

Incremental delivery cost of introducing potential interventions against respiratory syncytial virus in India ranged from US\$0.90 to US\$3.13 per beneficiary

Title: Incremental cost and cost-effectiveness of potential interventions against infant respiratory syncytial virus (RSV) in India

Background

- Respiratory syncytial virus (RSV) is the major cause of acute lower respiratory illness (ALRI) among children below 5 years
- 0.8 million episodes and 27,000 deaths were estimated in India from RSV severe ALRI among under-1 children
- Robust RSV interventions are in pipeline and India could be a potential country for the introduction.
- We estimated incremental cost of introduction and cost-effectiveness of potential RSV interventions in India

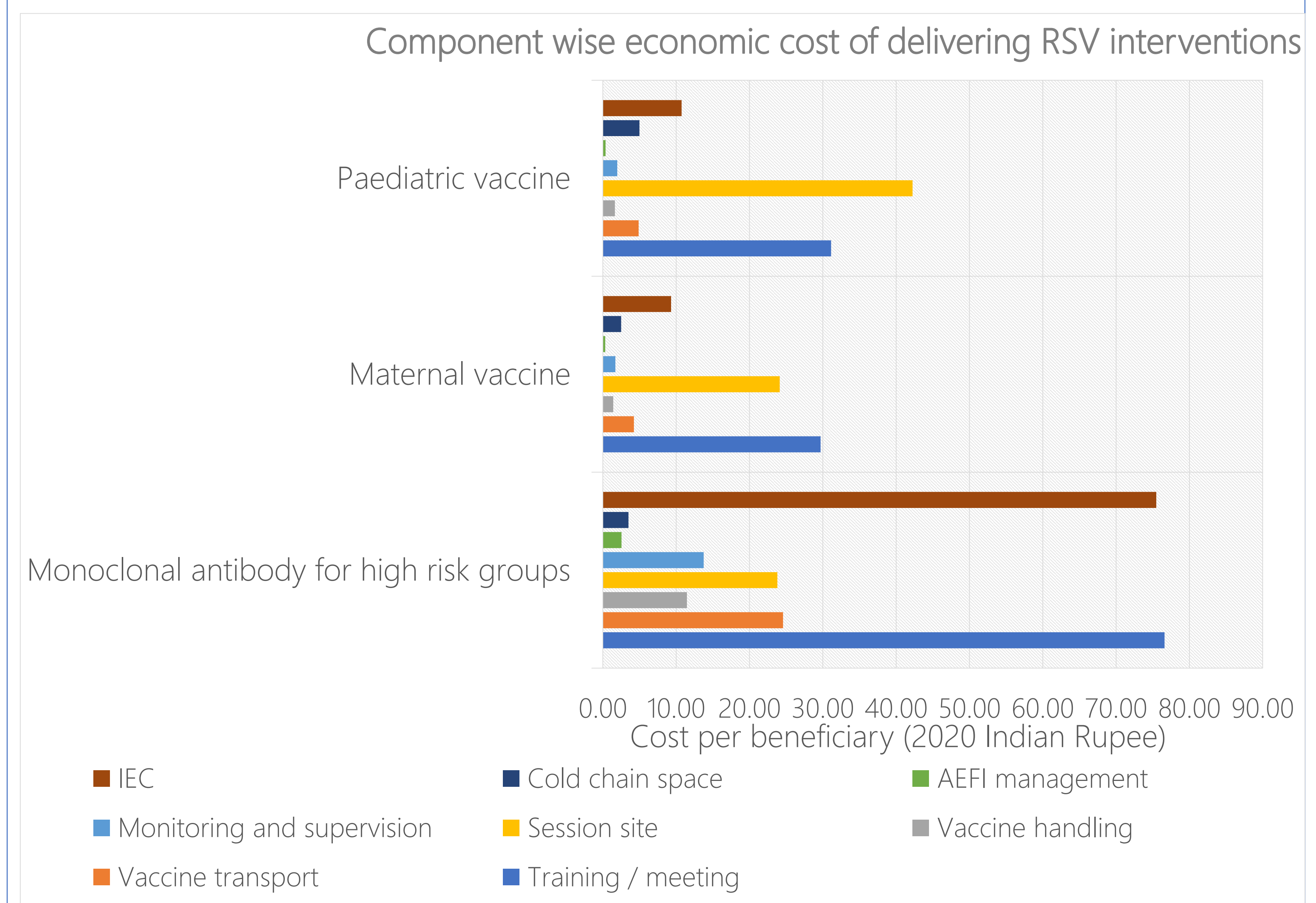
Methods

- Main assumption of this analysis was that any RSV related interventions will be implemented through the existing routine immunization system.

Interventions considered for analysis
(1) monoclonal antibody for high risk groups;
(2) maternal vaccine;
(3) paediatric vaccine

- Incremental economic cost for introducing these interventions were calculated using a government provider perspective
- Cost calculations were based on unit costs obtained from two recently conducted costing studies on immunization and using data from National Cold Chain Management Information System

Results



Note: 1 US\$ = INR 74.132

Introducing

- monoclonal antibody (high risk groups) will increase routine immunization budget by 1.41%;
 - maternal vaccine by 3.62%;
 - paediatric vaccine by 4.20%
- (excluding vaccines and supplies prices)
- At a 50% gross domestic product per capita threshold, all three interventions will potentially be cost-effective.

Discussion

- All estimates are subject to uncertainties around several critical parameters that inform these findings. Examples:
 - (a) Delivery platform
 - (b) Product characteristics
 - (c) Storage space
- As RSV interventions complete clinical development and product characteristics are clearer, further analysis will provide additional clarity of health and economic impact of various RSV interventions.