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**

- **December 30th, 2014**: Enrolment of The President of The Republic
- **March 2016**: Production of CMU cards
- **April 2017**: Start of Service for Student as pilot phase
- **June 2017**: Extension to Other Population Groups
- **January 2018**: Launching of CMU Service for Public and Private sector

**Operational**
- Launching of CMU Delivery of Kits and enrolment application

**Phase of Generalization**
- Extension of pilot Phase of CMU
- Phase of generalization with Public and Private Sector
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

Acknowledgement

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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)
Biometric Identification Solution v2.0

- High speed, high accuracy, tried & tested iri 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.
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