Selection of sites for *Plasmodium knowlesi* malaria surveillance

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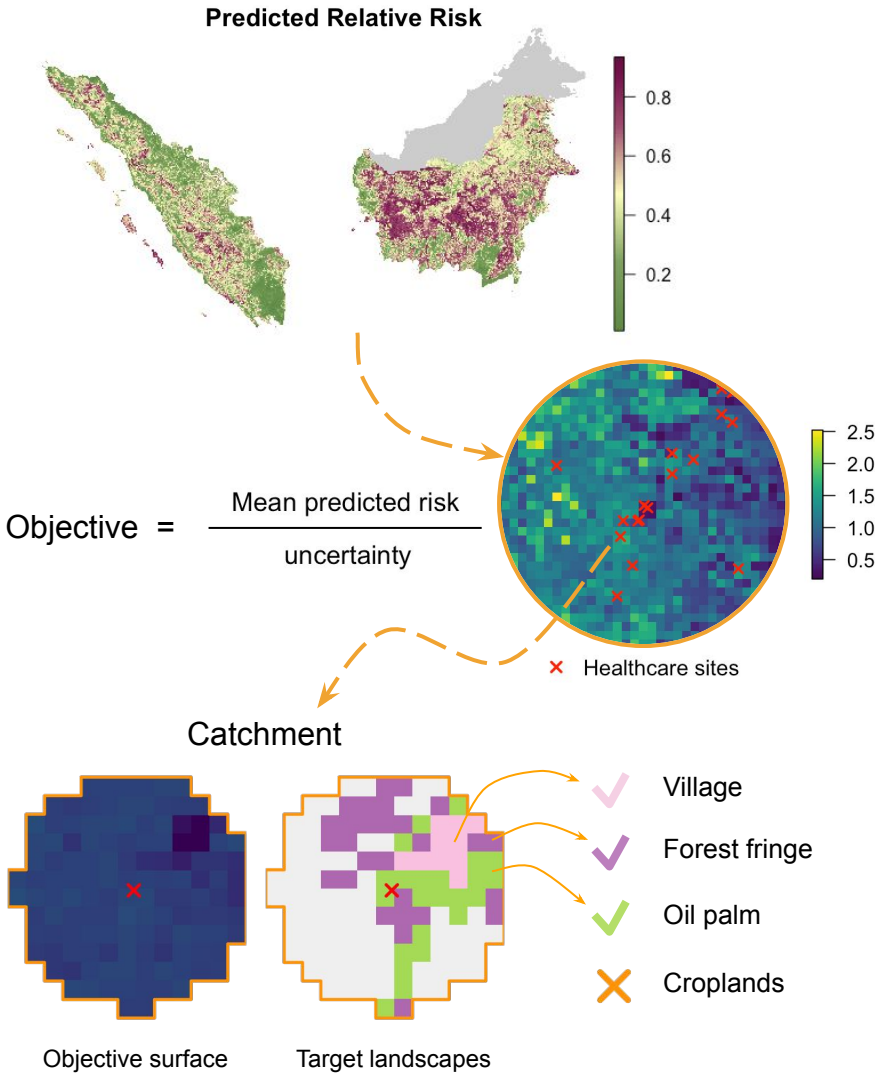

Introduction

- Plasmodium knowlesi is a strain of **zoonotic malaria** endemic to Southeast Asia
- Its spatial distribution is **uncertain**
- An existing statistical model predicts relative risk of *P. knowlesi* malaria using environmental data*
- We use this model to **select healthcare centres** for human surveillance in western Indonesia

Methods

- Define **catchments** around healthcare centres
- Calculate **objective value** for each catchment
- Evaluate **presence of target landscapes** in catchments
- Select sites with **highest objective value**

Results

- Sites are quantitatively compared
- Comparisons communicated to project stakeholders

Conclusions

- Quantitative modelling and decision support aids study design
- Study resources are focused in areas where *Plasmodium knowlesi* is most likely to be identified

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*Shearer *et al.* (2016). Estimating geographical variation in the risk of Plasmodium knowlesi infection in countries eliminating malaria. PLOS Negl. Trop. Dis., 10(8), e0004915