

## SOP: INTEGRATED DATA WAREHOUSE NAVIGATION

Last Revision: Aug 2021

	<p><b>Requirements:</b></p> <ul style="list-style-type: none"> <li>✓ Good Internet connectivity</li> </ul> <p><b>Objective:</b></p> <p>By the end of the session the learners should be able to navigate the sections of the DWH</p>	
No	Description	Illustration
	<p><b>Accessing Data Warehouse</b></p> <p>Access the integrated national data warehouse by entering the correct website address provided. The default landing page is <b>"HOME"</b></p>	<p style="text-align: center;"><a href="https://dwh.nascop.org/">https://dwh.nascop.org/</a></p>
<b>PART A: How to navigate the warehouse</b>		
	<p>Once the home page is launched, navigate to any of the main sections: i.e.</p> <ol style="list-style-type: none"> <li>i. Home</li> <li>ii. Reporting rates</li> <li>iii. HIV Testing &amp; Prevention</li> <li>iv. HIV treatment</li> <li>v. Resources</li> </ol>	

### 1. Data warehouse interface arrangement:

The data warehouse is divided into different main groups of dashboards. Under each category, there are context specific tabs available under each group:

The screenshot displays the Integrated Data Warehouse interface. At the top, there is a navigation bar with tabs: Home, Reporting Rates, HIV Testing & Prevention, HIV Treatment, and Resources. Below the navigation bar are four filter dropdowns: Select County, Select Sub-County, Select Facility, and Select Partner. The main content area is divided into several sections:

- Summary Cards:** Four cards showing key metrics: CURRENT ON ART as at Jul 2021 (841,197), ELIGIBLE FOR VL (97% at 818,625), VALID VIRAL LOAD (71% at 583,802), and VIRALLY SUPPRESSED (96% at 563,280).
- Demographic Breakdown:** Three cards showing ART uptake by age group: ADULTS ON ART (15+ YEARS) at 802,346, CHILDREN ON ART (0-14 YEARS) at 38,851, and ADOLESCENTS ON ART (10-19 YEARS) at 50,399.
- EMR SITES:** A map of Kenya showing the distribution of EMR sites. The map includes a legend: KenyaEMR (black circle), IQCare (green diamond), AMRS (orange square), ECare (blue triangle), and OpenMRS (red inverted triangle). The map is titled "EMR SITES" and has tabs for "CURRENT ON ART", "VALID VIRAL LOAD", and "VIRAL SUPPRESSION".
- WELCOME:** A text block stating: "1373 Health Facilities in 41 counties in Kenya, supported by 34 SDPs have ever uploaded care & treatment data to the warehouse since its inception. As at Aug 2021, 1373 facilities had reported patients current on ART".
- KEY HIGHLIGHTS:** A list of two highlights: 1. Trends in identification of new positives cumulatively and by month. The highlight also shows male and female identification trends by month. 2. Overall MMD uptake based on last month's patients current on ART. The highlight also shows MMD uptake among males and females.
- EMR SITES IN KENYA:** A section titled "EMR SITES IN KENYA" with the sub-heading "Kenya EMR" and the text: "Use the map to zero in to certain Counties to understand how programs have been reporting."

## 1. HOME

- Aggregates for specific national HIV indicators
- Welcome note
- Highlights of the month

Interactive map for four indicators (i.e.

- EMR Sites,
- Current on ART,
- Valid Viral Load
- VL suppression

## 2. REPORTING RATES

### CARE & TREATMENT

Basic indicators aggregate:

- Expected uploads
- Overall reporting rates
- Consistency of reporting

Reporting trends dashboards:

- Trends in overall reporting
- Trends in consistency of reporting
- Reporting rates by County
- Reporting rates by Partner

### HIV TESTING SERVICES

- Expected uploads
- Overall reporting rates
- Consistency of reporting

Reporting trends dashboards:

- Trends in overall reporting
- Trends in consistency of reporting
- Reporting rates by County
- Reporting rates by Partner

### PATIENT KEY VALUES

- Expected uploads
- Overall reporting rates
- Consistency of reporting

Reporting trends dashboards:

- Trends in overall reporting
- Trends in consistency of reporting
- Reporting rates by County
- Reporting rates by Partner

### 3. HIV TESTING & PREVENTION

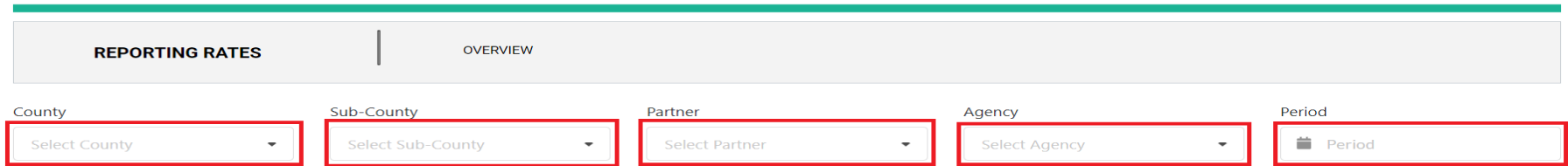
<u>HIV SERVICE UPTAKE</u>	<u>HIV TESTING SERVICES LINKAGE</u>	<u>PARTNER NOTIFICATION SERVICES</u>
<p>Basic reporting indicators aggregates:</p> <ul style="list-style-type: none"> <li>• Expected uploads</li> <li>• Overall reporting rates</li> <li>• Consistency of reporting</li> <li>• Trends in overall reporting</li> </ul> <p>Reporting trends dashboards:</p> <ul style="list-style-type: none"> <li>• Trends in overall reporting</li> <li>• Trends in consistency of reporting</li> <li>• Reporting rates by County</li> <li>• Reporting rates by Partner</li> </ul>	<p>Basic reporting indicators aggregates:</p> <ul style="list-style-type: none"> <li>• Total positive</li> <li>• Total linked</li> <li>• Male positive</li> <li>• Male linked</li> <li>• Female positives</li> <li>• Female linked</li> </ul> <p>Reporting trend dashboards:</p> <ul style="list-style-type: none"> <li>• HTS Linkage by month</li> <li>• HTS linkage by age group and sex</li> <li>• HTS linkage by population type</li> <li>• HTS linkage by strategy</li> <li>• HTS Linkage by Entry point</li> <li>• HTS linkage by county</li> <li>• HTS linkage by partner</li> </ul>	<p>Basic reporting indicators aggregates:</p> <ul style="list-style-type: none"> <li>• New HIV+ patients</li> <li>• Sexual contact elicited</li> <li>• Sexual contacts testes</li> <li>• Sexual contacts positive</li> <li>• Sexual contacts linked</li> </ul> <p>Reporting trend dashboards:</p> <ul style="list-style-type: none"> <li>• PNS cascade contacts</li> <li>• Characteristics of elicited sexual contacts</li> <li>• Contacts' knowledge of HIV status</li> <li>• Characteristics of sexual contacts who tested positive</li> <li>• Trends in sexual contact testing and positivity</li> <li>• PNS contribution to total positive</li> <li>• Sexual contact testing and positivity by county</li> <li>• Sexual contact testing and positivity by partner</li> </ul> <hr/> <p>Partner notification services</p> <ul style="list-style-type: none"> <li>• Children elicited</li> <li>• Children tested</li> <li>• Children positive</li> <li>• Children linked</li> </ul> <p>Dashboards:</p> <ul style="list-style-type: none"> <li>• The cascade of family testing of children</li> <li>• Trends in family testing of children and positivity</li> </ul>

## 4: HIV TREATMENT

<u>NEWLY STARTED ON ART</u>	<u>CURRENT ON ART</u>	<u>ART OPTIMIZATION NEW</u>	<u>ADVERSE EVENTS -AE</u>	<u>DSD</u>	<u>VL MONITORING</u>	<u>TREATMENT OUTCOMES</u>
Basic indicators	Basic indicators:	Basic indicators:	Basic indicators:	Basic indicators:	Basic indicators:	Basic indicators:
<ol style="list-style-type: none"> <li>Total newly started on art</li> <li>Adults started on art(15+ yrs)</li> <li>Males started on art</li> <li>Children started on art(&lt;14 yrs)</li> <li>Females started on art</li> <li>Adolescents started on art(10 - 19 yrs)</li> </ol>	<ol style="list-style-type: none"> <li>Currently on art</li> <li>Virally suppressed</li> <li>Eligible for VL</li> <li>Low level viremia</li> <li>Has current viral load</li> <li>High viral load</li> </ol>	<ul style="list-style-type: none"> <li>Adults on first line</li> <li>Adults on second line</li> <li>Adults on third line</li> <li>Adults on TLD</li> <li>Adults on nvp</li> </ul>	<ul style="list-style-type: none"> <li>Adults 15+ currently on art</li> <li>Adults 15+ on art and developed aes</li> <li>Number of aes reported cases in adults 15+</li> <li>Children currently on art</li> <li>Children on art and developed aes</li> <li>Number of aes reported cases in children</li> </ul>	<ul style="list-style-type: none"> <li>Current on art</li> <li>Patients on MMD</li> <li>Stable patients</li> <li>Patients on art &lt;1 year</li> <li>Patients with hVL</li> <li>Patients with poor adherence</li> </ul>	<ul style="list-style-type: none"> <li>Patients current on treatment</li> <li>Patients with current VL</li> <li>Viral suppression</li> </ul>	<ul style="list-style-type: none"> <li>Started art</li> <li>Transferred out</li> <li>Active on art</li> <li>Stopped art</li> <li>Lost to follow-up</li> <li>Net cohort</li> <li>Dead</li> </ul>
	Dashboards:	Dashboards:	Dashboards:	Dashboards:	Dashboards:	Dashboards:
Dashboards:	<ul style="list-style-type: none"> <li>Current on art by sex</li> <li>Current on art by age group and sex</li> <li>Distribution of patients currently on art by county</li> <li>Distribution of patients currently on art by partner</li> <li>Current on art by county</li> <li>Current on art by partner</li> </ul>	<ul style="list-style-type: none"> <li>Adult distribution of regimen lines</li> <li>Proportion of adults by regimen</li> <li>Distribution of regimen lines - adults by gender</li> <li>Trends of art regimen uptake among patients newly started on art</li> <li>Distribution of art regimen among patients newly started on art by county</li> <li>Distribution of art regimen among patients newly started on art by partner</li> <li>Overall TLD uptake</li> <li>Male TLD uptake</li> <li>Female TLD uptake</li> <li>TLD uptake by age and gender among patients</li> </ul>	<ul style="list-style-type: none"> <li>Children &lt;15 on art and developed adverse events</li> <li>Adults 15+ on art and developed adverse events</li> <li>Severity grading of aes</li> <li>Adverse events actions by severity</li> <li>Reported adverse events with severity levels</li> <li>Reported causes of</li> </ul>	<ul style="list-style-type: none"> <li>Dsd cascade</li> <li>Distribution of MMD models among patients currently on art</li> <li>MMD uptake by stability status</li> <li>MMD uptake by sex</li> <li>MMD uptake practices by age group</li> <li>MMD uptake in patients currently on art by county</li> </ul>	<ul style="list-style-type: none"> <li>Overall VL uptake and suppression among current on art patients</li> <li>Median time to 1st VL after art initiation by year of art initiation</li> <li>Median time to 1st VL after art initiation by county</li> <li>Median time to 1st VL after art initiation by partner</li> <li>VL uptake among current on art patients by sex</li> <li>VL uptake among current on art patients by age group</li> <li>VL uptake among current on art patients by county</li> <li>VL uptake among current on art patients by partner</li> <li>Overall VL outcomes among TX_CURR patients</li> <li>VL outcomes among TX_CURR patients by sex</li> <li>Viral suppression (less than 400 CPM) among current on art patients by age group</li> </ul>	<ul style="list-style-type: none"> <li>Art treatment outcomes by sex</li> <li>Overall art treatment outcomes</li> <li>Art treatment outcomes by age group</li> <li>Art treatment outcomes by year of art start</li> <li>Art treatment outcomes by county</li> </ul>

## 2. Dashboard Filtering

The dashboards under each section represent overall national statistics. But this information can be filtered by County, Sub-County, Partner as shown here:

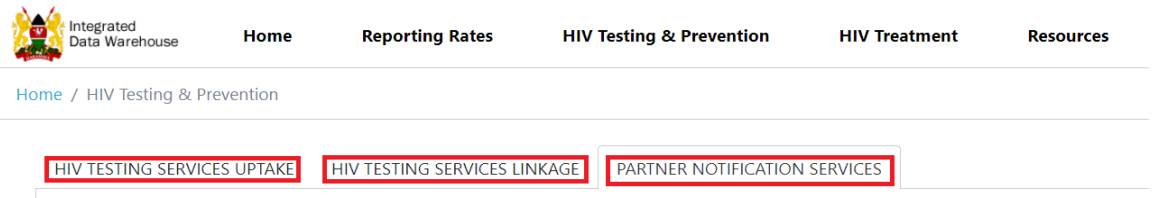


A screenshot of a dashboard interface showing filtering options. At the top, there are two tabs: 'REPORTING RATES' (selected) and 'OVERVIEW'. Below the tabs, there are five filter fields: 'County' (dropdown with 'Select County'), 'Sub-County' (dropdown with 'Select Sub-County'), 'Partner' (dropdown with 'Select Partner'), 'Agency' (dropdown with 'Select Agency'), and 'Period' (calendar icon with 'Period'). Each filter field is highlighted with a red border.

The dashboards can be filtered by a cascade i.e. County and Sub-county. It can also be done on a single field i.e. Partner. Select the partner by clicking the drop down and selecting the correct partner name. This will cause all the dashboards on the current page to refresh and show the data relevant to the selected partner.

## 3. Using the tabs

For each section, there are tabs provided for related groups of dashboards. Click the title of each tab to navigate and view its dashboards

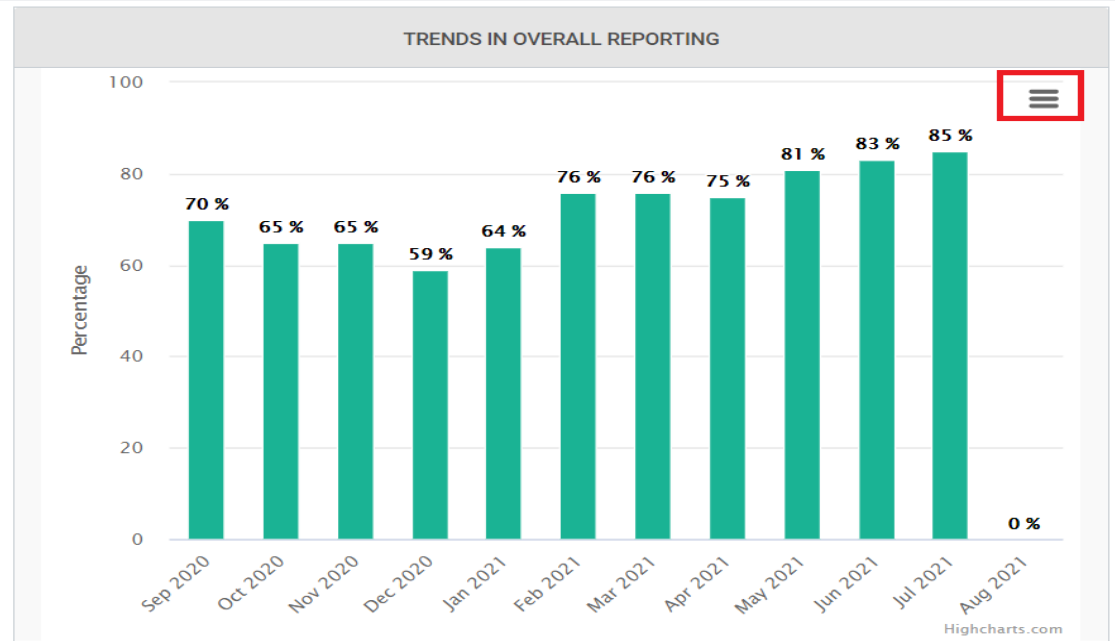


A screenshot of a dashboard navigation bar. On the left is the 'Integrated Data Warehouse' logo. To its right are five navigation tabs: 'Home', 'Reporting Rates', 'HIV Testing & Prevention', 'HIV Treatment', and 'Resources'. Below the tabs is a breadcrumb trail: 'Home / HIV Testing & Prevention'. At the bottom, there are three highlighted dashboard titles: 'HIV TESTING SERVICES UPTAKE', 'HIV TESTING SERVICES LINKAGE', and 'PARTNER NOTIFICATION SERVICES'. Each title is enclosed in a red border.

#### 4. Using breadcrumbs

Breadcrumbs are simple navigational links that appear alongside objects on the webpage. They provide additional options available to the user to the users. This includes:

- Full screen viewing of objects
- Printing a single object
- Downloading object as image
- Downloading the aggregate data associated with the object.
- Viewing data table for the specific object.



## 5. Accessing Capacity Building Resources through the Warehouse:

Data warehouse also provides link to all the KeHMIS product documents including capacity building contents and job aids.

### Steps:

- Navigate to **Resources** Tab
- You will be redirected to KenyaHMIS website where you can access Data Dictionaries for DWH and other materials.

**NB: The resources are available in video, PDF and PPT formats which you can download.**

The screenshot shows the KenyaHMIS website's Data Warehouse page. The URL is [kenyahmis.org/documentation/data-dictionaries/](http://kenyahmis.org/documentation/data-dictionaries/). The page features a navigation menu with 'HOME', 'RESOURCES', 'ABOUT US', and 'CONTACT'. The main heading is 'Data Warehouse' with a breadcrumb trail: 'Home / Documentation / Data Warehouse'. A sidebar on the left lists categories: 'Summary DWH', 'DWH Data sources and integrations', 'DWAPI Architecture', 'SPOT', and 'Data dictionaries'. The 'Data dictionaries' section is highlighted with a red box and contains a document icon, '1674 views', '13 likes', and a share icon. Below this, three dictionary titles are listed: 'Care & Treatment DWAPI Data Dictionary - June 2021', 'PrEP DWAPI Data Dictionary Mar 2021', and 'MNCH DWAPI Data Dictionary Mar 2021'.

## PART B: Using the Ad-Hoc section

### Description:

- Ad-hoc section provides utilities for query customization and generation of custom reports/ datasets.
- The section allows us to get customized data for further analysis
- There are pre identified variables that one can select from

Key components include:

- Query builder
- Query result
- Pivots

**NB: Refer [here](#) for content on how to use Ad-Hoc feature on Data warehouse**

**Click on Ad-Hoc Section to launch the page.**

**Warning: You must log in to access ad-hoc section**

The screenshot shows the 'Integrated Data Warehouse' query builder interface. The top navigation bar includes 'Home' and 'Datasource properties'. The interface is divided into three steps: 'Step 1 - Build Query', 'Step 2 - View Results', and 'Step 3 - Pivot Results'. On the left, a 'Database' pane shows a tree view of tables under 'PortalDev' and 'dbo'. The main area displays two data dictionaries: 'FACT\_Trans\_DSD\_MMD...' and 'Fact\_Trans\_New\_Cohort\_t...'. A blue line connects a field from the first dictionary to a field in the second. Below the dictionaries is a table with columns: 'Visible', 'Expression', 'Column N...', 'Sort Type', 'Sort Order', 'Aggregate', 'Grou...', and 'Criteria'. The table contains several rows of data, including 'FACT\_Trans\_DSD\_MMD\_Active...', 'FACT\_Trans\_DSD\_MMD\_Active...', 'Fact\_Trans\_New\_Cohort\_t.Cou...', and 'Fact\_Trans\_New\_Cohort\_t.Sub...'.



## PART C: Data Warehouse Administration and User Management

### Signing up for access:

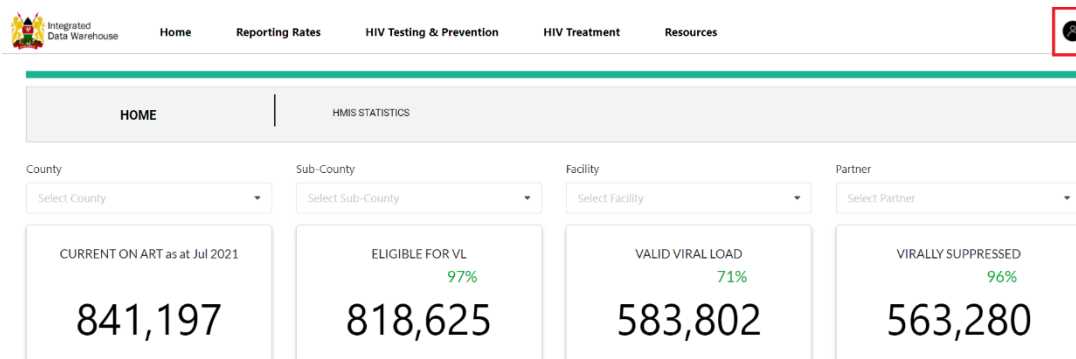
There are two basic functions of the administration Page

- Managing organizations
- User management

You must login as an authenticated user to access these functions. For unregistered users will need to sign up first.

### Steps:

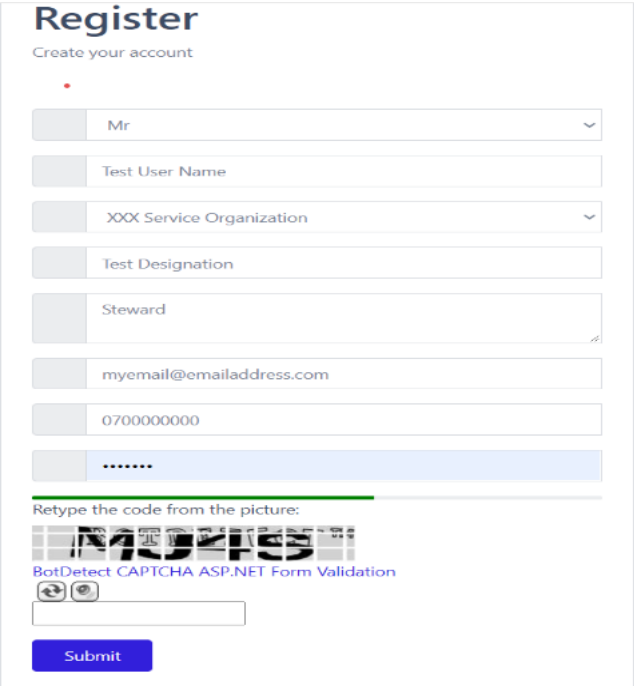
- Click user icon as shown on the diagram
- Select "Login" task as shown below.  
The login window will appear.



### Signing up for access (cont...)

- If you are already register, then you can proceed and enter your login details on the left side of the dialogue box. Otherwise click "Register Now" to sign up for your account.
- If case you forgot your password, click on "Forgot password" link to reset.

The screenshot shows a login and sign up dialog box. On the left side, there is a "Login" section with the text "Sign In to your account". Below this, there are two input fields: one for the username (placeholder: "username@domainname.type") and one for the password (masked with dots). There is a "Login" button and a "Forgot password?" link. On the right side, there is a "Sign up" section with the text "Please login using your credentials. If you do not have credentials you can request for access or proceed as Guest to access the public dashboards." and a "Register Now!" button.

<p><b>New User registration</b></p> <ul style="list-style-type: none"><li>- Specify the name, Organization, designation, Reason for Accessing, email address, phone number and the password. Remember to enter the CAPTCHA provided and click Submit.</li><li>- An email will be sent to the email specified. Check your email and verify the email address to continue.</li><li>- Once confirmed, another email will be sent to your Admin (Steward) to validate and grant you access.</li><li>- Your Admin (steward) will validate you request and grant access.</li></ul>	 <p>The screenshot shows a 'Register' form titled 'Create your account'. It includes a dropdown menu for gender (set to 'Mr'), text input fields for 'Test User Name', 'Test Designation', and 'Steward', a dropdown for 'XXX Service Organization', an email field with 'myemail@emailaddress.com', and a phone field with '0700000000'. A password field is shown with dots. Below the password field is a CAPTCHA section with the instruction 'Retype the code from the picture:' and a grid of characters. A 'Submit' button is at the bottom.</p>
<p>For more information on user access and other related materials, refer to the references below:</p> <p><b>References:</b></p> <ul style="list-style-type: none"><li>- <a href="http://kenyahmis.org">National Data Warehouse   Dashboard (kenyahmis.org)</a></li><li>- <a href="#">How to use the adhoc feature on Data warehouse</a></li><li>- <a href="#">User access management guide</a></li></ul>	

THE END