PhD Research Fellowship in Health Economics: assignment

March, 2025

To assess your scientific reasoning and practical skills, we have designed this assignment.

The assignment is divided into two parts:
Part 1. Questions on a discrete choice experiment.
Part 2. A reflection on your experience with the task.

There are multiple ways to implement and handle these tasks. Even if you do not have experience with discrete choice experiments and/or the software R, give it a try. Our main focus is on your reasoning, ability to select relevant information, and coding practices.
Please provide your answers in the form of a short report, limited to 3 pages Arial font 12 interline 1.5. Submit this report as a PDF including R code files alongside your application.

Part 1: Discrete choice experiment (DCE)

Question 1.1: Imagine you plan to repeat the DCE described in the paper Luyten et al Value in Health 2015 (https://repository.uantwerpen.be/docman/irua/f521f9/9619.pdf). The idea is to repeat the DEC to investigate if the responses have changed over time in the same population. This time however, you are limited to use only six attributes with maximum three levels per attribute. Which attributes and levels would you choose? Make sure to clearly justify your answer.

Question 1.2: Provide a simple example of a statistical analysis of a DCE in R. Define four attributes with two levels per attribute. Make sure to explain the different steps of your code. Provide the entire R code.

Part 2: Reflection

Question 2.1. Write a short statement on your experience regarding the task above.

Question 2.2. What did go smoothly, what parts were challenging, and why?

Question 2.3. Did you use a LLM such as ChatGPT for this purpose? Why or why not?