

HOW STATE-OF-THE-ART ID SOLUTIONS CAN CONTRIBUTE TO NATIONAL HEALTH

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ZETES – ID solutions for you

Voter's Registration

Population census

ID

e-passport

driver's license

Population Register

Intelligent Border Control

HEALTH



Universal Health Coverage

- **GOALS :**

- Guarantee an easy and low cost access to quality health care services for the people in Ivory Coast(24 Mi)
- Contribute strongly to the improvement of the health status and the living conditions of the population
- Ensure a sustainable self-financed healthcare system in Ivory Coast

KEY highlights

- ❖ 400 kits incl Zetes PRS for enrolment solution
- ❖ A very modern enrolment center
- ❖ A secure biometric health card
- ❖ 2500 mobile terminals for coverage check with ZETES application



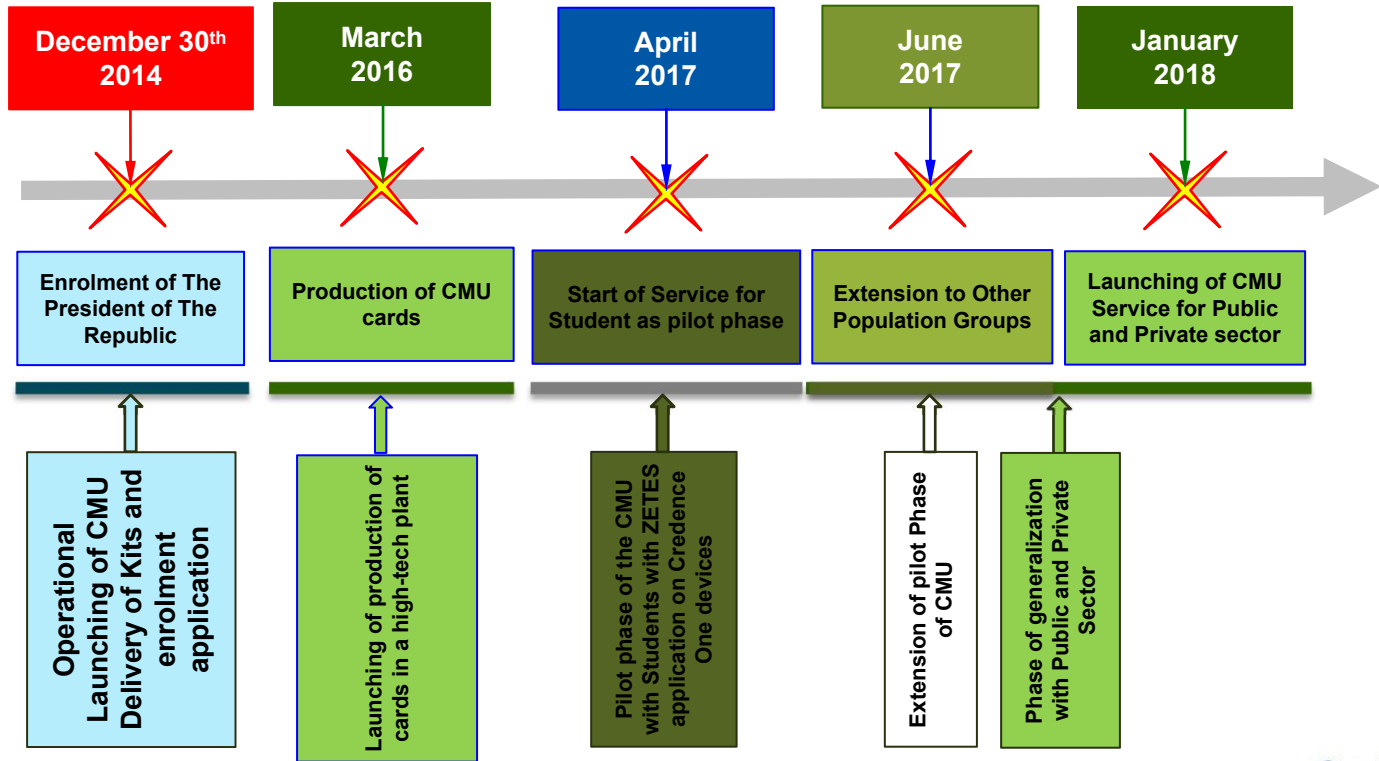
Universal Health Coverage

CNAM is supported by :

- Technical partners
 - SNEDAI is the prime contractor
 - ZETES is the partner for full biometric ID solution
 - Enrolment Solution
 - Centralisation
 - Secure Card production
 - Biometric Solution for applicant rights checking
 - CEGEDIM is providing health insurance Information System
- Delegated Management Organism for
 - Subscription
 - To collect applicants contribution
 - To transfer it to CNAM treasury
 - Allowance
 - To subsidize applicant's fees
 - To be reimbursed by CNAM



CNAM - KEY DATES & FIGURES



Biometric identification as enabling technology in healthcare

Solutions in a resource limited setting



Serge Masyn, Global Public Health R&D, Johnson & Johnson

On behalf of EBODAC, a collaboration between London School of Hygiene & Tropical Medicine, Janssen Pharmaceutical Companies of Johnson & Johnson, World Vision Ireland and Grameen Foundation

Global Public Health at J&J

We aspire to make a lasting difference in human health by addressing comprehensive health needs and delivering meaningful and enduring impact.

7 Principles GUIDING OUR GLOBAL PUBLIC HEALTH STRATEGY



DEMONSTRATE
better health outcomes
in the real world



BUILD
holistic solutions to deliver
our products/services



BE PARTNER OF CHOICE
for global and
local organizations



ANCHOR
every intervention around
evidence base



FOCUS
on long-term sustainability



SUCCESSFUL TRANSFER
of projects to local ownership



ENSURE
scalability beyond proof
of concept

Ebola in Sierra Leone

The Ebola epidemic claimed over **11,000** lives in West Africa since 2014, including **3,900 deaths** in Sierra Leone

Over **500 healthcare workers** have died
Health care systems **devastated**

Suspicion and **distrust** of affected populations



Photo: S. Masyn

Source: Ebola Situation Report (02/09/2015) (<http://www.who.int/csr/disease/ebola/en/>)

Acknowledgement

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MEDICINE



Janssen
PHARMACEUTICAL COMPANIES
OF Johnson & Johnson



World Vision



efpia



imi | innovative
medicines
initiative

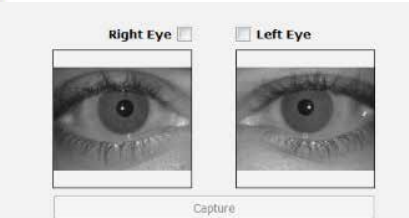
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EBODAC Ebola vaccine Deployment, Acceptance and Compliance

Ensuring the prime-boost vaccine regimen is well accepted & successfully deployed amongst communities in West-Africa



Develop and implement community engagement strategy



Develop and install identification tools



Implement mobile technology

Capacity building

- Technical training and expertise in biometric identification and mobile technology
- Community engagement training



Identification - High Level Requirements

- Janssen Ebola Zaire vaccine **under investigation** is a **two-dose regimen**
- **Uniquely identify** the participant on each clinic visit
- Reliable and robust method, simple and pragmatic
- Emotionally, **culturally accepted**
- Preferably **avoid contact**
- **Avoid pass on/circumvention** possibilities
- Low Complexity architecture, **scalable**
- Low cost of ownership relative to campaign cost per participant



Photo: S. Masyn

Biometric Identification Solution v1.0

Tried & tested finger printing & iris scan technology, printing capability of laminated vaccination cards

Robust & durable kit - Independent battery operation ~8hrs

Enables positive recognition of study participants (adults & children over 5yr)

Data synchronization between different kits

Challenges

- Making contact with device
- Heavy duty kit
- Biometric of parent/legal guardian for minors (age 1-4)



Photo: S. Masyn

Biometric Identification Solution v2.0

- High speed, high accuracy, tried & tested **iris scan** technology
- **Mobile tablet** version (97% volume & weight reduction, 40% price reduction)
- Data synchronization between different tablets (3G, WiFi)
- Device Localisation using GPS receiver
- (Optional) Print capability of plasticized tamper proof vaccination cards
- Fully operator driven, **no contact** with device or participant
- Solves challenges 1 & 2



Next step: Study in minors aged 1-4

To solve challenge 3:

A study for the evaluation (sensitivity and specificity) of iris-scanning and the feasibility/usability in the identification of minors (1-4 years)

- Objective: Assess the **usability (or feasibility)** and **accuracy** of iris-scan technology in a real world setting in a population of minors (age 1 – 4).
- Evaluate outcome for minors relative to adults, for accuracy (sensitivity & specificity) and enrolment rate.



Photo: A. Vuchelen

Summary

- Unique identification to support positive identification of study participants, can help identify any clinic attendee
- Development of Biometric kit (v1.0) and tablet (v2.0)
- Off the shelf components
- Deployable in resource limited settings
- Allows for improved data quality, reliability, security of the study related activities, and data integrity

Next step:

- Study assessing feasibility and accuracy in minors (1-4 yr.)



Photo: S. Masyn

Conclusion

EBODAC mission: Building a modular platform scalable for successful deployment of Ebola vaccines

Development of identification tool helps with the administration of the vaccine to the right participant at the right time

Thank you to all the study participants, their families and the partners