

Review and Analysis of Economic Model Characteristics According to Published HTA Conclusions in Ukraine

Ioltukhovskiy I.¹, Khmelovska M.¹, Serediuk V.¹, Piniashko O.¹, Babenko M.¹

¹State Expert Center of the Ministry of Health of Ukraine, Kyiv, Ukraine

OBJECTIVES

Since 2021 and up to June 2023 there were 30 HTA conclusions published by the HTA Department of State Expert Center of the Ministry of Health of Ukraine. According to the methodologic recommendations and national legislation, an economic model is required to be presented in the company submission dossier for the HTA procedure. Therefore, the main objective is to define and analyse the most common economic model designs and characteristics such as type of pharmacoeconomic analysis, model types and sensitivity analysis types.

Figure 1: Types of analyses used in the HTA submissions in Ukraine

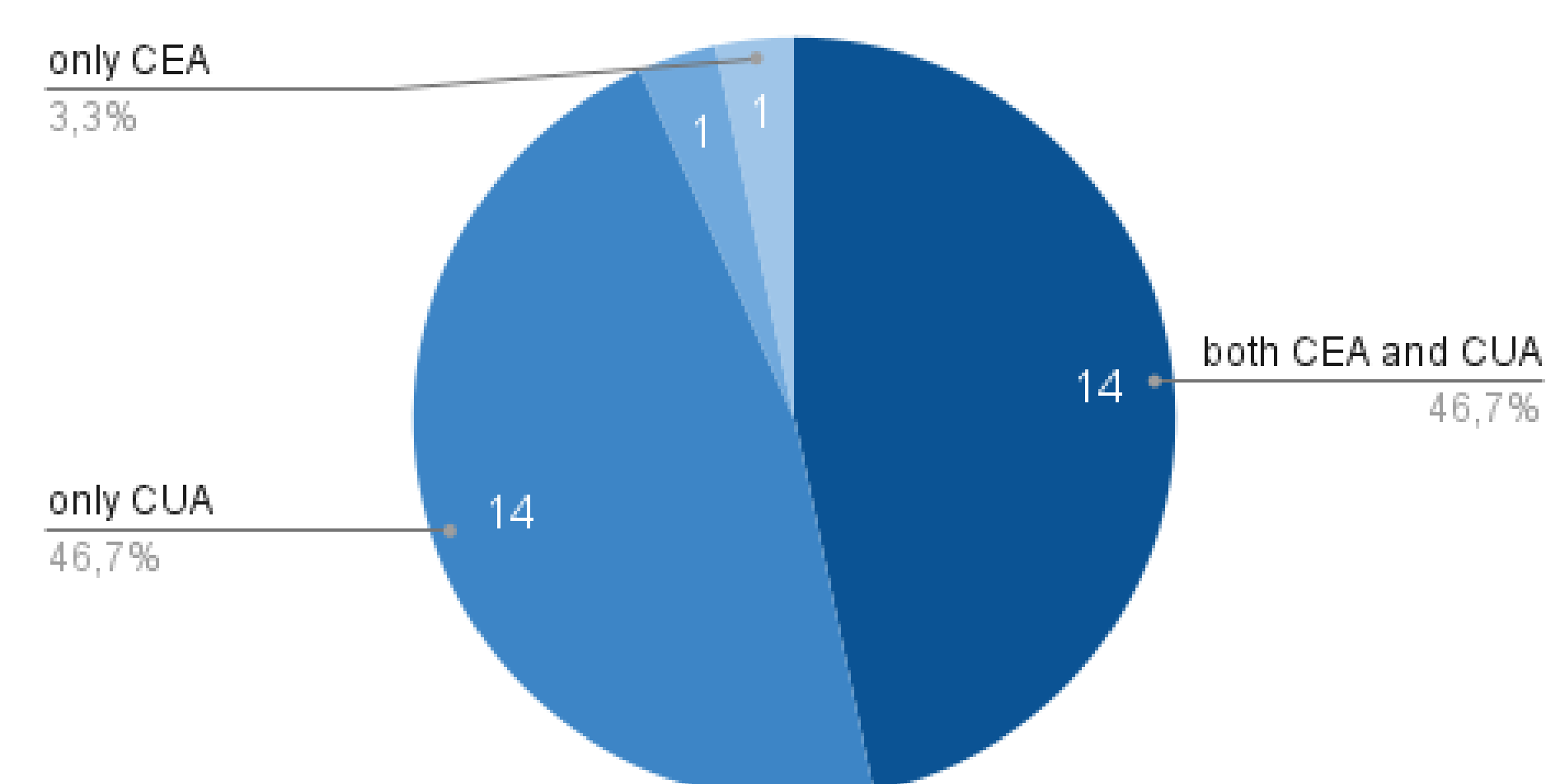
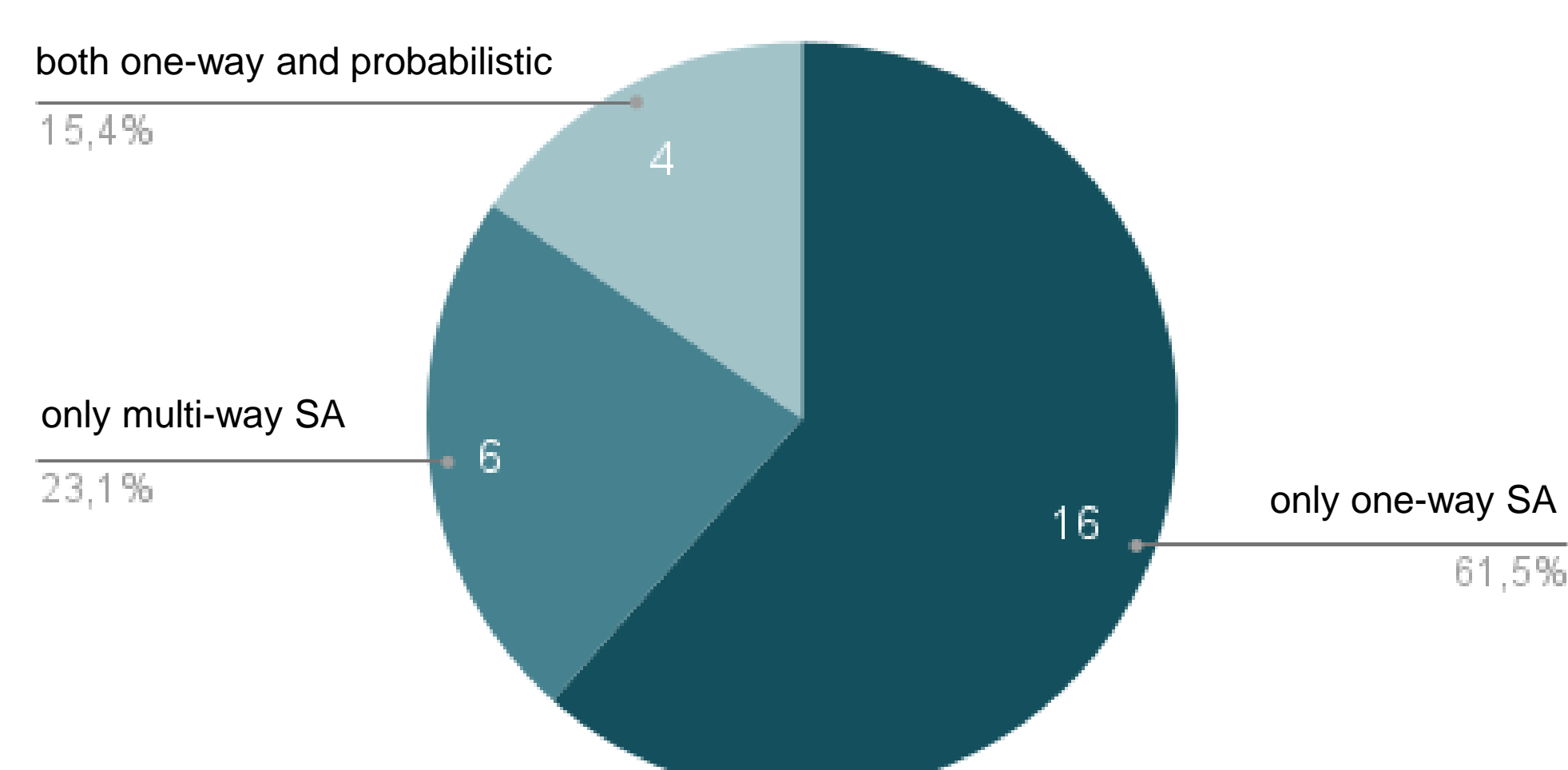


Figure 2: Types of sensitivity analyses used in the HTA submissions in Ukraine



METHODS

The review is aimed at nonconfidential data of HTA conclusions published by the HTA Department of “State Expert Center of the Ministry of Health of Ukraine”.

RESULTS

Among 30 economic models, most conducted only cost-utility analysis (CUA) (14) or both cost-effectiveness (CEA) and cost-utility analyses (14). One (1) model conducted cost-minimization analysis and one (1) only cost-effectiveness analysis (figure 1). The vast majority of economic models were designed as a Markov model (26). Two (2) models were designed as mixed decision tree / Markov models. There were three sensitivity analyses (SA) types conducted in economic models: only one-way SA (16), only multi-way SA (6), both one-way and probabilistic SA (4).

CONCLUSIONS

The most common economic evaluation type that is used in company submissions in Ukraine is cost-utility analysis. Nearly all of the models simulate Markov cohorts and most of them conducted one-way sensitivity analysis. A few pharmacoeconomic models were global and were adapted by the applicants due to local characteristics of the health system of Ukraine.