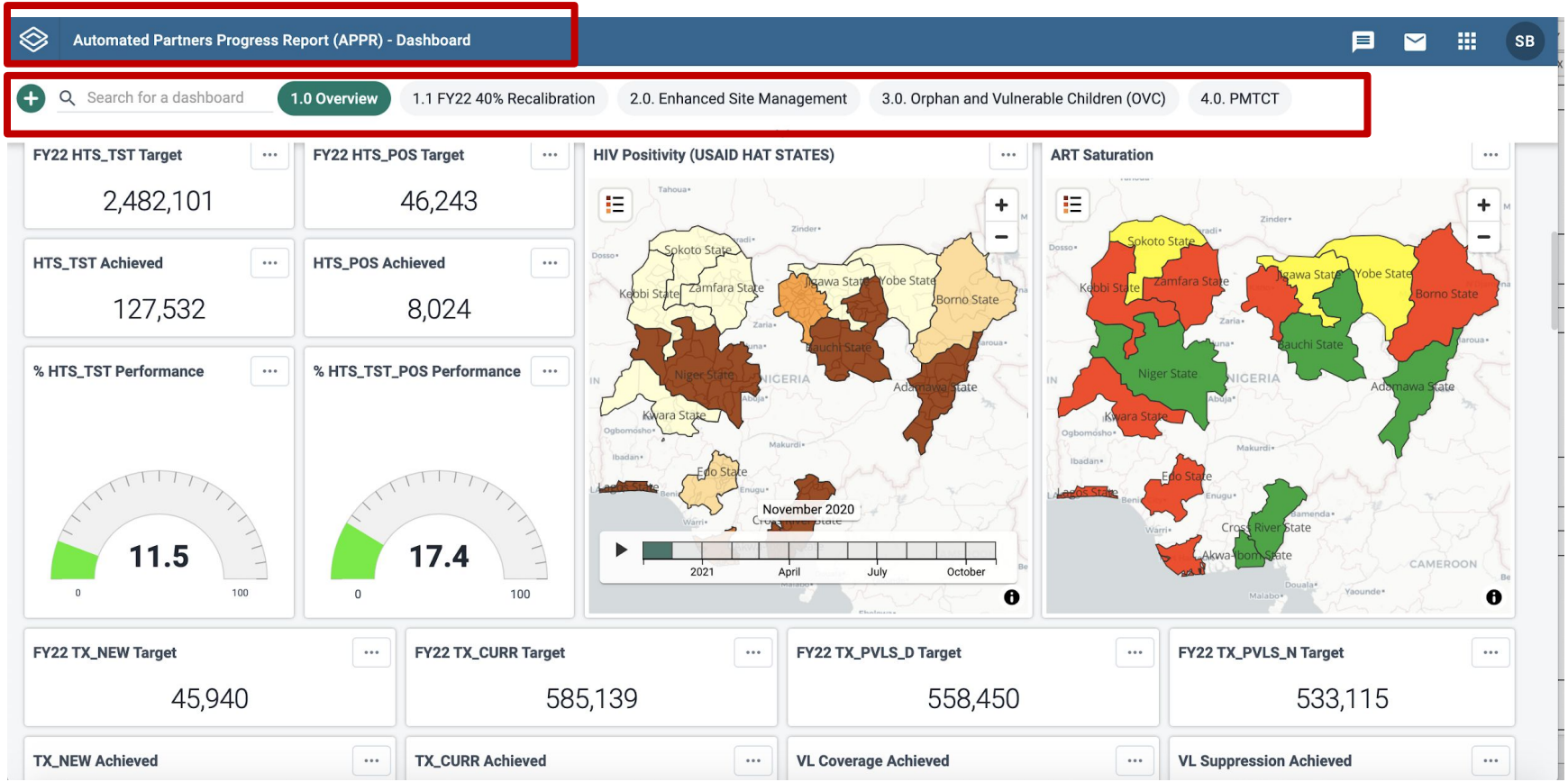
Data Use

- Supports decision making and maximizes the use of data for real time performance monitoring of TB data

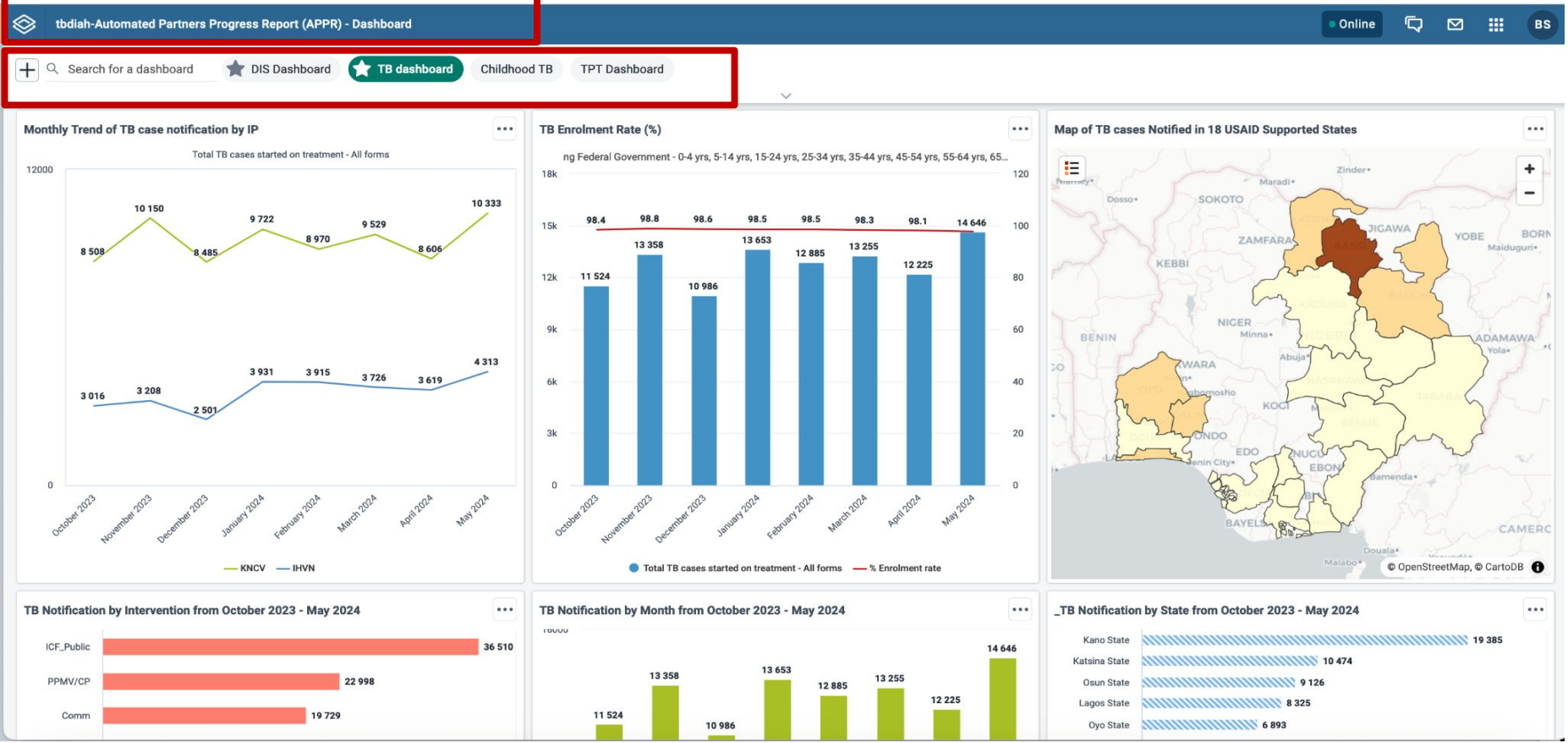
Data Quality and Governance

- Data quality is assured, and data governance and organizational structure is entrenched
- Timeliness and completeness

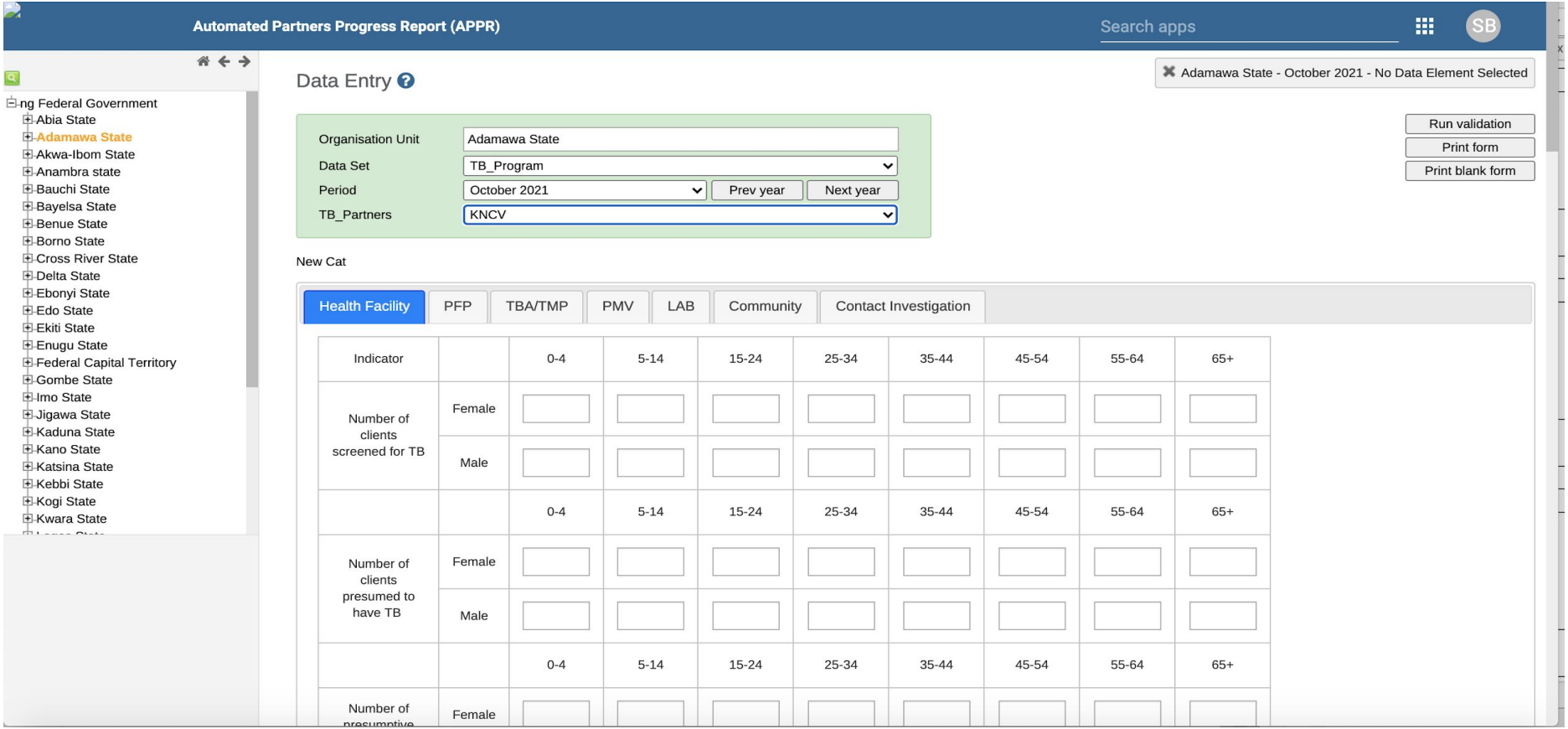
APPR Dashboard (Landing Page) at Inception



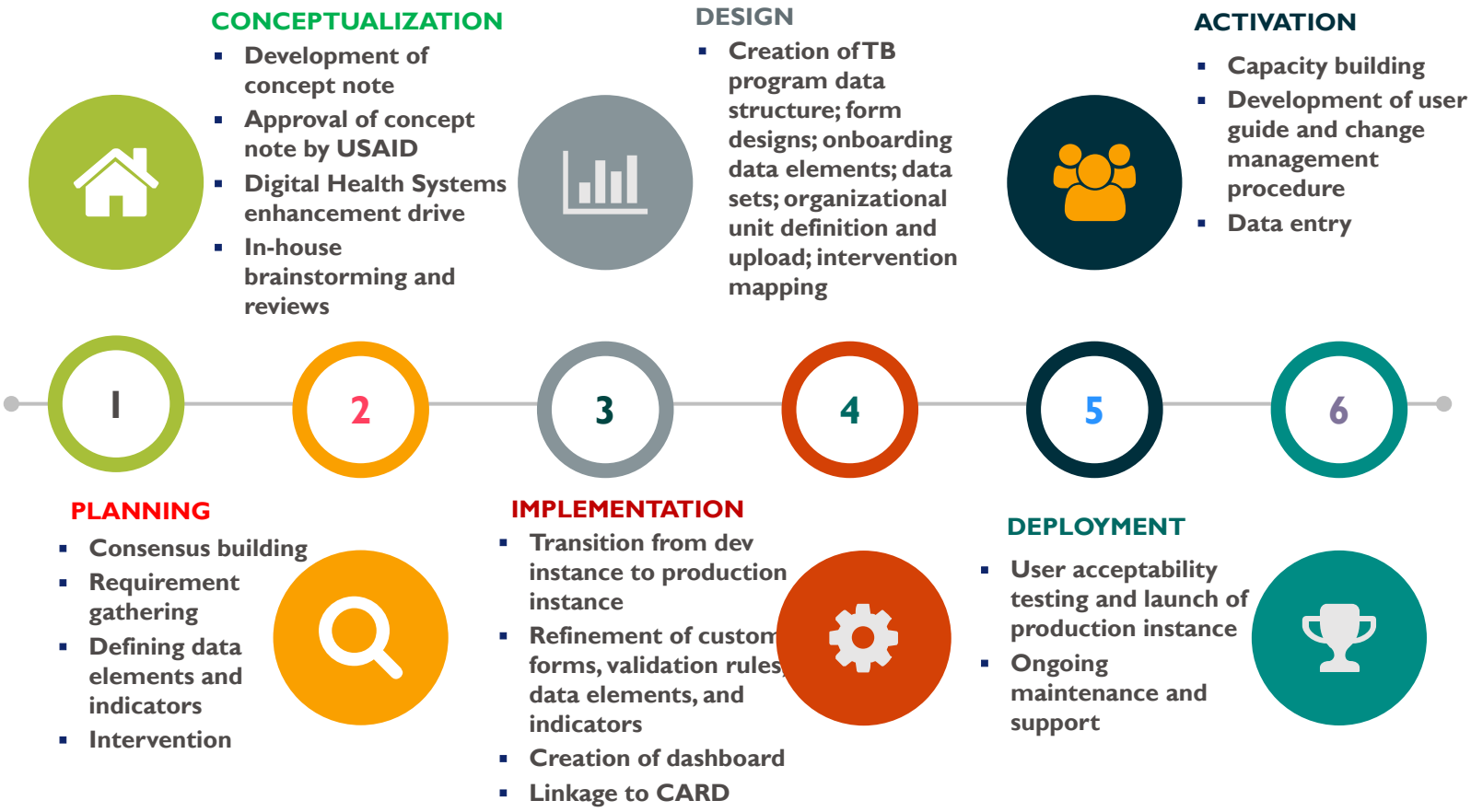
Current TB APPR Dashboard (Landing Page)



APPR Data Entry Page



APPR Development and Process Flow



ALIGNMENT OF PBMEF AND APPR – INDICATORS AND DATA ELEMENTS

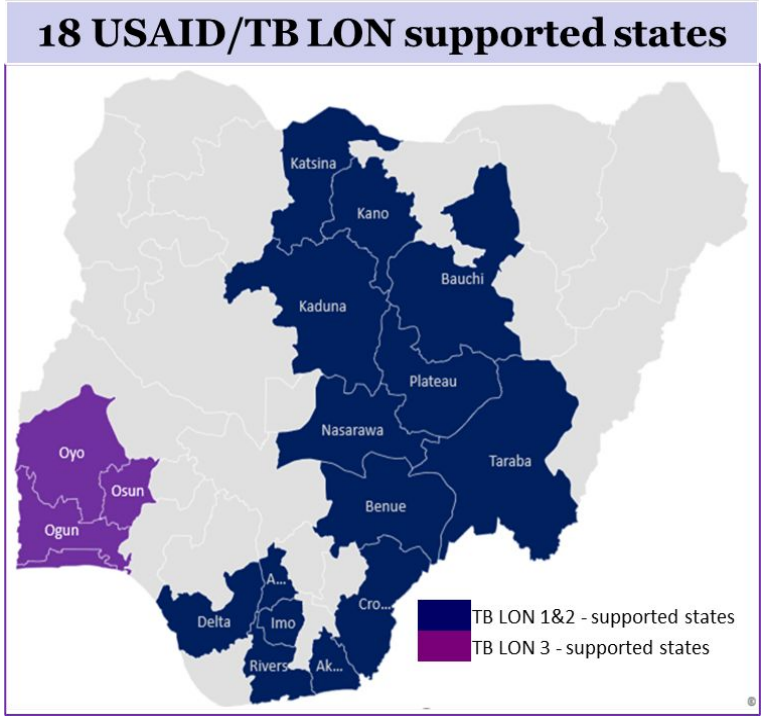
OBJECTIVES	INDICATOR TECHINCAL AREAS	DATA ELEMENTS IN APPR	USAID TARGETS OUTCOME
REACH Maximize the detection of all forms of TB in all individuals of all ages	▪ TB detection rate/treatment coverage ▪ Bacteriological coverage ▪ Childhood TB notification ▪ Drug-resistant TB (DR-TB) notification ▪ Contact investigation coverage ▪ Private sector notification ▪ Presumptive TB	▪ Number of clients screened for TB ▪ Number of clients presumed to have TB ▪ Number of presumptive cases evaluated for TB ▪ Number of clients diagnosed with DS-TB ▪ Number of clients diagnosed with DR-TB ▪ Number of clients diagnosed with all forms of TB ▪ Number of clinically diagnosed TB patients ▪ Number of bacteriologically diagnosed TB patients ▪ Number of DS-TB patients started on treatment ▪ Number of DR-TB patients started on treatment ▪ Number of all forms of TB patients started on treatment ▪ Number of all clients new and relapse TB Cases ▪ Bacteriologically – new and relapse TB cases	90% of incident TB cases diagnosed and initiated on treatment 90% treatment success rate
CURE Empower all individuals with TB to complete treatment and be cured	▪ Drug-sensitive TB (DS-TB) treatment success ▪ DR-TB treatment success	▪ Number of DS-TB cases reported in previous 12 months ▪ Number of DS-TB cases reported - Cured ▪ Number of DS-TB cases reported - Died ▪ Number of DS-TB cases reported - Loss to follow up ▪ Number of DS-TB cases reported - Not evaluated ▪ Number of DS-TB cases reported - Treatment completed ▪ Number of DS-TB cases reported - Treatment failure ▪ Number of DS-TB cases removed from register ▪ Number of DR-TB cases reported in previous 24 months ▪ Number of DR-TB cases reported - Cured ▪ Number of DR-TB cases reported - Died ▪ Number of DR-TB cases reported - Loss to follow up ▪ Number of DR-TB cases reported - Not evaluated ▪ Number of DR-TB cases reported - Treatment completed ▪ Number of DR-TB cases reported - Treatment failure	30 million on TPT TBD
PREVENT Stop the spread of new infections and progression from infection to active TB disease	▪ TB preventive treatment (TPT) ▪ Prevention	▪ Number of contacts screened for TB ▪ Number tested for TBI ▪ Number of contacts eligible for TPT ▪ Number of contacts started on TPT ▪ Number placed on 3HR ▪ Number placed on 6H ▪ Number placed on 1HP	
SUSTAIN Build country-owned TB systems, led by local partners, that accelerate progress and support pandemic preparedness	▪ TB financing expected from domestic sources	N/A	Global investments reach $13 billion by 2022

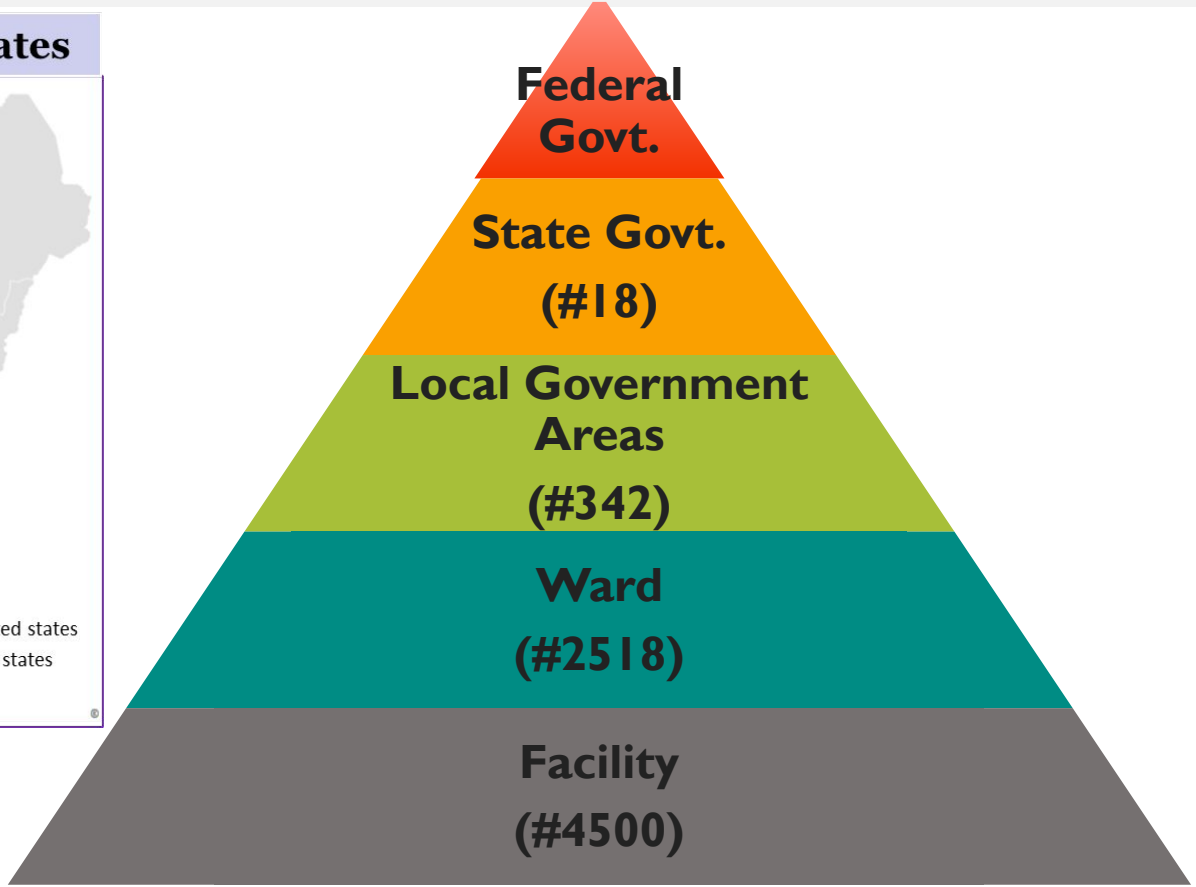
Decrease TB Mortality by 35% by 2030

Decrease TB Incidence by 52% by 2030

APPR Architecture

APPR Architecture: Organizational Unit





Intervention Mapping in the APPR

Standalone Laboratory

Private laboratories aligned with the NTP, diagnosis and referral of presumptive cases, TB cases

Community Level

Captured interventions are community active case finding (ACF), patent and proprietary medicine vendors, community pharmacies, informal private care providers, and referral of presumptive cases

Wellness on Wheels

Mobile TB diagnosis and treatment using the specialized containers; diagnosis and initiation of treatment of TB cases

Intensified Case Finding

- Disaggregation by public and private health facilities
- Screening, diagnosis, treatment and monitoring

Contact Investigation

Involving disaggregation by age and type of TPT regimen:

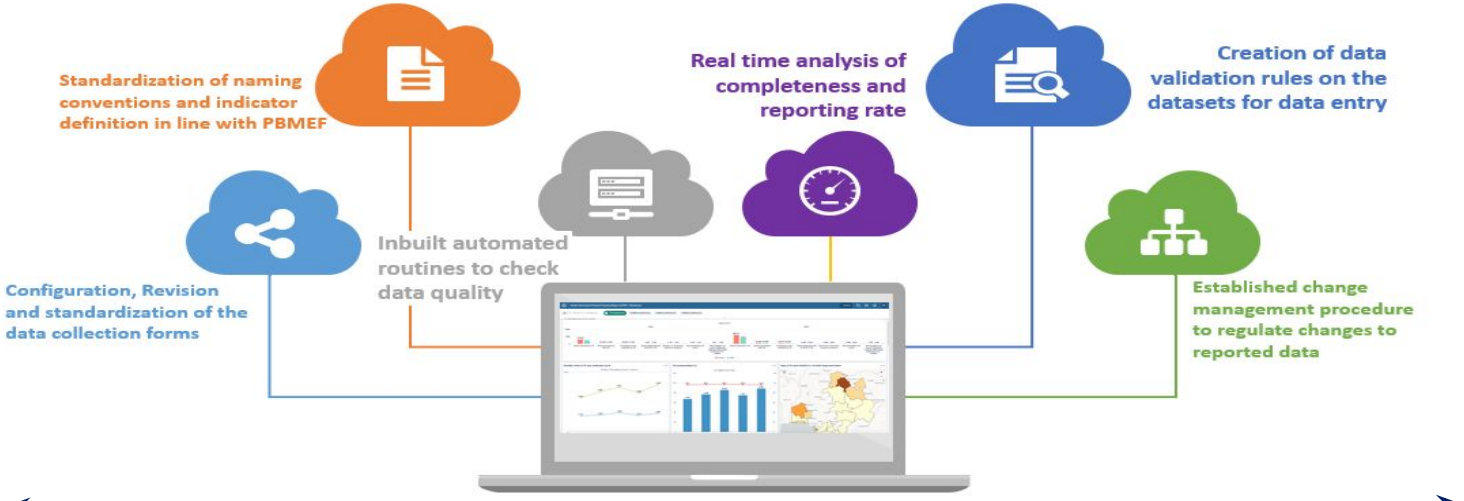
- 0-4 years, 5-14 years, 15 years and above
- 6H, 3HP, and 1HR

ACF – Special Population

Intervention areas include schools, prisons, Nomads, Internally displaced persons (IDP) camps, etc.

Data Quality Assurance in APPR

System Level



Program Level

Periodic data quality reviews, analysis, and feedback by TB DIAH

- Support to IPs through ongoing capacity building and mentorship
- Establish data management SOPs and CMP

- Collaboration with partners to promote information use at data collection points
- Promoting data harmonization at subnational levels

Benefits of APPR

- Improves data management support for the Mission and IPs by establishing a database and facilitating data analysis and use.
- Facilitates alignment with PBMEF guidance through standardizing reporting requirements and timelines across IPs, thus improving data quality.
- Reduces the data entry workload and improves data analytics and visualization.
- Facilitates IPs' transition from an Excel-based data system to DHIS 2 and interoperability and data exchange among data platforms.

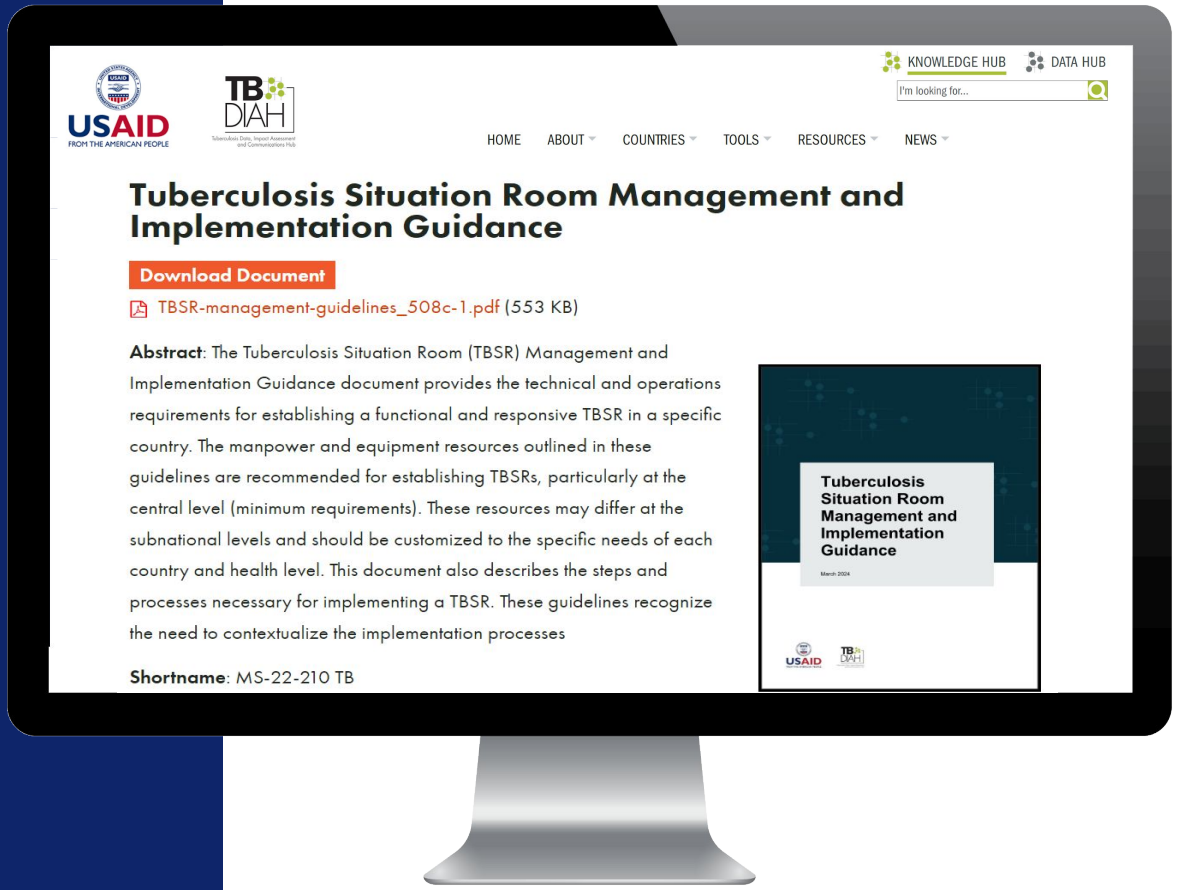
TB APPR Web Address:

https://tb.hatappr.org/dhis-web-dashboard/#/

TB Situation Room Management and Implementation Guidance

Introducing the TBSR Management and Implementation Guidelines

Now available in the TB DIAH Resource Library



Who is the TBSR guidance for?

PRIMARY

- ✔ TB program managers
- ✔ Service providers
- ✔ Implementing partners
- ✔ Data managers
- ✔ MEL specialists

SECONDARY

- ✔ Policy makers
- ✔ Donors
- ✔ Program administrators
- ✔ Civil Society Organizations

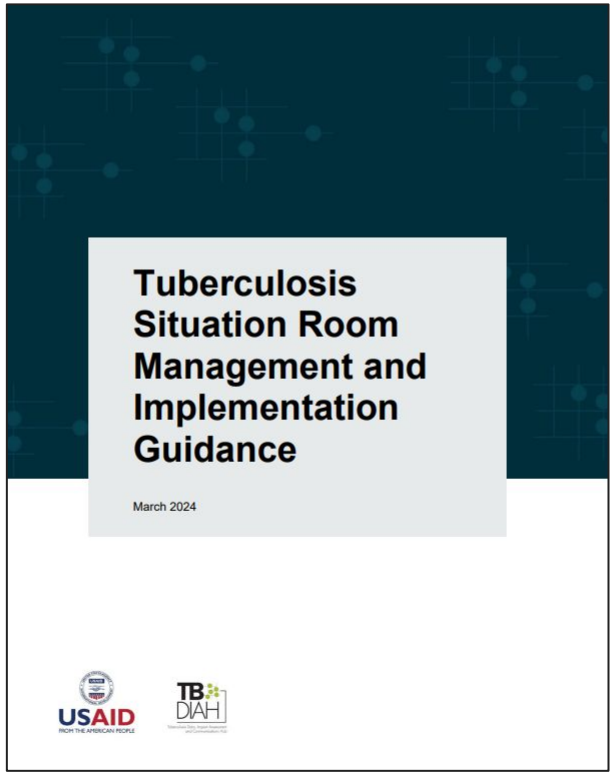
What does the guidance offer?

For the national level:

- Technical and operations requirements for establishing a functional and responsive TBSR in a specific country including:
  - ✔ manpower
  - ✔ equipment resources
- Steps and processes necessary for implementing a TBSR

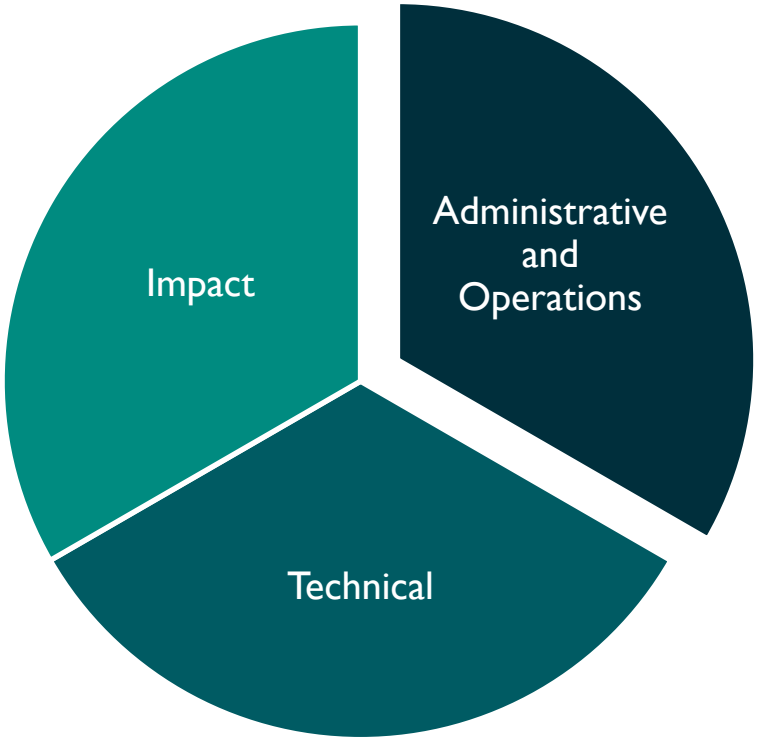
For the sub-national level:

- Discussion of the different resource and implementation requirements at the subnational levels



Management and team composition

TBSR operates with three functional roles: administrative and operations team, technical team, and Impact team (Dashboard viewers)

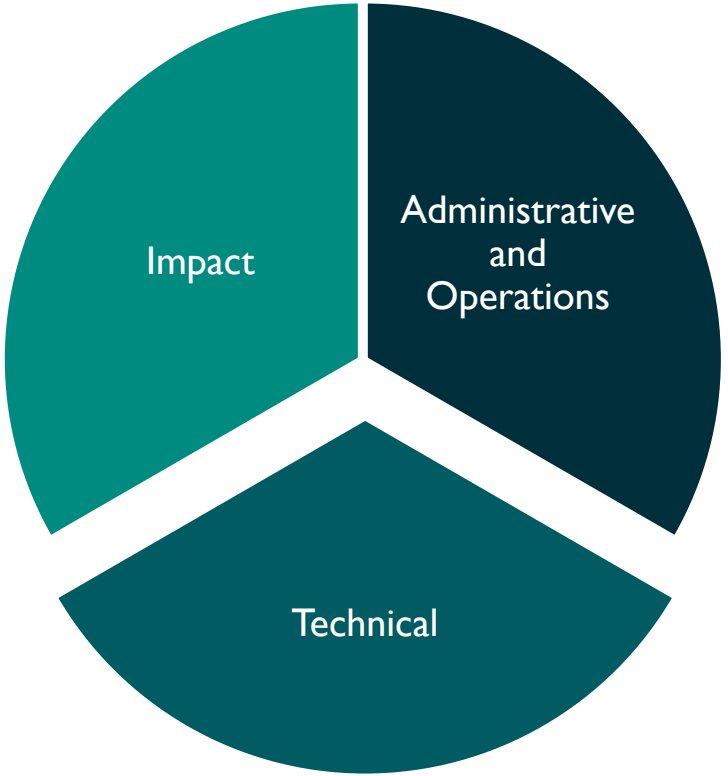


- **Administrative and Operations**
- Technical
- Impact

Management and team composition (cont'd)

TBSR operates with three functional roles: administrative and operations team, technical team, and Impact team (Dashboard viewers)

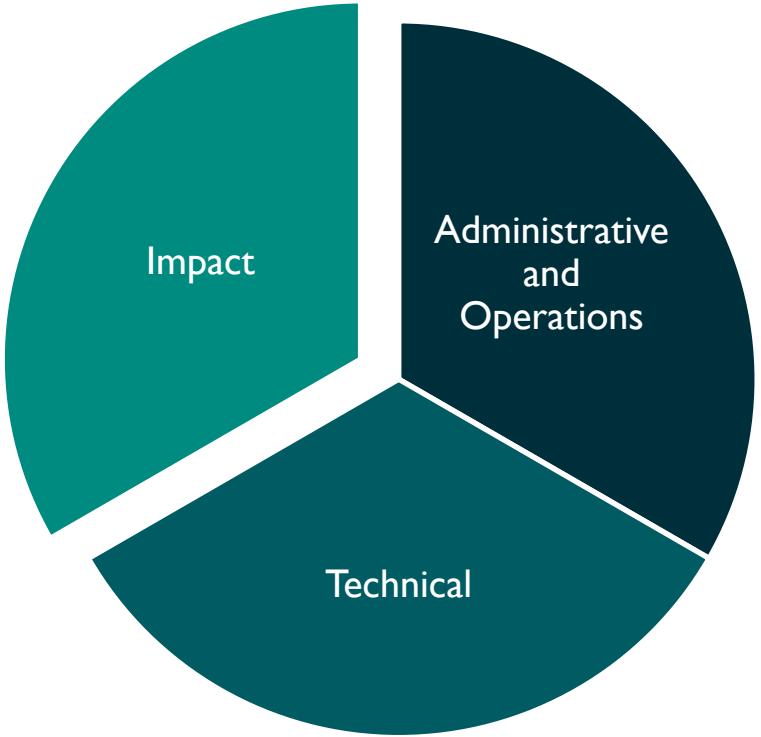
- Administrative and Operations
- **Technical**
- Impact



Management and team composition (cont'd)

TBSR operates with three functional roles: administrative and operations team, technical team, and Impact team (Dashboard viewers)

- Administrative and Operations
- Technical
- **Impact**



Sustainability of TBSR

Review and Evaluation

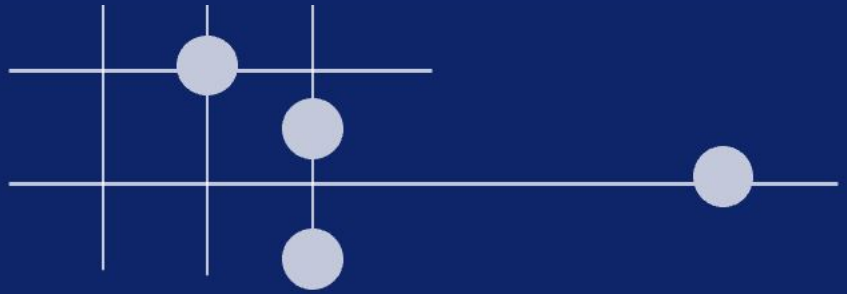
- The NTP and technical partners must regularly review and evaluate the TBSR to ensure it meets user needs.
- The findings should be used as a guide when determining changes needed in the TBSR.

Collaboration, Learning and Adapting (CLA)

- Developing the capacity for reflection, research, analysis, and dialogue is necessary to ensure that TBSR implementation is always learning from what works and what does not
- By adopting these CLA principles TBSR partners will:
  - ✔ collaborate with NTPs and other stakeholders; a
  - ✔ ensure that progress toward the TBSR vision is guided by continuous learning and informed by evidence-based data; and
  - ✔ apply lessons learned

Leveraging the TB M&E TWG

- Use the TB M&E TWG to assist the impact team with data interpretation, analysis, and use in making evidence-based decisions



Q&A

Live Links

TBDIAH.org		http://www.tbdiah.org
TBSR Management and Implementation Guidance		https://www.tbdiah.org/resources/publications/tuberculosis-situation-room-management-and-implementation-guidance/
Nigeria APPR		https://tb.hatappr.org/dhis-web-dashboard/#/

For more information

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USAID Bureau for Global Health, Office of Infectious Disease, TB Division

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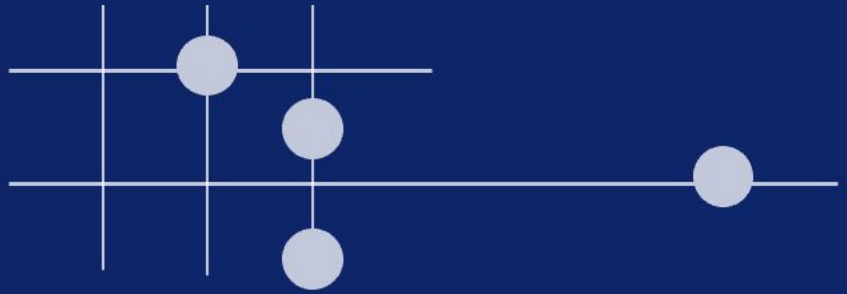

Thank You!

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PR-24-102e

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FROM THE AMERICAN PEOPLE

TB DIAH
Tuberculosis Data, Impact Assessment and Communications Hub