

**PRM103**

**Identifying the Key Parameters of the European-Study on Quantifying Utility of Investment in Protection from Tobacco (EQUIPT) Model**

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**Objectives:** To inform transferability of economic evidence to resource-poor countries.

This was achieved by identifying key input parameters that were important enough to cause significant variation in the return-on-investment (ROI) measures across different jurisdictions in the EQUIPT (European-study on Quantifying Utility of Investment in Protection from Tobacco) model. **Methods:** Following a Markov state transition framework, the EQUIPT model was set up to predict the ROI measures for tobacco control interventions in five European countries (UK, Spain, Germany, the Netherlands and Hungary) and is therefore data-hungry. To be able to assess the extent to which the model would require country-specific data if it were to be transferred to Central and Eastern Europe (CEE), a one-way sensitivity analysis was conducted on all the input parameters collected from the five countries.

Base case results were obtained through average values of all input parameters, which were then replaced one at a time with country-specific values. The resulting outcomes were evaluated thoroughly using Tornado diagrams. Finally, a short list of input parameters was constructed to guide additional data collection from CEE to further evaluate the transferability of EQUIPT model. **Results:** Sixteen of input parameters causing significant variation in model outputs were identified. Fourteen input parameters caused variation that was considered large (> 10%) in at least six of the eight ROI measures. This led to the construction of a short list that included key parameters like smoking prevalence, costs of smoking-related diseases, discount rates and several general attributes of the population. **Conclusions:** The shortlist of key parameters provides countries that have limited resources and time to conduct research with an opportunity to adapt the EQUIPT Tobacco ROI Tool to their own setting. After collecting only the key parameters in the shortlist and applying those in the EQUIPT model, researchers will be able to generate results relevant to their own countries.