UofG, MRC/CSO Social and Public Health Sciences Unit – Q-Step Intern (New Labour Project) (Advertised 2017)

Did inequality in life expectancy reduce under New Labour? Natural experiment using the Synthetic Control method.

The New Labour Government (1997-2010) aimed to reduce inequality in life expectancy between local areas, specifically "by 2010 to reduce by at least 10 per cent the gap between the fifth of areas with the lowest life expectancy at birth and the population as a whole"

There has been much research and discussion around whether this target was met. Additionally given that England was one of the first countries to have such a large scale focus on reducing inequality, it could have reduced inequality relative to other countries. There has been one study of this to date and this concluded that there was no effect. The data and method this study used have some limitations and so it is of interest to use an alternative approach. This project will look at variance in life expectancy as a measure of inequality and use the synthetic control method to compare trends in inequality in England before and after the introduction of strategy to those in comparable OECD countries. The synthetic control method generates a synthetic England from the weighted average of other countries so that the pre-intervention trend in inequality matches that of England.

If there is systematic difference in the inequality trend after the intervention this would suggest an effect. The method is easily implemented in R and requires no specialist knowledge beyond having a working knowledge of natural experiment and regression methods.

Main Duties and Responsibilities

All duties in conjunction with support from supervisor

- 1. Contribute to the writing of a pre analysis protocol, the writing of protocol will be be led by the supervisor but the student will be able to comment on the clarity and contribute ideas so they gain experience of this part of an analysis.
- 2. Gather and combine freely available data on life expectancy, and predictors (such as GDP per capita) for England and potential comparative OECD countries. This will involve accessing the data from websites and importing into R for cleaning and analysis. The supervisor will guide the student to the best sources for such data.
- 3. 3. Help the supervisor with conducting analysis in R using the Synth package. The intern will work closely with the supervisor on this part
- 4. 4. Contribute to the draft report / paper by helping with writing up the results section.
- 5. Undertake any other reasonable tasks which the research team requires.
- 6. The successful candidate will be expected to work upon their own initiative but also as part of a team and able to meet deadlines as required.