

Development of a Covid-19 Community Hub and Assessment Centre for Dumfries and Galloway

Context

The increased demand on health and social care services as a result of the Covid-19 virus is anticipated to be significant. Those with experiencing moderate to severe symptoms, particularly those with underlying conditions are likely to need rapid access to acute care.

It is therefore vital that an appropriate, whole system approach is adopted to support a community pathway designed to enable those with mild to moderate symptoms to safely manage at home, with appropriate access to advice and support.

Given one of the routes into the community pathway will be through NHS 24, there is a need to ensure it is consistent across Scotland and that it is ready to go live on 23 March 2020.

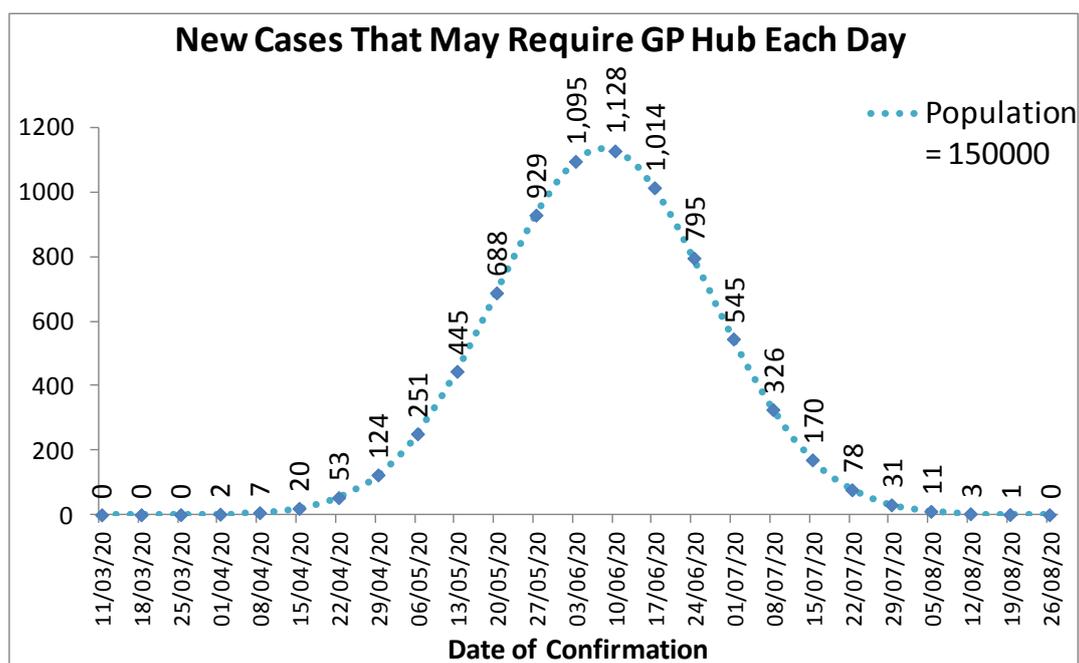
Assumptions

In developing this high level proposal for a community pathway in Dumfries and Galloway the following assumptions have been made:

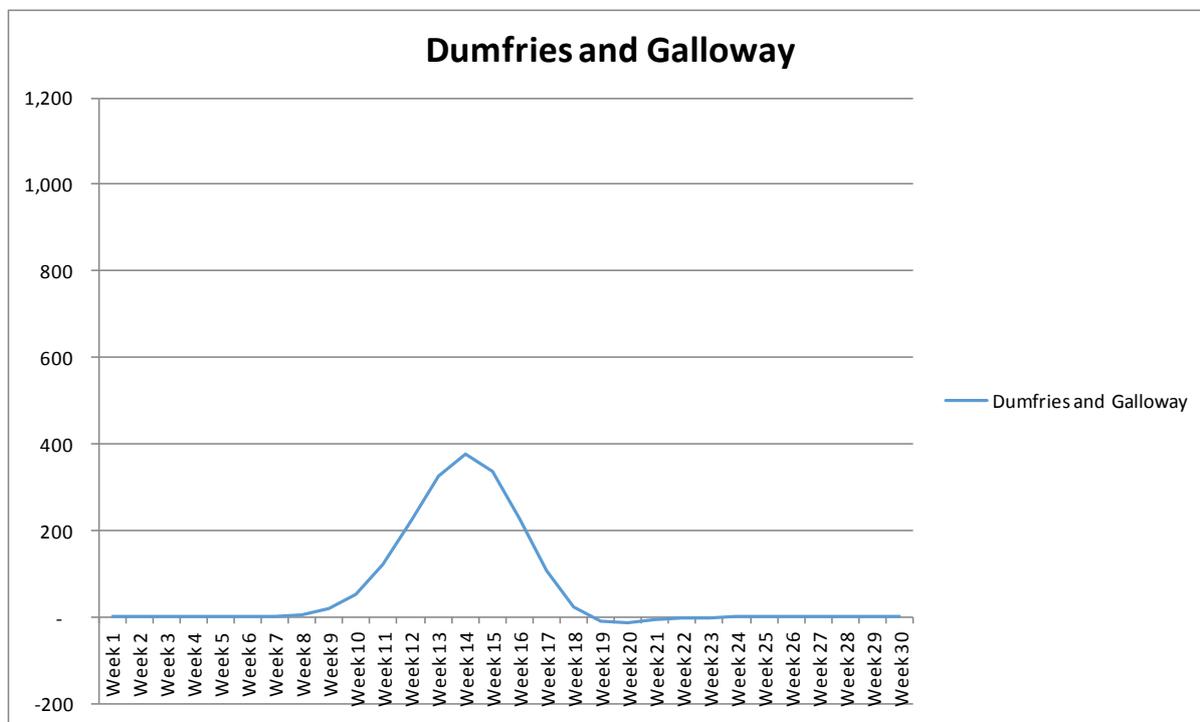
- 95% of those who contract Covid-19 will experience mild to moderate symptoms;
- Approximately one half of those individuals will self-manage and not require formal care or advice;
- Approximately one half of those individuals will require advice on how to self-manage; clinical assessment, either through NHS Near Me or on a face-to-face basis; and / or a community-based treatment plan to prevent hospital admission;

Applying these assumptions to the predicted demand curve for Dumfries and Galloway indicates that demand for the community pathway will start at a low level of 1 case per day during week commencing 23 March 2020, rising to 62 cases per day during week commencing 20 April 2020 and peaking at 1,114 cases during week commencing 08 June 2020.

These demand projections are set out graphically below:

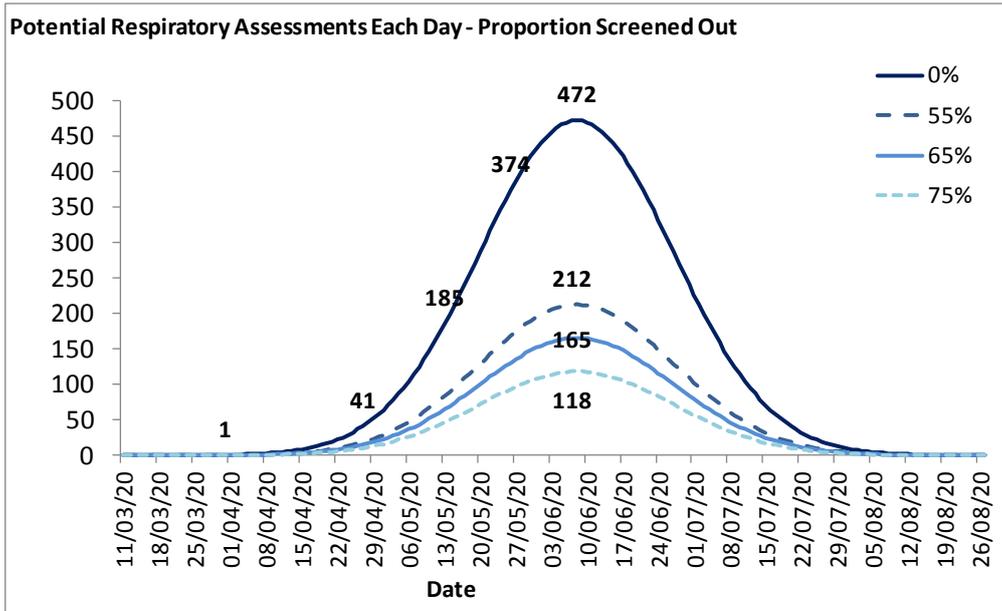


On 17 March 2020 Scottish Government set out further guidance relating to the creation of a Community Hub and Assessment Centre, including projected demand data that are significantly different to those that have been developed locally, with peak demand reported at 376 patients being triaged to the hub in June 2020. These data are presented in the chart below:



The key assumption behind these data are that NHS 24 will triage 75% of all calls they receive to self-manage at home without need for further intervention. The extent to which this will be realised remains to be seen and in light of the activity experienced by the Dumfries and Galloway Out of Hours service over weekend of 14 and 15 March and into week commencing 16 March, it is therefore prudent to plan for demand between the figures proposed by Scottish Government and those that have been developed locally.

NHS Greater Glasgow and Clyde have made some alternative planning assumptions based on an 80% infection rate, with 50% of those being symptomatic and 30% of those presenting to local Assessment Centres. Applying these assumptions to the Dumfries and Galloway data, along with confidence intervals around the percentage that will be successfully directed to self-manage by NHS 24, indicates the following possible demand scenarios:



The data indicate that if NHS 24 successfully triaged 75% of calls to self-manage at home, there would be demand of approximately 5 calls per hour to the local hub during the peak period, rising to approximately 7 patients per hour if only 65% were successfully triaged by NHS 24 and rising again to approximately 9 patients per hour if NHS 24 can only direct 55% to self-manage at home.

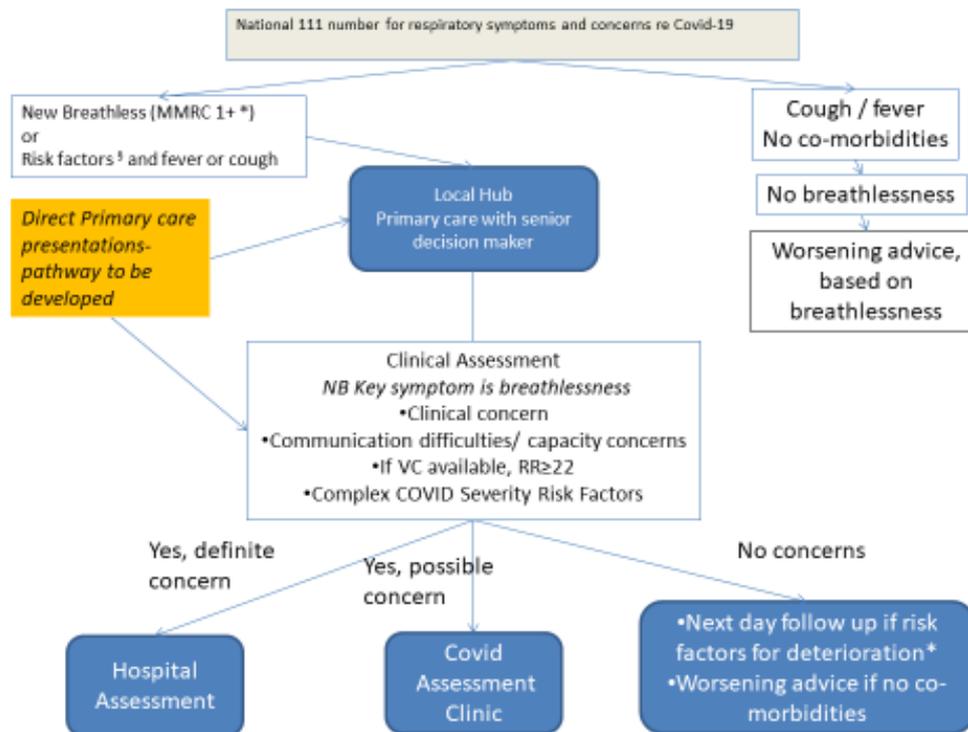
Given the initial triage undertaken by NHS 24 will have directed patients to self-manage or to hospital admission, the working assumption locally is that the hub would redirect 10% of patients to each of these local dispositions, with the remaining 80% requiring face-to-face clinical assessment. During the peak period, this would result in an average of between 4 and 7 patients per hour requiring clinical assessment either within a centre or at home, depending on the impact of NHS 24 triage.

Should there be no effective triage by NHS 24, the data suggest that, during the peak period, the hub would receive on average 20 calls per hour and, assuming the previous assumptions hold, this would result in on average 16 patients per hour requiring clinical assessment, either within a centre or at home.

Activity levels will be monitored closely on a day-to-day and week-to-week basis for the first month of operation and this data will be used to refine and further develop the demand analysis and associated workforce models for the anticipated peak periods throughout May, June and July 2020.

Nationally Defined Community Pathway

The following high level diagram has been developed by Scottish Government:



Rationale for a Dedicated Covid-19 Pathway

It is expected that those experiencing moderate to severe symptoms associated with Covid-19, particularly those with underlying conditions, are likely to need rapid access to acute care.

It is therefore vital that a dedicated pathway is designed, developed and delivered to enable those with mild to moderate symptoms to safely manage at home, with appropriate access to advice and support.

Guidance from Scottish Government has clarified that this pathway should begin with patients being directed to NHS 24 for initial triage and that those who cannot self-manage at home will be passed on to a local hub and assessment centre.

The hub runs 24/7 and handles all calls from NHS 24, with the Senior Clinical Decision Maker providing secondary triage, further advice on self-management and scheduling of face-to-face assessment where the presenting symptoms meet the specified criteria.

Two assessment centres and a home visiting service will also run 24/7, offering the capacity necessary to provide face-to-face physical assessment of patients based on an agreed protocol.

The hub will also provide targeted, telephone follow-up to those who have been assessed by telephone or in the assessment centre and where it has been determined that their condition is likely to worsen.

The creation of this pathway will support individuals with mild to moderate symptoms, who would otherwise self-present to the Emergency Department or General Practice, to access dedicated advice, support, assessment and treatment planning.

Without such a sustainable pathway being in place prior to the predicted increases in Covid-19 activity, there is a real risk that demand for assessment and treatment planning will default to individual GP Practices and the Emergency Department and that these services will quickly struggle to cope with the anticipated increased activity.

Implementing a Community Pathway for Dumfries and Galloway

Given the anticipated relatively low levels of demand in the initial period, the hub, assessment centre and other local dispositions will be established on the agreed national 'go-live' date to test their functionality and refine systems and processes prior to the anticipated peak demand period from mid-April onwards.

This will enable the deployment of an initial triage and telephone-consultation service, using NHS Near Me, with the assessment service staffed by experienced practitioners while work continues on the training of the team who will staff the service as in the longer term.

Sites for the Hub and Assessment Centre(s) in Dumfries and Galloway

Covid-19 Hub

It is proposed that one hub will be established to offer call handling, secondary triage and telephone advice and support for the whole area.

The hub will be created in the diagnostics suite of Dumfries and Galloway Royal Infirmary, with a room identified that can accommodate 6 – 8 call handlers and clinical triage staff. This will be adjacent to the OOHs administrative base in the former Orthodontic Lab so that IT, telephony, scheduling and wider infrastructure support is available.

East Covid-19 Assessment Centre

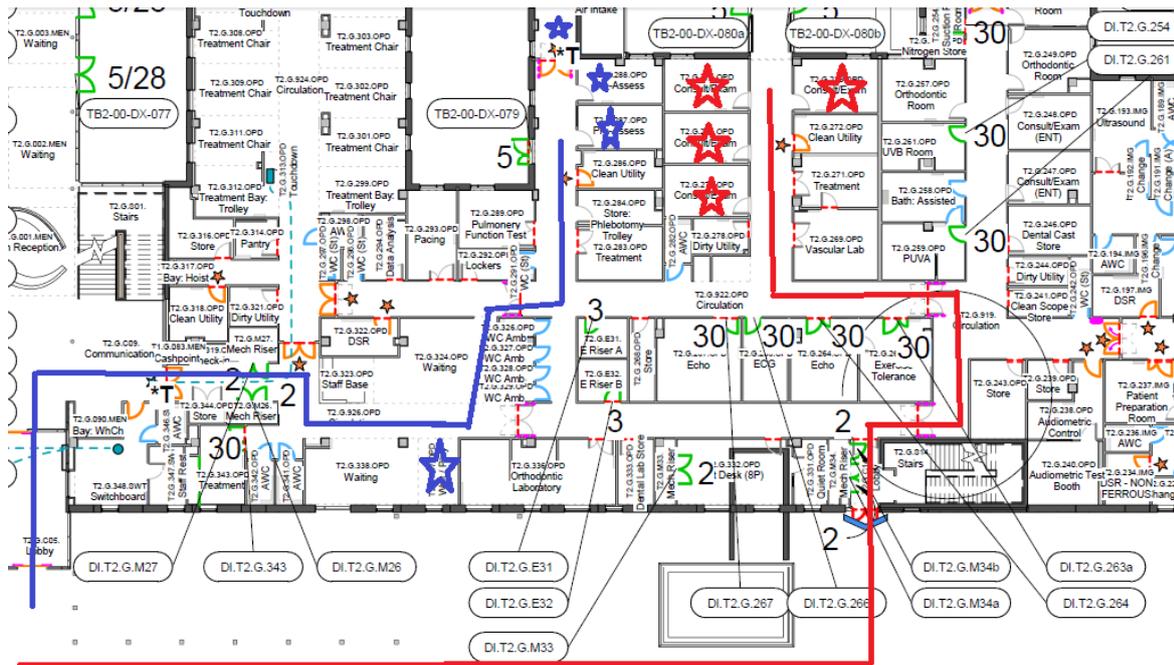
Given the strong links between the hub and the covid-19 assessment centre, the four clinical rooms designated by the red stars in diagram below will be used to provide dedicated assessment space, with sufficient capacity, in the first instance at least, to enable cleaning between patients.

The diagram also confirms the 'red' pathway that will be followed by patients attending the Covid-19 Assessment Centre. It is anticipated that these patients will advise the team by telephone that they have arrived at the drop-off point at the hospital entrance and will be directed to a separate side entrance where they will be met by a member of staff who will support them with PPE and accompany them to their designated consulting room. After their assessment, the staff member will accompany them back to the drop-off area where they will be collected.

This facility would serve the East of the county and offer close proximity to the Emergency Department, recognising the likelihood of patients self-presenting there with mild-to-moderate respiratory symptoms that could be assessed by the assessment centre team. Similarly, this would offer a convenient route of access to hospital care and wider diagnostics for those who are directed to the assessment centre but present with severe symptoms.

At the same time, the diagram below highlights in blue the route to be taken by patients attending the general Out of Hours service who will use the main hospital entrance, the diagnostic waiting area and the consulting rooms designated with a blue star.

This approach maintains the desired separate patient flows for the respective groups.



Skillmix for the East Assessment Centre

It is anticipated that the West Assessment Centre will see **around 1 patient per hour** through until the end of April 2020, with activity estimated to increase on site to **up to 7 patients per hour** towards the end of May and the likely peak in mid-June 2020. The demand profile is then expected to reverse along a similar trajectory through until early August 2020.

A full clinical assessment will be expected to take approximately 20 minutes, inclusive of time to put on and take off PPE and to write up notes. There will also be a need for down-time during each six-hour shift. On that basis, and recognising the need for some down-time for staff during their working period, each member of the assessment team will be able to see a maximum of 3 patients per hour, which would equate to between 10 and 16 patients per shift, depending on shift length.

This assumption will need to be tested during the initial days and weeks of operation and if it holds true, then the following staffing model proposed by Scottish Government would be likely to meet the demand in Dumfries and Galloway up to and including 20 April 2020:

- 1 administrator
- 1 non-clinical call handler
- 1 chaperone
- 2 drivers
- 1 domestic
- 3 Clinical Assessors (Nurses – Band 5 or above, or other trained Healthcare Professionals)
- 1 senior decision maker (General Practitioner, Consultant or Advanced Nurse Practitioner)

Plans may need to be developed between now and the middle of April 2020 to increase staff capacity, in line with learning from the initial weeks and revised demand projections.

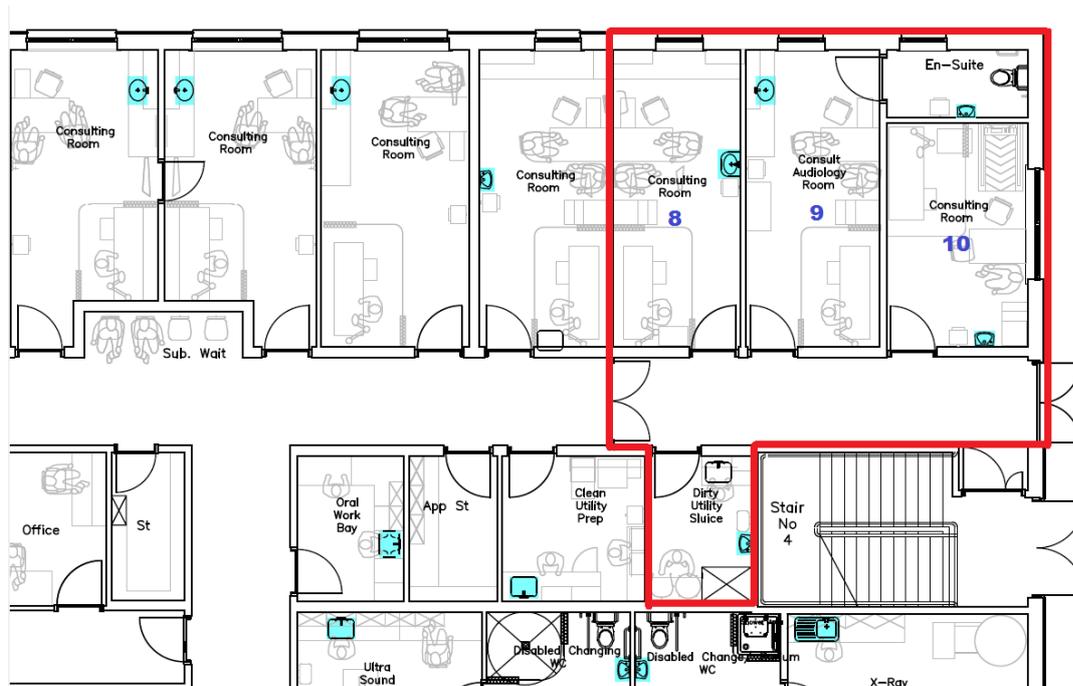
The guidance from Scottish Government confirms that the senior clinical decision-making role can be undertaken by the following professionals:

- Respiratory clinicians
- Respiratory CNSs (Primary and Secondary Care)
- TB nurses
- Emergency Department Band 6+ nurses
- Acute medical / Emergency Department doctors
- GPs
- Advanced Nurse Practitioners
- Paediatric assessor

West Covid-19 Assessment Centre

Further, work is underway to create an assessment centre co-located with the Out of Hours Service and Emergency Department at the Galloway Community Hospital. This site will also operate 24/7.

Dedicated space for the Assessment Centre will be created within a self-contained section of the out-patients area. This will offer three consulting rooms designated for sole use by the West Covid-19 Assessment Centre team, served by a dedicated entrance to maintain entirely separate patient flows. Details of the patient pathway through the assessment unit are presented in the diagram below:



Skillmix for the West Assessment Centre

It is anticipated that the West Assessment Centre will see less than 1 patient per hour through until the end of April 2020, with activity estimated to increase on site to up to 3 patients per hour towards the end of May and the likely peak in mid-June 2020. The demand profile is then expected to reverse along a similar trajectory through until early August 2020.

Using the same staffing assumptions as those applied to the East Assessment Centre, it is anticipated that the West Assessment Centre would, in the first instance require one clinician available 24/7 to provide the clinical assessment to scheduled patients. It is anticipated that this could be sustained through until the end of April 2020, when a second clinician would be required to meet the anticipated rise in demand. That capacity would need to be maintained throughout May and June 2020.

Given the more remote nature of the Galloway Community Hospital site, it is proposed that the clinicians involved should be experienced in clinical assessment, with the likely pool comprising:

- General Practitioners;
- Advanced Nurse Practitioners;
- Scottish Ambulance Service Paramedics; and
- ?? On-site Physiotherapists ??

Where a less experienced clinician is undertaking an assessment at Galloway Community Hospital, advice and support will be readily available from the Senior Clinical Decision Maker within the hub at Dumfries and Galloway Royal Infirmary.

The clinicians will need to be supported by:

- 1 x Chaperone
- 1 x Administrator
- 1 x Domestic
- 2 x Drivers

Staffing the Hub and Assessment Centres

The Primary Care and Out of Hours Teams will work closely with General Medical Practices across the area, the Advanced Nurse Practitioners attached to Practices through the Primary Care Improvement Plan and the Scottish Ambulance Service to identify those who can safely undertake the Senior Clinical Decision Maker and Clinical Assessor roles.

The Teams will liaise closely with the recently formed Deployment Hub to identify wider staff normally involved in the delivery of planned services who have the skills and competencies and / or the capacity to develop these and could therefore fulfil the Senior Clinical Decision Maker and Clinical Assessor roles.

Further, the Out of Hours Team will engage with those staff members who currently provide these services to determine the additional capacity they may be able to offer in terms of administrative support, chaperone services and driver services. The team will work closely with the Deployment Hub to identify staff from other areas of the organisation who can take on these roles and help fully populate the rotas.

Finally, the team will draw on the pool of Domestic staff being developed across the organisation to ensure there is dedicated support to maintain the required cleaning regime within the Assessment Centres.

When the staff have been identified, a training needs assessment will be undertaken to understand the skills and competencies that need to be developed to safely deliver the hub and assessment centre services, with the provision of that training prioritised.

Assessment Centre Appointments

Recognising the need to avoid potential cross-infection in a waiting area, the out of hours electronic scheduling system will be used 24/7 to offer planned, time bound appointments within the Assessment Centres.

To support this, two clinical rooms will be made available for every member of the assessment team on the Dumfries and Galloway Royal Infirmary site. This will enable the patient to move directly to the room in which they will be assessed as soon as they are clerked into the facility.

This also recognises that any patients directed to the assessment centre from the Emergency Department could then use a relatively isolated waiting space while awaiting their assessment.

Similarly, in the Galloway Community Hospital site, two consulting rooms will be available for the assessing clinician to use, with a third available to receive direct referrals from the Accident and Emergency Unit. This again allows for patients to enter the facility and move directly to the clinical space rather than waiting in a communal space.

During the peak demand period, on the Galloway Community Hospital site it may be necessary to re-designate the two consulting rooms immediately through the double doors (see diagram above) as additional Covid-19 consulting rooms with a temporary screen in place as a demarcation line between them and the rest of the department. A decision on this will be required as the profile of activity is better understood.

Transport to / from the Assessment Centre

Guidance from Health Protection Scotland clearly states that individuals with symptoms consistent with Covid-19 should refrain from travelling on public transport or in taxis.

Consideration therefore must be given to how individuals will be supported to attend an assessment centre. Where an individual is clinically fit to drive themselves or will be supported to attend by a relative or friend in a private vehicle, they will be made aware for the Health Protection Scotland guidance on travel by car.

Further, where an individual is not fit to drive and cannot access support to access the assessment centre by private vehicle, alternative provision will need to be made. The Primary Care Team will therefore liaise with Scottish Ambulance Service colleagues to determine what Patient Transport Service capacity could be made available as elective care is reduced. This would also require agreement on how such support could be booked when appointments are scheduled.

At the same time, advice has been sought on the measures required to enable the safe use of the Out of Hours vehicles to support patient transport and appropriate coverings will be procured. Recognising the anxieties some staff may have in providing this transport role, infection control support will be requested during the first few weeks of operation.

Where this is not possible, agreement will need to be reached on how the current community infrastructure can support home-based assessments.

Support to Return Home

Concerns have been raised that while some patients may be clinically fit to return home, they may not be able to do so without some additional support. The Primary Care Team will therefore work with the Community Care Team to agree how care at home support could be deployed on a rapid response basis to negate the need for hospital admission.

In order to support the patients who are required to self-isolate, take home medication will be made available within the assessment centre. The Acute Pharmacy Team has been advised of the range of

medicines that will be needed within the facility and the anticipated activity numbers have also been supplied. Work is now underway to ensure the facilities will be appropriately stocked.

Home Visiting Assessment Service

Where an individual who is deemed to require a clinical assessment resides outwith a 30 minute radius covered by the transportation service and does not have access to private transport, a home visiting assessment service will be offered.

It is estimated that this service will cover a total population of 11,369 in the West, with the East Service serving a total population of 32,219.

It is impossible to accurately estimate the number of people who will have access to transportation. For planning purposes, it has been assumed that 50% of people from remote and rural areas will have access to private transportation and make their own way to an assessment centre for a scheduled appointment.

The projected activity levels that have been developed for Dumfries and Galloway using the Greater Glasgow and Clyde epidemiology assumptions and local sensitivity analysis have been applied to the local population data to determine indicative demand for the Home Visiting Assessment Service.

Using these assumptions, the average daily activity for the West Home Visiting Assessment Service during the peak demand period is estimated to be between 5 and 19 depending on the level of triage achieved by NHS 24. Similarly, the average daily activity for the service in the East during the peak demand period is estimated to be between 13 and 52.

These numbers will be subject to change and refinement as true demand is quantified over time. That said, they offer a suitably robust basis for planning the capacity required for the home visiting assessment service.

Using these projections, the home visiting assessment service in the West of the County will be delivered in the first instance by the Paramedics attached to General Practice, with assessments in the out of hours period being provided by the Covid-19 Evening, Overnight and Weekend team.

Similarly, in the East of the County, this service will be provided within existing resources in the first instance with GP Practices being asked to visit and assess their own patients in the in-hours period and assessments in the out of hours period being provided by the Covid-19 Evening, Overnight and Weekend team.

Discussions are ongoing to agree how wider community healthcare resources could be deployed to meet increasing demand in the peak period.