Directorate of Chief Medical Officer

T: 0131-244 2818
E: SGCoronavirus@gov.scot

The Scottish Government
Riaghaltas na h-Alba

Dear Colleague

INTERIM PATIENT PATHWAYS FOR MANAGEMENT OF CONFIRMED COVID-19 CASES IN SCOTLAND

I would firstly like to thank you and your staff for all the hard work that has already gone into preparing and dealing with COVID-19. We are already dealing with the first cases and many more will present and be diagnosed. I would like to reiterate that at the moment Scotland remains firmly in the containment phase of the COVID-19 Action Plan and we should do all we can to remain in this phase..

I am writing to advise you of the updated interim pathway for the management of confirmed COVID-19 cases in Scotland. A copy of this guidance accompanies this letter.

I would ask that you ensure that your NHS board management are aware and, in particular, are supporting and resourcing Regional Infectious Disease Units (RIDUs) to provide the service.

In particular note that all cases should have a clinical discussion between the local responsible secondary care physician and the nominated RIDU, following which a decision will be made on placement.

Led by Health Protection Scotland, the clinical cell developing this guidance intend to begin the next phase, developing an inpatient pathway, next week. Please ensure your NHS Board management are aware and are planning your local inpatient pathways.

The same requirements will be needed for the primary care treatment pathway when it is developed.

I would also like to remind you that referring patients for information and advice in respect of Covid-19 remains different in Scotland to the rest of the UK.

From the Chief Medical Officer
Dr Catherine Calderwood MA Cantab MBChB FRCOG FRCP (Ed) FRCP (Glasgow) FRCS(Ed) HonFFPH

7 March 2020

SGHD/CMO(2020) 6

For action

Medical Directors NHS Boards
Directors of Public Health
Consultants in Public Health Medicine, NHS Boards
Nurse Directors NHS Boards

For information

Chief Executives NHS Boards

Health Protection Scotland;
Chief Executive, NHS Health Scotland;
General Practitioners;
Practice Nurses;
Practice Managers

Further Enquiries to:

St Andrew's House
EDINBURGH EH1 3DG

Tel: 0131-244 2818

SGCoronavirus@gov.scot

NHS 24 and NHS 111 whilst sharing the same public access numbers are independent organisations established with different remits and structures in Scotland and England. The NHS 111 service is publicised in England as available 24 hours a day 7 days a week

Scotland's NHS 24's 111 service is nationally provided and commissioned to provide urgent health advice Out of Hours, when the GP practice or dentist is closed. Only during the Out of Hours period does NHS 24 have the facility to refer directly to OOH services, SAS, Emergency Departments, and Emergency dentists.

During the in-hours period patients should be directed to phone their GP in the first instance. GPs should not refer patients, symptomatic or otherwise, to the 111 number, but should follow the national guidance developed by HPS. This is updated regularly and has been shared with all GP practices. These arrangements may change as the number of people with symptoms increases.

Can you please ensure that this is understood widely in your Board area.

Yours sincerely,

Catherine Calderwood

DR CATHERINE CALDERWOOD

Scottish Patient Care Pathways for confirmed COVID-19

Developed by the COVID-19 Clinical Cell including representation from Infectious Diseases, Paediatric Infectious Diseases, Critical Care, Health Protection Scotland and Scottish Government Obstetric and Paediatric Advisers

This paper sets out the current pathways for management of confirmed cases of COVID-19 infection in Scotland.

Overarching Principles

This pathway is designed to provide a structure for patient entry to hospital care and not for clinical management of patients once within hospital.

- This pathway will be modified if numbers of patients with confirmed COVID-19 increase.
- All patients with confirmed COVID-19 will be admitted to hospital and cared for in an isolation room appropriate to their clinical need.
- Paediatric and obstetric pathways differ from the standard adult pathway and are also set out in this document.
- It is essential that all hospital boards within Scotland are aware of the need to follow a national pathway for the care of such patients, even though they may reside outside the geographical boundaries of a particular health board.
- Disposition of patients will be made on a clinical basis and agreed through discussion between the local responsible physician (infectious disease, general medicine, paediatrician, obstetrician) and the *de facto* Regional ID Unit (RIDU).

Action to take in the event of a presumptive positive COVID-19 case

On receipt of a presumptive positive result:

- the local Health Protection Team will call an urgent IMT to coordinate the management of the case and their contacts.
- the local responsible physician will discuss the case with the relevant RIDU, Paediatric Infectious disease service in Glasgow or Edinburgh and/or obstetrician (see appendix 2 below for contact details) to decide on the most appropriate disposition of the patient. Following discussion a recommendation will be made to the IMT as to the most appropriate location for the patient's management.
- Additional advice may be sought from the airborne HCID Treatment Centre network in NHS England.
- For pregnant women: the local and/or regional Obstetric Consultant on call must be included in any discussion and decision about the most appropriate location of management, taking into consideration the woman's gestation and access to obstetric and neonatal services. For most women, co-location of these services will be desirable.

- Depending on gestation, the consultant responsible for the local neonatal service should be included in the IMT.

Disposition of patients with COVID-19 in Scotland

This section describes the disposition of the following patient groups, dependent upon the type and location of the patient:

- Adults
- Pregnant women (all stages of gestation)
- Remote and Island Communities
- Children < 16 years of age and Neonates

Adults

Stage 1

- The 4 RIDUs have a total capacity for 12 inpatients.
- Patients will preferentially (but not exclusively) be transferred to and cared for in these units. Appendix 1 lists which health boards would feed into each RIDU.
- Once capacity is reached, patient disposition will move to stage 2.

Stage 2

- Stage 1 capacity reached.
- All positive patients preferentially managed in clinically appropriate secondary care facilities outwith the 4 RIDUs.
- Hospitals without on-site infectious disease consultant support must ensure they are appropriately prepared to care for patients with COVID-19.
- The disposition of patients will be decided at the initial IMT following the positive result.

A Hub and Spoke organisational model will be used, based on clinical care requirements and recognising the close working relationships between regional and local Infectious Diseases units (LIDU) in Scotland. LIDU have clinically appropriate isolation rooms and available infectious disease consultant cover within normal working hours. Outside of normal working hours, or due to capacity, General Medical Physicians will be involved with patient care.

- The local physician (infectious disease or general medical) will be the named responsible consultant in charge of patient care

Hubs: 4 RIDUs

Spokes: 6 LIDUs Hospitals. Hubs as identified in appendix 1. * additional arrangements for remote and island communities are discussed in ‘Remote and Island communities’ within the document.

Stage 3

Capacity of LIDUs reached. National plans for ongoing care will be determined (shift to admission of only unwell patients and home or community care models for ‘well’ patients). This pathway is currently being developed in partnership with SG Primary Care colleagues.

- Hospitals without infectious disease consultant cover must to step up preparations to manage COVID-19 patients.

Stage 2 Inpatient adult care

All patients should be placed in a setting appropriate to their clinical care needs. This must include being nursed in respiratory isolation until deemed negative for SARS-CoV-2.

General Medical Ward level care: *Sufficient access to medical and nursing care for basic observations and availability of medical staff if deterioration observed. Requires regular Infectious Diseases specialist input and ability to escalate to a higher level of care, ideally on site*

Suitable patients include:

- Those requiring inpatient admission for secondary care.
- Those who would normally be managed in a primary care or OP setting in terms of their clinical condition.
- Patient with pre-existing risk of deterioration but minimal symptoms

Patients must be nursed in respiratory isolation in a:

- *Negative pressure room (preferentially) or*
- *Single room with closed door*

Risk factors for deterioration

1. Age >60
2. Respiratory or cardiac comorbidities
3. Immunosuppression including cancer
4. Frailty
5. Diabetes

High dependency care

Constitutes any patient requiring support for a single failing organ (excluding mechanical ventilation) or more detailed observation or intervention but not requiring or appropriate for Level 3 care. These patients may be identified through an elevated NEWS (medium or high clinical risk) or two or more qSOFA criteria.

The ability to escalate locally to level 3 care is required for appropriate patients.

Patient must be managed in a:

- *negative pressure rooms (preferentially) or*
- *single room with closed door*

NOTE: non invasive ventilation and High Flow Nasal Oxygen (HFNO) are AGPs and should only be instituted after an appropriate local risk assessment and with staff wearing appropriate PPE.

Intensive or Level 3 care

Patients requiring advanced respiratory support alone (invasive ventilation) or basic respiratory support together with support of at least two organ systems must be managed in a critical care/ITU setting in a:

- *negative pressure room (preferentially) or*
- *single room with closed door.*

*NOTE: non invasive ventilation and High Flow Nasal Oxygen (HFNO) are AGPs and should only be instituted after an appropriate local risk assessment and with staff wearing appropriate PPE.*ECMO can have a role in selected patients not responding to conventional management of severe respiratory failure/ARDS. The UK has an ECMO network with established referral pathways.

Obstetric care

Stage 1- 3

As per the adult pathway, the local and/or regional Obstetric Consultant on call must be included in any discussion and decision about the most appropriate location of management, taking into consideration the woman's gestation and access to obstetric and neonatal services. For most women, co-location of these services should be optimised.

- MEWS and Pregnancy SIRS criteria should be used for monitoring to assess for deterioration.
- Women being managed in non-obstetric settings – RIDU or LIDU must receive regular (daily) obstetric review.

Women in labour

Should be managed in a single room with closed door in a maternity unit with regular ID specialist input.

Postpartum

Separation of mother and baby is not currently advised. Mother and baby should be isolated in a single room with en-suite facilities and closed door. This could be in an appropriate maternity or neonatal/ paediatric unit if both are well.

Remote and island communities

Stage 1- 3

Pathway will be as for patients on mainland with the following additional points for consideration:

- A case discussion should be held including LIDU, RIDU and SAS/EMRS/ScotSTAR.
- Early transfer of patients should be strongly considered given the challenges and risks to patients of transfer as the clinical condition worsens.
- Up until transfer, patients should be managed in a single room with the door closed as per the adult care pathway.
- Whilst patients are awaiting transfer, ongoing specialist advice will be available from the designated regional infectious disease unit, paediatric infectious diseases service and/or regional obstetrician.

Children (aged up to 16 years) and neonates: National Paediatric Pathway

Children (aged up to 16 years)

Stages 1 – 3

Overarching principles:

- The majority of children in case series reported globally to date have not been severely affected. Thus a centralised process is deemed unnecessary and impractical for paediatric patients who do not require critical care. Capacity at central hospitals for non-critical cases is likely to be inadequate.
- Paediatric expertise in managing patients safely close to home exists in hospitals within all health boards across Scotland.
- Expert advice is available from the infectious diseases teams in Glasgow and Edinburgh as necessary.
- Escalation to a higher level of care (local, regional or national) can be via existing and well understood processes.

On receipt of a presumptive positive result:

- a case discussion will be held involving the referring team, the paediatric infectious diseases service in either Glasgow or Edinburgh (according to availability and the usual referral pathway), and SAS to coordinate the management of the case and their contacts.
- The most appropriate place of care will be agreed dependent on age, clinical condition, potential for deterioration, the local paediatric unit's capacity and ceiling of care, availability of negative pressure cubicles, clinical status of parent(s) and wishes of the child and parent(s).
- Existing referral process will be used for access to escalated levels of care (high dependency and intensive care). Patients requiring critical care should be discussed with PICU in Edinburgh or Glasgow, with input from Paediatric ID Consultant on call and transfer coordinated by ScotSTAR.

Neonates

Stage 1 - 3

When a neonatal case of COVID-19 is identified, a case discussion will be held involving:

- the referring team,
- the paediatric infectious diseases service in either Glasgow or Edinburgh (according to availability and the usual referral pathway)
- SAS/ScotSTAR (if required).

The most appropriate place of care will be agreed dependent on gestation, clinical condition, potential for deterioration, the local neonatal unit's capacity and ceiling of care, availability of negative pressure cubicles, clinical status of parent(s) and wishes of the parent(s).

- Refer to local protocol for provision of inpatient care.
- Access to escalated levels of care – high dependency and intensive care will be via existing referral processes.

Appendix 1: Local Infectious Disease Units (LIDU) and associated RIDU Hubs

NHS Board	Local ID Unit	RIDU Hub
Ayrshire and Arran	Crosshouse Hospital, Kilmarnock	Monklands Hospital: Lanarkshire
Borders	No ID unit	Western General Hospital, Edinburgh: Lothian
Dumfries and Galloway	DGRI	Monklands, Lanarkshire
Fife	Victoria hospital	Western General Hospital, Edinburgh: Lothian
Forth Valley	Forth Valley Royal Hospital, Larbert	QUEH Glasgow: GGC
Highland	Raigmore Hospital, Inverness	Aberdeen Royal: Grampian Or QUEH, Glasgow: GGC if Argyll and Bute
Orkney	No ID unit	Aberdeen Royal Infirmary: Grampian
Shetland	NO ID unit	Aberdeen Royal Infirmary: Grampian
Tayside	Ninewells Hospital - Dundee	Dependant on patient location in Tayside: Western General Edinburgh: Lothian, Aberdeen Royal Infirmary: Grampian
Western Isles	No ID unit	QUEH Glasgow: GGC

Appendix 2: Contact Numbers

Regional Infectious Disease Units:

Aberdeen ID:
Aberdeen Royal Infirmary: 0345 456 6000 (switchboard)

Edinburgh ID: Regional Infectious Diseases Unit, Western General Hospital, Edinburgh: 0131 537 1000 (switchboard)

Glasgow ID: Infectious Diseases on-call Consultant at Queen Elizabeth University Hospital 0141 201 1100 (switchboard)

Lanarkshire ID: On-call ID consultant:

Direct dial on-call phone (Mon-Fri, 9-5pm):	01698 753424
At other times, via Monklands switchboard:	01236 748748
Ward 2 (ID Unit)	01236 712238/9

Paediatric ID Units:

Glasgow: Infectious Diseases on-call Consultant at Royal Hospital for Children 0141 201 0000 (switchboard)

Edinburgh: Infectious disease consultant (Dr Jones), Royal Hospital for Sick Children Edinburgh: 0131 536 0000 (Switchboard) . If not contactable – defer to Glasgow number

HCID Treatment Centres:
Single point of contact is the NHS England Emergency Preparedness, Resilience and Response (EPRR) Team:
0333 200 5022 and ask for NHS 05

SAS SORT team:
Contact Strategic Operations Manager 24/7 on 0141 810 6106 or 07881 356395
ScotSTAR[1]**:**
03333 990 222

[1] (Scottish Specialist Transport and Retrieval) is a division of the Scottish Ambulance Service that exists to provide a national service for the safe and effective transport and retrieval of neonates, children and adults in Scotland. https://www.snprs.scot.nhs.uk/?page_id=2