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# ERRATUM

## Correction: Sensitivity Analysis and the Expected Value of Perfect Information

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It has come to our attention that inadvertent errors in an earlier article of ours have contributed to a small controversy<sup>1</sup> on the proper procedure for estimating the expected value of perfect information using Monte Carlo simulation. The errors occur in our procedure MC1<sup>2(p101)</sup> for forming a Monte Carlo simulation estimate of the information value EVPI ( $\xi_j$ ) of the parameter set  $\xi_j$ . The correct version of our procedure MC1 should be as follows.

### MC1: General Monte Carlo Simulation Procedure

1. Repeatedly generate random parameter values  $\xi = (\xi_j, \xi_j^c)$ .
2. For each generated  $\xi = (\xi_j, \xi_j^c)$ ,
  - i. Determine  $A^*(\xi_j)$  as the  $A$  maximizing  $E[V|\xi_j, A]$ .
  - ii. Calculate the improvement achieved by using  $A^*(\xi_j)$ .

Improvement =

$$E[V|\xi_j, \xi_j^c, A^*(\xi_j)] - E[V|\xi_j, \xi_j^c, A^*].$$

End For

3. Estimate EVPI ( $\xi_j$ ) as the average of the calculated improvement values.

Here it is assumed in Step 2i of the procedure that there is an algebraic expression for the quantity  $E[V|\xi_j, A] = E_{\xi_j^c}[E[V|\xi_j, \xi_j^c, A]|\xi_j]$  as a function of  $\xi_j$ . These corrections do not affect the results of numeric examples we present in the article. We apologize to all concerned for these errors.

### REFERENCES

1. Brennan A, Chilcott J, Kharroubi S, O'Hagan A. A two level monte carlo approach to calculating expected value of perfect information: resolution of the uncertainty in methods. [abstract] Med Decis Making. 2002;22(6):552.
2. Felli JC, Hazen GB. Sensitivity analysis and the expected value of perfect information. Med Decis Making. 1998;18(1):95–109.