

Official: Sensitive

up, and the need to reissue and update infection prevention and control guidance for healthcare staff and premises.

I think you absolutely have to add something here about nominal airborne HCID bed capacity (it's probably <30 patients), expanded surge HCID capacity (I am guessing still <100 beds) and another trigger that might occur at this stage or later when basically the IDUs are full and we have to start 'normal ward care' (in cohorts) for WN-CoV patients. Likely at this point we will also be drawing on pandemic PPE stockpiles and to be clear there will not be enough high-level PPE in this scenario.

Another trigger point that might run in parallel (given that the best estimate of hospital fatality rate is 14%) is that we run out of ICU beds. To note the in-hospital fatality rate in 2009 for H1N1pdm09 was 8% (see FLU-CIN papers) and the UK at that point ran down to ICU bed availability at the worst point in the low single figures. Thus there are two missing triggers that I see. I'm not wedded to them going in Section 2 if people would prefer 3. But IMO they could occur in late 2 or 3.

3. Significant spread and transmission in the UK

Should it become clear that the virus is able to transmit efficiently well from human to human (which is unknown at this stage), then an imported case or cases could, over time, lead to localised sustained community transmission within part or all of the UK. If the virus had not spread widely internationally, this could trigger an effort at containment in that part of the UK – for example by discouraging large social mixing at major social or sporting efforts. There would be a key role for the local authorities and Local Resilience Forum. However, it is far more likely that significant community transmission spread in the UK would only happen after there had also been significant global spread and sustained community transmission in multiple other locations. In this case, local social distancing measures would be ineffective as there would be multiple introductions from other places.

If community transmission occurs in the UK, it most likely that widespread community transmission would follow on rapidly; this would be a ~~there was very significant spread and transmission in the UK, then there is a~~ tipping point at which ~~where~~ we would cease contact tracing, as it ~~would no is no longer~~ be possible or a plausible route to stop the virus.

Likely, by this stage the number of UK cases in hospital will have exceeded the capacity of the HCID units, and of the HCID surge plan. The NHS would review and indicate plans for surging existing capabilities, particularly the dedicated isolation facilities, and stockpile of Personal Protective Equipment and key medicines. As not all this information is held centrally, we advise introducing national assurance of local capabilities now, as a contingency.

It is highly unlikely that spread and transmission would reach pandemic proportions – this did not happen with SARS or MERS – and such a scenario would be a 'rising tide' event that would materialise over months, not days. However, our Reasonable Worst Case Scenario planning for an influenza pandemic (along the lines of 1918 'Spanish flu') does include medical stockpiles, and plans for significant reconfiguration of health, social care and possibly other public services.