

## Record of COVID 19 modelling group meeting which took place by conference call on 31<sup>st</sup> March 2020

### Attendees

Ian Young (Chairperson)

Peter Jakobsen

NR

Adele Marshall

Frank Kee

Rob Brisk (Craigavon area hospital)

Declan Bradley

NR

**Apologies** Janie Bailie

### **England**

Ian explained that the briefing note on COVID 19 analysis prepared by the modelling group would be finalised before close that day.

Ian informed the group that NHS England had shared version 2.3 and 2.4 of their COVID 19 model with Declan Bradley. There was a discussion on the limitations of using the scaled down version of the SAGE projections. For example, there is no NI-specific outbreak curve for NI and the approach cannot account for:

- Age distribution and level of social deprivation by region;
- Clusters in different Trusts; and
- Patient flow across Trust boundaries.

Ian indicated that the latest data from SAGE suggests the increase in cases is following a straight line rather than an exponential curve. Ian also informed the group that SAGE had provided a set of updated assumptions.

### **Northern Ireland**

Declan presented NI COVID 19 analysis derived from employing NI population data to the NHS England model. NR and Rob Brisk also presented on the models they developed. It was noted that the NHS England tool had produced numbers that were an order of magnitude worse than the scaled SAGE projections, the estimates from Paul's and Rob's models. There was a brief discussion as to why the models may produce different impacts at this stage and the underpinning assumptions. For example, Rob indicated that in the model he developed the ICU length of stay was assumed to be 14 days based on his discussions with other clinicians in the Southern Trust. It was suggested NI could be at the peak for COVID 19 in two weeks assuming that we are now in week 8.

Declan indicated that if the modelling group were to choose the other sources over the NHS England tool, the reasons for doing so should be documented.

Frank highlighted the need for individual patient level data to further develop the COVID 19 analysis for NI. Ian also explained the importance of the assumptions for  $r^0$  in influencing the outcomes of the analytical models.

**Action**

- The model outputs of ICU bed usage and the number of deaths should be presented for each of the three COVID 19 models which have been developed to analyse a range of NI data. These outputs should be based at Friday 1<sup>st</sup> and Tuesday 5<sup>th</sup> March and mapped in a line chart against actuals (in addition to the charts the underlying data should also be provided).