

## **Extraordinary SPI-M meeting on the 4<sup>th</sup> March 2011: Conclusions.**

### **Purpose of meeting**

The purpose of the meeting was for SPI-M members to meet with members of the GCSA's Blakett Group, considering planning for low probability, high impact events, to consider planning assumptions for pandemic influenza and in particular the use of the 'reasonable worst case (RWC)' planning assumptions and scenarios based thereon. This note summarises the main conclusions of the meeting.

### **Main points and conclusions**

1. The current uses of the RWC scenarios in planning were described. These were;
  - In the national risk assessment/register (NRA/NRR) the RWC scenarios give an order of magnitude characterisation of the risk of pandemic influenza in comparison to other risks facing the UK.
  - The RWC scenarios provide an upper bound to the range of illustrative scenarios used by DH to describe the range of uncertainty, for example, on the impact of countermeasures.
  - Detailed DH planning (for example, of the size of countermeasure stockpiles) is based on cost benefit analysis considering a range of scenarios based on historical pandemics, often one of these scenarios may be based on some or all of the RWC parameters.
  - In the existing National Framework, the RWC scenarios set an upper limit to the wide range of scenarios considered by local planners.
  - The 'breakpoints' in the ability of the NHS and other Government agencies to deliver healthcare and related services via normal procedures are exceeded by credible pandemic scenarios (of extent and severity) some way below the 'reasonable worst case'<sup>1</sup>.
  - SPI-M does not rule out the possibility of a pandemic more severe than the RWC scenarios.
2. The meeting felt that the use of the RWC scenarios was unnecessary for planning in preparation for a pandemic.
3. The DH cost benefit planning approach for countermeasures (e.g. the current antiviral stockpile) could be formalised and extended to cover all pandemic planning.
4. Ideally, this would be based on the construction of a number of reference probability distributions for the parameters of possible pandemics. SPI-M should consider the generation of such distributions.

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<sup>1</sup> It is often the rates e.g. cases per week which are the deciding factor of when a service becomes overloaded rather than the total of a quantity over the pandemic.

5. If it proved impractical to determine such reference distributions, a standard set of 'challenge' scenarios (and probability weighted sets of such scenarios) should be developed for use in cost benefit analysis.
6. The probability distributions/challenge scenarios should include (with suitably low probability) scenarios beyond the current RWC.
7. The scenarios would also consider the probability of countermeasures being effective at various levels of efficacy.
8. The scenarios would include the variation in parameters such as attack rate and mortality by age and risk group.
9. Organisations should plan for a number of levels of response. For example, for hospitals these might consist of (as demand increases) 'normal service', cancelling elective surgery, major service reconfiguration and finally triaging admission with most cases being looked after at home by GPs. The thresholds for moving between levels would be determined by analysis of the local services, with the appropriate preparation required to be able to function at each level decided using a cost benefit analysis based on the reference distributions/scenarios.
10. Given the interaction between different local services and also services in different localities, a systems approach to the design of the totality of pandemic responses would be beneficial.
11. If the RWC is retained for the NRA/NRR then the current pandemic RWC scenarios should be retained (CAR of 50%, CFR 2.5% etc.).
12. Although general health and healthcare have improved since 1918, the disruption to healthcare in a severe pandemic, and the possibility significantly more severe illness than that seen in 1918, justify retaining the RWC 2.5% case fatality ratio based on that seen in the 1918/19 pandemic.
13. Cabinet Office should be asked to clarify the level of certainty which should be required of countermeasures for their mitigation to be included in the RWC for the NRA/NRR.
14. While the multiplication of the RWC clinical attack rate figures by the case fatality rate and population size to give an indicative RWC number of deaths leads to a relatively improbable scenario, more sophisticated modelling is unlikely to lead to a significantly (in terms of the impact on planning) lower estimate. In any case the possibility of other severe epidemics of emerging infectious diseases justifies having some form of planning in place for very large numbers of deaths.
15. The requirement for organisations to 'plan' to the reasonable worst case should be understood in the sense of the level based cost benefit analysis

described in 9 above, rather than providing an 'optimal' response up to the RWC. In this sense 'planning' should also continue beyond the RWC.

16. If the RWC is retained for wider pre-pandemic planning and there is a further need to review the assumptions, Ministers should be asked to consider, given suitable scientific guidance, the level of risk<sup>2</sup> they are prepared to accept. This is not a scientific question to be decided by SPI-M or other scientific group.

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<sup>2</sup> Given that the impact and probability of pandemics may be related by a 'power law', it may be necessary to base decisions directly on probability rather than risk (=probability x impact).

**Attendees**

**Names Redacted**