

Application updates

This book describes the process of updating applications in the HIS portfolio

- Point of Care

Point of Care

- EMR and E-Mastercard Update process

1. Introduction

This report provides an overview of how facility systems for the Point of Care and e-Mastercard applications are updated. Both applications are critical to healthcare service delivery, and maintaining them at the latest version is essential for functionality, security, and alignment with national standards and PEPFAR reporting standards.

2. System Overview

- 2.1 Point of Care

- Server Setup: Each facility hosts a local server that runs the Point of Care application and other ancillary services. The server is connected to the facility's internal network but not to the internet.
- Update Methods: Updates are applied remotely through auto-deployment where possible, or manually by HIS officers during scheduled visits.

- 2.2 e-Mastercard

- Usage: e-Mastercard is used on dedicated laptops, with the application running locally on the laptop.
- Update Approach: HIS officers visit the facility and connect to the internet to pull the latest changes from the internet and updated or through an offline build.

3. Device Types and Update Mechanisms

- EBN Gadgets and J2's
- Connect to the facility server through a web browser.
- Receive updates automatically once the server is upgraded.
- Ocom POS Devices / Tablets(Android-based)
- Operate offline without internet connectivity.
- Require updates through APK installation.

- Updates are delivered manually, typically using flash drives or memory cards.

4. Update Challenges

- Limited Auto-Deployment Coverage: Auto-deployment is effective for network-connected devices but excludes Android devices.
- Manual Updates: Updating Ocom POS devices depends on HIS officers traveling to facilities, which can be delayed due to transportation and resource constraints.
- Version Disparities: Facilities sometimes run different application versions across devices, leading to inconsistencies in functionality and reporting.
- This is due to our release cycle which may include incremental version updates if any major bugs are reported during the reporting cycle

5. Mitigation Strategies

- Distribution of APK Files: Clinical staff are provided with APK files so they can perform manual updates on Android devices when HIS officers are unavailable.
- Regular Facility Visits: HIS officers are encouraged to conduct periodic on-site visits to verify that all devices run the latest version.
- Capacity Building: Training facility staff on basic update procedures reduces reliance on HIS officers for routine updates.

6. Monitoring

- Though monitoring for the web versions is possible, monitoring the android versions is impossible as there is no way of verifying the app version on the device as we do not have remote access to the devices.
- A dashboard for auto deployments is available on the Malawi Analytics Platform which shows sites updated through auto deployments and those done manually

UPDATES TYPE DATA TABLE

Facility: All | District: All | Zone: All | Quarter: Q2 2025 | status: All

Facility	District	Zone	Quarter	Update Type
Thumbe Health Centre	Chiradziku	South West Zone	Q2 2025	Manual updated
Thunga Health Centre	Thyolo	South West Zone	Q2 2025	Manual updated
Zoa Health Centre	Thyolo	South West Zone	Q2 2025	Manual updated
Airwing Clinic Lilongwe	Lilongwe	Central Zone	Q2 2025	Auto updated
Area 18 Health Centre	Lilongwe	Central Zone	Q2 2025	Auto updated
Area 25 Health Centre	Lilongwe	Central Zone	Q2 2025	Auto updated
Bangwe Health Centre	Blantyre	South West Zone	Q2 2025	Auto updated
Bereu Health post	Chikwawa	South West Zone	Q2 2025	Auto updated
Bilal Clinic	Chiradziku	South West Zone	Q2 2025	Auto updated
Bimbi Health centre	Zomba	South East Zone	Q2 2025	Auto updated
Blantyre City Assembly Clinic	Blantyre	South West Zone	Q2 2025	Auto updated
Bolero Rural Health Centre	Karonga	Northern Zone	Q2 2025	Auto updated
Chambe Health Centre	Mulanje	South West Zone	Q2 2025	Auto updated
Changata Health Centre	Thyolo	South West Zone	Q2 2025	Auto updated
Chikwawa District Hospital	Chikwawa	South West Zone	Q2 2025	Auto updated
Chileka Health Centre (Lilongwe)	Lilongwe	Central Zone	Q2 2025	Auto updated
Chileka Health Centre Blantyre	Blantyre	South West Zone	Q2 2025	Auto updated
Chileka Sda Health Centre	Blantyre	South West Zone	Q2 2025	Auto updated
Chikumba Garrison Dispensary	Karonga	Northern Zone	Q2 2025	Auto updated
Chilumba Rural Hospital	Karonga	Northern Zone	Q2 2025	Auto updated
Chitochaka Rural Hospital	Chitochaka	Northern Zone	Q2 2025	Auto updated