

Measles and Rubella Research Agenda

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On behalf of

SAGE Working Group on Measles and Rubella

Terms of Reference

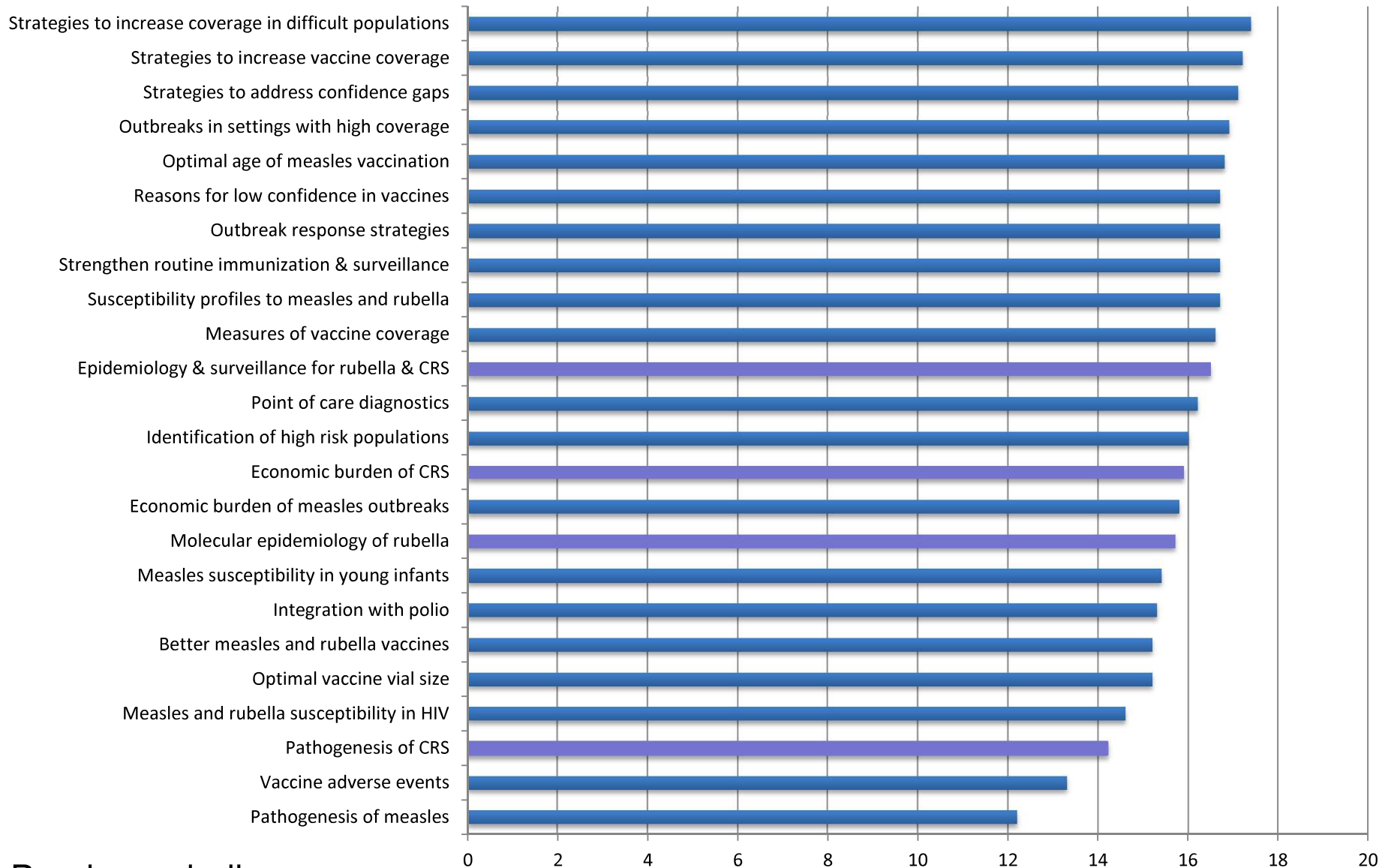
- Identify gaps in essential evidence and programme barriers to achieving measles and rubella/CRS elimination targets
- Present SAGE with proposed areas for operational or basic science research.

Prioritization Criteria

1. Relevance
2. Importance
3. Urgency
4. Chances of success
5. Impact

Research Options: Priority List with Overall Score

Range: 12.2 – 17.4



Purple = rubella

Priority Research Options: Top Half

1. Strategies to increase coverage in difficult populations
2. Novel strategies to increase vaccine coverage
3. Strategies to address confidence gaps
4. Outbreaks in settings with high coverage
5. Optimal age of measles vaccination
6. Reasons for low confidence in vaccines
7. Outbreak response strategies
8. Strengthen routine immunization & surveillance
9. Susceptibility profiles to measles and rubella
10. Measures of vaccine coverage
11. Epidemiology & surveillance for rubella & CRS
12. Point of care diagnostics

Red = measles vaccine coverage

SAGE Endorsement

- “SAGE endorsed the findings from the survey to identify gaps in essential evidence and programme barriers to achieving measles and rubella elimination targets;
- 12 topics/areas were prioritized for operational or basic science research.
- SAGE encouraged the WG to disseminate the findings and to promote implementation of the research agenda.”

Proposed Next Steps

- M & R research agenda
 - Lessons learnt from GPEI – essential to achieve elimination – eradication goals
 - Agenda driven by program needs
 - Constant review to assess progress and changing research needs

- Dissemination
 - Presented findings at the Global Vaccine and Research Forum March 2014
 - Measles and Rubella Research Website

- Identify potential funding agencies
 - Tap in to HSS funds for relevant programmatic questions

Measles and Rubella Initiative Research & Innovation Working Group

- Led by CDC to move research agenda forward
 - Define set of global measles and rubella research priorities to guide future research investments
 - **Program linked research**
 - Downstream – operational, implementation research
 - Upstream – basic science & technology
- Planned webinars
- Planned expert meeting October/November 2016

Operational/Implementation Research

- **Studies to improve delivery and increase coverage among difficult to reach populations**
 - Including inaccessible areas, nomadic populations, migrants, refugees and internally displaced persons.
 - Examples include studies of GIS mapping of susceptible populations, mobile phone reminder recall systems, and house-to-house vaccination strategies.
- **Measures of measles and rubella vaccine coverage**
 - Examples include evaluation of vaccination registries, school entry checks, population-based sero-surveys, and lot quality assurance sampling.

Potential Game Changing Technologies

- Detecting and forecasting measles outbreaks
 - Point-of-care tests for measles diagnosis (IgM)
 - Point-of-care tests for measles susceptibility (IgG)
 - Anticipating measles virus transmission pathways
- New measles vaccines and delivery systems
 - Delivery systems
 - Aerosol delivery of attenuated measles vaccine
 - Dry powder measles vaccine
 - **Micro-needle patches**

Conclusions

- Measles and rubella research priorities endorsed by SAGE
- Top research areas address issues of optimizing vaccine delivery & coverage and outbreak forecasting
- Research and Innovations Working Group: Led by CDC to move research agenda forward; Planned expert meeting October/November 2016