

SOP: INTEGRATED DATA WAREHOUSE NAVIGATION

Last Revision: Aug 2021

	<p>Requirements:</p> <ul style="list-style-type: none"> ✓ Good Internet connectivity <p>Objective:</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>Accessing Data Warehouse</p> <p>Access the integrated national data warehouse by entering the correct website address provided. The default landing page is "HOME"</p>	<p>https://dwh.nascop.org/</p>
PART A: How to navigate the warehouse		
	<p>Once the home page is launched, navigate to any of the main sections: i.e.</p> <ol style="list-style-type: none"> i. Home ii. Reporting rates iii. HIV Testing & Prevention iv. HIV treatment v. Resources 	

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 (818,625, 97%), VALID VIRAL LOAD (583,802, 71%), and VIRALLY SUPPRESSED (563,280, 96%).
- Adults on ART:** A card showing 802,346 adults on ART (15+ YEARS).
- Children on ART:** A card showing 38,851 children on ART (0-14 YEARS).
- Adolescents on ART:** A card showing 50,399 adolescents on ART (10-19 YEARS).
- Map:** A map of Kenya showing EMR sites. The map is titled "EMR SITES" and has tabs for "CURRENT ON ART", "VALID VIRAL LOAD", and "VIRAL SUPPRESSION". A legend indicates the types of EMR sites: KenyaEMR (black circle), IQCare (green diamond), AMRS (orange square), ECare (blue triangle), and OpenMRS (red inverted triangle). The map is credited to Highcharts.com.
- WELCOME:** A section with a welcome message: "1373 Health Facilities in 41 counties in Kenya, supported by 34 SDPs have ever uploaded care & treatment data to the warehouse since it's 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"> • Expected uploads • Overall reporting rates • Consistency of reporting • Trends in overall reporting <p>Reporting trends dashboards:</p> <ul style="list-style-type: none"> • Trends in overall reporting • Trends in consistency of reporting • Reporting rates by County • Reporting rates by Partner 	<p>Basic reporting indicators aggregates:</p> <ul style="list-style-type: none"> • Total positive • Total linked • Male positive • Male linked • Female positives • Female linked <p>Reporting trend dashboards:</p> <ul style="list-style-type: none"> • HTS Linkage by month • HTS linkage by age group and sex • HTS linkage by population type • HTS linkage by strategy • HTS Linkage by Entry point • HTS linkage by county • HTS linkage by partner 	<p>Basic reporting indicators aggregates:</p> <ul style="list-style-type: none"> • New HIV+ patients • Sexual contact elicited • Sexual contacts testes • Sexual contacts positive • Sexual contacts linked <p>Reporting trend dashboards:</p> <ul style="list-style-type: none"> • PNS cascade contacts • Characteristics of elicited sexual contacts • Contacts' knowledge of HIV status • Characteristics of sexual contacts who tested positive • Trends in sexual contact testing and positivity • PNS contribution to total positive • Sexual contact testing and positivity by county • Sexual contact testing and positivity by partner <hr/> <p>Partner notification services</p> <ul style="list-style-type: none"> • Children elicited • Children tested • Children positive • Children linked <p>Dashboards:</p> <ul style="list-style-type: none"> • The cascade of family testing of children • Trends in family testing of children and positivity

4: HIV TREATMENT

NEWLY STARTED ON ART

Basic indicators

- Total newly started on art
- Adults started on art(15+ yrs)
- Males started on art(<14 yrs)
- Females started on art
- Adolescents started on art(10 - 19 yrs)

Dashboards:

- Trends of newly started patients on art
- New on art distribution by group and sex
- Median time to art start by year of art start
- Median time to art start by county
- Median time to art start by partner
- Time from diagnosis to art start among newly diagnosed patients by year of art

CURRENT ON ART

Basic indicators:

- Currently on art
- Virally suppressed
- Eligible for VL
- Low level viremia
- Has current viral load
- High viral load

Dashboards:

- Current on art by sex
- Current on art by age group and sex
- Distribution of patients currently on art by county
- Distribution of patients currently on art by partner
- Current on art by county
- Current on art by partner

ART OPTIMIZATION NEW

Basic indicators:

- Adults on first line
- Adults on second line
- Adults on third line
- Adults on TLD
- Adults on nvp

Dashboards:

- Adult distribution of regimen lines
- Proportion of adults by regimen
- Distribution of regimen lines - adults by gender
- Trends of art regimen uptake among patients newly started on art
- Distribution of art regimen among patients newly started on art by county
- Distribution of art regimen among patients newly started on art by partner
- Overall TLD uptake
- Male TLD uptake
- Female TLD uptake
- TLD uptake by age and gender among patients current on art
- TLD uptake among patients current on art by county
- TLD uptake among patients current on art by partner

ADVERSE EVENTS -AE

Basic indicators:

- Adults 15+ currently on art
- Adults 15+ on art and developed aes
- Number of aes reported cases in adults 15+
- Children currently on art
- Children on art and developed aes
- Number of aes reported cases in children

Dashboards:

- Children <15 on art and developed adverse events
- Adults 15+ on art and developed adverse events
- Severity grading of aes
- Adverse events actions by severity
- Reported adverse events with severity levels
- Reported causes of aes
- Adverse events actions by drugs

DSD

Basic indicators:

- Current on art
- Patients on MMD
- Stable patients
- Patients on art <1 year
- Patients with hVL
- Patients with poor adherence

Dashboards:

- Dsd cascade
- Distribution of MMD models among patients currently on art
- MMD uptake by stability status
- MMD uptake by sex
- MMD uptake practices by age group
- MMD uptake in patients currently on art by county
- MMD uptake in patients currently on art by partner
- Distribution of stable patients by age group and sex
- Characteristics of unstable patients
- Distribution of stable patients by county
- Distribution of stable patients by partner

VL MONITORING

Basic indicators:

- Patients current on treatment
- Patients with current VL
- Viral suppression
- Overall VL uptake and suppression among current on art patients
- Median time to 1st VL after art initiation by year of art initiation
- Median time to 1st VL after art initiation by county
- Median time to 1st VL after art initiation by partner
- VL uptake among current on art patients by sex
- VL uptake among current on art patients by age group
- VL uptake among current on art patients by county
- VL uptake among current on art patients by partner
- Overall VL outcomes among TX_CURR patients
- VL outcomes among TX_CURR patients by sex
- Viral suppression (less than 400 CPM) among current on art patients by age group
- VL outcomes among current on art patients by art regimen/optimization
- Viral suppression by year of art start
- VL suppression among current on art patients by county
- VL suppression among current on art patients by partner
- 6-month viral suppression by year of art start
- 12-month viral suppression by year of art start
- 24-month viral suppression by year of art start
- Viral Suppression by facility

Dashboards:

- Patients current on treatment
- Patients with current VL
- Viral suppression
- Overall VL uptake and suppression among current on art patients
- Median time to 1st VL after art initiation by year of art initiation
- Median time to 1st VL after art initiation by county
- Median time to 1st VL after art initiation by partner
- VL uptake among current on art patients by sex
- VL uptake among current on art patients by age group
- VL uptake among current on art patients by county
- VL uptake among current on art patients by partner
- Overall VL outcomes among TX_CURR patients
- VL outcomes among TX_CURR patients by sex
- Viral suppression (less than 400 CPM) among current on art patients by age group
- VL outcomes among current on art patients by art regimen/optimization
- Viral suppression by year of art start
- VL suppression among current on art patients by county
- VL suppression among current on art patients by partner
- 6-month viral suppression by year of art start
- 12-month viral suppression by year of art start
- 24-month viral suppression by year of art start
- Viral Suppression by facility

TREATMENT OUTCOMES

Basic indicators:

- Started art
- Transferred out
- Active on art
- Stopped art
- Lost to follow-up
- Net cohort
- Dead
- Art treatment outcomes by sex
- Overall art treatment outcomes
- Art treatment outcomes by age group
- Art treatment outcomes by year of art start
- Art treatment outcomes by county
- Art treatment outcomes by partner
- 3-month retention by year of art start
- 6-month retention by year of art start
- 12-month retention by year of art start
- 24-month retention by year of art start
- Treatment outcomes

4: HIV TREATMENT...CONT

OTZ

Basic indicators

- Adolescents current on ART
- Enrolled on OTZ
- Adolescents on OTZ with Valid VL
- Adolescents on OTZ virally suppressed
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Dashboards:

- OTZ Enrolment Among ALHIV and on Art by Sex
- OTZ enrollment among ALHIV and on ART by Age
- OTZ enrolment among ALHIV and on ART by County
- OTZ enrollment among ALHIV and on ART by Partner
- VL Uptake among ALHIV enrolled in OTZ by sex
- VL Uptake among ALHIV enrolled in OTZ by Age
- VL uptake among ALHIV enrolled in OTZ by county
- VL uptake among ALHIV enrolled in OTZ by partner
- Completed OTZ trainings
- Completed OTZ training – Male
- Completed OTZ training – Female
- Proportions of ALHIV enrolled in OTZ who have completed training by county
- Proportions of ALHIV enrolled in OTZ who have completed training by partner

OVC

Basic indicators:

- Overall OVC services
- Female OVC services
- Male OVC services

Dashboards:

- Caregivers' relationship to OVC client
- Proportion of OVC clients enrolled in CPIMS – Overall
- Proportion of OVC clients enrolled in CPIMS – female
- Proportion of OVC clients enrolled in CPIMS -Male
- OVC_SERV distribution by county
- OVC_SERV distribution by Partner
- OVC Client exit reason
- Viral suppression among OVC patient – Overall
- Viral suppression among OVC patient – Female
- Viral suppression among OVC patient - Male

OVID-19

Basic indicators:

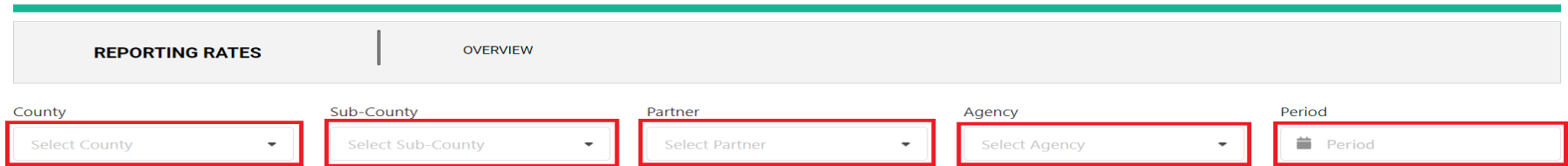
- Adult PLHIV current on treatment
- Partially vaccinated
- Fully Vaccinated

Dashboards:

- Adult PLHIV vaccinated against COVID-19 by gender
- Adult PLHIV vaccinated against Covid-19 by age
- Cumulative number of adult PLHIV who received at least one dose of COVID-19 Vaccine.
- Adult PLHIV Vaccinated against COVID-19 by County
- Adult PLHIV Vaccinated against COVID-19 by Partner
- Trends of adult PLHIV vaccination in the last 12 months.

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:

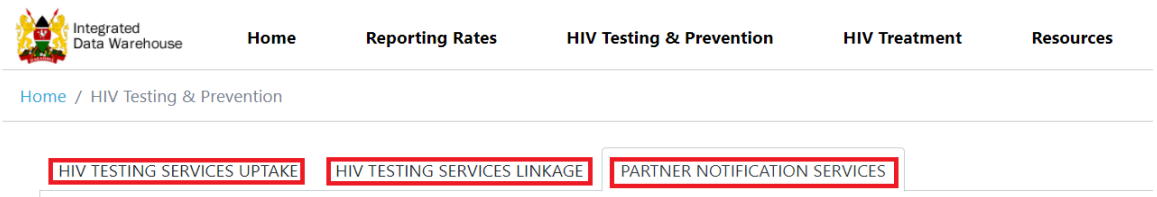


A screenshot of a dashboard interface showing filtering options. At the top, there are two tabs: 'REPORTING RATES' (selected) and 'OVERVIEW'. Below the tabs, there are five filter fields: 'County' (dropdown with 'Select County'), 'Sub-County' (dropdown with 'Select Sub-County'), 'Partner' (dropdown with '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

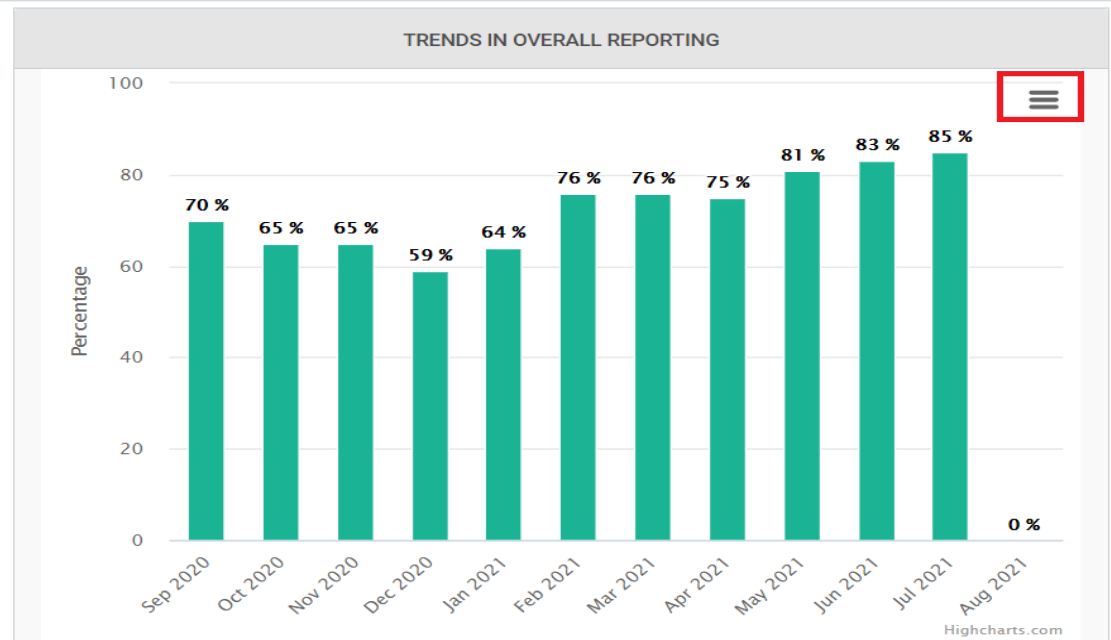


A screenshot of a dashboard navigation bar. On the left is the 'Integrated Data Warehouse' logo. To its right are five navigation tabs: 'Home', 'Reporting Rates', 'HIV Testing & Prevention', 'HIV Treatment', and 'Resources'. Below the tabs is a breadcrumb trail: 'Home / HIV Testing & Prevention'. At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

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.



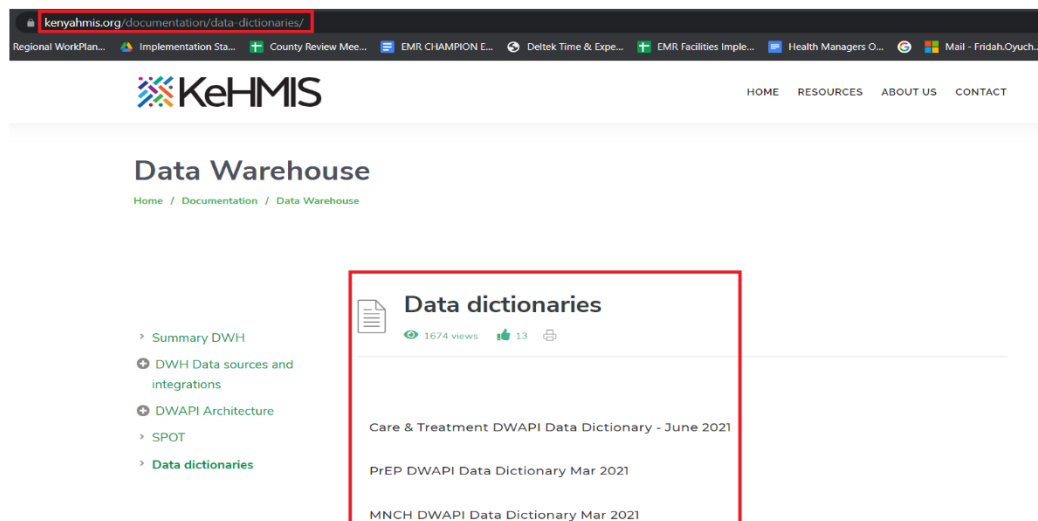
5. Accessing Capacity Building Resources through the Warehouse:

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/. 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 navigation options: 'Summary DWH', 'DWH Data sources and integrations', 'DWAPI Architecture', 'SPOT', and 'Data dictionaries'. The main content area, titled 'Data dictionaries', shows 1674 views and 13 likes. It lists three data dictionaries: 'Care & Treatment DWAPI Data Dictionary - June 2021', 'PrEP DWAPI Data Dictionary Mar 2021', and 'MNCH DWAPI Data Dictionary Mar 2021'. A red box highlights the 'Data dictionaries' section.

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

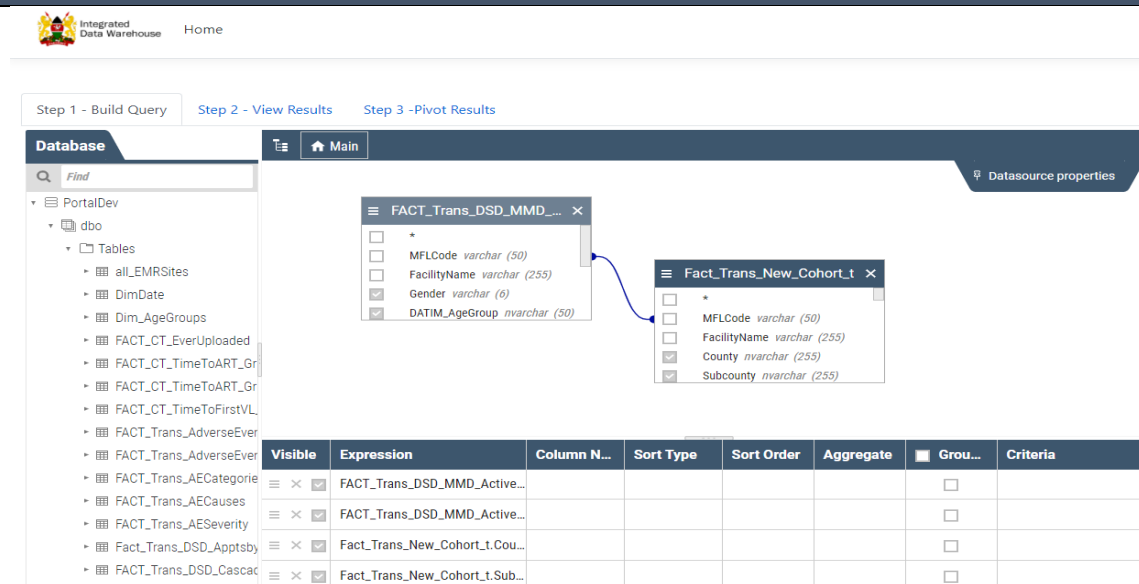
Key components include:

- 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'. The 'Database' pane on the left shows a tree view of tables under 'PortalDev' and 'dbo'. The main workspace displays two data dictionaries: 'FACT_Trans_DSD_MMD...' and 'Fact_Trans_New_Cohort_t...'. The 'FACT_Trans_DSD_MMD...' dictionary has fields: MFLCode (varchar 50), FacilityName (varchar 255), Gender (varchar 6), and DATIM_AgeGroup (nvarchar 50). The 'Fact_Trans_New_Cohort_t...' dictionary has fields: MFLCode (varchar 50), FacilityName (varchar 255), County (nvarchar 255), and Subcounty (nvarchar 255). A table below the dictionaries shows the query results with columns: Visible, Expression, Column N..., Sort Type, Sort Order, Aggregate, Grou..., and Criteria. The table contains four rows of data.

Visible	Expression	Column N...	Sort Type	Sort Order	Aggregate	Grou...	Criteria
<input checked="" type="checkbox"/>	FACT_Trans_DSD_MMD_Active...					<input type="checkbox"/>	
<input checked="" type="checkbox"/>	FACT_Trans_DSD_MMD_Active...					<input type="checkbox"/>	
<input checked="" type="checkbox"/>	Fact_Trans_New_Cohort_t.Cou...					<input type="checkbox"/>	
<input checked="" type="checkbox"/>	Fact_Trans_New_Cohort_t.Sub...					<input type="checkbox"/>	

PART C: Data Warehouse Administration and User Management

Signing up for access:

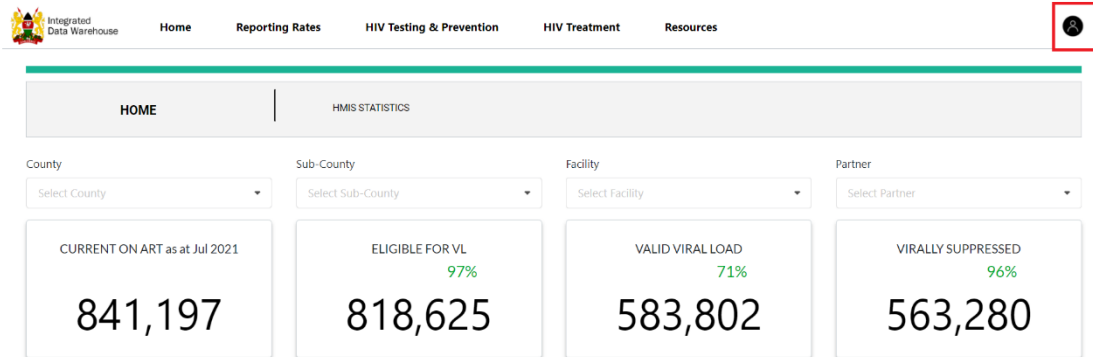
There are two basic functions of the administration Page

- 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:

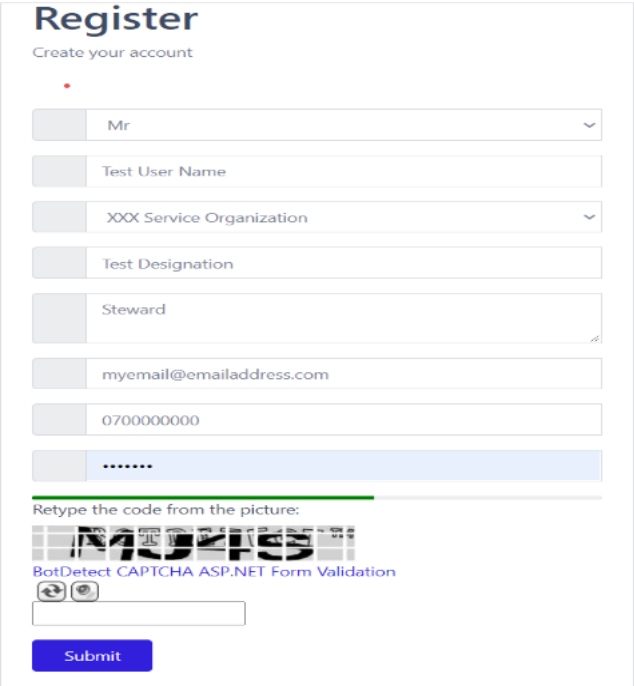
- Click user icon as shown on the diagram
- Select "Login" task as shown below.
The login window will appear.



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>New User registration</p> <ul style="list-style-type: none">- Specify the name, Organization, designation, Reason for Accessing, email address, phone number and the password. Remember to enter the CAPTCHA provided and click Submit.- An email will be sent to the email specified. Check your email and verify the email address to continue.- Once confirmed, another email will be sent to your Admin (Steward) to validate and grant you access.- Your Admin (steward) will validate you request and grant access.	 <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', 'Steward', 'myemail@emailaddress.com', and '0700000000'. There is a password field with a strength indicator. Below the password field is a CAPTCHA section with the text 'Retype the code from the picture:' and a grid of characters. The CAPTCHA text is 'BotDetect CAPTCHA ASP.NET Form Validation'. There is a 'Submit' button at the bottom.</p>
<p>For more information on user access and other related materials, refer to the references below:</p> <p>References:</p> <ul style="list-style-type: none">- National Data Warehouse Dashboard (kenyahmis.org)- How to use the adhoc feature on Data warehouse- User access management guide	

THE END