

Progress of Modelling work package: model validation and applications

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Model validation and application

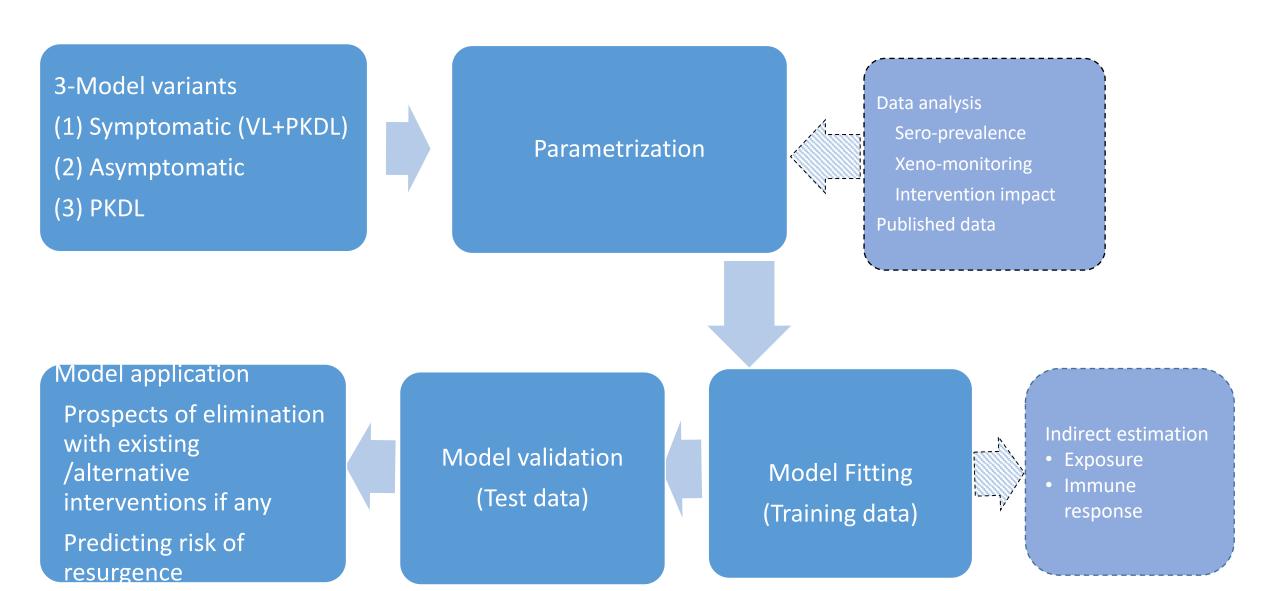
1. Transmission model

2. RiskMapper

3. Sandfly population dynamic model

(1) Transmission model







(2) RiskMapper

- Geo-statistical modelling of serological data (block /village)
 - Climate
 - Topography
 - Demography
- Adapt 'RiskMapper' for VL / LF in India
- Short term prediction of VL outbreaks
- Long term changes in risk of resurgence of LF



(1) + (2) Model integration

Transmission model



RiskMapper



(3) Sandfly population dynamic model

- Review of sandfly population dynamic models and ecological modelling for providing
 - Summary of the data available for ecological modelling
 - Assumptions and structures of existing models
- Analysis of xenomonitoring data (Project 2)
- Develop a model of sandfly populations
- Model parametrization
- Predict impact of sandfly control

Timeline



Activities

6 Months

12 Months 18 Months

Adapting RiskMapper

RiskMapper predictions

Introduction to operations in India

Develop age-time-space model (ATS, Transmission model)

Validate & apply ATS model

Progress workshop

THANK YOU