

## Background

The choice of perspective in health economic evaluations is central to the outcome [1]. In Sweden, the Dental and Pharmaceutical Benefits Agency (TLV) bases reimbursement decisions on health economic evaluations, adopting a societal perspective [2]. Unlike the healthcare payer perspective, the societal perspective accounts for costs and benefits arising both within and outside the regional healthcare system [3].

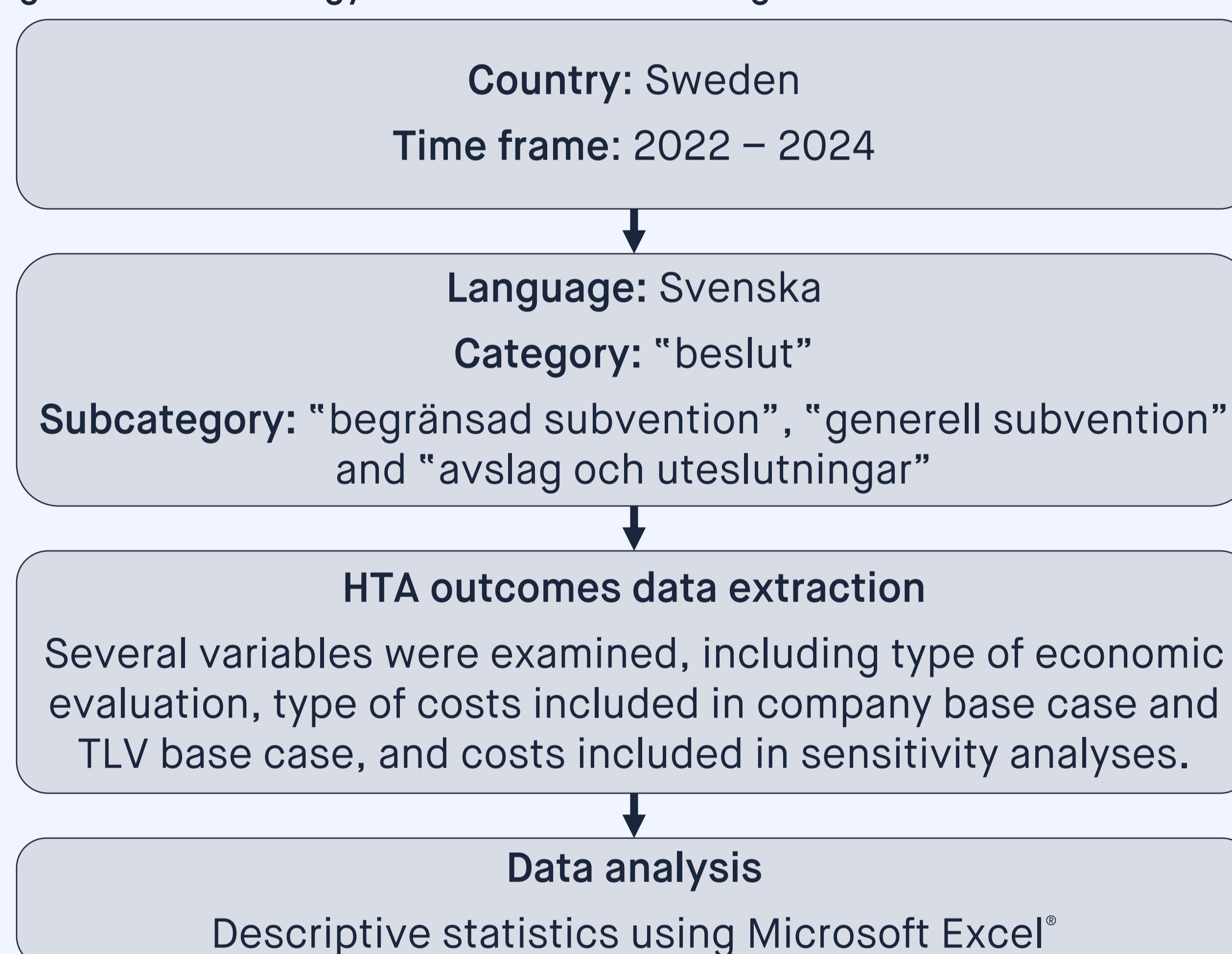
## Aim

This study aimed to investigate how TLV applies the societal perspective, focusing on their assessment of non-healthcare costs.

## Methods

A health economic analysis was defined as having a societal perspective if it included costs beyond direct healthcare expenditures, i.e., cost incurred outside the Swedish regions and hospitals. The NMAi tool [4] was used to retrieve reimbursement decisions published by TLV. The NMAi tool consists of a database with documents from year 2000 published by Nordic HTA bodies. The NMAi tool allowed for filtering searches by date range, country, language, category, subcategory, and medicine. TLV reimbursement decisions published between 2022 and 2024 were included in the analysis. **Figure 1** presents the methodology for data extraction.

Figure 1. Methodology of data collection using the NMAi tool



A total of 704 TLV documents for the relevant time period were identified in the NMAi tool. Decisions for price changes and assessment reports for the NT Council were excluded from the analysis, resulting in a total of 389 documents. In the NMAi tool, unique reimbursement assessments can include two documents: the decision and the assessment report. Since detailed cost data are available in assessment reports, corresponding reimbursement decisions were excluded, leaving 139 assessment reports. Following manual screening, cost comparisons were excluded, leaving 52 cost-utility analyses for the final analysis.

## Results

Of the 54 cost-utility analyses analysed, companies proposed including non-healthcare costs in 6 (11%) of the base cases. In all of

these cases, TLV excluded non-healthcare costs from their base case (**Figure 2**). Non-healthcare costs included by the companies were transportation costs and productivity losses for patients and relatives. In one reimbursement decision (Apexxnar) TLV included the non-healthcare cost in their sensitivity analysis. A detailed description of the six reimbursement decisions with non-healthcare costs is presented in **Table 1**.

Figure 2. Reimbursement decisions analysed 2022-2024

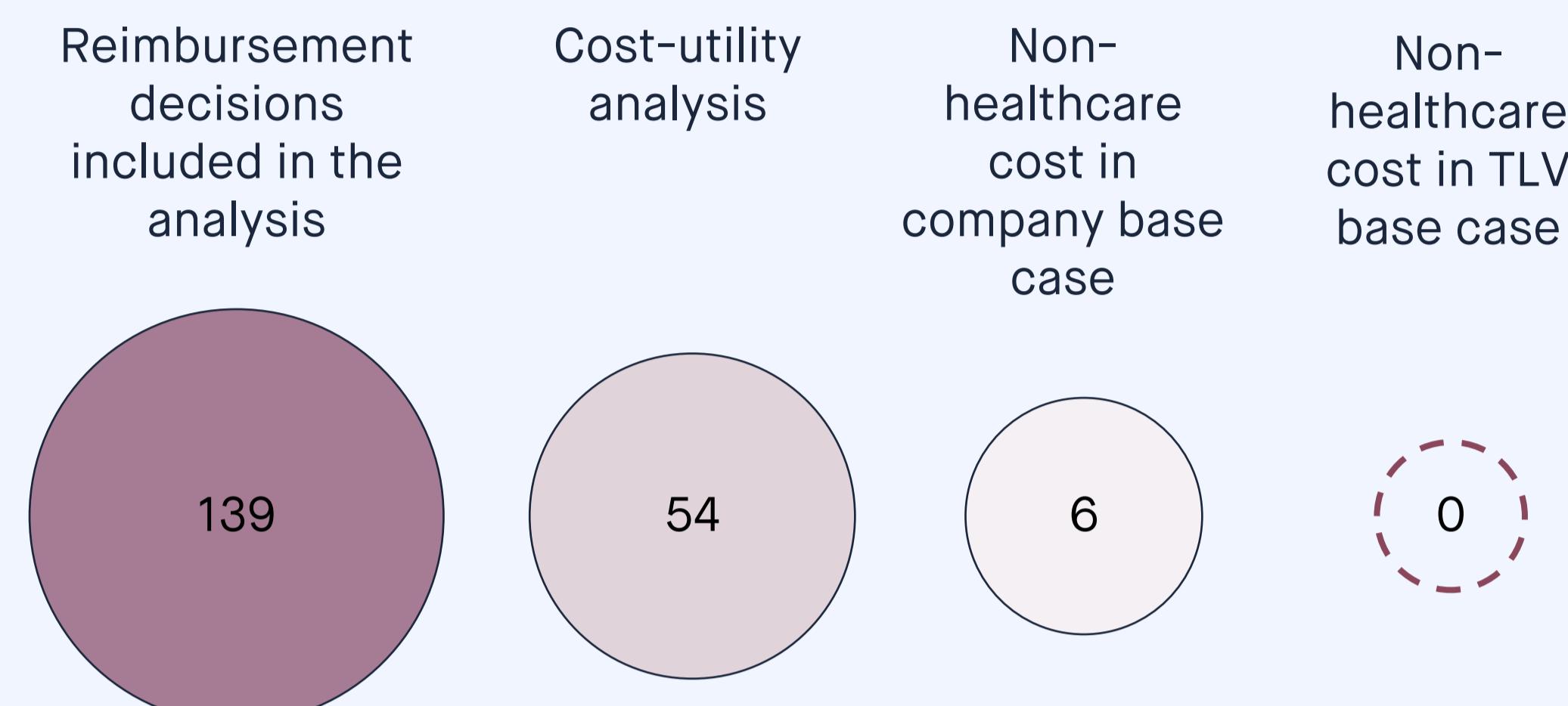


Table 1. Descriptive analysis of reimbursement decision where the company included non-healthcare costs

Medicine	Disease area	Non-healthcare costs	Effect on ICER
Tukysa (tukatinib)	Oncology	Productivity losses	Excluding non-healthcare costs increased the ICER with SEK 127,105
Apexxnar (20-valent pneumococcal conjugate vaccine)	Vaccines	Productivity losses	ICER was dominant with and without non-healthcare costs; when excluding non-healthcare costs, incremental costs fell by SEK 187 and SEK 652 in the two analysed subgroups
Rinvoq (upadacitinib)	Immunology	Productivity losses and transportation costs	ICER was dominant with and without non-healthcare costs. When excluding non-healthcare costs, incremental costs fell by SEK 221,171
Brukinsa (zanubrutinib)	Oncology	Transportation costs	Not reported
Bylvay (odevixibat)	Hepatology	Productivity losses for relatives	Not reported
Repatha (evolokumab)	Cardiovascular	Productivity losses	Not reported

## Discussion and conclusion

The study aimed to examine how TLV incorporates non-healthcare costs in reimbursement decisions and, consequently, how TLV adopts a societal perspective. The findings suggest that companies rarely include non-healthcare costs in their analyses, and when they do, these costs are often associated with productivity losses. In all analysed reimbursement decisions, TLV excluded non-healthcare from their base cases.

TLV has addressed its approach to the societal perspective in an official statement, emphasising a more cautious approach toward including costs associated with productivity loss, since there is a risk that patients outside the labour market become disadvantaged [5]. However, the societal perspective extends beyond productivity losses to include any costs that may be affected by the introduction of a new medicine, such as transportation, municipal services, and personal assistance. Besides productivity loss, transportation costs were the only non-healthcare costs identified in the reimbursement decisions, which TLV excluded from the analyses.

According to guidelines, TLV adopts a societal perspective. However, this study could not identify any reimbursement decision between 2022 and 2024 in which TLV included non-healthcare costs in their base-case analysis.

## References

- [1] Kim Y. et al. The Primary Process and Key Concepts of Economic Evaluation in Healthcare. *J Prev Med Public Health*. 2022;55(5):415-423
- [2] TLV. Handbok för företag vid ansökan om subvention och pris för läkemedel. Last updated 2025-06-19.
- [3] Sittimart, M. et al. An overview of the perspectives used in health economic evaluations. *Cost Eff Resour Alloc* 22, 41 (2024).
- [4] Palomar M, et al. Using the NMAi tool to ease comparative analyses of HTAs in the Nordics. *ISPOR Europe 2024 Conference*; 2024 Nov 10-13; Barcelona, Spain.
- [5] TLV. Ny tillämpning av etiska plattformen. Cited: 2025-10-16. Last updated: 2022-08-30. Available: [tlv.se/lakemedelsföretag/helsekonomi/ny-tillämpning-av-etiska-plattformen.html](http://tlv.se/lakemedelsföretag/helsekonomi/ny-tillämpning-av-etiska-plattformen.html)