

SPECIAL COVID-19 ECHO Session #21



OPTIMISED DIAGNOSTIC NETWORKS KEY TO RESPONDING TO COVID-19

- The impact of optimised diagnostics networks in responding to the COVID-19 pandemic
- How diagnostic capacity mapping, data management, sample transport, and waste management have helped drive uptake of SARS-CoV-2 testing
- Experiences from Nigeria, Cameroon and Zimbabwe

PANELISTS:

- GEORGE ALEMNJI, U.S. President's Emergency Plan For AIDS Relief
- SMILJKA DE LUSSIGNY, Unitaid
- CHARLES ATEM, Clinton Health Access Initiative, Cameroon
- UGHWEROGHENE OMO-EMMANUEL, USAID, Nigeria
- RAIVA SIMBI, Ministry of Health, Zimbabwe
- LARA VOJNOV, World Health Organization

CONNECT WITH ZOOM <https://us02web.zoom.us/j/84622761531>

JOIN US ON **13 AUG 2020** 16:00 TO 17:00 **EAST AFRICA TIME**





LEVERAGING INVESTMENTS IN DIAGNOSTIC NETWORKS OPTIMISATION TO EXPEDITE PLANNING AND IMPLEMENTATION OF SARS COV-2 LABORATORY TESTING - CAMEROON COUNTRY EXPERIENCE



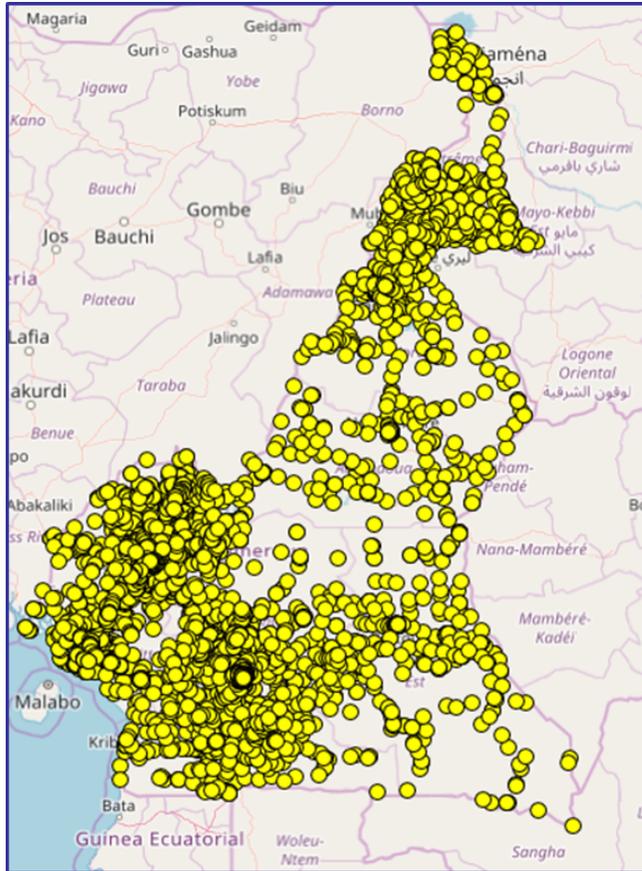
**Charles Atem, CHAI
Cameroon Country Team**

Outline

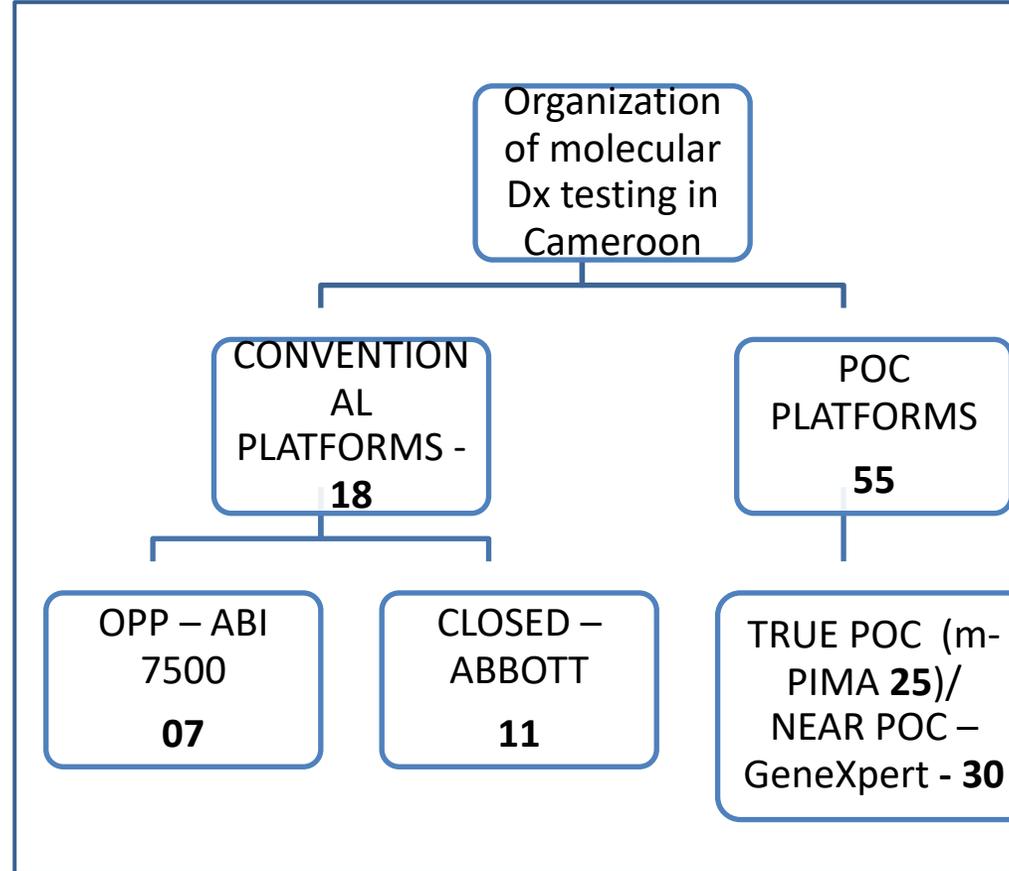
-  Overview of molecular diagnostics in Cameroon
-  Progress of DNO work and testing strategy for COVID -19
-  Data management solutions – thought process / strategies to expedite result return
-  Key take-aways
-  Key challenges

Overview of molecular diagnostics in Cameroon

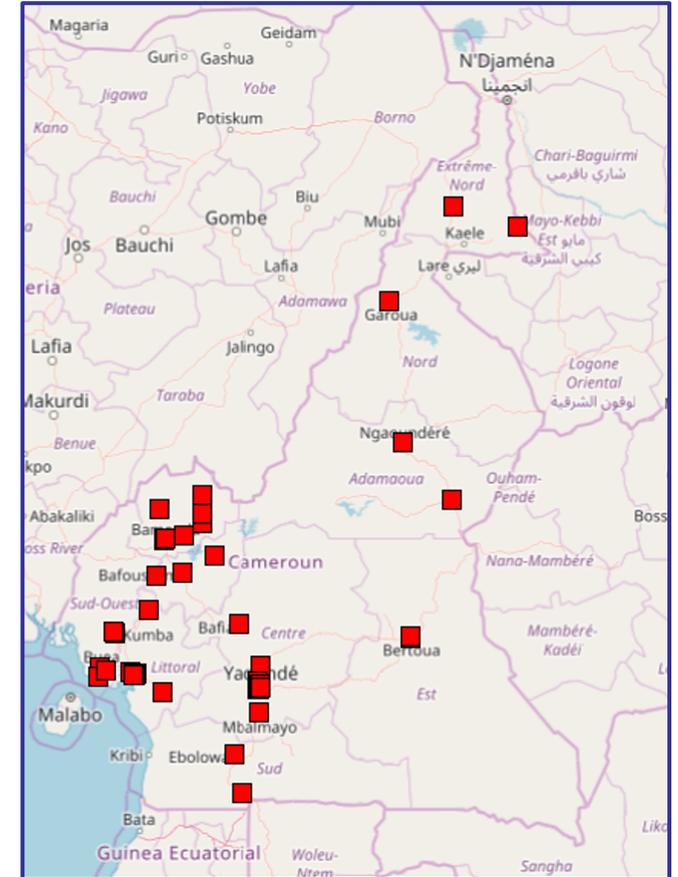
HF distribution > 5000 HFs



Molecular diagnostic testing exists in a mix



Device foot print



Progress of DNO work in Cameroon

2017

2018

2019



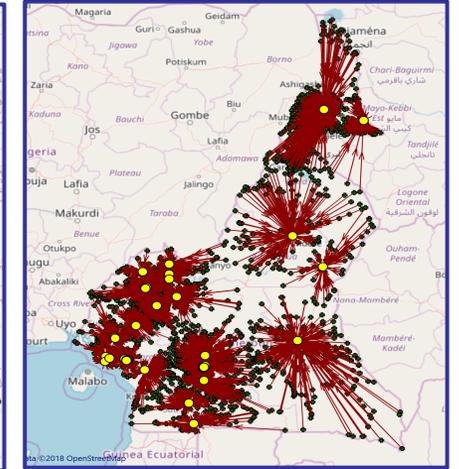
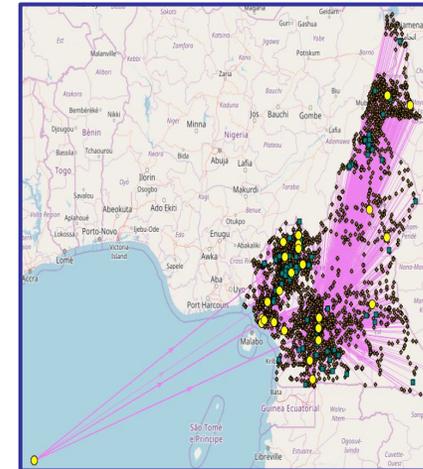
Above - First DNO workshop in Cameroon Below - Regional Training on labEQIP attended by MoH (NPHL, CNLS, GHSC-PSM, EGPAF, CHAI) – Uganda 2017



Strong engagement from the Government alongside partners) (Global Fund, CDC/PEPFAR, Unitaid), with MoH as the main driver – Yaounde 2018

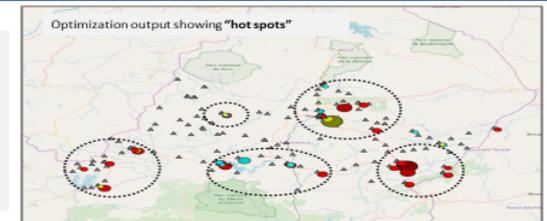
Before DNO

After DNO

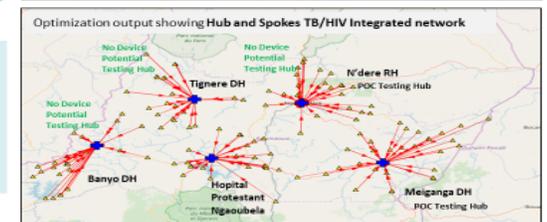


Optimization analysis in Adamawa Region presents a scenario to improve quality and timely access of integrated testing services through addition of 3 POC devices

- To identify new testing hubs, Cameroon looked at the following parameters:
- sites with high patient numbers (PMTCT, PLHIV cohort and EID)
 - geographical location to determine the advantage of additional machine placement



- Optimization results:
- a minimum of 3 additional POC/near POC devices are needed to improve quality and timely access to integrated diagnostic testing services in Adamawa region alone.



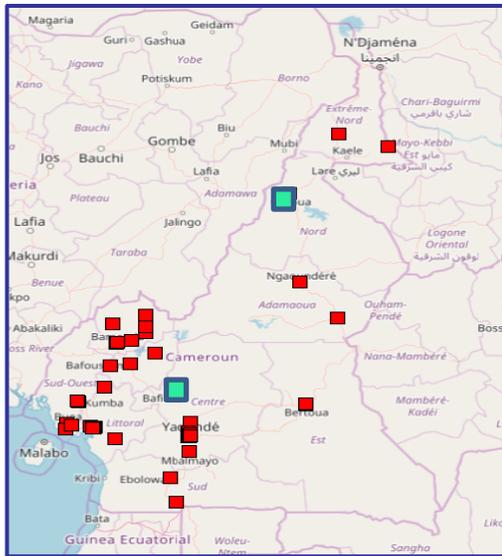
COVID -19 testing strategy in Cameroon – coordinated by the NPHL and CPC

1 Phase 1 – Centralized testing on OPP 2 sites

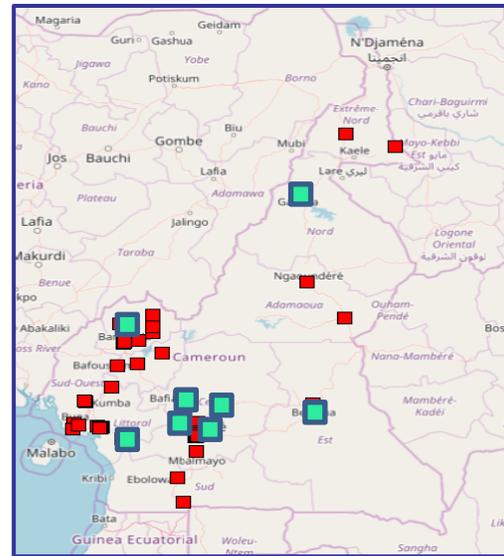
2 Phase 2 – Decentralized testing to 8 OPP sites

3 Phase 3 – Decentralized testing – GeneXpert 2 sites

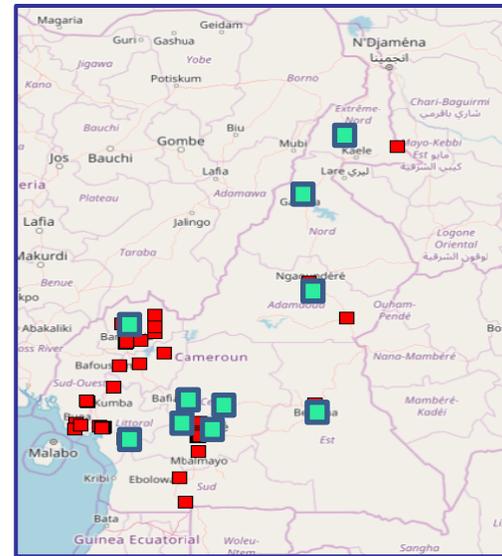
4 Phase 4 – further decentralization to 3 new Abbott sites



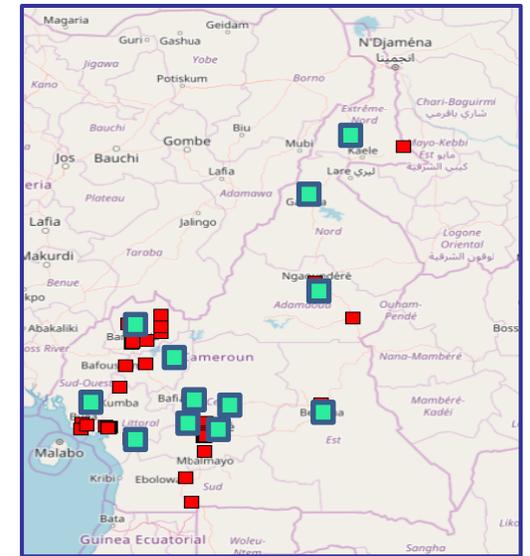
March 2020



April 2020



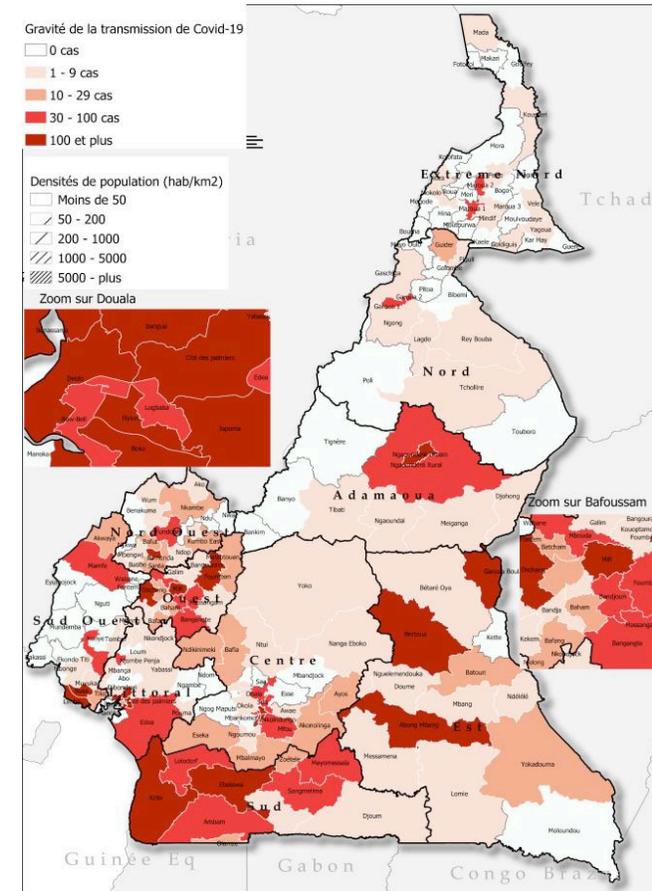
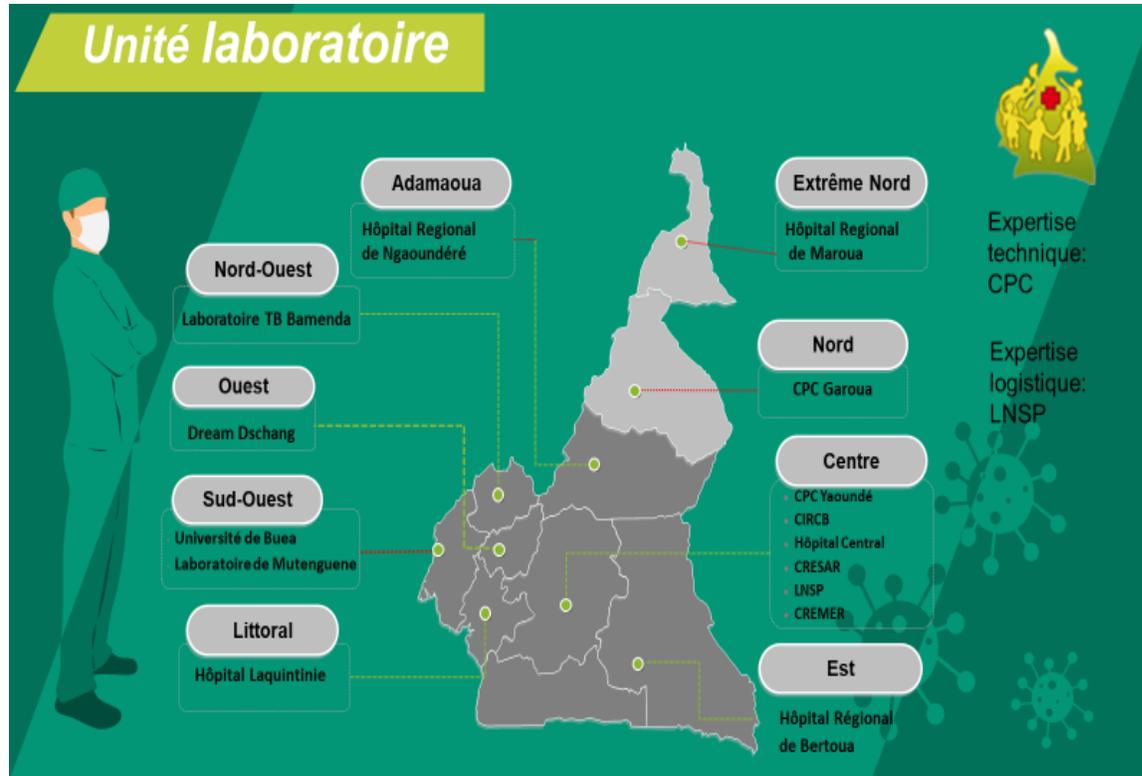
May 2020



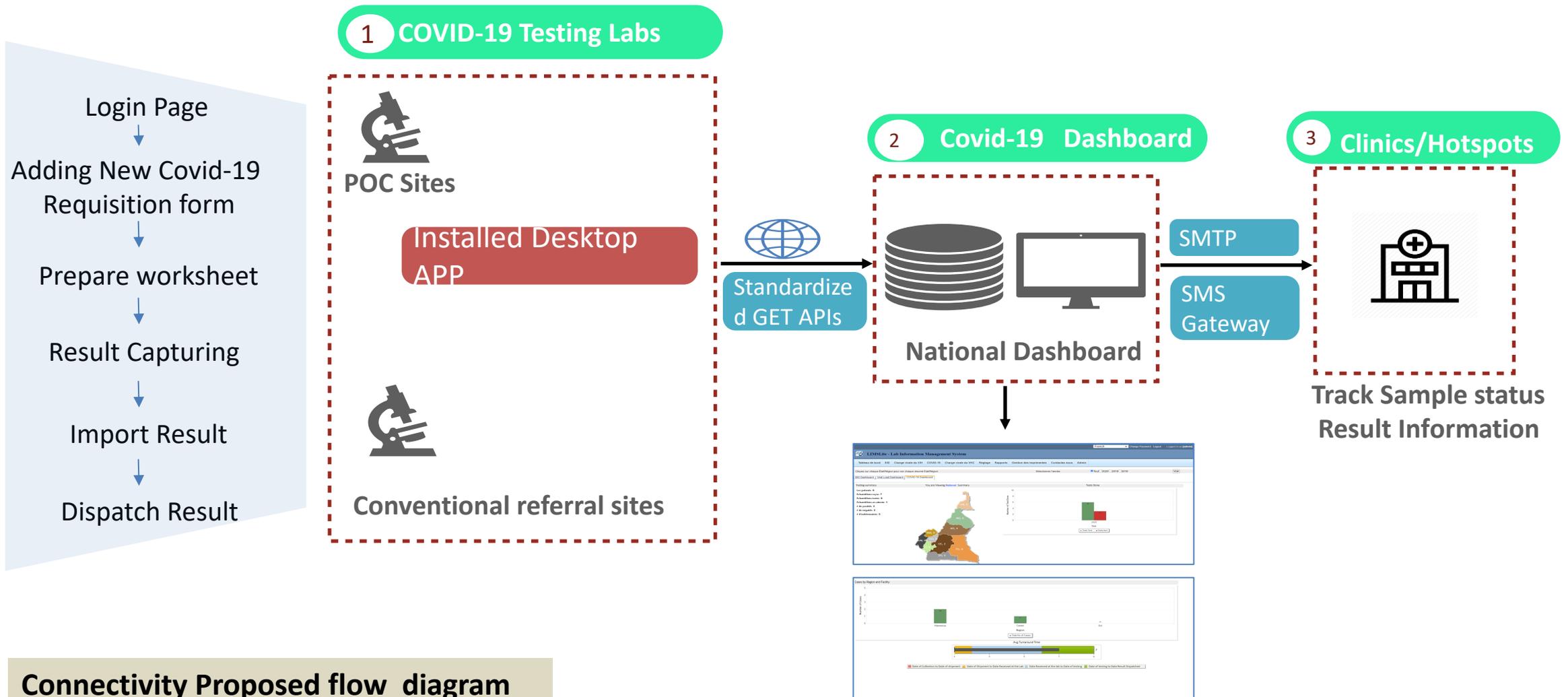
June 2020

Currently there are 14 COVID -19 molecular testing sites in country use both OPP and Abbott platforms

COVID -19 testing strategy in Cameroon – aligning testing to COVID epidemiology



Data management solution – thought process including strategies to expedite return of results



Data management solution – dashboard screen shots from PLACARD (Short term solution → LIMSLite software for long term solution (in development))

Tracking labs submitting data

Laboratoire	LUNDI 10/08/2020	MARDI 11/08/2020	MERCREDI 12/08/2020
CPC Yaoundé	T	T	T
CIRCB	T	R	T
HCY	T	T	T
CRESAR	NA	NA	NA
LNSP	T	T	T
Laquintinie	NT	T	T
CPC Garoua	T	T	T
Bamenda	T	T	T
HR Bertoua	NT	NT	NT
Buea	T	T	T
HR Maroua	T	T	T
HR Ngaoundere	T	T	T
Mutenguene	NT	NT	NT
Dschang	NT	NT	T
CREMER	NT	R	NT

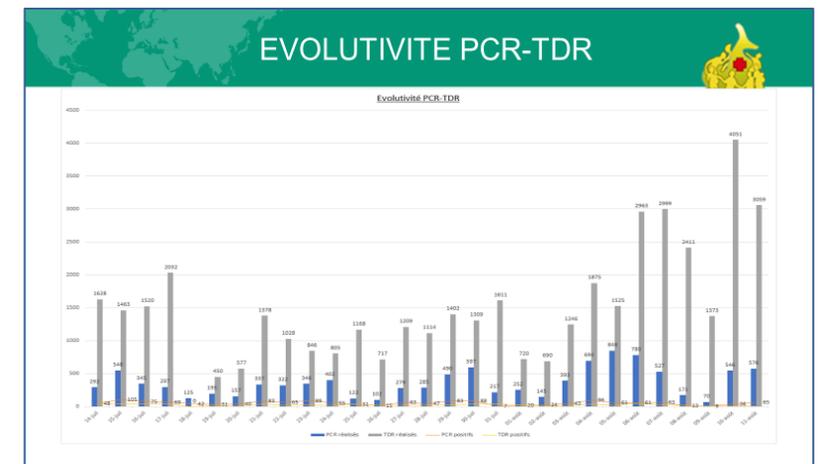
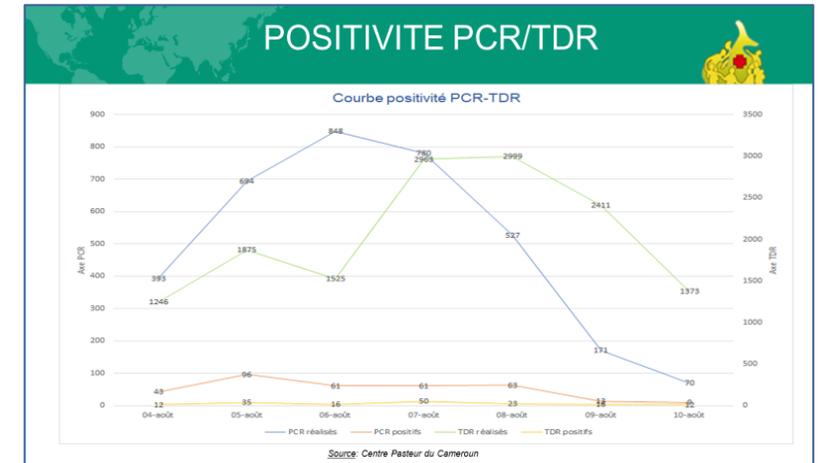
Légende:
 T: A Temps
 R: Retard
 NT: Non Transmis
 NA: Non Applicable (en arrêt)

Timeliness to submit data

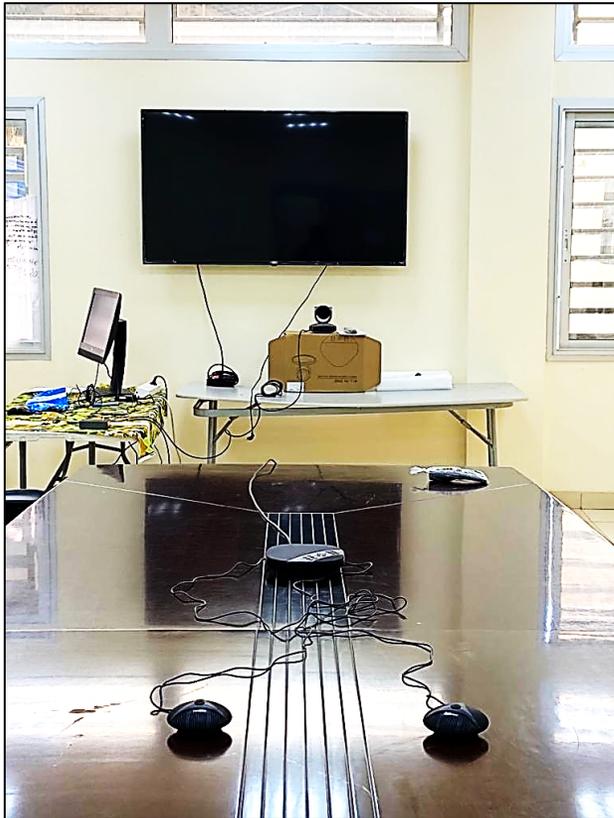
Région	LUNDI 10/08/2020	MARDI 11/08/2020	MERCREDI 12/08/2020
Adamaoua	T	T	T
Centre	T	T	NT
Est	T	T	T
Extrême-Nord	T	T	T
Littoral	T	T	T
Nord	T	T	T
Nord-Ouest	T	T	R
Ouest	T	T	T
Sud	T	T	T
Sud-Ouest	NT	T	NT

Légende:
 T: A Temps
 R: Retard
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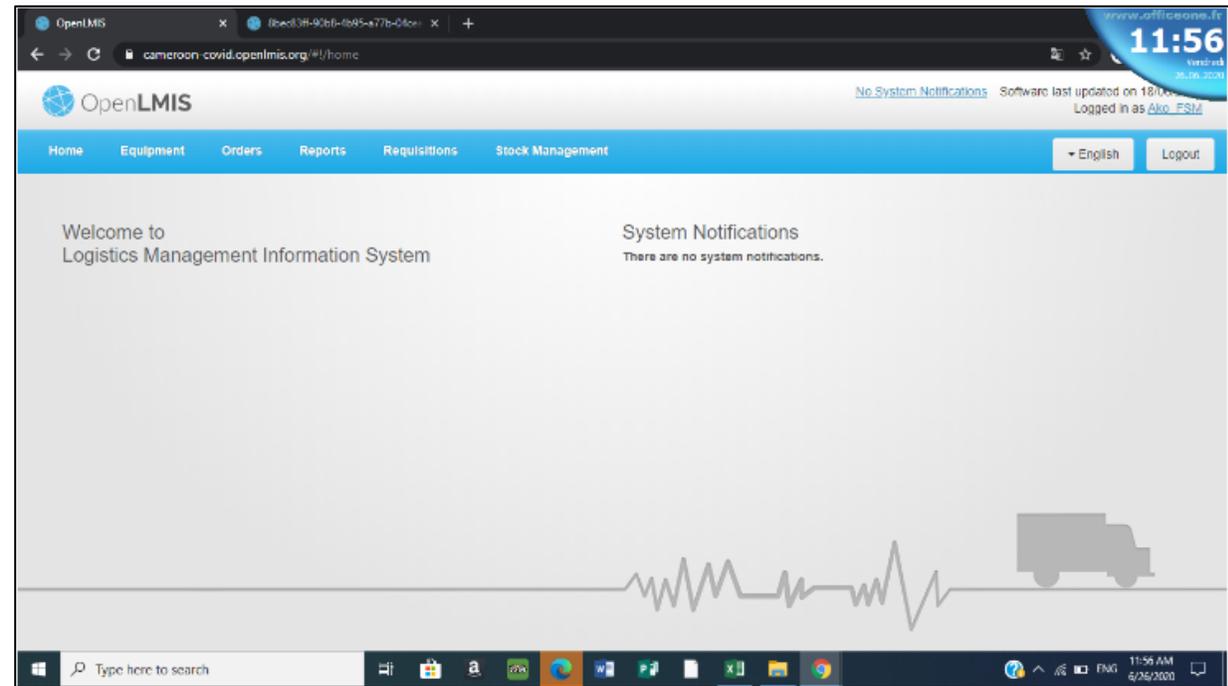
63,488 samples tested



Commodity monitoring solution – thought process to include stock level reporting across all testing labs including management of PPE



Call center set up at NPHL to facilitate coordination and reporting across labs



OpenLMIS tool for monitoring commodity stock levels for real time reporting

Key challenges

-  Delayed procurement – commodities arrive in parts and this affects device throughput and the TAT
-  Limited HR capacity (in quantity) – some staff have been reassigned to support COVID testing
-  Few labs have put in place a 24/7 workflow strategy
-  Data management system pending full scale implementation – this limits real time data visibility

key take-aways

-  No upfront procurement or additional investments in equipment were needed to activate testing
-  Rapid decentralization of COVID -19 testing on the existing OPP network (scaling up from 2 to 15)
-  Flexibility of switching reagents on the OPP platforms ensured limited interruption in testing
-  knowledge on existing lab capacity (personnel and device spare capacity) informed mapping exercise
-  Leveraging on existing LIMS for HIV (EID/VL) to include a module for COVID for real-time visibility
-  Centralized systems for managing commodities – coordinated by the NPHL (with optimal cold storage capacity)
-  Leveraging on existing coordination platforms for improved communication and experience sharing



**Thank you !
Merci !**

