



# OpenLMIS COVID edition to support supply chains during COVID

Wes Brown (OpenLMIS Community)



**16<sup>th</sup> TechNet Conference**

Shaping a resilient and adaptive immunization program



# OpenLMIS COVID Edition

Supporting Supply Chains in a  
Pandemic



**16<sup>th</sup> TechNet Conference**

Shaping a resilient and adaptive immunization program



# Presenter



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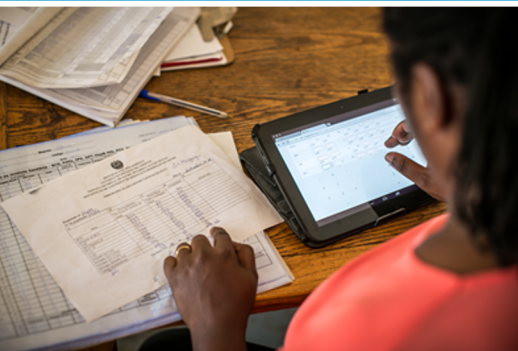
# MISSION

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*Collaboratively develop shared, open source software to improve health commodity distribution in low- and middle-income countries.*

"PLEASE NOTE"  
1. Recommended COLD LIFE  
at 4°C ambient temp and  
when loaded with fully frozen  
ice packs.  
43 HRS, without opening.  
Do not keep in direct sunlight.  
Ensure ice packs are fully  
frozen. It is recommended to  
freeze ice packs in freezer for  
24 HRS.  
**low kings**  
MUMBAI - 400 021,  
INDIA.

# What is OpenLMIS?



Open source LMIS designed for LMICs. Core software certified by global actors, highly configurable



HCWs can easily track, order and report stock; saves time and no manual calculations



Proven to reduce stockouts and increase reporting of stock data

# Robust Partner Network

## DONORS & THOUGHT PARTNERS

*Historically, these partners have provided both funding and strategic guidance.*

BILL & MELINDA  
GATES foundation



## IMPLEMENTING PARTNERS

*These partners customize and deploy OpenLMIS in country health systems, provide training and other professional services for users, and jointly bid for new country implementations.*



## TECHNOLOGY PARTNERS

*These partners provide technology development and bug fixes.*



# System Features



## Requisitions:

Use stock data to generate orders



## Order Fulfillment:

Fulfill and ship orders based on stock on hand and send a Proof of Delivery



## Stock/Inventory Management:

Capture inventory data and stock movements to provide an overview of stock availability



## Analytics and Reporting:

Use and display data with intuitive visualization that supports decision making



## Mobile Integration:

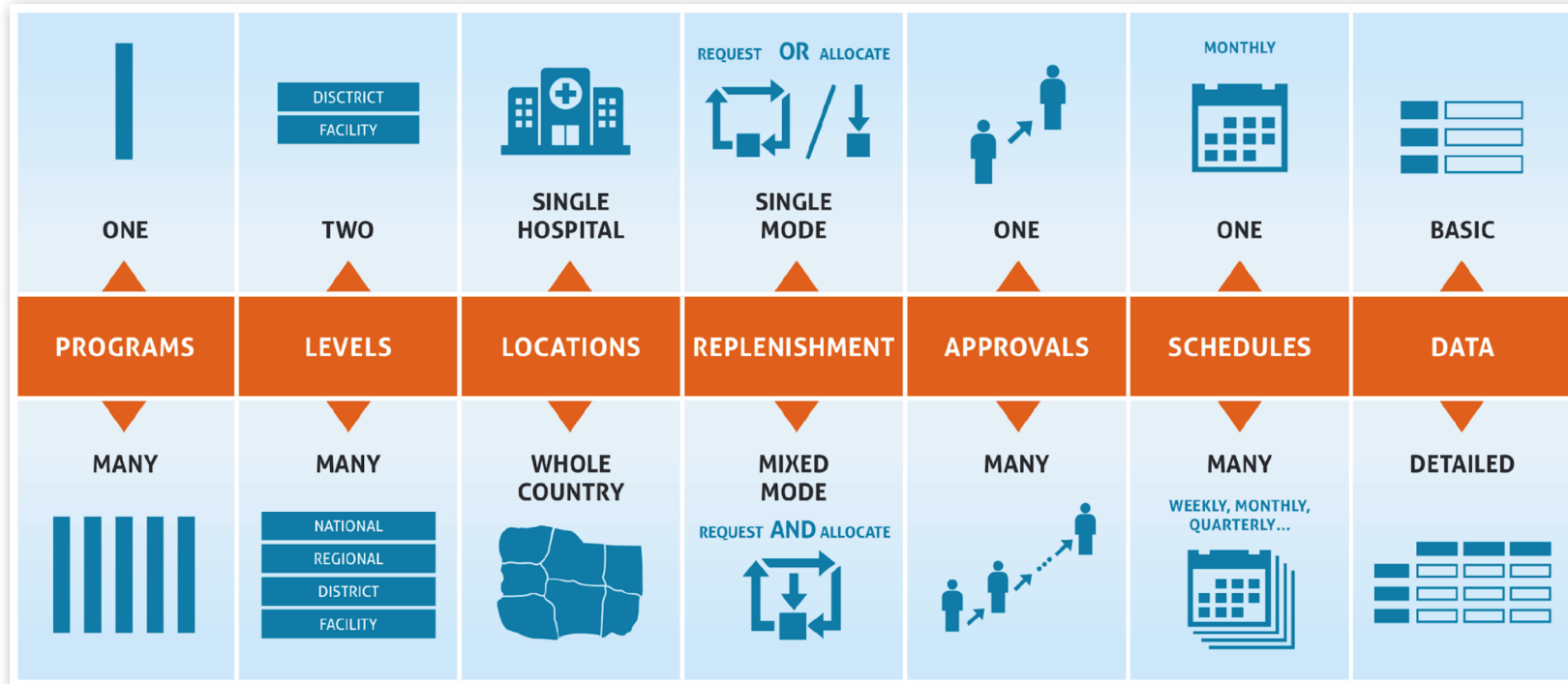
Connect dispensing and supply information at the point of care through an integration with OpenSRP



## Equipment:

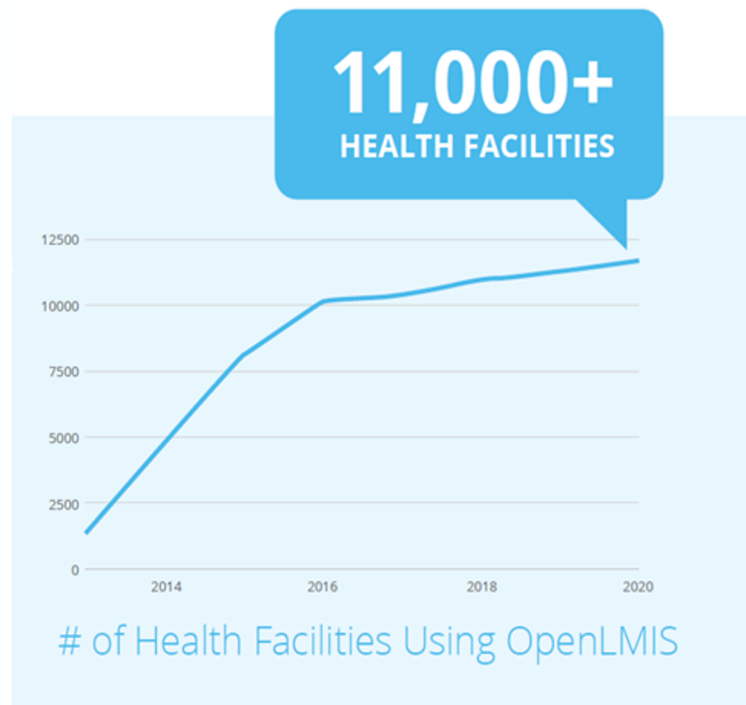
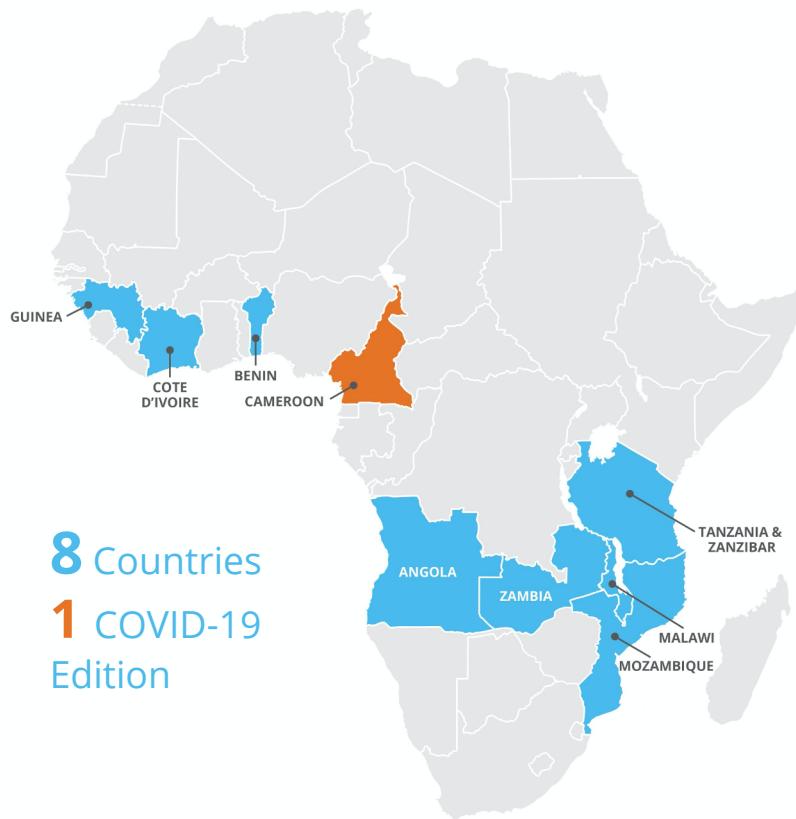
Track equipment inventory, functional status; real-time alerts on CCE device temperature

# Highly Configurable to Country Context

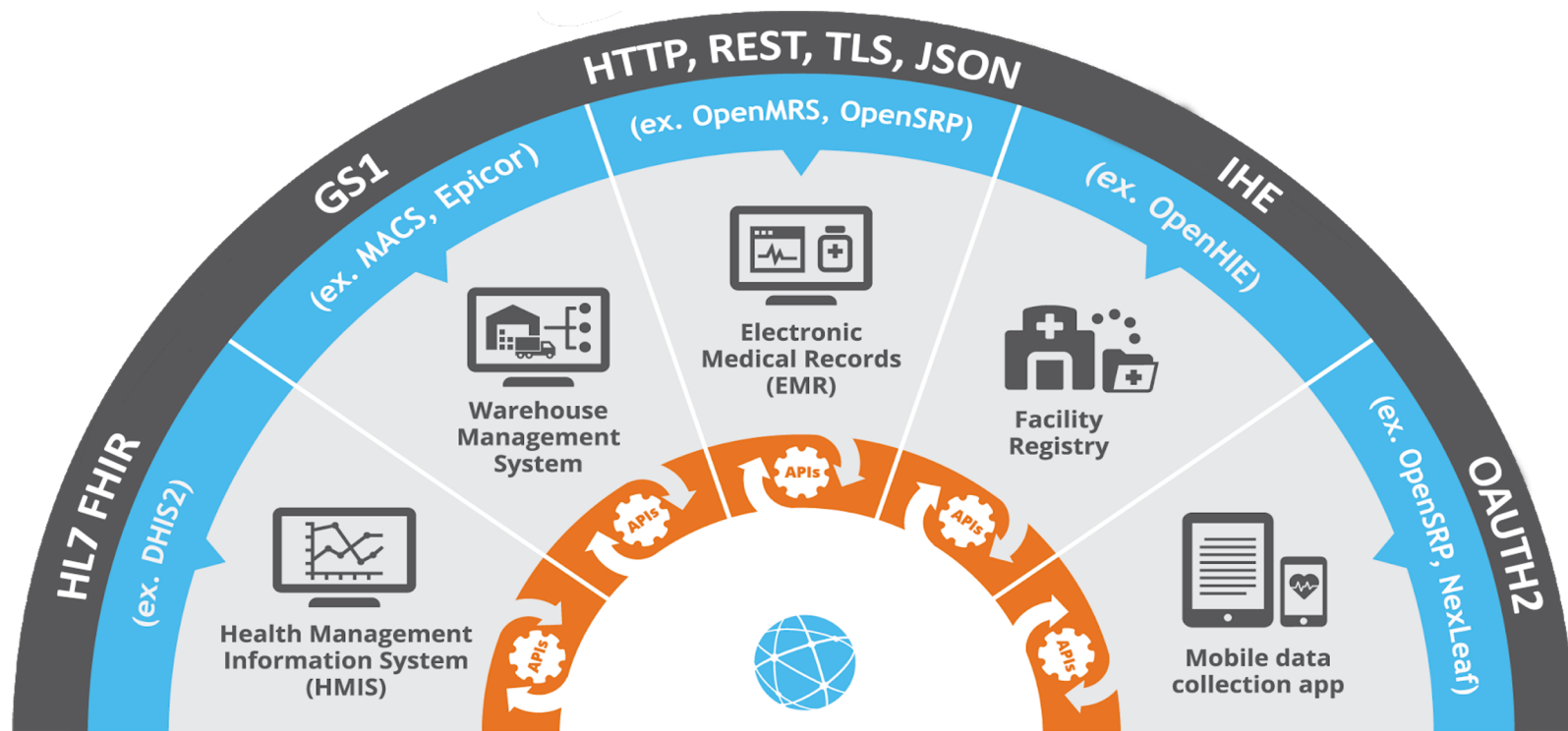




# Geographic Reach



# Stronger Together: Interoperability



# Summary of Benefits of OpenLMIS



## End User

- Time saving!
- Quick stock calculations
- Easy, accurate reporting
- Simple admin
- Data validation
- Offline functionality



## System

- Stock management
- Data dashboards
- Interoperability with DHIS2 & other systems
- Vaccine module
- CCE tracking



## Big Picture

- Future code enhancement
- Community tools & support
- Certified system by Gavi & GF

# OpenLMIS COVID Edition

- OpenLMIS has been configured to enable COVID-19 supply chains and can facilitate inventory management and the replenishment of COVID-19 commodities at health facilities, district/provincial warehouses, and central medical stores
- This streamlined system requires minimal training and, therefore, can be quickly deployed.
- The software is offered as a SaaS solution, free of charge, and with no operating costs.
- Collaborative effort between VillageReach and CHAI



# Supporting the COVID-19 Supply Chain

## Inventory Management

Track orders, receipts, and quantities of products; receive proof of delivery of COVID-19 products

## Equipment Tracking

Ventilator and other equipment location, operational status monitoring and reporting

## Data Visualization

Informs decision making and completes routine reports using custom data dashboards

# Screenshot - Requisition

[Home](#) / [Requisitions](#) / [View Requisition](#)

## Report and Requisition for EPI (Health Center) Print

<b>Regular</b>	<b>Facility</b> N008 - Macaue-2, Cuamba	<b>Operated by</b> Ministry of Health	<b>Region</b> Cuamba	<b>Reporting period</b> 01/02/2017 - 28/02/2017
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**Comments** + Add Comment

No comments added

Full supply product(s)

Skip [All](#) | [None](#) All changes are saved

Skip	Product code	Product	Beginning balance	Total received quantity	Total consumed quantity	Total losses and adjustments	Total stockout days	Stock on hand	Ideal Stock Amount	Calc Order Qty ISA	Average consumption	Calculated order quantity	Requested quantity	Requested quantity explanation
Vaccines														
<input type="checkbox"/>	bcg20	BCG	166	0	0	0	0	166	3300	3134	0	0	<input type="text"/>	<input type="text"/>
<input type="checkbox"/>	ipv5	IPV	68	0	0	0	0	68	3200	3132	0	0	<input type="text"/>	<input type="text"/>
<input type="checkbox"/>	measles10	Measles	53	0	0	0	0	53	4000	3947	0	0	<input type="text"/>	<input type="text"/>
<input type="checkbox"/>	pcv10	PCV10	41	0	0	0	0	41	8900	8859	0	0	<input type="text"/>	<input type="text"/>
<input type="checkbox"/>	penta1	Pentavalent (1 dose)	47	0	0	0	0	47	6500	6453	0	0	<input type="text"/>	<input type="text"/>
		Pentavalent (10 dose)											<input type="text"/>	<input type="text"/>
		Polio (20											<input type="text"/>	<input type="text"/>

# Screenshot – Stock Management

Home / Stock Management / Physical Inventory / N008 - Macaue-2, Cuamba - EPI

## N008 - Macaue-2, Cuamba - EPI

8 of 13 products completed 62% Filter + Add Product

Product Code	Product	Lot Code	Expiry Date	Stock on Hand	Current Stock	VVM Status	Reasons	Unaccounted Quantity
Vaccines								
ACM-SAFETYBOX-1234	Acme Safety Box - each	Product has no lots		78	<input type="text" value="78"/>		<span>+ Add Reasons</span>	0
ACM-SYRINGE005ML-1234	Acme Syringe 0.05ml - 0.05ml	Product has no lots		45	<input type="text" value="40"/>		<span>Lost</span>	0
ACM-SYRINGE05ML-1234	Acme Syringe 0.5ml - 0.5ml	Product has no lots		89	<input type="text" value="89"/>		<span>+ Add Reasons</span>	0
ACM-SYRINGE5ML-1234	Acme Syringe 5ml (updated) - 5ml	Product has no lots		56	<input type="text" value="52"/>		<span>+ Add Reasons</span>	-4
GSK-PCV10-2-1234	Synflorix PCV10 (2 dose) - 2 dose,injection	Product has no lots		41	<input type="text" value="41"/>	<span>Stage 1</span> ✕	<span>+ Add Reasons</span>	0
GSK-POLIO-20-1234	GlaxoSmithKline Polio (20 dose) - 20 dose,oral drop	Product has no lots		53	<input type="text" value="53"/>	<span>Stage 2</span> ✕	<span>+ Add Reasons</span>	0
IVX-BCG-20-1234	Intervax BCG (20 dose) - 20 dose,injection			166	<input type="text" value="163"/>			
		No lot defined		92	<input type="text" value="92"/>	<span>Stage 1</span> ✕	<span>+ Add Reasons</span>	0
		BCGI2017A	01/06/2019	28	<input type="text" value="25"/>	<span>Stage 1</span> ✕	<span>Cold chain failure</span>	0
		BCGI2017B	01/07/2019	46	<input type="text" value="46"/>	<span>Stage 1</span> ✕	<span>+ Add Reasons</span>	0
MRK-MEASLES-10-1234	MMR II (10 dose) - 10 dose,injection	Product has no lots		53	<input type="text" value="53"/>	<span>Stage 2</span> ✕	<span>+ Add Reasons</span>	0
<span>Delete</span>	ROTA-1-1234	RotaTeq (1 dose) - 1 dose,injection		146				

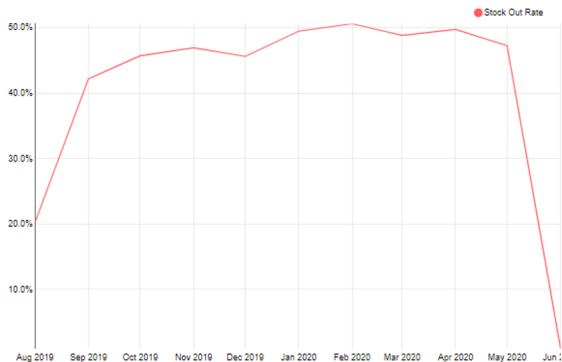
Save Submit

# Standard Reporting Dashboards

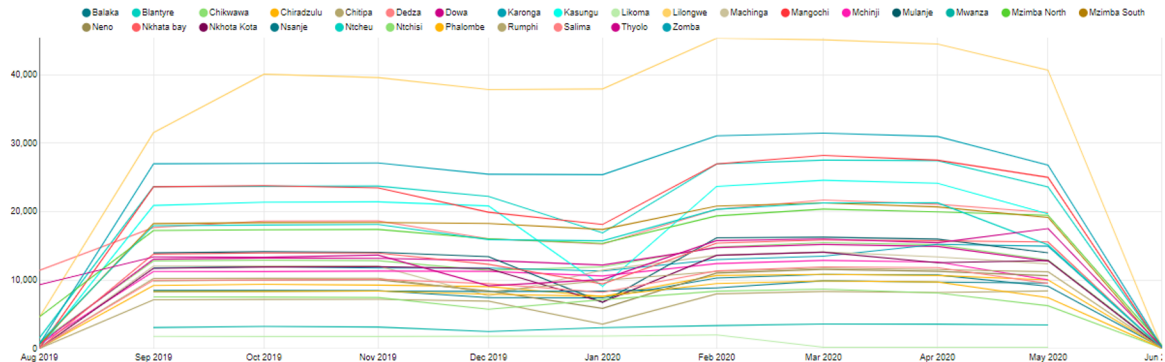
## Stock Status ☆

Edit dashboard ▾

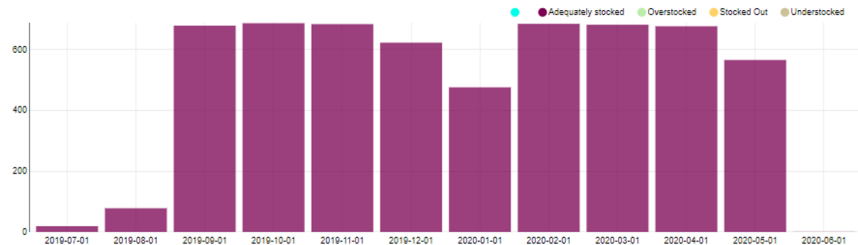
### Stockout Rate Over Time



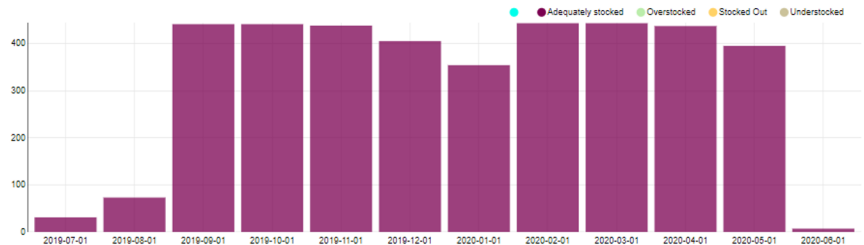
### Months of Stock



### HIV Stock Levels



### TB Stock Levels





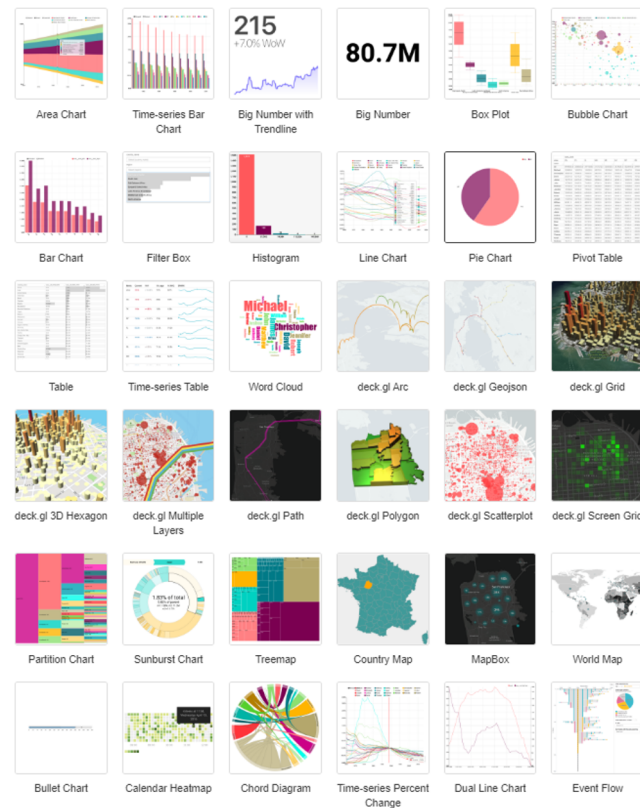
# Data Visualizations

Create custom dashboards based on program priorities

Built-in reports include:

- Stockouts
- Stock Status (overstocked, understocked)
- Consumption
- Orders
- Reporting rates/timeliness

Filter by program, geographic region, date, facility



# OpenLMIS COVID Edition - Lessons Learned

- Getting consensus on the product catalog is vitally important
- Even if the technology is ready, the country may not be
- Work with a local partner whenever possible
- When a vaccine is available, tracking the allocation and usage will be critical; as will monitoring cold chain equipment



# Thank You



For additional information, visit us at [openlmis.org](https://openlmis.org)  
or email at [info@openlmis.org](mailto:info@openlmis.org)