Do Generic Population Utility Scores Accurately Represent Real-World Experienced Health?



J. Felipe Montano-Campos, MS; Anirban Basu, PhD

fmontano@uw.edu @JFelipeMCampos

Background

- The Health-Related Quality of Life (HRQOL) in the EQ-5D-3L health states scale helps inform healthcare decisions, resource allocation, and policy-making.
- The HRQOL societal weights associated to the EQ-5D=3L health states are derived through the anticipated utility approach.
- The anticipated utility approach involves predicting the future utility or satisfaction associated with various health states.

Objective

• This study aims to evaluate the extent to which these weights align with self-reported health statuses as experienced in the real world.

Data

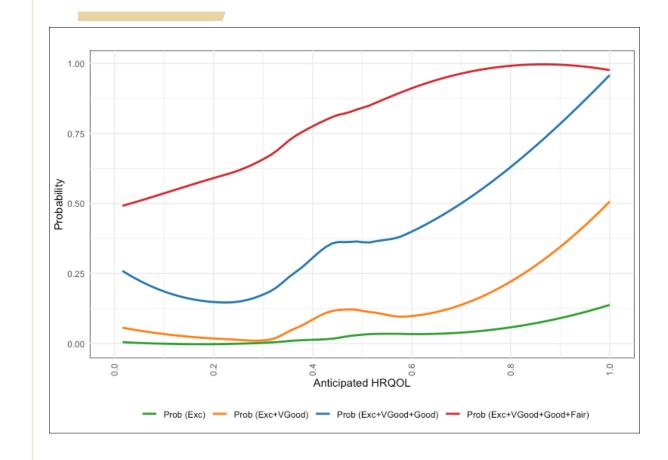
- Data sourced from the national Risk Factors survey in Argentina
- Examination of the relationship between HRQOL societal weights for EQ-5D-3L health states and self-reported health statuses.
- Utilization of data from a nationally representative sample of approximately 30,000 Argentine respondents.
- Application of survey weights to ensure national representativeness.



Methods

- Data sourced from the national Risk Factors survey in Argentina
- Examination of the relationship between HRQOL societal weights for EQ-5D-3L health states and self-reported health statuses.
- Utilization of data from a nationally representative sample of approximately 30,000 Argentine respondents.
- Application of survey weights to ensure national representativeness.
- Linkage of 163 distinct EQ-5D-3L health states to their respective HRQOL societal weights (ranging from 0 to 1).
- Assessment of the relationship between these weights and the probability of self-reported health states (from excellent to poor).
- Employment of multinomial logistic regression for analysis.
- Use of a fourth-degree polynomial function as predictors to identify the best model fit.
- Model fit determination based on AIC and BIC criteria.

Results

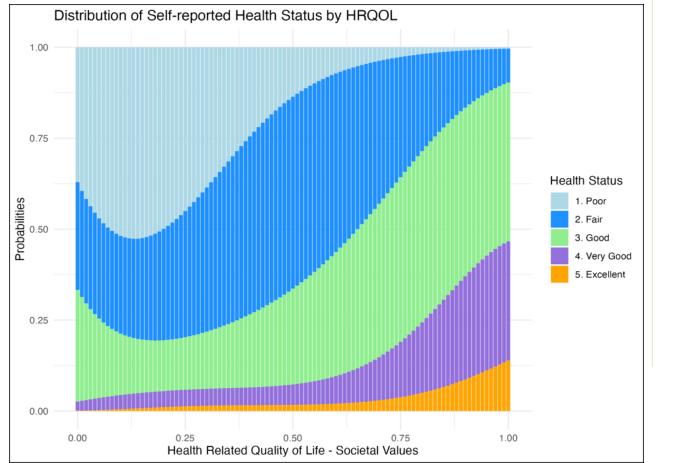


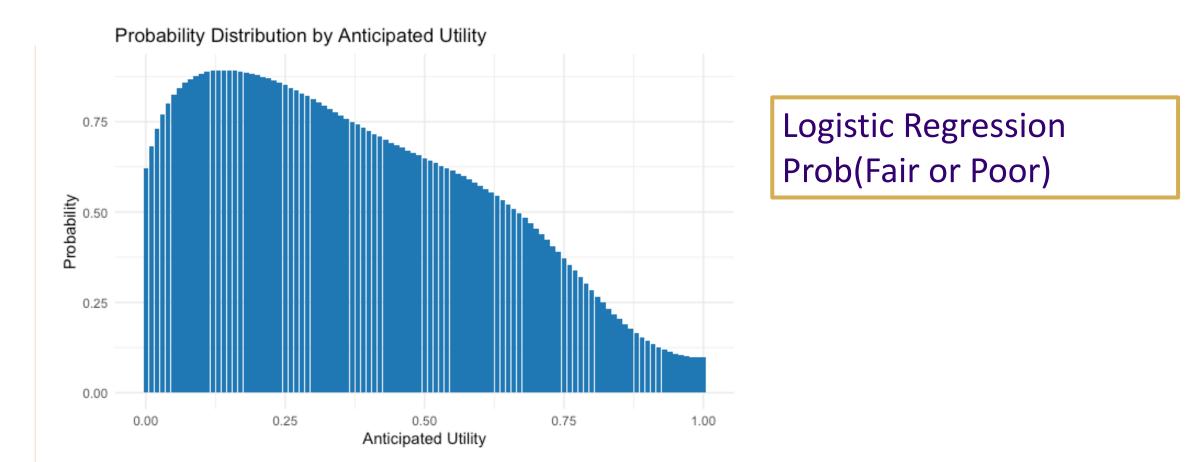
Empirical Trajectories

Multinomial Logistic Regression

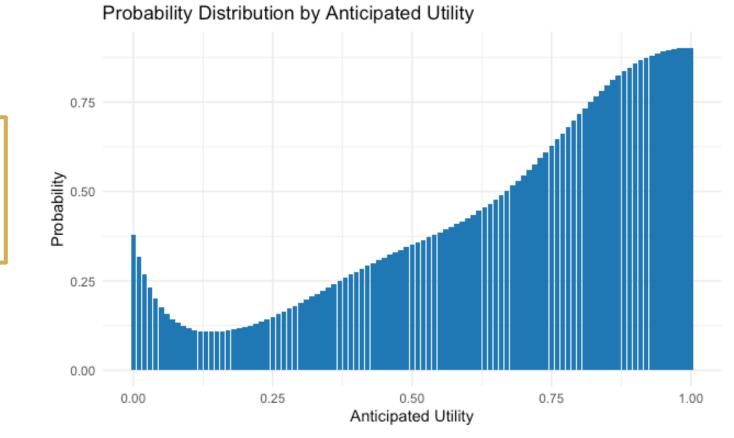
Probability of reporting 'poor' health increased up to HRQOL value of 0.16, then decreased.

- Distribution of reporting 'good' health showed an inverse trend.
- Positive, monotonic linear relationship between HRQOL measures and reporting 'very good' or 'excellent' health statuses.





Logistic Regression
Prob(Exc or VGood or Good)



Conclusions

- HRQOL societal values from anticipated utility may not accurately reflect individuals' true health experiences.
- Inaccuracy noted within the range where health deterioration isn't adequately represented by societal HRQOL weights.
- Emphasizes the need to adopt an experienced utility approach for generating societal weights.
- Experienced utility approach may offer more accurate representation of health experiences.
- Highlighted importance for informed health policy-making.