User Manual for cStock

Version 1.0

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# Contents

## Acronyms:

AMC        average monthly consumption

CCM        community case management

EO        emergency order

FP        Family Planning

GPS        global positioning system

HC        health center

HIV        Human immunodeficiency virus

HSA        health surveillance assistant

MOH        Ministry of Health

MOS        months of stock

OS        out of stock

SC4CCM        Supply Chains for Community Case Management

SMS        short message service

SO        stock out

SOH        stock on hand

# I. Overview of cStock

cStock is a RapidSMS based, open-source, automated logistics management information system for reporting, calculating resupply, and managing and monitoring community-level essential medicines that includes transmission of logistics information via mobile phone text messaging (short message service, SMS) to a computer application that responds with information for product resupply, displays product information on a web-based dashboard, and produces reports that can be used to monitor availability of community health products and the overall performance of the districts.

## A. Vision

cStock provides real-time, actionable HSA logistics data for managers and stakeholders to use to coordinate, plan and identify solutions to better meet customer needs in a timely manner.

## B. Objectives of cStock

- Improve resupply procedures and visibility into HSA stock levels
- Empower supply chain managers at all levels of the supply chain with HSA logistics data
- Improve coordination among stakeholders
- Create and promote a culture of data driven decision making.

## Purpose of the User Manual

This manual provides information on how to navigate within and use the web-based system. It also provides information on how to access the cStock website, its dashboard and the reports found on the website.

## Target Users

Central level, district managers and partners involved in the provision of medicines at community level are the primary users of the system. Using this system the target users can access information on product availability at the community level. This access provides an opportunity to use real data from the dispensing point to take decisions and resolve product availability challenges.

# Navigation tips

There are several key features in the systems that are used to navigate, filter and select the information to be viewed.

**The menu bars:** The system has two menu bars that are visible throughout the site pages. The upper menu bar provides information on some standard information. The lower menu bar has the option for viewing various outputs of the system. Each of the tabs in the menus is explained separately. The active tab at any time is in a transparent background shade. The example below shows the menu bars with **"Consumption Profiles"** as the active tab. To select a different tab simply click on it.



**Site selector:** The site selector is used to select the location of the data you would like displayed. Depending on your level of access specific districts or facilities can be selected or you may select the national level called "Malawi". Below shows an example of how to select a district, displayed here is **"Lilongwe"** district.
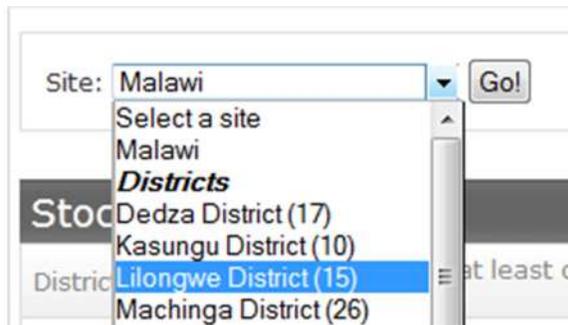


**Date Selector:** In most of the cStock pages information can be viewed for a period. The date selector allows one to pick the Month and Year in the start and end date sections and click once done to proceed. On pages where the date selector is available it can be found next to the site selector. The default period is three months from current date.

**Go Button:** The Go button is used to confirm selection and proceed to view the output. This appears after all the selection option on the pages.



**Search Box:** The search box provides a quick way to filter and find specific information in the tables. You can view a specific selection by typing a facility name in the search box.  The corresponding table below will be filtered to provide information on the search that has been typed in. This screenshot shows the filtering of information on facility names with "**Ch**" in their names.



**Product Selector:** The product selector is a dropdown list that allows you to view information for a specific product, from the list of options. After the selection is made the you need to click on the Go! button to proceed to  view the outputs.
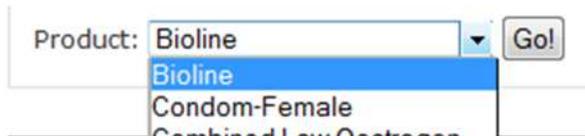


**Product Category Selector:** This is dropdown list that allows you to choose a category of products to view. There are currently four options ALL, CCM, HIV and FP. Once a category is selected all products within the category are displayed.
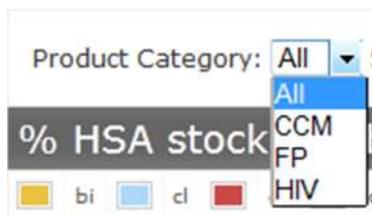
# Printing and exporting cStock data

**Export button**: Many of the tables can be exported to Excel by clicking on the CSV box found in the upper right hand corner of the table. The CSV button located at the top-right corner of tables allows you to export the table.



After clicking on the CSV box, cStock triggers Excel to launch and data from the table automatically fills an Excel worksheet. The resulting file has a ".csv" extension.
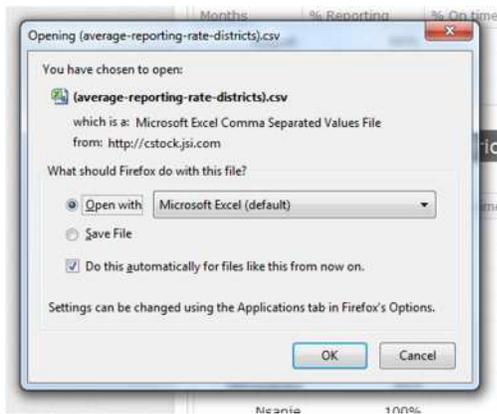


**IMPORTANT NOTE: when saving the file, you MUST save the file as an Excel file by changing the extension to ".xls" or "xlsx".**
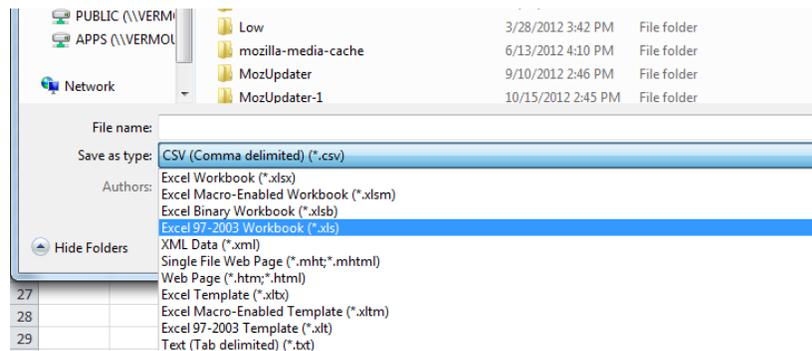


Once exported to excel the information can be used to conduct further analysis or included in other documents.

**Printing Data:** The dashboard, and each set of reports under any tab, can be printed using the print function of your internet browser. The print dialogue box allows you to print the report directly to a printer.
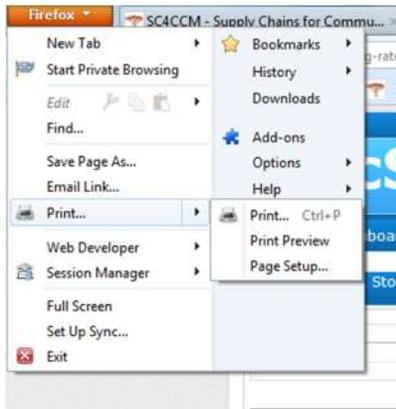
## Logging on to cStock

To log onto the system, launch/start an internet session using either Google Chrome or Mozilla Firefox. The URL for the site is cstock.jsi.com . This will provide the login screen as shown below



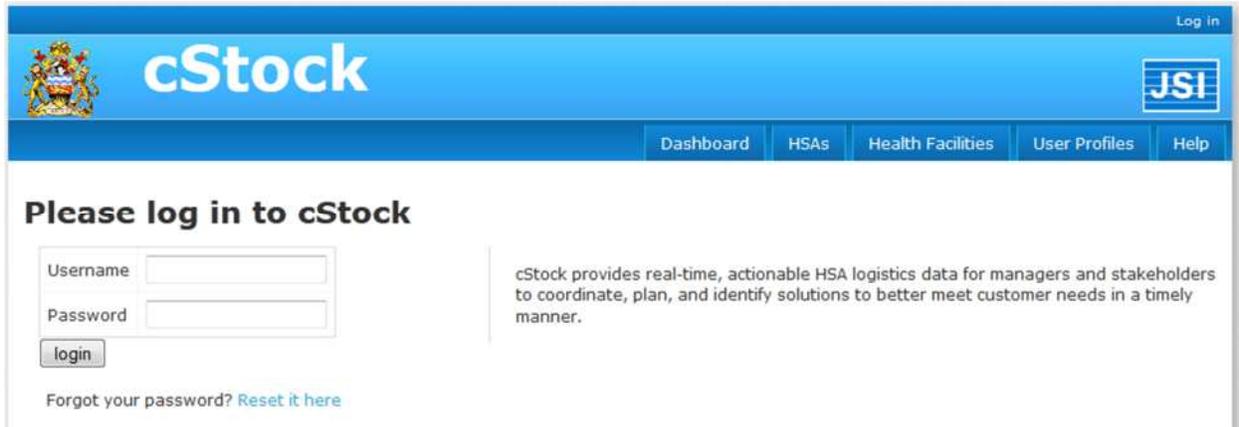Each user of the system has a unique **Username** and **Password**. These credentials allow you to logon to the system and view the site. Once you have entered the information, click on the **login** button to proceed. If the information is not correct the login screen will display with error message **"Oops. Your username and password didn't match. Please try again"**.



If you have forgotten your password click on the "Reset it here" message under the login.

If the information provided in the login page is correct you will proceed to the default page for the site which is the dashboard.

When you have finished using the website, always remember to logout from the system. To log out use the option of the upper right-hand side of the page.

In one easy-to-view screen, the dashboard informs you of immediate supply chain problems through alerts, indicates the reporting rate, status and completeness of reporting from all HSAs in all registered districts or in a selected district, and shows the availability of stock in all districts or in a selected district.



**The display on the dashboard is always based on current information which means the current calendar month.**

On this page if you are a central level user "Malawi" will be the default view, however you may use the site selected to view specific districts or facilities. If you are district level user the default view will be your district. On the dashboard you may also view the information for all districts by selecting "Malawi" on the "Site" drop down menu.

*For help with how to select sites refer to the navigation tips.*

**Stock out Rates:** This table shows the percentage of HSAs in a district / facility / HSA depending on the site selected with at least one stock out of any product that they manage.



| Stockout rates | |
| --- | --- |
| District | % HSA with at least one stockout |
| Kaluluma | 100.0% |
| Mpepa/Chisinga | 80.0% |
| Wimbe | 75.0% |
| Mtunthama | 100.0% |
| Mziza | 66.7% |

**Current Alerts:** This table shows the percentage of HSAs nationally or in a district or facility, depending on the site selected, with low stocks that the health facility has not been able to

resolve. Immediate action from district or national level staff is required or a stock out is likely to occur.

| Current alerts | |
|---|---|
| | % HSAs |
| With EOs that HCs cannot resupply | 10% |
| Resupplied but remain below EO | 86% |

- *"With EOs that HCs cannot resupply"* means that these HSAs reported stock levels of one or more products below the emergency order point and the health center is unable to resupply them with that products.

- *"Resupplied but remain below EO"* means that these HSAs reported stock levels of one or more products below the emergency order point, and the health center resupplied them, but the quantity resupplied was insufficient to bring the stock level above the emergency order point.

**Reporting Rates:** This graph provides information on timeliness and completeness of reporting by HSAs by district / facility / individual HSA depending on the site selected. The bar graph displays percentage of HSAs who have reported on time, late, or not reported; the green line graph displays the percentage of HSAs who have completely reported on all the products with which they are associated.

**Current stock status by product:** This bar graph shows percentage of HSAs nationally or for a specific district or facility, depending on the site selected who are under stocked, adequately stocked, over stocked or stocked out. It also shows the percentage of HSAs who are associated with a product but have not reported during the most recent reporting period ("no data").
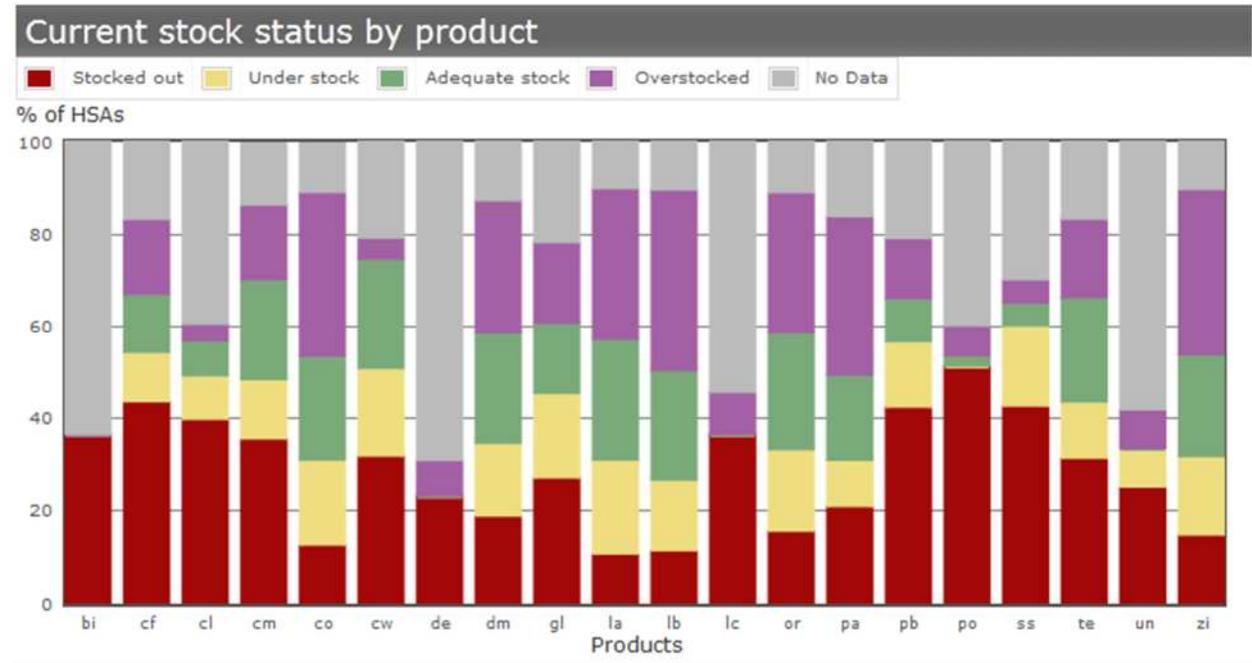
## Current National Picture

The side bar entitled Current National Picture that appears on the right side of all pages and shows national level information. The information will always remain the same even when you select different sites, dates or products.

This table shows only current information on the following:

1. *Numbers Registered:* This is the number of staff at district level, health facility level and HSAs who are registered on cStock
2. *Reporting Rate:* percentage of all HSAs registered in cStock who have reported in the current month
3. *National Stock Out Rate:*
   a. The product column lists all the products managed by the HSAs by their product code.
   b. The HSAs column indicates the number of HSAs who are associated with that product across all districts
   c. percentage SO (stock out) is the percentage of the HSAs associated with that product that have a stock-out of that product for this current month

**Current National Picture**

**Number Registered**

| Districts | 9 |
|---|---|
| H facilities | 203 |
| HSAs | 1014 |

| Reporting Rate | 85% |
|---|---|

**National Stock Out Rate**

| Product | HSAs | % SO |
|---|---|---|
| bi | 11 | 36.4% |
| cf | 290 | 43.4% |
| cl | 53 | 39.6% |
| cm | 384 | 35.4% |
| co | 985 | 12.5% |
| cw | 243 | 31.7% |
| de | 13 | 23.1% |

## Reporting Rates

The reports on this tab display the performance of HSAs in reporting to the cStock system. You can choose to view the reports, depending on your level of access, for Malawi (all registered districts) or a specific district or facility for a specific period of time. This page allows you to view both current and historical data. The default view is the most recent complete three months.

*For help with how to select sites or date periods refer to the navigation tips.*



**Average Reporting Rate by Month:** The stacked bar graph shows percentage HSAs nationally or for a specific district or facility, depending on the site selected, in the selected period of time, who

- reported their stock on hand through SMS to cStock on time, by the 2nd day of the month (yellow bar)
- reported late, after the 2nd day of the month (blue bar)
- did not report in the last 30 days. (red bar)

The line graph shows completeness, percentage of HSAs who reported on all products they manage for the selected time period. A table of the data that is used to generate the graph is found below the graph.
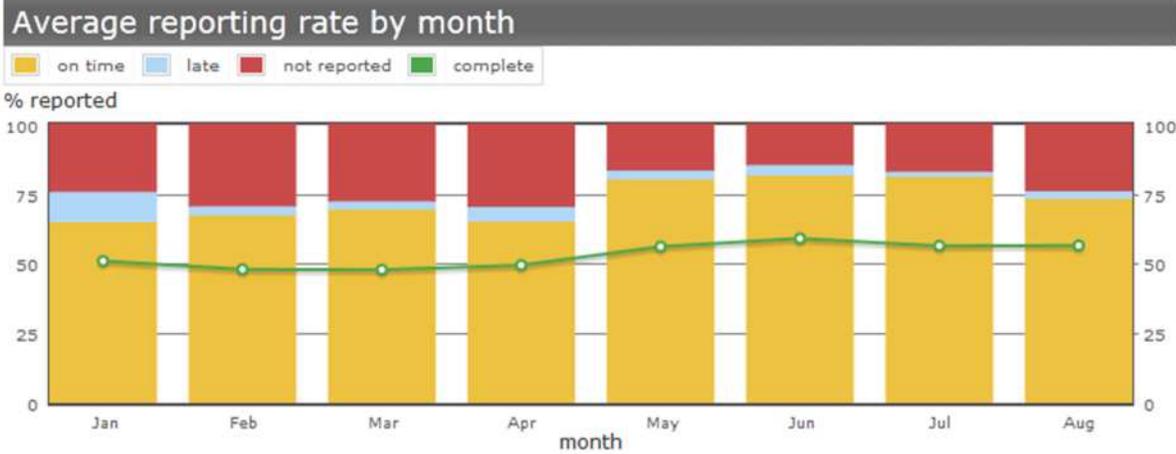
**Average Reporting Rate (Districts/Facilities):** This report only appears if "Malawi" or a specific district is selected. This table lists the reporting information that is displayed in the graph above in a table format.



| Districts | % Reporting | % On time Rep | % Late Rep | % Not Reported | % Complete |
|---|---|---|---|---|---|
| Dedza | 0% | 0% | 0% | 0% | 0% |
| Kasungu | 66% | 64% | 2% | 34% | 87% |

**HSA reporting profile:** This report only appears if a specific facility is selected. This table provides a list of all HSAs in the selected facility and the individual reporting record based on the following indicators:

- *Min Number Expected* is the minimum number of reports expected over the selected time period, for example if you select June-August, the minimum number of reports expected is 3.
- *Non Reporting* shows of the number of reports expected how many were not received during the selected time period
- *On Time* shows the number of reports received that were on time, by the 2nd day of the month
- *Late* shows the number of reports received that were late, after the 2nd day of the month
- *Complete* shows the number of reports received that included data for all products that the HSA is associated with in cStock

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## HSA reporting profiles

Search: [                ]

| HSA | Min Number expected | Non-reporting | On Time | Late | Complete |
|---|---|---|---|---|---|
| ABSALOM NAKHATI | 3 | 1 | 2 | 0 | 0 |
| ACID AJIDA | 3 | 1 | 2 | 0 | 2 |
| AGNES KAMUZANJIRA | 3 | 3 | 0 | 0 | 0 |
| AGNESS SITOLO | 3 | 2 | 1 | 0 | 1 |

## Stock Status

The Stock Status reports display the overall stock situation of Malawi, or for a specific district or facility, by assessing if there is an overstock, under-stock, adequate stock or a stock out. You can choose to view the reports, depending on your level of access, for Malawi (all registered districts) or a specific district or facility. This page displays current data for most reports except the final graph that has a date selected and historical data can be viewed here.

*For help with how to select sites or date periods refer to the navigation tips.*



**Current Stock Status by Product (graph):** This bar graph shows percentage of HSAs nationally or for a specific district or facility, depending on the site selected who are under stocked, adequately stocked, over stocked or stocked out. It also shows the percentage of HSAs who are associated with a product but have not reported during the most recent reporting period ("no data"). This is the same graph as displayed on the dashboard.

**Current stock status by product**

Legend: Stocked out | Under stock | Adequate stock | Overstocked | No Data

% of HSAs (y-axis: 0 to 100)

Products (x-axis): bi, cf, cl, cm, co, cw, de, dm, gl, la, lb, lc, or, pa, pb, po, ss, te, un, zi
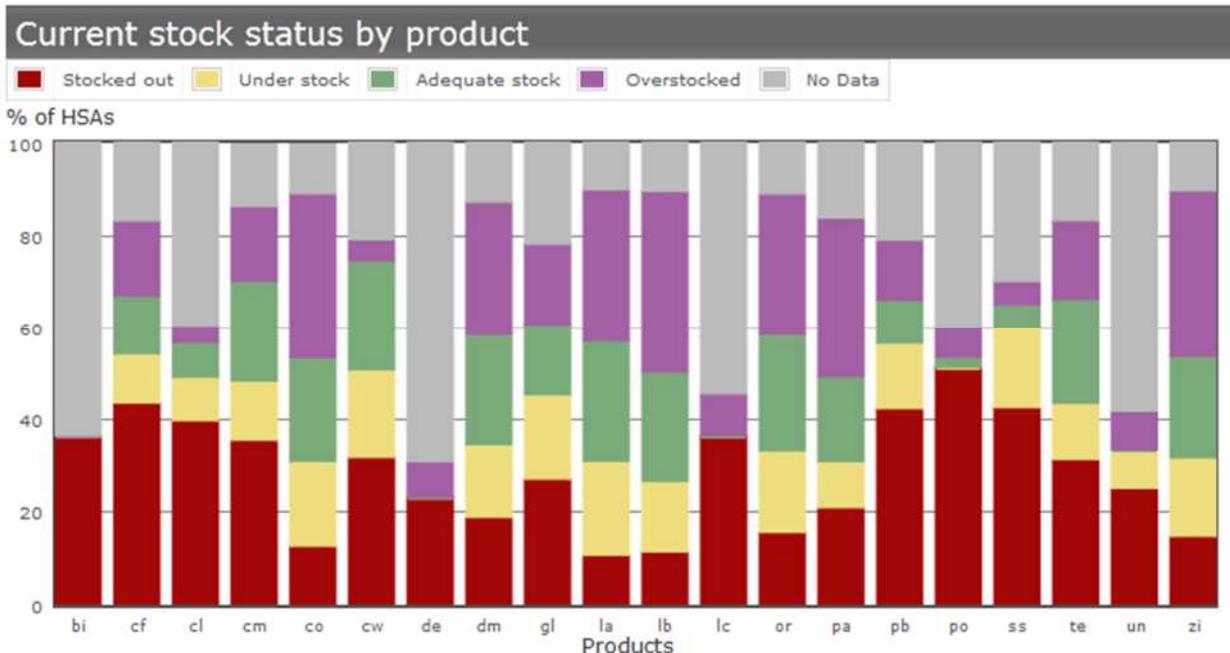
**Current AMC, MOS and Stock Status by Product (table):** This table shows the following information aggregated for all HSAs in either Malawi, or a specific district or facility selected.

### Current AMC, MOS, and stock status by product

| Product | AMC (last 60 days) | TOTAL SOH (day of report) | MOS (current period) | Stock Status |
|---|---|---|---|---|
| LA 1 x 6 | 13717 | 275645 | 20.1 | Overstocked |
| LA 2 x 6 | 21512 | 478633 | 22.2 | Overstocked |
| Paracetamol 500mg | 8984 | 341522 | 38.0 | Overstocked |

- **AMC (last 60 days):** The average monthly consumption (AMC) for each product is calculated using data from the last 60 days and is the calculated by aggregating the consumption for all HSAs for the last 60 days and dividing by 2.

- **Total SOH (day of report):** Total stock on hand (SOH) last reported is aggregated for all HSAs by product, either nationally or in the district or facility selected

- **MOS (current period):** Months of stock for the current period is calculated by taking the total stock on hand divided by average monthly consumption for each product. MOS indicates an estimation of how long a product will remain in stock if it is consumed according to the past average monthly consumption.

- **Stock Status:** Compares the months of stock to the maximum and EOP stock levels that have been set for HSAs. Stock status is described as overstock, adequate stock, under or stock out. *Overstock* means the MOS is above the max. *Adequate* means the MOS is between

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EOP and max. *Under* means the MOS is between zero and EOP. Stock out means the stock on hand is zero (0). The maximum months of stock that an HSA should have is 2 months, the emergency order point (EOP) is one full course of treatment.

**Current Stock Status across Districts / Facilities (table):** This table displays information for stock status for a selected product for all districts, or a specific district or facility selected. This table will only display information for one product at a time, to select a product use the product selector directly above the table.



**% HSA Stock outs by Product Category (graph):** This line graph shows the percentage of HSAs stocked out for all products or a selected product category over the selected time period. This graph has both product category selectors and time period selectors that apply to this graph.

*For help with use selectors refer to the navigation tips.*
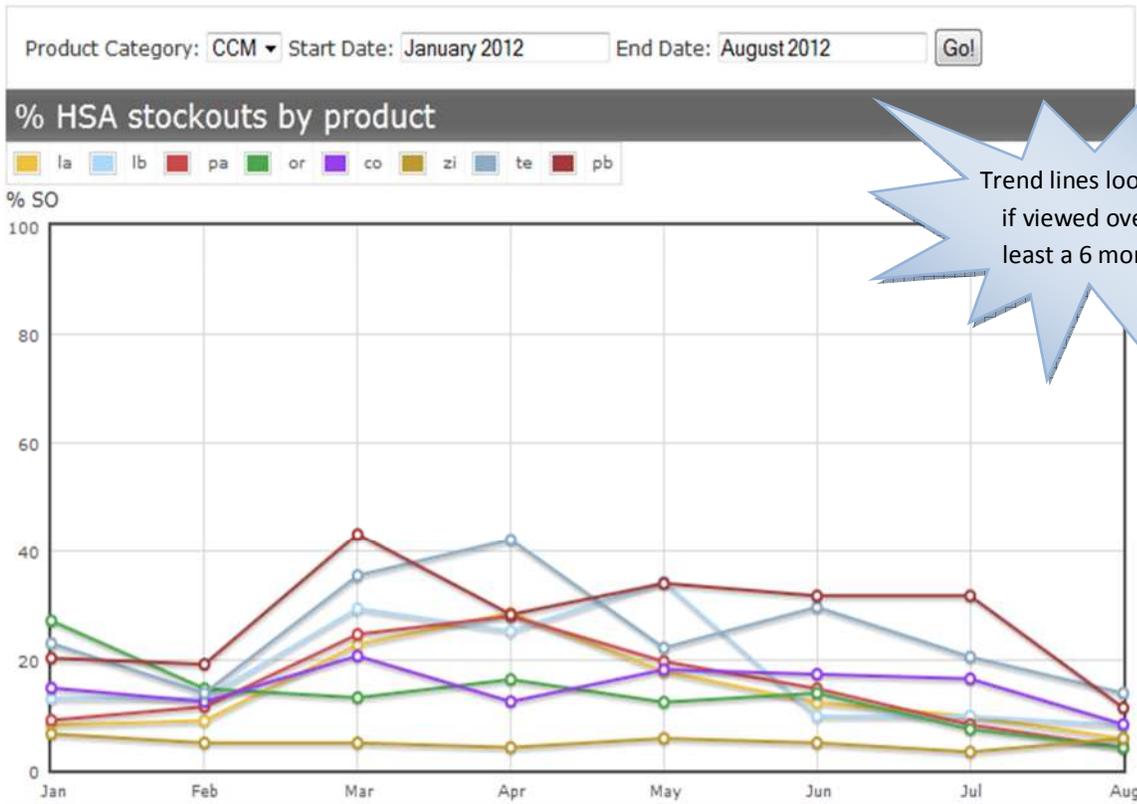


**HSA months of stock (MOS) by product (table):** This table is only displayed when a specific facility is selected as the site. This table shows the MOS by product for each individual HSA. MOS is obtained as the total SOH divided by the average monthly consumption. Using the scroll bar on the right you can scroll up and down to view a specific HSA or type the name of the HSA in the search field.



| HSA | bi | cf | cl | cm | co | cw | de | dm | gl | la | lb | lc | or | pa | pb | po | ss | te | un | zi |
|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Aron Mchere | - | - | - | - | 0.2 | - | - | - | - | 0.3 | 1.9 | - | 0.5 | - | - | - | - | - | - | 3.2 |
| Bertha matumbo | - | - | - | - | 0.2 | - | - | - | - | 0.3 | 6.8 | - | 7.0 | - | - | - | - | - | - | 2.8 |

## Consumption Profiles

The data on this tab is useful for the purposes of quantification to estimate country, district and facility requirements for HSA products using the consumption method. You can also view historical information on months of stock (MOS) and average monthly consumption (AMC) to determine how well stock levels have been maintained.

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**Calculated consumption in cStock is calculated:**

**Previous SOH + Receipts this period – Current SOH = Consumption**

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You can choose to view the reports, depending on your level of access, for Malawi (all registered districts) or a specific district or facility for a specific period of time. This page allows you to view both current and historical data through the product selected. The default view is the most recent complete three months.

You can also view the consumption profile for an individual HSA by first selecting the facility, and then selecting the HSA's name from the drop down menu.



*For help with how to select sites or date periods refer to the navigation tips.*

**National / District / Facility / HSA Consumption Profile (table):** This table shows consumption profiles for all products managed by the HSAs.

### National Consumption Profiles

| Product | Total Actual Consumption for selected period | # stockout days for all HSAs | Total consumption adjusted for stockouts | Data coverage (% of period) | Total consumption (adjusted for stockouts and data coverage) | AMC for all HSAs |
|---|---|---|---|---|---|---|
| LA 1 x 6 | 156924 | 4 | 163968 | 32% | 509384 | 169795 |
| LA 2 x 6 | 258673 | 4 | 269263 | 31% | 867921 | 289307 |
| Paracetamol 500mg | 420126 | 4 | 438545 | 23% | 1913052 | 637684 |

For each product this table provides information on:

- **Total Actual Consumption for selected period:** Calculated by the system by summing the calculated consumption for each HSA for the product for the period.

- **# (Number) stockout days for all HSAs:** Obtained as an average of total number of days stocked out for all HSAs in the selected period and location divided by the total number of HSAs in that location.

- **Total consumption adjusted for stock outs:** This is the total consumption expected if the HSAs had the specific product in stock throughout the period under review.

- **Data coverage:** This is a percentage calculated using the number of days in the period that the data represents divided by the total number of days in the period.

- **Total consumption (adjusted for stockouts and data coverage):** Represents the total consumption expected if all HSAs had the selected product in stock throughout the period under review and if data were available for all days in the period under review.

- **Average monthly consumption (AMC) for all HSAs:** Provides an average of the quantity of product dispensed by each HSA monthly. It is obtained by dividing the total consumption adjusted for stock outs and data coverage by the total number of HSAs in all districts.

**AMC and MOS by product (graph):** The graph shows the trend line for average monthly consumption (AMC) and months of stock (MOS) for the selected product in all districts/the selected district/ facility/HSA. You must select the product you would like to view information on at the top next the site and date selector.
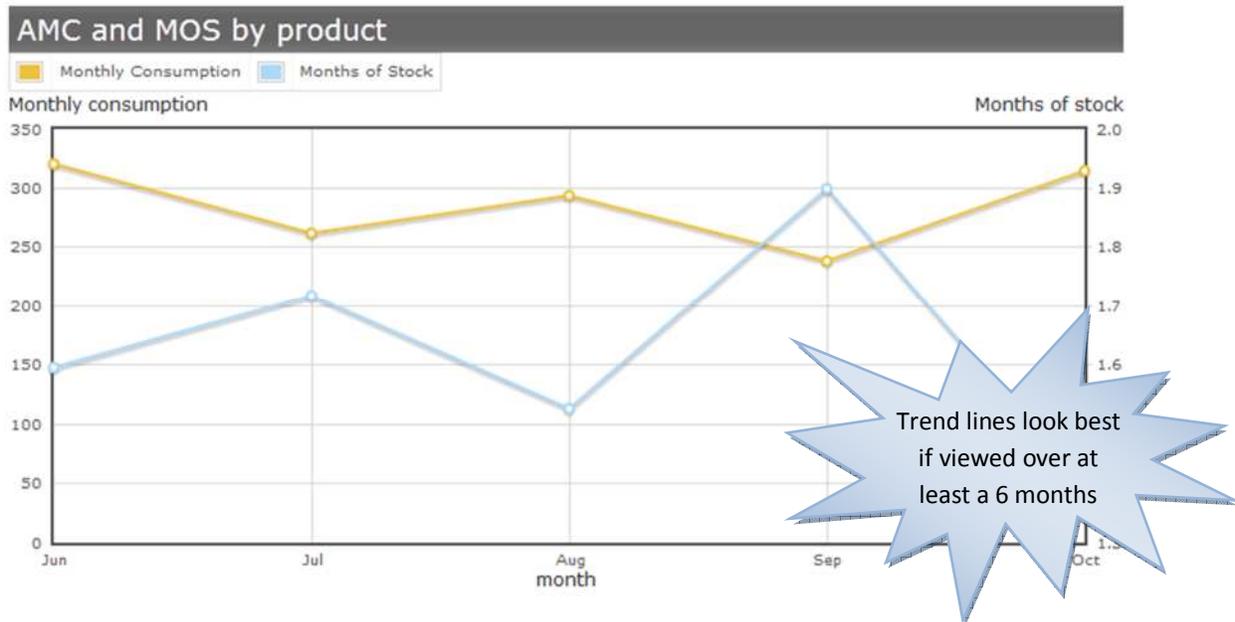
Consumption patterns may vary over time, however in a properly managed logistics system, the months of stock should only fluctuate between the EOP stock level and the maximum stock level, in this case for HSAs between 2 months maximum stock level and an EOP of one treatment. Larger fluctuations in MOS may indicate that too much or too little is being resupplied to an HSA for the specific product.

## Alert Summary

This tab shows the Current Alert Summary table. The alerts found in this report are current for the most recent report month. When viewing the Malawi view, alerts for all facilities in all registered districts are shown. On selecting a specific district, only facilities found in that district are included in the report.



The Current Alert Summary table shows by health facility the number of HSAs associated with the facility and the percent of HSAs who report to that facility who have experienced one or more of the following five supply chain performance problems.

- % of HSAs stocked out

- % of HSAs with EOs (emergency orders) that HCs (health centers) cannot resupply

- % of HSAs resupplied but remain below EO

- % HSAs registered but not added products they manage

- % HSAs not reporting receipts

Using this report, you can determine which facilities are experiencing problems in resupplying HSAs and can take appropriate action; which HSAs are registered in cStock, but whose information is not available in cStock as they have not registered their products, or their information is incomplete as they have not reported receipts.

## Resupply Qty Required

This tab provides the Resupply Quantities Required report that can be viewed, depending on your level of access for Malawi, a specific district or facility. Information in this report is based on the most current stock reported by the HSAs. You may choose to view the resupply quantities to fill regular orders or quantities needed to resupply emergency orders by selecting from the "Order Type" drop down menu.



| District Name | Bioline | Condom-Female | Combined Low Oestrogen | Condom-Male | Cotrimoxazole 480mg | Cotton Wool | Determine HIV | DMPA | Gloves |
|---|---|---|---|---|---|---|---|---|---|
| Dedza | 0 | 4122 | 1348 | 5652 | 24592 | 46 | 0 | 2150 | 4025 |
| Kasungu | 8 | 5998 | 742 | 43626 | 61034 | 75 | 240 | 3581 | 4779 |
| Lilongwe | 0 | 1293 | 216 | 2524 | 57698 | 3 | 0 | 64 | 40 |
| Machinga | 6 | 8400 | 1903 | 11682 | 133027 | 90 | 240 | 3156 | 1400 |

**All products (aggregated quantity to ensure that the HC can resupply):** This table provides current information on aggregated quantities for products required for resupply to all HCs in all districts, or all facilities in a selected district, to ensure that the HC can resupply the HSAs. This table allows for comparison of aggregated quantities required for resupply for all products across districts or facilities depending on the site selected. Use the scroll bar to see resupply quantities required for different products. The last row provides the total quantity required for resupply of each product for the all the districts registered in cStock.

Lead Times

## Lead Times

The lead times report shows how long the entire resupply process takes. It displays the total lead time and then breaks down the lead time into two components.

> **Order – Ready:** time between the HSA sending an SOH report and the HSA supervisor sending an order ready message
>
> **Ready – Received:** time between HSA receiving order ready message and HSA sending a product receipt message to cStock
>
> **Total Lead Time**: the sum of the time between order - ready and ready - received

- **Average lead time (graph):** this stacked graph provides information on the average number of days between order - ready and ready - received. The height of the graph shows total lead time for each month in the selected period for all HSAs in Malawi or the district or facility selected. A table of the data that is used to generate the graph is found below the graph.
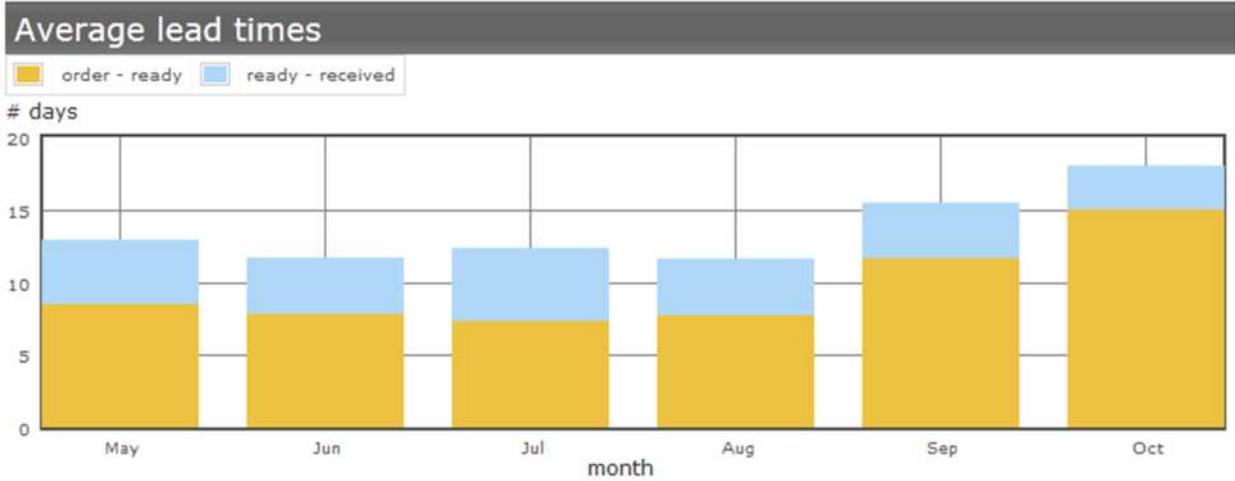


| Month | Order - Ready (days) | Ready - Received (days) | Total Lead Time (days) |
|-------|---------------------|------------------------|------------------------|
| May | 8.5 | 4.3 | 12.8 |
| Jun | 7.8 | 3.8 | 11.6 |

- **Average lead time by district / facility / HSA (table):** this table shows the average number of days between order - ready and ready - received. It can be used to compare timeliness of the resupply process across districts, facilities or HSAs. One can scroll up or down the table to see facility information or select a specific facility using the search function by typing in the name of the facility.

## Average lead times by facility

Search:

| Facility | Ord-Ord Ready (days) | Ord-Ord Received(days) | Total Lead Time (days) |
|---|---|---|---|
| Area 18 | No data | No data | No data |
| Area 25 | 7.3 | No data | No data |

## Order Fill Rate

The Order Fill Rate (OFR) report allows you to see how well order requests are filled. You can choose to view order fill rate for all products or for a category of products for national, district or facility level. The product categories can be selected using the Product Category drop down menu and are: All, CCM (community case management), FP (family planning) and HIV.

*For help with how to select product categories, sites or date periods refer to the navigation tips.*



**Monthly average OFR by product (graph):** Order fill rate (OFR) is calculated as the percentage of the quantity requested that was received by the HSA. This graph shows the average OFR for each product which indicates if on average HSAs were over or under supplied for each product. For example if the average OFR is 1% then on average each HSA received 1% of what they needed or requested and so was under-supplied. If the average OFR is 120% then on average each HSA received 20% more than what they needed or requested. A table of the data used to generate the graph is found below the graph in the **Monthly average OFR by product** (table).

Monthly average OFR by product
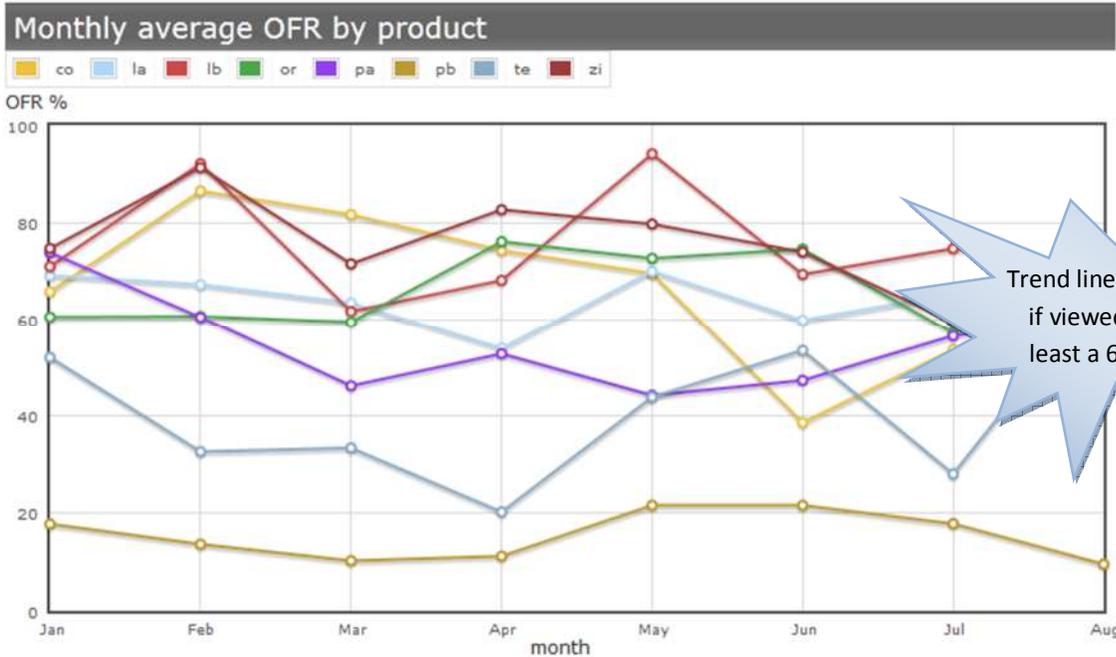
When viewing a specific district you will have an extra table:

- **OFR for selected time period by facility and product (table):** This table shows OFR by facility by product for the selected time period. To select a facility, type the name of the facility in the search field. You can scroll up and down to see the facilities in the selected district and right to left to see OFR for the various products.



OFR for selected time period by facility and product (%)

Search:

| Facility | bi | cf | cl | cm | co | cw | de | dm | gl | la | lb | lc | or | pa | pb |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bua | 0% | 20% | 5% | 53% | 44% | 30% | 0% | 61% | 7% | 49% | 40% | 0% | 22% | 32% | |
| Chamwavi | 0% | 33% | 100% | 52% | 92% | 23% | 0% | 70% | 0% | 72% | 50% | 0% | 49% | 27% | |

## Emergency Orders

The Emergency Orders tab has three reports that can be used to see the percentage of HSAs who have reported reaching the emergency order point, by product and by month, or as a monthly average during the selected period of time. If action to resupply is not taken promptly in response to emergency orders, stock outs of those products are likely.

*For help with how to select product categories, sites or date periods refer to the navigation tips.*



**Average % of HSAs with EO (graph)**: provides information on the average percentage of HSAs that have an EO over the months in the selected period for each of the products listed.

- **% of HSAs with EO by month (table):** provides information on the percentage of HSAs with an EO by month by product for the selected time period. Use the scroll bar on the right to view information on a specific product, or type the product name in the search field to see information on emergency orders for a specific product.



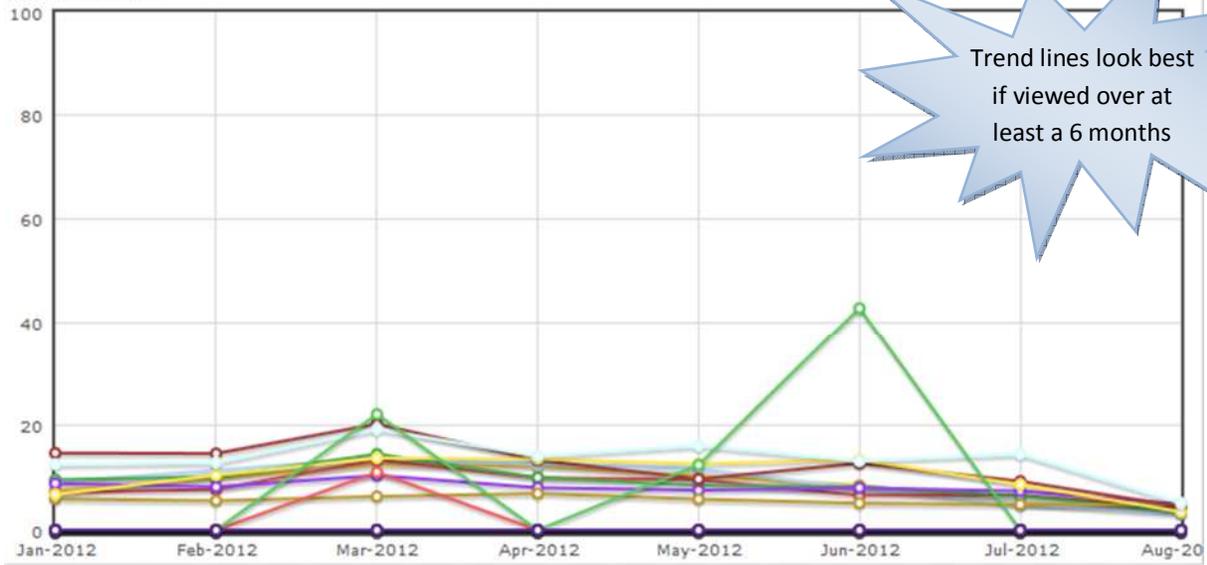| Product | Jan-2012 | Feb-2012 | Mar-2012 | Apr-2012 | May-2012 | Jun-2012 | Jul-2012 | Aug-2012 |
|---|---|---|---|---|---|---|---|---|
| bi | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| cf | 13% | 13% | 19% | 14% | 16% | 13% | 15% | 5% |

- **% with EO by product (graph)**: provides information on the percentage of HSAs with an EO by month for a selected product category over a select time period. The product categories can be selected using the Product Category drop down menu and are: All, CCM, FP and HIV.

## HSAs Report

Using the HSAs tab report, you can choose to view information for a specific HSA in the system. Information about all HSAs registered in cStock, sorted by facility (in alphabetical order), can be viewed using the Malawi view, or by district or by facility using the "Site" drop down menu, selecting a district or facility and clicking the Go! button.

The following information can be found in the report:

**All HSAs:**

- **Facility**, name of the facility with which HSA is associated

- **Name** of the HSA

- **ID**, cStock identification number for the HSA

- **Responsible for these Commodities**, products managed by the HSA that HSA associated with his/her cStock identification

- **Has stockouts** yes/no as to whether HSA has a stock out of one or more products based on the last stock data reported

- **Has emergency orders** yes/no as to whether HSA has reported an emergency order stock level of one or more products based on the last stock data reported

- **Has products with adequate supply** yes/no as to whether HSA is adequately stocked in all products managed

- **Has overstocks** yes/no as to whether HSA is overstocked in one or more products based on the last stock data reported

- **Last Message Dates**, date of last SMS message sent by HSA to cStock on which the indicators above are based.

By clicking on a specific HSA, you will be able to view information about that HSA and his/her performance through three reports.

**HSA reporting summary:** This table lists each month a report should have been received and indicates with either "yes" or "no" if the report was received on time, was late, and whether or not it was complete. If a report was never received for that month all columns will have "no" in them.

## HSA reporting summary

| Month | On Time | Late | Complete |
|---|---|---|---|
| Oct-2012 | no | no | no |
| Sep-2012 | no | no | no |
| Aug-2012 | yes | no | yes |

**Calculated consumption and stock levels:**

## Calculated consumption and stock levels

| Product | Total Daily Consumption (adjusted for stock outs) | Average Monthly Consumption | Current SOH | Months of Stock on hand | Resupply Qty Required |
|---|---|---|---|---|---|
| Cotrimoxazole 480mg | None | 303 | 724 | 2 | 0 |
| DMPA | None | 15 | 13 | 1 | 17 |

This table includes the following

- Product, the list of products associated with the HSA
- Total daily consumption for each product, calculated by cStock based on reported stock levels, receipts, and stockout messages, using the dates and quantities of these reports
- Average monthly consumption, for each product, calculated using daily consumption and extrapolating to a full 30 day month
- Current SOH (stock on hand), for each product, from the HSA's last SOH report to cStock
- Months of stock on hand, for each product, calculated by dividing SOH by average monthly consumption
- Resupply Qty (quantity) Required, for each product, calculated by cStock to bring the SOH up to 2 months of stock

Order response time: This table shows the status of each order generated by the HSA reporting stock on hand for the products managed.

| Product | Is Emergency | Balance | Amt Requested | Amt Received | Requested On | Responded On | Received On | Status |
|---|---|---|---|---|---|---|---|---|
| Condom-Male | no | 0 | 200 | None | 2012-05-08 | 2012-08-06 | | approve |
| Cotrimoxazole 480mg | no | 85 | 337 | 1000 | 2012-04-02 | | 2012-06-19 | receive |
| Cotton Wool | no | 0 | 2 | None | 2012-05-08 | 2012-08-06 | | approve |
| DMPA | no | 13 | 17 | None | 2012-08-01 | 2012-08-06 | | approve |
| DMPA | no | 6 | 24 | 0 | 2012-07-01 | | | cancele |

- **Product -** the table is sorted alphabetically by product. Multiple occurrences of a specific product show each time a SOH report was submitted that included that product.
- **Is emergency** – A "no" indicates the report sent for that product was a routine SOH report and a "yes" indicates the report sent was an EO as the product had reached the emergency order point
- **Balance** – stock balance for the reported product at the time of the report
- **Amt requested** – the amount of the product cStock calculated was needed to bring the HSA stock level up to the 2 month maximum stock quantity based on the balance reported
- **Amt received** – the quantity of product the HSA reported receiving
- **Requested on** – the date on which the SOH report was sent by SMS to cStock
- **Responded on** – the date on which the health facility send an SMS to cStock indicating that the order was ready for pick up
- **Received on –** the date on which the HSA reported receiving the order
- **Status** – the status can be requested, approved, received or cancelled. Requested means the HSA has sent an SOH report and cStock has sent the request to the HC but the HC has not yet responded. Approved means the health facility received the request and has approved the order so it is ready for pick up by the HSA. Received means the HSA has received products from the HC for this order. Cancelled means the HSA sent a request and then a second request was sent for the same product without the HSA receiving any products so the first request has been cancelled and replaced by the second request.

In addition the individual HSA page shows date and text of all SMS messages sent by that HSA, and also includes identification information including the HSA's name, code (ID), phone number, the list of products that are associated with the HSA and the facility and district with which the HSA is associated.

## Recent messages

| Date | Message Text |
|------|-------------|
| 2012-08-06 | Rec or 9 |
| 2012-08-01 | Soh la 444 lb 1044 pa 779 or 23 zi 290 co 724 dm 13 te 3 |
| 2012-07-01 | SOH LA 558 lb 1188 pa 1046 or 39 zi 360 co 1034 te 5 dm 6 |

## HSA details

| | |
|--|--|
| Name | |
| Code | |
| Phone Number | |
| Products | |

## Health Facilities

## Health Facilities Report

On the Health Facilities tab you can select a specific health facility in a district and view information on the performance of HSAs who are resupplied by the health facility and on the performance of the health facility in resupplying its HSAs.

This tab includes the following reports:

**Current stock status by product (table):** This table indicates the stock status for all the HSAs who are resupplied by this facility for each of the products listed. It provides information to the HSA supervisor on the percentage of HSAs who are resupplied by the facility who are stocked out, under-stocked, adequately stocked and overstocked by product. As this information is based only on those HSAs who have reported, the table also indicates the percentage of HSAs who have not reported in the period selected. This report can highlight which products HSAs are having the most difficulty maintaining adequate stock quantities.

### Current stock status by product

| Product | % HSA stocked out | % HSA under | % HSA adequate | % HSA overstocked | % HSA not reported |
|---|---|---|---|---|---|
| Bioline | 0% | 0% | 0% | 0% | 0% |
| Condom-Female | 33% | 0% | 0% | 0% | 67% |
| Combined Low Oestrogen | 50% | 0% | 0% | 0% | 50% |
| Condom-Male | 33% | 0% | 0% | 0% | 67% |

**Reporting rates:** This table shows the percentage of HSAs resupplied by the facility that have reported on time, late (more than 2 days after the reporting month) and not reported during the period selected; it also shows the names of the HSAs in each of these categories. For those HSAs who have reported, the table also shows the percentage of HSAs resupplied by the facility who have reported completely, on all products they manage, and the percentage of those who have not reported on all products they manage (Incomplete reporting). The names of HSAs in each of these categories are also included in the report. Ideally there should be 100% on time and complete reporting.

## Reporting rates

| | % | Names of HSAs |
|---|---|---|
| Reporting on time | 0% | |
| Late reporting | 0% | |
| Non reporting | 100% | Macdonald Mataka, Rosemary Phiri, SANKHANI ZAKALIYA, Tionge Masonga, wyford mingulu |
| Complete reporting | 0% | |
| Incomplete reporting | 0% | |

**Average lead times:** This report indicates the timeliness of the resupply process for the HSAs resupplied by the facility. It shows in number of days:

## Average lead times

| Facility | Order to order ready (days) | Order ready to order received (days) | Total lead time (days) |
|---|---|---|---|
| Bua | 15.0 | 8.1 | 23.1 |

- **Order to order ready** – This is the amount of time from when the HSA sends a stock on hand message to cStock until the HSA Supervisor sends an order ready message to cStock. It is an indicator of how quickly the health facility prepares the order and informs the HSA that the order is ready.
- **Order ready to order received** – This is the amount of time from when the HSA Supervisor sends the order ready message to cStock until the HSA sends the order received message to cStock. It is an indicator of how quickly the HSA comes to collect and acknowledged receipt of the order after being informed it is ready.
- **Total lead time** – is the sum of the two indicators above. Ideally this number should be 4 days or less.

**Current AMC, MOS and stock status by product (table):** This table indicates the stock status of all HSAs resupplied by the health facility as a group by comparing their total average monthly consumption of each product with the current stock on hand for each product, and indicates whether the stock status is considered overstocked, adequate, or under stocked as compared to a 2 month maximum and 1 month minimum stock, or stocked out. If no data is available on consumption, then stock status cannot be evaluated and the status category is No Data.

This information provides an indicator of how well the health facility is maintaining appropriate stock levels amongst its HSAs as a whole, though individual variations cannot be seen in this report. More specifically, the table includes:

## Current AMC, MOS and stock status by product

| Product | Average monthly consumption (last 60 days) | TOTAL SOH (day of report) | MOS (current period) | Stock status |
|---|---|---|---|---|
| LA 1 x 6 | no data | 3174 | no data | No Data |
| LA 2 x 6 | no data | 5440 | no data | No Data |

- **Product** – name of product for which the following information is provided
- **Average monthly consumption (AMC) (last 60 days)** – This is the average monthly consumption for this product by all HSAs who have reported and are resupplied by the facility.
- **Total SOH (day of report)** – This is the total stock on hand for the product for all HSAs who have reported and who are resupplied by the facility.
- **MOS (current period)** – This number represents the number of months that the total supplies of each product in stock among all HSAs who have reported will last given current AMC. It is calculated by dividing the stock on hand by the average monthly consumption.
- **Stock Status** – This indicates if the stock levels of the aggregated HSA stocks of the product are considered adequate, understocked, over stocked, or a stock out.

**Filled Order Product Statistics (table)** - This report shows how well the HC is able to fill the individual HSA order requests for HSAs who have reported their stock on hand information and need product. Ideally, all requests should be completely filled and no emergency orders received. If emergency orders are received, all should be filled completely. The numbers indicate the number of resupply requests made by product, the total requests filled and how well the health facility was able to fill the request.

## Filled Order Product Statistics (July 2012 to September 2012)

| Product | Total requests received | Total requests filled | Filled order response | | | | # of emergency orders |
|---|---|---|---|---|---|---|---|
| | | | HC Stocked Out | Partially Filled | Completely Filled | Over Filled | |
| LA 1 x 6 | 8 | 6 | | 5 | | 1 | 0 |
| LA 2 x 6 | 7 | 6 | | 4 | | 2 | 0 |

The report includes the following:

- **Product** – name of product for which the following information is provided
- **Total requests received** – this is the total number of requests for this product that come from cStock after have reported their stock on hand to cStock and represent the number of "orders" for the product that the health facility should fill to keep HSAs who are resupplied by this facility stocked with the product.
- **Total requests filled** – this is the number of requests, out of the total requests received, to which the health facility responded by providing product or indicating that the health facility was stocked out of the product

- **Filled order response** – this indicates how the health facility responded to those requests filled by indicating the number of requests filled in the following categories; information on whether the request was partially, completely or over filled is based on comparing the quantity or each request as calculated by cStock with the quantity received as reported by each HSA:
  - **HC stocked out** - the facility was unable to resupply any of the product to the HSA and responded to cStock that it was stocked out
  - **Partially filled** – indicates the number of requests where the quantity received by the HSA is less than the quantity required
  - **Completely filled** - indicates the number of requests where the quantity required equals the quantity of the product received by the HSA.
  - **Over Filled** - indicates the number of requests where the quantity received by the HSA is more than the quantity required
- **# of emergency orders** – of the total requests received for the product, this is the number of those requests that were sent as emergency orders as indicated when the HSA reported stock on hand

The Health Facility Report can be printed by clicking the print icon in the upper right corner of the page; this will produce a report appropriate for sharing with the health facility.

## User Profiles

The User Profiles tab provides information on users registered in cStock and their contacts.

The Malawi view shows:

Districts: A tab with all districts that are registered in cStock and information on:

 le

- o **District** name
- o District **Code**
- o # (Number) of Facilities in that district registered in cStock
- o # (Number) of HSAs in that district registered in cStock
- o District IMCI coordinator Name
- o Contact of district IMCI coordinator

By clicking on a district or entering the name of a district in the search field a table appears below and displays information on the list of facilities in that district.

**Facilities under (District Name):** A table with all facilities in that district registered in cStock and information on:
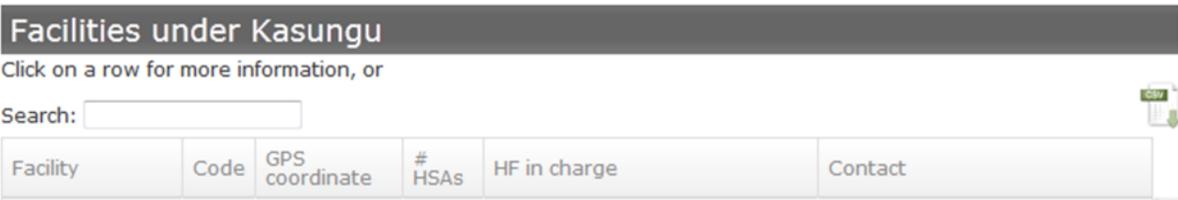


- o **Facility** name
- o Facility **Code**
- o **GPS Coordinate** of the facility location
- o **# (Number of) HSAs** registered in cStock and associated with that facility
- o Name of **HF In-charge** at the facility
- o **Contact** of In-charge at the facility

To view information on a specific facility, move the scroll bar on the right of the facility table up or down. If you click on the facility name, a table displays with the following information.

**HSAs under (Facility Name):** A table with all HSAs associated with that facility registered in cStock and information on:



- o **HSA Name**
- o HSA **ID**
- o **Contact** Information, the phone number of the HSA
- o **Supervisor** Name
- o Supervisor **contact**



## Help

By selecting the Help tab, you can find contact information for the cStock system administrators and access to the User's Manual. Should you have a problem with cStock, please refer to the manual; if by using the manual you are unable to solve the problem please contact the system administrator.