



Title: Multistate Healthy Life Expectancy Decomposition

Acronym: MultiLED

Project leader: Timothy Riffe

Host organisation: Universidad del País Vasco (UPV/EHU)

Main purpose of the project:

This project will develop, describe, test, and apply a method to decompose differences in summary measures calculated from multistate models reliably. We will apply the approach to multistate estimates of healthy life expectancy (HLE) in Spain to explain trends and inequalities in HLE in terms of health and mortality transitions.

Design/methodology/approach:

We will estimate health and mortality transitions for the Spanish population using EU-SILC and SHARE data and use these to calculate healthy and unhealthy life expectancy using multistate models. The proposed decomposition method will then be used to explain changes and gaps in healthy life expectancy.

Potential results:

Decomposition results will indicate the absolute and relative importance of mortality differences and critical transitions such as the onset and recovery from disability.

Social relevance of the research:

These results will help quantify the relative importance of life-saving versus prevention and recovery on healthy life years. Such information aids in framing policies aimed at closing gaps and continuing health improvement for the whole population.

Originality/value of the project:

For social scientists using multistate models to estimate working life expectancy, partnership expectancies, or healthy life expectancy, our proposed decomposition method will allow research into some of the most compelling questions in social science: what transitions determine trends and what transitions create gender, class, geographical, and other inequalities?