

## Metadata – Health-related quality of life score

<b>Description</b>	Score of the quality of life related to the health calculated by the EQ-5D tool. The EQ-5D tool is a simple questionnaire evaluating the impact of the health status on the quality of life with 5 dimensions: mobility, self-care, usual activities, pain/discomfort, and anxiety/depression.
<b>Rationale</b>	<p>Health-Related Quality of Life (HRQoL) is a complex, subjective and multidimensional concept. With the ageing and the increase in chronic diseases, interests are growing in understanding the quality of the extra years lived. Measures of HRQoL are also used for health technology assessment, gains in HRQoL of different treatments and technologies are compared to support economic evaluation and decision about allocation of resources in healthcare.</p> <p>Complementary to the traditional indicators of mortality and morbidity, HRQoL is now recognized as an important dimension of the health of a population.</p>
<b>Primary Data source</b>	Sciensano, Health Interview Survey (HIS 2013, 2018)
<b>Indicator source</b>	Sciensano, HIS reports and additional ad hoc analysis
<b>Periodicity</b>	Every 5 years since 2013
<b>Calculation, technical definitions and limitations</b>	<p>Different instruments exist to calculate the HRQoL. A European group, the EuroQol Group, developed the EQ-5D in 1990 (1). In the HIS 2013, the EQ-5D tool was included for the first time. Questions covering 5 dimensions were asked: mobility, self-care, usual activities, pain/discomfort, and anxiety/depression. Each dimension had 5 levels: no problems, slight problems, moderate problems, severe problems, and extreme problems. In total, 3125 different health states are possible, based on all the possible combinations of answers.</p> <p>The 3125 different health statuses obtained from the descriptive system of the EQ-5D can be converted into a single index value to facilitate further analysis. In order to transform the health states in a single index score, country-specific value sets are needed. The value sets are derived from a study, conducted at the country level, that elicit preferences from the general population for different health states. Thus, it allows us to know the preference of a specific population for health states and makes it possible to convert the 3125 health states in a single index. Studies to generate the value sets for the EQ-5D-3L have been conducted in Belgium as in other countries. Cleemput in her study, calculated preference valuation set for EQ-5D-3L health states from the general Flemish population in Belgium (2). This value set is the one currently used for the general population in Belgium. However, even if this is used among those working with EQ-5D in Belgium, it presents several limitations. First, the study was done in the Dutch-speaking region of Belgium only. Second, the response rates were extremely low (35%) and a significant part of respondents had to be excluded of the study, meaning that only 20% of the initial sample was kept. It is therefore likely that selection biases plague this value set.</p> <p>Then, for each health state, an index value or HRQoL score is computed, it summarizes in one number the health state, based on the population preference value set. In Belgium, thanks to the population preferences for different health states calculated and the crosswalk function developed to adjust for the 5 levels, an index value for each health states has been calculated. These index values range from -0.518 (health state worse than death) to 1 (perfect health state). Each individual gets an index value corresponding to her health state.</p>
<b>International comparability</b>	<ol style="list-style-type: none"> <li>Availability: Limited, some countries have HRQoL scores assess with the EQ-5D tool.</li> <li>Comparability: The use of country-specific value sets impedes the international comparability of HRQoL measures (3).</li> </ol>

## Reference List

- (1) Reenen M, Janssen B. EQ-5D-5L User Guide: Basic Information on How to Use the EQ-5D-5L Instrument . Rotterdam: EuroQol Research Foundation; 2015.
- (2) Cleemput I. A social preference valuations set for EQ-5D health states in Flanders, Belgium. *European Journal of Health Economics* 2010;11(2):205-13.
- (3) Heijink R, van Baal P, Oppe M, Koolman X, Westert G. Decomposing cross-country differences in quality adjusted life expectancy: the impact of value sets. *Population Health Metrics*; 2011.