



World Health
Organization

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Integrating vaccine research into the outbreak response : *Lessons learned from ring vaccination strategy during EVD outbreaks.*

Dr. Alhassane TOURE

Building research readiness for a future filovirus outbreak.

20-22 February 2024, UGANDA

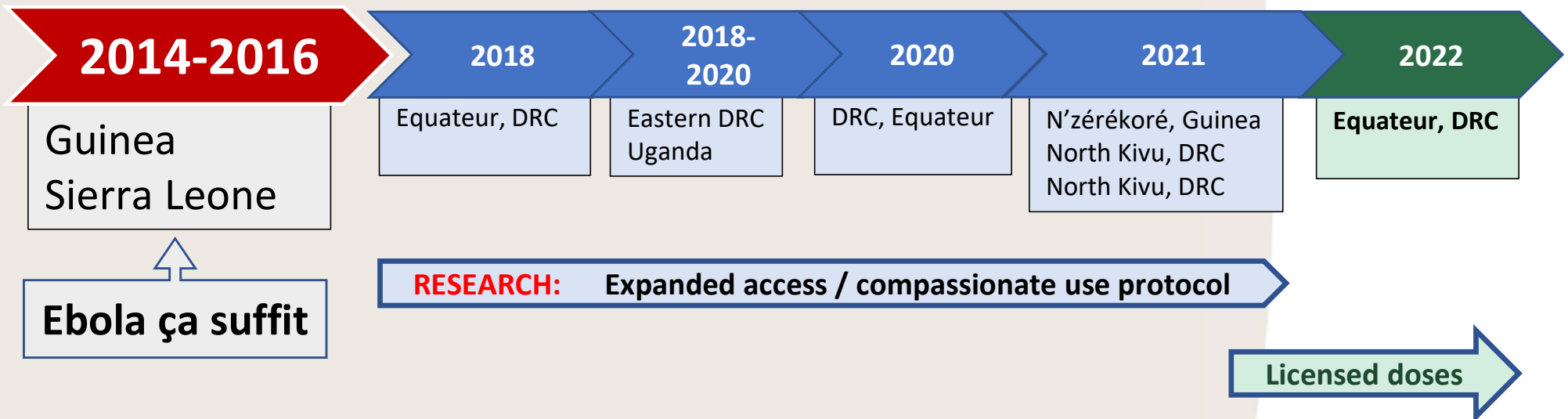


R&D Blueprint

Powering research
to prevent epidemics

Ring vaccination use in EVD epidemics

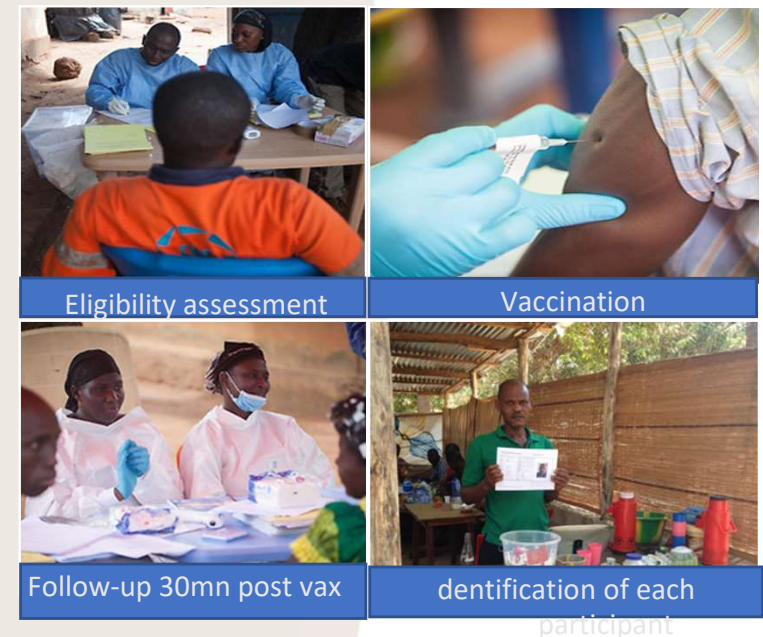
Successive Ebola Virus Disease (EVD) epidemics with use of ring vaccination



Integrated vaccine research into EVD outbreak response ³

Background from 2014-2016

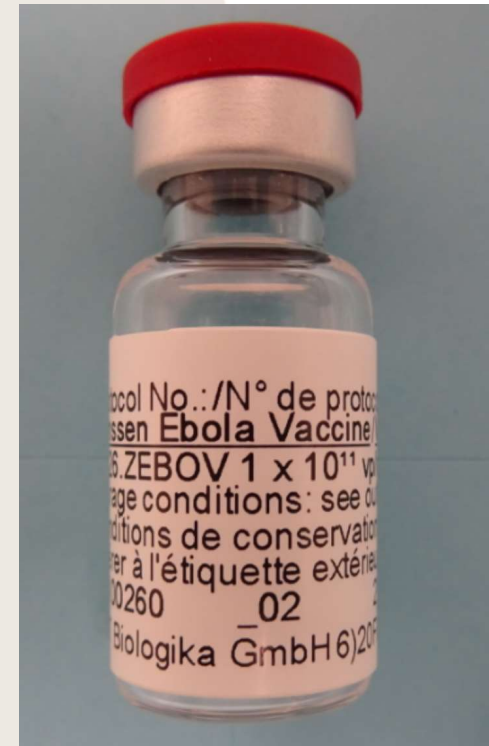
- **High quality** clinical trial using mobile teams can be done in a **context of an outbreak** like EVD
- Local staff use is not a choice but imperative! (**90% local staff in Guinea**)
- The **ultra cold chain** can be used in very remote areas
- Use of an **unlicensed vaccine with efficacy data** in outbreak response is feasible → **Covid-19**
- Expanded access/**compassionate use** can be used for safety monitoring and to further document efficacy and effectiveness



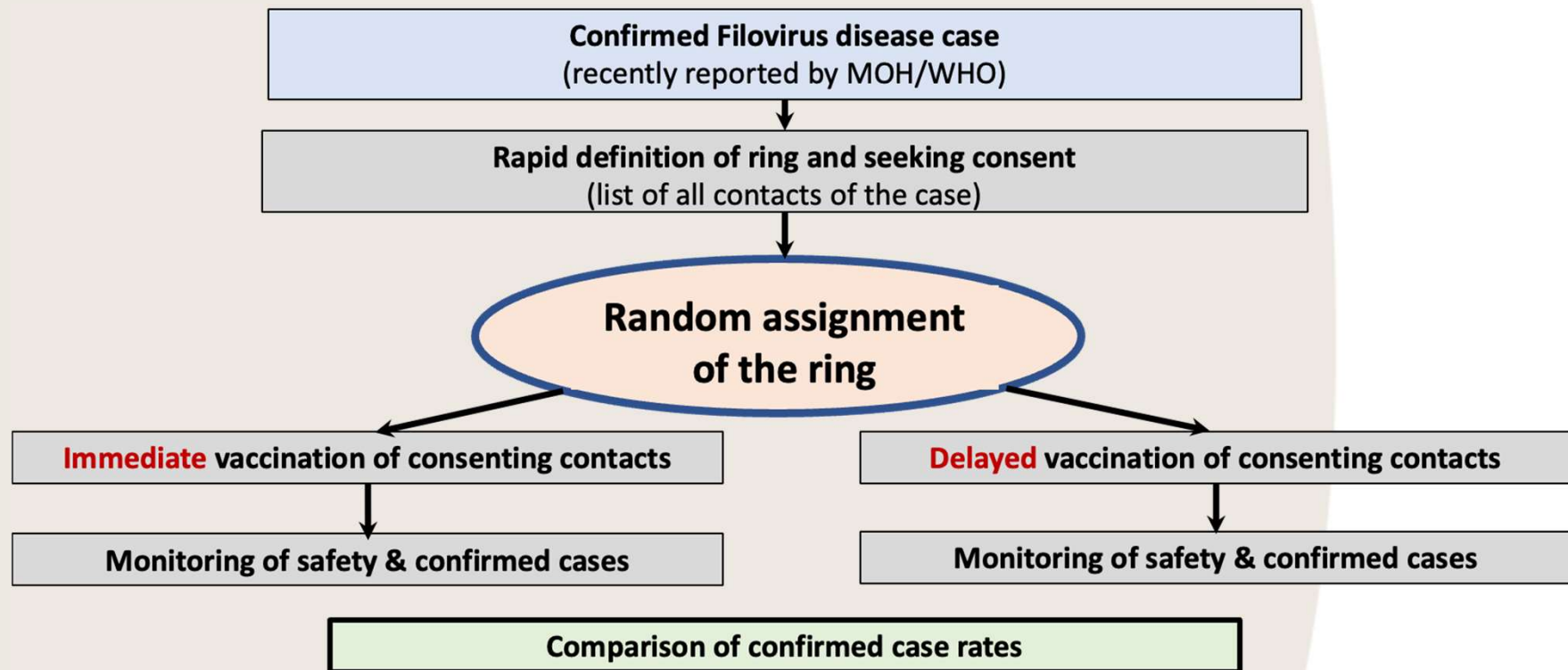
Integrated vaccine research into EVD outbreak response ⁴

Method

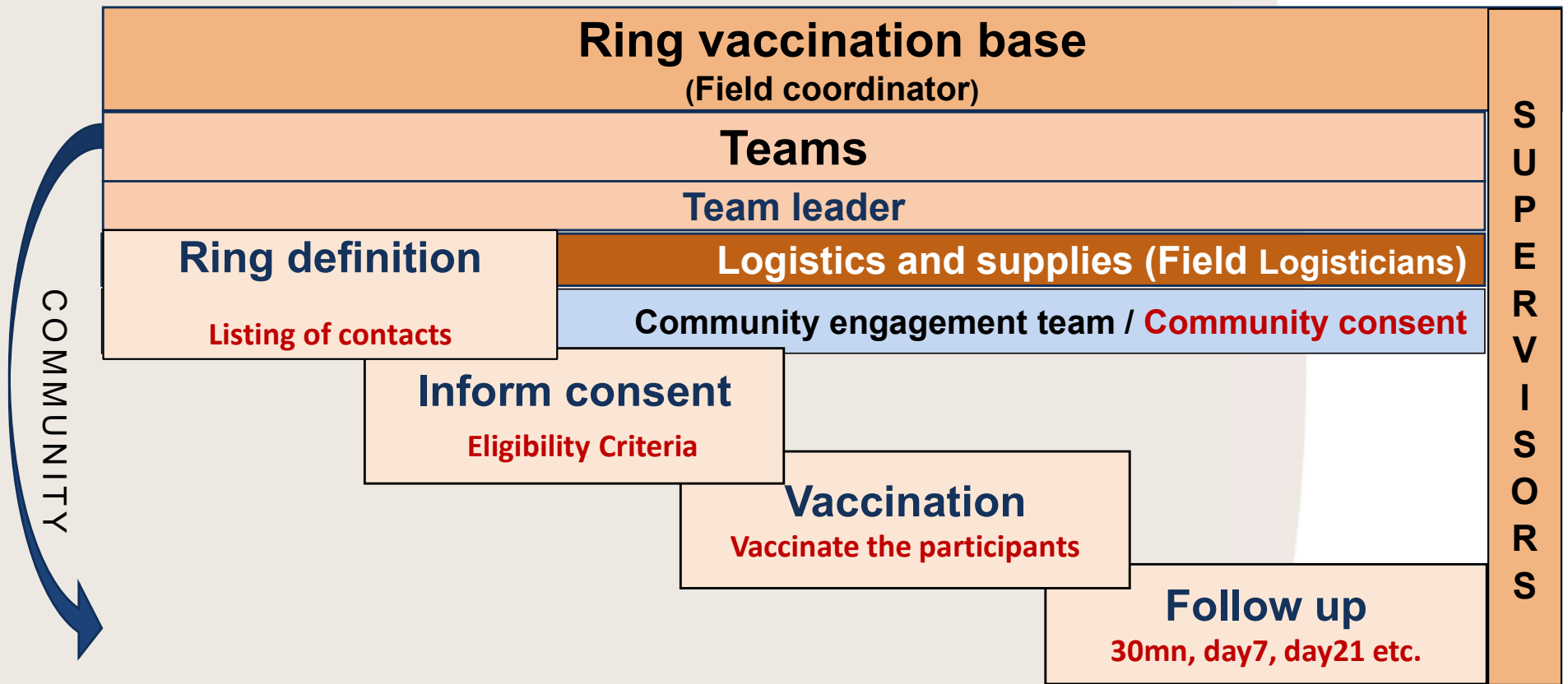
- Ring vaccination trial protocol → **ICH/GCP compliance.**
 - ✓ Written informed consent CCCs
 - ✓ Clear inclusion and exclusion criteria etc.
 - ✓ Appointment of **Principal Investigator** (local PI)
 - ✓ Study duration → Outbreak
- WHO/Country → **EC, IRB & RA approval**
- Local staff training (GCP and Protocol & SOP)
- Support from Clinical trials experts



Method/ Solidarity against Filovirus RCT protocol.

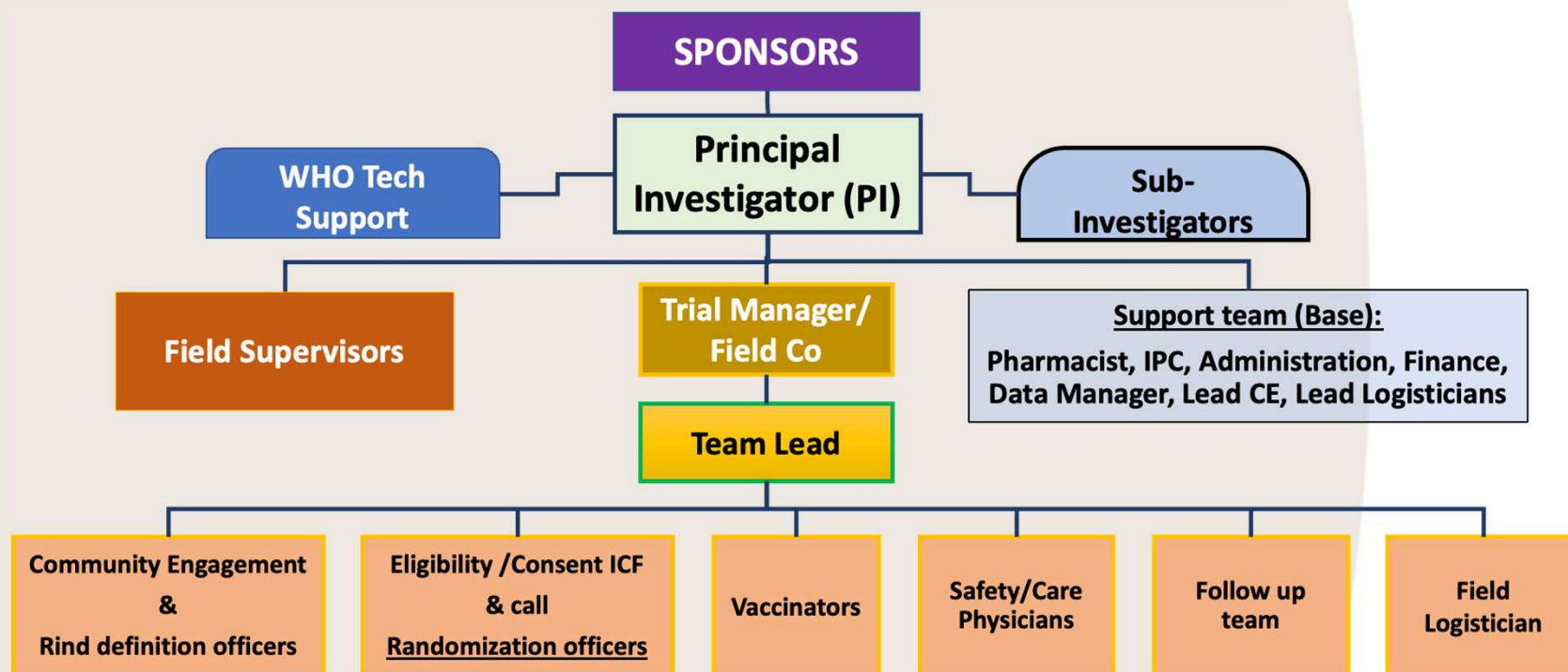


Method/ Coordination of the Trial Activities



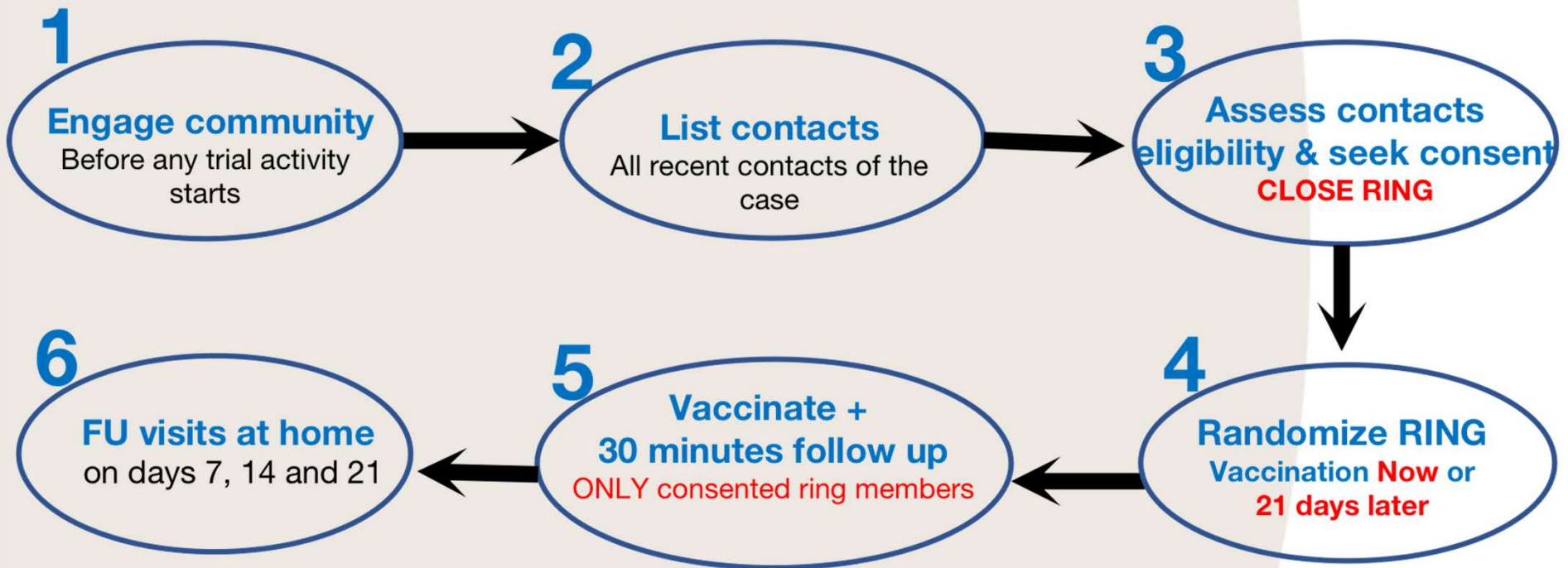
Method/ Example of team coordination from TOKOMEZA trial

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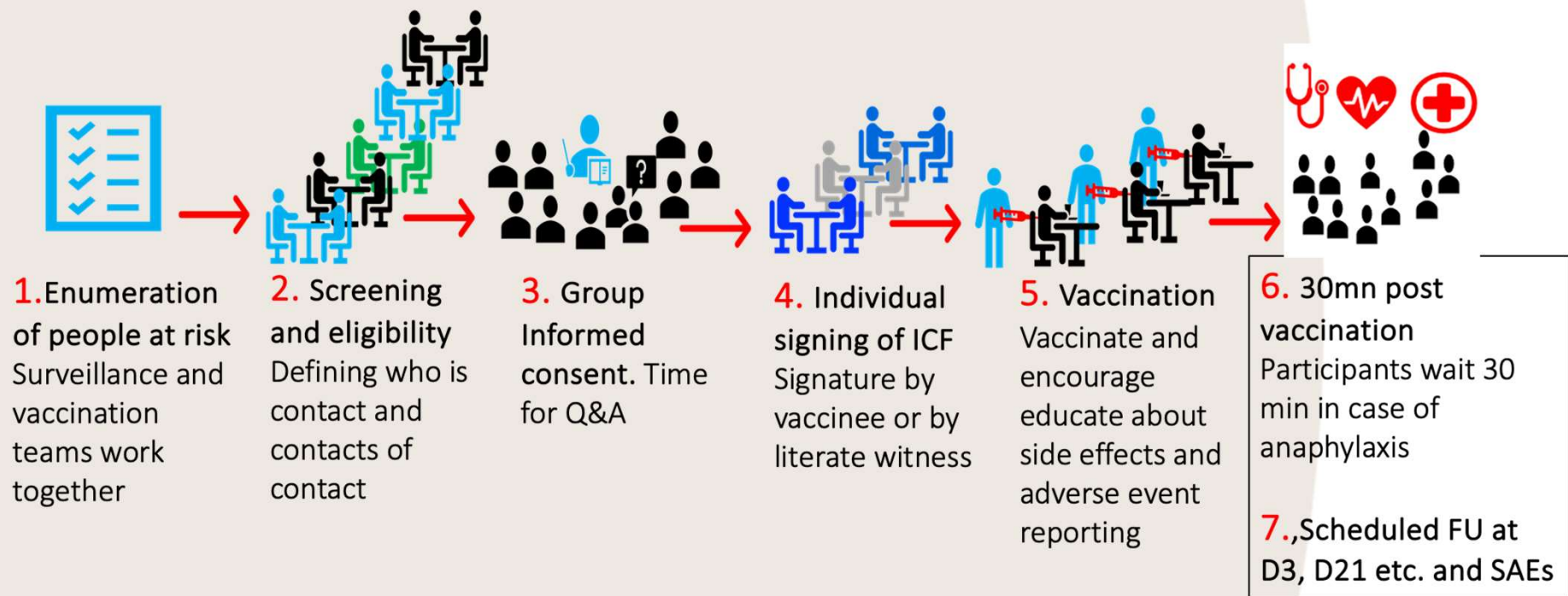


Method/ Implementation of Field Activities

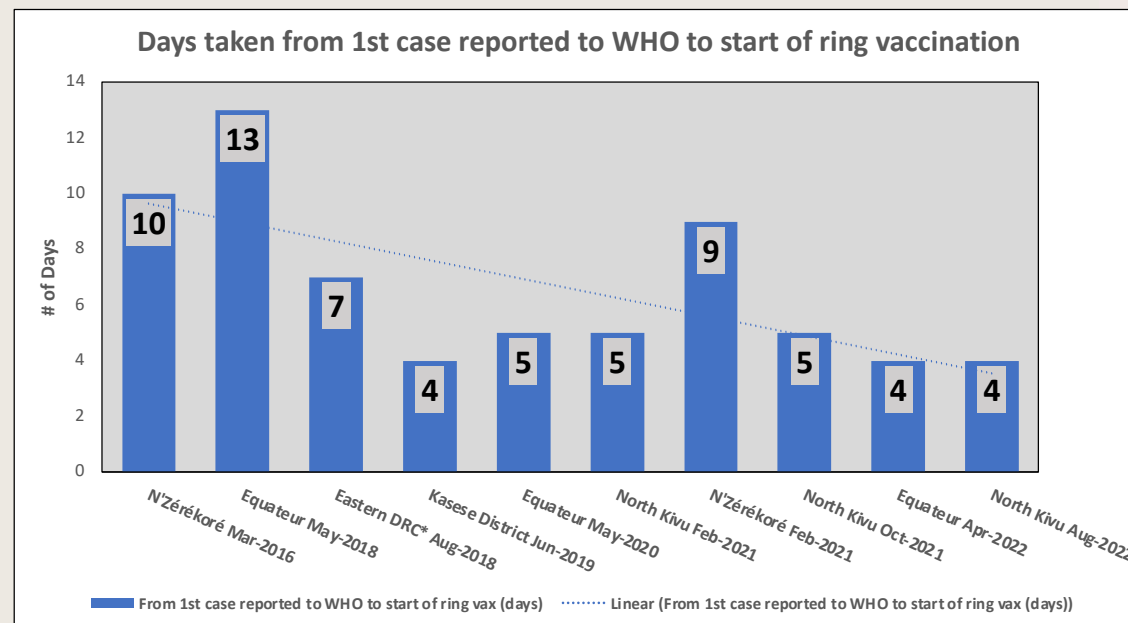
A lab-confirmed of a filovirus case reported!



Method/ Field Vaccination Procedures



Outcome/ Readiness of vaccine research integrated into EVD outbreak responses since 2016



Over **2,243** rings defined and vaccinated, covering **91%** (3,526/3,885) of EVD cases from 2016 to 2022

Outcome/ Local capacity building across EVD outbreaks affected countries

Country	# of field team trained and used	# of Health Zones or Districts covered
Guinea 1st EVD outbreak	4	3
DRC 09th EVD outbreak	5	6
DRC 10th EVD outbreak	95	68
Uganda 2019	3	1
DRC 11th EVD outbreak	46	20
DRC 12th EVD outbreak	14	4
Guinea 2nd EVD outbreak	6	7
DRC 13th EVD outbreak	6	2
Grand Total	179	111

- We have built **179** field teams and trained **more than 2500 local HCWs** with the **basics of GCP and ring vax SOPs** across those successive EVD outbreaks in **111 districts** in the affected areas.



Some Key Lessons learned

- **Building local staff capacity** is crucial, highlighting preparedness in resource-challenged countries, as seen in Uganda in 2019.
- Early assessment of vaccine safety is vital for **pregnant women, breastfeeding women, and infants aged 6 months and above.**
- Research activities involve **strategic communication**, training vaccinators, prioritizing **healthcare worker education**, and using diverse media.
- Include **local traditions, customs, and authorities** in the communication strategy, collaborating with local leaders and addressing rumors through various channels.
- Continuously **adapt the implementation strategy** based on field conditions, incorporating **innovative approaches** and empowering **local healthcare workers.**
- Tailor the communication **strategy to each country and community**, recognizing the unique differences among vaccine beneficiaries.



Conclusion

- Over **370,000** individuals have received vaccinations with unlicensed doses, research integrated into Ebola outbreak response.
- Ring vaccination is an **effective vaccine research strategy** to prioritize high-risk individuals when vaccine supplies are constrained.
- **Successful** vaccination strategies hinge on **stakeholder engagement**.
- **Lessons from Ebola** ring vaccination offer **valuable insights** for developing vaccine research guidelines and strategies for other interventions during outbreak, including COVID-19, Monkeypox, Marburg, etc.



The PI, Professor J. J. Muyembe with WHO ring vaccination experts in Beni Health Zone/North Kivu /DRC, 2019.

THANK YOU FOR YOUR ATTENTION

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Dr. M. J. Ryan visiting and supporting field team in VISIKI/LIDE Health Area /North Kivu /DRC, 2019