

“Patient experience and benefit distribution are considered as important as health outcomes when valuing healthcare”

EE214

Unravelling the elements of value of healthcare and assessing their importance using evidence from two discrete-choice experiments in England

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Introduction

Worldwide, health systems are being redesigned towards value-based healthcare through new models of care.

However, little is known about the elements of value of healthcare and their relative importance.

There is an ongoing debate about whether healthcare costs should counterweight elements of value in a multi-composite value metric.

This study aimed to define the elements of value of health care and assess their relative importance to the public in England.

Methods

- Identification of the elements of value of healthcare:**
 - 26 semi-structured interviews¹ and a systematic literature review².
 - Selection based on **properties of decision-theory**.
- Estimation of elements’ relative importance (RI):**
 - Two discrete choice experiments (DCE)** using a representative sample of the **general public in England**. Costs of healthcare expressed as income tax rise was included only in one survey. Each participant responded 14 choice tasks (online survey).
 - Respondent preferences were analysed using **mixed logit models**.

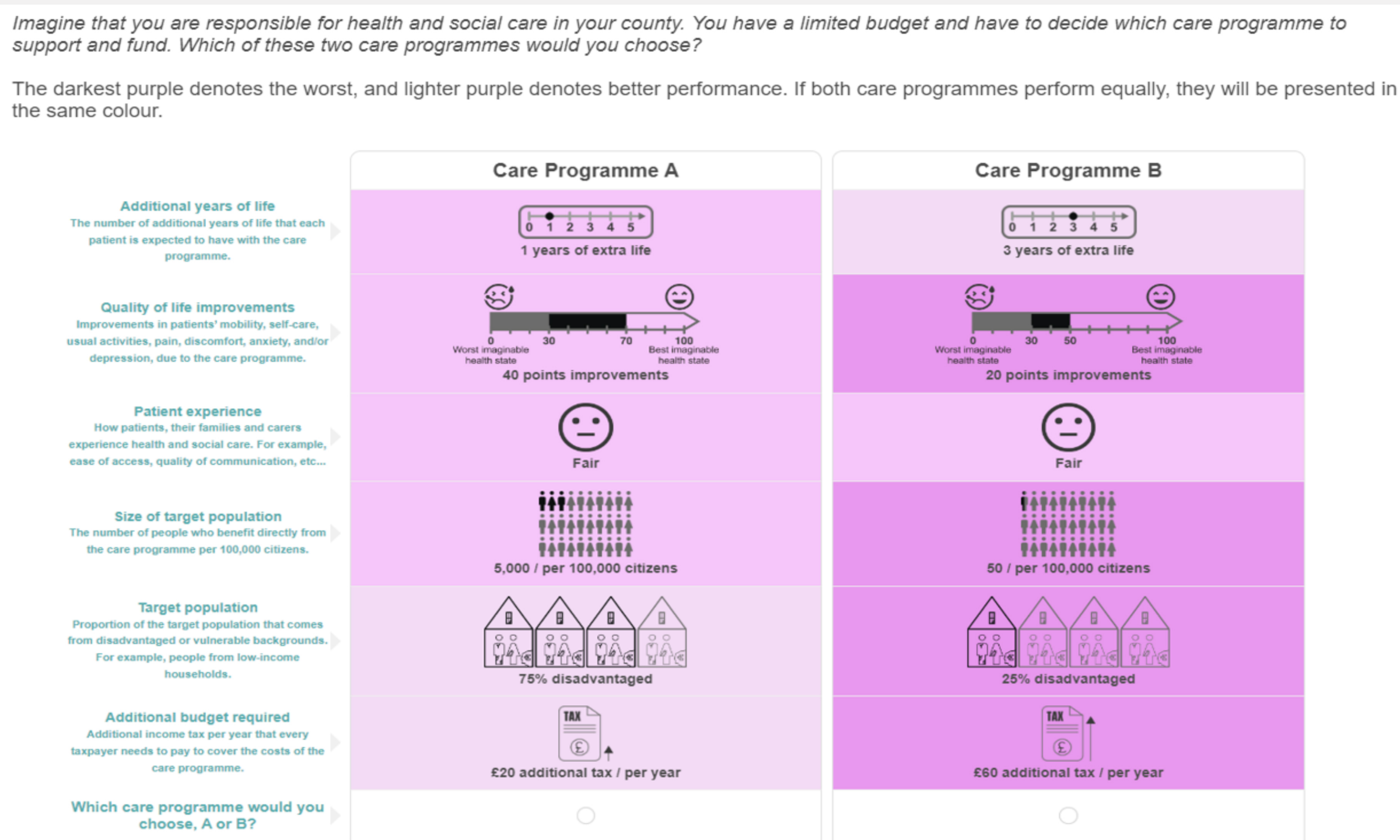


Figure 1. Choice task presented to participants

Discussion

- ✓ This is the **first choice experiment in the field** using a **split sample design** that expresses cost in terms of **income tax increases**.
- ✓ The general public assigns **high importance to elements of value that are not captured by conventional value metrics**, such as quality-adjusted life-year (QALY).
- ✓ The inclusion of **costs in the value metric should be considered with caution**, especially when linear additive models are employed.
- ✓ This study offers a **comprehensive set of elements** to better conceptualise the idea of **value-based healthcare**.
- ✓ Local healthcare commissioners in England could use the relative weights derived in this study to **systematically assess new care models**.
- ✓ The relative weights could be used in the application of **Multi-criteria Decision Analysis (MCDA)** to assess value-based healthcare.

Results

- Six elements of value** were identified (Figure 2) and renamed for the choice experiments (Figure 1).
- 402 members of the public** completed the surveys in November 2022.
- All utility coefficients had the expected signs and were statistically significant ($p\text{-value} < 0.05$).

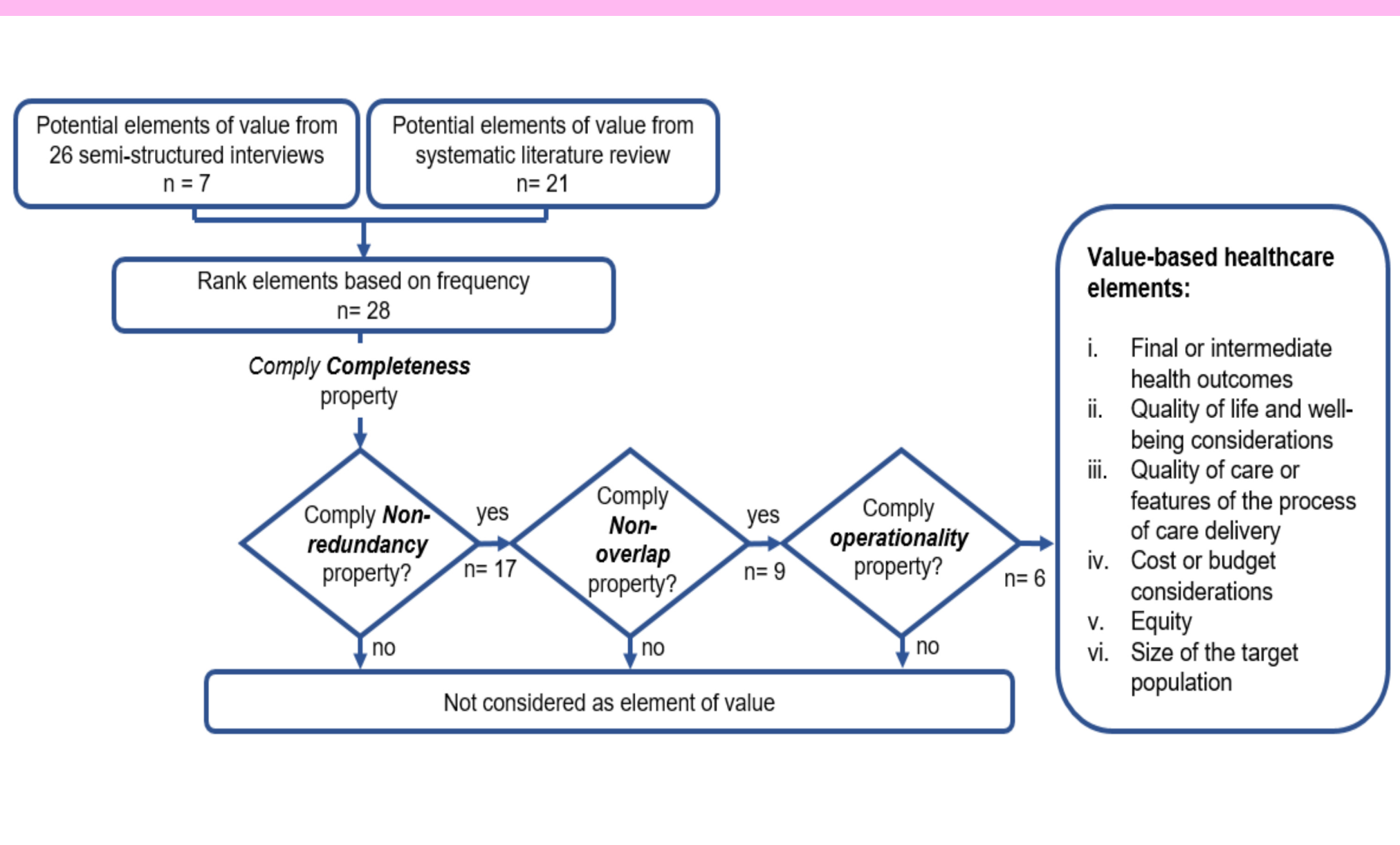


Figure 2. Flowchart to select value elements based on properties of decision theory

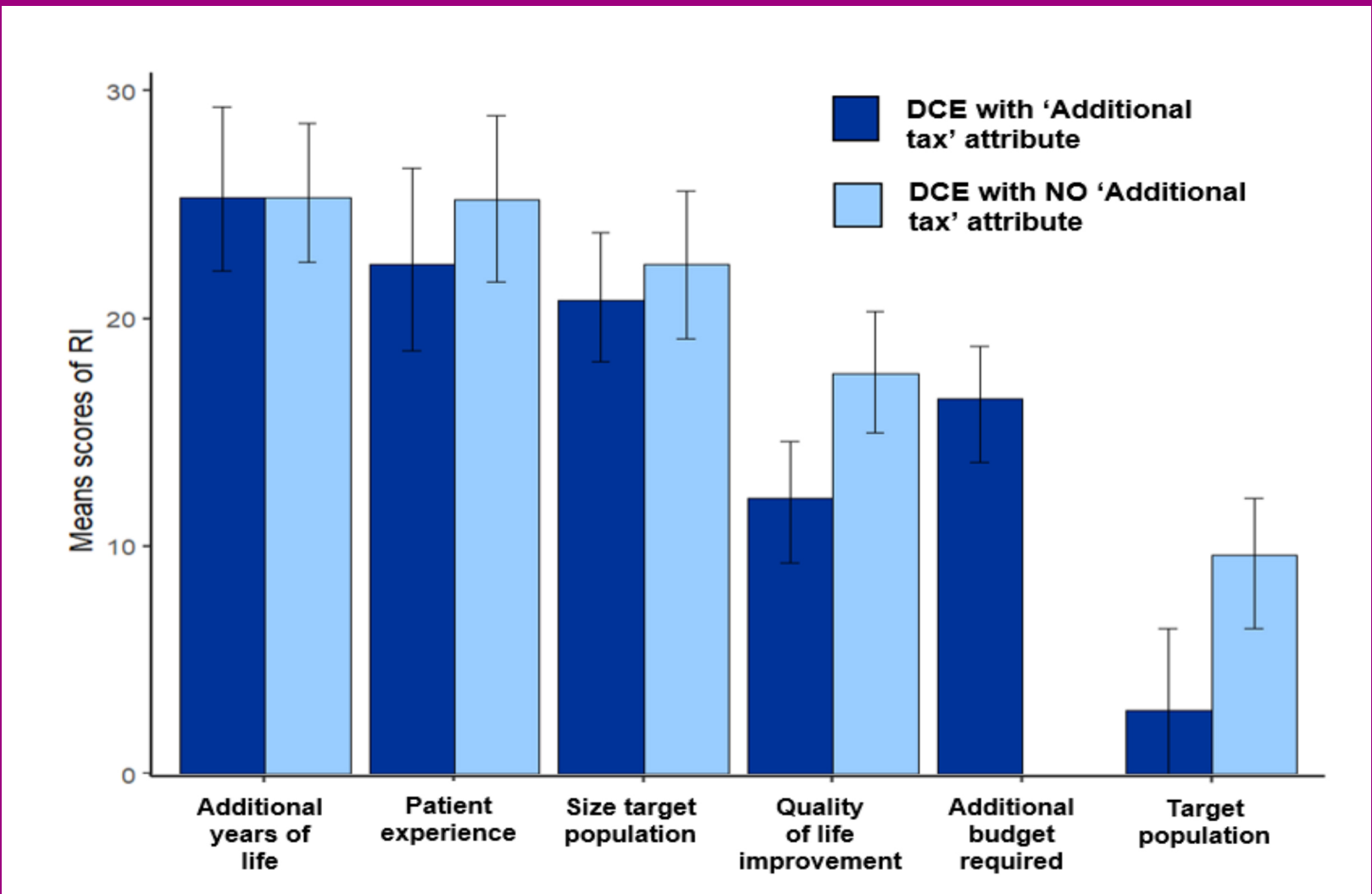


Figure 3. Comparison of RI scores with error bars (95% confidence interval)

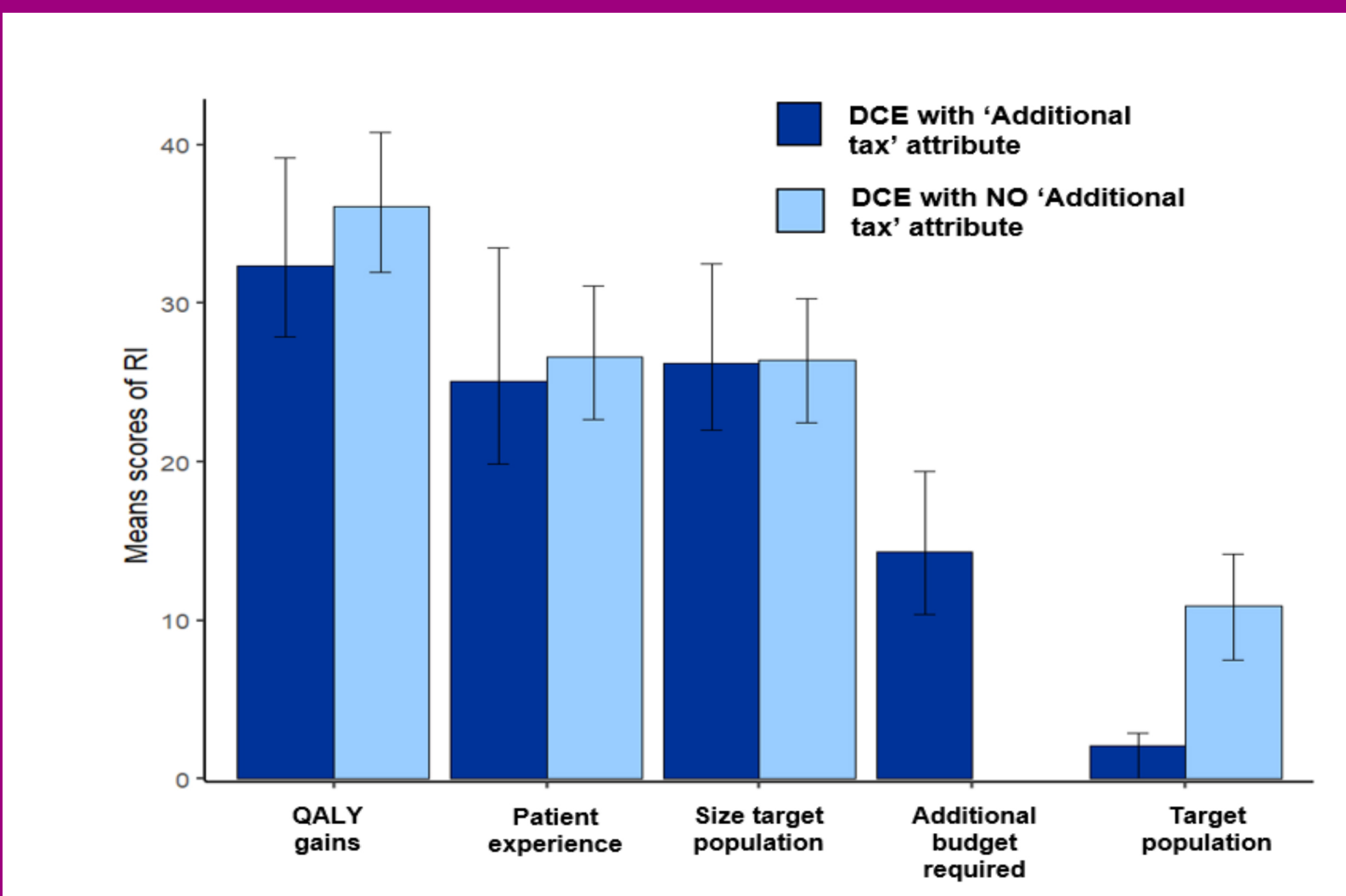


Figure 4. Comparison of RI scores with QALY gain variable derived from DCE data and error bars (95% confidence interval)

References

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Acknowledgements

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