Making Health Economics Shiny: A tutorial

Robert Smith, Paul Schneider & Sarah Bates

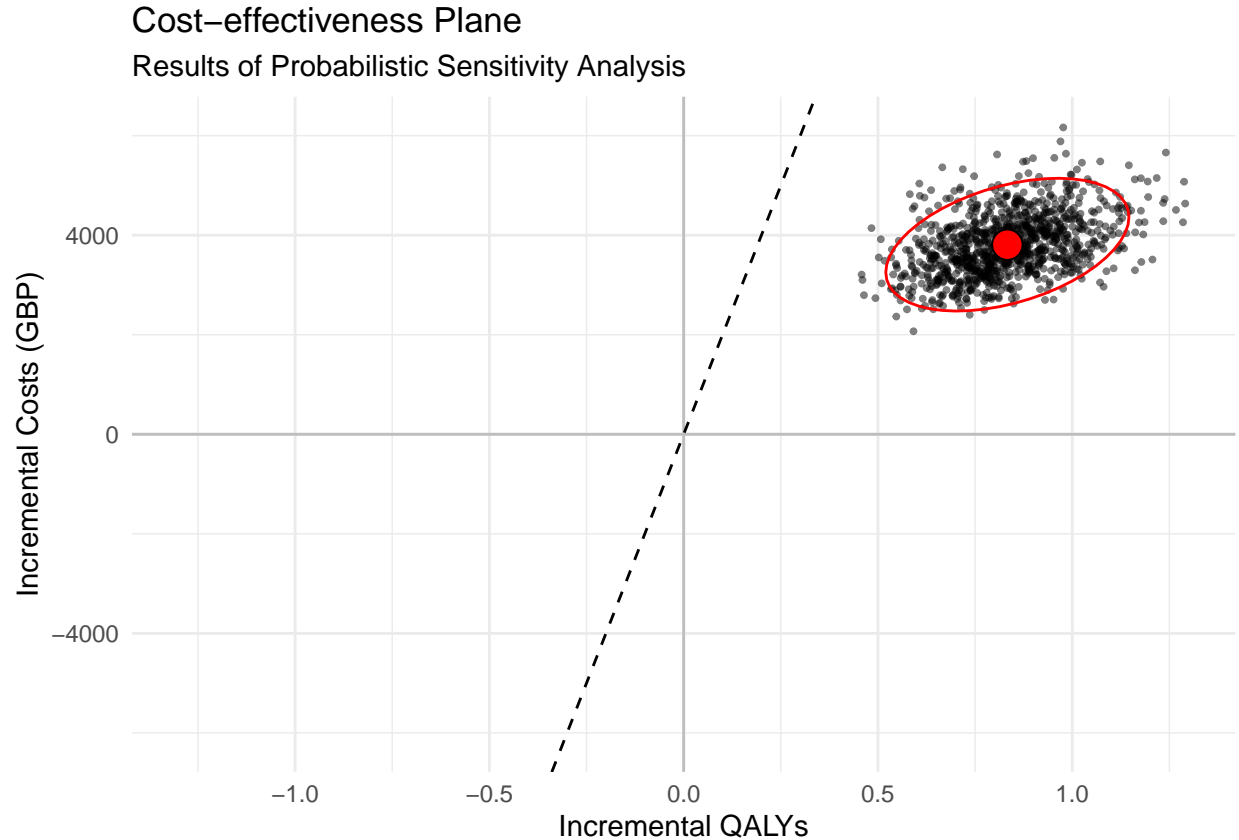18/02/2021

The Sick Sicker Model

Parameter inputs

We use the Sick Sicker Model with a price of £375 , an initial age of 20 , a maximum age of 75 , a discount rate of 1.5% and run a PSA with 1000 iterations.
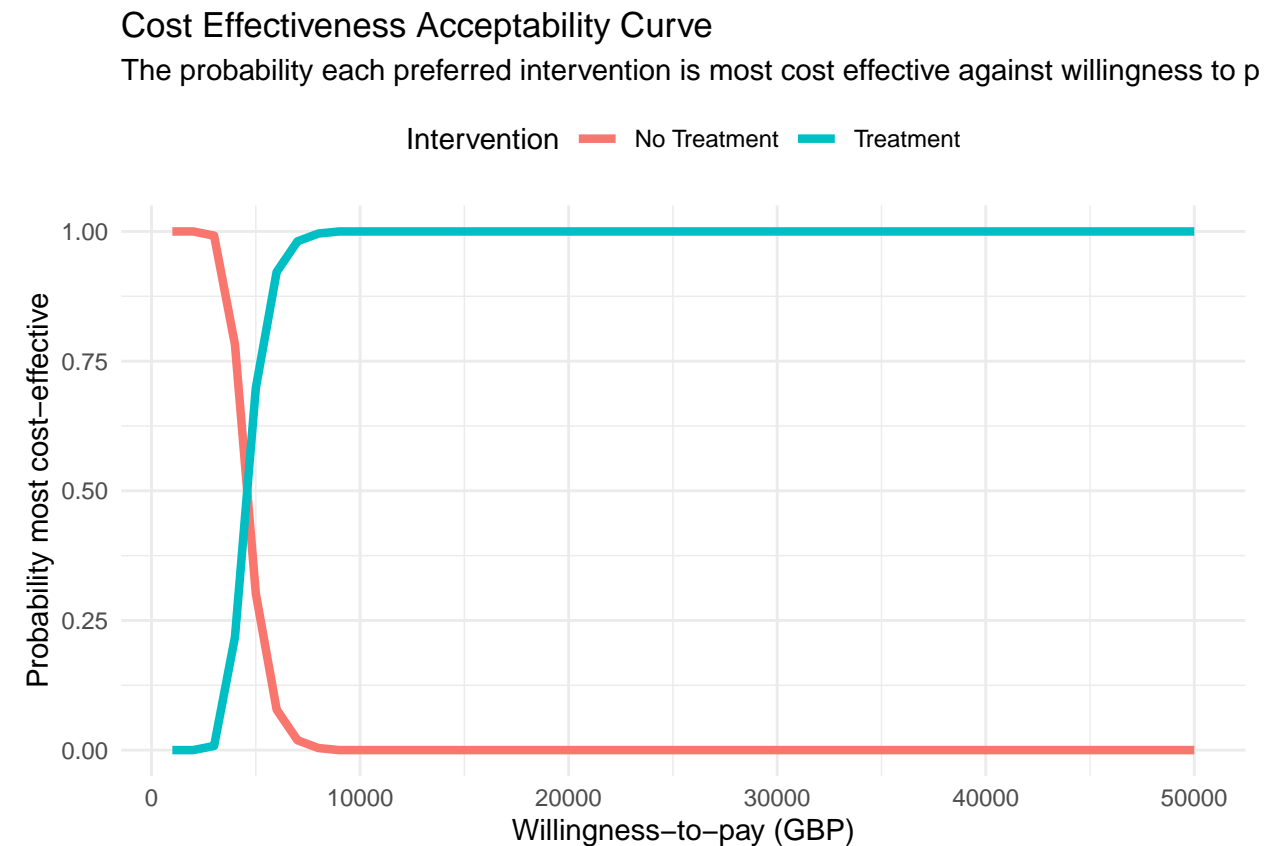
Results

Cost Effectiveness Plane

Here is the Cost Effectiveness Plane.

Cost Effectiveness Acceptability Curve

Here is the CEAC.

Cost Effectiveness Acceptability Curve

The probability each preferred intervention is most cost effective against willingness to p

Intervention ━━ No Treatment ━━ Treatment

The ICER is £4574.01.

Exercise

1. Your client has mentioned that their treatment cost is now £375, rather than the £200 stated in the previous report. They would like to see an identical report to that shown above, but with an updated cost-effectiveness plane and ICER.

2. Your client would like to see the CEAC curve and for the insertion of a paragraph at the beginning with the inputs to the Sick-Sicker function defined. (Ensure you do this so that the entire document can be updated by one change).

3. The decision body has changed its discount rate from 3.5% to 1.5%. Please update the entire report.