



Leveraging data from CDSS: Using leDA data for national decision making

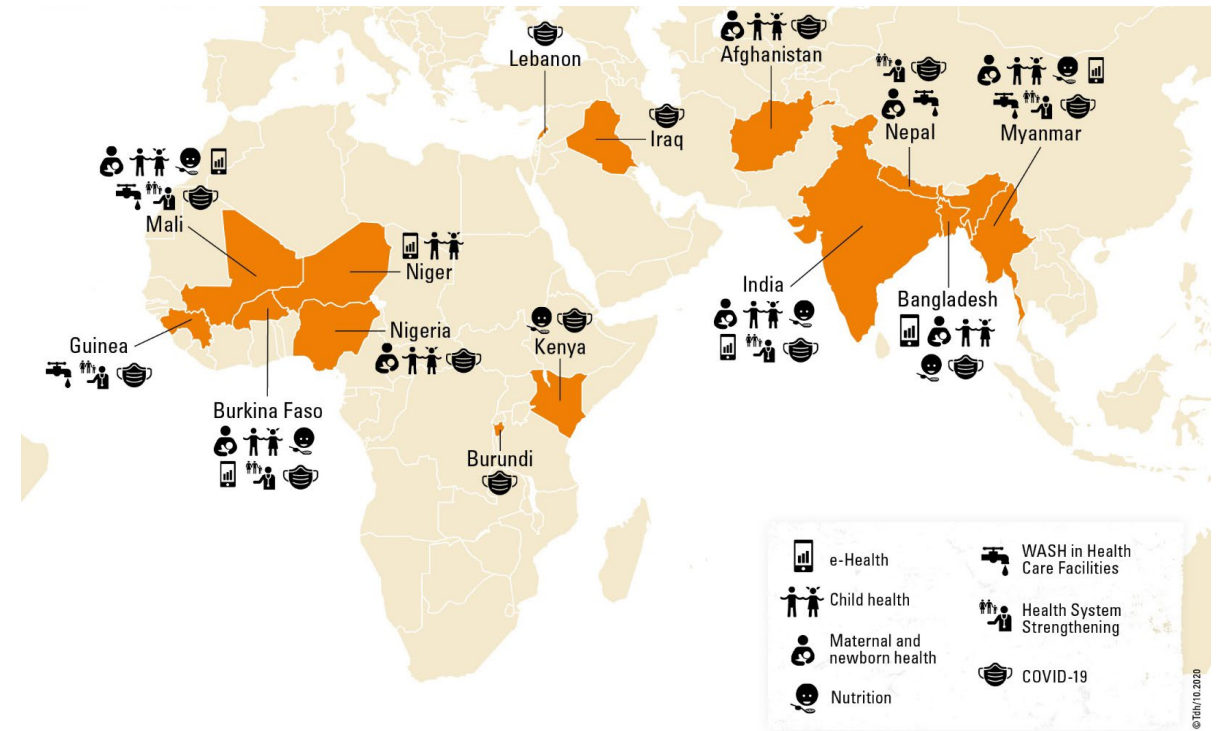
Iveth J. González – Head of Health Programme

Swiss TPH – February 8th, 2023

Terre des hommes foundation (Tdh) is the leading Swiss organization for children's aid since 1960

Health strategic priorities 2021 – 2024:

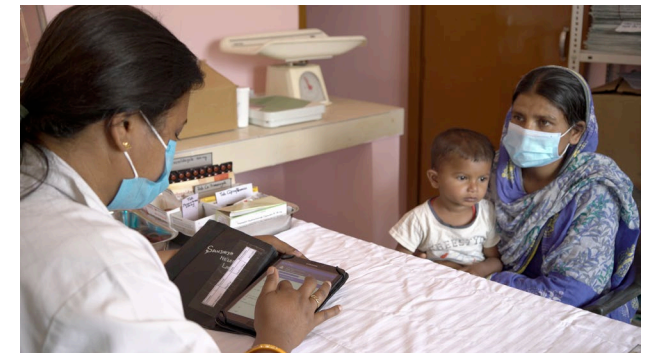
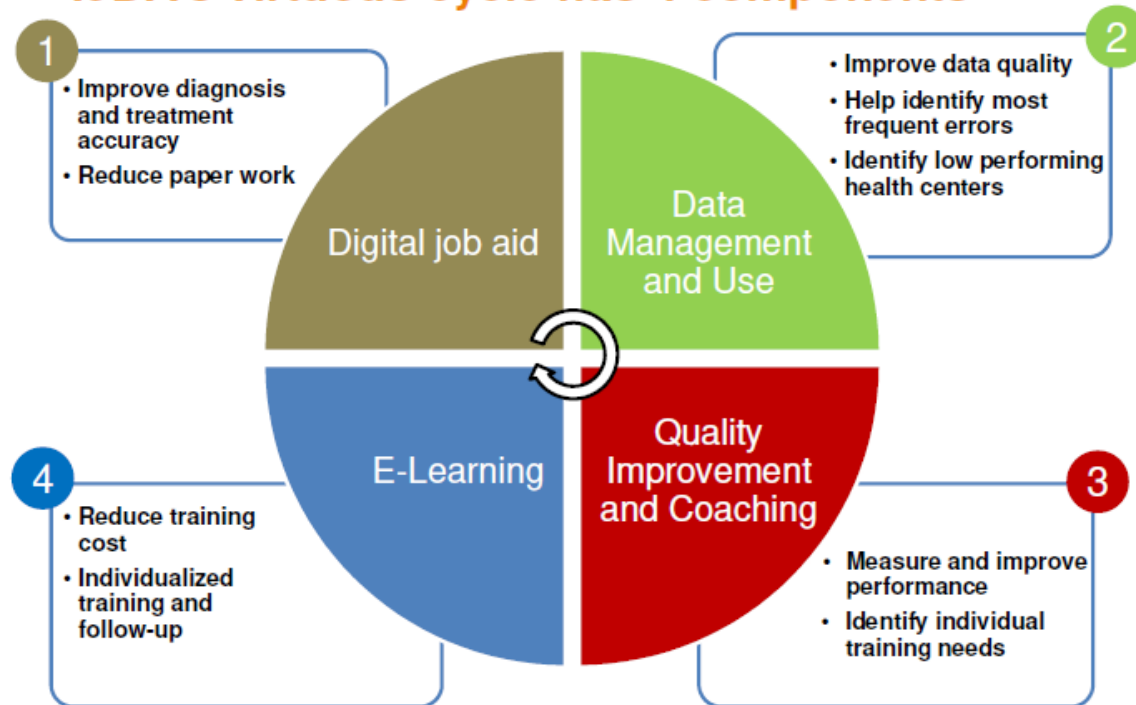
- **Perinatal health**
 - to make a significant difference
- **Health system strengthening**
 - to ensure sustainability
- **Digital health and innovation**
 - as a catalyser for impact



The Integrated e-Diagnostic Approach (leDA) is a decision support for health workers

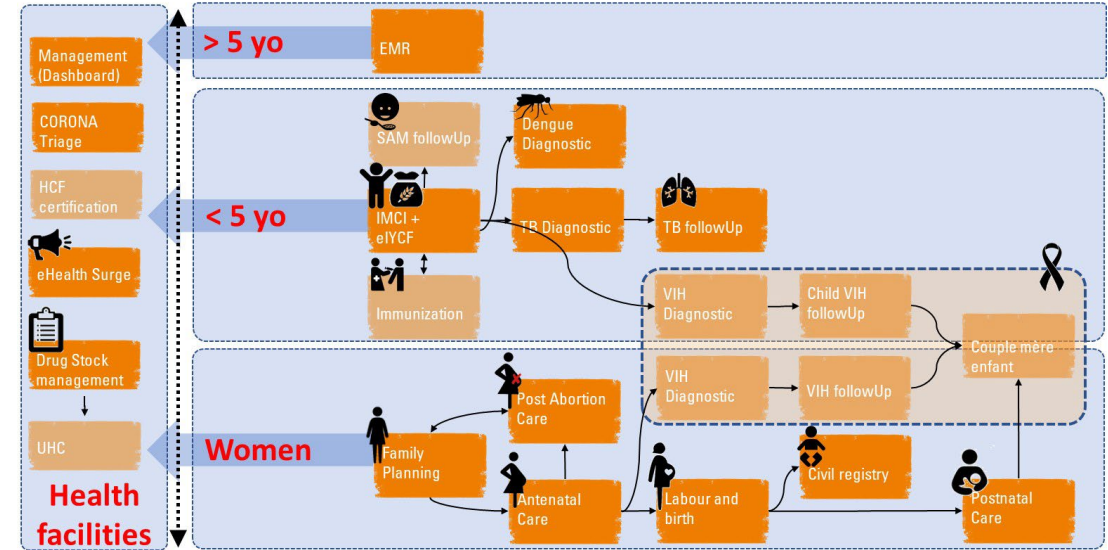
A digital application on tablets built on the WHO protocol for the Integrated Management of Childhood Illnesses (IMCI)

leDA's virtuous cycle has 4 components



leDA is scaled up and having other applications

Projet leDA au Burkina Faso



Burkina Faso

- 60 districts
- 1800 centres
- 6500 workers



Mali

- 2 districts
- 50 centres
- 150 workers



India

- 1 districts
- 67 centres
- 90 workers



Guinea

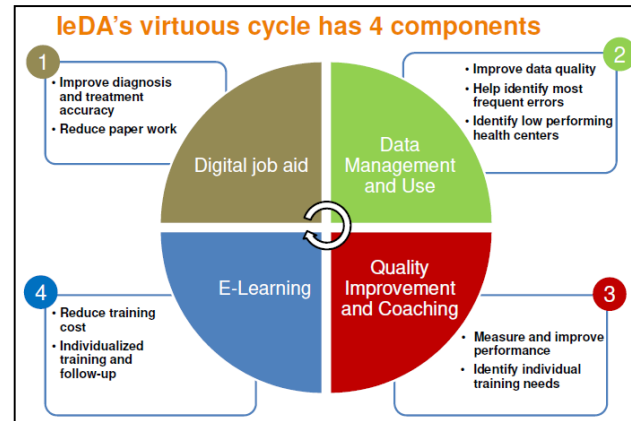
- 3 districts
- 15 centres
- 20 workers



Niger

- 2 districts
- 2 centres
- 5 workers

leDA supports health workers training and supervision



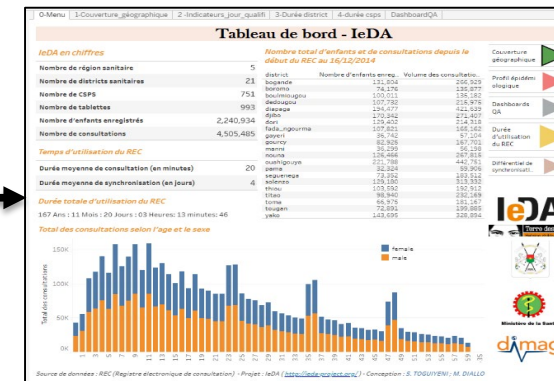
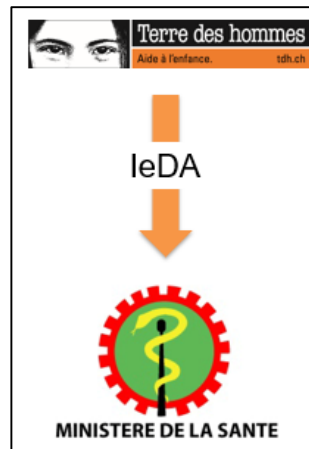
Facilitates adherence to clinical protocols and improved quality of services

1'850+ PHCs use leDA today
(85% of PHCs in Burkina Faso)

8.0 millions+ children registered

6'500+ active users; over 92% of consultations made with the tool

+350'000 consultations per month on average in 2022
18 millions+ of consultations



Is used for evidence-based decision making process

Reports to DHIS2 and Results-Based Financing (RBF) indicators data

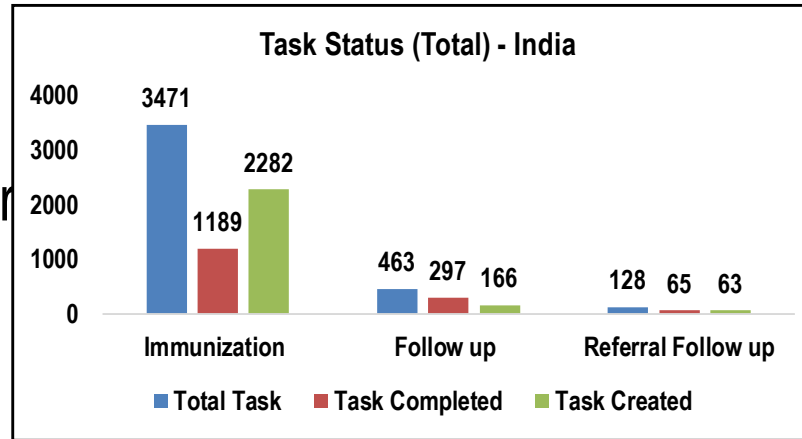


leDA data allows to follow up performance of healthcare workers in real time

- Protocol adherence
- Performance evaluation
- Dashboard for coaching and supervision

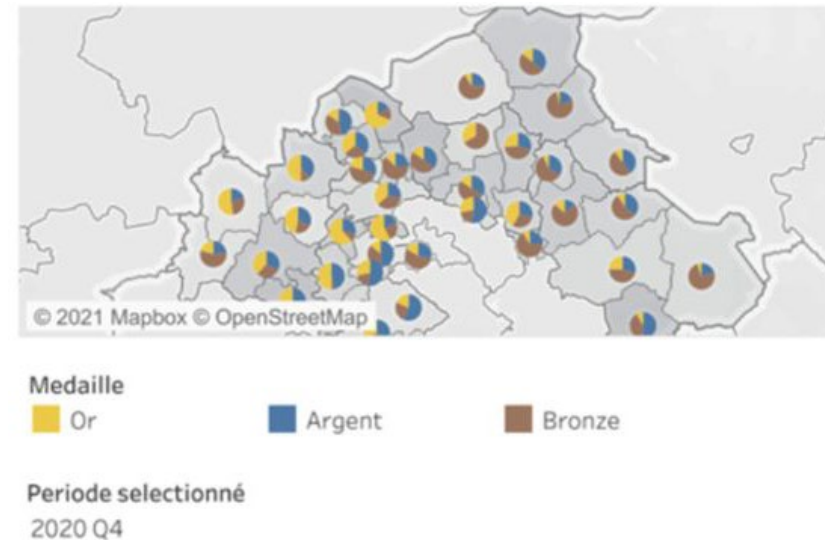
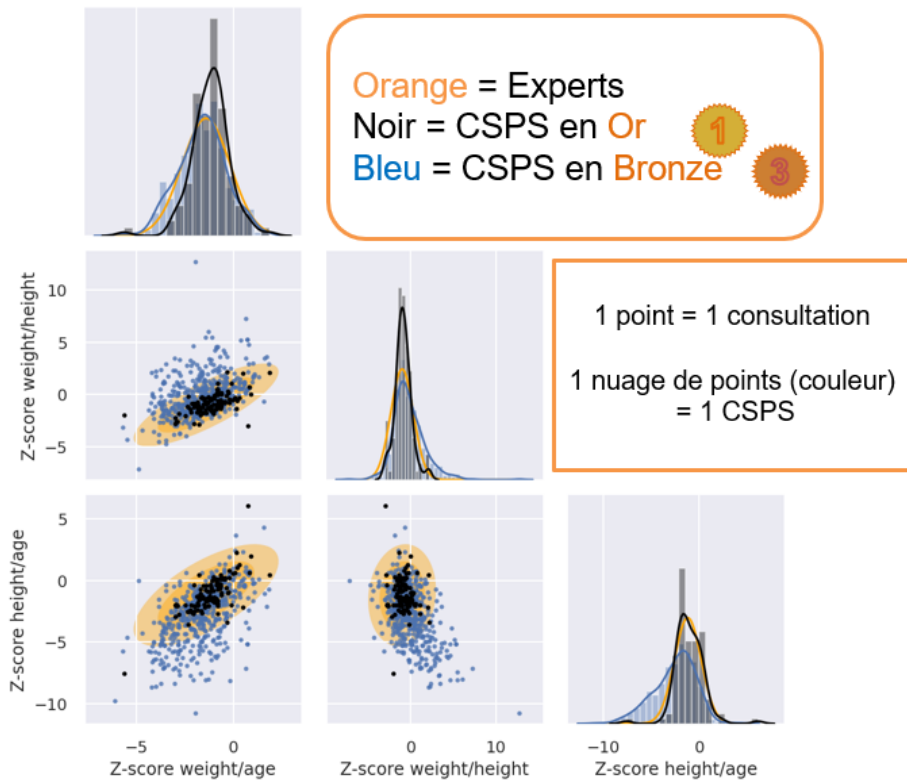
Utilization rate in Burkina Faso:

District	janv-22	févr-22	mars-22	avr-22	mai-22	juin-22	juil-22	août-22	sept-22
Bousse	98%	98%	93%	99%	99%	99%	99%	98%	98%
Ziniare	93%	96%	96%	95%	95%	91%	94%	93%	92%
Zorgho	98%	98%	97%	98%	97%	99%	98%	97%	99%
bittou	96%	100%	100%	100%	100%	98%	100%	100%	99%
tenkodogo	93%	94%	94%	94%	92%	95%	95%	93%	89%
garango	93%	95%	97%	97%	96%	90%	94%	97%	95%
koupela	99%	98%	99%	97%	100%	98%	100%	99%	99%
pouytenga	99%	99%	100%	100%	100%	100%	100%	96%	99%
ouargaye	98%	99%	100%	100%	100%	100%	100%	98%	97%
zabré	94%	97%	100%	100%	100%	100%	100%	100%	100%
Daffra	99%	99%	99%	99%	99%	100%	98%	95%	97%
Dandé	99%	99%	100%	100%	100%	100%	100%	100%	100%



leDA supports the evaluation of primary healthcare facilities (PHCFs) performance

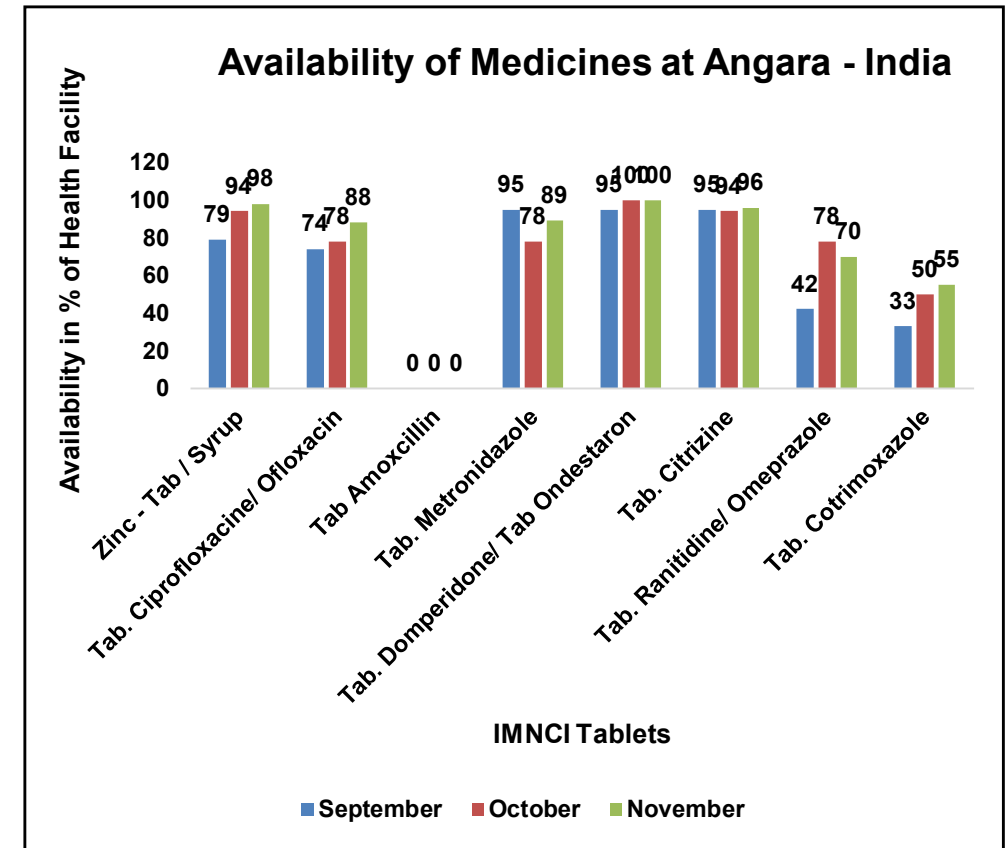
Assessment of PCHFs based on the distribution of anthropometric measurements and vital signs entered in leDA (AI & machine learning)



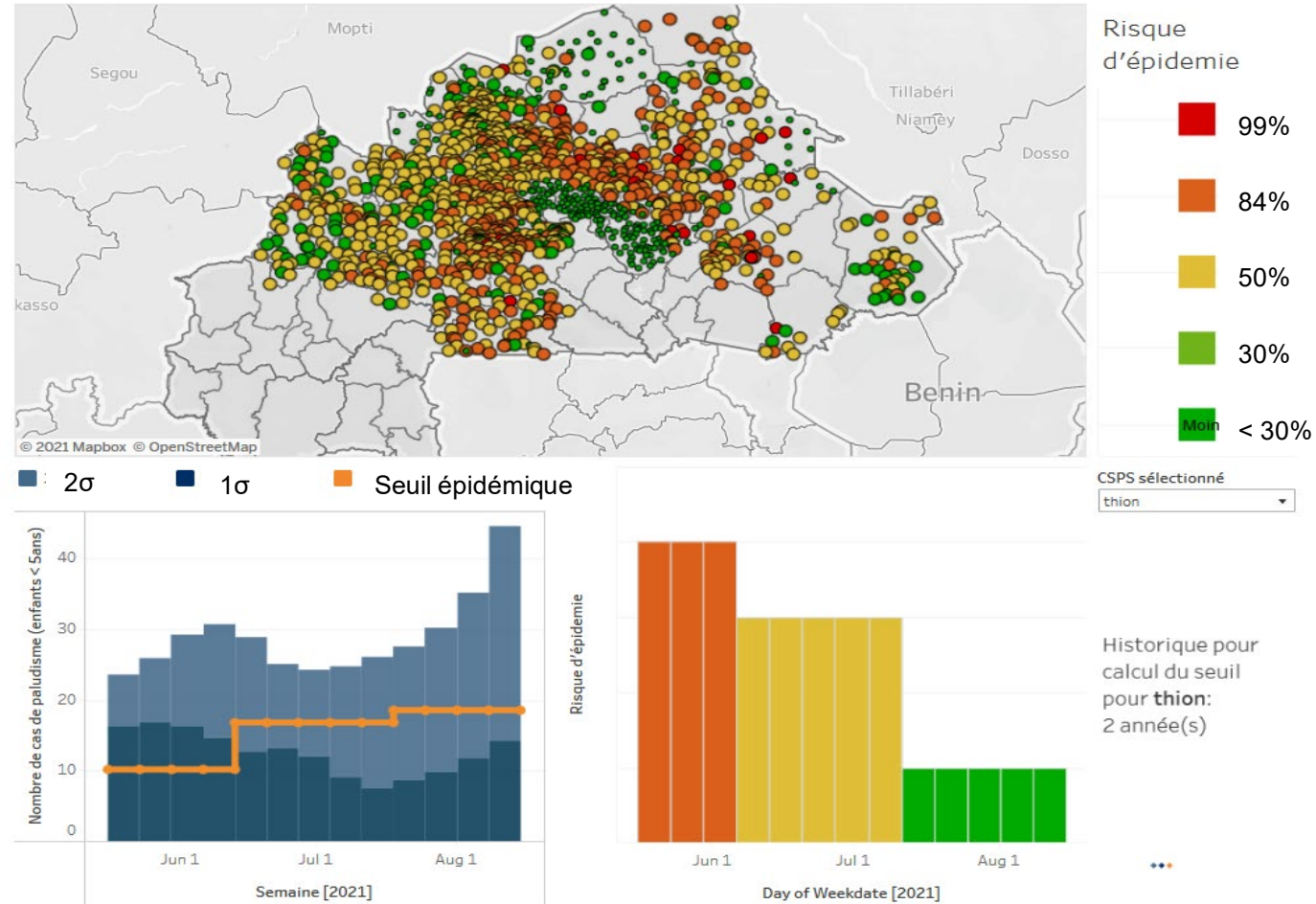
Dynamic dashboard presenting an overview of the PHCF scores distributions

leDA contributes to pharmacy management at primary healthcare facilities

- Real-time **tracking of individual medicines** by block and PHCFs levels
- Improved **management of stocks** to avoid rupture and the expiration of stocks (Gestock)
- **Health workers are informed in real time** of the availability of drugs in the pharmacy



leDA provides predictive models for surveillance and response

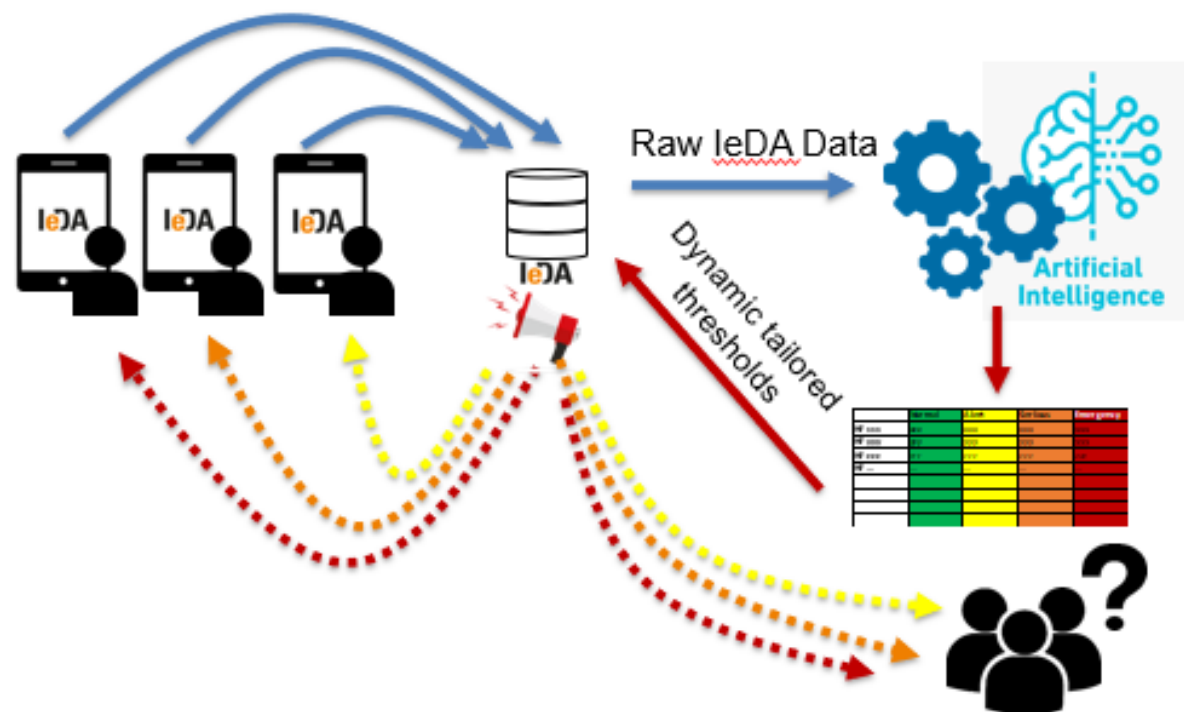
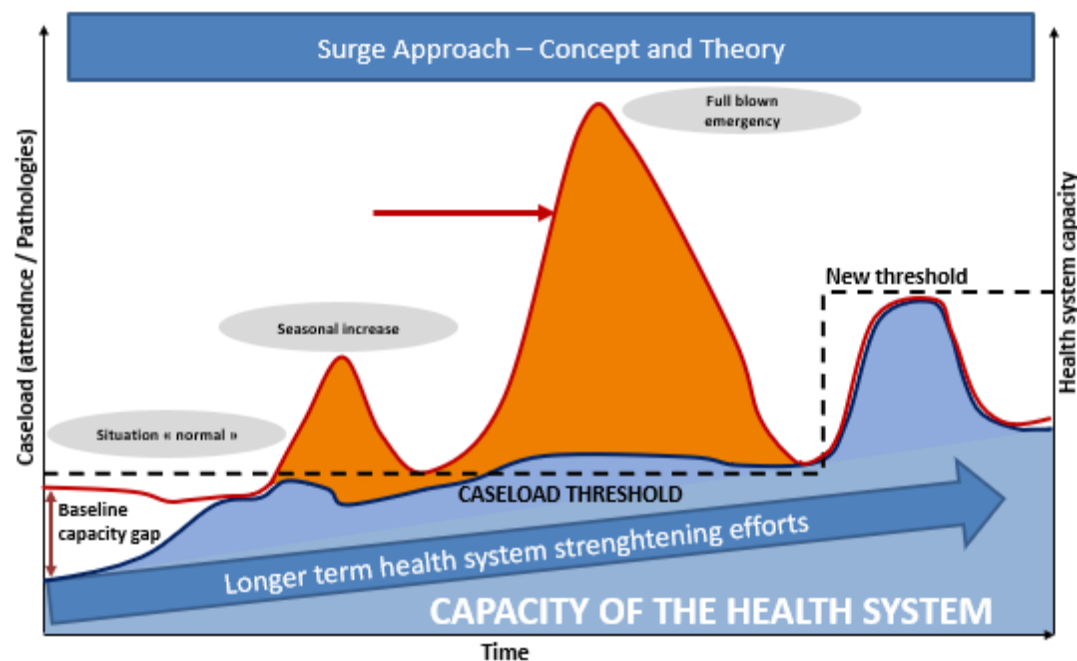


Harvey D, Valkenburg W, Amara A. Predicting malaria epidemics in Burkina Faso with machine learning. PLoS One. 2021 Jun 18;16(6):e0253302.



leDA is a tool for emergency response – eHealth Surge

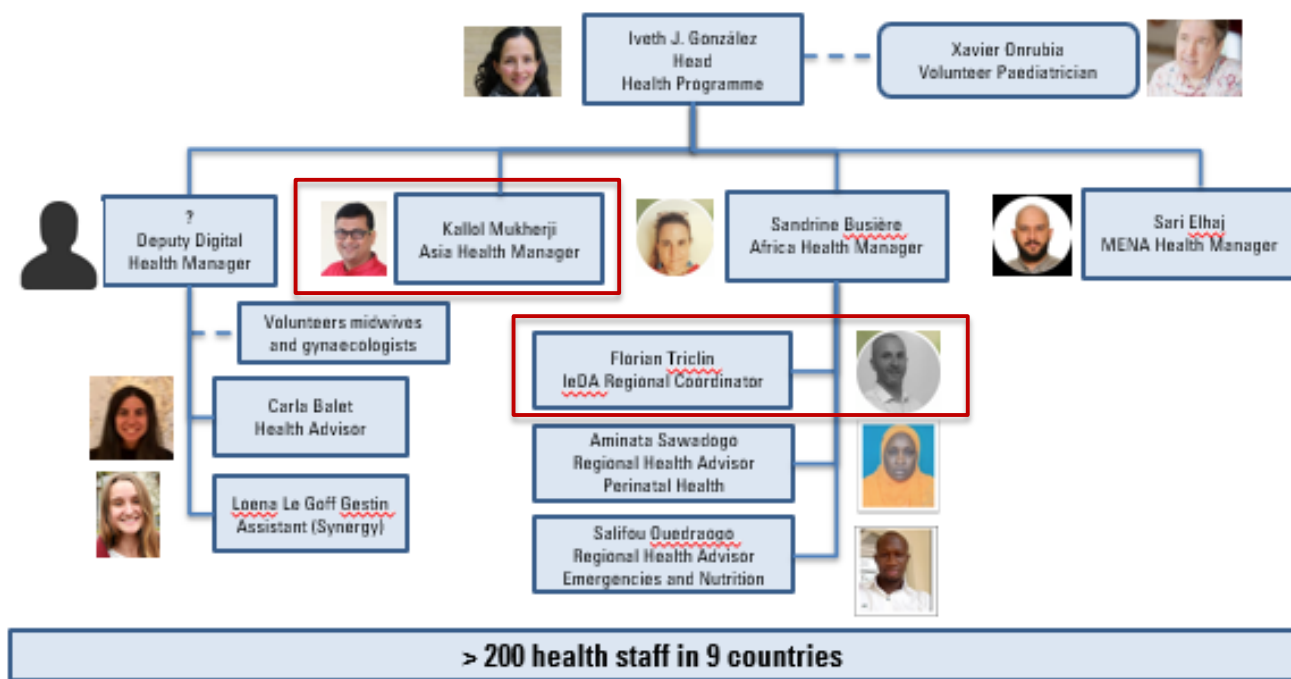
leDA data and machine learning algorithms triggering **emergency response based on thresholds** (number of consultations vs available resources)



Tdh will continue to leverage digital health data to:

- Support **health system strengthening** by improving quality of care and health information systems
- Contribute to **Universal Health Coverage**:
 - Support free health care (under-5 and pregnant women)
 - Analysis of real costs of primary health services
 - Improved planning of health staff, supplies, and finances
- Facilitate **epidemiological surveillance and emergency response** in real time

Team and collaborative work at international, regional and national levels





Thank you for your attention and questions

