Draft framework for formulating recommendations for the deployment of Ebola Vaccines

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Background & context

- **Rapidly changing epidemiology of disease**
  - The three most affected countries in different stages of control
- **Several vaccine candidates in different stages of evaluation**
  - Four leading candidates undergoing clinical evaluation
  - Likelihood of efficacy estimates uncertain
  - Some of the lead candidates pose programmatic challenges
- **Lack of complete clarity on the regulatory processes**
  - Process and timelines for full or emergency authorization still not clear
  - Emergency authorization likely to be accompanied by post-marketing conditions
- **Draft framework proposes a way forward taking changing circumstances into account but will need to be reviewed and revised as the situation unfolds**
  - Currently available data inadequate to draw firm conclusions and draft recommendation

Some guiding principles

- **Non-vaccine control measures work**
  - Need to stress the need to rigorously enforce these measures even when vaccines are deployed
- **Routine childhood immunization needs to be re-established**
  - Ebola vaccine deployment should not be at the expense of routine immunization
- **The opportunity of Ebola vaccine deployment should be used to strengthen health systems**
  - Particularly disease and safety surveillance

Steps for formulating policy recommendations

1. **Define the different scenarios** (based on epidemiological situation and authorization for vaccine use)
2. **Establish objectives for vaccination** for each scenario
3. **Define and prioritize target populations** for vaccination for each scenario
4. **Define additional considerations** for making recommendations

1. Scenario definition

Epidemiological scenarios		Authorization for use	
		Emergency	Full licensure
Widespread transmission of disease	Increasing disease trend		
	Flat trend		
	Declining trend		
Localized or limited transmission			
Countries/ communities with no reported cases but at high risk from an ongoing outbreak, e.g. neighbouring countries			
Future outbreaks	Reactive vaccination		
	Preventive vaccination		

2. Objectives for vaccination

Consensus on using the same objectives across all scenarios is required

- **Primary objective**: Interruption of transmission leading to the complete control of an outbreak (i.e. elimination)
- **Secondary objective**: Individual protection of high-risk individuals. This would be particularly relevant when vaccine supplies are limited or data to assess risks and benefits in population groups at lower risk are not available.

3. Definition and prioritization of target populations

Epidemiological scenarios		Target population (ILLUSTRATIVE ONLY)	
		Emergency Authorization	Full licensure
Widespread transmission of disease	Increasing disease trend	FLW	FLW
		Adults (targeted)	Adults (targeted)
			Universal
	Flat trend	FLW	FLW
		Adults (targeted)	Adults (targeted)
	Declining trend	FLW	FLW
			Adults (targeted)
Localized or limited transmission		HCW	HCW
		Adults (targeted)	Adults (targeted)
Countries/ communities with no reported cases but at high risk from an ongoing outbreak		None	HCW

- Additional data, analysis and grading of evidence is required to define and prioritize the target population
- Will be the subject of discussions in upcoming teleconferences and meetings

4. Additional considerations to be developed

- Recommendations on disease and safety surveillance to accompany deployment of vaccines.
- Recommendations on managing febrile episodes following vaccination (especially when vaccination targets potential contacts of cases as part of a ring vaccination strategy).
- Recommendations on community engagement and risk communications to improve the uptake of vaccines by the target populations.

4. Additional considerations to be developed

- The potential trade-offs and how should they be addressed, for example:
  - Between vaccines or schedules that rapidly induce protection versus those that provide longer duration of protection?
  - Between efficacy and programmatic feasibility, e.g. choosing between the vaccine with highest efficacy versus one that is programmatically more easily deployed but has lower efficacy?
- The non-vaccination control measures should not be neglected once vaccines are introduced.
- Considerations for vaccine deployment in the face of ongoing enrolment in phase 3 vaccine trials.
- The need for continued focus for re-establishing routine childhood immunization in parallel deploying Ebola vaccines

Feedback requested from SAGE

- Does SAGE agree with the proposed framework and process for making recommendations
- Does SAGE have additional considerations around the framework?
- Noting the uncertainty about endpoints from phase 3 clinical trials can SAGE :
  - Discuss how to proceed in the absence of efficacy data and limited safety data
  - Discuss whether there is a requirement for further dialogue with the clinical trial researchers as the studies proceed
  - Comment on whether the uncertainty of authorisation for use via emergency authorization influences their recommendations