

**Web Figure 1.** One-way sensitivity analyses showing changes in the estimated infection rates using various methods, with changes to single input parameters. Graphs A to H show changes to the infection rate estimates using the various methods (labeled M1 to M4, respectively) shown on the  $y$ -axis with changes to the input parameters shown on the  $x$ -axis. The mean and 95% Bayesian credible intervals of the sensitivity analyses are shown in the main graphs. The box plots or point estimates of the actual parameters obtained from the Singapore studies are shown below each graph, together with the box plots of the actual results on the left.

