

SOP: KenyaEMR 3.x Facility Dashboard

Last Update: Mar 2024

TASK:	Facility Dashboard Walkthrough
OBJECTIVE:	Guide user through KenyaEMR 3.x dashboard
ACTORS:	Facility Admin, Facility Special Clinics, Facility OPD Users, Facility IPD Users
REQUIRED MATERIALS:	Functional KenyaEMR version 18.7.2
SUMMARY:	
A health facility dashboard serves as a centralized platform for monitoring and analyzing critical data related to patient care, resource utilization, financial performance, and operational efficiency within a healthcare facility. It aggregates data from multiple sources, such as electronic health records (EHR), billing systems, and administrative databases, to provide a comprehensive view of facility operations.	

Locations of use:

- i) Facility Admin
- ii) Facility Users with access

The following are key Facility Dashboard views for various actors:

Facility Admin	Facility Special Clinics	Facility OPD Users	Facility IPD Users
Financial Performance <ul style="list-style-type: none"> Revenue and Expenses: Monitor revenue streams, including waivers, and out-of-pocket payments, as well as expenses such as supplies, and overhead costs. 	Patient Metrics <ul style="list-style-type: none"> Admissions and Discharges: Track the number of patients admitted to and discharged from the facility over time. Bed Occupancy Rates: Monitor bed utilization rates to optimize resource allocation and capacity management. Average Length of Stay: Analyze the average length of time patients spend in the facility to identify opportunities for efficiency improvements. Clinical Quality Indicators		

- Profitability Analysis: Analyze profit margins, net income, and return on investment (ROI) to assess the financial health and sustainability of the facility.
- Budget Variance: Compare actual financial performance against budgeted targets to identify discrepancies and areas for cost-saving measures.

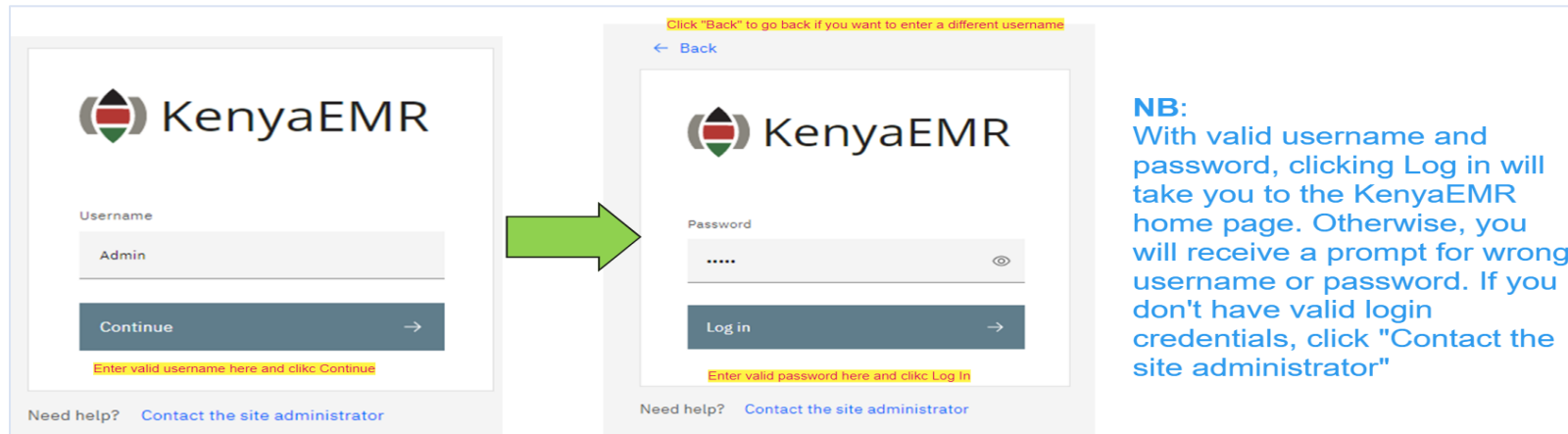
Operational Efficiency

- Appointment Wait Times: Track average wait times for appointments and consultations to optimize patient scheduling and reduce waiting times.
- Resource Utilization: Monitor the utilization of medical equipment, facilities, and staff to identify inefficiencies and optimize resource allocation.
- Workflow Bottlenecks: Identify bottlenecks and inefficiencies in clinical workflows and administrative processes to streamline operations and improve productivity.

- Patient Outcomes: Measure clinical outcomes such as mortality rates, readmission rates, and complication rates to assess the quality of care delivered.
- Compliance with Clinical Guidelines: Monitor adherence to evidence-based clinical guidelines and protocols to ensure the delivery of standardized and high-quality care.
- Patient Satisfaction Scores: Track patient satisfaction scores and feedback to gauge patient experience and identify areas for improvement. Dispense to patients/users in case of specific departments.
- Should be aware of stock levels for medications and prescribes medication to the patient.
- Budgeting for stock, tracking expenditures related to stock, and ensuring that financial records align with stock levels and procurement activities

Part 1: Login into the system

- Enter the correct URL on your browser (i.e http://server_IP_Address:8080/openmrs/spa)
- The logging screen will be displayed. Enter the correct username and password in the sequences shown.



The image shows two sequential screenshots of the KenyaEMR login interface, connected by a green arrow pointing from left to right.

Left Screenshot (Username screen):

- Header: KenyaEMR logo and text.
- Form: Username field with the text "Admin" entered.
- Button: "Continue" button with a right-pointing arrow.
- Text below button: "Enter valid username here and clicc Continue" (note the typo "clicc").
- Footer: "Need help? [Contact the site administrator](#)"

Right Screenshot (Password screen):


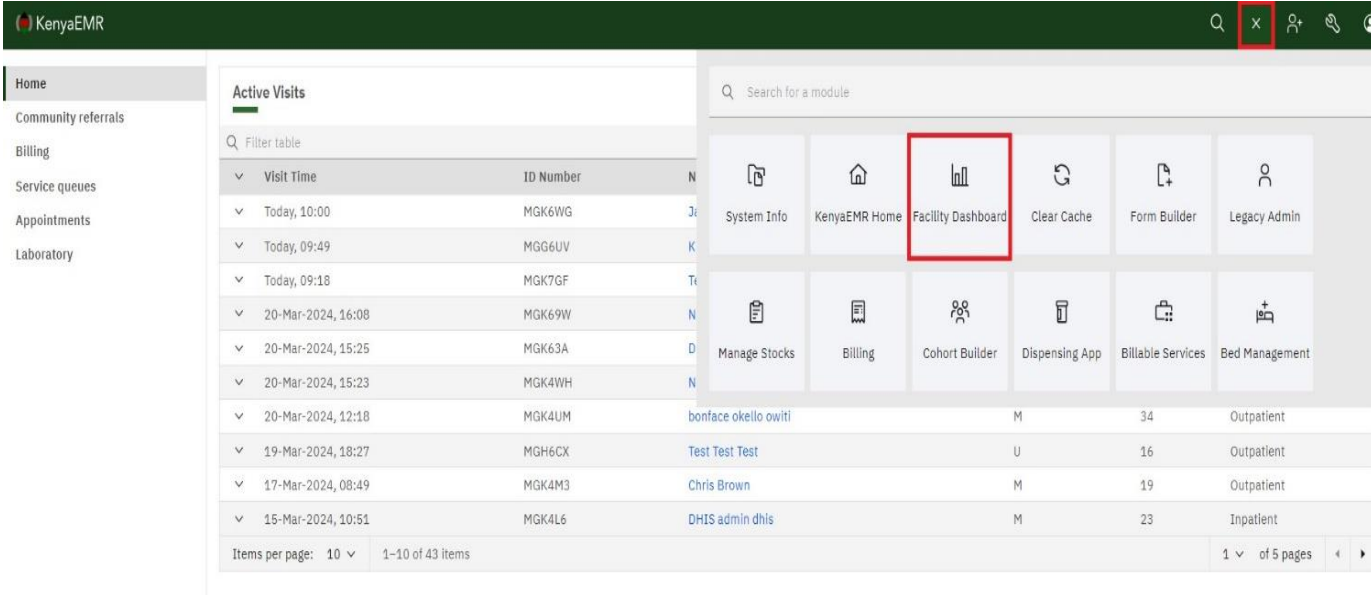
- Header: KenyaEMR logo and text.
- Form: Password field with masked characters "....." and a toggle eye icon.
- Button: "Log in" button with a right-pointing arrow.
- Text below button: "Enter valid password here and clicc Log In" (note the typo "clicc").
- Footer: "Need help? [Contact the site administrator](#)"

Annotations:

- A yellow highlight at the top of the right screenshot reads: "Click 'Back' to go back if you want to enter a different username".
- A blue arrow labeled "Back" points to the left of the right screenshot.

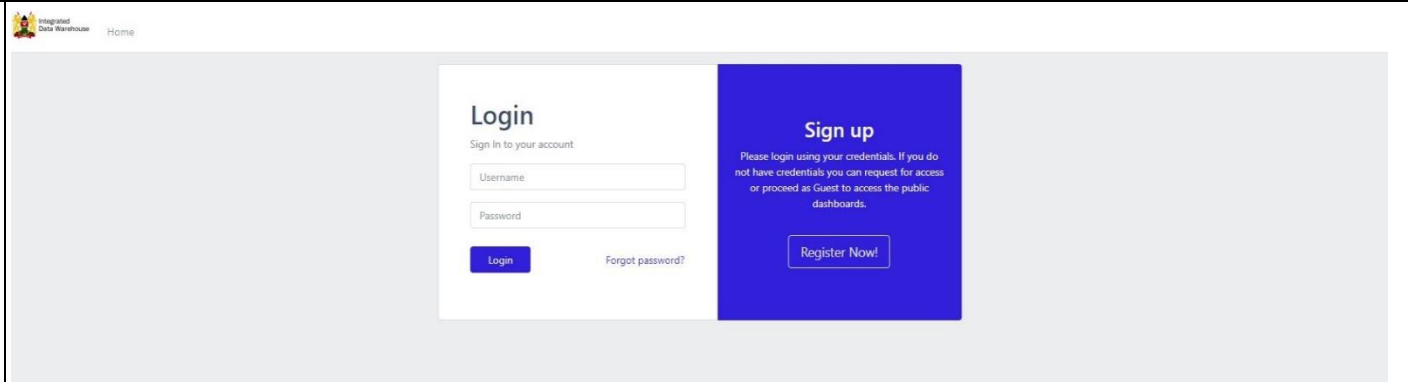
NB: With valid username and password, clicking Log in will take you to the KenyaEMR home page. Otherwise, you will receive a prompt for wrong username or password. If you don't have valid login credentials, click "Contact the site administrator"

Part 1: How to Access Facility Dashboards

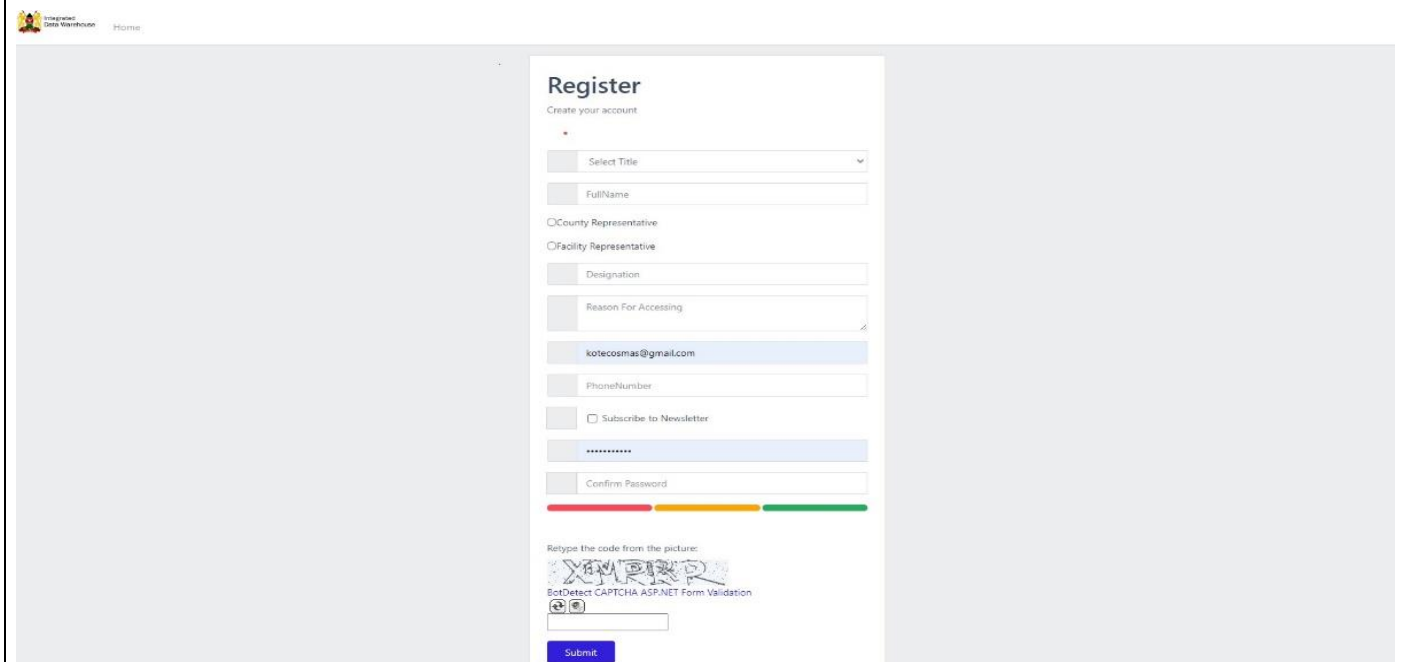
No	Task Description	Screenshot																																																							
1	<p>Access Facility Dashboard module</p> <ul style="list-style-type: none"> On the KenyaEMR Home Page, click on the Grid Icon  on the top-right corner to display KenyaEMR applications then click on Facility Dashboard <p>NB: The Facility dashboard will be displayed as shown in the next image.</p> <p>Overview: By default the dashboards will be hosted and opened on superset. The dashboards will come already pre-configured but the platform allows users to dynamically create new dashboards.</p>	 <p>The screenshot shows the KenyaEMR interface. In the top-right corner, a search icon and a grid icon are highlighted with a red box. Below the grid icon, the 'Facility Dashboard' module is highlighted with a red box in the application menu. The main content area displays a table of 'Active Visits' with columns for Visit Time, ID Number, and Patient Name.</p> <table border="1"> <thead> <tr> <th>Visit Time</th> <th>ID Number</th> <th>Patient Name</th> <th>Age</th> <th>Visit Type</th> </tr> </thead> <tbody> <tr> <td>Today, 10:00</td> <td>MGK6WG</td> <td>J...</td> <td></td> <td></td> </tr> <tr> <td>Today, 09:49</td> <td>MGG6UV</td> <td>K...</td> <td></td> <td></td> </tr> <tr> <td>Today, 09:18</td> <td>MGK7GF</td> <td>T...</td> <td></td> <td></td> </tr> <tr> <td>20-Mar-2024, 16:08</td> <td>MGK69W</td> <td>N...</td> <td></td> <td></td> </tr> <tr> <td>20-Mar-2024, 15:25</td> <td>MGK63A</td> <td>D...</td> <td></td> <td></td> </tr> <tr> <td>20-Mar-2024, 15:23</td> <td>MGK4WH</td> <td>N...</td> <td></td> <td></td> </tr> <tr> <td>20-Mar-2024, 12:18</td> <td>MGK4UM</td> <td>bonface okello owiti</td> <td>34</td> <td>Outpatient</td> </tr> <tr> <td>19-Mar-2024, 18:27</td> <td>MGH6CX</td> <td>Test Test Test</td> <td>16</td> <td>Outpatient</td> </tr> <tr> <td>17-Mar-2024, 08:49</td> <td>MGK4M3</td> <td>Chris Brown</td> <td>19</td> <td>Outpatient</td> </tr> <tr> <td>15-Mar-2024, 10:51</td> <td>MGK4L6</td> <td>DHIS admin dhls</td> <td>23</td> <td>Inpatient</td> </tr> </tbody> </table>	Visit Time	ID Number	Patient Name	Age	Visit Type	Today, 10:00	MGK6WG	J...			Today, 09:49	MGG6UV	K...			Today, 09:18	MGK7GF	T...			20-Mar-2024, 16:08	MGK69W	N...			20-Mar-2024, 15:25	MGK63A	D...			20-Mar-2024, 15:23	MGK4WH	N...			20-Mar-2024, 12:18	MGK4UM	bonface okello owiti	34	Outpatient	19-Mar-2024, 18:27	MGH6CX	Test Test Test	16	Outpatient	17-Mar-2024, 08:49	MGK4M3	Chris Brown	19	Outpatient	15-Mar-2024, 10:51	MGK4L6	DHIS admin dhls	23	Inpatient
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Login/Register:

- If you are an existing user, use your email address as username and enter the password you had created to login.
- If you are a new user, click on 'Register Now' to create an account. You shall be redirected to the 'Registration form' Fill and save.



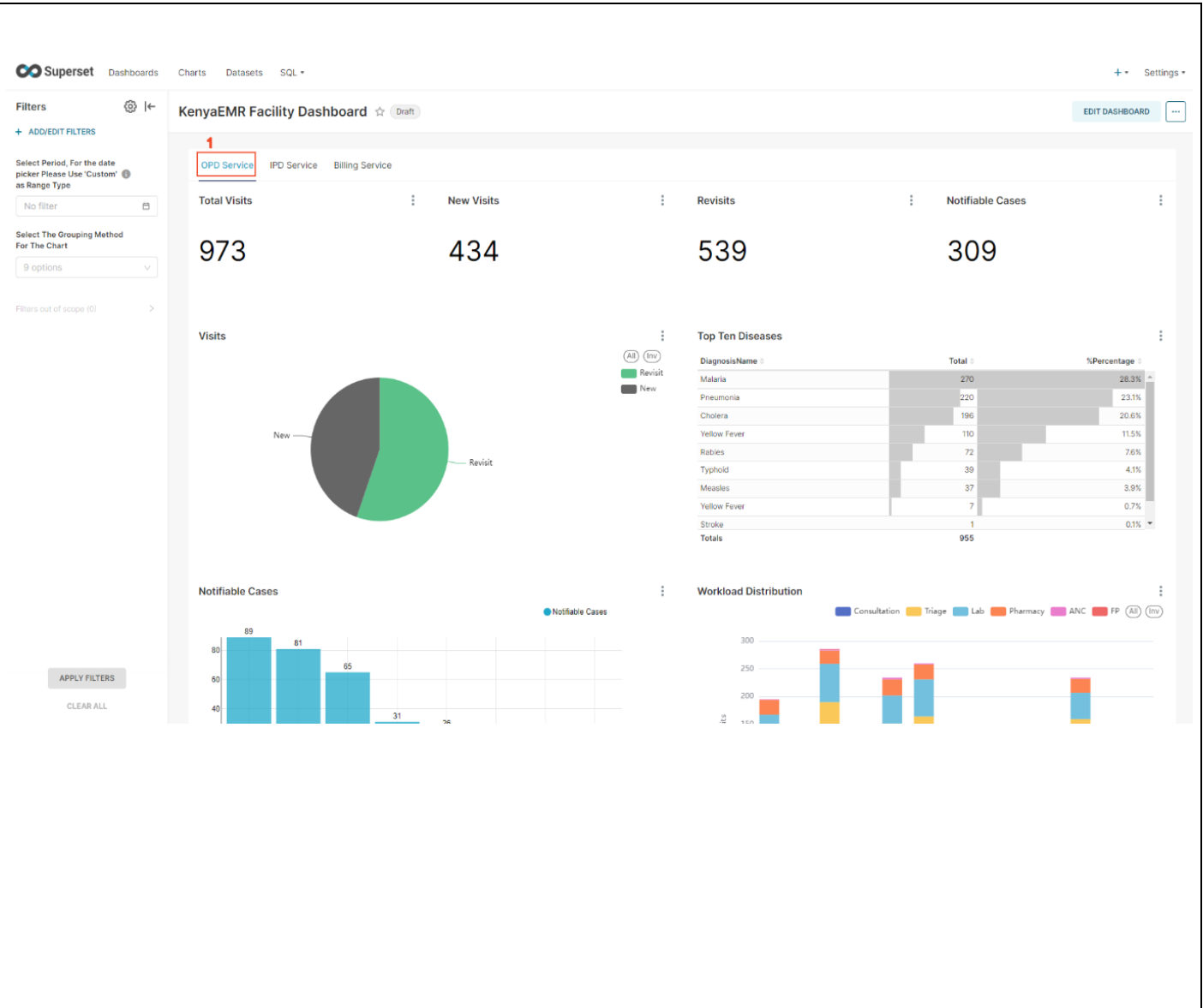
The screenshot shows the 'Login' page of the Integrated Data Warehouse. The page has a header with the logo and 'Home' link. The main content area features a 'Login' form with fields for 'Username' and 'Password', a 'Login' button, and a 'Forgot password?' link. To the right of the login form is a blue 'Sign up' box with a 'Register Now!' button and a message: '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.'



The screenshot shows the 'Register' page of the Integrated Data Warehouse. The page has a header with the logo and 'Home' link. The main content area features a 'Register' form with the following fields: 'Select Title' (dropdown), 'FullName', 'Designation', 'Reason For Accessing' (dropdown), 'Email' (text field with value 'kotecosmas@gmail.com'), 'PhoneNumber', 'Subscribe to Newsletter' (checkbox), 'Password' (text field with asterisks), and 'Confirm Password'. Below the password fields is a CAPTCHA image with the text 'Retype the code from the picture:' and a 'Submit' button.

1. Navigating the dashboard:

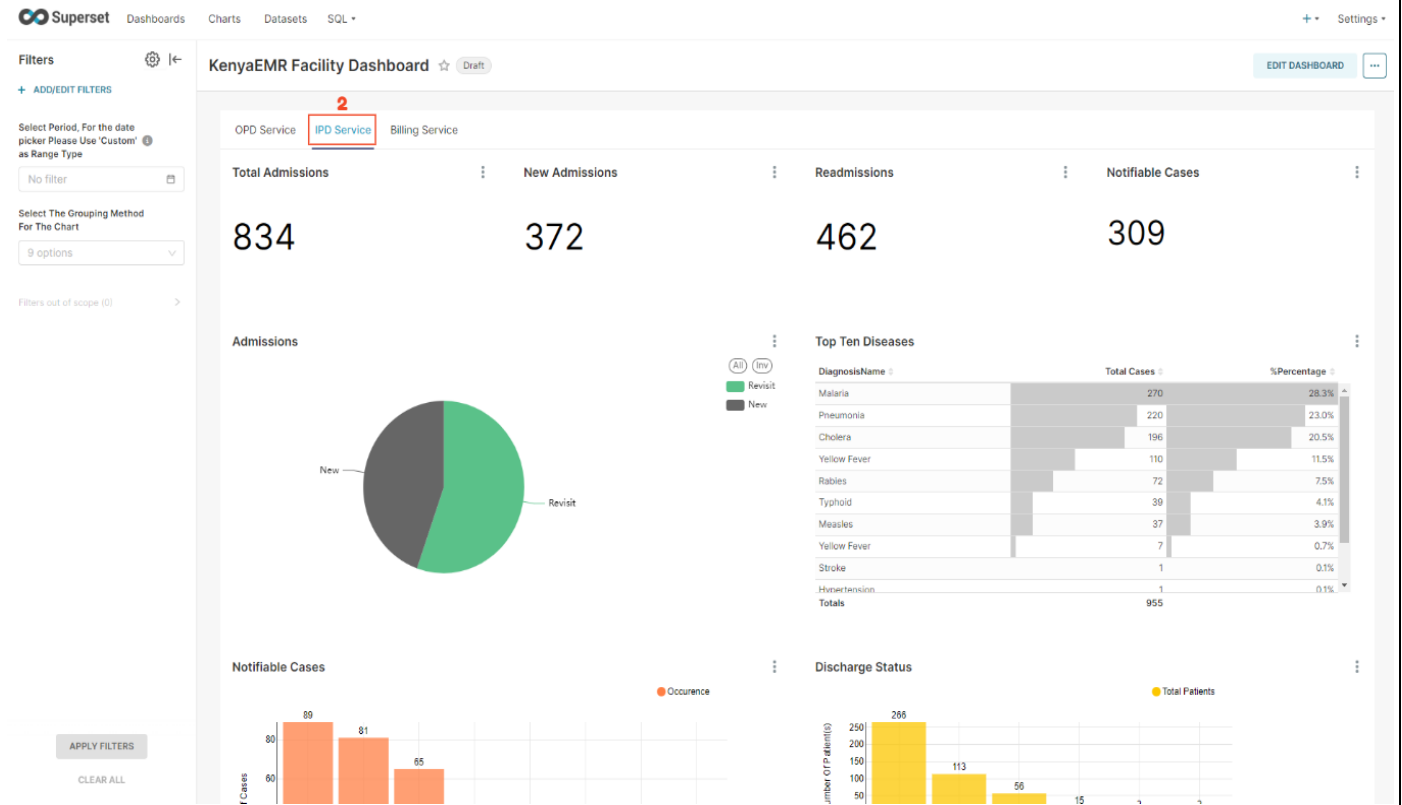
- a. Click on (1) OPD service – This will open for you all dashboards created for OPD.



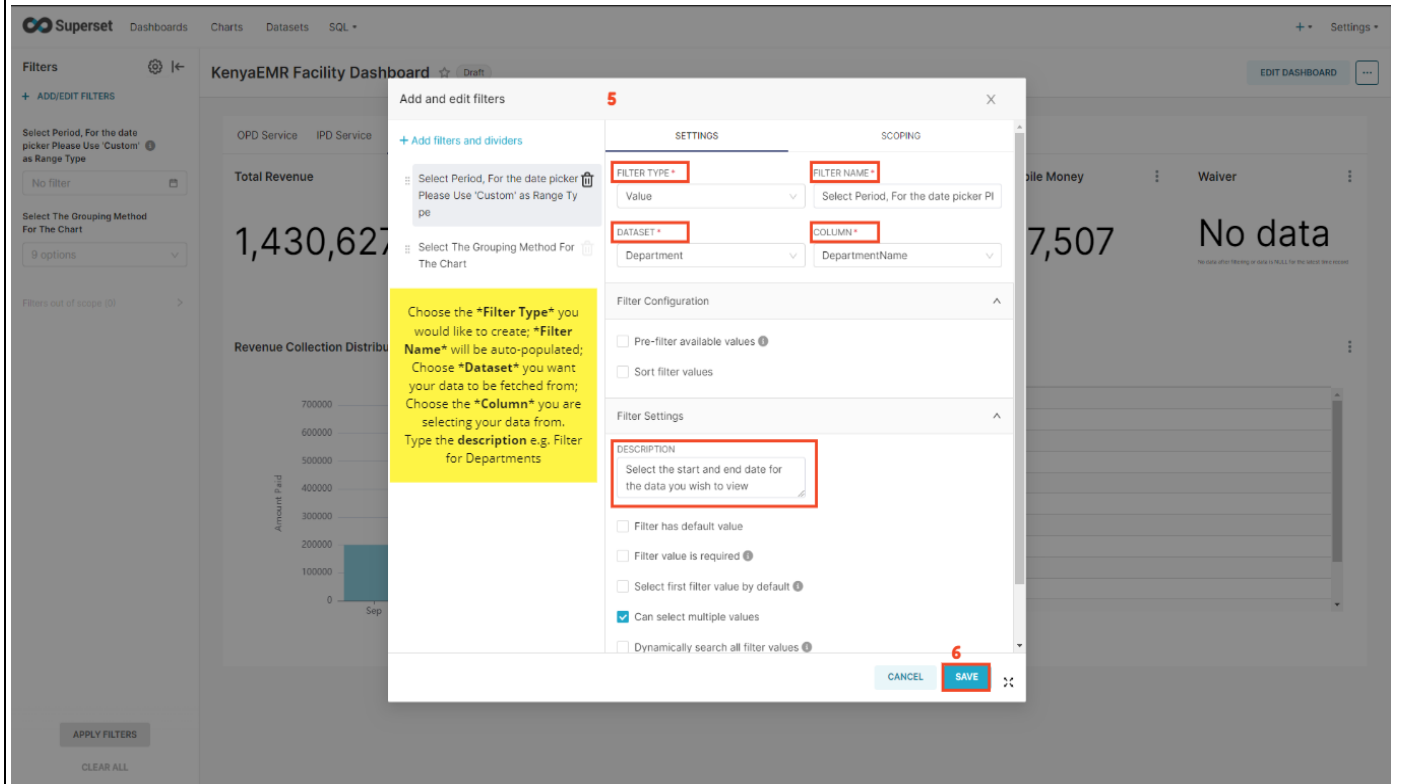
The screenshot displays the 'KenyaEMR Facility Dashboard' in Superset. The dashboard is filtered for 'OPD Service' (indicated by a red box and the number '1'). Key metrics are shown at the top: Total Visits (973), New Visits (434), Revisits (539), and Notifiable Cases (309). A pie chart titled 'Visits' shows the distribution between 'New' (dark grey) and 'Revisit' (green). A table titled 'Top Ten Diseases' lists various conditions with their total counts and percentages. A bar chart titled 'Notifiable Cases' shows the count for several categories. A 'Workload Distribution' stacked bar chart shows the number of cases across different service types: Consultation, Triage, Lab, Pharmacy, ANC, and FP.

DiagnosisName	Total	%Percentage
Malaria	270	28.3%
Pneumonia	220	23.1%
Cholera	196	20.6%
Yellow Fever	110	11.5%
Rabies	72	7.6%
Typhoid	39	4.1%
Measles	37	3.9%
Yellow Fever	7	0.7%
Stroke	1	0.1%
Totals	955	

b. Click on (2) IPD service – This will open for you all dashboards created for IPD.



- e. (5). These custom filters allows a user to affect the data being displayed and change the dashboards according to the filter applied.
- f. The dialog box for custom filter has mandatory fields. The fields are as follows: **Filter Type, Filter Name, Dataset, Column** and **Description (Not Mandatory)** that have to be filled before saving.
- g. Click on (6) Save – This will submit and save the new filter you have added to slice your data and display dashboards according to filters applied.



The screenshot shows the 'Add and edit filters' dialog box in Superset. The dialog is titled 'Add and edit filters' and has a red '5' in the top right corner. It is divided into 'SETTINGS' and 'SCOPING' tabs. The 'SETTINGS' tab is active and contains the following fields:

- FILTER TYPE***: Value
- FILTER NAME***: Select Period, For the date picker PI
- DATASET***: Department
- COLUMN***: DepartmentName

The 'SCOPING' tab is also visible and contains a **DESCRIPTION** field with the text: 'Select the start and end date for the data you wish to view'. This field is highlighted with a red box and a red '6' in the bottom right corner of the dialog. Below the 'DESCRIPTION' field are several checkboxes for filter settings, including 'Filter has default value', 'Filter value is required', 'Select first filter value by default', 'Can select multiple values' (which is checked), and 'Dynamically search all filter values'.

A yellow callout box in the center of the dialog contains the following text: 'Choose the *Filter Type* you would like to create; *Filter Name* will be auto-populated; Choose *Dataset* you want your data to be fetched from; Choose the *Column* you are selecting your data from. Type the description e.g. Filter for Departments'. The 'SAVE' button at the bottom right of the dialog is also highlighted with a red box and a red '6'.

Once the filters have been successfully created, you will be able to see the new filter with the choices made available on the left side bar menu as depicted in the image.

Superset Dashboards Charts Datasets SQL

KenyaEMR Facility Dashboard Draft EDIT DASHBOARD

Filters ADD/EDIT FILTERS

Select Period, For the date picker Please Use 'Custom' as Range Type

Cardiology x

Select All (13)

- Cardiology ✓
- Dermatology
- Emergency Room
- Gastroenterology
- Internal Medicine
- Neurology
- Obstetrics and Gynecology

APPLY FILTERS

CLEAR ALL

KenyaEMR Facility Dashboard

OPD Service IPD Service Billing Service

Total Revenue: 1,430,627

Insurance: 1,179,270

Cash: 193,850

Mobile Money: 57,507

Waiver: No data

Revenue Collection Distribution Per Payment_Mode

Payment Date	insurance	cash	mobile_money
Sep	~200,000	0	0
Oct	~50,000	~10,000	~10,000
Nov	~200,000	0	0
Dec	~250,000	~100,000	~20,000
2024	~500,000	~100,000	~50,000

Departmental Revenue Collection

DepartmentName

- Cardiology
- Dermatology
- Emergency Room
- Gastroenterology
- Internal Medicine
- Neurology
- Obstetrics and Gynecology
- Oncology
- Ophthalmology
- Orthopedics
- Pediatrics

THE END