On **Sept 20, 2020** Boris Johnson turned down the proposal from SAGE for a twoweek circuit breaker lockdown to be introduced around the October half term. <u>This</u> <u>was suggested by SPI-M</u> and then supported by SAGE on September 21, where they warned of "<u>catastrophic consequences</u>" if not adopted. September 20 was also the day when the first B.1.1.7 variant was detected by the lighthouse lab at Milton Keynes. What would have happened if the government had followed SAGE advice, as opposed to introducing a circuit breaker on 5 November 2020?

This can be estimated—using counterfactual scenario modelling—by increasing the sensitivity of contact rates to the prevalence of infection from 26 Oct 2020 (October half term) for four weeks, until 27 Nov 2020.

This figure reports estimates based upon the parameters of a dynamic causal model based on data covering the entire pandemic until 10 Apr 2021. The lines correspond to expected deaths per day (upper panel) and mobility (lower panel), while the shaded areas correspond to 90% confidence intervals. The blue lines are the most likely estimate of deaths and mobility, while the black dots correspond to (smoothed) data from the ONS and Google. The red lines show what might have happened if a full second lockdown had started earlier on 26 Oct 2020 (modelled by increasing a sensitivity parameter by a factor of e and then returning to its estimated value on 27 Nov 2020). The numbers in brackets are the predicted cumulative deaths on 1 Aug 2021.



Under this scenario modelling, **between 3,400 and 15,800 deaths might have been avoided** (90% credible interval, to the nearest hundred). This large range speaks to the difficulties of estimating what might have happened because of the knock-on effects of any intervention. For example, an earlier lockdown would have attenuated the second peak in November but may have just deferred a rebound during the resurgence over Christmas.