**MEMORANDUM E (20) 84 (C)**

**FROM:** **ROBIN SWANN MLA**
**MINISTER FOR HEALTH**

**DATE:** **29 April 2020**

**TO:** **EXECUTIVE**

**FINAL EXECUTIVE PAPER: EXPANSION AND UTILISATION OF COVID-19 TESTING CAPACITY**

## Introduction

1. Testing for COVID-19 is a critical part of our pandemic response. In the containment phase, the priority for testing was focussed on testing to support contact tracing and investigating outbreaks. In the current phase, while seeking to 'delay' the spread of the virus through social distancing measures, I recognise the immediate importance of providing tests to patients who need them, to front line staff across the health and social care system, and to wider key workers and their families who are in self or household isolation, to support them to return to work as soon as possible, if they are well enough to do so.

2. It is within that context that my Department has been working to ensure that testing across Northern Ireland is increasing daily and will continue to increase as we rapidly scale up our testing capability.

3. I also recognise that it is critical to ensure full utilisation of our capacity when it is available. My Department has therefore working with a number of key stakeholders and delivery partners from across the HSC system, local universities and industry, at both local and national level, to further expand testing capacity across Northern Ireland and to ensure that capacity is utilised effectively.

## Expert Advisory Group

4. As part of the Department's response to COVID-19, I established an Expert Advisory Group (EAG) to lead on the expansion of testing for COVID-19 across all our laboratory services (within health and social care services/systems and also to develop suitable approaches for the utilization of other testing facilities, including those within the research, academic and commercial sectors.

5. The main focus of the EAG is to develop a Testing Strategy for Northern Ireland, to consider current and projected testing requirements, and to develop and oversee a rapid expansion of testing capability and capacity as we move through phases of our pandemic response. I have previously shared the Testing Strategy with Executive colleagues outlining the various elements of this work.

6. Membership to the EAG has been drawn from a range of key stakeholders across the Health and Social Care (HSC) system, including the Department of Health (DoH), the Public Health Agency (PHA), Health and Social Care Trusts, the Business Services Organisation (BSO) and the NI Pathology Network.

7. An academic consortium involving Queens University Belfast (QUB), University of Ulster (UU), Western Health & Social Care/ Clinical Translational Research and Innovation (WHSCT/C-TRIC) and the Agri-Food and Biosciences Institute (AFBI) has been established at the request of the Chief Medical Officer. The purpose of this consortium is to support DoH and HSC to rapidly scale up and expand diagnostic testing for COVID-19.

8. The consortium is also currently examining the feasibility of local production of reagents required within the testing process, and is actively progressing a programme of work to validate antibody tests when they become available. The consortium will also drive scientific innovation in testing over the coming months.

9. The EAG is currently in the process of inviting Almac to join the consortium, with a view to enabling further scale up in testing capability and capacity including the provision of additional laboratory space to support diagnostic

testing. It is anticipated that Almac capacity will be approximately 500 tests per day and it is expected to be operational towards the end of May.

**Interim Protocol for Testing**

10. The Testing Strategy for Northern Ireland, which was developed by the EAG in March, sets out the priority groups for testing for COVID-19. Implementation of the Strategy is supported by an Interim Protocol for Testing, which applies across the region. The Protocol is an operational tool which supports delivery of testing.

11. As the position on testing is fast moving, this Interim Protocol is kept under constant review and the priority groups for testing have been extended regularly in line with the expansion currently being delivered in our testing capacity.

12. The Interim Protocol was initially circulated on 17 March; it was further revised on 28 March and most recently, the approach and priority groups to be tested in the latest version of the protocol were approved by the Chief Medical Officer on 19 April.

13. In line with the Interim Protocol, testing is currently reserved for a number of priority groups – these are unwell patients admitted to hospital for acute care (including those admitted to critical care), essential health and care workers who are self-isolating because either they or a member of their household is symptomatic, and residents in residential or care settings such are care homes or prisons. The latter (closed settings) are identified as a priority category/group for testing as people in these settings may be more vulnerable for a range of reasons and additionally the nature of these settings presents an additional challenge with regard to managing individual cases and outbreaks or clusters of infection.

14. Three new categories/groups were identified and included as a priority for testing when the Interim Protocol was updated on 19 April. These are cancer patients, renal patients and patients discharged from hospital to a care home setting.

15. On 12 April the EAG agreed an extension to testing arrangements for Care Homes (reflected in the formal update to the Interim Protocol on 19 April) which meant that all symptomatic residents were tested if/when a care home reported that it had two or more residents met the case definition. Note this approach was subsequently superseded by a further expansion to testing agreed by EAG on 24 April (testing to include all staff and all residents in care homes when a home is identified to the Health Protection team in PHA as having a potential outbreak; see paragraph 25 below).

16. The list of Health and care workers prioritised for testing in the Interim Protocol are set out in **Annex 1.**

17. These priority groups for testing have been determined following discussion with local and national experts and with scientific advisory groups. They will be kept under continuing review and further expanded in line with emerging evidence and increases in our testing capacity.

**Scaling up of Capacity**

18. The HSC system is working intensively to significantly increase levels of testing across all our laboratory services, within health and social care facilities, other public sector bodies, and also within the commercial sector.

19. We have increased capacity in recent weeks and will increase further. At the start of this outbreak, HSC laboratory services were processing around 40 tests per day. That has now increased to approximately 1,700 tests per day and we expect to increase our testing capacity further. It is important to note that capacity can change on a daily basis due to a number of variables at local lab level.

20. Through the work of the academic consortium with QUB, UU, CITRIC and AFBI, we plan to increase testing capacity by potentially another 500-1000 tests per day by the beginning of May. This is expansion is being planned and delivered in close collaboration with the expert virology team in the Regional Virology Laboratory (in Belfast Trust).

21. It is expected that our capacity will be further increased once Almac join the consortium, operating under the auspices of the EAG. I am advised that neither Almac and the AFBI laboratories use Roche platforms, rather they use Thermo-Fisher platforms. This is an important aspect of our planned expansion of testing capacity as currently Roche based testing kits are allocated on a restricted basis across laboratories in the UK.

**Increasing Our Use of Expanded Testing Capacity**

Care Homes

22. Since its introduction the Interim Protocol on Testing (on 17 March 2020) has always facilitated testing of residents in residential or care settings where there is a possible cluster or outbreak of COVID-19 infections. The protocol also enabled testing of staff who work in care homes, and who were symptomatic or isolating as a member of their household was symptomatic, from 28 March 2020.

23. On 12 April the EAG agreed an extension to testing arrangements for Care Homes (reflected in the formal update to the Interim Protocol on 19). This enabled testing of all symptomatic residents and staff in care homes settings if/when a care home reported that it had two or more residents that met the case definition – that is they are displaying/reporting symptoms consistent with COVID-19 infection, the presence of a new persistent cough and/or a fever. Prior to that change a maximum of 5 residents were tested in each care home reporting possible outbreaks of COVID-19 infection. This approach was implemented with immediate effect from 12 April.

24. In all cases, appropriate consideration is given to the need to test staff as part of the early risk assessment undertaken by the PHA Health Protection team with each care home when the home reports it may have possible cases of COVID-19 infection.

25. At its meeting on Friday 24 April, the EAG agreed that testing will be carried out on all staff and all residents in care homes with a potential outbreak or cluster of infections.

26. On 17 April the EAG on Testing recommended that all patients being discharged from acute hospital care to a care home should be tested 48 hours prior to discharge. It was further agreed on 24 April that all patients/ residents being transferred into a care home from any setting, whether that be from hospital, supported living or directly from their own home, will be tested 48 hours prior to admission to the care home.

27. This testing will enable the care home managers to understand the status of the patient prior to transfer to their care setting, and the care home staff to plan and manage the resident's care appropriately. It should be noted that a negative test provides a status for a patient at a particular point in time and test results must be interpreted carefully. There are a number of factors associated with and influencing interpretation of results including the quality of the swab taken, the background prevalence of infection, the stage of infectiousness of the patient, the potential for a false negative test.

28. It is important to highlight that this testing should not delay a patient's discharge to a care home should a patient test positive prior to discharge. Where a test result has not been processed, the resident should still be admitted to the care home in anticipation of a test result being processed. Colleagues in HSCB have advised that the average number of patients discharged from acute hospital care to a care home during 2019 was 230 patients per week. However it is not possible to infer that this is representative of the current position regarding discharges from hospital to care homes, as currently acute and elective activity is considerably different to that prior to commencement of this pandemic.

29. This testing programme is undertaken in the context of all other work currently ongoing to support care homes to manage individual cases and outbreaks of infection. For example, the PHA has established protocols and procedures for managing outbreaks within nursing and care homes which have been updated to take account of COVID 19. The PHA Health Protection Team will work with the homes and provide all required advice and assistance in accordance with established procedures; including working with Trusts to facilitate appropriate testing of residents and staff as required.

30. This approach is subject continuing review as the learning emerges from both testing and symptom development/progression amongst staff and residents. It will be important to fully assess the learning arising from this work, in order to inform the most appropriate model for management of care home outbreaks during the remainder of this response phase and into the next phase.

**Surveillance testing**

31. Surveillance is critical to determine the level of COVID-19 circulation in the wider community. There are a number of strands of surveillance testing currently underway. The results will feed into wider decision making regarding relaxation of social distancing measures.

General Practice.

32. We have commenced a programme of testing and surveillance in general practice. This programme involves testing and data collection of a sample of patients with respiratory symptoms presenting to their General Practitioner (GP) who are clinically assessed as not requiring referral to or assessment in a COVID-19 primary care centre.

33. Currently all patients contacting their GP are triaged according to a traffic light system – those in the 'red' category require referral to hospital, those in the 'amber' category require face-to-face clinical assessment in a COVID-19 primary care centre, and those in the 'green' category are provided with self-

care advice and are advised to remain at home. This programme will involve testing and surveillance of patients triaged into the 'green' category.

34. Thirty-six general practices across Northern Ireland currently participate in the HSC 'Influenza GP Spotter Surveillance System', this represents approximately 10% of all general practices who actively test a sample patients for seasonal influenza during the usual influenza season. The surveillance approach uses this 'GP Spotter System' to undertake this programme as staff in these practices are trained and have a good understanding of the importance of testing and surveillance.

35. Thirteen general practices in the Belfast and South-Eastern Trust areas commenced testing and surveillance of patients last week (as above). The practices will identify and refer for testing of a total 65 patients per day, testing will be undertaken in Trust test centres. During the week commencing 27 April this testing programme will extend to include 23 additional 'GP Spotter Practices' across the other parts of N Ireland in Northern, Southern and Western Trust areas. The full implementation of this programme will result in a total of approximately 180 tests per day taken across all participating practices.

36. PHA is currently working with staff in the Health and Social Care Board (HSCB) Integrated Care Directorate to explore the feasibility of adapting the current COVID-19 primary care centre model, to enable testing and surveillance of a selection of patients attending for assessment but not requiring admission to hospital. These patients are in the 'amber' category as described above. The current operational model for the primary care centres does not include testing, therefore discussions are actively progressing to introduce this testing. I am advised that approximately 190 patients are assessed each day across these centres, testing will be undertaken on an agreed sample of these patients.

37. As with the programme described above in the care home setting, this testing and surveillance programme in general practice is important to inform our understanding of how the virus is behaving in the community. It is important that our intelligence and tracking systems across primary care are fully

operational in advance of any planned change to our pandemic response arrangements.

Emergency Departments

38. One area where we need more information is patients with mild to moderate respiratory symptoms who attend the Emergency Department (ED) and who are not admitted to hospital for further care. The PHA will commence a sequential programme of testing and surveillance in EDs on 28 April. This programme will commence in the ED in the Royal Victoria Hospital and it will subsequently be extended to include EDs in other Trusts on a rolling basis.

39. In each ED, patients attending with mild to moderate respiratory symptoms, who following clinical assessment are deemed not to require admission to hospital, will be tested. This group will include patients in the 'red' category as described above (GP referrals to ED) and also patients who present of their own accord to the ED in question.

40. This programme will commence in the ED in the Royal Victoria Hospital where I am advised that currently 30-40 patients in this category are assessed each day. The programme will test these patients (up to 40 per day) and in total up to 250 patients attending the RVH, which is the first ED to participate. The exact numbers of patients who will be tested in the other EDs as this programme is extended is to be determined on the basis of feasibility and learning emerging from the programme in the RVH.

41. At its meeting on Friday 24 April, the EAG advised that with effect from Monday 27 April, all patients who are admitted to hospital will be tested for COVID-19, this includes patients admitted for emergency and/or elective care.

**National Partnership Testing Sites**

42. Over recent weeks my Department has also increased testing capacity through participation in a national partnership testing initiative. This national initiative has been established by the Department of Health and Social Care (DHSC) and it operates through collaborative working with the Department of Health in

Northern Ireland and key staff in the PHA. The first testing centre arising from this national partnership was opened at the SSE Arena, Belfast on 4 April. A second centre has opened in the City of Derry Rugby Club on 17 April, and a third centre opened on 23 April in Craigavon MOT centre. The sites are managed by Deloitte (on behalf of DHSC) and the laboratory testing is undertaken by Randox.

43. Testing offered through this partnership was initially for essential health and care workers, both Trust and non-Trust employed staff, including professional carers.

44. The number of test kits supplied from the UK wide Randox contract is agreed with locally on a daily basis. Estimated demand/capacity is based on the numbers of tests performed over the previous few days. I am advised that available capacity has not been fully utilised on any given day to date at any of the three sites.

45. The uptake of testing in these centres has not been what I was expecting, however officials at my Department and at the PHA have been taking active measures to increase the numbers availing of testing through this national initiative. Considerable work has been undertaken on a daily basis to optimise the numbers of essential workers tested through the national testing centres. Despite significant attention and concerted work by policy and operational staff, there is further scope to use all testing capacity available through these centres. Early indications from PHA are that demand has increased since my decision on 22 April to expand testing to include additional frontline workers and symptomatic members of their household. This includes testing for symptomatic family members of staff in care homes. I am advised that this increased testing will be reflected in subsequent days' allocations to each site.

46. The chair of the EAG on Testing continues to work closely on a daily basis with colleagues in the PHA who are making significant effort to increase the numbers of staff tested. PHA staff are working with Trusts and other HSC organisations, including NI Fire and Rescue Service, Independent Providers (for care homes and domiciliary care staff) and HSCB Integrated Care Services

(for community pharmacists, general practice staff, community optometrists and community dentists) to ensure that as many essential health and care workers as possible and as required are tested.

47. On 17 April, processes were put in place to enable RQIA to coordinate referrals and appointments at the national testing sites for staff working in care homes, should they require testing (either because they or a member of their household was symptomatic, or they needed to be tested as part of the risk assessment of a potential outbreak or cluster of infection associated with a care home).

48. Prior to my announcement on 22 April to expand testing to include additional frontline workers, arrangements were in place over recent weeks through the NI-Hub to identify key workers outside of health and care that can be tested (are symptomatic/ isolating because a family members is symptomatic). An email was cascaded daily to all Departmental Operation Cells with a request that they communicate to ALBs and sectors linked to their Departments to key workers identify eligible workers for testing. I understand that, outside of police and prisons staff, only a relatively small number of requests were made for tests.

49. Working with colleagues in the Department of Justice, arrangements have also been put in place to facilitate testing of police and prisons staff and approximately 380 tests had been requested for these staff by 23 April.

50. At its meeting on Friday 17 April, the EAG on Testing agreed to progress a proposal from DHSC that the national testing site in SSE Arena (Belfast), similar to sites in England, would be opened to testing of essential staff/key workers out-with the health and social care sector for trial period of 72 hours (without a requirement for staff to pre-register). In response, an invitation was sent to the NI-Hub for urgent communication to all its contacts advising that there was temporary testing capacity at both SSE Arena and City of Derry Rugby Club sites over the weekend 18 and 19 April. PHA has since reported that groups tested over that weekend included staff from Translink and telecoms staff.

51. Following pilot work over the weekend of 18 and 19 April, I then announced on 22 April a further expansion of testing through the national test centres to include additional frontline workers and symptomatic members of their household. Importantly, this now includes frontline workers in the private sector, with a focus on staff delivering key medical, energy, utility, transport and food supplies. This latest expansion in testing will allow even more essential workers to return to the front line.

52. I am advised that consideration of the opening of a fourth site has been paused until demand for testing as part of the national initiative, which has been low to date, has been further assessed. The position on a fourth site will be reviewed again by the EAG at the beginning of May. A potential fourth site has not yet been identified

53. There is also an option for rapid deployment of Randox test through the national test initiative in the event of an outbreak in a care home setting. I am advised that the EAG's preference at this time is that testing of symptomatic patients and residents, and by extension any associated testing of other non-symptomatic residents in care homes, should be streamed through our HSC/Consortium laboratory services. This advice is premised on the importance of receiving lab results promptly when testing at care homes (understand results usually received within 24 hrs in HSC labs versus up to 72 hours at Randox laboratories through the national partnership test sites), and continuing work to progress information governance aspects of the national programme and administration arrangements for these test centres.

54. The option of a mobile testing centre was discussed at the Expert Advisory Group at its meeting on Friday 24 and remains under consideration. There was an announcement on Sunday 26 April by Number 10 Downing Street that 96 mobile test units would be introduced. This is to include 4 mobile testing units for Northern Ireland. Further details are currently in development.

55. A digital platform to facilitate registration and booking with the National Test Centres has been introduced and has been available in Northern Ireland from

28 April. Booking through the online digital platform provides an option of home testing. I understand this option will be available in Northern Ireland.

**Recommendation**

56. I recommend that Executive colleagues note the detail of this paper on Testing for COVID-19 in Northern Ireland.

**ROBIN SWANN MLA**
**MINISTER FOR HEALTH**

**Annex 1**

**Health and Care Workers Prioritised for Testing**
*(As per Interim Protocol for Testing – latest iteration 19 April)*

- Physicians and surgeons, Nurses and Allied Health Professionals involved in the care of acutely ill patients;
- Emergency Departments Critical Care Units/Intensive Care Units;
- Primary Care staff;
    - GP frontline staff working in GP Practices and GP Out of Hours Services
    - Community Pharmacy frontline staff working in community pharmacies
    - Dental staff working in Urgent Care services
    - Optometry staff working for the urgent Primary Eyecare Assessment and Referral Service (PEARS) managing acute red eye conditions
- Frontline Ambulance staff
- Frontline care staff in the community, includes Trust and non-Trust employed staff
- Other HCWs or critical staff within HSCNI not covered above can be considered on a case-by-case basis at the discretion of the Medical Director of each Trust.