1. Rapidly increasing numbers of coronavirus positive cases are now being confirmed in the UK.

2. In addition to the requirement for acute care facilities, it must also be recognised that the main burden of managing any significant outbreak will lie within primary and community care. A strong and well-functioning integrated system in local communities will help ensure better flow for those people waiting to be discharged from hospital, early intervention and proactive management of those at potential increased risk of serious outcome and good local communication and education to support and enable community resilience.

3. To enable this, local systems should urgently consider how they can ensure a comprehensive and expansive front line community response to help alleviate the surge in demand for hospital beds and use of critical care facilities, enabling rapid pathways for those affected or concerned about Covid-19, but also how the system can connect to more of itself to mitigate the likely consequence of staff absence.

4. The pathway outlined at appendix A and narrative below offers a national “once for Scotland” approach to support people to access the right information and help at the right time, and in the right place, by playing to the strengths of individual parts of the system in a co-ordinated and planned way. This approach will also bring opportunities to strengthen whole system partnership working, build resilience and support teams to work together in different ways with common purpose.

5. Assumptions

In order to support a rapid, whole system response which can deliver a reliable 24/7 service at scale:

- **In order to enable NHS24 111 direct line becoming the main point of contact all boards will require to “go live” at the same time.** Failure to do so will cause public confusion. Each boards OOH hub will be the main route of communication from NHS24, and would therefore require to be operational 24/7, 7 days a week.

- Patients must be managed in the community where clinically possible.

- Patients presenting with symptoms as defined by the Health Protection Scotland Guidance for Primary Care
  should be regarded as possible cases and should be managed in separate
healthcare settings (hub or designated area/centre) to those without respiratory illness until COVID-19 is excluded.

• Testing is likely to be overwhelmed and will need to be focused according to clinical/organisational priority.

• Risk of healthcare associated COVID-19 needs to recognised and should be minimised as much as possible.

• Telemedicine is a useful support tool. Enhancement and expansion of this should be considered a priority.

• Consideration should be given to what primary care can stop doing to free up capacity both in and out of hours.

• Secondary care should only be for clinically unwell patients.

• Health and Social Care Partnerships must ensure community health and social care support is robust to ensure people are cared for at home, avoid unnecessary admissions and delayed discharges are avoided.

• The ability for secondary care to rapidly discharge all patients is essential to facilitate patient flow with an emphasis placed on good care planning.

• Elective activity will require to be curtailed. Consideration should be given to enhanced healthcare support in community settings by shifting resources e.g. to nursing homes and other community healthcare initiatives.

• Critical care capacity is likely to be highly stretched. Up-skilling general medical physicians in HDU level care such as inotropic support/NIV/HFNO may be of value in certain hospital settings.

• Medical and nursing staff will need reassurance that the medico legal aspects of providing care out with the scope of their usual professional competencies and under extreme pressure are considered and they will be supported fully in any resulting safety/governance concerns that result from “doing the best they can” in extreme circumstances.

• Communication between primary care and secondary care needs to be robust and clear both in the admission and discharge process.

6. Role of NHS 24

In this model NHS 24 will provide a single point of entry for all people with respiratory symptoms or concern about Covid-19 through use of the national 111 phone
number, and the national website www.nhsinform.co.uk using existing IVR telephony to stream people appropriately. Emergencies will be managed according to current protocols.

Clinical pathway to be followed with 2 outcomes:
- Advice given, person well: no immediate further action- pass to registered practice.
- Further action required: pass down to local hub using existing Adastra system for contact (standards set 1 hour or within 4 hours).

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Risks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single point of entry</td>
<td>capacity</td>
</tr>
<tr>
<td>Standard process</td>
<td>phone lines become overwhelmed</td>
</tr>
<tr>
<td>Can be monitored</td>
<td></td>
</tr>
<tr>
<td>Existing IT infrastructure will support</td>
<td></td>
</tr>
<tr>
<td>Can operate 24/7</td>
<td></td>
</tr>
</tbody>
</table>

7. Role of Local Covid-19 Hub

Operates at health board level.
Number and location of hubs may vary locally, but main OOH hub must be operational in order to provide the connection with NHS 24.
Staffed 24/7
Modelling for predicted numbers at board level to support local planning will be shared.

The hub should support non-patient facing assessment of people referred down from NHS 24 triage (disposition will be contact within 1 hour or 4 hours).

Should face to face assessment be required, this must be arranged at a separate location from the main hub. Assessment centres can be co-located (but separated) from the hub, in hospital settings, in local communities or GP practices. How these are set up, hours of operation etc. should be agreed locally at board level in order to better manage capacity and demand.
#### $ Risk Factors for deterioration$

- Age >60
- Respiratory or cardiac comorbidities
- Immunosuppression including cancer
- Frailty
- Diabetes

#### MMRC scale

The Modified Medical Research Council (MMRC) Dyspnea Scale

<table>
<thead>
<tr>
<th>Grade of dyspnea</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Not troubled by breathlessness except on strenuous exercise</td>
</tr>
<tr>
<td>4</td>
<td>Shortness of breath when hurrying or walking up a steep hill</td>
</tr>
<tr>
<td>3</td>
<td>Walks slower than people of the same age or is out of breath because of breathlessness on level ground</td>
</tr>
<tr>
<td>2</td>
<td>Stops for breath after walking about 100 m or after a few minutes on the level</td>
</tr>
<tr>
<td>1</td>
<td>Has breathlessness when lying down at rest or dressing or undressing</td>
</tr>
</tbody>
</table>

Clinical Assessment

*NB Key symptom is breathlessness*
- Clinical concern
  - Communication difficulties/capacity concerns
  - If VC available, RR > 24
- Complex COVID Severity Risk Factors

Yes, definite concern
- Hospital Assessment

Yes, possible concern
- Covid Assessment Clinic

No concerns
- Next day follow up if risk factors for deterioration
  - Worsening advice if no comorbidities, follow self isolation guidance

Cough / fever
- No co-morbidities
- No breathlessness

Worsening advice, based on breathlessness
- Self-isolate per current guidelines

Direct Primary care presentations-local pathways

Local Hub
- Primary care with senior decision maker

National COVID-19/respiratory line NR5111
For possible unassessed or known positive cases
Paediatric pathway

NHS 111
Triage as per standard algorithms for children with febrile/respiratory illness

- Mild illness
  - Reassurance/advice
- Moderate illness
  - Refer to COVID 19 Hub
- Covid 19 telephone hub assessment
  - Moderate illness needs assessment
  - Covid 19 Hub Clinical assessment
  - Moderate illness – advice/prescribe
- Serious illness – Refer to secondary care

Pathway for pregnant women

Central COVID-19 NHS24 – 111 help line
For pregnant women with respiratory symptoms at any stage of pregnancy

- Cough/fevers, no risk factors for deterioration*
  - No breathlessness
    - Advise - Self isolate 7 days and inform primary midwife
    - Call back if worsening symptoms or develop breathlessness
- Shortness of breath, worsening respiratory symptoms OR risk factors for deterioration *
  - Refer to secondary care – telephone contact with Maternity Triage, who will then advise according to:
    - No additional obstetric complications – follow local health board policy for admission
    - Additional obstetric complications – admit to obstetric unit

* Risk factors for deterioration
  - Respiratory or cardiac comorbidities
  - Immunosuppression
  - Diabetes (Type 1&2 not gestational diabetes)

How the hub operates should be determined locally, recognising systems and processes that are already in place. The key issue is that NHS 24 MUST be able to send clinical information down to the current OOH hub through the Adastra system, and so there must be arrangements in place to enable information flow from national NHS24 into each board.

Principles to consider for hub:

- Primary and community care HUB staffed by senior clinical decision maker *
- Staff should be drawn from across the system
- Staff who are advised to be non-patient facing should be considered
- Closely connected with local HPT, local practices, local SAS, local social care and local hospitals
- A “shift system” could support staff with partners who are also frontline workers.
- Will accept calls triaged initially by NHS 24 and other primary care providers
- Telemedicine centre ideally with access to video consultation e.g. NHS Near Me
- No patient facing role
- Will have access to local primary care records (EMIS/Vision—where this is available) and clinical portal
- Will have a robust way to communicate with secondary care/SAS and COVID assessment clinic
- Has protocols for worsening advice
• Will transition across to OOH provision overnight and weekends - dual function supporting staffing resilience
• Will be able to offer advice for paediatric patients
• Will triage pregnant women according to agreed protocols (see pathway)
• Will require management and administration support

*Potential senior clinical decision makers
  Respiratory clinicians
  Respiratory CNSs (Primary and Secondary Care)
  TB nurses
  ED Band 6+ nurses
  Acute medical / ED doctors
  GPs
  ANPs
Consider clinical staff for hub who may be advised to avoid direct clinical contact
Paediatric assessor (i.e. GP, ANP or other health practitioner with paediatric experience)
In addition, the hub could facilitate care management decisions, mental health, AHP (particularly respiratory physios) etc.

10. Benefits
• Would operate 24/7 supporting both in and out of hours period
• Dealing with Covid-19 only and creating a safe patient handover to Primary Care supported by transfer of record through Adastra system
• Clinical and admin staff drawn down from whole board complement (not just GP’s) – clinically trained staff able to triage, diagnose and offer clinical advice as appropriate, following standard protocols
• Co-locate (or work closely) with local HPT
• Knowledge and intelligence of local GP practices, HSCP arrangements
• Knowledge and intelligence of acute system, bed state etc.
• Opportunity to use e-consult and NHS Near Me
• Direct links with NHS 24 and SAS
• Single point of data and intelligence
• Frees up GP time to manage more in the community.

11. Risks
• Clinical staffing in the hubs, admin and management support (again this could be drawn from across the system)
• Space
• Non Covid-19 issues – pass back to GP/ referrer
• Demand exceeds capacity
• Technical/IT requirements (there is nothing “new” required, only connection of existing systems).
12. The Covid assessment centre

Has ability to perform face to face assessments and take basic obs/NEWS/PEWS score.

Supports people to follow guidance for travel arrangements and minimise need for ambulance transport where possible.

Appointment only (arranged via Covid hub).

Able to discharge patients back to community with access to therapeutic options/prescribing.

Could be co-located with Covid hub, or could be separate (see above). Potential to utilise testing centres.

- 1 administrator
- 3 nurses (1 front door, 2 assessing/buddying)
- 1 senior decision maker* ideally with prescribing ability
- 1 full time domestic
- PPE
- Obs kit (temp / sats probe / BP)
- Testing kits if testing is considered appropriate, and following latest guidance. This guidance is being regularly updated.
- limited medication to supply (asthma / LRTI) and ability to write scripts
- Access to O2
- IT infrastructure and needs to have links to vision/EMIS- GP record where possible

13. Patient criteria for ambulatory care

- Patient with borderline symptoms who would benefit from face to face clinical assessment
- Patients with communication difficulties - Learning difficulties / Capacity issues / language barriers
- Patients with complex COVID severity risk factors as identified in local hub but clinically well
- Those assessed by HUB as benefiting from NEWS/PEWS score to support triaging decision
- Able to attend the centre e.g. Mobility/transport considerations including ability to drive themselves and parking.
- Children who are judged on telephone triage to require a primary care assessment (ie children whom NHS 24 would normally refer to GP)
14. Covid assessment flow

Flow

- Patient arrives (by appointment)
- Surgical Mask put on patient by staff in PPE *
- Obs taken (+/Swabs )

**Senor decision maker** review

- Waiting room must have capacity to keep >2 patients >2 metres apart
- Trage room
  - This needs cleaned between each patient

Consider admission if
- *SpO2 <92% (if COPD, patients known baseline or <88%)
- *RR≥24, increased work of breathing, NEWS >2
- *Other clinical concerns

*following NPS guidance
**see slide 11

- Home

Where possible additional community care services that may avoid admission should be utilised. E.g. community respiratory nursing and elderly care hospital at home

15. Site location for assessment centres

**Acute site**

**Pros**
- Can provide fuller work up if required (XRay / bloods etc)
- Can provide COPD and other standard treatments if required
- Maybe able to use unused elective area (e.g. OP facility)
- May be easier to manage over extended hours if demand requires

**Cons**
- Increased stress on acute site
- Expectation this is the responsibility of secondary care physicians
- Increased tendency to admit?
- May be more remote from population in some cases
- May not be suitable for rural settings

**Community site**

**Pros**
- Keeps patients away from acute site
- Easier parking
- Closer to the population
Reduced media/public interest
Could use existing general practice infrastructure where appropriate.

Cons
Limitied access to other Rxs/investigations
Requirement for potential further SAS transport if admitted to secondary care
Site management if operating over extended hours

16. Interface with secondary care

Admission organisation
- Senior Coordinator (ideally Band 7 SCN)
  - Coordinate admissions
  - Coordination of bed/flow of COVID/known COVID+ patient assessment unit (minimise time in waiting room)
  - Stagger attendances with clinical prioritisation
  - Liaise with Hub/Ambulatory Testing Centre/Primary Care
- Administrative support
  Paediatrics – utilise existing referral pathways where possible in line with local arrangements (eg. Refer to GP advice line or Paediatric Registrar on call)

Consider use of professional to professional communications such as consultant connect.

17. Broader considerations for primary care

- Management of people who are self-isolating and require general medical services (and following the latest guidance around contact)
  - who have not contacted NHS24 and are self-isolating
  - who had been advised via the hub or their practice to self-isolate and have clinical concerns.
- Management and delivery of medical equipment and prescriptions
- Supporting local populations, particularly those who are vulnerable, at risk, elderly and care homes
- Supporting palliative and end of life care
- Proactive management to help reduce risk of admission, through care planning, assessment and review where appropriate
- Ensuring good connections with Covid hub
- Follow protocols for any suspected cases who do present to surgery
- Hospital discharges
- Capacity to support Covid hub, assessment centre or out of hours
In addition to clinical care, practices should also ensure practice plans are in place, and there is good communication within clusters around contingency planning. Smaller practices may be vulnerable if there are high numbers of staff sickness.

18. Broader considerations for secondary care

Patient flow and discharge

Key principles
- Redeployment of staff from areas where elective work has stopped may be required, including to support rapid discharge arrangements
- Where possible services that support community delivery of secondary care should be enhanced e.g. OPAT/respiratory and COPD nurse led services, hospital in the home etc.
- Consider utilising other staff such as those providing pulmonary rehabilitation or cardiac rehab if that service is suspended
- Hospital pharmacy services must operate a 7 day a week service to support daily discharges throughout the day
- Twice daily senior ward rounds would be expected 7 days a week to allow immediate discharges.
- Consider use of nurse led discharge planning
- Patient flow out of secondary care is essential to allow rapid and high quality care of all admitted patients including those with possible or proven COVID-19
- Patients with COVID-19, possible or confirmed, can be discharged based on clinical grounds and will not be tested unless admitted to hospital. Discharge planning must be given the highest priority, with care plans in place
- HSCP need to have the ability to rapidly provide care in community settings to facilitate discharge
- Patients may need to be moved to “downstream settings” in other facilities regardless of their postcode to facilitate bed availability at “front door”.

19. Management of confirmed cases at home

Confirmed COVID-19 patients can be managed or discharged home unless they require inpatient care for clinical reasons or are considered unsuitable for home isolation.

This should be read in conjunction with the following guidance document:
Guidance on Home Isolation for Confirmed COVID-19 Patients(11.03.2020).

Patients with possible COVID-19 awaiting test results from secondary care can be managed at home with a mechanism in place to communicate the results back to the patient.
Patient information is available at https://www.nhsinform.scot/illnesses-and-conditions/infections-and-poisoning/coronavirus-covid-19#stay-at-home-advice

Patients that are assessed in the COVID Assessment Centre or acute secondary care services such as medical receiving or Emergency Departments will not be tested unless admitted for an overnight stay in hospital.

Transport to and from hospital should be in line with secondary care guidelines appendix 1 https://hpspubsrepo.blob.core.windows.net/hps-website/nss/2936/documents/1_covid-19-guidance-for-secondary-care.pdf

20. Patients already in secondary care with proven COVID-19

These patients are no longer required to stay in hospital awaiting serial sampling results, as per previous PHE/HPS guidelines, unless inpatient care is required for clinical reasons or other concerns about their safety and ability to self isolate in the community.

• Discharge criteria
  – No clinical concern after senior medical review (consultant obstetric review for pregnant women)
  – Discharge with worsening advice and contact information for primary care/NHS 24 or other appropriate secondary care service.

21. Patient information

Patients will be given printed information https://www.gov.uk/government/publications/covid-19-stay-at-home-guidance or know how to electronically access this. This has information on who to contact if they have clinical or other concerns. Information leaflets are included in the “Guidance on Home Isolation for Confirmed COVID-19 Patients”

Duration of isolation is as per current guidelines

  – Although evidence of virus in stool and blood, nose/throat swabs and sputum most likely to reflect infectivity and is a very sensitive assay. Respiratory tract samples alone can be used to support isolation/infection control decisions for inpatients.
Patients diagnosed with COVID-19 in a community setting

All patients that can be considered for home management based on clinical condition but an assessment will also be required to assess the patient's ability to self-isolate. Patients not requiring admission must be given clear worsening advice as per https://www.gov.uk/government/publications/covid-19-stay-at-home-guidance and advised to report new or worsening breathlessness with their GP/NHS 24 or the HUB as per local arrangements.

Any pregnant woman reporting breathlessness requires obstetric assessment in their local obstetric admissions unit.

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**The Modified Medical Research Council (MMRC) Dyspnoea Scale**

<table>
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<tr>
<th>Grade of dyspnoea</th>
<th>Description</th>
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<tbody>
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<td>Too breathless to leave the house or breathless when dressing or undressing</td>
</tr>
</tbody>
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22. Discharge criteria for paediatric patients with known or possible COVID-19

Discharge should be based on clinical assessment by a senior clinician (senior registrar or consultant) in line with standard practice for respiratory and febrile illness, with consideration for family circumstances and ability to self-isolate. Carers should be given clear worsening advice and a contact number to call if concerns.

23. Exceptional groups

It is recognised that a number of exceptional patient groups will require specific guidance based on their particular circumstances. Examples include, but are not limited to patients undergoing cancer treatments, renal dialysis patients, cystic fibrosis patients and bone marrow transplant patients. Patients that regularly attend hospital services collocated with higher risk groups for example dialysis units and oncology services need to consider how to manage those with COVID-19 or possible COVID-19 and the infection control aspects of this. In these groups for those with proven disease, testing to evaluate when isolation can be lifted may be appropriate. Testing at day 7 after symptoms and every 3 days thereafter until 2 consecutive negative samples are obtained, 24 hours apart, is a possible strategy that allows
patients to resume the standard pathway of care. Guidance is being developed to support prisoner healthcare and homeless people.

24. Summary and recommendations

This proposal has been developed by the SG clinical cell, a group of clinicians from all parts of the system working in collaboration. Whilst it is recognised there will be more work to do in the coming days, we believe this offers a safe, resilient and sustainable solution over the predicted medium term. It requires whole system working, drawing on board and HSCP assets and utilising our national board functions to support a “once for Scotland” approach combined with local flexibilities around delivery in local populations. It will support rapid intelligence and data collection, and it is anticipated that by standing together shoulder to shoulder, our staff will feel supported, connected and enabled to deliver what they do best for our population.
Post-Containment Covid-19 Pathway

Patient

HPS

Single Number

NHS 24

Non-Covid-19

Advice

GP Practice

Further Action required

Adastra

Covid Local Hub 24/7

OOH

Acute

HPT

Local GP Practices

Local Hubs:
- Clinical & admin staff drawn from across the Board
- Covid-19 only
- Local knowledge & intel.
- Rapid communication
- Single point – Comms Data
- Use: E-Consult
- NHS near me
- Consultant Connect etc.

? Covid-19

Advice

No Further Action required

Email

GP practice Email box