

April 2020 Global Digital Health
Network meeting:
Multi-Stakeholder Approach to
Digital Health & Nutrition
Amidst COVID-19 Response



April 30, 2020

Speakers

- Miriam Chang, Nutrition Technical Specialist, WorldVision
- Riccardo Lampariello, Head of Health, Terre des hommes
- Marelize Gorgens, Senior Specialist - Decision Science & Artificial Intelligence, World Bank
- Claudia Juech, CEO & President, Cloudera Foundation





Multi-Stakeholder Approach to Digital Health & Nutrition Amidst COVID-19 Response ALeDIA: Alliance for e-Diagnostic

Miriam Chang
Nutrition Technical Specialist
World Vision Canada

Global Digital Health Network
Meeting
April 30, 2020



Terre des hommes
Helping children worldwide.

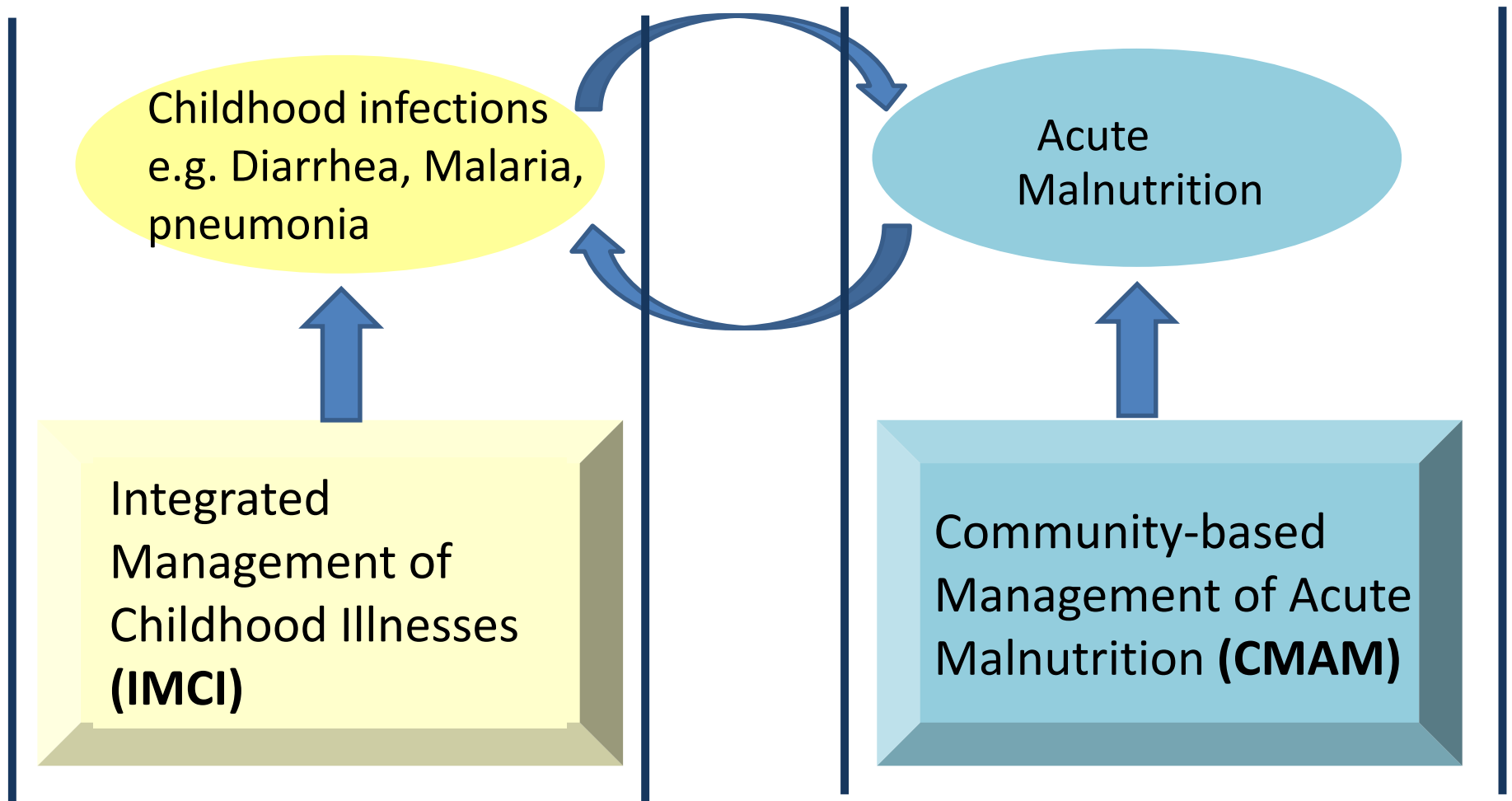


ALeDIA (Alliance for e-DIAgnostic)

- A partnership between Tdh, World Vision and Action Against Hunger
- Launched at the WHA 2018
- Shared interests include
 - Improving health and nutrition outcomes of children
 - Health systems strengthening

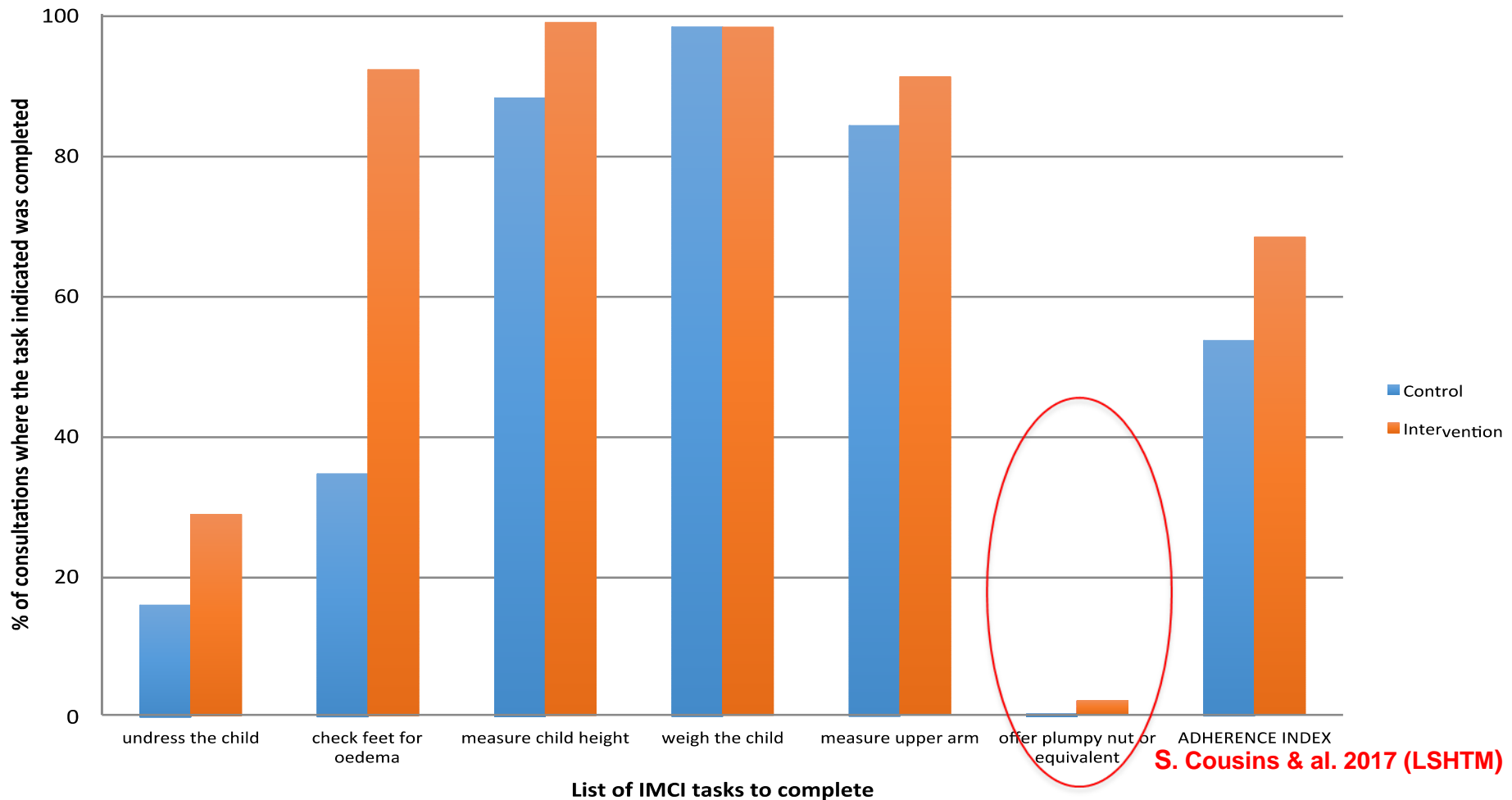
Malnutrition contributes to about 45% of the 5.3 million deaths among children under 5 years of age (2018)

Two effective treatment protocols exist:



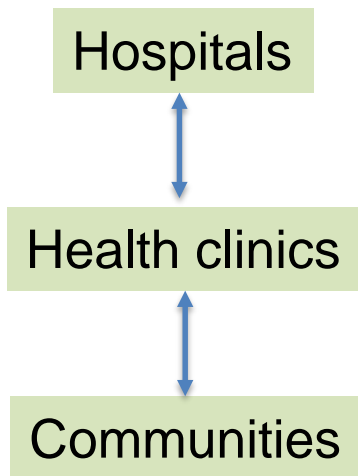
Protocol adherence is low and often not well coordinated

- Misclassification of nutritional status
- Appetite test upon admission of severe acute malnutrition not always performed
- Delayed prescription of ready-to-use therapeutic food (RUTF)



Protocol adherence is low and often not well coordinated

- Infrequent, inconsistent counselling on recommended feeding practices, health and hygiene behaviours
- Loss to follow up +++; defaulters, difficulty tracking referrals and counter-referrals



- Challenges with paper registers

COVID-19 Aftershocks: Secondary Impacts Threaten More Children's Lives Than Disease Itself



<https://www.wvi.org/publications/covid-19-aftershocks-secondary-impacts-threaten-more-childrens-lives-disease-itself>

Analysis based on:

- Secondary impact of Ebola crisis in 2014-16 in 3 countries
- Existing need in 24 countries prioritised by UN Global Humanitarian Response Plan COVID-19

⇒ Estimate: As many as **30 million** children's lives threatened by secondary health impacts of COVID-19, e.g.

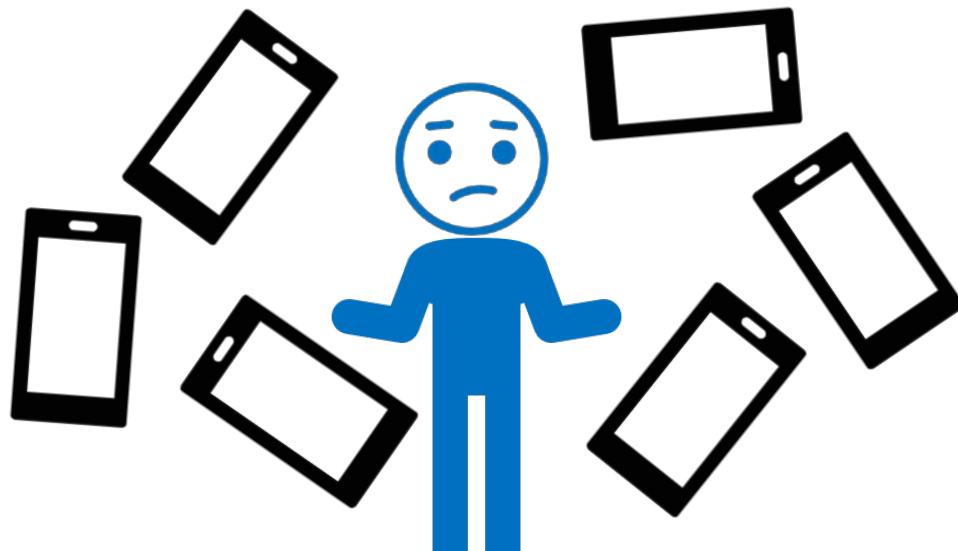
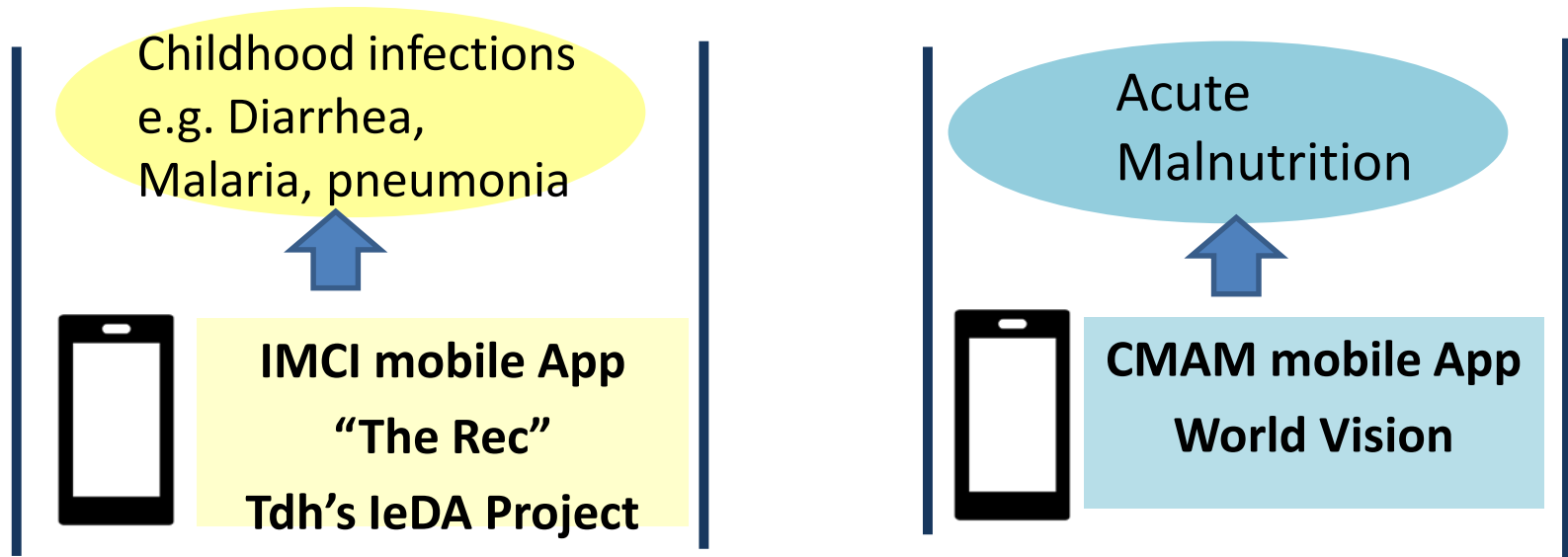
- Increase in malaria
- decreased immunization
- increased malnutrition
- health systems are overwhelmed by COVID-19 patients



ALeDIA (Alliance for e-DIAgnostic)

- Shared interests:
 - ✓ Using technology to improve treatment protocol adherence and support health workforce capacity building
 - ✓ Improve diagnostic and treatment of childhood illnesses and malnutrition with an **Integrated IMCI+CMAM digital solution**
 - Improve health and nutrition outcomes
 - Strengthen health systems

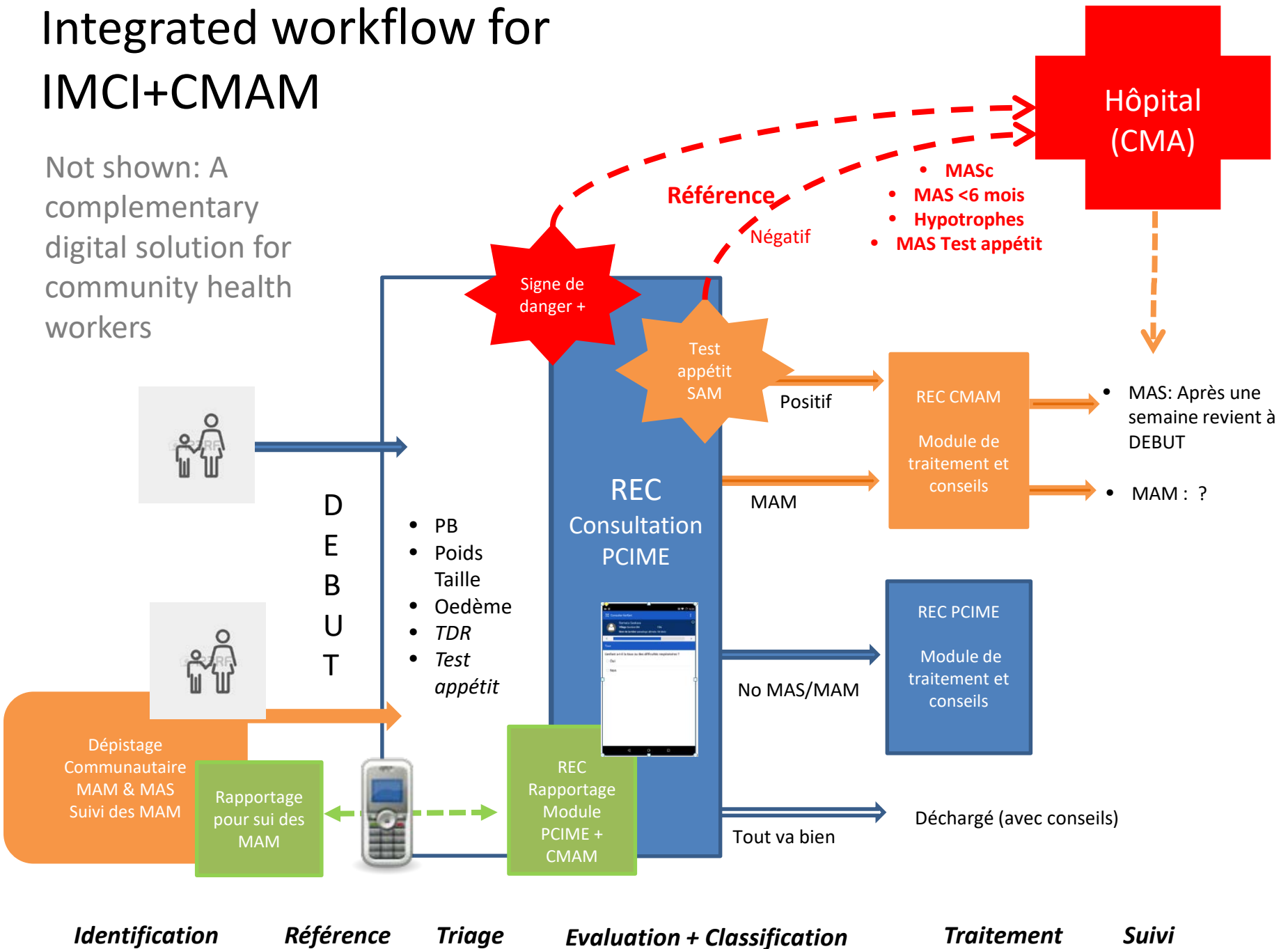
The stand-alone mobile apps already exist





Let's reduce
FRAGMENTATION!

Integrated workflow for IMCI+CMAM

Not shown: A complementary digital solution for community health workers



ALeDIA Consortium

“Alone we go fast,
Together  ← 2m →  we go far”

Ministries of
Health

Research
institutions

Technology
partners

Mobile
network
operators

Donors





Thank
you





Multi-Stakeholder Approach to Digital Health & Nutrition Amidst COVID-19 Response

Apr 30th, 2020

Riccardo Lampariello

Head of Health

1



Terre des hommes

Helping children worldwide.

Terre des hommes

the leading Swiss organization for children's aid





Since 2010, Terre des hommes and the Ministry of Health of **Burkina Faso** have co-created a **job-aid tool** digitalizing a **medical protocol (IMCI)** for **children at primary healthcare facilities**



leDA is a rare example of digital solution at scale in Sub-Saharan Africa



1'189 PHC use leDA today
(62% of PHCs in Burkina Faso)



6,390+ active users; over
92% of consultations made
with the tool



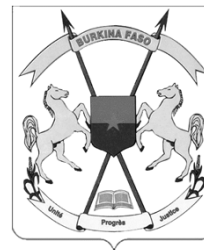
2.8 million children registered
(> 14% of total population)



~200,000 consultations per
month on average,
6.0 M consultations (Feb '20)



Deployed in **Mali** (2 districts),
just launched in **Niger**

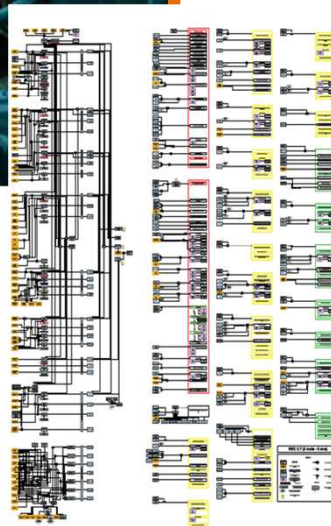
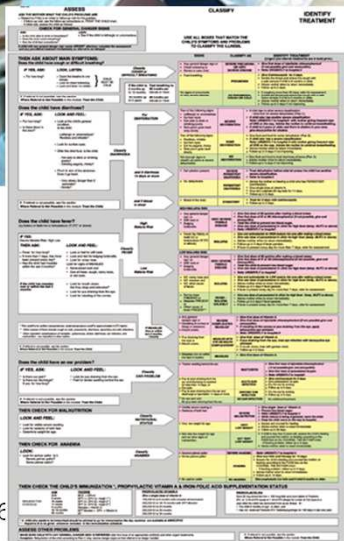
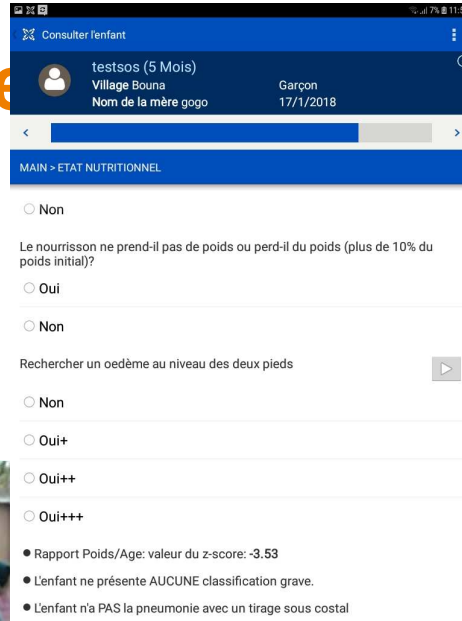


MoH takes over by end of
2020

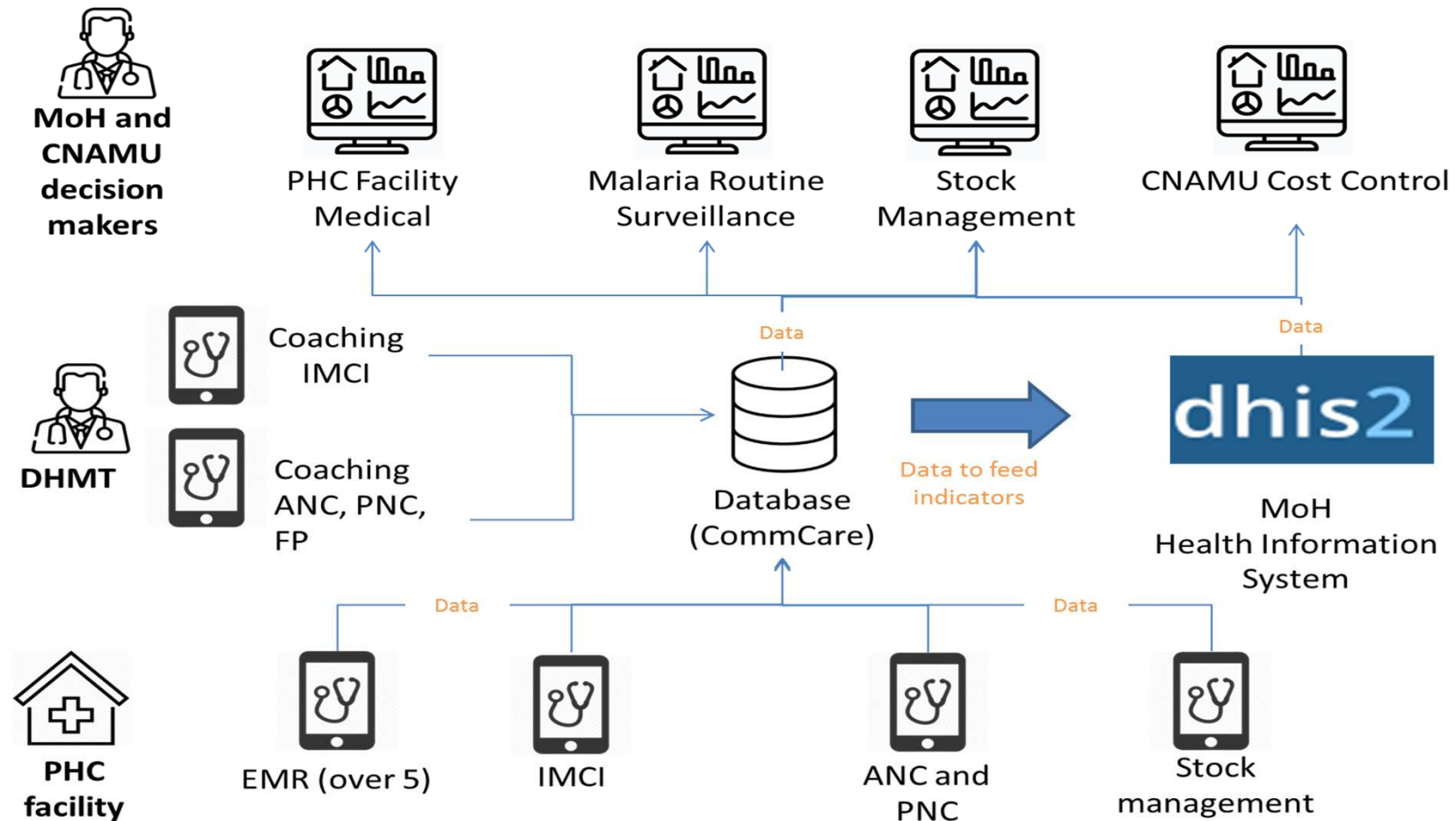
Digitization: the «easiest» initial step



Digitization: the «e» step



Integration is a prerequisite to reduce fragmentation and to scale-up



7 Some of the apps are currently under development



Scaling-up: other key factors



- MoH on board from the beginning
- Long term vision ... and tenacity
- Engagement by all stakeholders
- Medical relevance & impact
- Cost
- **Partnerships**



If you want to go quickly, go alone.

If you want to go far, go together. (African proverb)

Logos for various organizations in the OPERATIONS category:

- dmagi
- World Vision
- Logo of the Swiss Confederation
- FIND: Because diagnosis matters
- ACTION CONTRE LA FAIM
- alive&thrive: nourish. nurture. grow.
- Inserm
- ALIMA: THE ALLIANCE FOR INTERNATIONAL MEDICAL ASSISTANCE
- Solthis: Therapeutic Solidarity and Initiatives for Health

OPERATIONS

Logos for various organizations in the RESEARCH category:

- LONDON SCHOOL of HYGIENE & TROPICAL MEDICINE
- Swiss TPH
- heds: Haute école de santé Genève
- HESAV
- CHUV
- UNIVERSITÉ DE GENÈVE
- HUG: Hôpitaux Universitaires Genève
- EPFL
- JOHNS HOPKINS UNIVERSITY

RESEARCH

Logos for various organizations in the MAIN SPONSORS category:

- giz
- Humanitarian Aid (European Union flag)
- CLOUDERA Foundation
- Schweizerische Eidgenossenschaft / Confédération suisse / Confederazione Svizzera / Confederaziun svizra
- Unitaid
- The Global Fund: To Fight AIDS, Tuberculosis and Malaria
- EUROPEAID (European Union flag)
- BILL & MELINDA GATES foundation
- ITU
- tableau SOFTWARE

MAIN SPONSORS

To foster further integration and scale-up: an Alliance for e-Diagnostic (ALeDIA)

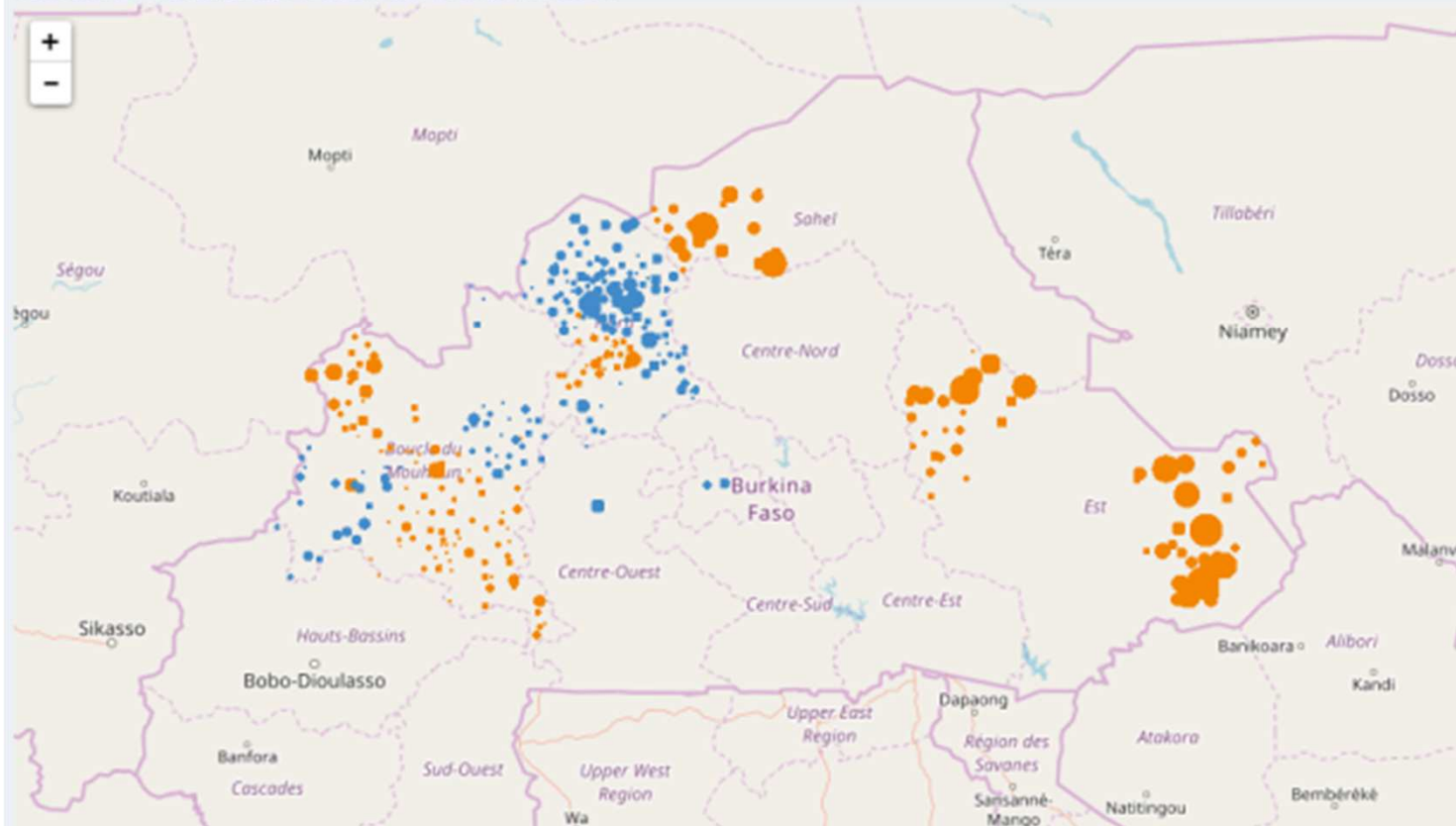
A partnership with **World Vision** and **Action Against Hunger** with the aim to:

- **Reduce clinical fragmentation** (two medical protocols & 3 healthcare levels)
- **Reduce digital fragmentation** (larger footprint and data standardisation)
- **Increase efficiency**



Integration helps address COVID - 19

En orange, CSPS avec une date de demarrage superieure à 2017-01-01. La taille des points est proportionnelle au nombre de consultations realisees le mois dernier.



Terre des hommes
Helping children worldwide.

THANK YOU

leDA

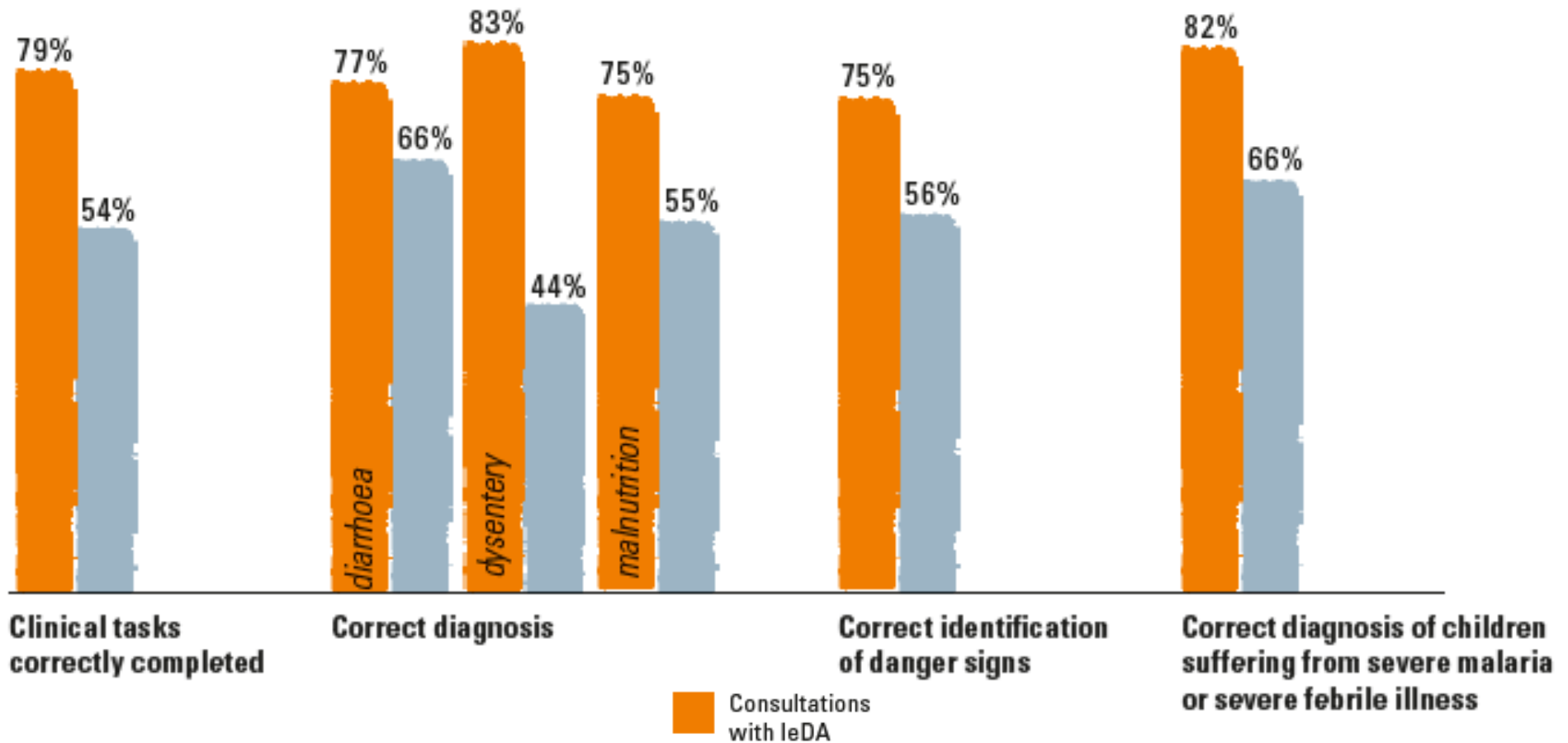


BACK UP slides

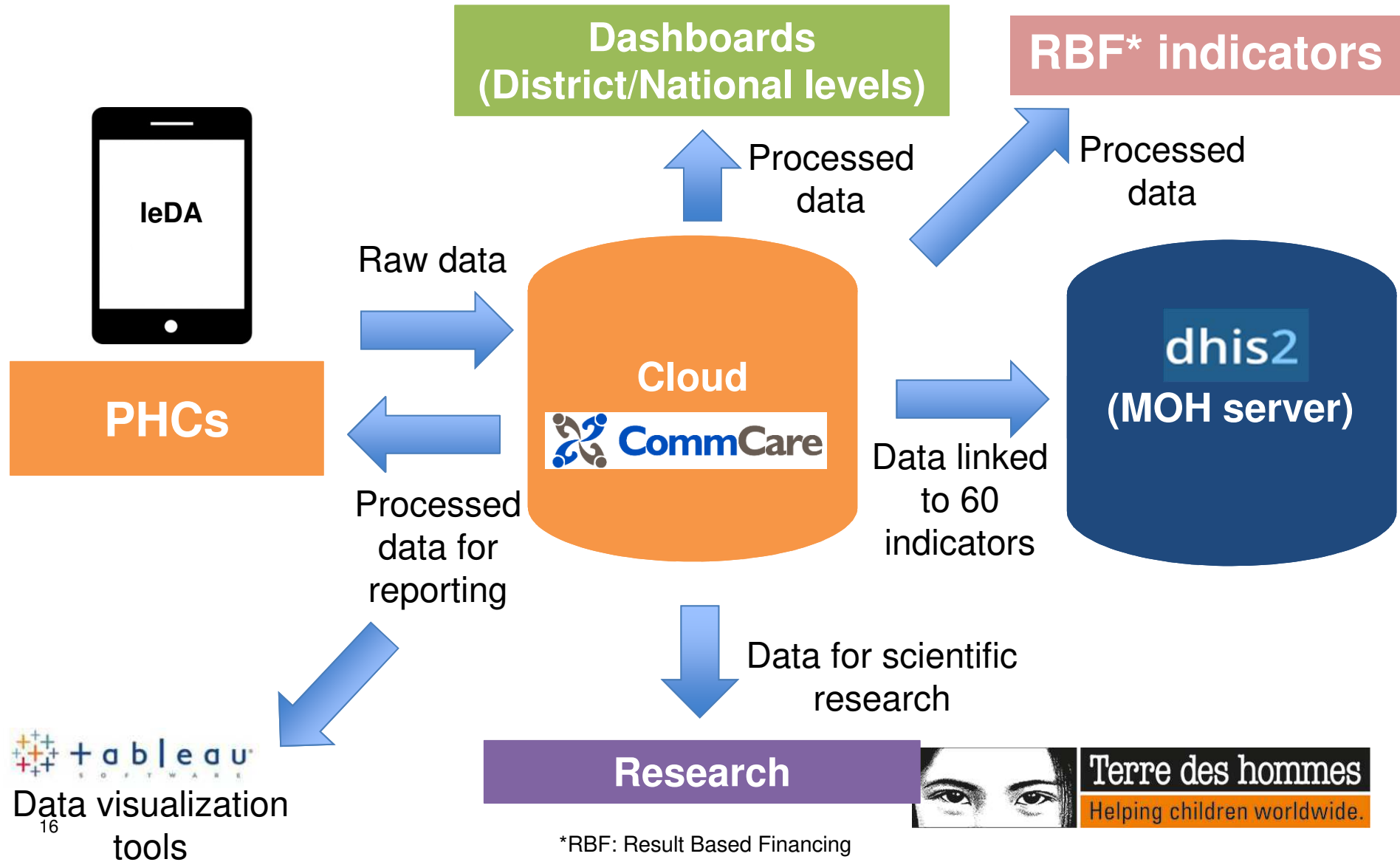
Scaling up leDA in Burkina Faso will lead to savings for the MoH

- **Net savings in operating costs are estimated to be between 33.2 \$ and 66.3 \$ per health centre per month**
- Further economies of scale are expected when the transfer of leDA to the Minister of Health will be effectively in place
- Not included societal costs
- Not included synergies

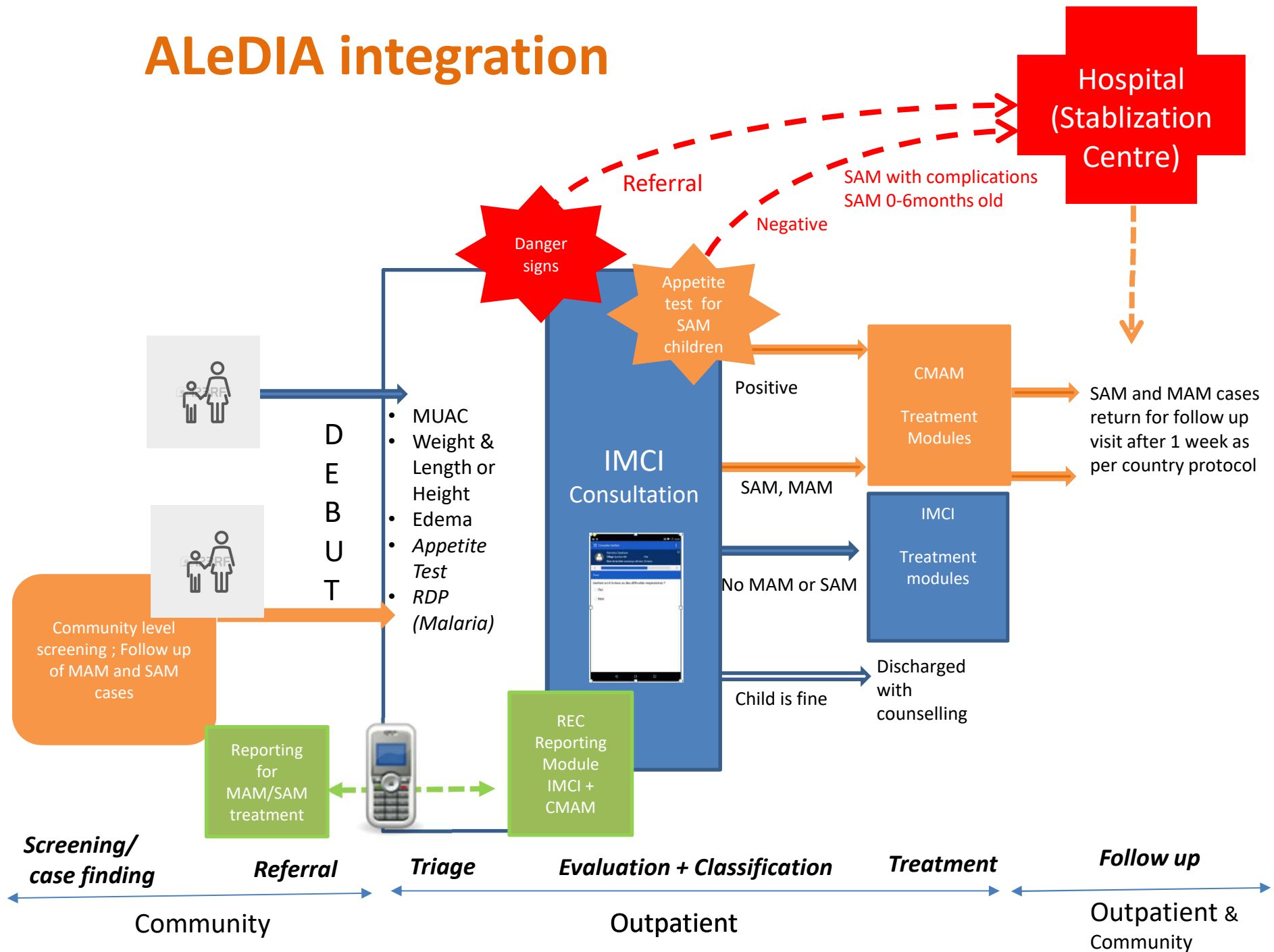
Impact study shows a significant improvement compared to paper based



Data management system



ALeDIA integration



CLOUDERA FOUNDATION

MULTI-STAKEHOLDER APPROACH TO DIGITAL HEALTH & NUTRITION AMIDST COVID

April 30, 2020

Claudia Juech
CEO and President

WHO WE ARE

OUR MISSION:

Enable nonprofits around the globe to use data and data analytics to improve people's lives and protect the planet

- An independent 501(c)(3) nonprofit, NOT a nonprofit sales organization
- Created in 2017 by Cloudera, Inc., an enterprise data cloud company
- Senior team has international experience in data, technology and the needs of nonprofits
- Work across all fields, sectors and geographies

UNCONVENTIONAL DATA SOURCES



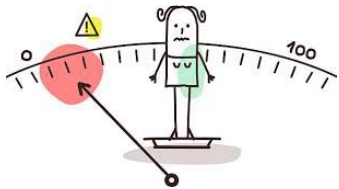
Census

2015

Fill in gaps

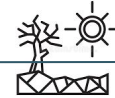


2021

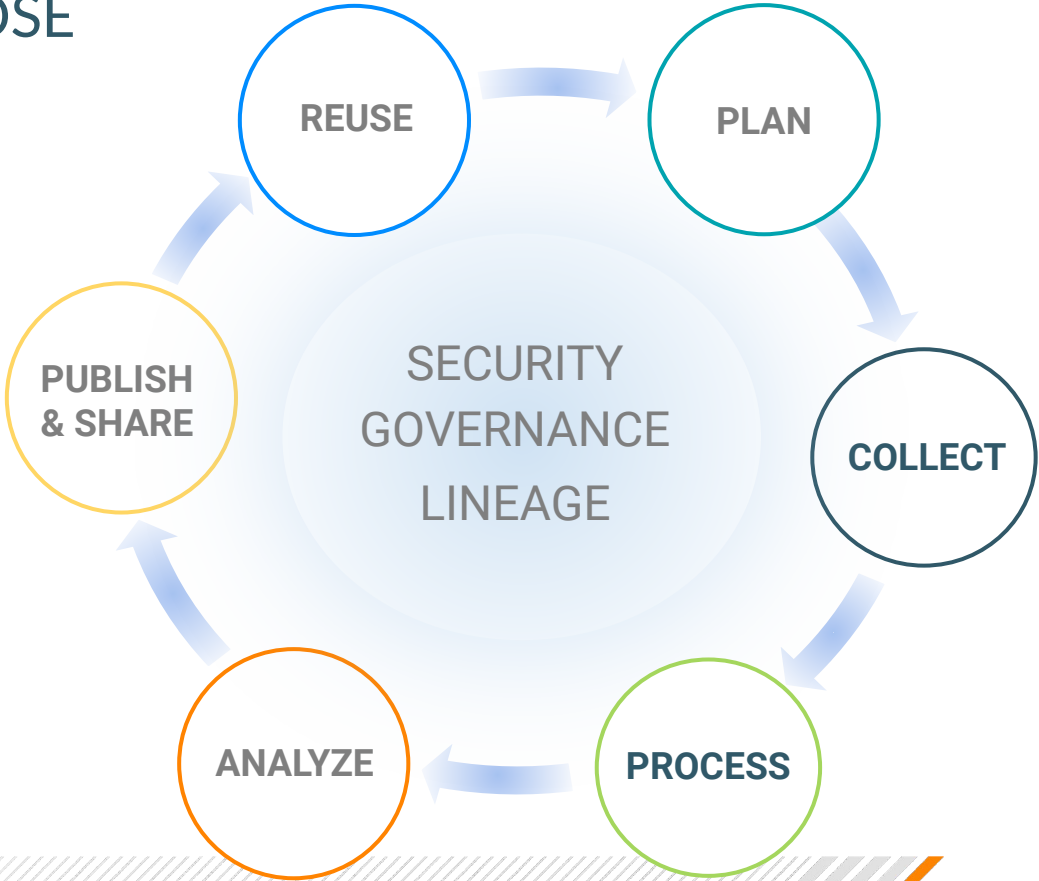


Malnutrition

Complement and enrich



FIT FOR PURPOSE

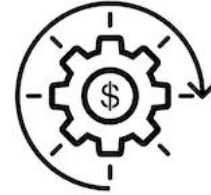


SCALE



> 5 million consultations

Question of data volume
optimal for predictive and
ML uses



Reducing duplication

Device, training, data related
expenses – using constraint
resources most effectively

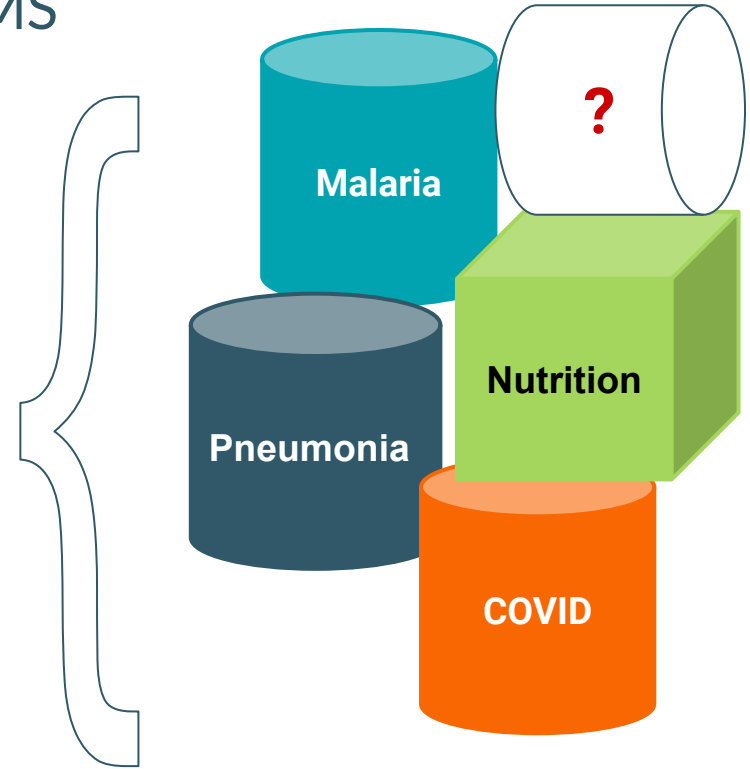
STRENGTHENING HEALTH SYSTEMS



Future Trends

Early Warning

Linkages



THANK YOU

CLOUDERA FOUNDATION

Email: shareyouridea@clouderafoundation.org

www.clouderafoundation.org