Developing guidance for country-level TB modelling

Synopsis of draft guidance document

September 18, 2017

TB MAC Annual Meeting

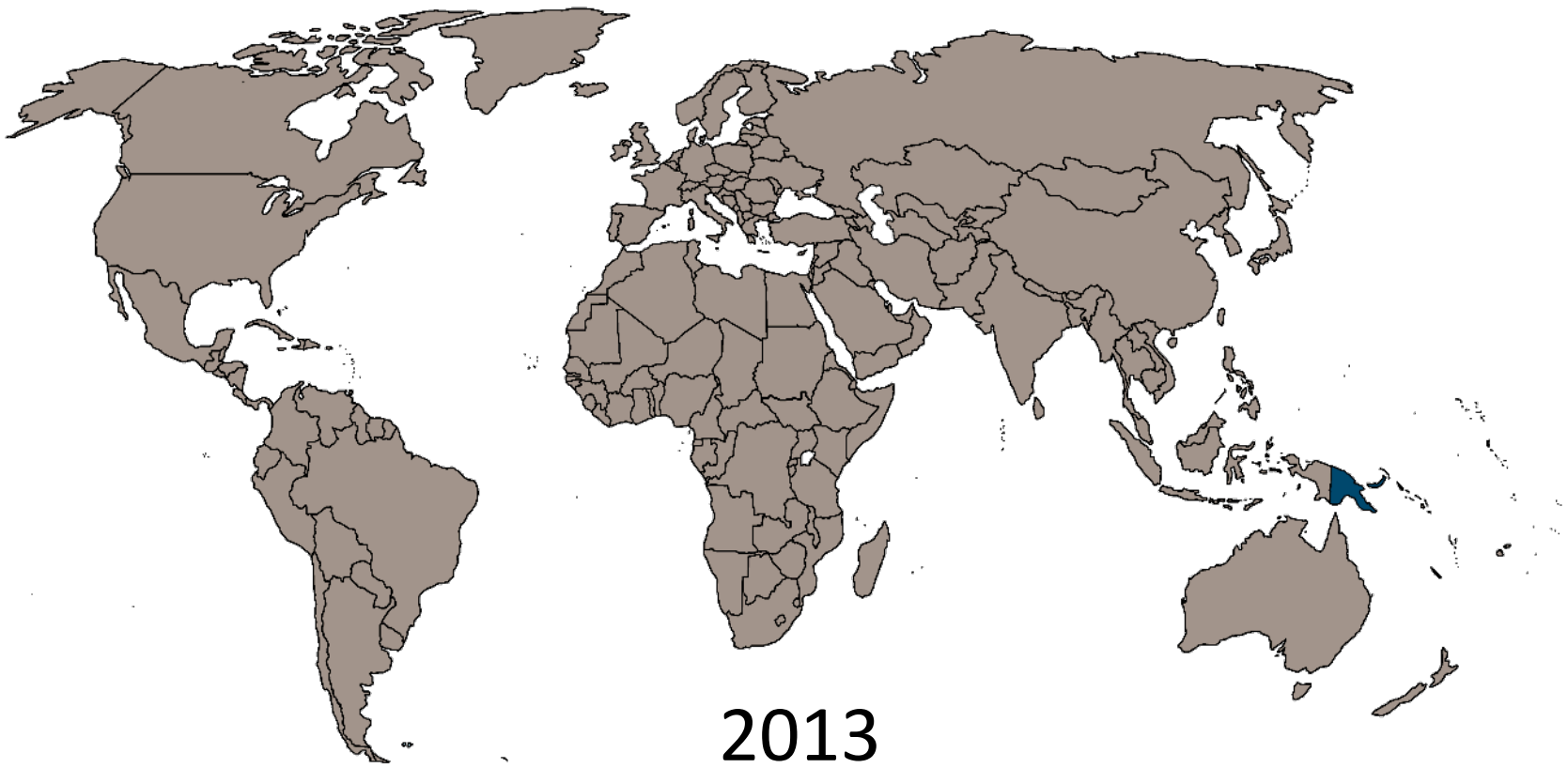
Glion, Switzerland

Motivation

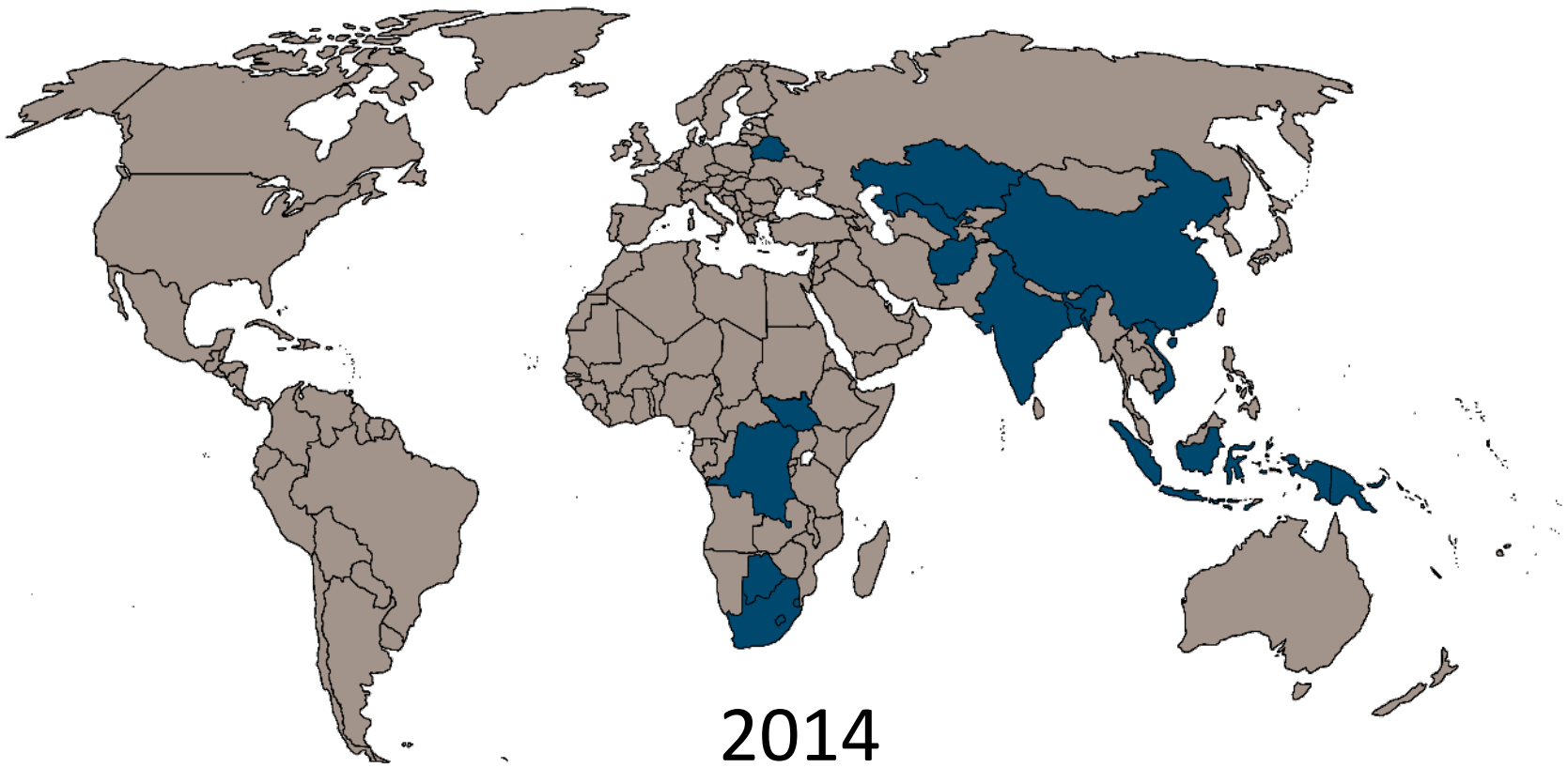
- Mathematical modelling becoming a commonly-applied tool to inform country-level TB program decisions

Growth of TB modelling

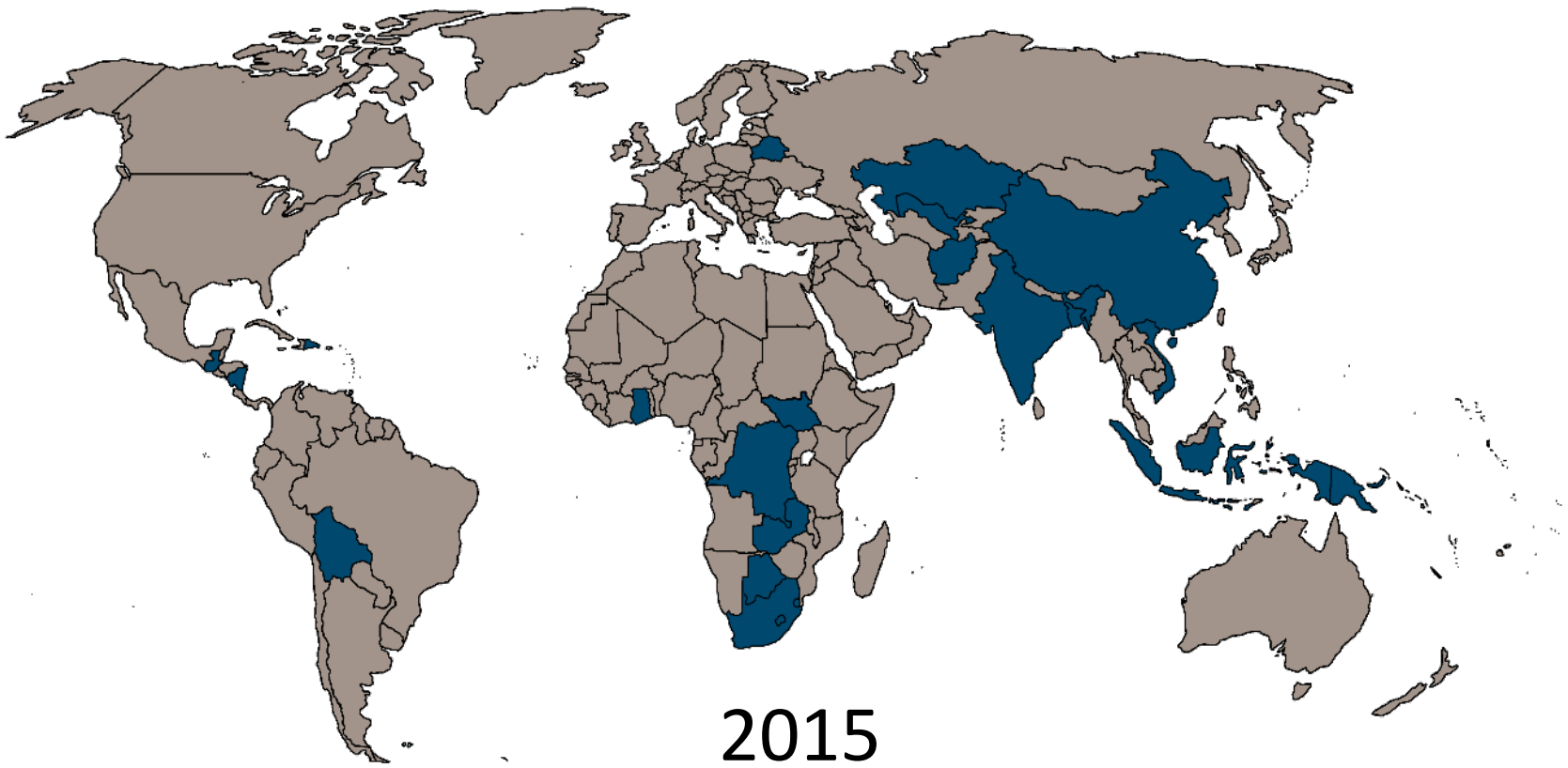
Growth of TB modelling



Growth of TB modelling



Growth of TB modelling



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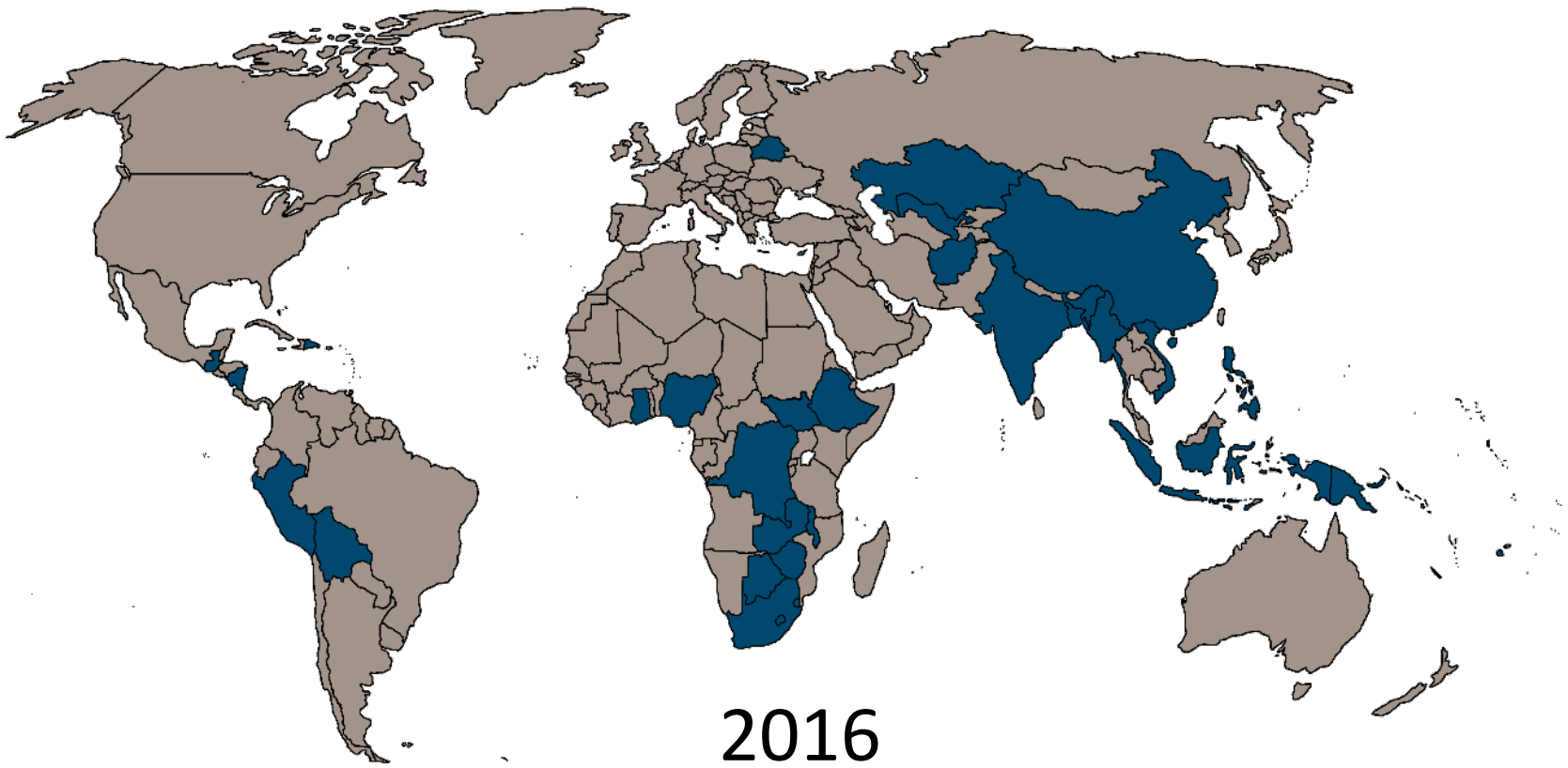

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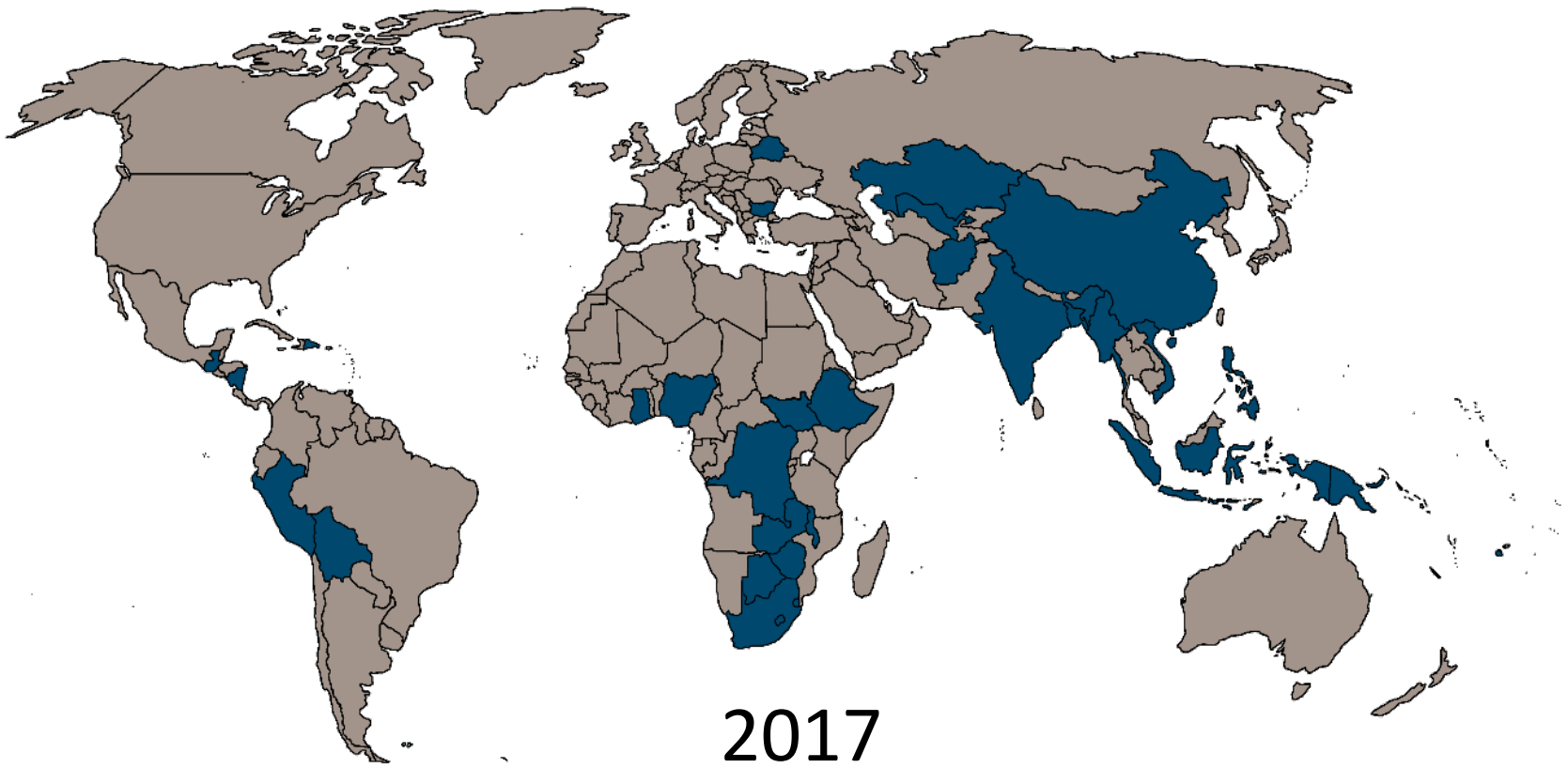

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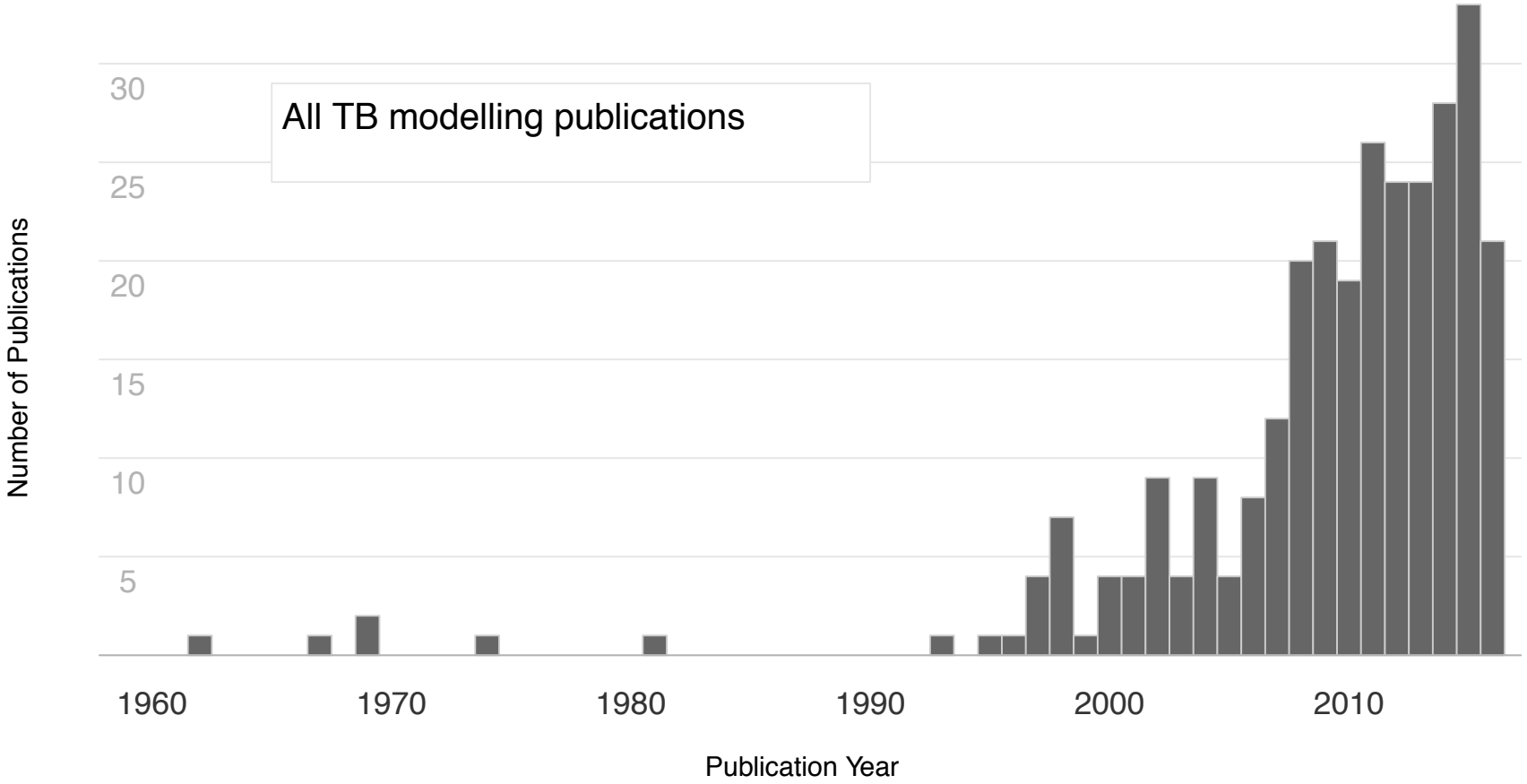
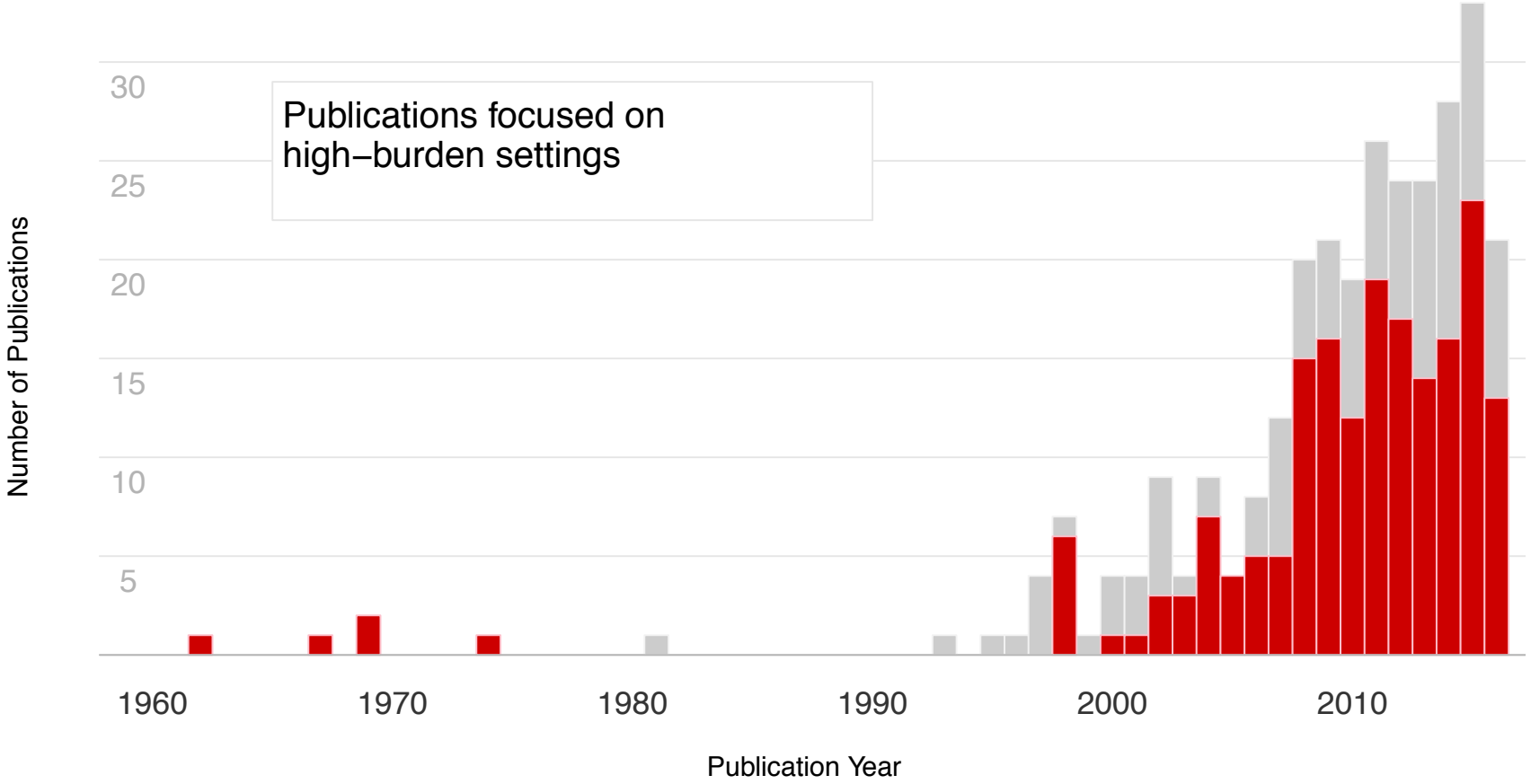


Growth of TB modelling



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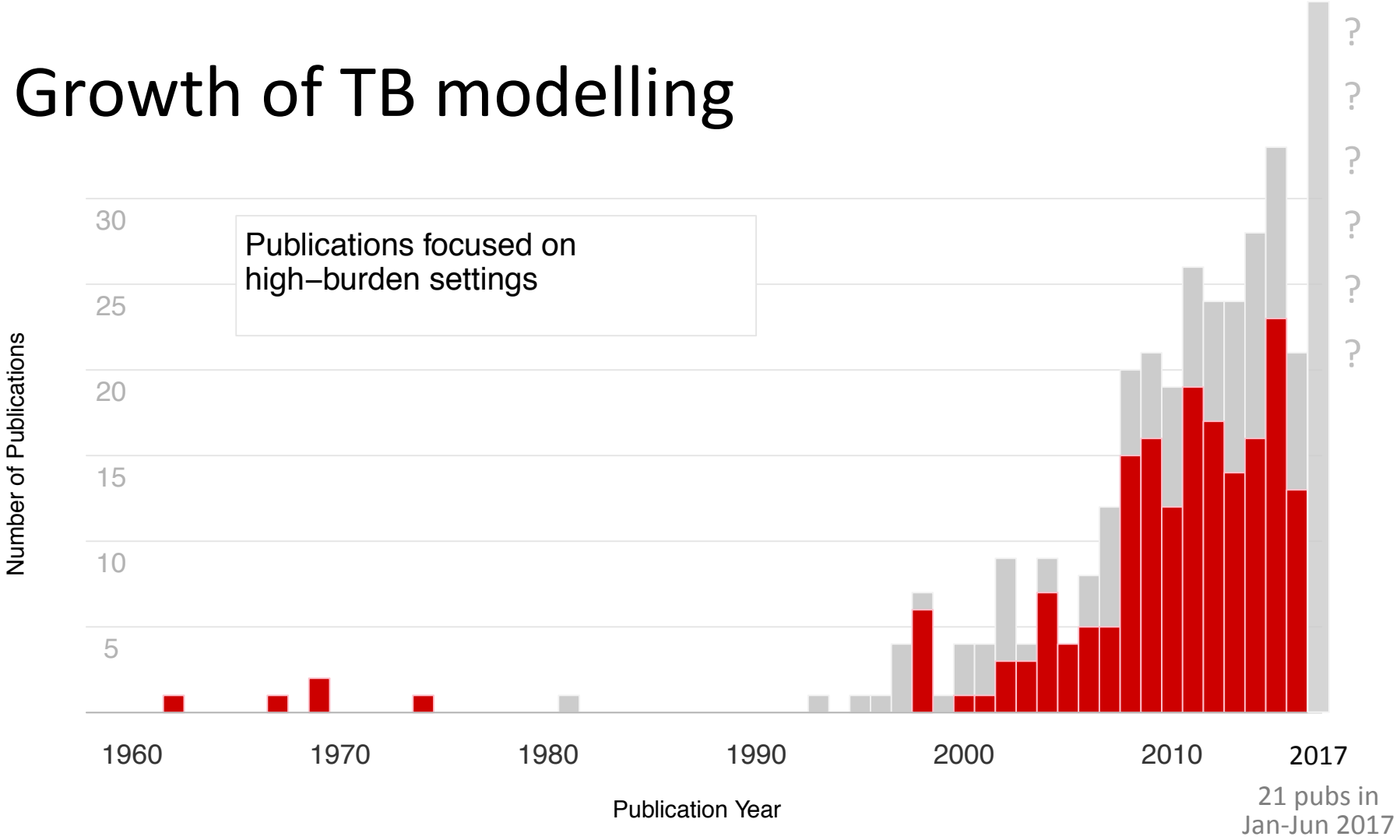


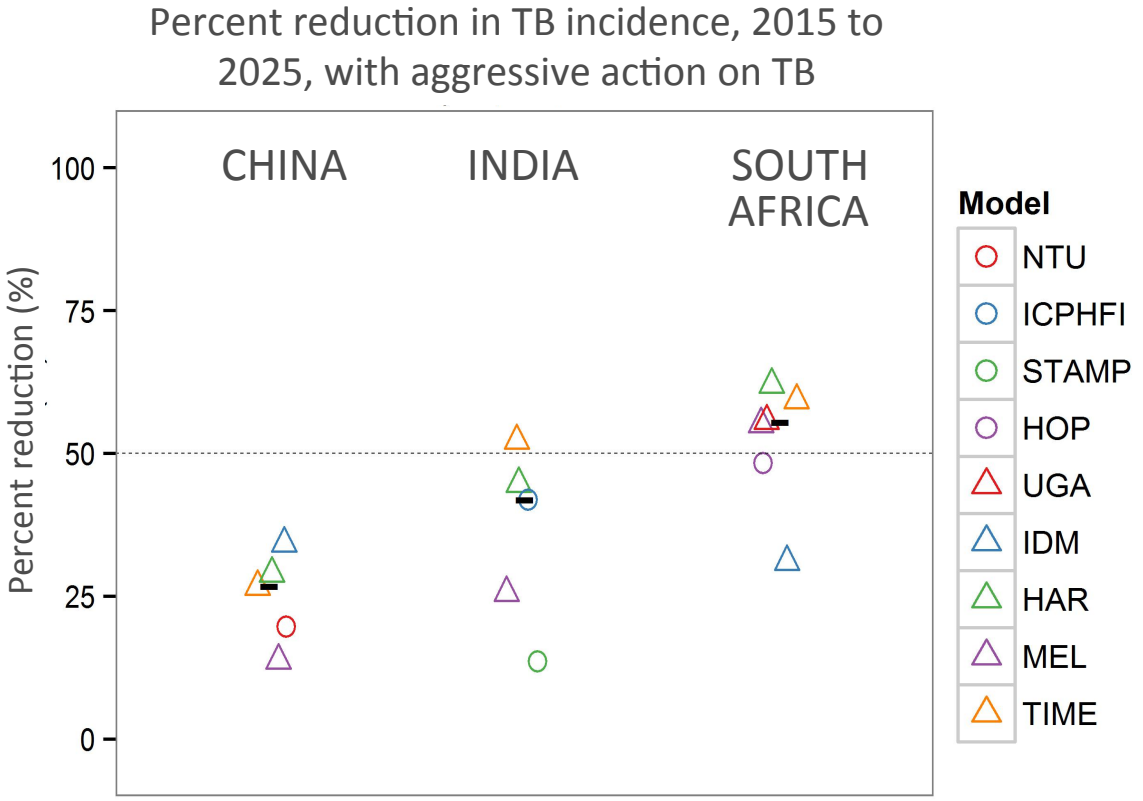
Motivation

- Mathematical modelling becoming a commonly-applied tool to inform country-level TB program decisions
- Recent evidence suggests that models can produce a wide range of results when investigating similar/identical policy questions

Variable results

TB Targets exercise

- Multi-model collaboration
- *Same* countries
- *Same* policies being evaluated
- *Same* outcome measures
- *Different* results



Houben et al 2016

Variable results

TB Targets exercise

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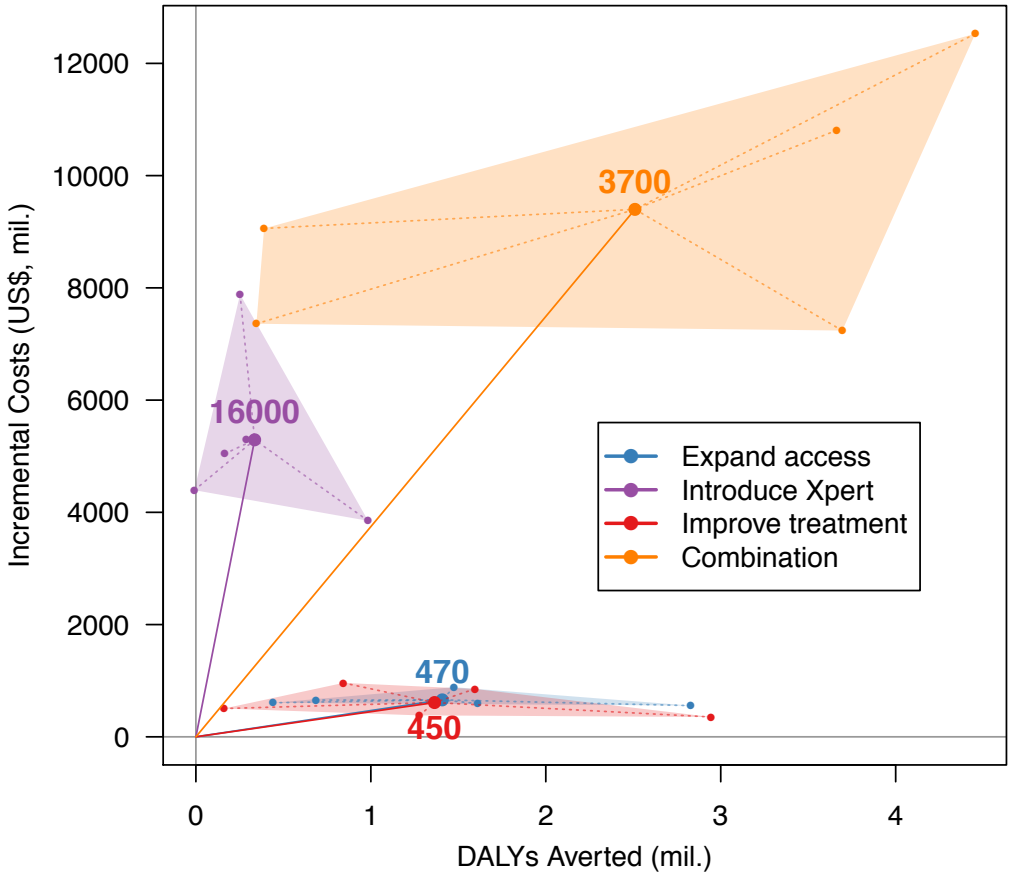
Cost-effectiveness of more aggressive TB policy over 20 years, health system perspective, China



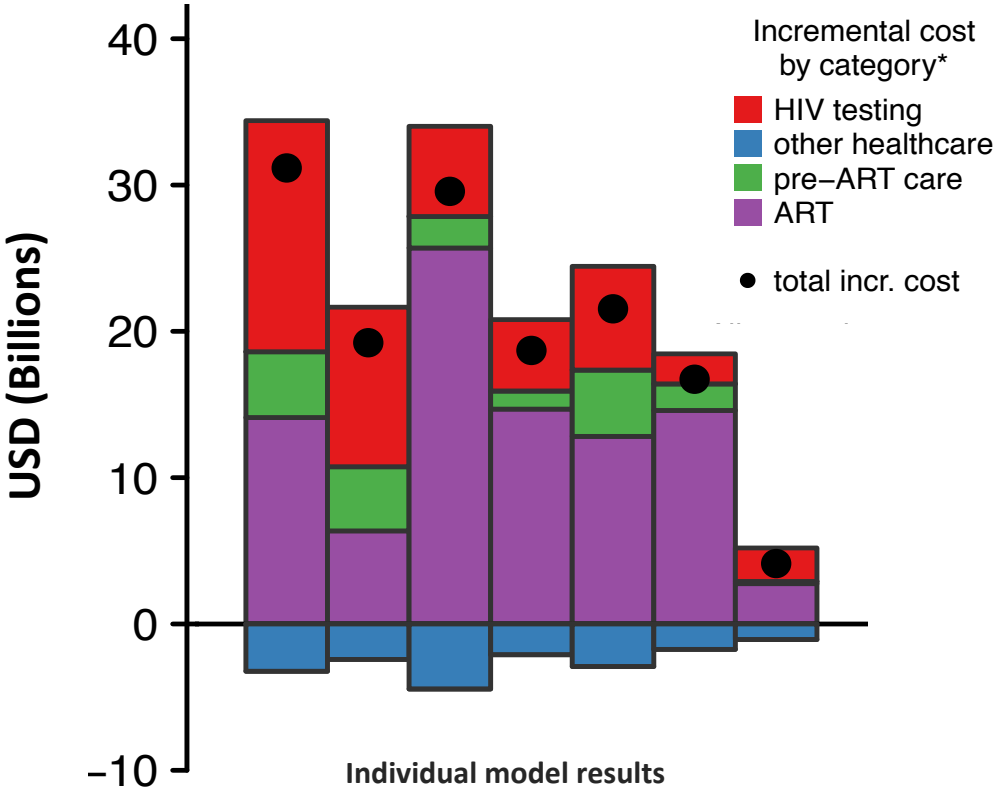
Menzies et al 2016

Variable results

HIV guideline revision

- Multi-model collaboration
- *Same* countries
- *Same* policies being evaluated
- *Same* outcome measures
- *Different* results

Incremental costs of expanded ART access, summed over 20 years (South Africa)



Eaton et al 2014

Motivation

- Mathematical modelling becoming a commonly-applied tool to inform country-level TB program decisions
- Recent evidence suggests that models can produce a wide range of results when investigating similar/identical policy questions
- Currently no domain-specific guidance about how modelling should be applied to support country decision making