

## NI COVID 19 Modelling Group Conference Call – 22 December 2020

### Attendees

Ian Young DoH (Chairperson)  
Paul McWilliams SIB  
Adele Marshall QUB  
Frank Kee QUB  
Stephen Bergin PHA  
Declan Bradley PHA  
Paul Montgomery DoH

### Key issues discussed

#### *Update*

- Ian provided an update on the latest position in respect of the key indicators of the trajectory of the virus and the impact on the health & social care (HSC) sector. The number of positive cases has risen over the past week, but on a linear rather than exponential basis. The number of tests conducted for the virus is also increasing with the result that the 7 day average rate for test positivity is plateauing at around 9%. Ian highlighted that whilst the number of reported cases may fall over the Christmas period, this was expected to be due to a fall in the proportion of individuals with symptoms coming forward for testing, as opposed to reduced incidence of the virus.
- There has been a significant increase in the number of cases in the Fermanagh & Omagh Local Government District over the past week, but this was not linked to any particular event or factor.
- The numbers of Covid-19 related hospital admissions and hospital inpatients with community acquired Covid is broadly stable with a slight reduction in the number of inpatients with hospital acquired Covid-19. However, the level of mobility over the last week was higher than in October when the R number was 1.6.
- The group agreed that the latest estimate of the R number is above 1 and between 1.05-1.25 for cases (1.05-1.25 last week). The R number based on hospital admissions was agreed as 1.0-1.15 (1.0-1.2 last week).
- The 7 day level of cumulative cases per 100,000 population was observed to be at a very high level in Wales linked to the new variant of the virus which has also increased the number of cases in London and the South-East of England. Although the variant has not been confirmed in the Republic of Ireland (RoI), Ian indicated that the rapid in growth in cases (R number of 1.6) would suggest that it is present. **Update: Tánaiste quoted on RTE news as indicating that Irish government is working on basis that new variant is present in RoI whilst new cases likely to increase to 1,000 before Christmas Day and perhaps 2,000 by New Year's Eve compared with 549 on 21 December.**

### ***New Variant***

- Ian informed the group that the new variant (VUI-202012/01) of the Covid-19 virus had been identified as part of the response to a change in the trajectory of case numbers in the South-East of England.
- The small number of potential cases of the new variant in NI had been identified by negative results for the S-gene in the real-time reverse transcription polymerase chain reaction (RT-PCR) test. However, this can be due to other variants with the epidemiology suggesting that the variant is not currently dominant in NI, as it appears to be in Wales and the South-East of England. Cases of the new variant have been reported in other countries such as the Netherlands.
- Although there is limited evidence available, it is expected that viral shedding occurs at an earlier stage and continues for a longer period with a higher peak under the new variant. However, the increase in duration is not sufficiently great to require an increase in the self-isolation period. The new variant may transmit more in school age children but this has yet to be confirmed.
- In terms of modelling, the increased transmissibility of the new variant would imply that it would increase the R number by 40-60% when it is the dominant strain of Covid-19. This would suggest that a full lockdown would need to include the closure of schools in order to reduce the R number below 1. At this time, there is no requirement to change the modelling for NI until there is evidence that the new variant is dominant. The position in NI will be monitored through genomic sequencing of Pillar 1 tests and/or evidence of a rapid rise in case numbers not due to super spreader events.

### ***Vaccination Programme***

- Ian advised the group that 16,000 people to date in NI had received the first dose of the Pfizer-BioNTech vaccine with evidence from the Moderna vaccine that it might provide a degree of immunity at an early stage. In this context, given the focus of the vaccination programme on older people, it was expected that the programme would reduce the impact on hospital admissions in the coming months for a given level of community transmission.
- However, the impact on hospital admissions would be lower in respect of the vaccination of care home residents as very few people aged over 80 would be admitted to ICU. It was agreed that there would be a need for progress on the vaccination programme to start being incorporated into the work of the modelling group.

## **AOB**

- Adele Marshall presented the results of sensitivity analysis which compared the actual outcome in NI with what would have been expected to happen if there had been (1) no lockdown or other measures (such as advice on handwashing) or (2) if there had been other measures only. This showed that in the absence of the lockdown and other measures there would have been a severe impact from Covid-19. Although introducing the other measures without a lockdown would have constrained the impact to an extent for around 4 months, there would then have been a significant impact.