

NI COVID 19 Modelling Group Conference call on 10th April 2020

Attendees

Ian Young DoH (Chairperson)

Paul Montgomery DoH

NR DoH

Declan Bradley PHA

Janice Bailie PHA

NR SIB

Rob Brisk CAH

Adele Marshall QUB

Frank Kee QUB

Key issues discussed

Current situation

- Ian reported that the number of deaths in NI from COVID 19 remained much lower relative to GB and that NI was now reaching close to the estimated peak timeframe. It was the view of the NI analysts that lower NI population density was a key driver in the different COVID 19 experience of NI and GB.
- The key issue now was whether there would be a plateau or a rapid decline in the number of additional cases with an R_0 of 0.6 implying rapid decline and an R_0 of 1 suggesting a plateau lasting for weeks or months. Ian indicated that SPI-M had agreed to provide projections for NI in respects of deaths and bed requirements on a regular basis- need to check on 14 April.
- Ian reported to the group that early global evidence is suggesting that herd immunity for phase 1 of COVID 19 appears relatively low.
- Ian also informed the group that the Institute for Health Metrics and Evaluation (IHME) published analysis earlier in the week which included estimates for the UK and Ireland. Ian explained that if the IHME, UK analysis was scaled in terms of the NI population the peak would require 700 critical beds but if the RoI results were scaled to the NI population the equivalent number would be 62 critical care beds. Based on this finding Ian suggested the latter was closer to the actual numbers observed for NI critical bed occupancy. [Note: the IHME analysis was subsequently revised with the number of projected deaths in the UK reduced by almost one half.]
- Ian stated that he would try to obtain outputs from RoI COVID 19 analysis and feedback the results to the group. It had also been agreed that RoI figures would be applied to the NI modelling.

NI analysis updates

- Declan confirmed that he received the updated version of the NHS England model (version 2.5) on 10th April. Declan stated that he would run the NI population data through the model and report the results to the group.
- Paul (McWilliams) provided a brief update on the COVID 19 analysis he has undertaken.
- Adele confirmed that she had submitted a request to DoH for access to COVID 19 related data.
- Ian suggested to the group that there should be no change in the reasonable worst case scenario at this point in time until there is more NI data available and possibly some analysis from RoI. Declan also cautioned that there could potentially be a worsening COVID 19 care home impact. Paul (Montgomery) suggested that the definition “reasonable” worst case scenario may not be reflective of the actual numbers currently observed especially as the peak was predicted to be the following week. Ian clarified that he viewed the NI modelling estimates as estimates for capacity planning rather than forecasts. Ian suggested waiting to next Tuesday 14th and then to review the NI estimates in the context of the then actual figures.
- Rob indicated that based on the number of patients currently requiring ventilation in NI it was unlikely that comfortable capacity would be exceeded and suggested that if reporting externally on the reasonable worst case scenarios etc. further clarification of their interpretation would probably be helpful.
- There was a discussion about the approach to an Exit Strategy including the information that would be required with reference made to the work by John Edmunds in calculating the basic reproduction number, R_0 under different control measures. This work had considered NI specifically, but there was not enough data to determine if there were regional variations.

Other issues

- Frank suggested that, in the medium term, a short paper should be presented to the Health Minister to address the issue of data shortage.
- Adele informed the group that Queen’s University will have 60 placement students this summer who could help the Trusts (with no cost to the Trust).

Actions

- The analysts were asked to provide seven day NI estimates to Eimear each Friday before 12 Noon (Saturday – day 1).