

SOP: KenyaEMR 3.x Stock Management Module

Last Update: Mar 2024

TASK:	End-to-End Stock Management Walkthrough
OBJECTIVE:	
ACTORS:	Storekeeper - Receiver, approve, and Issue commodities; Clinician - Aware of stock levels for medications and prescribes medication to the patient; Pharm Tech (Dispenser) - Order and receive stock from the main store, Aware of stock levels and dispense prescribed medication to the patient. Monitor stock levels; Finance Officers - Budgeting for stock, tracking expenditures related to stock, and ensuring that financial records align with stock levels and procurement activities.
REQUIRED MATERIALS:	Functional KenyaEMR version 18.7.0 and above
SUMMARY: Stock management within an Electronic Medical Record (EMR) system refers to the process of managing and tracking medical inventory, supplies, and medications within healthcare facilities.	

Locations of use:

- i) Main store
- ii) Dispensing Units: Pharmacy, Department Stores, Lab, Administration

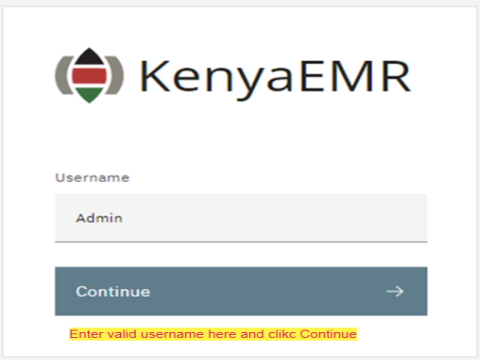
The following are key Stock Management tasks for various actors:

Storekeeper (Main Store)	Dispenser (Pharmacist, Lab Techs)	Clinician	Administration/Finance
<ul style="list-style-type: none"> • Receive items from external sources. • Enter/Update quantities of initial stock take in main store. • Set Stock levels. 	<ul style="list-style-type: none"> • Monitor stock levels within their dispensing units. • Set Reorder levels. • Raise requisitions. • Send requisitions for approval. 	<ul style="list-style-type: none"> • Should be aware of stock levels for medications and prescribes medication to the patient 	<ul style="list-style-type: none"> • Budgeting for stock, tracking expenditures related to stock, and ensuring that financial records align with stock

<ul style="list-style-type: none"> • Should be able to confirm/approve/reject requisitions. • Issue items from the store to the dispensing units 	<ul style="list-style-type: none"> • Receive stock items from the main store. • Dispense to patients/users in case of specific departments 		<p>levels and procurement activities</p>
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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.

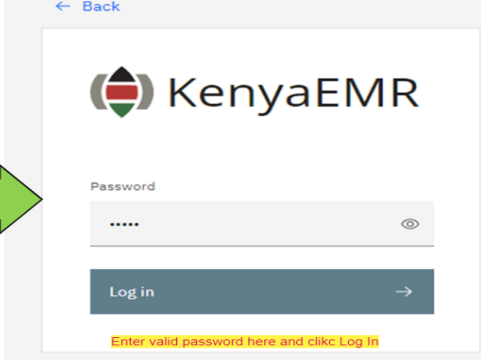


Need help? [Contact the site administrator](#)

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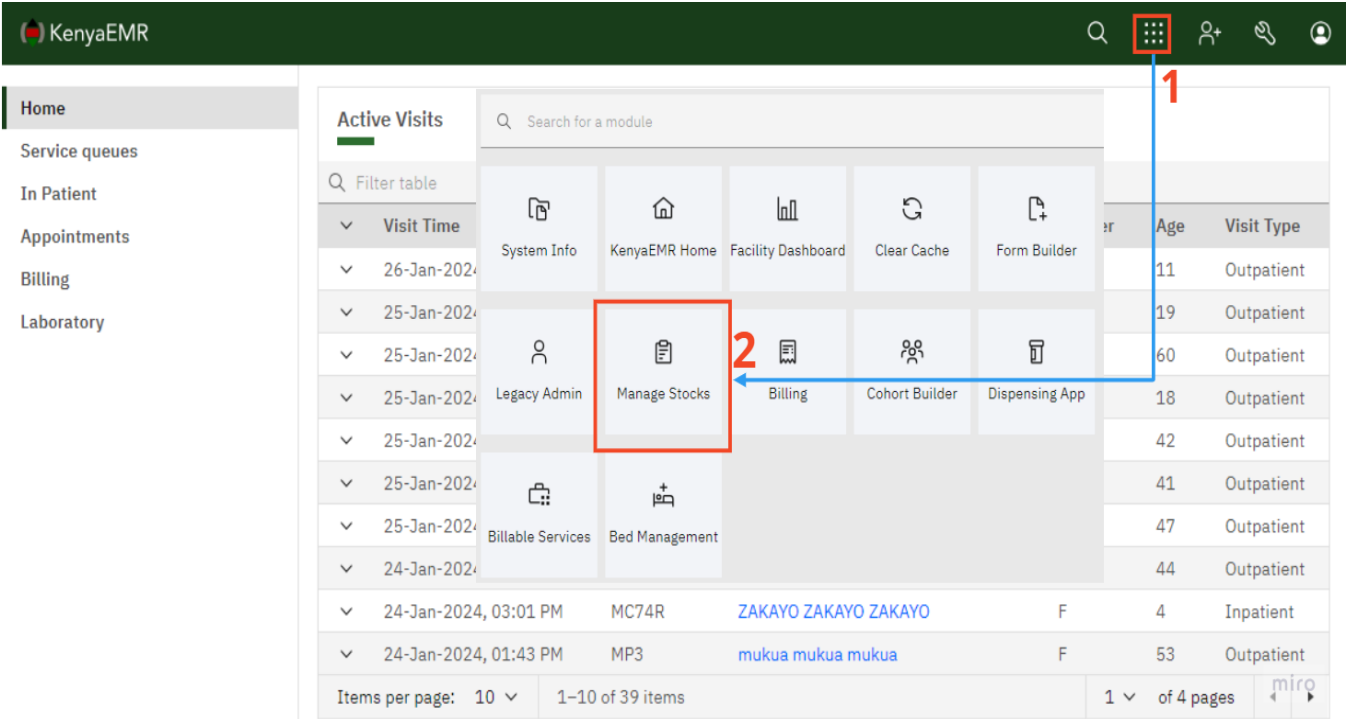
Click "Back" to go back if you want to enter a different username

← Back

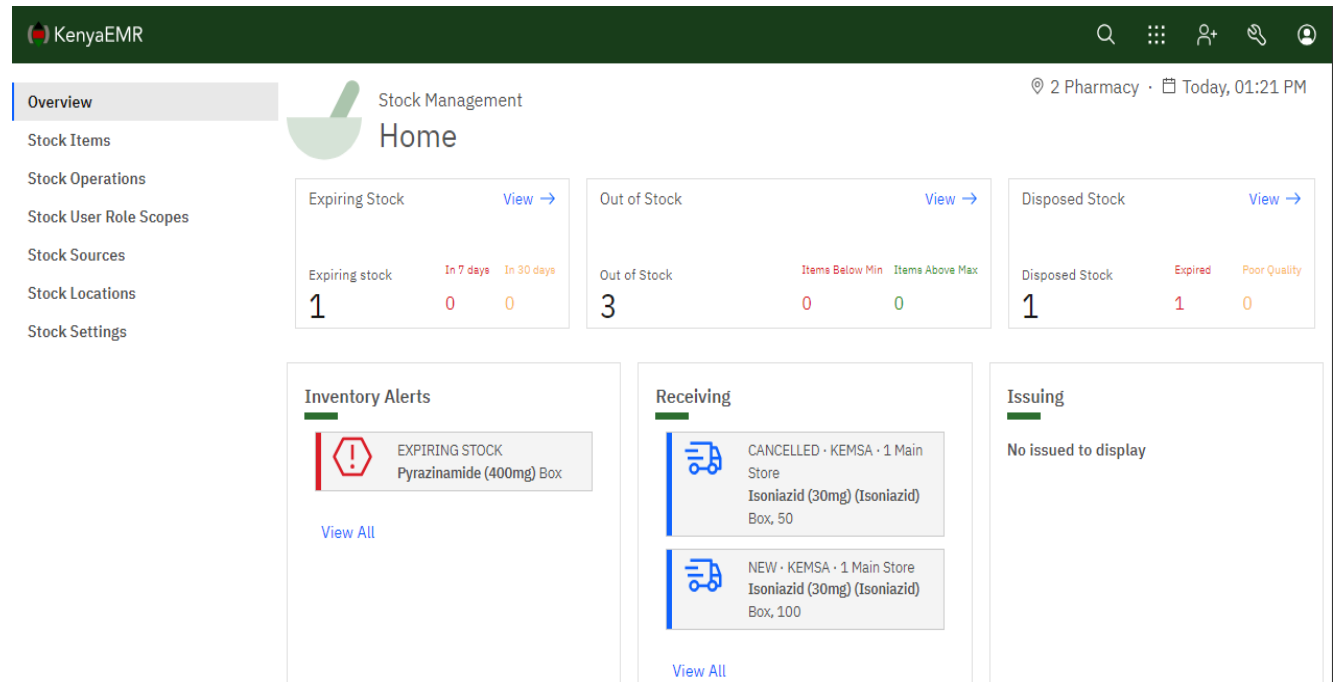


Need help? [Contact the site administrator](#)

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"

No	Task Description	Screenshot																																																																																										
	<p>Access Stock Management 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 Manage Stocks <p>NB: The Stock Management dashboard will be displayed as shown.</p> <p>1. Overview:</p> <ol style="list-style-type: none"> Expiring Stock: Number of items expiring in either 7 or 30 days Out of Stock: Number of items that are currently out of stock. Disposed Stock: Number of Expired/ Damaged items Inventory Alerts: Alerts on expiring items. Receiving: Items received in the store Issuing: Items issued from the store to various dispensing points 	 <p>The screenshot shows the KenyaEMR Home Page. The top navigation bar includes the KenyaEMR logo, a search icon, a grid icon (labeled '1'), a user profile icon, and a help icon. The main content area features a sidebar on the left with options: Home, Service queues, In Patient, Appointments, Billing, and Laboratory. The main area displays a grid of application tiles. The 'Manage Stocks' tile is highlighted with a red box (labeled '2'). Below the grid is a table of 'Active Visits' with columns for Visit Time, Patient Name, Age, and Visit Type. The table contains several rows of visit data.</p> <table border="1"> <thead> <tr> <th>Visit Time</th> <th>System Info</th> <th>KenyaEMR Home</th> <th>Facility Dashboard</th> <th>Clear Cache</th> <th>Form Builder</th> <th>Age</th> <th>Visit Type</th> </tr> </thead> <tbody> <tr> <td>26-Jan-2024</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>11</td> <td>Outpatient</td> </tr> <tr> <td>25-Jan-2024</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>19</td> <td>Outpatient</td> </tr> <tr> <td>25-Jan-2024</td> <td>Legacy Admin</td> <td>Manage Stocks</td> <td>Billing</td> <td>Cohort Builder</td> <td>Dispensing App</td> <td>60</td> <td>Outpatient</td> </tr> <tr> <td>25-Jan-2024</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>18</td> <td>Outpatient</td> </tr> <tr> <td>25-Jan-2024</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>42</td> <td>Outpatient</td> </tr> <tr> <td>25-Jan-2024</td> <td>Billable Services</td> <td>Bed Management</td> <td></td> <td></td> <td></td> <td>41</td> <td>Outpatient</td> </tr> <tr> <td>25-Jan-2024</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>47</td> <td>Outpatient</td> </tr> <tr> <td>24-Jan-2024</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>44</td> <td>Outpatient</td> </tr> <tr> <td>24-Jan-2024, 03:01 PM</td> <td>MC74R</td> <td>ZAKAYO ZAKAYO ZAKAYO</td> <td></td> <td></td> <td></td> <td>F</td> <td>4</td> <td>Inpatient</td> </tr> <tr> <td>24-Jan-2024, 01:43 PM</td> <td>MP3</td> <td>mukua mukua mukua</td> <td></td> <td></td> <td></td> <td>F</td> <td>53</td> <td>Outpatient</td> </tr> </tbody> </table>	Visit Time	System Info	KenyaEMR Home	Facility Dashboard	Clear Cache	Form Builder	Age	Visit Type	26-Jan-2024						11	Outpatient	25-Jan-2024						19	Outpatient	25-Jan-2024	Legacy Admin	Manage Stocks	Billing	Cohort Builder	Dispensing App	60	Outpatient	25-Jan-2024						18	Outpatient	25-Jan-2024						42	Outpatient	25-Jan-2024	Billable Services	Bed Management				41	Outpatient	25-Jan-2024						47	Outpatient	24-Jan-2024						44	Outpatient	24-Jan-2024, 03:01 PM	MC74R	ZAKAYO ZAKAYO ZAKAYO				F	4	Inpatient	24-Jan-2024, 01:43 PM	MP3	mukua mukua mukua				F	53	Outpatient
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The Stock management module home screen will look like shown in the illustration.

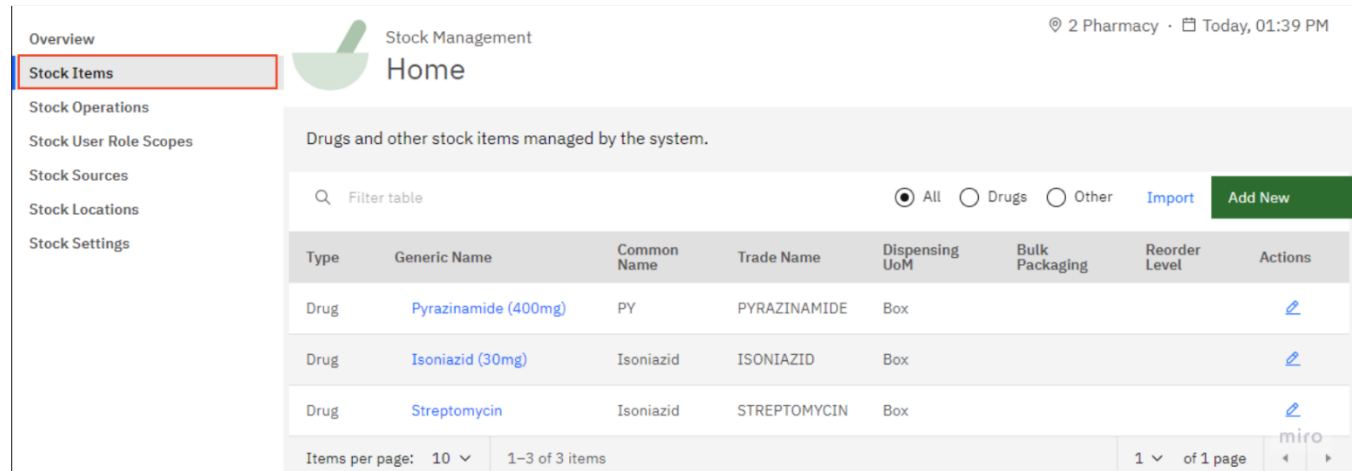


The screenshot shows the 'Stock Management Home' interface. At the top, there is a dark green header with 'KenyaEMR' on the left and search, menu, and user icons on the right. Below the header is a navigation sidebar on the left with 'Overview' selected, and other options like 'Stock Items', 'Stock Operations', etc. The main content area features a 'Stock Management Home' title with a mortar and pestle icon. It includes three summary cards: 'Expiring Stock' (1 item, 0 in 7 days, 0 in 30 days), 'Out of Stock' (3 items, 0 below min, 0 above max), and 'Disposed Stock' (1 item, 1 expired, 0 poor quality). Below these are three sections: 'Inventory Alerts' showing an alert for 'EXPIRING STOCK Pyrazinamide (400mg) Box', 'Receiving' showing two items (one cancelled, one new), and 'Issuing' with 'No issued to display'.

2. Stock Items

- A list of all drugs and other stock items managed by the system
- Search for an item by typing the name of the item
- View all items by selecting **'All'** button
- View only drugs by selecting **'Drugs'** button
- View other items other than drugs by selecting **'Other'** button
- Import bulk list of items from a spreadsheet (**only .csv files which are 2MB and below in size**) using the Import feature
- Add new items in the list by clicking on the **'Add New'** button

Edit a stock item by clicking the **'Edit button'** under **Actions**.
 Click on **'Upload Stock Items'** to save changes when done or **'Cancel'** to cancel the upload.



Overview Stock Management 2 Pharmacy · Today, 01:39 PM

Stock Items Home

Drugs and other stock items managed by the system.

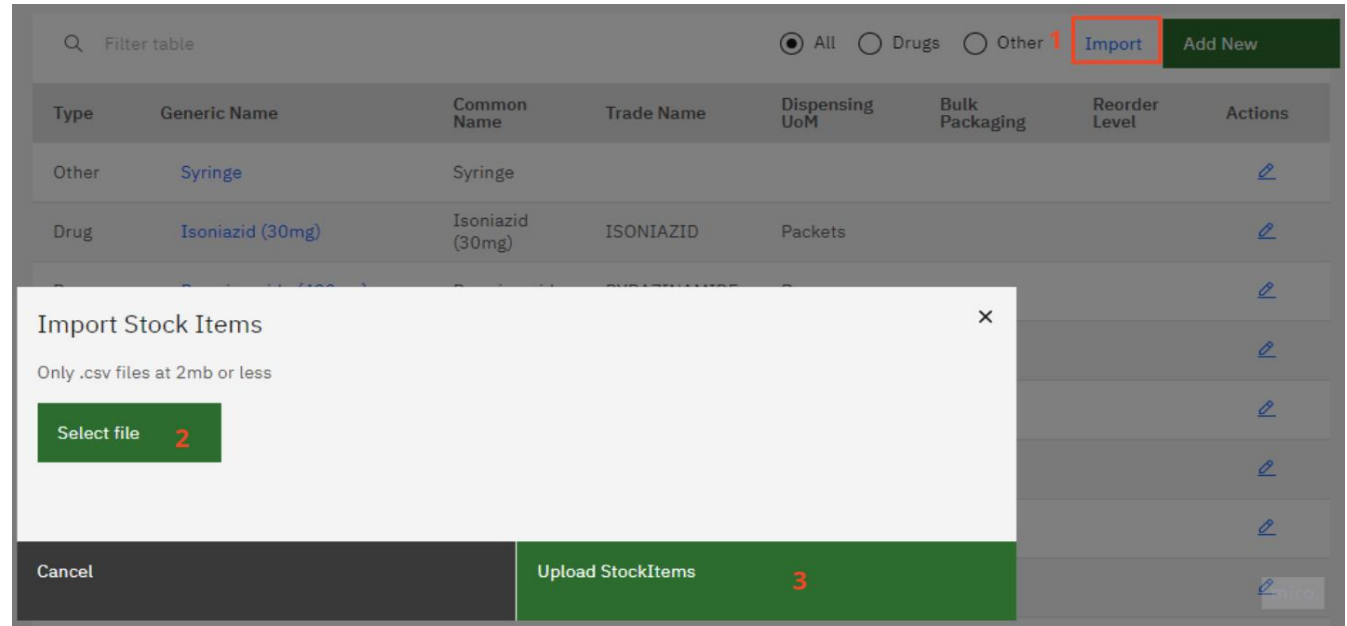
Filter table All Drugs Other [Import](#) [Add New](#)

Type	Generic Name	Common Name	Trade Name	Dispensing UoM	Bulk Packaging	Reorder Level	Actions
Drug	Pyrazinamide (400mg)	PY	PYRAZINAMIDE	Box			Edit
Drug	Isoniazid (30mg)	Isoniazid	ISONIAZID	Box			Edit
Drug	Streptomycin	Isoniazid	STREPTOMYCIN	Box			Edit

Items per page: 10 1 - 3 of 3 items 1 of 1 page miro

Import Stock Items

- Click on Import to open a dialogue box
- Click Select file then Click Update Stock Items button to complete



Filter table ● All ○ Drugs ○ Other **1** Import Add New

Type	Generic Name	Common Name	Trade Name	Dispensing UoM	Bulk Packaging	Reorder Level	Actions
Other	Syringe	Syringe					🔗
Drug	Isoniazid (30mg)	Isoniazid (30mg)	ISONIAZID	Packets			🔗
							🔗
							🔗
							🔗
							🔗
							🔗
							🔗
							🔗

Import Stock Items ✕

Only .csv files at 2mb or less

Select file **2**

Cancel **Upload StockItems** **3**

Add New Stock Item

- Click on Add New button to open Add dialogur box
- Select item type; if Drug, specify which drug by selecting from drop-down lust, specify it's common name and abbreviation;if it has an expiry date kindly enter Expiry Notice (in days), select preferred vendor from the drop down list, enter category from the drop-down list, select dispensing unit from the drop-down list. If Item type is Other; specify the item from the drop down list

The screenshot shows the 'Stock Management' interface. On the left, a sidebar contains a menu with 'Stock Items' highlighted. A red box around 'Stock Items' is labeled 'Step 1'. A blue arrow points from 'Stock Items' to a green 'Add New' button in the top right of the main content area, labeled 'Step 2'. Another blue arrow points from the 'Add New' button to the 'Expiration Notice (days)' field in the form, labeled 'Step 3'. The form contains the following fields:

- Item Type: Drug Other
- Please specify: (dropdown)
- Common name:
- Abbreviation: (input)
- Does the item expire? Yes No
- Expiration Notice (days):
- Who is the preferred vendor? (Choose vendor dropdown)
- Category: (Choose a category dropdown)
- Dispensing Unit: (Choose a dispensing unit dropdown)

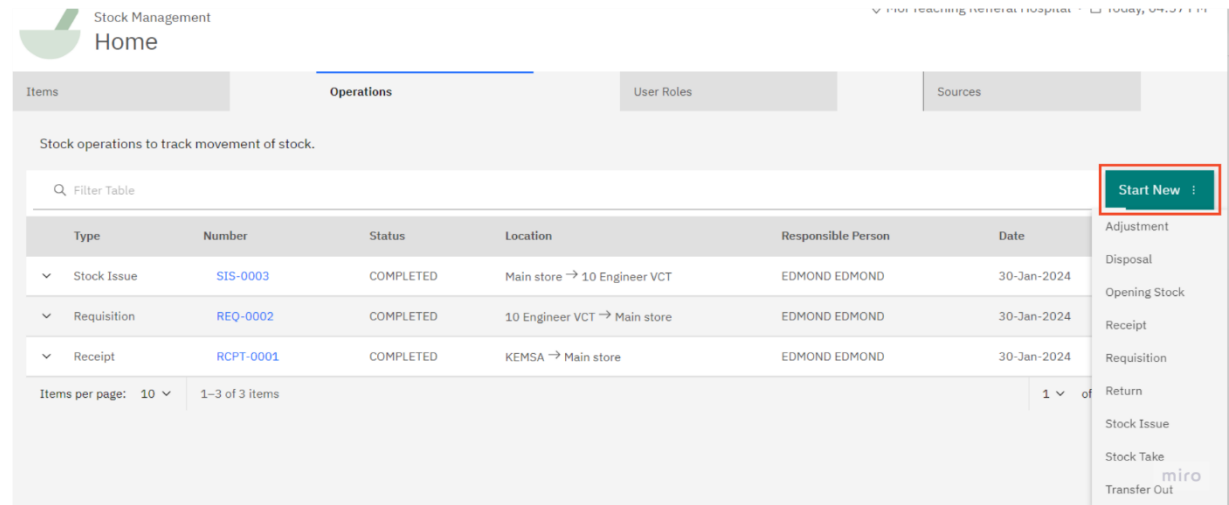
At the bottom right of the form are 'Cancel' and 'Save' buttons. A 'miro' watermark is visible in the bottom right corner of the screenshot.

3. Stock Operations:

Helps in tracking movement of stock from the main store to dispensing points and vice versa

- Filter table by searching for a transaction; Requisition/Stock Issuing
- Start a new Operation by clicking on 'Start New'; Select an option to update; **Adjustment, Disposal, Opening stock, Receipt, Requisition, Return, Stock issue and Transfer Out**

- a) Adjustment: Increasing or reducing the number of stock items
- b) Disposal: Removing expired/spoilt/damaged stock items from the store
- c) Opening Stock: Adding initial stock items in the store indicating; Item names, Batch No, Expiry, Quantity, Quantity UoM and Purchase price if any
- d) Requisition: This is a stock item request



The screenshot shows the 'Stock Management Home' page. It features a navigation bar with 'Items', 'Operations', 'User Roles', and 'Sources'. Below the navigation bar, there is a search bar labeled 'Filter Table' and a table of stock operations. The table has columns for Type, Number, Status, Location, Responsible Person, and Date. A 'Start New' button is highlighted in a red box on the right side of the table.

Type	Number	Status	Location	Responsible Person	Date
Stock Issue	SIS-0003	COMPLETED	Main store → 10 Engineer VCT	EDMOND EDMOND	30-Jan-2024
Requisition	REQ-0002	COMPLETED	10 Engineer VCT → Main store	EDMOND EDMOND	30-Jan-2024
Receipt	RCPT-0001	COMPLETED	KEMSA → Main store	EDMOND EDMOND	30-Jan-2024

- done by a dispenser (pharmacy, lab) to the main store
- e) Receipt: Receiving stock items from the main store to the dispenser(pharmacy, lab)
- f) Stock Issue: Receiving stock item request from the dispenser (pharmacy, lab) and Issuing requested items
- g) Return: Returning expired/spoilt stock items
- h) Transfer Out: Transferring stock items from the facility main store to another facility

The screenshot shows the 'Stock Management Home' interface. A workflow diagram is overlaid on the page, indicating the steps for creating a new adjustment:

- Step 1:** Click on the 'Stock Operations' menu item.
- Step 2:** Click on the 'Start New' button in the top right corner.
- Step 3:** Click on the 'Adjustment' option in the dropdown menu.
- Step 4:** Click on the 'Next' button at the bottom of the 'New: Adjustment' form.
- Step 5:** Click on the '+' button in the 'Adjustment Details' table.
- Step 6:** Click on the 'Next' button in the 'Adjustment Details' table.

The 'New: Adjustment' form contains the following fields and options:

- Status:** (Dropdown)
- Adjustment Details:**
 - Operation Date: 15/02/2024
 - Submit/Complete: Choose a location, Responsible Person (Filter...), Choose a reason, Remarks.
- Stock Items:** Table with columns: Item, Batch No, Expiry, Qty, Qty UoM, and a '+' button.
- Submit/Complete:** Save, Go Back buttons.

The table below shows the data for the 'Stock Items' section:

Type	Number	Status	Location	Responsible Person	Date
ocation-2				EDMOND EDMOND	08-F
Main Store				EDMOND EDMOND	08-F
EMSA → 1 Main Store				Babe Babe	08-F
EMSA → 1 Main Store				Babe Babe	08-F
Pharmacy → 1 Main Store				EDMOND EDMOND	08-F
EMSA → 1 Main Store				EDMOND EDMOND	08-F

4. **Stock User Roles:** To access stock management features, users must have assigned roles specifying location and stock operation type scopes.

Adding New User Role Scope

- Click on the 'Add New User Role Scope' button to open a dialog box then fill the necessary details depending on the roles of the user you are adding
- Save when done

Overview | Stock Management | Home | 1 Main Store - Today, 12:26 AM

Stock Items | Stock Operations | **Stock User Role Scopes** | Stock Sources | Stock Locations | Stock Settings

To access stock management features, users must have assigned roles specifying location and stock operation type scopes. [Click here to add new user role scope](#)

Filter table Search for a user to view or edit their features **Add New User Role Scope**

User	Role	Location(s)	Stock Operations	Permanent ?	Active From	Active To	Enabled ?	Actions
Oloro Bildard	Inventory Administrator	Location-11 ← Location-10 ← Location-9 ← Location-8 ← Location-7 ← Location-6 ← Location-5 ← Location-4 ← Location-3 ← 1 Main Store ← Location-2 ← 2 Pharmacy ←	Transfer Out, Stock Take, Stock Issue, Return, Requisition, Receipt, Opening Stock, Disposal, Adjustment	Yes			Yes	
muchanga douglas	Inventory Administrator	1 Main Store ← Location-11 ← Location-10 ← Location-6 ← Location-9 ← Location-8 ← Location-7 ← Location-5 ← Location-4 ←	Disposal, Requisition, Adjustment, Opening Stock, Receipt, Return, Stock Issue,	Yes			Yes	

Edit existing user Delete existing user

Overview | Stock Management | Home | 1 Main Store - Today, 12:26 AM

Stock Items | Stock Operations | **Stock User Role Scopes** | Stock Sources | Stock Locations | Stock Settings

To access stock management features, users must have assigned roles specifying location and stock operation type scopes. **Add New User Role Scope**

Filter table

User	Role	Location(s)	Stock Operations	Permanent ?	Active From	Active To	Enabled ?	Actions
Add Stock User Role Scope								
Oloro Bildard	Inv: Adn	User: <input type="text"/>					Yes	
muchanga douglas	Inv: Adn	Role: <input type="text"/>					Yes	

Enabled ? Permanent ? Active From: Active To:

Stock Operations
The list will be applicable to only selected stock operations.

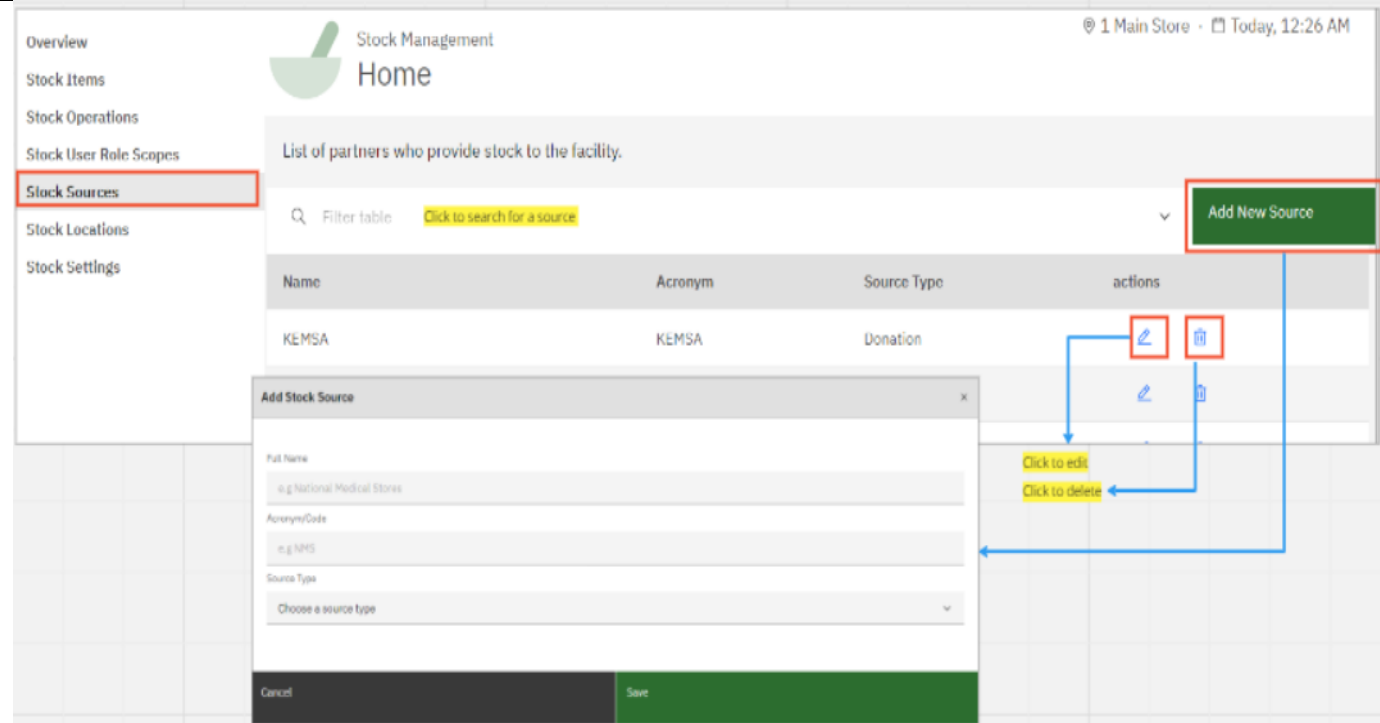
Adjustment Disposal Opening Stock Receipt Requisition Return Stock Issue Stock Take Transfer Out

Locations
Use the toggle to apply this scope to the locations under the selected location.

10 Engineer VCT 12 Engineers 300 MB EDUCARE CLINIC 304 Health Centre 311 Turk Atambulu Dispensary 348 WMO Health Centre 888 Street Clinic A to Z Quality Health Family Health Services A.C.K.Hutanga Dispensary AAR Adams Health Centre AAR City Centre Clinic AAR Clinic Serek Centre (Westlands) AAR Evamwin AAR Ekover AAR Gush Health Care unit AAR Health Care AAR Health Care Busia AAR Health Care Kisumu

Cancel Save

5. **Stock Sources:** Update partners who supply stock items to the facility.



The screenshot shows the 'Stock Sources' page in the Stock Management application. The left sidebar has 'Stock Sources' highlighted. The main content area shows a table of stock sources with columns for Name, Acronym, Source Type, and actions. A modal window titled 'Add Stock Source' is open, showing fields for Full Name, Acronym/Code, and Source Type. Annotations include a red box around the 'Add New Source' button, a yellow box around the search filter, and blue arrows pointing from the table's action icons to the modal's 'Click to edit' and 'Click to delete' labels.

Overview
 Stock Items
 Stock Operations
 Stock User Role Scopes
Stock Sources
 Stock Locations
 Stock Settings

Stock Management Home
 1 Main Store · Today, 12:26 AM

List of partners who provide stock to the facility.

Filter table [Click to search for a source](#) [Add New Source](#)

Name	Acronym	Source Type	actions
KEMSA	KEMSA	Donation	Edit Delete

Add Stock Source

Full Name
 e.g National Medical Stores

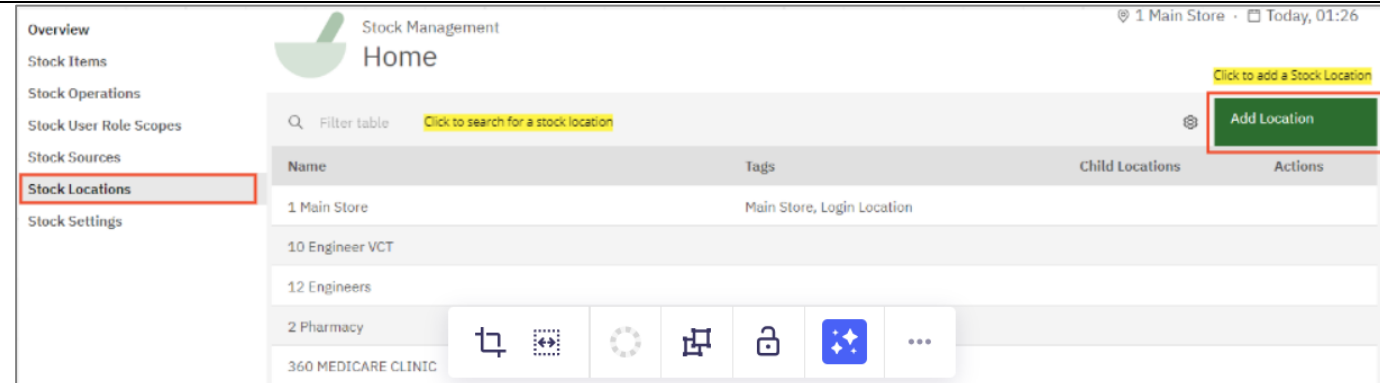
Acronym/Code
 e.g NPS

Source Type
 Choose a source type

[Click to edit](#)
[Click to delete](#)

Cancel Save

6. **Stock Locations:** Update respective stock locations withing the site



The screenshot shows the 'Stock Locations' page in the Stock Management application. The left sidebar has 'Stock Locations' highlighted. The main content area shows a table of stock locations with columns for Name, Tags, Child Locations, and Actions. A modal window titled 'Add Stock Location' is open, showing fields for Name and Address. Annotations include a yellow box around the search filter and a red box around the 'Add Location' button.

Overview
 Stock Items
 Stock Operations
 Stock User Role Scopes
 Stock Sources
Stock Locations
 Stock Settings

Stock Management Home
 1 Main Store · Today, 01:26

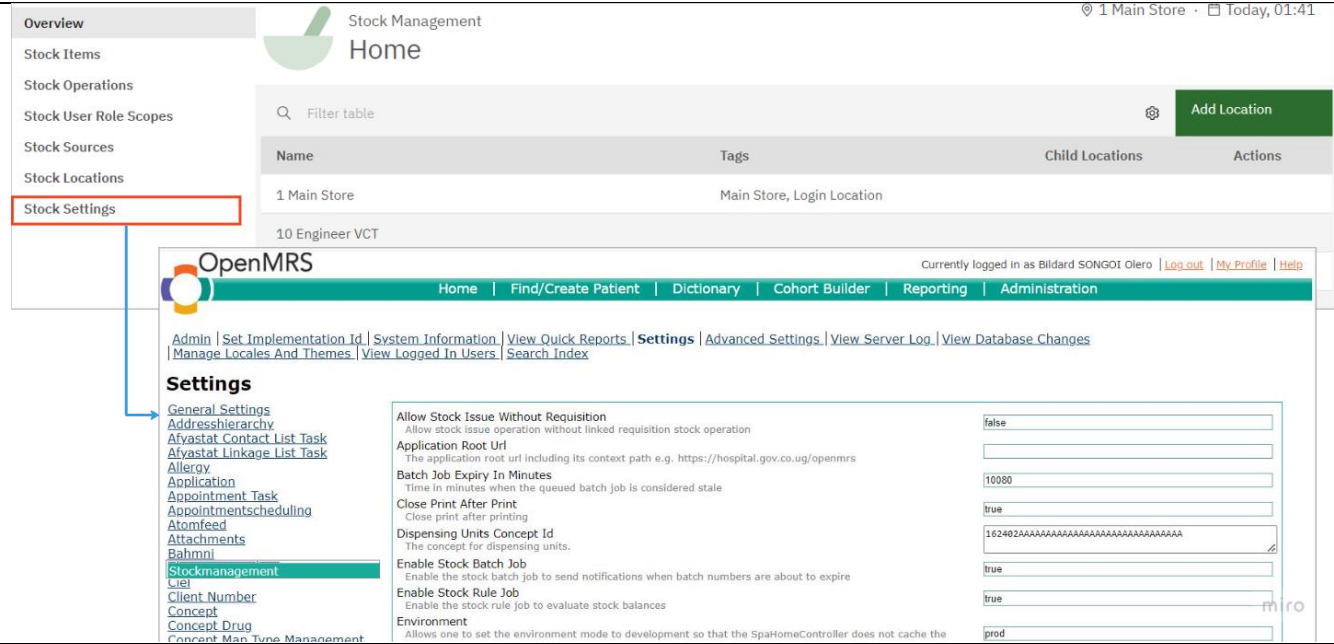
Filter table [Click to search for a stock location](#) [Add Location](#)

Name	Tags	Child Locations	Actions
1 Main Store	Main Store, Login Location		
10 Engineer VCT			
12 Engineers			
2 Pharmacy			
360 MEDICARE CLINIC			

[Click to add a Stock Location](#)

[Add Location](#)

7. Stock Settings: Selecting Stock Settings takes you to the Admin page



The screenshot shows the OpenMRS Stock Management interface. On the left sidebar, the 'Stock Settings' menu item is highlighted with a red box. A blue arrow points from this menu item to the 'Settings' page content on the right. The 'Settings' page includes a navigation bar with 'Home', 'Find/Create Patient', 'Dictionary', 'Cohort Builder', 'Reporting', and 'Administration'. Below the navigation bar, there are links for 'Admin', 'Set Implementation Id', 'System Information', 'View Quick Reports', 'Settings', 'Advanced Settings', 'View Server Log', and 'View Database Changes'. The 'Settings' page is divided into several sections, each with a title and a description, and a corresponding input field:

- Allow Stock Issue Without Requisition**: Allow stock issue operation without linked requisition stock operation.
- Application Root Url**: The application root url including its context path e.g. https://hospital.gov.co.ug/openmrs.
- Batch Job Expiry In Minutes**: Time in minutes when the queued batch job is considered stale.
- Close Print After Print**: Close print after printing.
- Dispensing Units Concept Id**: The concept for dispensing units.
- Enable Stock Batch Job**: Enable the stock batch job to send notifications when batch numbers are about to expire.
- Enable Stock Rule Job**: Enable the stock rule job to evaluate stock balances.
- Environment**: Allows one to set the environment mode to development so that the SpaHomeController does not cache the.

THE END