Monitoring Vertical Transmission Prevention Services Among Pregnant Women Accessing Services in the Community

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HIV Impact Network for Vertical Transmission Elimination

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Outline

1. Overview of VTP Services Delivery Sites at Community
2. Data collection methods and tools for monitoring in the Community
3. Monitoring and Evaluation structure and data flow
4. National Data Reporting System (NDARS)
5. Key vertical transmission prevention indicators
6. Reporting HIV testing Serivces among pregnant women at home
7. Lessons learnt
8. Challenges
9. Conclusion and Recommendations

Vertical Transmission Prevention Services in the Community

Unconventional Sites

- Non-traditional, non-registered health facilities providing antenatal services (e.g., traditional birth attendants, faith homes, birth homes).
- Services reported using national PMTCT tools and spoke site summary forms.

HTS Among Pregnant Women (Home/Outreach)

- Pregnant women are tested at home or community locations (e.g., churches, community meetings).
- Services reported through national HTS tools, disaggregated for community-based testing.

Spoke Sites

- Community or health facilities offering minimal PMTCT services.
- Provide testing and refer positives to comprehensive sites for treatment.
- Services reported using spoke monthly Summary form (MSF) on NDARS.

Comprehensive Sites

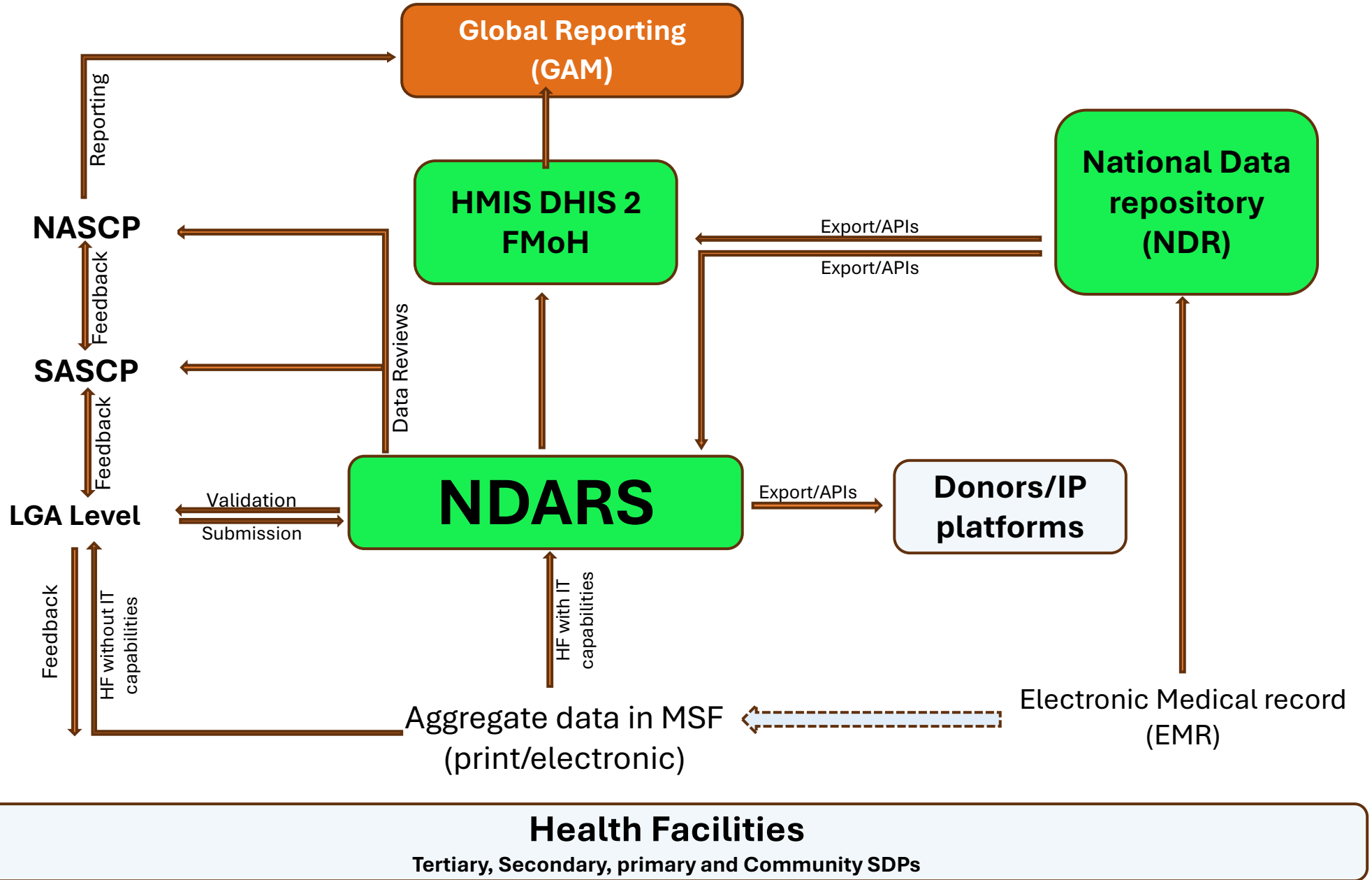
- Sites delivering comprehensive PMTCT services, including ART and EID.
- Pregnant women identified as positive from spoke sites, community or at home are linked to and retained for management.
- NEPWHAN community members play a critical role in linkage and retention.

Data Collection Methods and Tools for VTP in the community

Data collection is done by **both paper and electronic** based system

Paper Based Tools	Electronic Based
• Request and Result Form • Referral Register/Referral form • National PMTCT registers and summary form • PMTCT Spoke Register and Summary form • National HTS Register and Summary form	• National Data Reporting System (NDARS/DHIS)

Monitoring and Evaluation Structure and Data Flow



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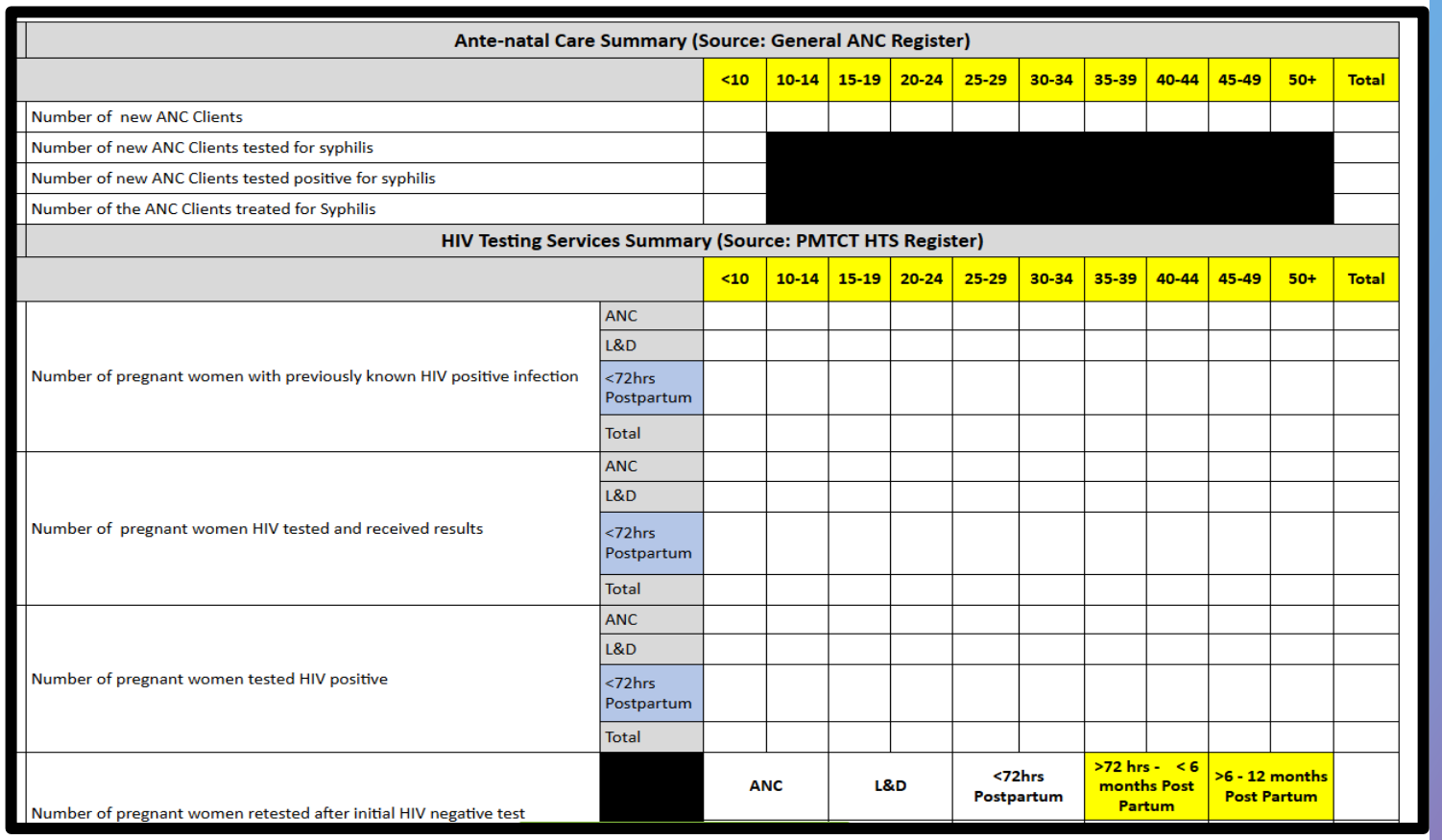
Documentation in Paper Based Tools

- Standardized forms or registers are used to capture data on patient demographics, test results, treatment regimens, and outcomes
- Daily registers, monthly summary sheets, and individual patient forms
- Data from individual paper forms are aggregated into summary forms, such as Monthly Summary Forms (MSFs), which capture totals for indicators like number of tests, ART initiations, or early infant diagnosis

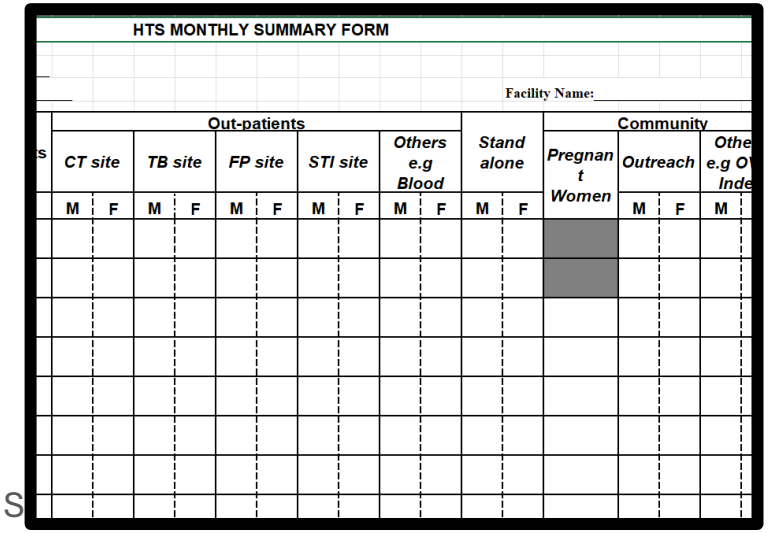


Ante-natal Care Summary (Source: General ANC Register)

	<10	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50+	Total
Number of new ANC Clients											
Number of new ANC Clients tested for syphilis		[redacted]									
Number of new ANC Clients tested positive for syphilis											
Number of the ANC Clients treated for Syphilis											

HIV Testing Services Summary (Source: PMTCT HTS Register)

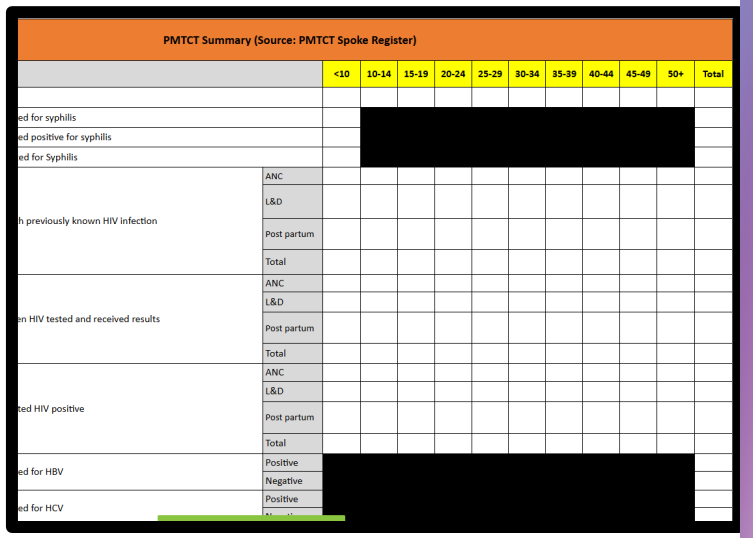
		<10	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50+	Total
Number of pregnant women with previously known HIV positive infection	ANC											
	L&D											
	<72hrs Postpartum											
	Total											
Number of pregnant women HIV tested and received results	ANC											
	L&D											
	<72hrs Postpartum											
	Total											
Number of pregnant women tested HIV positive	ANC											
	L&D											
	<72hrs Postpartum											
	Total											
Number of pregnant women retested after initial HIV negative test	[redacted]	ANC		L&D		<72hrs Postpartum		>72 hrs - < 6 months Post Partum		>6 - 12 months Post Partum		



HTS MONTHLY SUMMARY FORM

Facility Name:_____

	Out-patients												Community			
	CT site		TB site		FP site		STI site		Others e.g Blood		Stand alone		Pregnant Women	Outreach		Othe e.g O Inde
	M	F	M	F	M	F	M	F	M	F	M	F		M	F	M



PMTCT Summary (Source: PMTCT Spoke Register)

		<10	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50+	Total
ed for syphilis			[redacted]									
ed positive for syphilis												
ed for Syphilis												
h previously known HIV infection	ANC											
	L&D											
	Post partum											
	Total											
n HIV tested and received results	ANC											
	L&D											
	Post partum											
	Total											
ted HIV positive	ANC											
	L&D											
	Post partum											
	Total											
ed for HBV	Positive		[redacted]									
	Negative											
ed for HCV	Positive											

Data Collection and Tools

Use of Electronic Medical Records (EMR):

- Health facilities with IT infrastructure leverage EMRs to collect patient-level data.
- Data is transmitted to the National Data Repository and subsequently to NDARS.
- Mobile EMR systems are deployed in communities but are not yet widespread

Aggregated Data Reporting:

- Data from paper-based records at health facilities and unconventional sites are compiled.
- Monthly Summary Forms (MSF) are used by facility M&E teams to enter data into NDARS.

Standardized Tools:

- Registers and forms are standardized and used uniformly across all service delivery points.

Data Management

- Facilitates efficient management of large data volumes from health facilities nationwide.

Platform Overview:

- Centralized, open-source, web-based platform built on DHIS2.
- Supports interoperability with other reporting systems, such as the National Data Repository .

Community Data Reporting in NDARS:

- **VTP MSF**: Reports from unconventional sites.
- **HTS MSF**: Data from home/outreach testing of pregnant women.

Data Reporting and Analysis

Comprehensive Data Reporting:

- Aggregates data from multiple sources to generate reports for program stakeholders.
- Supports strategic decision-making by providing a holistic view of program performance.

Data Analysis and Visualization:

- Offers dashboards for insights, trends, and contributions, particularly from **community testing.**
- Simplifies data interpretation, enhancing stakeholder engagement and accessibility.

Organizational Structure:

- Organizational units in NDARS are clearly grouped to reflect community sites, ensuring clarity in reporting and analysis

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The National Data Reporting System Functionalities

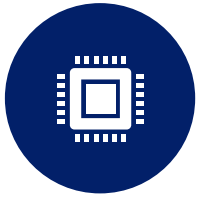
An innovative platform designed to strengthen the M&E of vertical transmission prevention programs and other related interventions

It collects **aggregate data across all health sector interventions** for HIV, Viral hepatitis and STIs. With huge focus on M&E of vertical transmission

Designed to collect data from both conventional health facilities and unconventional centres including **home services** for pregnant women

Using smartphones or tablets, health workers can enter data, capturing information about pregnancy care, HIV/Hepatitis/Syphilis testing, and ART

It is a one stop shop for reporting and monitoring all PMTCT services in Nigeria



Built on DHIS 2 Backbone: DHIs 2 is a robust, flexible, and scalable framework for managing health information.

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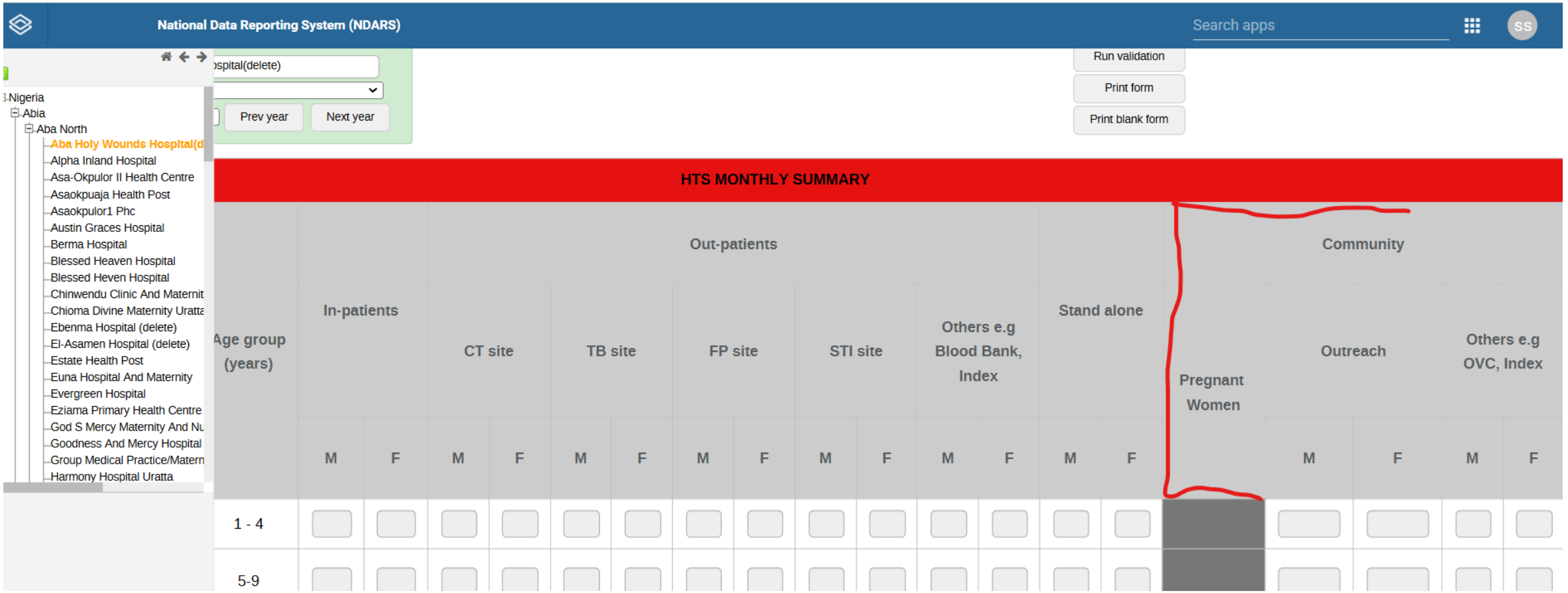
National Data Reporting System Monthly Summary



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NDARS Deployment for Health Sector Response including Community PMTCT Reporting

Sept 2023

- NDARS birthed
- Development commenced by a team in NASCP with support from experts
- NDARS fully managed by NASCP

Dec 2023

- PMTCT Dataset fully developed – mirror image of ALL the paper MSFs
- Pilot conducted through data drive in about 5,000 primary health facilities across 36states + FCT
- Virtual trainings adopted for the pilot

Jan 2024

- 1st physical trainings on data entry & analysis for State program managers & SASCP SI lead
- Engagements – NEPWHAN, PEPFAR team, UN agencies & other stakeholders

Feb 2024

- 2023 backlog data entry conducted by SASCP and adhoc personnels

Mar 2024

- NDARS was used as source for Global AIDS Monitoring Report (PMTCT)
- NDARS account creation for stakeholders

April till now

- Data entry roles devolved to LGAs and facilities
- SASCP was given admin role for user creation and management of org units
- Training of community implementers started

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NDARS Administrative Structure

Central System Admin role: Domicile in NASCP and manages every aspect of the NDARS system in terms of IT infrastructures (account is managed by minimum of 2 HI staff at a time)

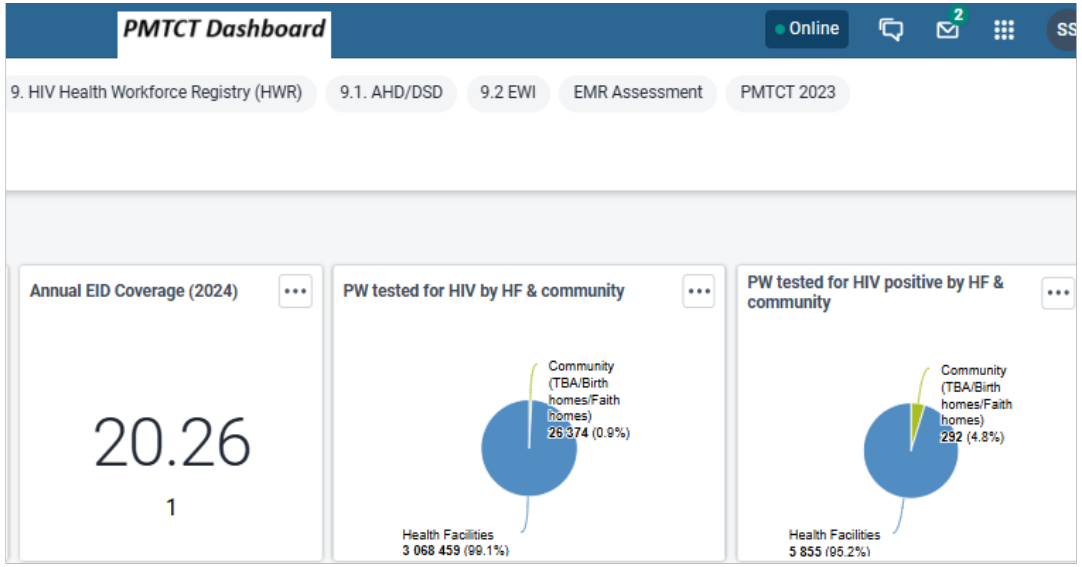
Super user role: Build the structures including the org unit management, creating the forms, user management, resolves issues relating to the NDARS structures. 2 additional persons has this role

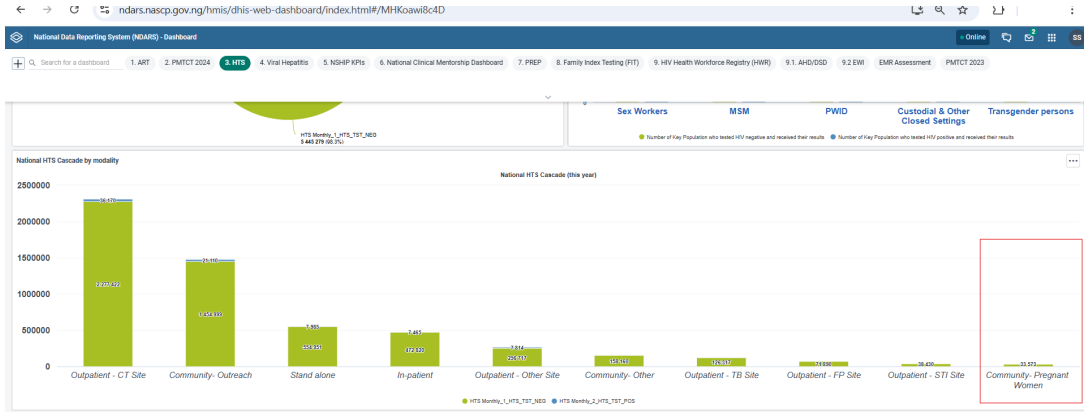
State admin role: The SASCP team are responsible for creating state level users including facility, community, LGA and implementing partners users in their various state. This role is devolved to the state for ownership and sustainability of the system.

-Additionally, they are also responsible for the org unit management including identification of new SDPs including community sites, groupings, cleaning the org units in their various states

Key VTP Indicators Reported

- Number of pregnant women **who know their HIV status** (disaggregated by community & health facilities)
- Percentage of pregnant women with HIV who **received antiretroviral** medicine to reduce the risk of vertical transmission of HIV
- Percentage of infants with perinatal exposure receiving a **virological test for HIV within 2 months of birth**
- Percentage of pregnant women **tested for syphilis**
- Proportion of syphilis positive pregnant women who were **treated for syphilis**
- Percentage of pregnant women **tested for Hepatitis B**
- Percentage of pregnant women **tested for Hepatitis C**





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List of Major VTP Data Elements on NDARS

PMTCT_ANC_3. Number of new ANC Clients tested positive for syphilis Total
PMTCT_ANC_3. Number of new ANC Clients tested positive for syphilis <10
PMTCT_PNS_17. Number of partners of HIV negative pregnant women tested HIV positive
PMTCT_L&D_20. Total deliveries at facility (booked and unbooked pregnant women)
PMTCT_HTS_5. Number of pregnant women with previously known HIV positive infection
PMTCT_HTS_13. Number of new ANC Clients Coinfected with HIV and HCV_Total
PMTCT_RTRI_14b. Number of HIV positive pregnant women tested for Recent Infection and the result is Recent
PMTCT_RTRI_14d. Number of HIV positive pregnant women with a confirmed Recent result through Viral Load Testing
PMTCT_EID_36. Number of HIV Exposed babies who tested for HIV within 18-24 months of birth by Rapid Test
PMTCT_ART_15a. Number of HIV positive pregnant women already on ART prior to this pregnancy
PMTCT_PNS_18. Number of partners of HIV positive pregnant women tested HIV negative

PMTCT_PNS_19. Number of partners of HIV positive pregnant women tested HIV positive
PMTCT_EID_37. No. of Infants born to HIV+ women referred for DNA PCR
PMTCT_RTRI_14a. Number of HIV positive pregnant women tested for Recent Infection
PMTCT_RTRI_14e. Number of HIV positive pregnant women with a confirmed LongTerm result through Viral Load Testing
PMTCT_L&D_21. Number of booked HIV positive pregnant women who delivered at facility
PMTCT_EID_29. Number of infants born to HIV infected women started on CTX prophylaxis within two months of birth
PMTCT_L&D_23. Number of live births by HIV positive women who delivered at the facility
PMTCT_EID_33. Number of HIV PCR results received for babies whose samples were taken within 72 hrs of birth
PMTCT_ANC_1 Number of New ANC clients
PMTCT_HTS_6. Number of pregnant women HIV tested and received results
PMTCT_ART_15f. Number of HIV positive pregnant women newly started on ART during Post Partum (>72 hrs - < 6 months)

PMTCT_EID_35. Number of HIV PCR results received for babies whose samples were taken between 2-12 months of birth
PMTCT_L&D_22. Number of unbooked HIV positive pregnant women who delivered at the facility
PMTCT_EID_34. Number of HIV PCR results received for babies whose samples were taken between >72 hrs - < 2 months of birth
PMTCT_ANC_2. Number of new ANC Clients tested for syphilis total
PMTCT_HTS_PP_7. Number of pregnant women with previously known HIV positive infection 35-39_<72hrs Postpartum
PMTCT_HTS_10. Number of new ANC Clients tested for HBV (ANC, L&D, <72hrs Post Partum)
PMTCT_RTRI_14c. Number of HIV positive pregnant women tested for Recent Infection and the result is Long Term
PMTCT_ART_15d. Number of HIV positive pregnant women newly started on ART during Labour
PMTCT_ART_15g. Number of HIV positive pregnant women newly started on ART during Post Partum (>6 - 12 months)
PMTCT_HTS_8. Number of pregnant women retested after initial HIV negative test

PMTCT_L&D_25. Number of babies born to hepatitis B positive mothers who received immunoglobulin within 24 hrs of delivery
PMTCT_HTS_PP_31. Number of pregnant women tested HIV positive 45-49_<72hrs Postpartum
PMTCT_EID_32. Number of Infants born to HIV positive women whose blood samples were taken for DNA PCR test between 2-12 months of birth
PMTCT_EID_30. Number of Infants born to HIV positive women whose blood samples were taken for DNA PCR test within 72 hrs of birth
PMTCT_ART_15b. Number of HIV positive pregnant women newly started on ART during ANC <36wks of pregnancy
PMTCT_HTS_11. Number of new ANC Clients tested for HCV (ANC, L&D, <72hrs Post Partum)
PMTCT_ANC_2. Number of new ANC Clients tested for syphilis <10
PMTCT_ART_15c. Number of HIV positive pregnant women newly started on ART during ANC >36wks of pregnancy
PMTCT_L&D_24. Number of infants delivered to Hepatitis B positive pregnant women at the facility
PMTCT_ART_15e. Number of HIV positive pregnant women newly started on ART during Post Partum (<72 hrs)
PMTCT_ART_15h. Number of Pregnant women referred to a Hub facility for treatment

PMTCT_HTS_12. Number of new ANC Clients Coinfected with HIV and HBV_Total
PMTCT_L&D_26. Number of HIV exposed infants who received HBV monovalent vaccine within 24hrs of delivery at the facility
PMTCT_EID_31. Number of Infants born to HIV positive women whose blood samples were taken for DNA PCR test between >72 hrs - < 2 months of birth
PMTCT_EID_28. Number of HIV-exposed infants born to HIV positive women who received ARV prophylaxis after 72 hrs of delivery
PMTCT_EID_27. Number of HIV-exposed infants born to HIV positive women who received ARV prophylaxis within 72 hrs of delivery
PMTCT_ANC_4. Number of the ANC Clients treated for Syphilis <10
PMTCT_ADDENDUM_15h Number of HIV positive pregnant women identified in the community who were initiated on ART in the facility
PMTCT_HTS_9. Number of pregnant women retested who seroconverted to HIV positive after initial HIV negative test
PMTCT_HTS_7. Number of pregnant women tested HIV positive
PMTCT_PNS_16. Number of partners of HIV negative pregnant women tested HIV negative
PMTCT_ANC_4. Number of the ANC Clients treated for Syphilis total

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Reporting HIV Testing Among Pregnant Women at Home

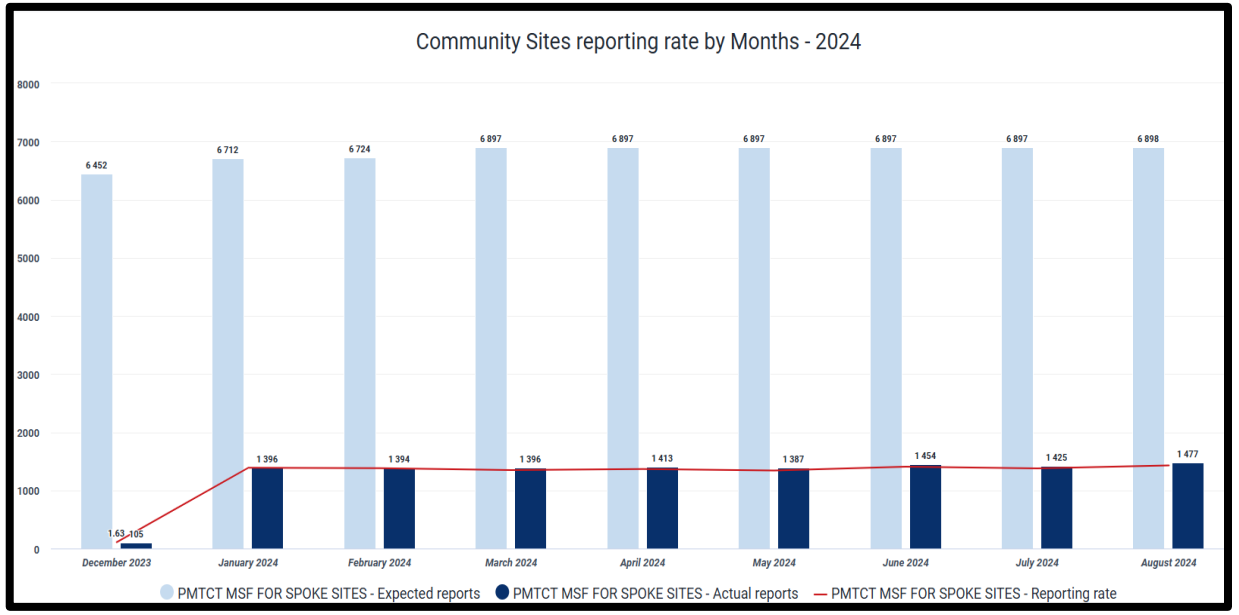
- **Commodities Supply**: Supplied by the supporting Service Delivery Points (SDPs).
- **Eligibility Checklist**: Ensures exclusion of women already tested during the current pregnancy.
- **Testing Procedure**:
  - ✓ Uses the national algorithm: dual HIV/Syphilis (A1) and Hepatitis rapid test kit .
  - ✓ Reactive results confirmed with a confirmatory test.
- **Linkage and Follow-Up**:
  - ✓ Positive women linked to comprehensive PMTCT facilities for retesting, care, and treatment.
  - ✓ Non-reactive women counselled and referred to health facilities for ANC.
  - ✓ Follow-up continues until the final infant status is determined
- **Data Capture and Reporting**:
  - ✓ All services documented in the HTS register, designated for "outreach for pregnant women" for summarization into national HTS MSF.
  - ✓ Reported through supporting SDPs, whether conventional or unconventional.
- **Collaboration**: Home testing conducted by CBOs/implementers in collaboration with SDPs.CBOs/implementers and SDPs ensure all data is reported to NDARS.

Lessons Learned: How NDARS Enhances M&E of VTP

Comprehensive Data Coverage: NDARS covers critical data points related to VTP

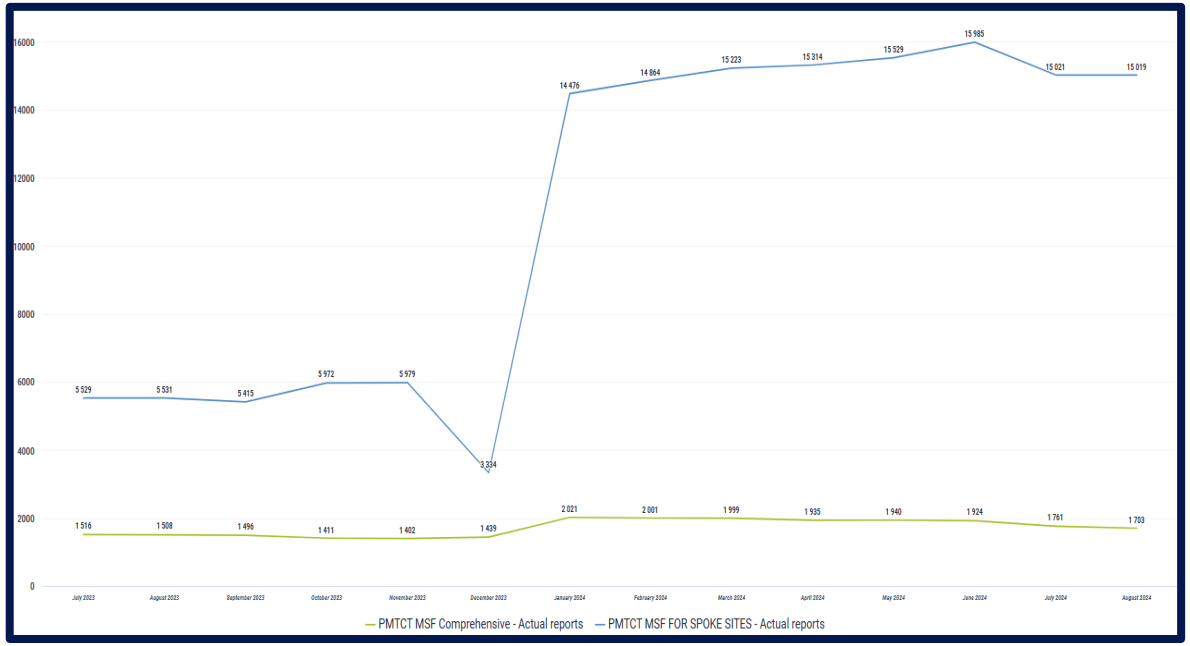
Tracks key services (HIV, syphilis, hepatitis testing) and outcomes (ART initiation, infant prophylaxis, transmission reduction).

Monitors real-time performance and predicts program trajectories



Data Quality Assurance: Built-in validation checks and error reporting that ensure data integrity, reducing issues of misreporting or underreporting.

Provides easy access to VTP data for all stakeholders, enhancing collaboration and decision-making



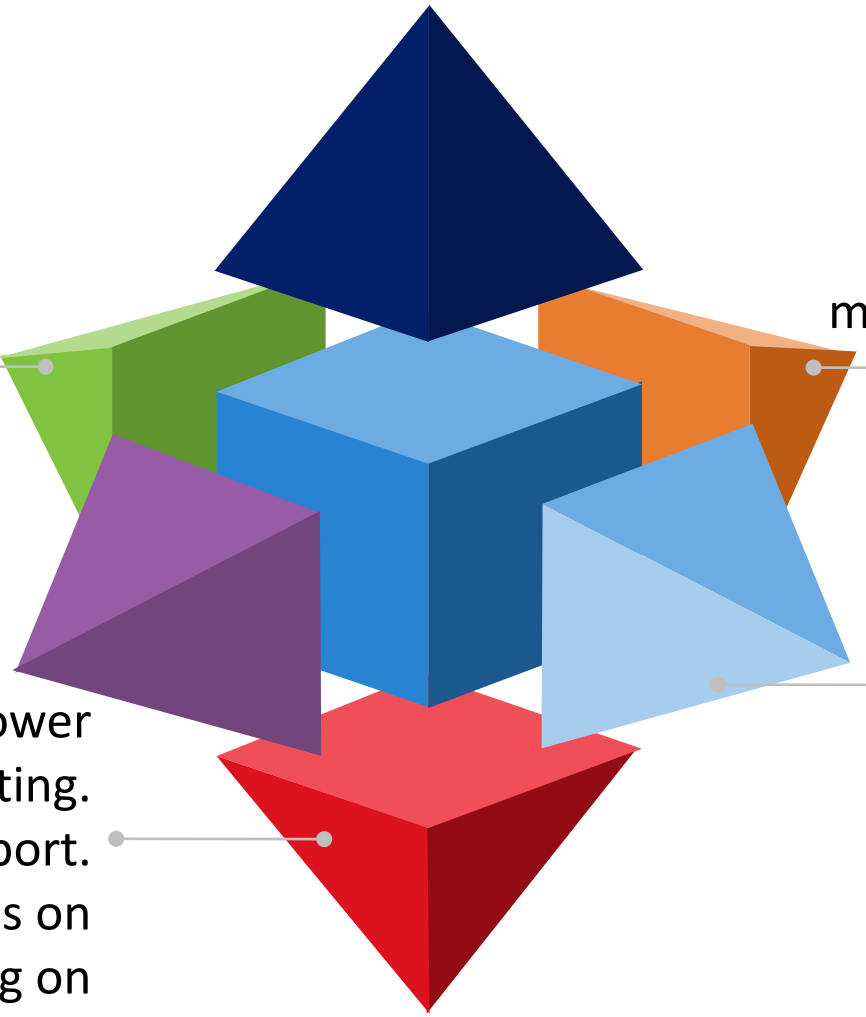
Significant increase in sites reporting PMTCT services (from 2,000 to 19,000), improving data completeness. Onboarding community sites for PMTCT reporting

Improved HIV Prevalence Estimation: Broader reporting network helps provide a more accurate picture of HIV prevalence among pregnant women

Challenges

Data quality Issues due to capacity gap at lower level (LGA & community)

Inconsistency in reporting every month on NDARS. Lot of follow up still required at the lower level



Unavailability of computers at lower levels (LGA & community) for reporting. They mostly use cell phones to report. Cell phones distort MSFs structures on NDARS and may lead to reporting on wrong fields

Insufficient human resource at state level to ensure data quality processes given the large volume of sites

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Conclusions and Recommendations

Strengthen Data Utilization:

- Continue using NDARS data for strategic decisions and program adjustments.

Expand Data Collection:

- Include more granular data on maternal and infant health to improve VTP monitoring.
- Clean the SDPs list especially the unconventional sites to remove closed facilities and add new ones

Enhance Capacity Building:

- Ongoing training for healthcare providers at all levels (including the community) to ensure accurate data collection and usage.

Improve Data Quality and Feedback Loops:

- Advocate for increase in number of M&E officers at state MoH to help with data review
- Strengthen real-time feedback to SDPs including community settings to adjust service delivery promptly.

Foster Greater Stakeholder Engagement:

- Use NDARS' transparency to encourage collaboration among all VTP stakeholders.

Thank You!

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