

1. New conditions worthy of consideration

Although our primary remit was to consider those diagnostic groups most at risk of adverse outcome on the basis of immunological vulnerability, our review of the evidence highlighted other conditions that could confer poorer outcomes on the basis of primary tissue pathology - for example, as a result of reduced respiratory, cardiovascular or renal reserve, peripheral cardiovascular pathology (for example, diabetes), immobility (for example, neurodegenerative disorders) and would merit consideration of antiviral interventions.

Parameters including age and obesity remained out of our remit and are not included in our recommendations though both remain significant risk factors in all data sets.

We identified several cardiovascular diseases, particularly heart failure, and cardiometabolic conditions (namely, diabetes (type 1 and type 2)) as additional risk factors. We do not make specific recommendations around these conditions noting deliberations elsewhere on behalf of policymakers.

Neurologic disorders have now been defined in detail in our updated report, particularly highlighting neurodegenerative disorders and immune diseases of the brain, which were previously covered in our section concerning immune-mediated inflammatory diseases (IMIDs).

Finally, some respiratory conditions - for example, COPD, severe asthma requiring immune suppression - have now been identified as conditions with higher risk of poorer outcome. Accordingly, we provide a standalone advisory 'box' to highlight these areas to more effectively support policy decisions.

2. Risk prediction algorithms

The QCovid 4 risk algorithm predicts mortality among people with a positive viral test. The IAG considered that the introduction of the use of a risk prediction tool, such as QCovid4, could offer value in the management of individuals at potential risk as it could individualise decision-making.

At this time, there remains limited evidence of the clinical effectiveness of this approach. Moreover, it is noted that this would require further validation and necessary interaction with other agencies - for example, NHS Digital - to ensure that it was feasible in primary care and that requisite data sets would be made readily available to allow optimal performance in primary care where this was likely to be of most value.

Whereas this sits out with our primary remit, the IAG considered that our report would be incomplete in its broader context without noting this potential approach to management and recommends that further research be performed to assess the role for risk prediction tools in allocation of therapeutics upon testing positive.

The updated recommendation of the advisory group on the groups of patients with highest risk is shown in Box 1.