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## Exploring new ways of measuring the economic value of vaccination with an application to the prevention of rotaviral disease

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**EXPLORING NEW WAYS OF MEASURING  
THE ECONOMIC VALUE OF VACCINATION**

WITH AN APPLICATION TO THE PREVENTION OF ROTAVIRAL DISEASE

1. The comparison of cost-of-illness study results on rotavirus disease reveals how the disease is managed differently across countries in Europe (Chapter 2.1).
2. QALY measurement of rotavirus disease must be analysed by age and disease-severity level expressed through medical visits and hospital care (Chapter 2.2).
3. Simplified models are a helpful tool for a first economic evaluation of new vaccines in those countries with scarcity of data (Chapter 2.4).
4. Impact studies of vaccines may reveal the precision of disease models' prediction and may identify unexpected features about the infection, the disease, and the vaccine (Chapter 3).
5. The standard formula for measuring vaccine efficacy/effectiveness is not accurate as soon as the vaccine affects the numerator and the denominator in the equation in a different way (Chapter 3).
6. Improvement in quality of care of hospital management should be included in the overall value assessment of rotavirus vaccination (Chapter 4.1).
7. Retrospective administrative databases show that rotavirus vaccination leads to a reduction in absenteeism amongst working mothers (Chapter 4.2).
8. High disease burden linked to low investment in health care hampers the applicability and the interpretation of cost-effectiveness analysis in low-income countries (Chapter 5).
9. Optimisation modelling and return on investment analysis are alternatives to cost-effectiveness analysis to assess the economic value of new vaccines in low-income countries (Chapter 5).
10. Vaccination introduced in low-income countries should be embedded into a total development plan, including improvement of hygienic conditions, family planning, educational development, and work opportunities.
11. Use of drones can only under specific conditions be an efficient mode of transport of vaccines in remote areas such as urgency of the project, high labour cost, heavy transport material.
12. As the flow of master students from the Netherlands who finalise their studies in Flanders, and the flow of doctoral students from Belgium who defend their thesis in the Netherlands is equivalent, there is a clear gain for the former.