

Single Technology Appraisal – Varenicline for smoking cessation

Further to my letter of 31 January, the Evidence Review Group (ERG), ScHARR, and the technical team at NICE have had an opportunity to carry out preliminary analysis on the information you have provided. As a result of these analyses, the ERG would like to clarify a further point of information with you concerning transition calculations in the model.

Both ScHARR and the technical team at NICE will be addressing these points in their reports. As there will not be any consultation on the evidence report prior to the Appraisal Committee meeting you may want to do this work and provide further discussion from your perspective at this stage.

We request you to provide a written response to this letter, in addition to those already requested in my letter of 31 January, to the Institute by 5pm on Friday 16th February. Two versions of this written response should be submitted; one with academic/commercial in confidence information clearly marked and one from which this information is removed.

If you present data that is not already reference in the main body of your submission and that data is seen to be academic/commercial in confidence information, please complete the attached checklist for in confidence information.

Yours sincerely,

Meindert Boysen, Pharmacist MScHPPF Associate Director - STA Centre for Health Technology Evaluation

Encl. checklist for in confidence information

Section A: Clarifications

A1. Please could you explain the apparent inconsistency in the Markov state transition/population calculations which appear to cause the total population to increase in the first year and then subsequently decrease?

The population for the model is 3,174,339 which represents the total number of smokers attempting to make a quit attempt at the model starting point (time t0). As the model broadly follows a Markov structure, this population number should be accounted for across the model health states at any point in time (time t+n) i.e. all patients must exist in one of the model health states either alive or dead. For validation purposes we have added in a worksheet called "validation" which looks up the number of patients in each health state from the "strategy 1 population" worksheet (age and sex subgroups are grouped). We have determined that during the first year, the population is 3,174,339, but during the next year this population appears to have increased by nearly 2,000 patients and subsequently decreases back down to the original population value over the remainder of the time horizon.

We would like to know whether this validation is correct in its interpretation of the results and could an explanation be offered as to why this may be occurring?