ARE GENERAL POPULATION DATA SUITABLE FOR APPROXIMATING BASELINE UTILITY VALUES IN ECONOMIC MODELS?



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INTRODUCTION

The incremental cost per quality adjusted life year is calculated by summing the benefits accrued from avoiding or alleviating a particular event or health condition. Consequently the baseline or counterfactual utilities, i.e. the utility associated with not having the specific event or condition, are as important as the utilities experienced when having the event or health condition. It has been suggested that data from the general population could be used as proxy scores for the baseline.

OBJECTIVE

The primary objective of this study was to determine if data from the general population are suitable for use as the baseline in economic models when condition specific data are not available.

METHODS

Data (n=41,174) collected during four rounds of the Health Survey for England were pooled. The self-reported responses describing the presence of a long standing illness (coded into 39 different health conditions), and the responses to the EQ-5D questionnaire were used to compare:

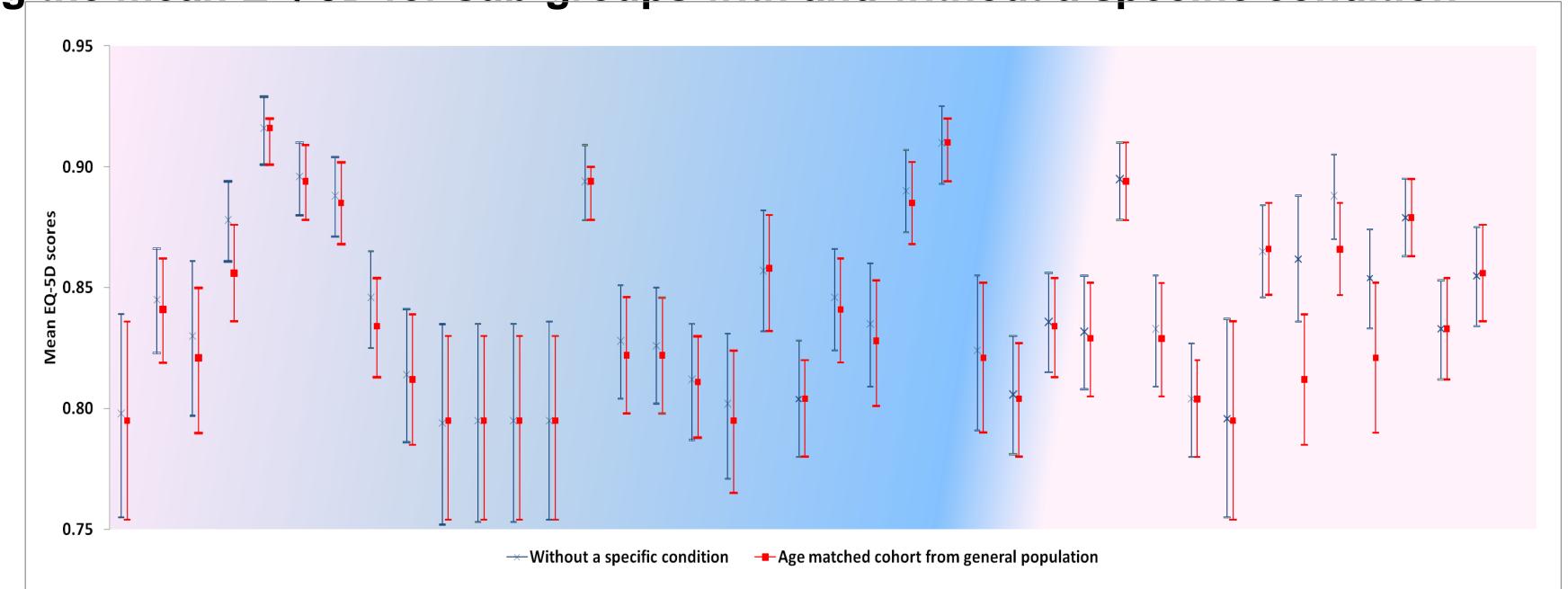
- a) the health related quality of life (HRQoL) for sub-groups who have a particular health condition (irrespective of other conditions)
- b) the HRQoL from similar aged sub-groups who do not have the particular health condition (irrespective of other health conditions)
- c) the HRQoL from similar aged sub-groups irrespective of health status (i.e. the general population).

Statistical significance for the mean EQ-5D scores were assess using the 95% confidence intervals of the mean, whereby if the CIs do not overlap there is a statistically significant difference between the groups.

RESULTS

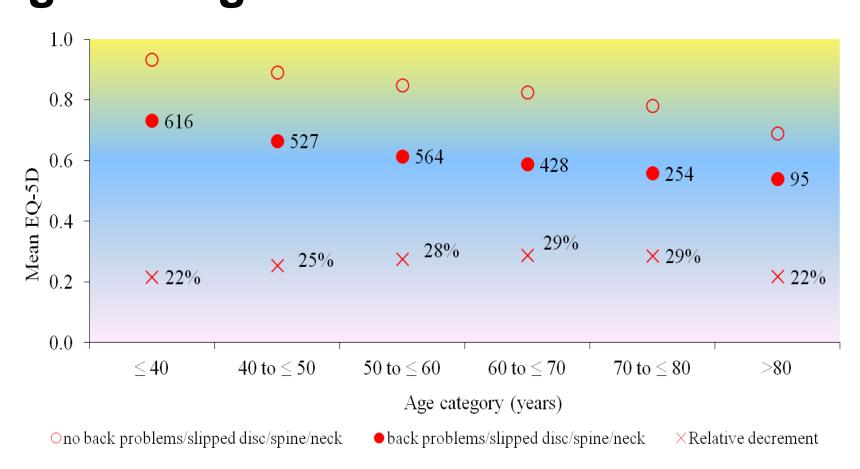
Comparing the mean EQ-5D scores for cohorts not affected by a specific condition with the corresponding mean scores for age matched cohort from the general population (Figure 1), all the CIs of the matched mean scores overlap.

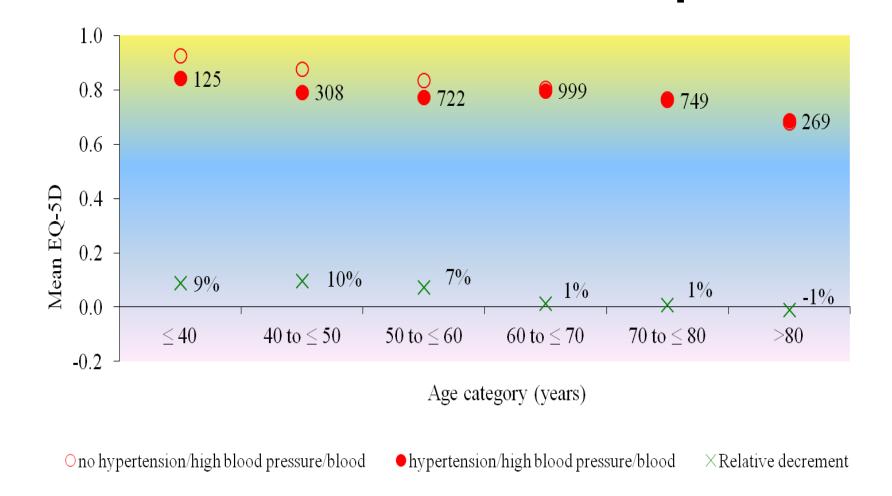
Figure 1 Comparing the mean EQ-5D for sub-groups with and without a specific condition

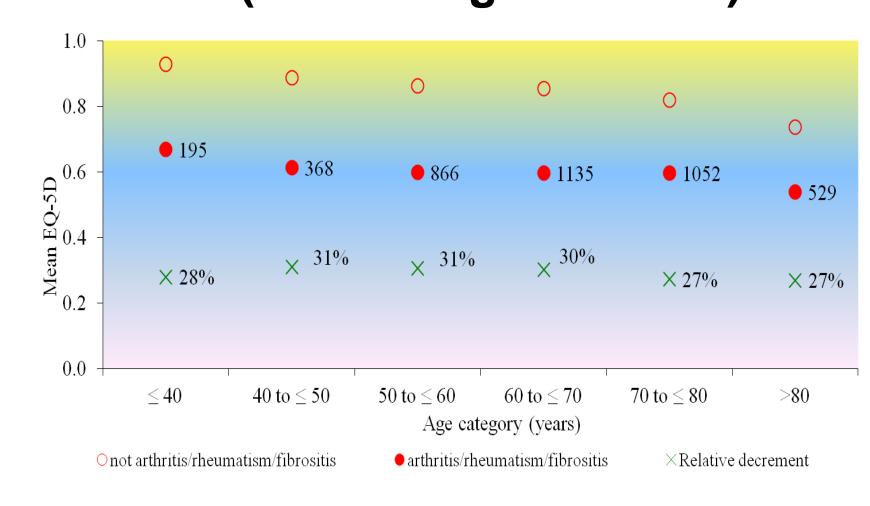


Exploratory analyses suggest the decrement on HRQoL may not be constant across ages for all conditions and these relationships may be condition specific (Figure 2).

Figure 2 Age-related mean EQ-5D scores and relative decrement compared to the baseline (not having condition)







Numbers in charts represent the size of the sub-group

CONCLUSIONS

Our results suggest that data from the general population could be used to approximate baseline HSUVs in some analyses but not all. Additional research is required to support our findings.

REFERENCES

Joint Health Surveys Unit of Social and Community Planning Research and University College London, Health Survey for England 200x [computer file] (3rd ed.). Colchester, Essex: UK Data Archive, [distributer], 2008

The Health Survey for England is commissioned and published by the NHS Information Centre, who have no responsibility for the secondary analyses described in this article.