

Bayesian Modeling of Health State Preferences

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Abstract

In this paper we consider the Health Utility Index Mark II to quantify and describe a population's Health Related Quality of Life over health states which are composed of multiple attributes. We present a Bayesian framework for population utility estimation and health policy evaluation by introducing a probabilistic interpretation of the multi attribute utility functions used in health economics. In so doing, our approach combines ideas from the multi attribute utility theory and Bayesian statistics and provides an alternative method of modeling preferences and utility estimation.