Comparison of EQ-5D-3L and EQ-5D-5L Index Scores Using Crosswalks in Real-World Data from the Dutch Institute for Clinical Auditing (DICA)

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Background

The EQ-5D questionnaire measures **quality of life** across five dimensions with two versions: **EQ-5D-3L** (3L; three levels) and **EQ-5D-5L** (5L; five levels). In clinical audits governed by **the Dutch Institute for Clinical Auditing (DICA)**, patients can start with EQ-5D-3L and continue follow-up measures with EQ-5D-5L when **transitioning** from 3L to 5L. The transition raises the question whether EQ-5D-3L data can be used to predict EQ-5D-5L index scores in audit reports.

Aim

Comparison of **directly calculated** EQ-5D-3L index scores with **predicted** EQ-5D-5L index scores from EQ-5D-3L, and vice versa. This would enable the use of historic EQ-5D-3L data to predict EQ-5D-5L index scores in audits.
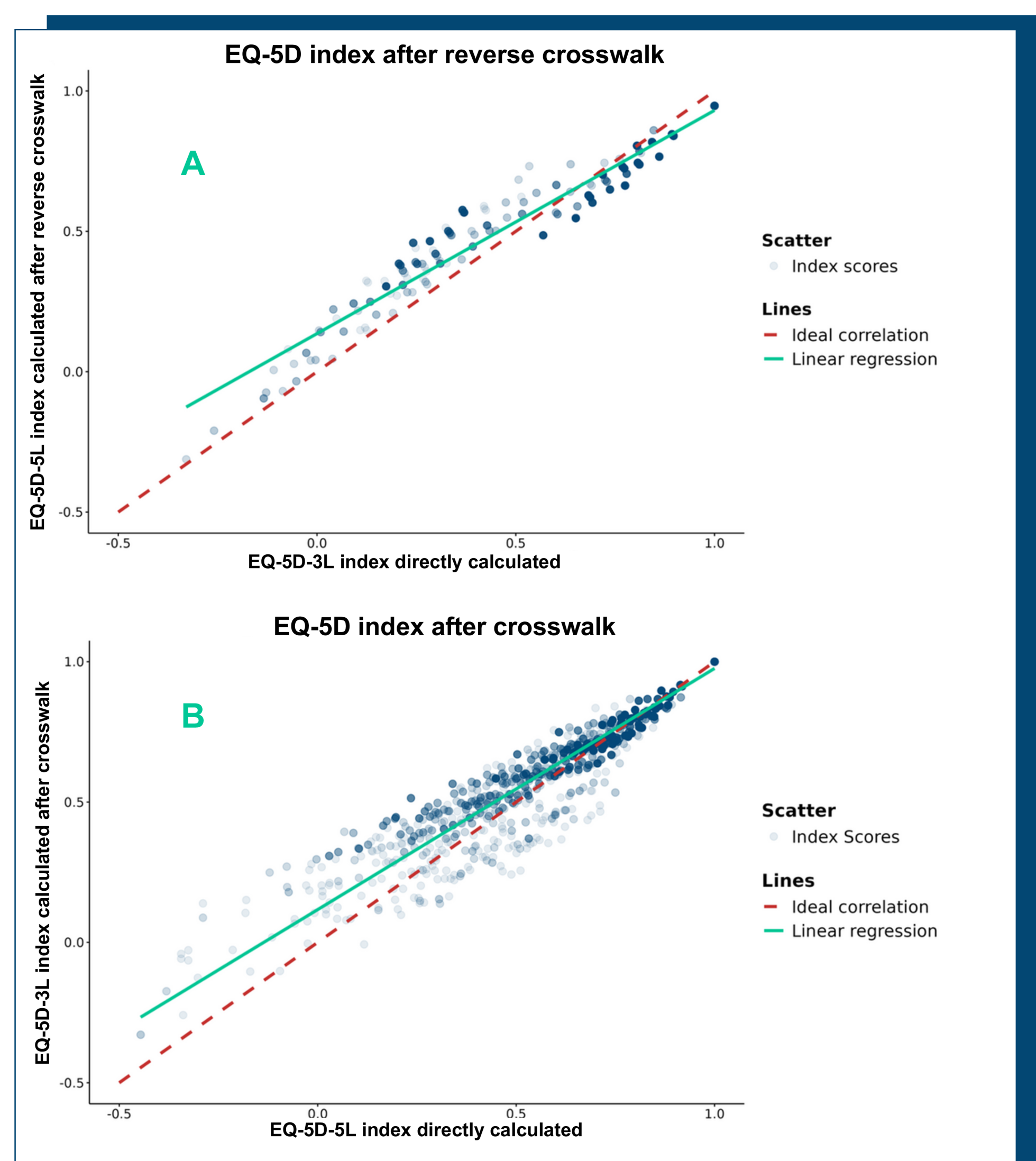
Method

- EQ-5D-3L and EQ-5D-5L data from **various DICA quality registries** were used.
- **Reverse crosswalk and crosswalk methods** were used to predict EQ-5D index scores.
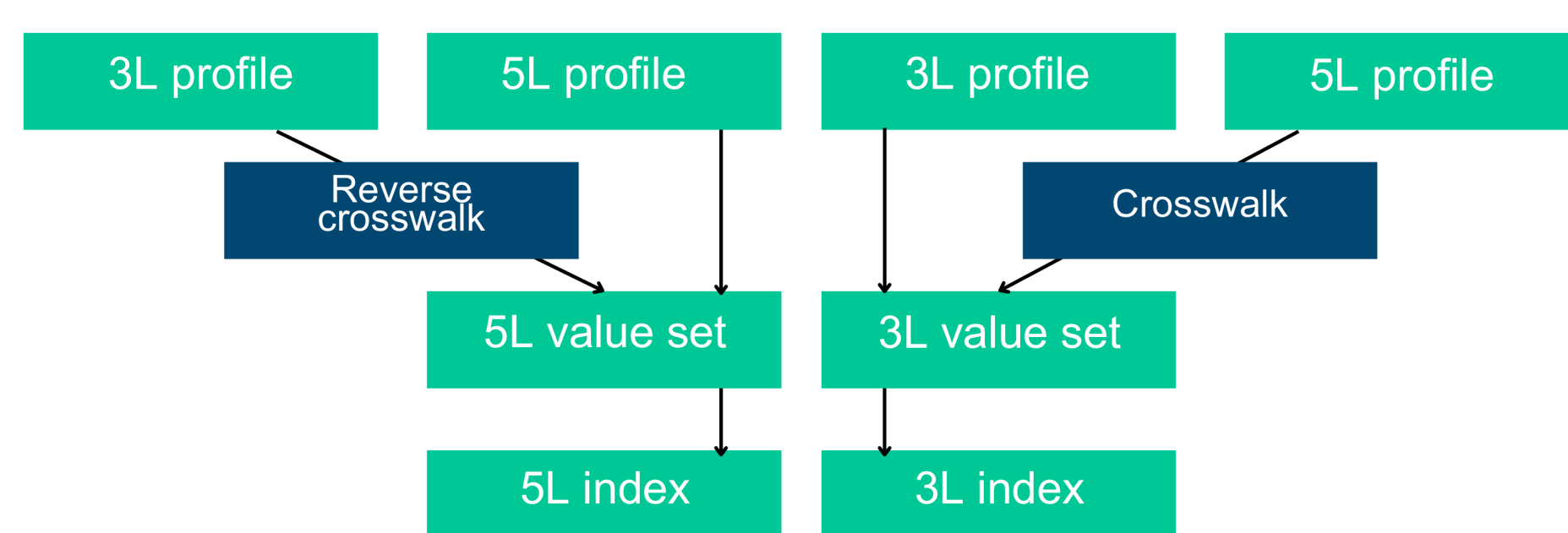
Results

- A total of **12,278** EQ-5D-5L and **4,011** EQ-5D-3L questionnaires were included.
- Deviations from the regression line indicate discrepancies between directly calculated and predicted EQ-5D index scores (**A & B**).

CONCLUSION AND IMPLICATIONS

> The (reverse) crosswalk method is inadequate for substituting directly calculated with predicted EQ-5D index scores in audits.

> Using only predicted scores may lead to different recommendations by healthcare professionals regarding quality of life.

> Audit reports should include both directly calculated EQ-5D-3L and predicted EQ-5D-5L index scores when using historic 3L data.

> EQ-5D data from various DICA registries were used; further analysis is recommended in patients who completed both 3L and 5L in the same registry.

Questions or remarks?

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