

# From Trials to Target Populations: Extending and Extrapolating Evidence for HTA Decision-Making

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# What is the challenge?

- Clinical trials enroll highly-selected populations that are not always aligned with the population that would be eligible for treatment in the real world following a positive health technology assessment (HTA) recommendation.
- This divergence may be necessary or desirable for reasons of safety, ethics, trial logistics and/or statistical power, and the uncertainty this introduces into the HTA decision problem must be tackled with other methods.
- The real-world population that would receive treatment in routine clinical practice, or equivalently the population covered by the HTA recommendation, may be considered the 'target' population.
- HTA decision makers routinely consider analyses of clinical trial data to make recommendations for a target population, and increasingly rely on non-randomised evidence to supplement trial data.
- Consequently, there is a need to consider the best use of data to inform decision-making for target populations.

### What can be done?

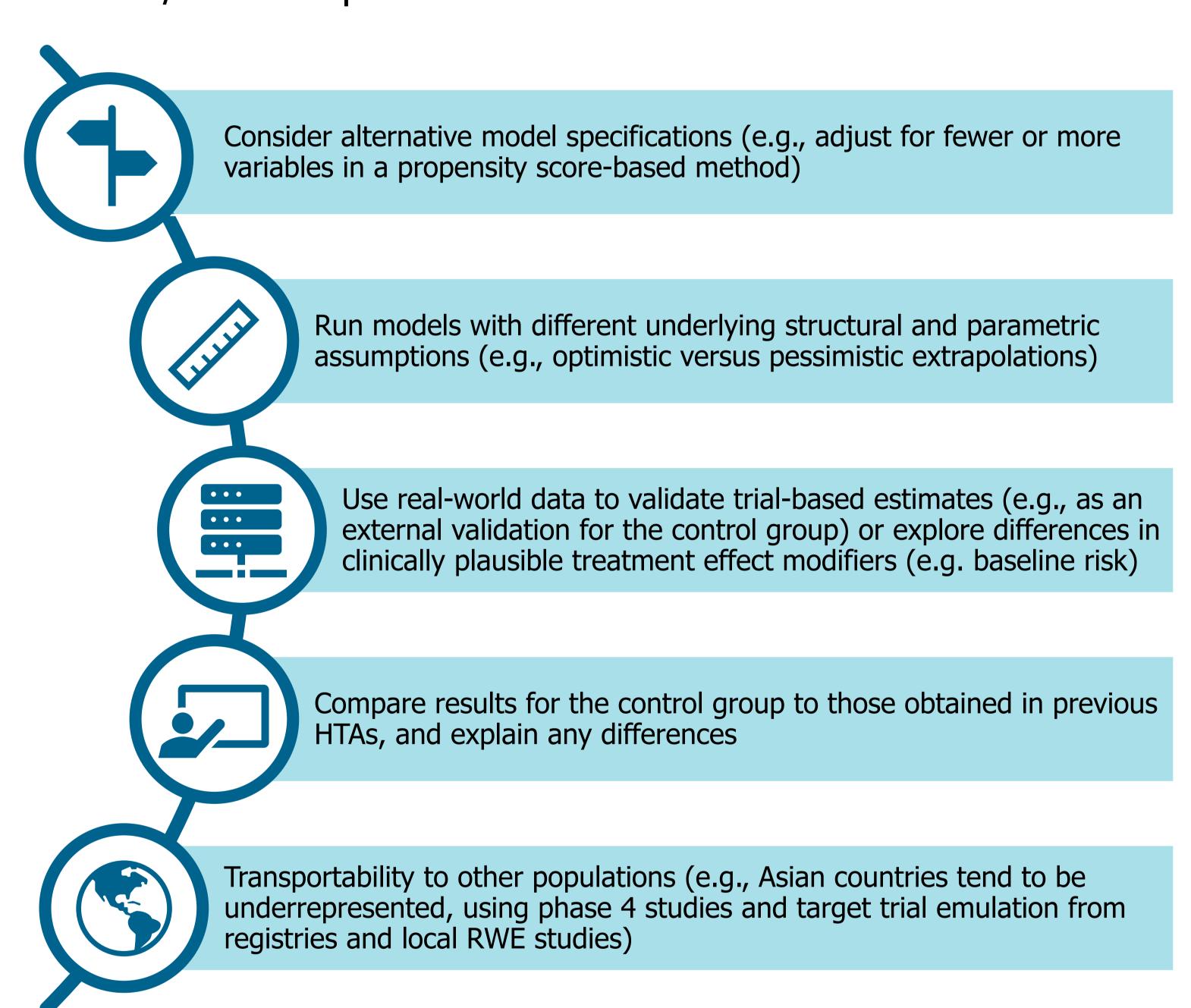
# Statistical techniques and related HTA activities:

There are a range of different methods and activities that may help guide estimates of clinical outcomes and treatment effects.



## **Sensitivity analysis:**

For any analysis method performed, it should be possible to consider sensitivity analyses to stress test various settings and/or assumptions.



### **Early planning:**

Outside of specific analyses, it is important to plan early for HTA as part of evidence generation plans. Pre-specified populations and analyses often carry more weight in HTA decision making.

Incorporate HTA considerations as part of trial design (e.g., considering eligibility criteria in line with expected target population, diversity plans)

Pre-specify target populations in protocols, statistical analysis plans and evidence generation plans

Engage with HTA bodies early to clarify evidence needs and harmonize evidentiary requirements between regulatory and HTA agencies (e.g., NICE scientific advice, Joint Scientific Consultations as part of EU HTAR)

Seek stakeholder input to define relevant populations (e.g., patient, payer or clinician advisory boards) Guidance on filling in the joint clinical assessment (JCA) dossier template: Section 2.1.2 Characterisation of the target patient population and related HTA RWE Frameworks (e.g., NICE, CAD)

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