

# A systematic review of the methodological aspects of applied economic evaluations in the palliative and end-of-life care settings

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## Background

- The demand for palliative and end-of-life care (EOLC) is rising; therefore, economic evaluations (EEs) of interventions in the palliative and EOLC settings are becoming increasingly important to provide guidance for fair resource allocation.
- Although these settings differ from curative ones in multiple regards (e.g., treatment aim), hardly any methodological recommendations for conducting EEs specifically in palliative and EOLC settings are currently available.
- Consequently, this literature review **aims to assess existing EEs** conducted in these settings regarding their applied methodological aspects and quality of reporting.

## Methods

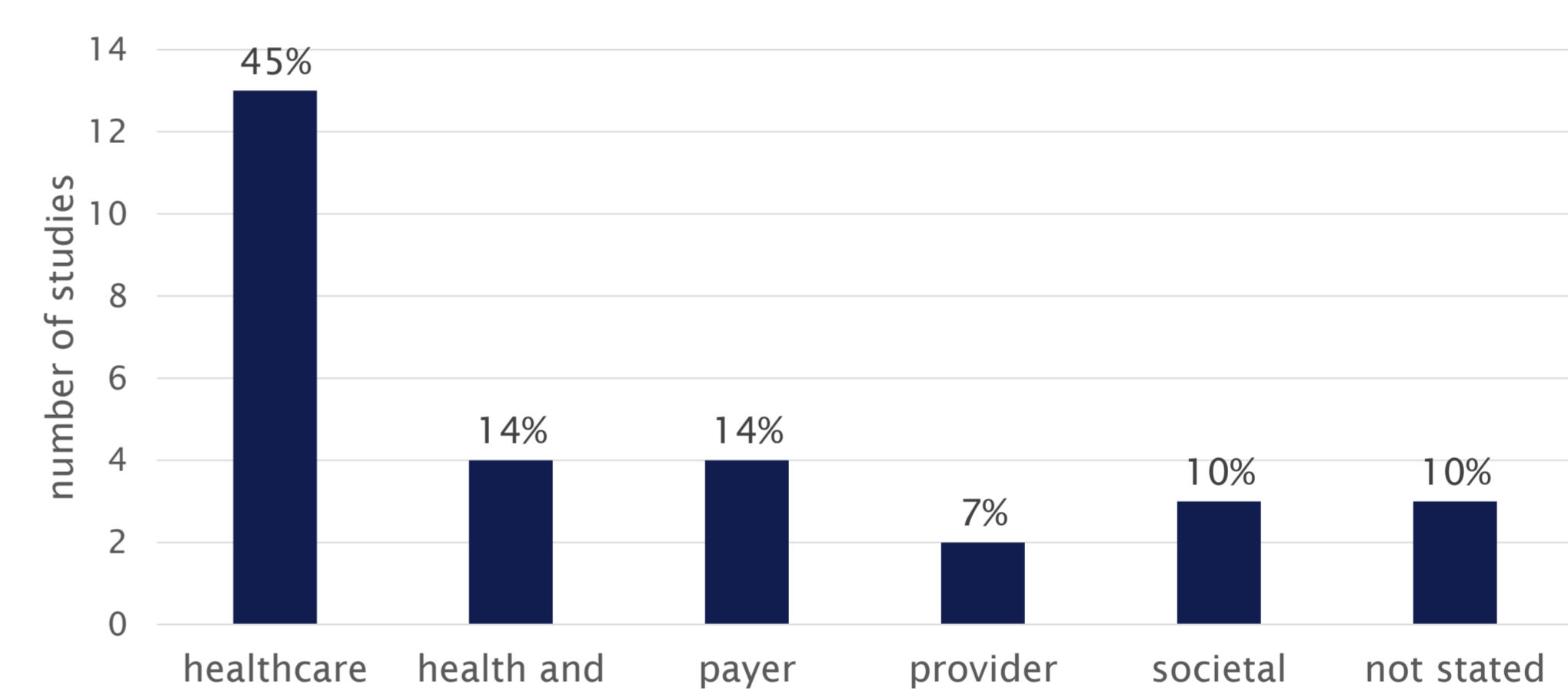
- Following a **peer-reviewed published research protocol** and the up-to-date **PRISMA guideline**, we covered literature published between Jan. 2010 and Jan. 2022.
- Study selection was conducted in course of two screening rounds by two researchers and based on predefined inclusion criteria: applied full EEs of interventions for adult patients in the palliative or EOLC setting, published in English or German language.
- Using a pre-designed form, we extracted and compared **descriptive** as well as **methodological information** (e.g., utilized outcome measures, included costing strategy, analytical perspective taken).
- Selected articles were assessed regarding their quality of reporting and summarized using narrative synthesis.

## Results

- Our search strategy identified 2,993 references, of which 160 were included for full-text review. So far, 29 full-texts have been included (see Figure 1).
- **A preliminary data extraction of these 29 studies shows:**
  - 55% are **trial-based** and 31% are modelling-studies.
  - Most studies (90%) cover solely **single-country information**.
  - The predominant **type of EE** is a cost-utility analysis (69%).
  - The **analytical perspective** taken is usually narrow (66%) such as payer or healthcare perspective (see Figure 2).

- More studies are carried out in the **palliative setting** (69%) compared to the EOLC setting.
- The most frequently evaluated care segments are **hospitals** (55%) followed by the home setting (21%).
- 66% of the studies analyze **cancer-related interventions**.

Fig. 2 Analytical perspective (n=29)



- **Outcomes** frequently applied are QALYs followed by life years gained and clinical outcomes. **Quality of life (QoL) measures** utilized are mainly generic (non-condition-specific) ones (65.5%) with the EQ-5D being the predominant one (see Figure 3).
- **Palliative-specific outcome measures** applied are the ICECAP-SCM, ICECAP-O, IPOS and POS-S-MS (14%).

Fig. 3 Outcomes and outcome measures (n=29)

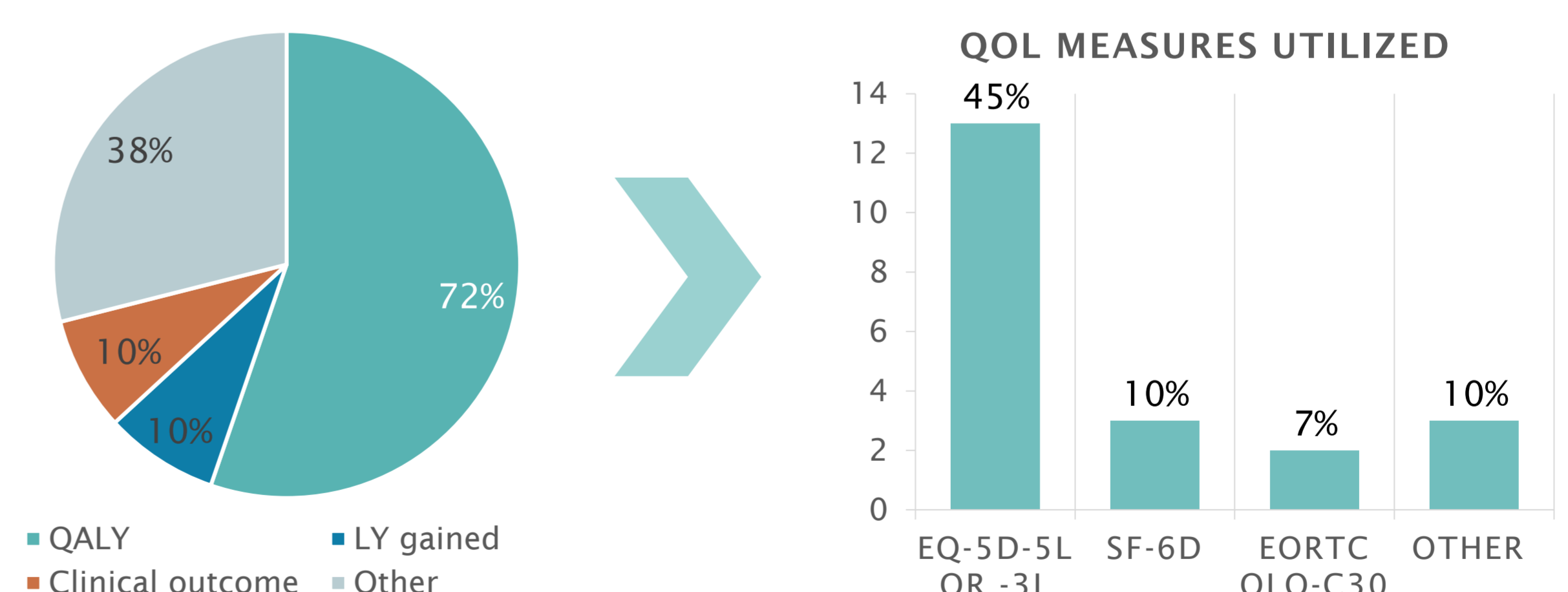
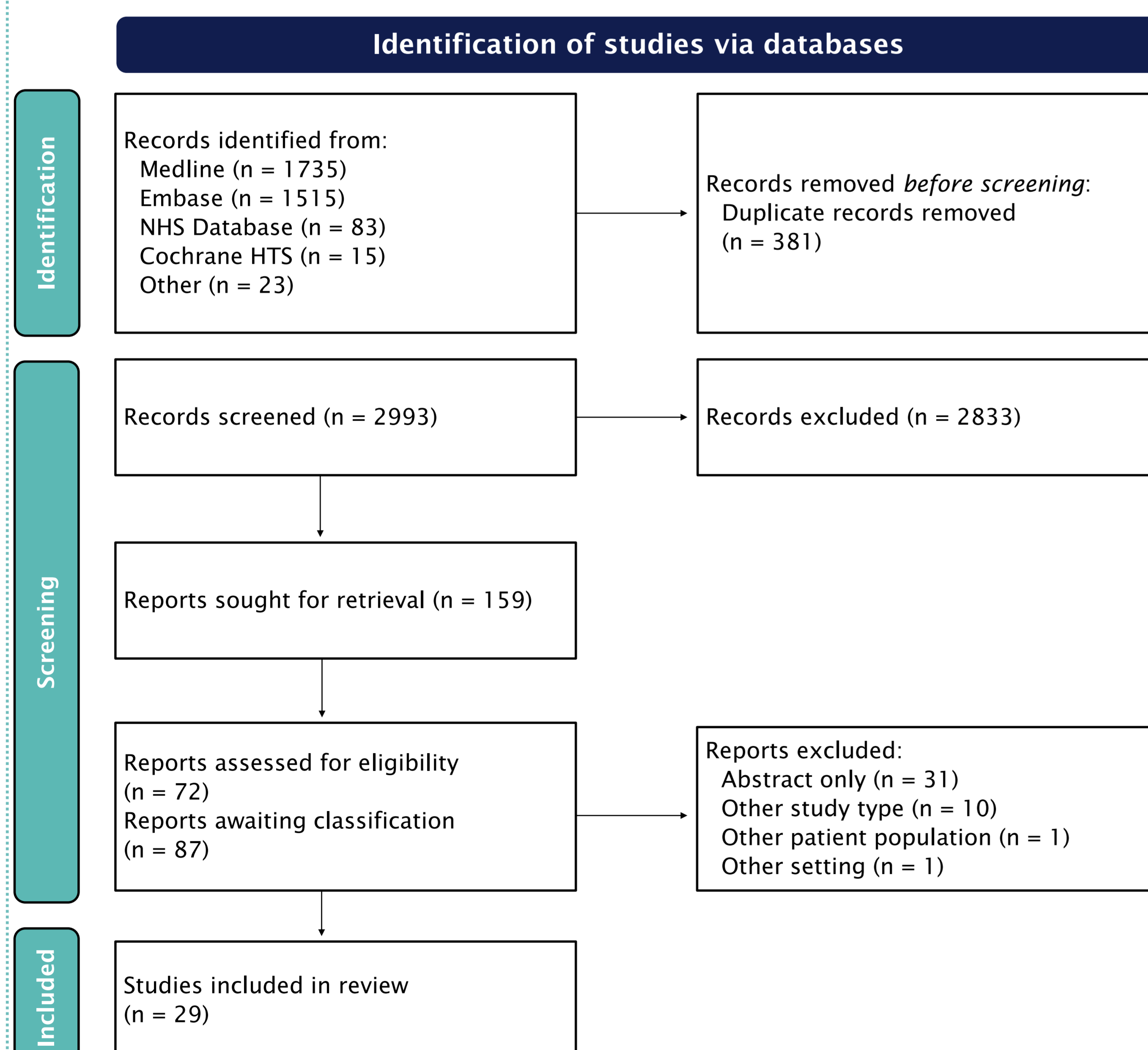


Fig. 1 PRISMA 2020 flow diagram



## Conclusion

- Based on our findings, the methodology of full EEs conducted in the palliative and EOLC settings is highly variable; besides, crucial methodological information is often missing.
- Frequently, generic QoL-measures (e.g., EQ-5D-5L) are utilized and a narrow analytical perspective is taken.
- To increase the usefulness and comparability of generated economic evidence in the field of palliative and EOLC, reporting guidelines should be followed in future EEs.

## References

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