issues to procure the testing infrastructure, deliver a quality assured service and ensure solid data flow of results to HPS, but as that work progresses, opportunities for subsequent timely expansion of the service will be developed. Possible future models include further increased capacity across all Boards, deploying private laboratory services or securing additional large scale testing facilities in a limited number of sites to complement provision of ongoing local more rapid testing for critical samples.

7. HPS are well advanced with a digital solution to providing negative test results directly back to the citizen concerned by email and text. This convenient solution, which can reduce some of the workload burden, is dependent on all results, regardless where testing takes place, being recorded in systems that feed into ECOSS (HPS database).

National approach to testing

8. Our approach to testing should be guided by the principles of ensuring our testing capacity is directed in the most effective way to protect those most vulnerable to save lives and maximising the capacity of the critical workforce to be at work.

9. On the former we are proposing to prioritise testing for clinical cases up to a given point on the epidemic curve, specifically for whom the result will influence clinical management and infection prevention. Currently the basis we are working on is the principle of testing all hospital admissions that are suspected of being related to COVID-19 and all ICU admissions where there is an upper respiratory related condition. With the combined impact of all seven interventions (case isolation, household quarantine, social distancing for whole population, more significant social distance for people 70 and over, vulnerable people staying at home, stopping mass gatherings, and closing schools and universities), we anticipate the demand at the peak of the outbreak is estimated to be:

- 8,500 people requiring hospital beds
- 850 people requiring ICU beds

10. oHowHowever, this would utilise place significant demand given this would utilise almost half of the available capacity of 3,000 tests per day. As the pandemic wave progresses, HPS are of the view that there is less reason to undertake this level of testing in all clinical cases. Their position is that as the outbreak develops, the diagnostic probability increases that even without testing there is a high chance/almost certain probability that presenting cases will have this infection. HPS have indicated that at this point they would move to sampling a statistical proportion rather than all of the hospital cases. This would free up resource during the most rapid upswing in the epidemic curve and likely happen prior to reaching the peak outlined in the above table.

11. If our aim is ultimately to contribute to saving lives then we will not be able to limit testing to hospitals. A substantial proportion of those who are likely to be infected by the virus will remain in a community setting, in particular care homes. Colleagues in HPS are currently modelling this demand. What we know is that there are 35,989 residents in 1,142 care homes. Testing a significant proportion or all of these residents would significantly exceed the available capacity in laboratories.

Maximise the capacity of the critical workforce to be at work

12. There has been a very widespread call for testing, not only for those most at risk in a clinical setting, but also for those who are most critical to our public services. The impact