



REPÚBLICA DE MOÇAMBIQUE

MINISTÉRIO DA SAÚDE

Central de Medicamentos e Artigos Médicos

2018 Global Health Supply Chain Summit

Lusaka, Zambia

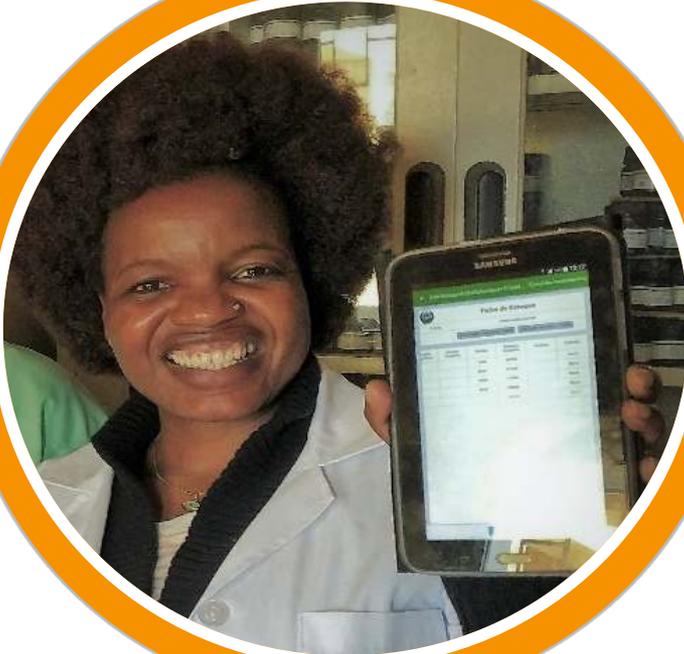


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SIGLUS

Implementing eLMIS to Improve Data Visibility and the Health Supply Chain: Lessons from Mozambique

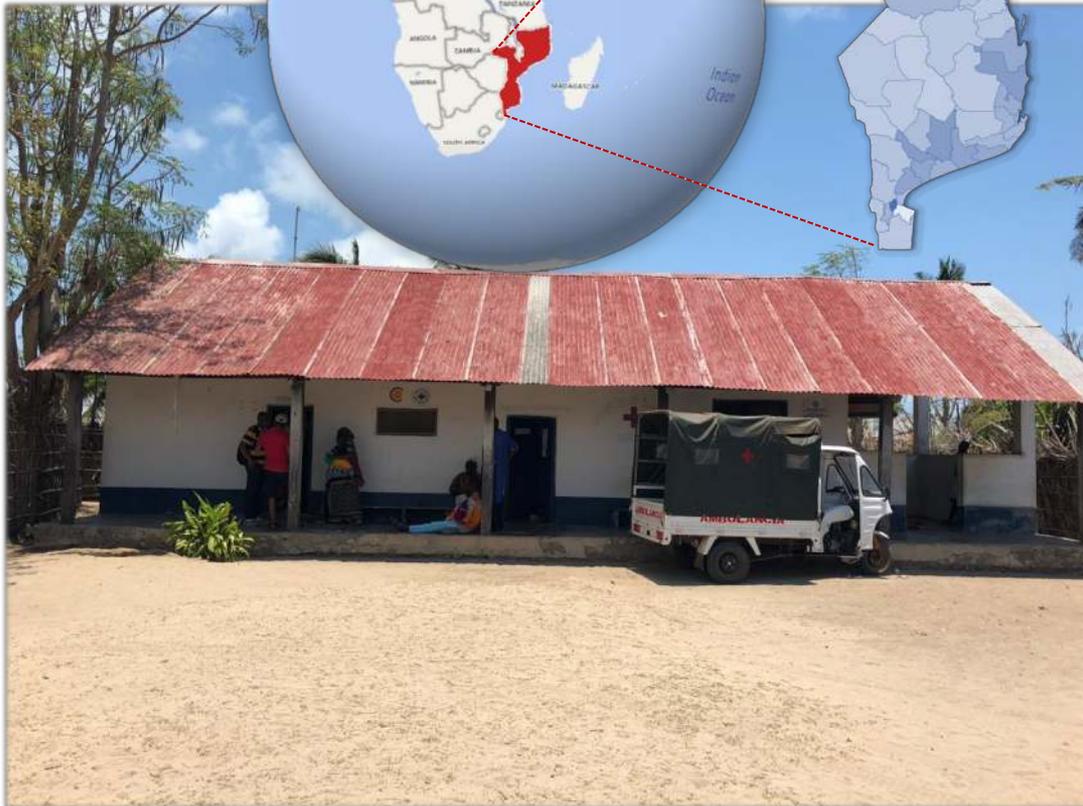
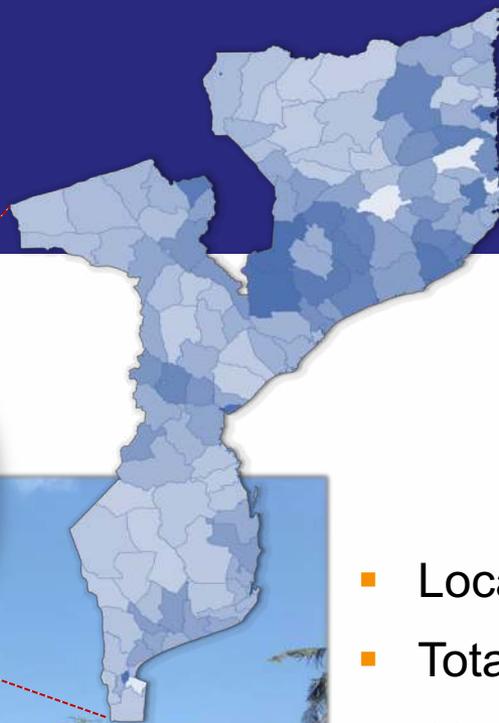
Brana Branquinho
Deputy Director
Central Medical Stores (CMAM)
Mozambique





Context

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- Located in Southeast Africa
- Total population 29,668,834
- 11 provinces
- 154 districts
- HIV prevalence of 13.2%, more than 1.300.000 in ART
- 1,596 health facilities (INE- National Institute of Statistics)
- 96% of health facilities are Level 1 (former health posts)



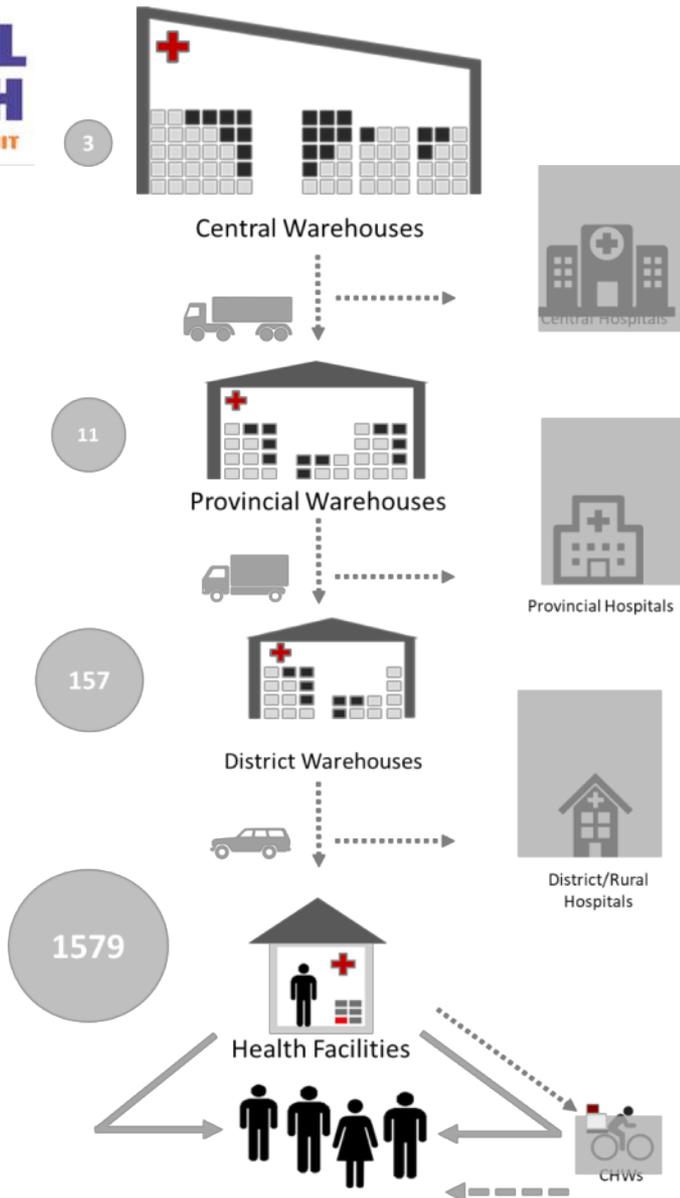
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Mozambique's Supply Chain

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- Supply Chain Structured in 4 levels; plus the community
- Central-level Central Medical Stores & 3 regional warehouses
- 11 provincial warehouses
- 147 district warehouses
- 1,596 health facilities
- 4,427 community health workers
- Serving over 29,668,834



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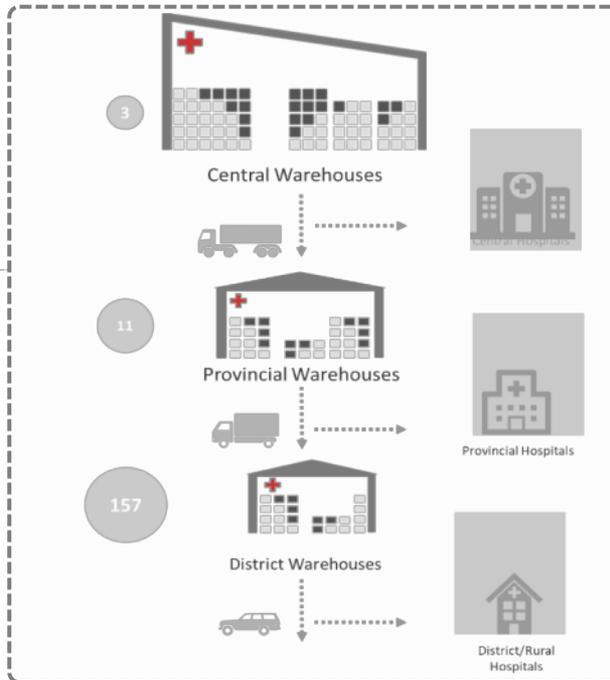


Data Gap in Supply Chain

Before SIGLUS

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2%



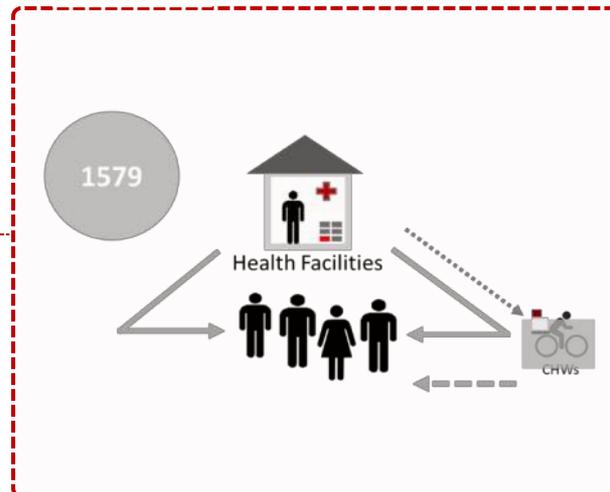
Computerized

- Only 2% Public health supply chain visible
- Only the warehouses had computerized systems
- Main stream relies on aggregated paper based data



Manual

98%

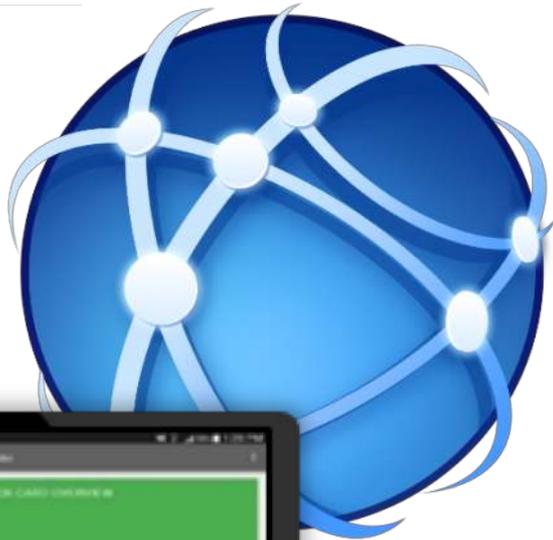


- Lack of visibility in vast majority of the system:
- 98% of the stocking points missing critical data
- No HF consumption data
- No stockout data at the large bottom of the pyramid



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Mobile Solution for impact



SIGLUS

SIGLUS is a cloud-based Logistics Management Information System for Health Facilities, used to report stock data via tablets.

Capture data on: :

- stock on hand
- quantity issued
- quantity received
- Adjustments
- quantities requested
- patients by regimen for ARVs

Health Facilities use SIGLUS also to generate and send monthly or quarterly requisition.



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SIGLUS – The Mobile app



- Online/offline
- Transactional workflows (as opposed to a reporting tool)
- Automated calculations for requisition process
- Alerts for low stock levels, overstocking, understocking and upcoming expiries
- Product expiry date and batch information
- Requisitions to supply warehouse
- User interface mimics paper forms familiar to healthcare workers to reduce training burden
- All Essential Products including
Anti Malaria drugs, Anti-retroviral , Contraceptives,
Rapid Diagnostic Tests, Antibiotics, Essential Medicines,
Key Medical Articles



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SIGLUS – The Web Portal



- Customized reports for Mozambique, such as weekly tracer drug report.
- Facility-level and aggregate reports and visualizations
- Data export for further analysis
- Access to all submitted requisitions
- Access to stock cards and transactions of products
- Tracking of synchronization status and order requisition timeliness





Mobile solution for end-to-end Visibility

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Monthly Requisition
Provinces and Districts generates and send monthly or quarterly requisition



Distribution Plan
Quantities to be delivery to provinces
Data Visibility
Managers has data visibility of the Provinces, Districts and HF
Master Data Mngt



Quantification

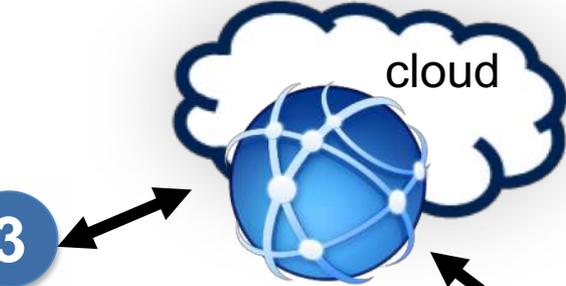


Procurement



Warehousing

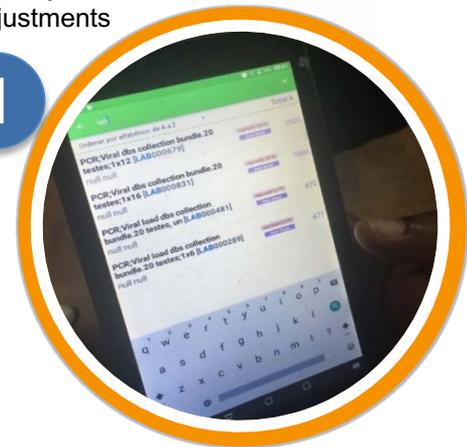
Daily movements
Quantity issued, quantity received, adjustments



Data visibility
Managers has real-time data of the HF on:
•Stock on hand
•Quantities issued
•Quantities received
• Adjustments
• Quantities requested
•Stock outs
•Expiry dates



Monthly Requisition
HF generate and send monthly or quarterly requisitions including quantities requested

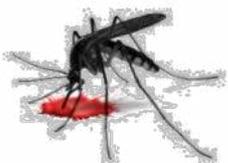




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Malária



SIGLUS – Data for decision-making

OpenLMS Electronic Logistics Management Information Systems Logged in as jtex72 [Profile](#) | [Help](#) | [Logout](#)

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Stock on hand, Single product across facilities

Drug: Coartem

Example Stock Availability in one District

- AL 6x1 (ACT)
- 1 district (Nicoadala)
- Zambézia Province
- 7 Health Units



es
Updated 
Update from tablet 
37 PM 12 Nov 2018
44 PM 15 Nov 2018
08 PM 14 Nov 2018
49 PM 15 Nov 2018
55 PM 14 Nov 2018
56 PM 2 Nov 2018
46 PM 15 Nov 2018

Out

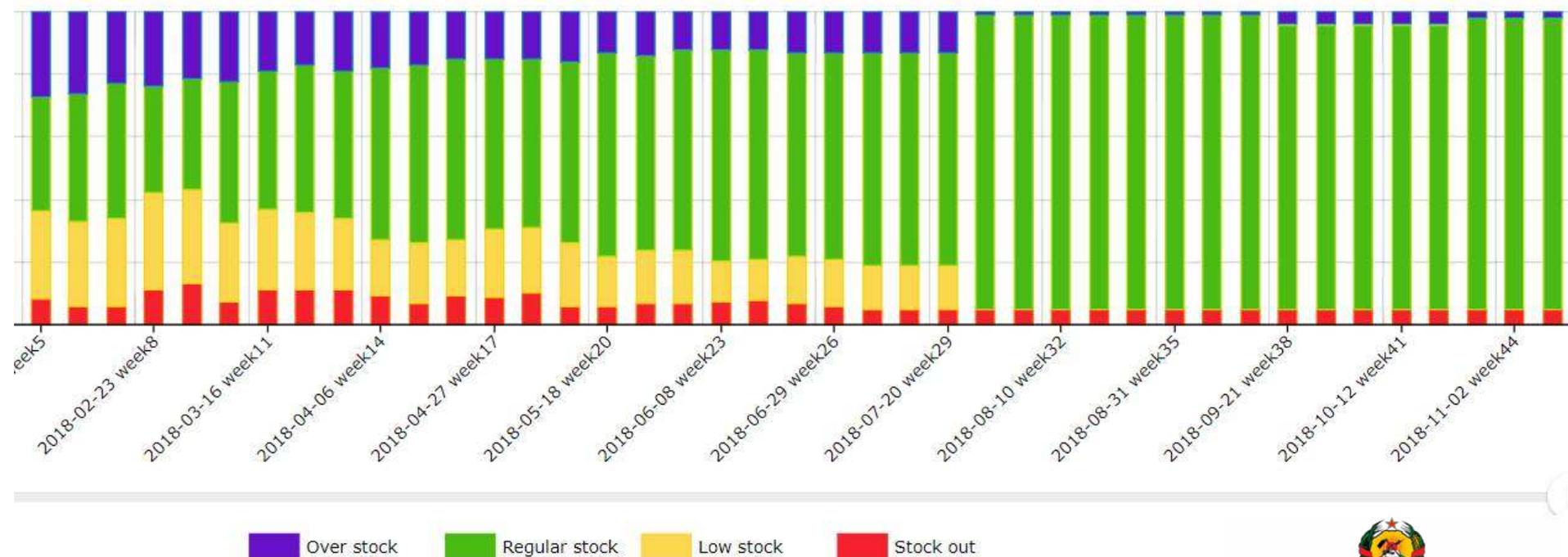
Hea
Health Fa
CS Quinta
CS Nicoad
CS Amorr
CS Ilalane
CS Nama
CS Domel
CS Licuar

Exce
Expor





Cotrimoxazol 480mg Tablets Stock According to Plan over time





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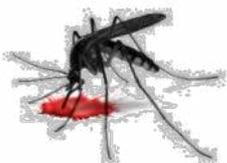
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Density of Stock Outs

Density of Stock Availability



Malária



One frequent question...

What is the Malaria
Medicines Stock
Situation?



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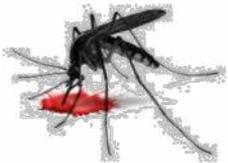


Density of Stock Outs

Density of Stock Availability

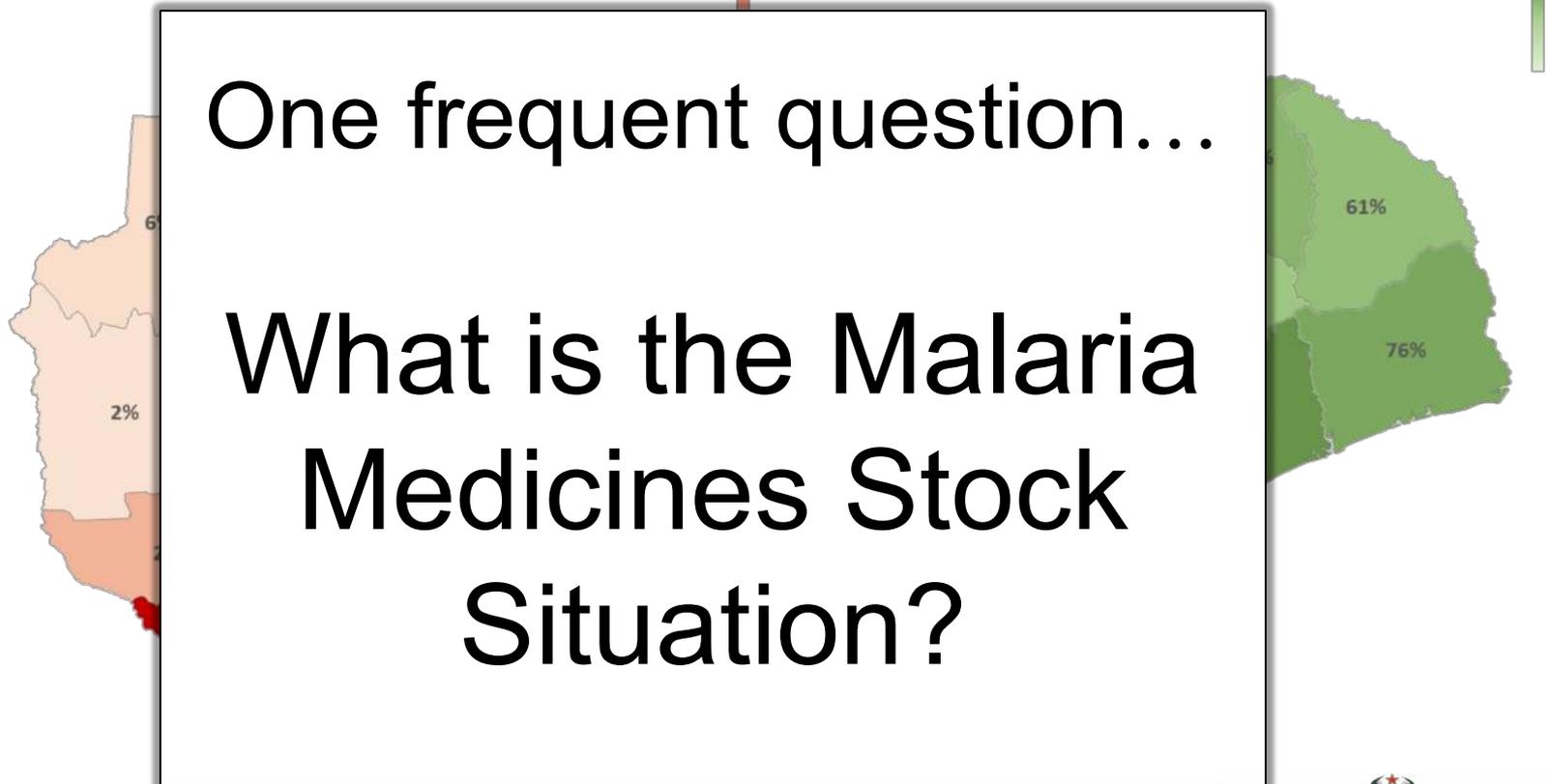


Malária



One frequent question...

What is the Malaria
Medicines Stock
Situation?



■ GIS data





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SIGLUS – Data for decision-making

Development – deep analysis tools

- Improved data visualization and early warnings
- Comprehensive Dashboards
- Use BI tools – over time analysis SIGLUS data
- GIS
- Integration and interoperability with other LMIS and HIS systems
- Including reagents, laboratory and health consumables
- Expanding to laboratory logistics
- Impact indicators



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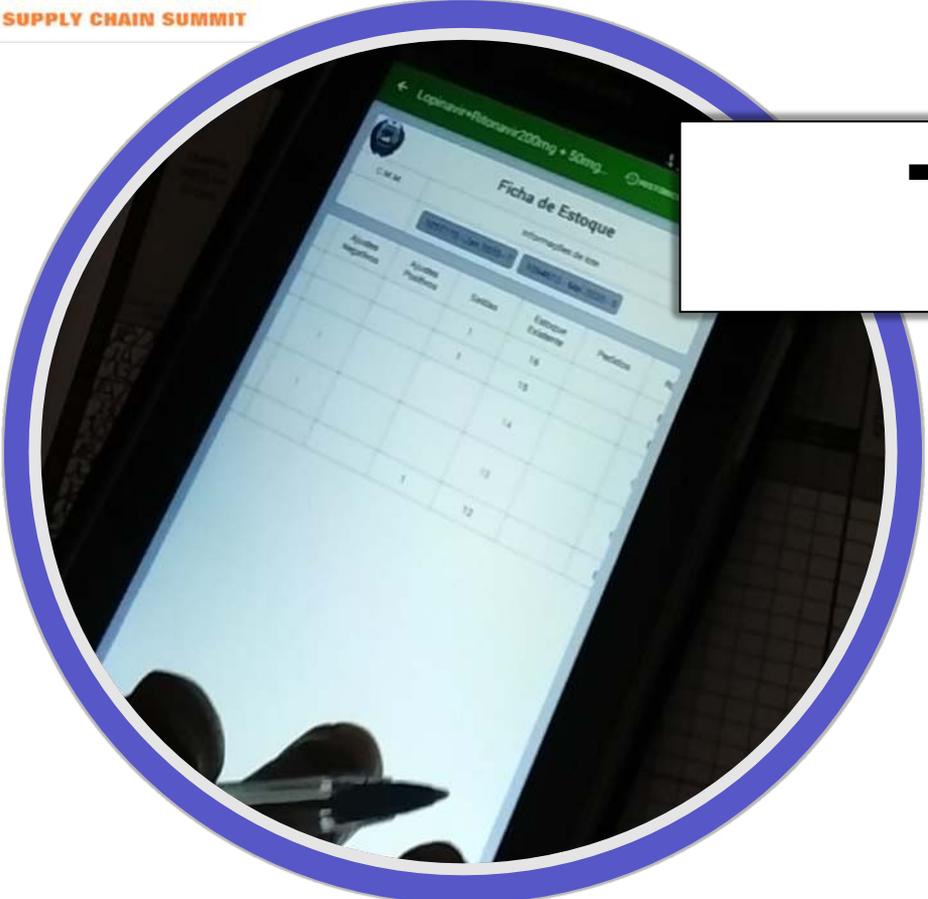
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public/pages/login.html](https://lmis.cmam.gov.mz/public/pages/login.html)





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Thank You! 



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