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Collecting patient level dHTS data in intermittent power and internet environment

ScanForm Technology

Where from

1. Malaria surveillance Project-Kenya
2. Piloted in Malawi -2021
3. First deployment-2022
4. Phased approach – now in 692/800 sites

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Ministry of Health, Government of the Republic of Malawi

Report and Recommendations from Field Evaluation and Pilot

3-Test Rapid Diagnostic Algorithm for HIV

ScanForm Technology for Digitizing Client-Level Records from HIV Testing and Self-Test Distribution Registers

December 2021

Why ScanForm

1. Basic smartphone, simple user training
2. Phones can be charged anywhere and last for days, no need for stable connectivity
3. Cheap/easy national scale up (already in 692/800+ testing sites)!
4. Convenient data access and use via ScanForm phone, data portal, DHIS2, DHA-MIS

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How ScanForm works

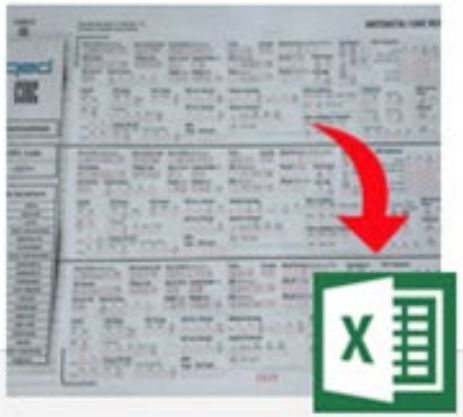
Rapid and Accurate Data Collection at National Scale

STEP 1

Write on paper

STEP 2

Take a picture



STEP 3

Get the data

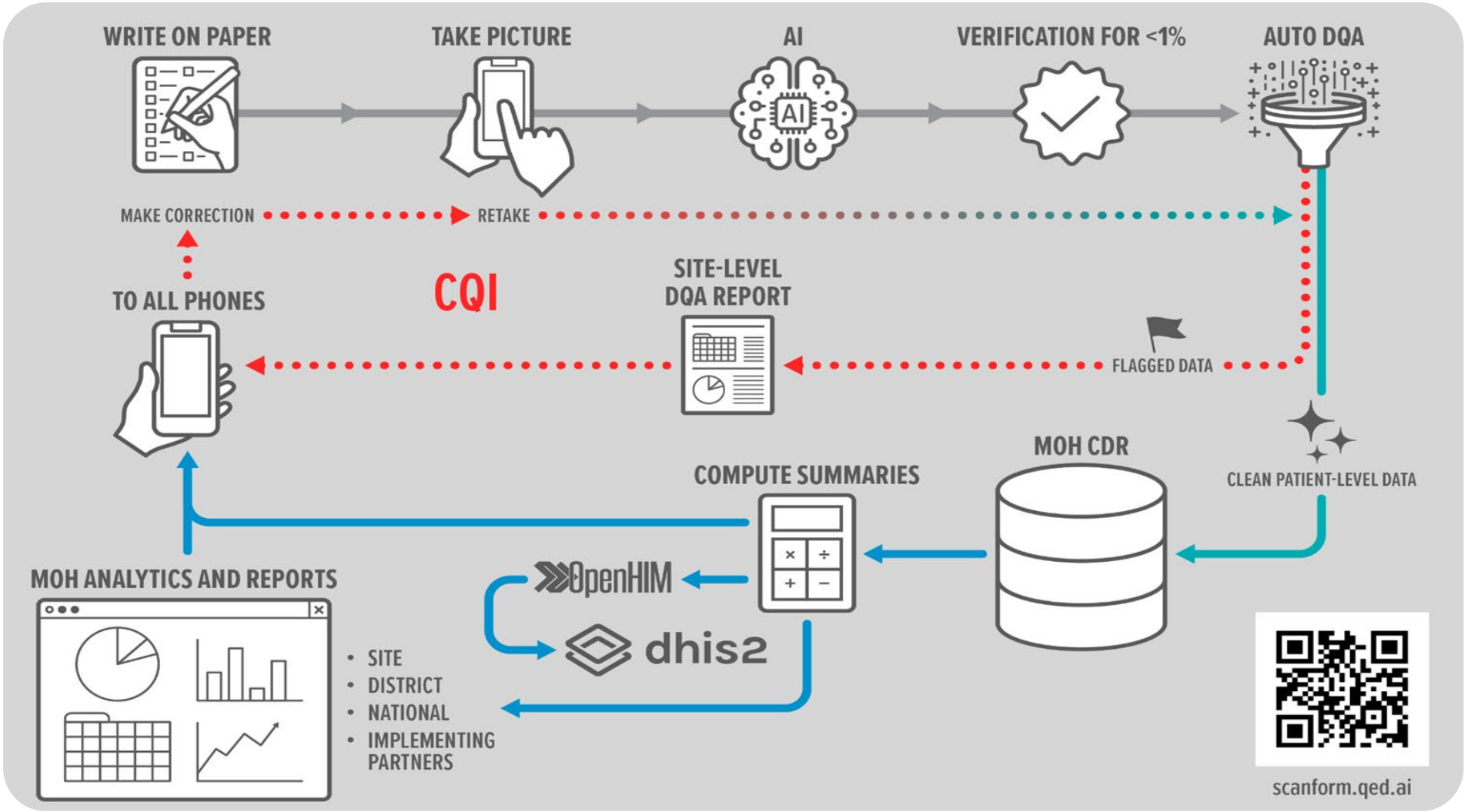
STEP 4

Use the data

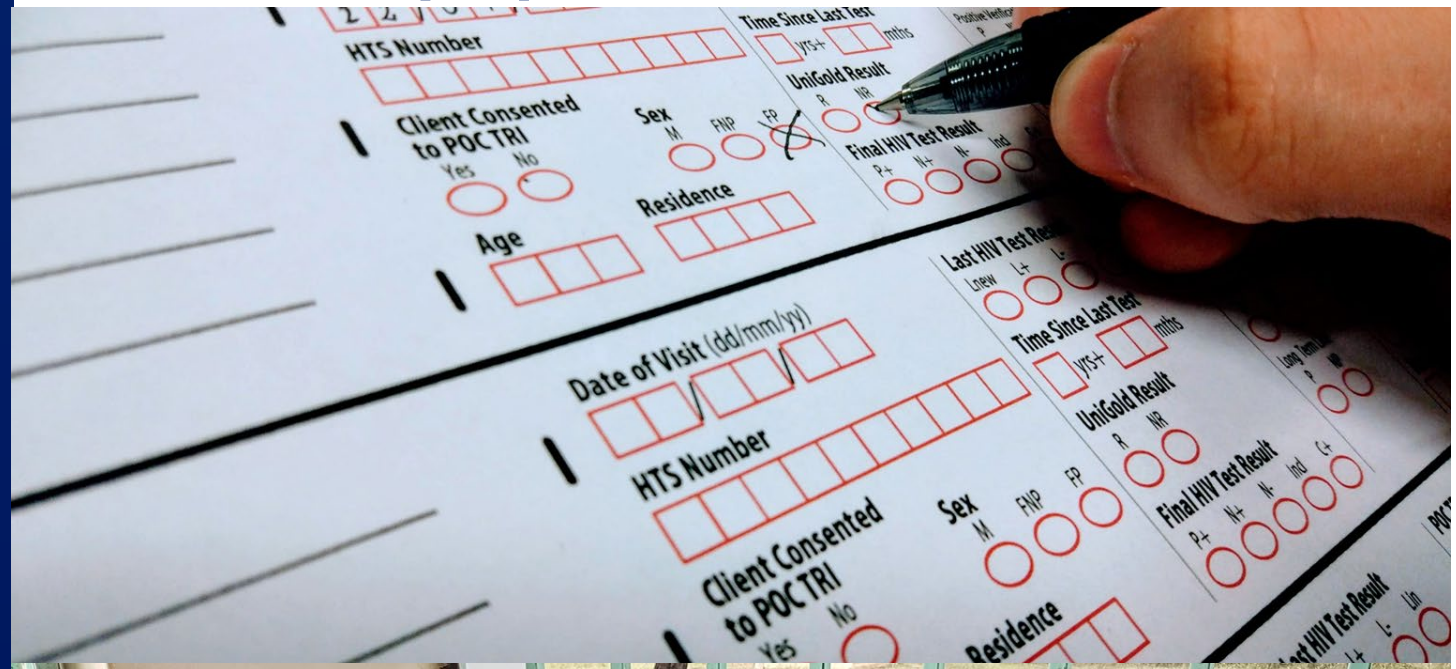
(not required: computers or scanners)

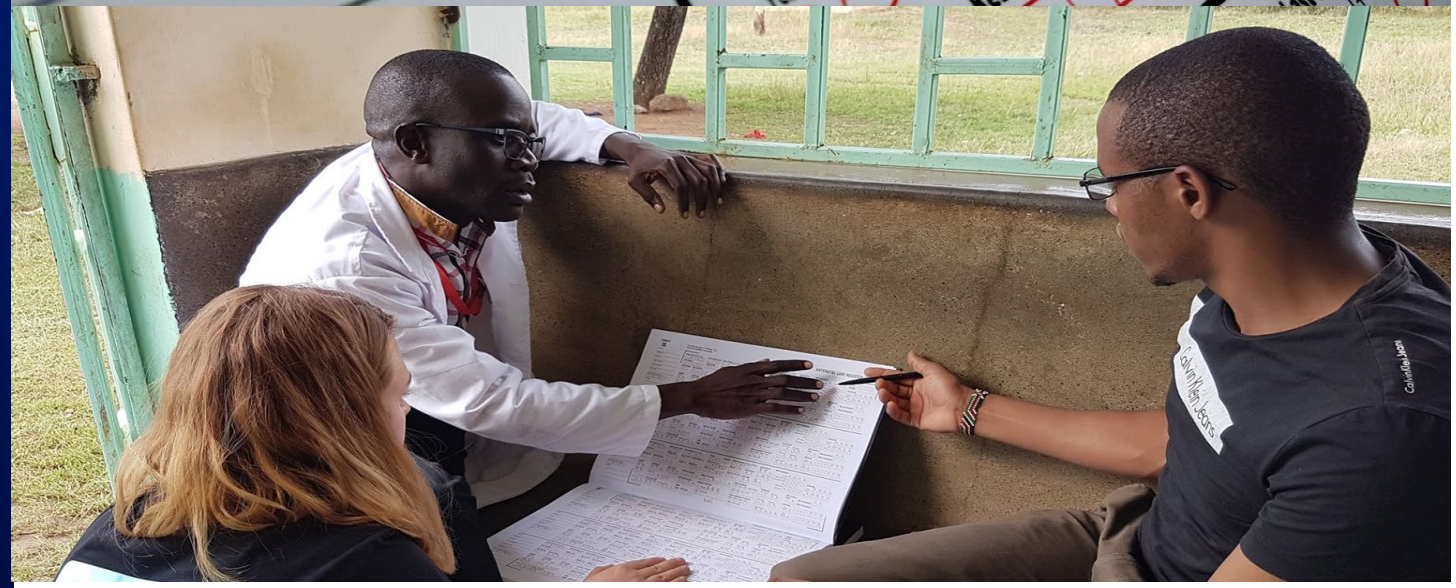
(intermittently needed: electricity for phone charging and network for auto-upload of pictures)

ScanForm data flow



Write on paper

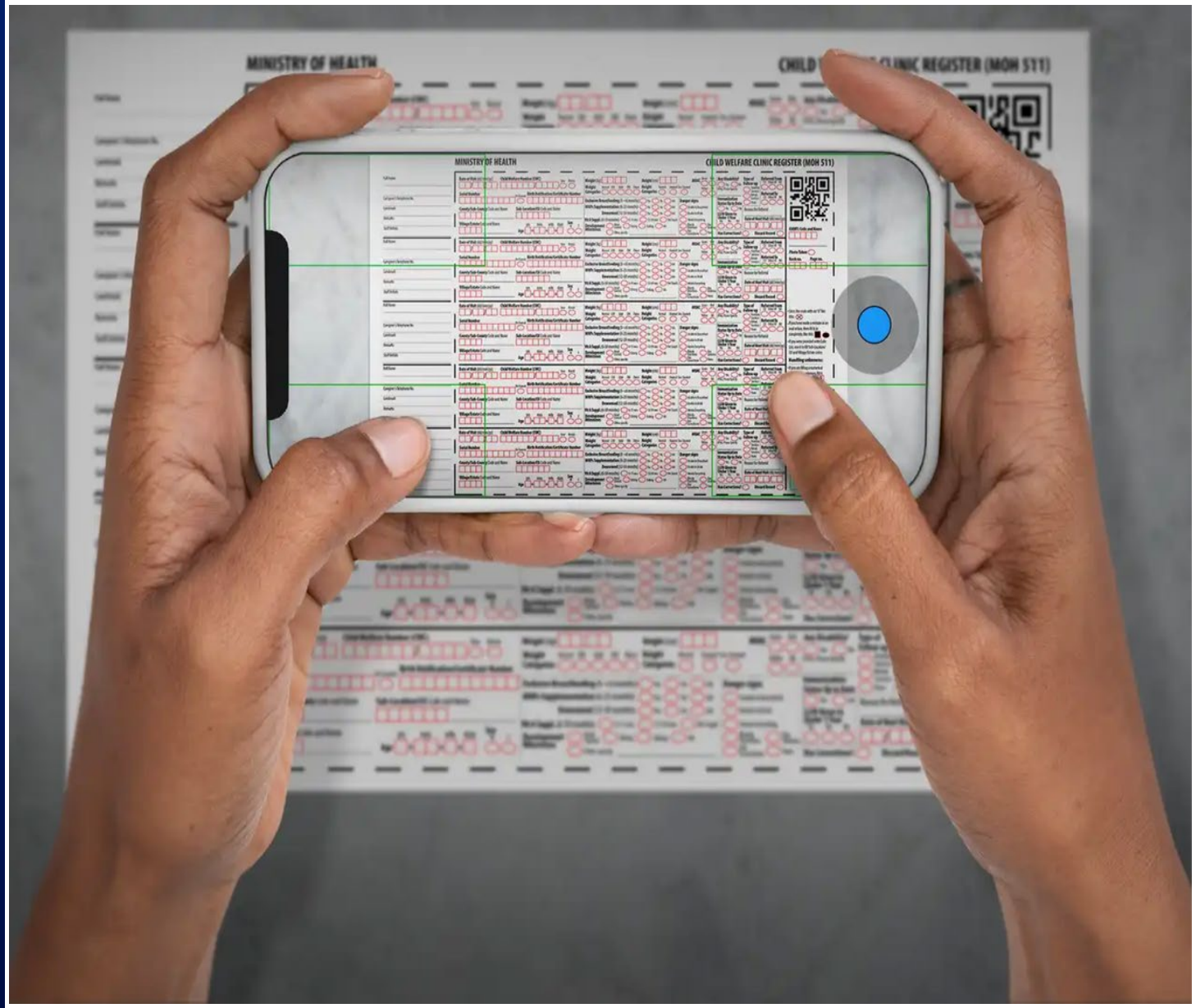




Currently :

1. *Initial register (HIV,Syphilis,HBV)*
2. *Confirmatory register (When T1 is reactive)*
3. *HIVST distribution register*

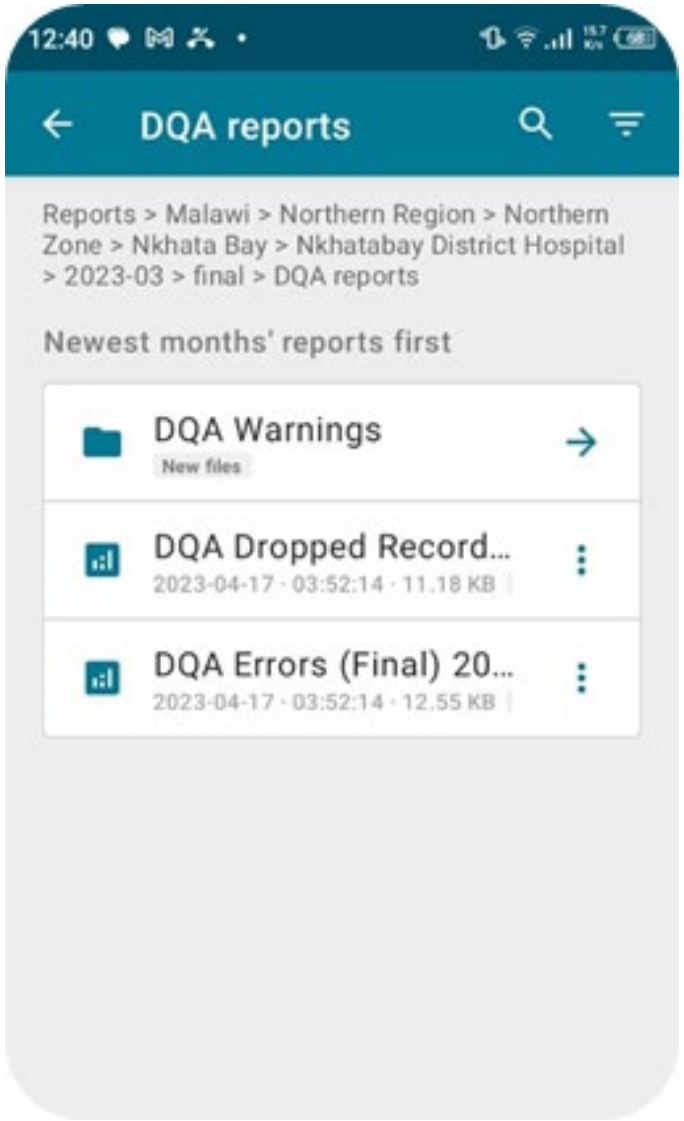
Take a picture



Using basic Android smartphone:

1. *When page is full*
2. *At end of month*
   (For monthly report)
3. *After making correction*
   (data for this page is updated)

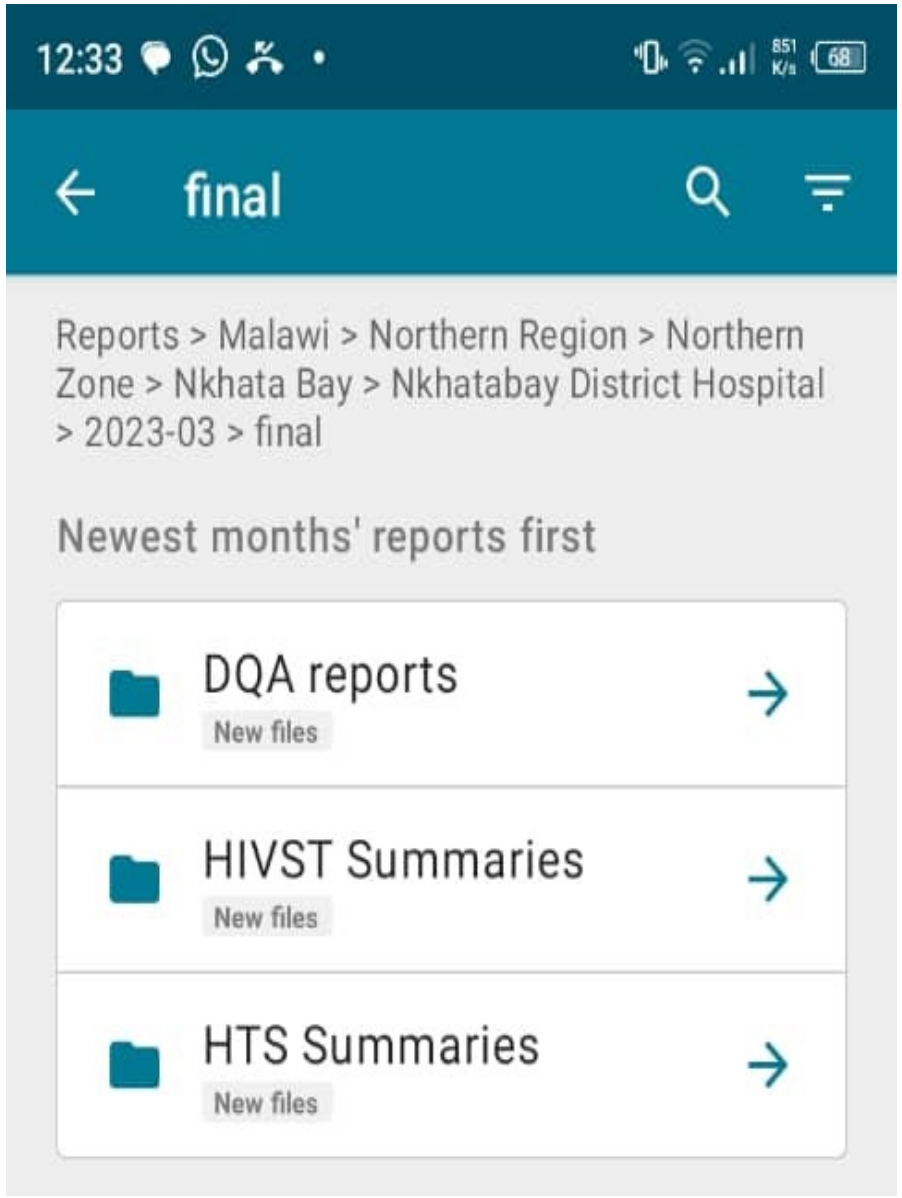
Continuous data quality improvement



Data Quality Assurance reports:

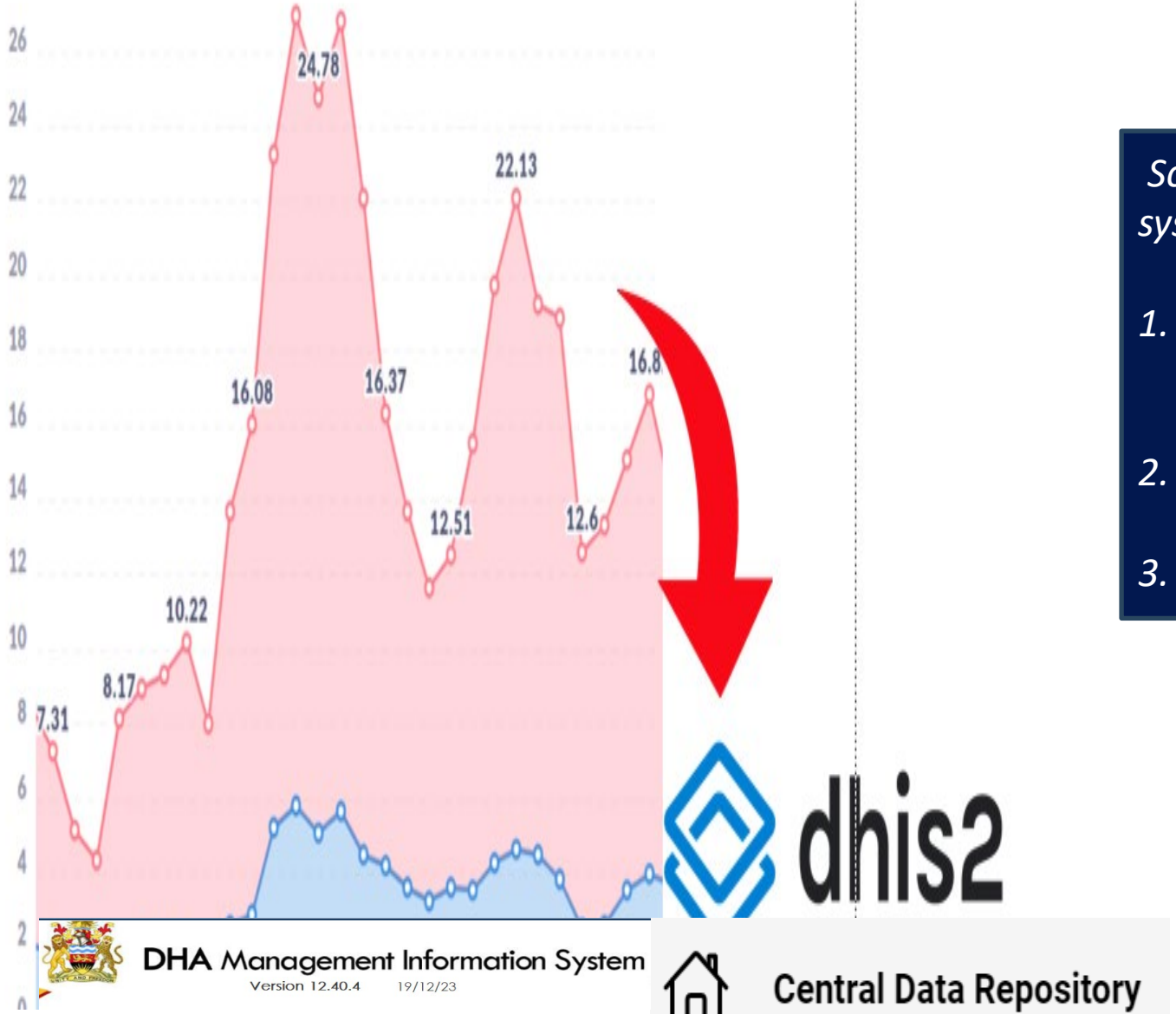
1. *Warnings*
2. *Errors*
3. *Dropped records*

Added value to providers



1. *No page and monthly summaries*
2. *No report writing hassles (auto generated reports)*
3. *Report easily accessible (Through ScanForm phones)*
4. *Errors in register easily identified*
5. *Readily available technical support (Videos, pdf via phone)*

Added value to national HMIS



ScanForm interoperability with other systems

1. *No mannual data entry on DHIS2 and DHAMIS*
2. *Improved timeliness*
3. *Improved data quality*

Where we are

HIV, Syphilis, and Hep B Testing and Counseling in Malawi

Field operations for epidemiological surveillance for HIV Testing Services (HTS), Syphilis Testing, and Hep B Testing, in Malawi. All data collected from phone-scannable integrated HTS registers, implemented using ScanForm technology from QED.ai and the technical and programmatic support of the Department of HIV and AIDS. These programs are being deployed to all HIV testing points nationwide.

4,256,148
Total Clients Tested for HIV

1,651,395
Total Self-Test Kits Distributed

ScanForm

834,245
Total Clients Tested for Hepatitis B

912,329
Total Clients Tested for Syphilis

692
# of Participating Clinics

1,903
Estimated # of Access Points

593
Number of Clients Saved from HIV Misdiagnosis

660
Number of Negative Clients Prevented from an Inconclusive Result

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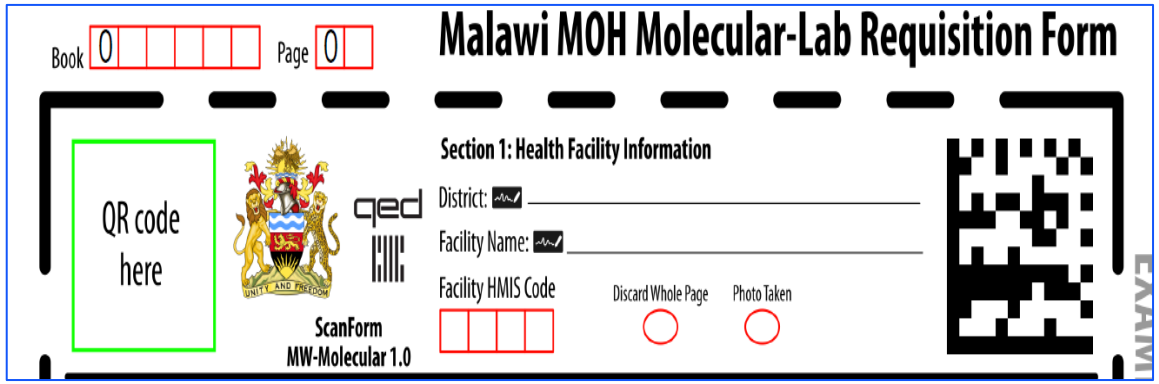
Where we want to be



1. *All 800 + sites providing testing services by August,2024 (Global Fund)*
2. *ScanForm used for PrEP services (Already used in CAB-LA study sites)*
3. *ScanForm used for molecular lab Form (Scannable Form already designed)*
4. *ScanForm used for STI services (In discussion with MBF for support)*

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Thank You!