



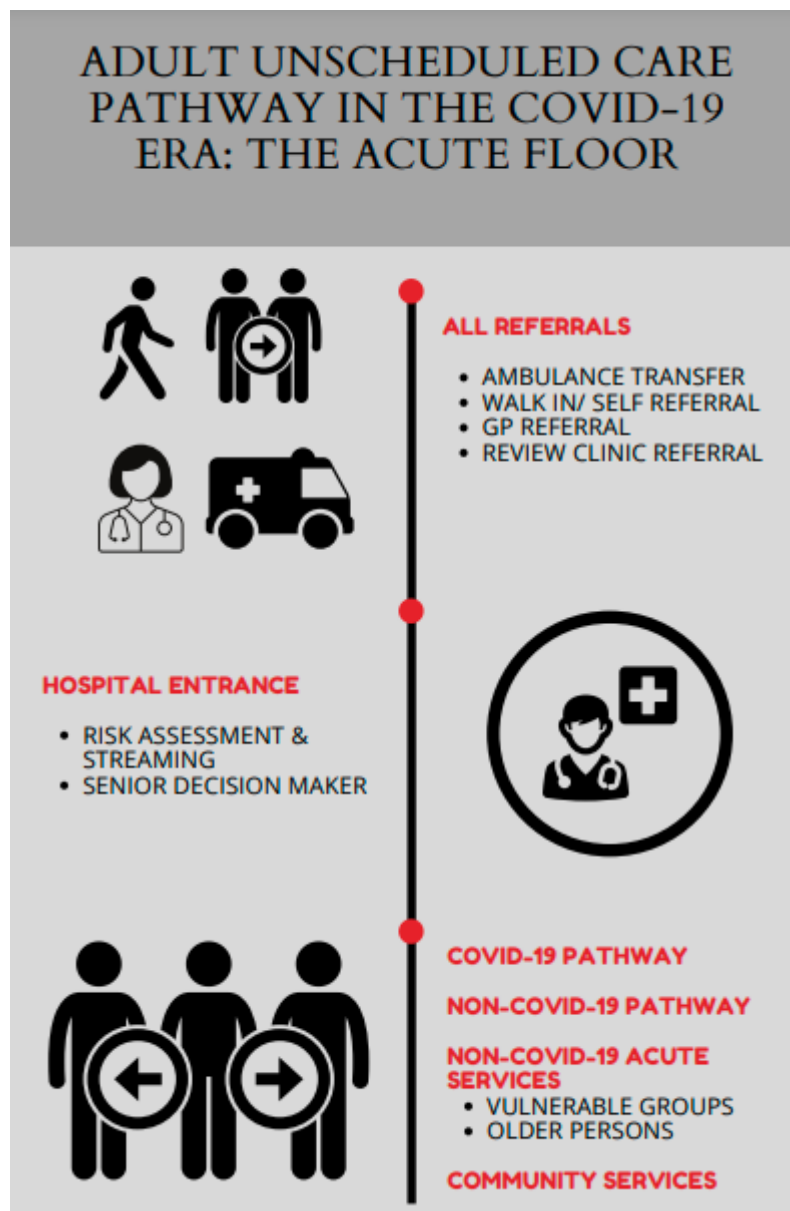
Seirbhís Sláinte
Níos Fearr
á Forbairt

Building a
Better Health
Service



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Guidance



All Patients Should Be Routed Through The Navigation Hub

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Glossary of Words & Terms	
AFIS	Acute Floor Information System
ANP	Advanced Nurse Practitioner
AMAU	Acute Medical Assessment Unit
ASAU	Acute Surgical Assessment Unit
CGA	Comprehensive geriatric assessment
ECDC	European Centre for Disease Prevention and Control
ED	Emergency Department
FAST	Facial drooping, Arm weakness, Speech difficulties and Time used to educate the public on detecting symptoms of a stroke
FITT	Frailty Intervention Therapy Team
HPSC	Health Protection Surveillance Centre
ICU	Intensive Care Unit
ITU	Intensive Therapy Unit
IPC	Infection Prevention and Control
LRTI	Lower respiratory tract infection
MDRO	Multi Drug Resistant Organisms
NAS	National ambulance service
NCEPOD	National Confidential Enquiry into Patient Outcome and Death classification
OOH	Out of hours
OPD	Out Patient Department
OT	Occupational Therapist
PET	Patient Experience Time
PPE	Personal Protection Equipment
RSV	Respiratory syncytial virus
USC	Unscheduled Care
VIP	Variable Indicative of Placement risk
Acute Floor	Composed of ED, AMAU, ASAU
Minimum physical distancing	1m
Navigation Hub	A streaming/ sieving area situated at the hospital entrance, for risk

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	assessment and streaming of patients by senior decision makers.
Senior decision makers	Senior decision makers are defined here as those who have undergone appropriate training to make independent decisions around patient admission and discharge: Registrar grade and above or ANPs.
COVID-19 Streaming also called Sieving	Streaming is a hands off assessment to identify if patients have clinical features that indicate that they are suspect cases for COVID-19. The outcome dictates which zone or service the patient moves to. It is recorded at the Navigation Hub (and also by the zone they go to). It requires privacy but not necessarily an assessment area (although this may afford privacy).
Minimising exposure risk	<p>Minimising exposure risk is achieved by limiting interactions with individuals outside of a person’s household and good infection prevention and control practices.</p> <p>The purpose of minimising exposure risk is to minimise the risk of acquiring COVID-19 in the community.</p> <p>Testing for SARS-CoV-2 (where appropriate), only informs that the virus cannot be detected on that particular day, it does not guarantee that the patient is not incubating the virus. Test results must be considered in the overall clinical context.</p> <p>Minimising the exposure risk (cocooning as much as practicable) reduces the risk of a patient being admitted with undetected COVID-19.</p> <p>In this regard, it is a patient safety strategy. It also reduces the risk of exposure of healthcare workers to undetected COVID-19.</p>
Risk Designation	<p>For unscheduled care patient designated for admission:</p> <p>14-day incidence <25 cases / 100,000 population:</p> <p>TESTING OF PATIENTS WITH SYMPTOMS AND/ OR EXPOSURE RISK</p> <p>14-day incidence ≥ 25 cases / 100,000 population:</p> <p>TESTING OF ALL PATIENTS IS REQUIRED</p> <p>All patients should undergo a structured risk assessment prior to admission.</p> <p>The hospital testing policy, in line with this guidance, will be under the governance of the hospital or hospital group COVID preparedness committee (or equivalent) and will be informed by the review of the 14-day cumulative review of incidence along with local clusters and outbreaks in the community and hospital settings which is issued by the HPSC Monday to Friday. Information by county is also available via the COVID-19 app. This policy will also be informed by testing capacity, recognizing that the testing of symptomatic individuals and close contacts takes priority.</p>

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Executive Summary

Broadly speaking there are three categories of patients presenting to the acute hospital with respect to COVID-19.

- Patients with symptoms and signs consistent with COVID-19, recognizing that there are common and less common presenting complaints.
- Patients with non-COVID-19 presenting complaints who have potentially been exposed to COVID-19 and who could be incubating the virus.
- Patients with non-COVID-19 presenting complaints who have minimal exposure risk and are unlikely to be incubating the virus. (THERE IS NO RISK FREE OPTION).

In addition, patients will present with different severity of illness and require triage based on severity to ensure timely care and best outcome.

On arrival at the Acute Floor (ED/AMAU/ASAU) it is recommended that all patients be assessed by a senior decision maker and be streamed (sieved) based on COVID-19 symptoms, exposure risk, severity of presentation and directed into the most appropriate patient pathway.

This is the principle function of the navigation hub. Each navigation hub is likely to have a different suite of referral pathways depending on the services offered in the acute hospital and surrounding community.

It is recommended that the navigation hub uses a structured risk assessment form to facilitate the streaming of patients into COVID-19 and non-COVID-19 patient pathways. (Appendix 2)

It is recommended that HPSC guidance is followed for infection prevention and control and the use of personal protective equipment aligned with the risk status of the patient and the task being performed. (1).

Available patient pathways may include:

Emergency Department	Services for the Older Patient
Acute Medical Assessment Unit	Maternity Assessment Units
Acute Surgical Assessment Unit	Paediatric Assessment Units
Virtual Speciality Clinics	Community Assessment Hub
Rapid Access Clinics	Outreach Services
Psychiatric services	Primary care

High Level Principles:

- This advice applies to Unscheduled Care Patients who usually fall into different risk categories than Scheduled Care Patients.
- It constitutes a brief framework document to provide support and recommendations to the Acute Floors in Ireland during COVID-19.
- The guidance/ recommendations should be considered by local COVID-19 Preparedness Committees, including Microbiology/ IPC and Acute Floor Clinicians, based on local circumstances and resources and adopted based on local risk assessments.
- Clinical judgment should always be exercised when utilising guidance documents as these cannot anticipate the clinical context of each case or circumstance.

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- The protection of patients and staff (by commission and omission) are central tenets of the framework.
- Infection prevention and control guidance should not be a barrier to the access of timely, appropriate care, particularly in an emergency. In such circumstance, for example a polytrauma patient requiring resuscitation or a patient with respiratory failure requiring immediate advanced airway support, the patient should be managed with the protections as if they have COVID-19 until demonstrated otherwise. In a low incidence environment i.e. 14-day incidence < 25/100,000 population this can be demonstrated by using the structured risk assessment form. In a higher incidence environment testing for SARS-CoV-2 will also be required.
- Pragmatic considerations around infrastructure and what is likely to be implementable in a short timeframe are to be made and put in place.
- As with any pandemic, national guidance in specific aspects may change over time and updated guidance should be considered where available.
- Patients requiring review by specialist teams and/or are designated for admission should be clearly documented as
 - COVID-19: Confirmed or suspected (RED if using color-coding)
 - COVID-19 pathway: non-COVID-19 presenting complaint but with exposure risk (Amber)
 - Non-COVID-19 pathway: non-COVID-19 presenting complaint and low exposure risk e.g. an individual who has been actively minimising exposure risk (Green)

The patient designation must be clearly documented and communicated with the reviewing team and bed management services so that appropriate infection prevention and control practices can be applied.

- All admitted patients, who reside in an area with 14-day incidence > 25/100,000 pop or where the hospital is located in such an area, are required to have SARS-CoV-2 testing and to be managed on the COVID-19 pathway until their risk designation is assessed with the virus detection results.
- The availability of rapid turnaround testing is a priority for patient and staff safety and for the management of patient flow.
- Asymptomatic patients with a documented history of laboratory confirmed SARS-CoV-2 **do not** need to be retested.
- **It is recommended that hospitals receiving undifferentiated patients have on-site testing for COVID-19 +/- Influenza to facilitate the diagnosis and safe cohorting of patients.**
- There may be a delay between designation for admission and the results of the SARS-CoV-2 test being available. These patients should follow the in-patient COVID-19 pathway until their test result is available and their risk assessed. Patients being held on the Acute Floor for such and other purposes have the potential to aggravate overcrowding, difficulty in accessing assessment areas and impede patient flow and thus represent an outbreak risk. In anticipation of this, a necessary part of the plan should include an identified area which is appropriately-staffed, can be deployed when necessary and which can deliver on the required infection prevention and control measures. Examples include outpatient or day services areas. Units on the Acute Floor should not be used for boarding (accommodating overnight), nor should Ambulances, as this impacts on patient assessment and flow, which in turn can result in waiting room overcrowding due to backlog and associated outbreak risk.
- **It is recommended that patients, once designated for admission, are not boarded on the Acute Floor even when COVID-19 or other respiratory viral tests are pending.**

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There are 15 key recommendations:

1. On arrival at the Acute Floor (or emergency department) it is recommended that all patients be assessed by a senior decision maker and be streamed based on COVID-19 symptoms, exposure risk, severity of presentation and directed into the most appropriate patient pathway.
2. It is recommended that the navigation hub uses a structured risk assessment form to facilitate the streaming of patients into COVID-19 and non-COVID-19 patient pathways. (Appendix 2)
3. It is recommended that HPSC guidance is followed for infection prevention and control and the use of personal protective equipment aligned with the risk status of the patient and the task performed.
4. It is recommended that hospitals receiving undifferentiated patients have on-site testing for COVID-19 +/- Influenza to facilitate the diagnosis and safe cohorting of patients.
5. It is required that when/where 14-day incidence is < 25/100,000 population, SARS-CoV-2 testing is performed on all patients, designated for admission, presenting with symptoms/signs of infection and/or COVID-19.
6. It is required that when/where 14-day incidence is < 25/100,000 population, SARS-CoV-2 testing is performed on all patients, designated for admission, who have an exposure risk identified by the structured risk assessment form or other means.
7. It is required that when/where 14-day incidence is > 25/100,000 population, SARS-CoV-2 testing is performed on all patients designated for admission. It is recognized that when demand for testing exceeds capacity, testing will be prioritized based on clinical indication and risk assessment.
8. It is recommended that patients, once designated for admission, are not boarded (accommodated overnight) on the Acute Floor even when COVID-19 or other respiratory viral tests are pending.
9. It is recommended that Ambulance NOT be used to house patients pending assessment.
10. It is recommended that the senior decision maker/s assigned to the AMAU/ ASAU and ED be without competing responsibilities to ensure the Patient Experience Time (PET, time from registration to discharge or decision to admit) is optimised and patient flow maintained.
11. It is recommended that all acute admissions have a documented COVID-19 risk assessment completed/ confirmed by the admitting team.
12. It is recommended that at least one dedicated emergency theatre be available for admitted acute surgical patients 24/7.
13. It is recommended that timely access to intervention/care not be delayed and that the latest version of the HPSC guidance on acute hospital IPC precautions for possible or confirmed COVID-19 should be followed, if risk assessment cannot be performed and/or if testing is indicated where test results are not available. Repeat testing is generally not appropriate in people with a previously-confirmed diagnosis of COVID-19, unless there is a specific clinical indication, because some patients may continue to have a positive test for some time after their acute infection due to the shedding of non-viable viral fragments.
14. It is recommended that pathways, COVID-19 and non-COVID-19 be communicated to the local GP and OOHs services and the general public informed of local hospital pathways and practices.

It is recommended that discharge letters be sent to GPs for patients who have attended and received treatment and discharge from the acute floor. Where possible this should be via Healthlink.

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1 Introduction

The purpose of this document is to guide the set up and implementation of unscheduled care patient pathways in the COVID-19 environment. It is recognised that each hospital solution will vary based on its infrastructure, staffing and services. The implementation of the USC patient pathways should come under the governance of a subgroup of the COVID-19 preparedness committee and includes representation from Emergency Medicine, Acute Medicine, Surgery, Critical Care/ Anaesthesiology, Clinical Microbiology and/or Infectious Disease, Infection Prevention and Control, Nursing and Hospital Patient Flow Managers.

Each acute hospital should document and implement its USC patient pathway and monitor it for effectiveness in terms of streaming patients into COVID-19 and non-COVID-19 pathways and patient confidence. The pathway should be communicated to local GPs, ambulance services and the local population.

USC is provided through a number of pathways and the patient is directed to the relevant pathway by a senior decision maker at the Navigation Hub. The suite of pathways will vary depending on the services offered.

There is no risk free solution that can be offered, the aim of this guidance is to minimize risk and support the provision of timely and appropriate care. The risk to patients and staff will be minimised by structured risk assessment, patient streaming, physical distancing, hand hygiene and masking; strict compliance with standard precautions, which includes hand hygiene, with the addition of wearing a face mask in clinical areas and while transiting between busy public areas of the hospital and the appropriate use of PPE.

Overcrowding is a significant risk to providing the required infection prevention and control interventions. The aim of patient streaming and bringing senior decision makers to the Acute Floor is to shorten the time to admission or discharge decision (PET) and to optimize patient flow.

2 Infrastructure

The Navigation Hub location needs to be identified as well as the patient pathways available. These may include ED, AMAU, ASAU, Community COVID-19 assessment Hub, GP, Older Persons acute services, Rapid access clinics etc.

Pathways for streaming patients into COVID-19 and non- COVID-19 services need to be identified and where possible have separated infra-structure and staffing.

Appropriate PPE must be available.

Example: An Acute Floor may have a single pathway for patients presenting with respiratory tract and other symptoms of COVID-19 and multiple pathways for non-COVID-19 services.

Another may have COVID-19 and non-COVID-19 pathways and a dedicated non-COVID-19 service for older (>70years) and vulnerable patients who are minimising exposure risk and thus have a low exposure risk.

COVID-19 has variable presentation and a high index of suspicion needs to be held. In addition, a surgical presentation may mimic COVID-19 so it is important that the ASAU provider is also available to rapidly assess patients on the COVID-19 pathway who may have a surgical differential, as required.

Different sites will have different challenges based on model, age of the facility, location and the suite of services provided.

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The following diagram illustrate some of the services available in a Model 4 hospital and a Model 3 hospital and those that are linked to the Acute Floor:

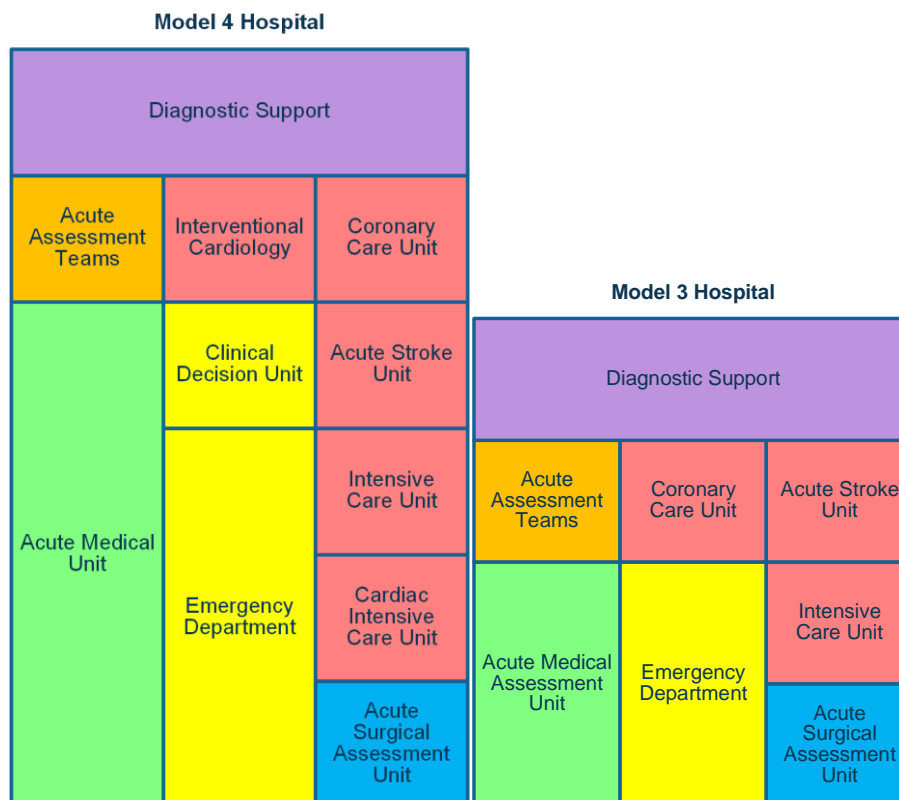


Figure 1

Typical Acute Floor constituents in Irish Hospital models. It is noted that the prevalence of some assessments units vary according to site (from AFIS Project brief, HSE 2018)

3 Senior Decision maker availability

Senior decision makers being immediately available to patients on the Acute Floor played an important part during wave 1 of the COVID-19 pandemic. A lot of learning around how acute assessment can function efficaciously resulted. Senior decision makers are defined here as those who have undergone appropriate training to make independent decisions around patient admission and discharge: Registrar grade and above or ANPs.

3.1 Streaming Guidance 1

- Where possible, the most senior decision makers should be available on the Acute Floor.
- Admission avoidance should be strongly considered in each case.
- The streaming service should allocate the patient to the appropriate assessment area.
- Where referral onto another discipline is required it should be conducted by the most senior decision makers (at least registrar or equivalent) to another assessment area in a 'refer forwards' principle.
- Disagreements around acute patient governance must be discussed by the attending consultants of the day and if no resolution escalated through relevant Clinical Director pathways.
- Unit components of the Acute Floor should have a senior decision maker available at all opening times to minimize delays to patient assessment and decision making. These senior decision

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makers should be assigned only to the unit and the Acute Floor and not have competing duties that might interfere with timely care delivery. This includes the AMAU, ASAU and the ED.

- Streaming should be to: COVID-19 or non-COVID-19 pathways following a structured assessment form, an example of which is in Appendix 2.

3.2 Streaming Guidance 2:

- Patients should be risk assessed for COVID-19 by a senior decision maker at the Navigation Hub. This includes patients who have been referred by their GP/OOHs, Nursing Homes, the ambulance and those who self-present. Ambulatory patients whose condition is best managed in the community should be referred directly to the appropriate service provided it is available and using clinical judgment. The Acute Floor should not be used for rapid access to COVID-19 testing by ambulatory patients; these individuals should be referred to the community hubs via the local GP/OOHs service. (Follow HPSC/ Occupational health guidance for essential Health care workers).
- Waiting areas should allow minimum physical spacing (1m) with separation of COVID-19 and non-COVID-19 services. All patients should practice hand hygiene, physical distancing and wear medical face masks unless unable to do so.
- Accompanying adults are not permitted unless there is a clinical indication e.g. dementia, delirium, physical, sensory or intellectual disability, end of life. No children are permitted, except in exceptional circumstances.
- A separated space on the Acute Floor must be allocated to COVID-19 pathway patients.
- Boarding admitted patients should not occur in any assessment space. Patients designated for admission should be immediately transferred to the ward or an identified and appropriately staffed area pending admission that allows for necessary IP&C practices and does not impede patient assessment and management in the Acute Floor.
- Testing should be employed to support patient flow (critical care allocation, surgery, cohorting, where there is pressure on isolation spaces) at the earliest juncture. It is not possible to determine infectious agents based on clinical assessment.
- At all incidence levels, patients who present with symptoms consistent with the case definition for COVID-19 or who are close contacts of known cases should be tested for SARS-CoV-2 and treated as COVID-19 unless an alternative diagnosis is demonstrated and the COVID-19 virus is not detected.
- When circulating influenza rates rise above the ECDC threshold for influenza season, influenza should be included in the testing of patients who will require admission and who have presented with an LRTI.
- Caution should be exercised when cohorting patients who have presented with symptoms of influenza like illness as there are a number of infective causative organisms. Cross infection may be associated with increased morbidity and mortality. Patients with suspected viral respiratory tract infection or other infectious disease should be placed in a single-patient room with en-suite facilities if this is available. If this is not available cohorting of patients may be necessary for undiagnosed patients. This is a very significant risk as the patients cohorted may be infected with different respiratory pathogens and cross infection may occur. This risk can be mitigated by early testing and a heightened awareness of risk and the required control measures. For further details see HPSC guidance documents.
- The Health Protection Surveillance Centre as published useful interim guidance on testing for influenza / COVID-19 during the winter season which can be accessed [here](#). In addition, they have produced interim, guidance on frequently asked questions which is available [here](#).

4 Presentation

It is recommended that each acute hospital identifies local pathways of care for 'COVID-19' and 'non-COVID-19' service delivery and that these pathways are clearly communicated within the hospital and externally to local primary care, NAS and the general community. These pathways are best managed with separated infrastructure and staffing and need to be able to flex between low incidence scenarios, with low numbers of 'COVID-19' presentations and higher incidence scenarios, with higher numbers of 'COVID-19' presentations.

COVID-19 incidence varies with geography and with time. It is the role of the Hospital's COVID-19 preparedness committee to oversee the implementation of the testing and admission policy of the hospital, in line with National Guidance, along with preparing and overseeing the local COVID-19 response.

It is recommended that during periods of low circulation of COVID-19 (14-day incidence < 25/100,000 pop.(2)), USC patients should be risk assessed and tested based on clinical grounds and exposure risk. During periods of higher circulation of COVID-19 (14-day incidence >25/100,000 pop.) it is required that all hospital admissions be risk assessed and tested for SARS-CoV-2. Some Hospitals will choose to test all admissions during this pandemic.

Patients with documented history laboratory confirmed SARS-CoV-2 **do not** need to be retested.

4.1 High index of suspicion:

Consideration should be given to the variable presentation of COVID-19, including the pre-symptomatic phase and asymptomatic infection and the risks of undetected COVID-19 presentations and admissions. While the consistent use of a structured assessment questionnaire by a senior decision maker at the navigation hub is intended to minimise this risk, there is no risk-free solution. The risk is further mitigated through consistent application of standard precautions, wearing of face masks, social distancing, careful donning and doffing of PPE and following guidance for use of advanced airway devices.

4.2 The patient pathway to the hospital Acute Floor follows a number of routes:

4.2.1 Streaming Guidance 3:

For the purpose of streaming, patients are designated to COVID-19 pathways (at risk of COVID-19) or non-COVID-19 pathways (COVID-19 not clinically suspected).

4.2.1.1 GP referral (GP surgery, OOHs, Community hub)

- Patients referred by primary care should be streamed into: 'COVID-19' (at risk of COVID-19) or 'non-COVID-19' (COVID-19 not clinically suspected)
- Streaming decisions before this should be clearly documented in the referral letter or pre-alert. Referrals should be electronic via Healthlink where appropriate.

4.2.1.2 NAS emergency transfer

- Resuscitation patients should be pre-alerted where feasible and IPC managed as 'COVID-19' until risk assessed and streamed.
- Patients who are categorised as 'COVID-19' should be communicated by NAS to the navigation hub ideally in advance of their arrival to the ED.
- Patients are streamed and triaged on arrival and reviewed in order of illness based on clinical urgency, irrespective of presentation modality.

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- Holding patients in ambulances after arrival at the Acute Hospital is not an acceptable means of dealing with patient flow.
- The Navigation hub should risk assess patients in ambulance in the event that there is a delay in decant. However, every effort should be made to minimise such delays.

4.2.1.3 Self-Presentation

- It is recommended that Patients self-presenting to the ED undergo a formal COVID-19 risk assessment conducted by a senior decision maker in a single task streaming area (Navigation hub) and be subsequently allocated to either the 'COVID-19' or 'non-COVID-19' pathways.
- Category 5 patients (Manchester Triage System) may be referred to community services for assessment, diagnosis and management based on the clinical judgement of the senior decision maker, taking into consideration the risks of overcrowding both to the individual category 5 patient and to the patients within the department.

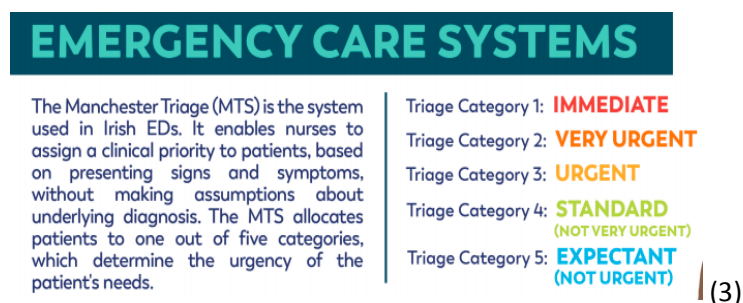


Figure 2

- Ambulatory 'COVID-19' patients, who self-present, will be re-directed to the GP/OOHs services for testing to be organised in the community unless there are indications for hospitalisation.

4.2.1.4 Review clinic

- Any review clinic that is held in the Acute Floor should follow the Acute Operations/ HPSC guidance for OPD which includes pre-attendance risk assessment using a structured questionnaire (Appendix 2) and infection prevention and control measures and practices.

5 Navigation Hub streaming from the Acute Floor

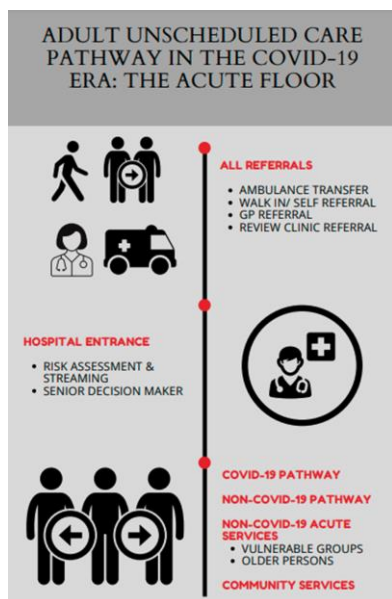


Figure 3

There will be a single point of entry to the Acute Floor for all patients, regardless of the source of referral. At this Navigation Hub, all patients will be rapidly streamed to the appropriate service by a suitably experienced and independent clinician.

5.1 Streaming Guidance 4

5.1.0 ED

Post streaming at the Navigation hub, a more formal Manchester Triage process may be undertaken in the triage areas, as required, once the patient is referred to the ED, to ensure that the clinical risk is effectively managed within this service. (Appendix 3)

The ED deals with “undifferentiated” patients who become suddenly and acutely unwell or suffer injury that requires hospital attendance. Currently, all patients who attend an ED are triaged by an experienced and appropriately trained nurse to allocate them into one of five categories of urgency using a standardised system (Manchester Triage System). These categories decide the clinical urgency of the presentation, ranging from needing immediate resuscitation (category one – triage and treatment are simultaneous) to non-urgent from a clinical perspective (category five – see 4.2.1.3). The introduction of streaming will eliminate the need for a further formal triage process in some patients.

Two priorities guide ED care:

- To consider and diagnose or out rule serious acute illness or injury as a cause for a patient’s condition and administer appropriate initial resuscitation, treatment and comfort measures as appropriate.
- To determine whether that patient should be treated within the emergency department and discharged home, or whether they need to be referred elsewhere for further investigation or treatment. From the moment patients arrive at the emergency department to the point of their disposition, senior clinical decision makers systematically organise patient care into a series of activities sequentially driven to achieve these outcomes.

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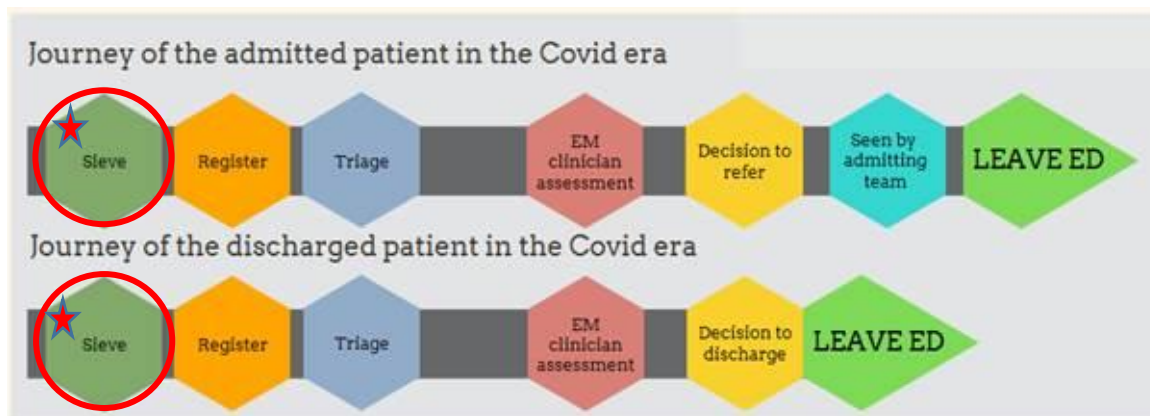


Figure 4

★ Sieving, also known as streaming, occurring at the navigation hub, is a hands off risk assessment of a patient using a structured questionnaire +/- a temperature to identify if they may be at risk of Covid-19 infection. The outcome is documented. It occurs before registration. It requires some privacy.

5.1.1 AMAU

The AMAU provides senior medical assessment and management for undifferentiated medical presentations to the Acute Floor (Appendix 4). Patients with chronic medical conditions and the older patient are at higher risk of complication and death from COVID-19 and a higher risk of admission for non-COVID-19 related conditions and services. The AMAU provides a unique opportunity to provide non-COVID-19 services to these particularly vulnerable patients. However, larger AMAUs may be able to provide COVID-19 and non-COVID-19 care depending on local resources.

It is recommended that the senior decision maker/s be assigned to the AMAU without competing responsibilities to ensure the PET is optimised and patient flow maintained.

One of the expressed concerns over healthcare delivery during the COVID-19 pandemic and in particular, during surge periods, is that this vulnerable group may not seek timely healthcare due to concerns regarding hospital exposure to COVID-19. In turn, this could lead to morbidity and mortality due to non-COVID-19 healthcare issues. Providing a dedicated service with separated staff and infrastructure in addition to reassuring patients that it is as safe as possible for them to attend, if required, and by bringing specialist expertise to the Acute Floor the potential for admission avoidance is maximised.

When setting up the Acute Floor services, consideration should be given as to where best care for this patient cohort will be provided and once organised, communicating this to the GPs and local community.

It is recommended that all acute medical patients, regardless of mode of admission, have a documented COVID-19 risk assessment completed/ confirmed by the admitting team at the navigation hub.

5.1.2 ASAU & Surgical Patients in ED

The Acute Floor is where the majority of acute surgical admissions occur. Other streams such as outpatient admissions and direct ward transfers do occur but form the minority of admissions. Whichever route the patient is admitted through, it is essential the COVID-19 risk assessments are

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carried out for streaming and further documented by the admitting team as COVID-19 (red), COVID-19 pathway (amber) or non-COVID-19 (green).

It is recommended that all acute surgical patients, regardless of mode of admission, must have a documented COVID-19 risk assessment completed/ confirmed by the admitting team.

Acute surgery, in its many sub disciplines, is a service delivered by historic on call rotas that vary site to site in the 26 acute adult emergency receiving hospitals across Ireland. There is significant variability of services and staffing across hospital sites and regions, which has largely grown organically over time.

For those hospitals with functioning ASAU's, the initial COVID-19 surge in Spring 2020 demonstrated how useful they were, with the majority of units seeing more than standard ASAU's criteria (both in terms of speciality and triage category), as a non-COVID-19 stream (4). This was facilitated by enhanced staffing levels, owing to a lack of elective surgery competing for staff during that time. As elective surgery returned in summer 2020, staffing levels returned to normal and most ASAU reverted to only accepting patients fitting standard criteria.

Patients on 'COVID-19' and 'non-COVID-19' pathways should be separated on the Acute Floor.

The ASAU/ acute surgical team must be available to all acute surgical patients presenting to other areas of the Acute Floor.

Every effort must be made to reduce PET on the Acute Floor. For those candidates not for outpatient/ ambulatory care, the decision to admit should be made early. In addition, efforts to reduce length of in-hospital stay should also be undertaken.

It is recommended that at least one dedicated emergency theatre must be available for admitted acute surgical patients 24/7.

Those patients who may require additional resources on discharge (such as frailty, lacking in social supports) should be identified early in the admission. Discharge planning should occur as soon as possible and any necessary resources applied in a timely fashion.

5.1.3 Acute (Unscheduled) Operative pathway

COVID-19 presenting as cause of acute surgical illness alone, is rare, however, COVID-19 may present with abdominal discomfort, nausea and diarrhoea and early surgical infection may present with fever and no /minimal localizing signs, so care must be taken to consider COVID-19 and non- COVID-19 causes in the differential.

During periods of high incidence and/or in individuals with an exposure history, there is a risk that asymptomatic/undetected COVID-19 could be present in patients with a surgical illness. If COVID-19 is a suspected part of the presentation, then patients should be treated through the COVID-19 stream on the Acute Floor. Admitted patients with an exposure risk should follow the in-patient 'COVID-19 pathway'.

Initial concerns around high mortality rates in patients incubating COVID-19 at the time of surgery (5) have been tempered by later pandemic and Irish data suggesting lower mortality risks. These risks are still not inconsequential and for patient and staff welfare all patients must be risk assessed on attendance (6), (7).

All Patients Should Be Routed Through The Navigation Hub

Unscheduled acute surgical patients should be assigned to the appropriate perioperative pathways based on admission risk assessment (Appendix 2). These have different terminologies in different hospitals. The most common are:

- **Red or COVID-19 confirmed/suspect**
- **Amber or COVID-19 pathway (no symptoms but exposure risk)**
- **Green or non-COVID-19**

The clinical priority and timing of the operation should be decided by the admitting surgical team, in consultation with the anaesthesiology service.

When the regional 14-day COVID-19 incidence is > 25/100,00/pop, COVID-19 testing of all unscheduled surgical patients is required.

Clinical priority for those needing surgery should be decided at the earliest juncture, ideally at time of admission. Risk stratification using a risk scoring system such as a modified NCEPOD classification may be used (8). These are Immediate (surgery needed within minutes), Urgent (within a few hours hours), Expedited (12-48 hours) and Elective (maybe booked at a suitable time).

All surgical unscheduled care patients should have a clinical priority assessment at admission (or the earliest appropriate juncture) by the admitting team. (Immediate, Urgent, Expedited, Elective)

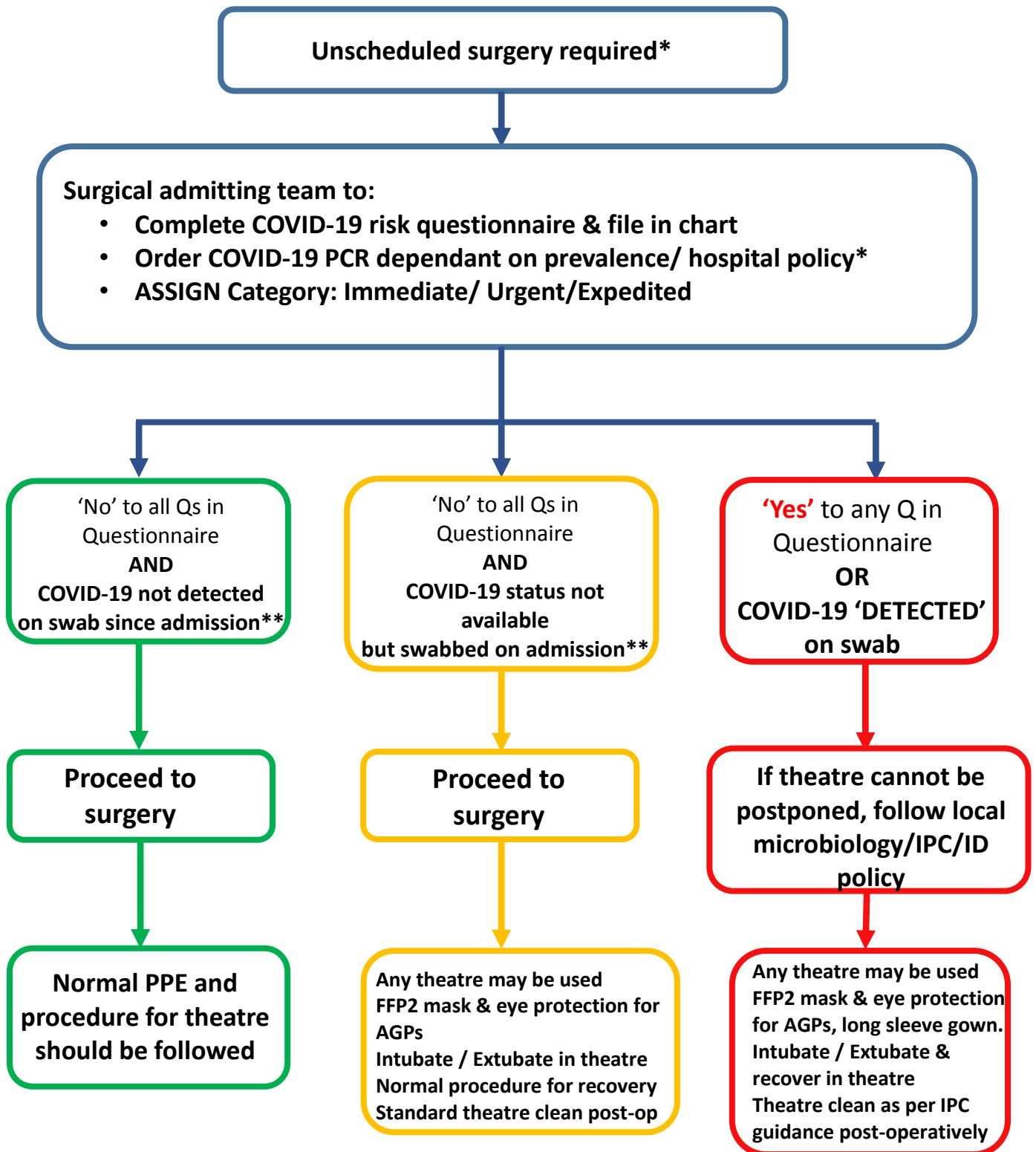
Where category Immediate or Urgent is assigned, patients should not be delayed by waiting for a test result. If community 14-day incidence is greater than > 25/100,000 population and/ or there is a clinical suspicion for asymptomatic COVID-19 incubation, then this cohort should be transitioned through the theatre complex as COVID-19 detected or suspected patients.

It may be helpful to color code the different COVID-19 streams for clarity for all staff regarding patient flow through the theatre and recovery areas (Figure 5).

In areas of sustained low community incidence, 14-day incidence < 25/100,000, COVID-19 testing is generally not required for the green and amber patient pathways. The risk assessment form is sufficient and the green theatre pathway used may be used for patients who have no symptoms and no excess exposure risk as per the form.

All Patients Should Be Routed Through The Navigation Hub

5.1.4 Patient Flow in theatre:



*In areas of sustained low community incidence, green and amber pathways can be considered without swab screening (SARS-CoV-2 testing)

**If SARS-CoV-2 testing indicated

Figure 5: Modified with permission Dr AR Prior

6 Inpatient process

Once the decision to admit is taken, local hospital protocols should be followed regarding the location and cohorting of patients who are either suspected or not suspected to have COVID-19.

Patients should not be boarded in the Acute Floor.

- Patients who have COVID-19 or who are suspected to COVID-19 should go through the COVID-19 (RED) pathway.
- Patients who do not have symptoms or signs of COVID-19 but who have a significant exposure risk should go through a COVID-19 -pathway (AMBER) pathway/ admission process. When in doubt as to this intermediate status, they should be upgraded to the red pathway.
- Patients with a non-COVID-19 diagnosis and low exposure risk should go through a non- COVID-19 (GREEN) pathway.

ALL patients must be screened by using the COVID-19 risk assessment questionnaire on the Acute Floor and completion of this assessment should be checked at the admission ward area.

HPSC National recommendations on the use of PPE for all patient interactions should be followed.

It is recommended that all patients admitted to the ward should have, on arrival, their risk assessment checked and outstanding tests for COVID-19 / other respiratory viruses identified so they are managed according to the appropriate IPC requirements.

As part of hospital-based education, all staff need to be trained in PPE use and IPC requirements and be advised that there is no 'no risk free' solution and that vigilance should remain high. It is good IPC practices and PPE that prevent staff and patient hospital acquisition and no test offers a 100% guarantee that the patient does not have COVID-19.

It remains paramount that staff remain vigilant in using distancing recommendations and/ or PPE for all patient and staff interactions as per national guidelines (9) to minimize transmission from asymptomatic carriers.

The requirement for testing does not apply to patients who have had laboratory documented COVID-19 and who are asymptomatic.

Rationale

Patients diagnosed with COVID-19 who are 14 days or more post onset of symptoms and with no fever for the last five days do not require additional testing. These patients are regarded as non-infectious. (Clinical judgment and expert opinion should be sought for patients with known profound immunosuppression as they may shed live virus for longer). Repeat testing is generally not appropriate in people with a previously-confirmed diagnosis of COVID-19, unless there is a specific clinical indication, because some patients may continue to have a positive test for some time after their acute infection due to the shedding of non-viable viral fragments. This detectable SARS-CoV-2 RNA is not evidence that these patients are infectious and these patients are not infectious to others. If there is a specific concern, please discuss the patient with the admitting team/ Consultant Microbiologist or Infectious Diseases Physician.

7 Specific diagnoses and their pathways

- ED/Ward and Critical Care Staff Educational Powerpoint Presentations: These presentations are available for hospital based education programmes and are regularly updated.
<https://hse.drsteevenslibrary.ie/Covid19V2/emergencydepartment>
- Clinical Decision Support for Suspect Adult COVID-19 for Acute Hospitals (Appendix 2):
<https://hse.drsteevenslibrary.ie/Covid19V2/clincialassessment>

7.1 The patient with respiratory failure:

All patients presenting with respiratory failure are required to be managed with COVID-19 precautions and tested for SARS-CoV-2 RNA. This is different from presuming that all of these presentations are due to COVID-19 because it is important to maintain alertness for non-COVID-19 causes, so that patients get the appropriate treatment in a timely fashion. A result with 'virus not detected' does not preclude COVID-19, an index of suspicion and appropriate precautions should be maintained in the management of patients who present with a COVID-like illness and have no other pathogen identified. Retesting may be appropriate. Irrespective of disease incidence, patients requiring high flow oxygen, CPAP or non-invasive ventilation should have it administered in a single room; preferably an isolation room and staff should wear long sleeved PPE with eye protection and respirator mask as per HPSC guidance.

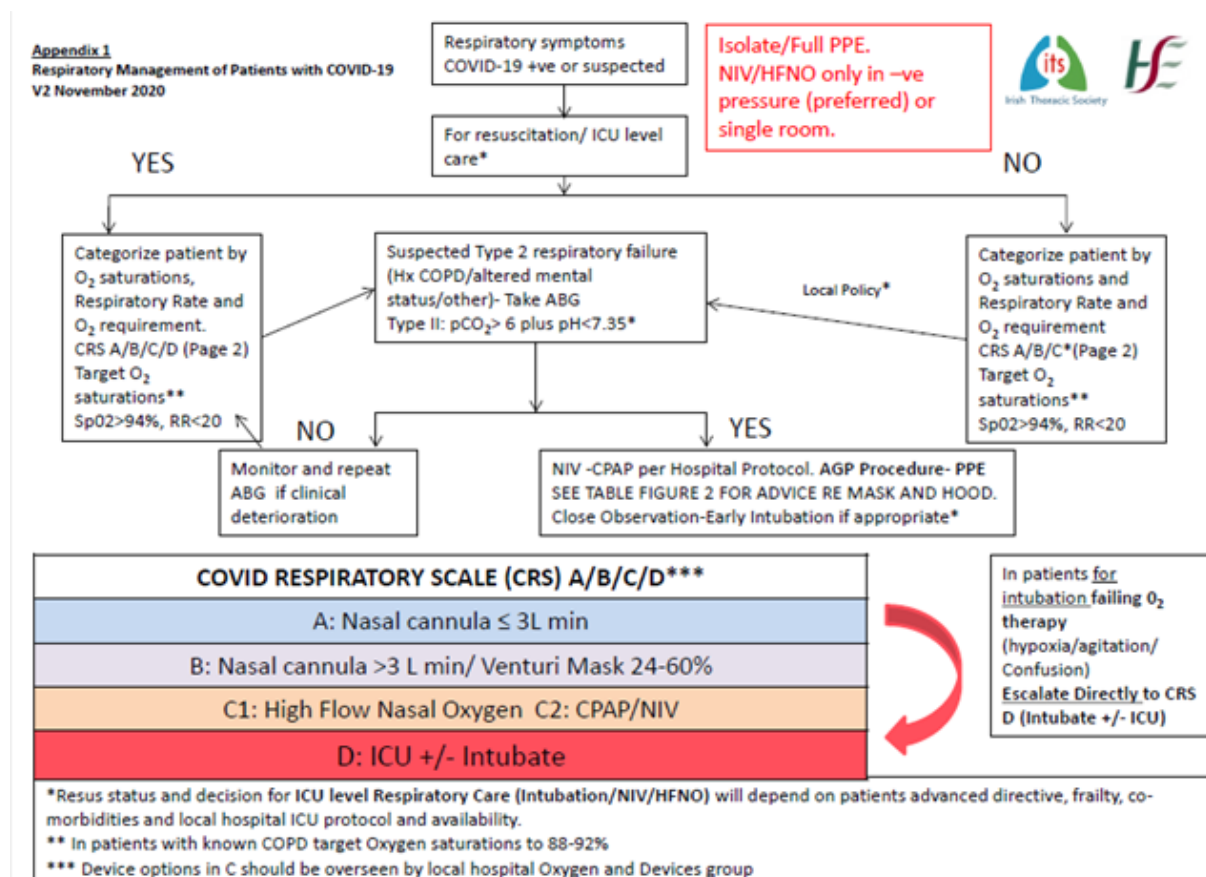


Figure 6

<https://hse.drsteevenslibrary.ie/Covid19V2/respiratory#appendix1%20021>

7.2 The 'viral' patient presenting unwell with possible or probable COVID-19:

COVID-19 presentations are variable and can mimic other conditions, such as other respiratory viral infections (seasonal influenza A or B, RSV, rhinovirus) etc. It can present as acute delirium in the older patient, as a pyrexial illness without an obvious source (PUO), abdominal pain or gastroenteritis. It can mimic bacterial sepsis. This makes diagnosis challenging and puts pressure on isolation facilities, PPE and laboratory testing capacity. These patients are required to be tested for SARS-CoV-2 irrespective of community 14-day incidence.

7.3 FAST + and chest pain presentations

These are time-dependent, emergency presentations. Each patient should undergo COVID-19 assessment using the structured COVID-19 questionnaire in Appendix 2 and where indicated be tested for SARS-CoV-2 at the soonest available opportunity. Treatment should not be delayed beyond therapeutic windows due to pending COVID-19 test results; rather IPC practices should be as if the patient has COVID-19 until a result is available in the high risk environment/patient.

It is recommended that timely access to intervention should not be delayed and the latest version of the HPSC guidance on acute hospital IPC precautions for possible or confirmed COVID-19 should be followed if risk assessment cannot be performed and if testing is indicated, where test results are not available. *Patients with a history of laboratory-confirmed COVID-19 do not require retesting.*

7.4 Management of orthopaedic injuries

While some patients presenting with traumatic injuries may have been exposed to COVID-19, may have concomitant symptoms of COVID-19 or may be in an at risk group, many will not. In general the principle of managing these patients is to minimize the time they spend in the ED (or eliminate it altogether) to reduce the potential for infection and to reduce the burden on the ED.

Patients may be encouraged to attend Injury Units either directly or after assessment in the navigation hubs depending on their COVID-19 risk or on their injury. Injury Units are often capable of performing diagnostic tests and initiating management. This can also occur in non-COVID-19 areas of the ED where appropriate.

Many patients can be further managed in an outpatient setting. Expansion of the Trauma Assessment Clinics will mean that many of these patients can be managed remotely without further visits to hospital. If they do need to attend, the fracture clinics are remote from the acute floor and are often self-contained reducing the risk of unnecessary patient interaction.

Some patients will require operative management that can be performed in a planned fashion. The Planned Trauma Care arrangements will differ in different places but where possible the aim is to reduce the need for patients to be admitted through the ED. Day-case facilities, including elective Orthopaedic hospitals and independent sector facilities, can be used for ambulatory trauma. Patients can then be admitted on the day of surgery and discharged as soon as clinically appropriate (often on the same day).

Management of traumatic injuries via Injury Units, Trauma Assessment Clinics and Planned Trauma Care requires appropriate communication mechanisms to allow transmission of clinical information, including clinical photographs and x-rays to decision makers and to the sites of final disposition.

Some patients with more significant injuries or with co-morbidities will need to be admitted from the ED and will not be suitable for assessment in Injury Units. These should be screened and managed for potential COVID-19 including appropriate IPC measures and as per agreed upon theatre

All Patients Should Be Routed Through The Navigation Hub

protocols. **The care of patients with hip and femoral fractures remains urgent and a surgical priority.**

Staffing: Every effort should be made to ensure that patients with orthopaedic injuries are nursed by a cohort of nurses experienced in trauma orthopaedic nursing. Health and Social Care Professionals are key members of the multidisciplinary team and aid rehabilitation and speedy discharge. Resilience should be built in to all staff rosters to allow for likely absences.

Theatre resources: There should be a regular appraisal of available resources, including, at minimum, daily strategy meetings with a theatre coordinator and a consultant from anaesthetics and each relevant surgical specialty. All should have a clear understanding of the issues facing their own specialty prior to the meeting, including workload, relevant clinical details, ICU bed status, sickness absence and redeployment of staff. Resource allocation and patient prioritisation should be agreed.

It is imperative that patients do not get lost in the system. Clear records of patients whose care is deferred must be held and coordinated.

8 Special groups

8.1 Frailty

Older persons, >70 years who present to the Acute Floor should be assessed for frailty using a rapid assessment tool, e.g. VIP tool and if deemed frail, be assessed, investigated and treated expeditiously, if possible, in a separate area and by a frailty team during the usual working hours for CGA.

Presentations of frailty to OOH services should be referred to the FITT service as soon as possible for CGA.

This service should be led by a consultant geriatrician and an appropriately resourced team (ANPs, OT, and Physiotherapists).

The focus should be on ambulatory care with enhanced community supports (e.g. Community Intervention Team). If admission is required, this should be prioritized to avoid any unnecessary delay in the Acute Floor as this is associated with adverse outcomes.

Particular attention should be paid to the atypical presentations of COVID-19 in the older person and a high index of suspicion maintained to perform testing for SARS-CoV-2.

8.2 Cystic Fibrosis

There are two risk levels for people with Cystic Fibrosis (CF) as defined by their CF team.

- People with clinically stable CF are in the high-risk group from COVID-19. They should follow the latest public health advice for people at high risk from COVID-19.
- People with clinically unstable or severe CF, are in the very high-risk group from COVID-19; this includes people waiting transplantation. They should follow the latest public health advice for people at very high risk from COVID-19.

People with CF who need admission out of hours.

This applies to either a lower-COVID-19 or a higher-COVID-19 environment.

All Patients Should Be Routed Through The Navigation Hub

In hospitals with a specialist CF Centre, people with CF who present out of hours should be assessed and treated by the team on call. They should be transferred to the CF Team the following day.

In hospitals without a specialist CF Centre, they should be assessed and treated at the hospital where they present. The CF Centre where they attend should be informed of their admission the following day. If appropriate and, if safe to do so, they may then be transferred to their CF Centre; that may or may not be necessary if they present with a short-term medical issue unrelated to CF.

Unless suspected or confirmed COVID-19 positive, people with CF should only be directed along non-COVID-19 pathways.

8.3 Acute critical care patients

COVID-19 has highlighted the need for increased capacity in critical care areas in Ireland. During the COVID-19 surge, the ITU shortfall was taken up by ceasing elective surgery and recommissioning theatres as critical care spaces. This led to significant issues around staff working outside of their trained skill sets.

Patients requiring critical care for the treatment of COVID-19 have a high mortality:

	ROI: HPSC 6/7/20	N. Ireland (ICNARC)	UK ICNARC 3/7/20	(6), (7)
ICU mortality	17.0% (71/417)	24.8%	40.4% (3948/9768)	

Table 1

There is a significant burden of morbidity for survivors of ICU and in itself critical care places a physiological challenge to patients.

It is recommended that all patients reviewed for critical care admission have the potential for reversibility and their care wishes taken into consideration prior to admission. Where possible treatment aims and limitations should be discussed with the individual. Where this is not possible treatment goals and expectations should be discussed with the relevant individual. These goals and expectations should be revisited based on the patients' response to treatment.

All unscheduled care admitted patients, where there is a potential likelihood of a need for ICU should have their COVID-19 risk status documented and clearly communicated to the Critical care team in advance of assessment.

All unscheduled care patients admitted to ICU should have SARS-CoV-2 testing in addition to risk assessment on admission. Critical care management should not be delayed pending test results; rather a patient should be managed as COVID-19 pathway until proven otherwise.

COVID-19 testing for patients undergoing emergency surgery and/or admission to ICU must be prioritised to aid patient flow and maximise the utility of critical care isolation spaces.

There should be ICU isolation areas for the next COVID-19 / COVID-19 pathway patient identified at all times by the ICU team.

Each ICU should have a documented plan for managing any future COVID-19 surges.

All Patients Should Be Routed Through The Navigation Hub

When ICU resources are stretched beyond normal occupancy, there should be an ICU controller, ideally a consultant intensivist, whose sole responsibility is coordinating patient flow, triage and strategic planning for additional ICU spaces.

ICUs should consider screening all patients for COVID-19 once weekly (unless they are previously confirmed COVID-19 patients beyond the 14 day period).

There have been significant learnings over the course of the pandemic with respect to COVID-19 ICU patient care. Treating patients in the prone position and the use of steroids early in the course of the disease have been shown to be improve outcome. When a significant volume of COVID-19 positive patients are ventilated, consideration should be given to organizing proning teams. It is essential that outer PPE (gloves and e.g. 'Thumbs up' gown) be exchanged in between proned patients.

Those ICU patients requiring semi urgent tracheostomy should have current COVID-19 status checked prior to a decision for tracheostomy (those requiring immediate tracheostomy follow the red surgical pathway).

For further information on the management of the critically ill COVID-19 patient see the Critical Care Management for COVID-19 power point presentation and the Drug Management Guidelines: <https://hse.drsteevenslibrary.ie/Covid19V2/CriticalCareResourceCOVID19>

9 Governance

The Governance for the implementation of this guidance rests with the Hospitals and Hospital Groups through their COVID-19 Preparedness Committee (or equivalent) or a dedicated subgroup of same.

National and subnational 14-day incidence rates are published daily by the HPSC (Mon-Fri) and are available by county on the COVID-19 app.

It is the role of the Hospital's COVID-19 preparedness committee (or equivalent) to oversee the implementation of the testing and admission policy of the hospital, in line with National Guidance and community incidence.

Communication with primary care during the pandemic is key and where possible physically distanced or web based regular communications with community representatives should be undertaken to provide and gain information regarding unscheduled care challenges in the pandemic.

It is recommended that discharge letters be sent to GPs for patients who have attended and received treatment and discharge from the acute floor. Where possible this should be via Healthlink.

This guidance is not intended to supersede clinical judgment rather to guide acute hospitals in the setting up of unscheduled care pathways to manage risk and optimize patient outcome during the COVID-19 pandemic.

10 References

- (1) <https://www.hpsc.ie/a-z/respiratory/coronavirus/novelcoronavirus/guidance/infectionpreventionandcontrolguidance/hseinfectionpreventionandcontrolguidanceandframework/>
- (2) <https://www.ecdc.europa.eu/en/publications-data/rapid-risk-assessment-coronavirus-disease-2019-covid-19-pandemic-ninth-update>
- (3) <https://www.hse.ie/eng/services/publications/clinical-strategy-and-programmes/infographic-emergency-medicine.pdf>
- (4) <https://www.rcsi.com/surgery/-/media/feature/media/download-document/surgery/practice/publications-and-guidelines/models-of-care/minimum-standards-for-acute-surgical-assessment-unites-in-ireland.pdf>
- (5) Lei et al: Clinical characteristics and outcomes of patients undergoing surgeries during the incubation period of COVID-19 infection. 2020 Apr 5:100331.doi: 10.1016/j.eclinm.2020.100331. [Epub ahead of print] [https://www.thelancet.com/journals/eclinm/article/PIIS2589-5370\(20\)30075-4/fulltext](https://www.thelancet.com/journals/eclinm/article/PIIS2589-5370(20)30075-4/fulltext) and [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(20\)31182-X/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)31182-X/fulltext)
- (6) [https://www.hpsc.ie/a-z/respiratory/coronavirus/novelcoronavirus/casesinireland/epidemiologyofcovid-19inireland/june2020/COVID-19_Daily_epidemiology_report_\(NPHEI\)_09062020_v1%20website.pdf](https://www.hpsc.ie/a-z/respiratory/coronavirus/novelcoronavirus/casesinireland/epidemiologyofcovid-19inireland/june2020/COVID-19_Daily_epidemiology_report_(NPHEI)_09062020_v1%20website.pdf)
- (7) <https://www.icnarc.org/Our-Audit/Audits/Current-Audits>
- (8) <https://www.ncepod.org.uk/>
- (9) <https://www.hpsc.ie/>

11 Appendix 1

11.1 Common Signs & Symptoms of COVID-19



WHEN TO SUSPECT COVID-19

COMMON SYMPTOMS

DRY COUGH

FEVER / CHILLS

DYSPNOEA

MYALGIA

FATIGUE

ACUTE LOSS OF TASTE or SMELL



WHEN TO SUSPECT COVID-19

**in the older person
OTHER SYMPTOMS**

In older persons, common symptoms may or may not be present and could also include:

CONFUSION



LETHARGY



LOSS OF APPETITE



UNEXPLAINED CHANGE IN BASELINE CONDITION



CLINICAL PRESENTATION

BASED ON AN EARLY ANALYSIS OF CASES



LESS COMMON SYMPTOMS

- Anorexia
- Sputum production
- Sore throat
- Confusion
- Dizziness
- Headache
- Rhinorrhoea
- Chest pain
- Haemoptysis
- Diarrhoea
- Nausea/vomiting
- Abdominal pain
- Conjunctival congestion
- Anosmia
- Ageusia
- Dysguesia



12 Appendix 2

12.1 COVID-19 Risk Assessment Form: Front page

NAVIGATION HUB - COVID-19 RAPID STREAMING TOOL

For Adults only - To be completed by Senior Decision Maker

Name: DOB: MRN	Source of Referral Self Referral <input type="checkbox"/> 999 Ambulance <input type="checkbox"/> GP (Inc OOH GP) <input type="checkbox"/> Speciality Team <input type="checkbox"/> Return for diagnostic <input type="checkbox"/> Other <input type="checkbox"/>	Pre-Hospital Consultation No consultation <input type="checkbox"/> Could not contact GP / get an appointment <input type="checkbox"/> Telephone consultation + advised to attend <input type="checkbox"/> Virtual Consultation + advised to attend <input type="checkbox"/> Physical Consultation (GP) + advised to attend <input type="checkbox"/> Physical Consultation (OPD) + advised to attend <input type="checkbox"/>		
	Date of Attendance	Pre-notification <input type="checkbox"/> Yes / No	Letter <input type="checkbox"/> Yes / No	Nursing home <input type="checkbox"/> Yes / No

Actions:

For Patient: Clean hands using alcohol hand rub, put on a surgical mask and be appropriately placed (minimum requirement is 1m, ideally 2m)

For IPC: Follow HPSC Guidance and avoid unnecessary or ineffective aerosol generating procedures (AGPs). For more information on AGPs see overleaf

Exposure Risk:

Has patient had lab confirmed COVID-19? Yes / No If yes, was it: Within last 14 days <input type="checkbox"/> More than 14 days ago <input type="checkbox"/>	Has anyone in the patients family, work, residential care or social circle tested positive for coronavirus in the last 14 days? Yes / No	Has the patient been actively physically distancing to minimise their exposure risk? Yes / No
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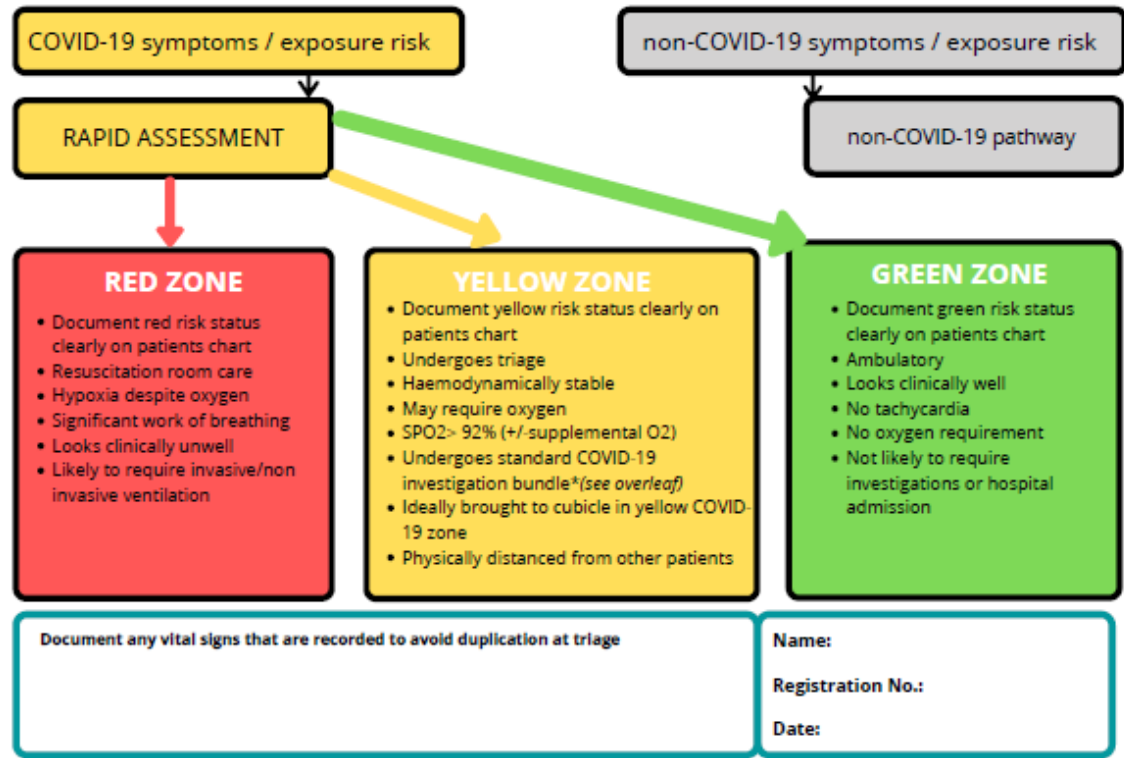
Signs and Symptoms:

Most Common <ul style="list-style-type: none"> Cough Fatigue Fever Myalgia Shortness of Breath Acute loss of taste / smell 	Less Common <ul style="list-style-type: none"> Anorexia Sore throat Haemoptysis Abdominal Pain Sputum Production Headache Nausea/vomiting Conjunctival Congestion Dizziness Rhinorrhoea Diarrhoea Chest Pain
--	--

If the person is immunocompromised, has an active malignancy or is older, then consider atypical presentation

Atypical presentation includes:

- New Confusion
- Loss of Appetite
- Lethargy
- Unexplained change in baseline



AMP 229 30/05

Back page:



Management of Suspected COVID-19 in Adults

Mini-Registration - To be completed by Senior Decision Maker

<p>Name:</p> <p>DOB:</p> <p>MRN:</p>	<p>Risk factors for severe disease</p> <ul style="list-style-type: none"> • Ischaemic Heart Disease • Cerebrovascular disease • Hypertension • Chronic Lung Disease • Active Malignancy in last 5 yrs • Extremely medically vulnerable • Chronic Heart Failure • Chronic Renal Disease • Type II Diabetes • 1° / 2° Immunosuppression • Age >60 • Obesity
---	---

Addressograph Label

INEWS can be used for all adult non-pregnant patients and includes escalation and response protocols

IRISH NATIONAL EARLY WARNING SYSTEM (INEWS) Scoring Key							
Score	3	2	1	0	1	2	3
Respiratory Rate (bpm)	≥ 8		9 - 11	12 - 20		21 - 24	≥ 25
SpO ₂ (%)	≤ 91	92 - 95	96 - 95	≥ 96			
Inspired O ₂ (F _i O ₂)				Air			Any O ₂
Heart Rate (BPM)		≤ 50	51 - 60	61 - 90	91 - 110	111 - 150	≥ 151
Systolic BP (mmHg)	≤ 90	91 - 100	101 - 110	111 - 200	≥ 200		
ADWU/ CNS Response				AWU (A)			New Confusion (C), Urine (U), Pain (P), Lethargy (L)
Temp (°C)	≤ 35.0		35.1 - 36.0	36.1 - 36.0	36.1 - 38.0	≥ 38.1	

Consider admission for:

- INEWS ≥3 **OR**
- Clinical judgment **OR**
- Home or psychosocial circumstances not suitable for isolation

Initial Management:

- Oxygen for sats ≥ 94% (88-92 in chronic hypoxic lung disease)
- Community acquired pneumonia (CAP) antibiotics (Follow local antimicrobial guidelines)
- Treatment as per Drugs Management Programme COVID-19 guidance (www.hsc.ie/eng/about/who/acute-hospitals-division/drugs-management-programme/)
- Paracetamol (for fever and /or myalgia)
- Don't forget VTE prophylaxis

Red Flags

Consider early critical care assessment if:

- RR > 30 breaths /min
- Severe respiratory distress
- Hypotension
- New onset confusion
- New onset SpO₂ < 90% on room air
- Oliguria >12 hours
- Initial INEWS ≥7
- Clinically deteriorating patient with INEWS >5

Preliminary Tests & Investigations when COVID-19 is suspected*

• Swab for SARS-CoV-2 PCR*	• Ferritin	• LDH
• Sputum M C & S	• U & E	• CXR
• Blood Cultures	• LFT's/ABG/VBG	• Troponin
• Coagulation Screen	• FBC	• d-dimer
• Creatinine Kinase	• CRP	

*Refer to www.hpsc.ie for further guidance

During the Flu Season, also test for influenza and other respiratory diseases as appropriate

WHEN TO ESCALATE TO CRITICAL CARE:

Consider critical care review in a patient with an INEWS ≥7 or clinically deteriorating patient with an INEWS ≥5. The decision to admit to ICU rests with the duty anaesthesiology / critical care team

Fluid Management:

COVID-19 may cause severe lung injury, which can be aggravated by excess intravenous fluid administration. **IV Fluids should only be given if there is a clinical indication such as hypotension; raised lactate or the patient is unable to tolerate oral fluids.**

COVID Respiratory Scale (CRS (A,B,C,D))

A. No O ₂ requirement / Nasal cannula ≤ 3L/min	SaO ₂ > 94%	RR < 20
B. Nasal cannula > 3L/min/Venturi Mask 24-60%. Responds well to nasal cannula	SaO ₂ > 94%	RR > 20
C1. High Flow Nasal O ₂ / AIRVO	Poor response to venturi mask	SaO ₂ < 94%
C2. NIV		SaO ₂ < 94%
D. ICU +/- Intubate	Poor response to HFNO/NIV	SaO ₂ < 94% RR > 20

Aerosol Generating Procedures (AGPs)

The following procedures are the generally considered AGPs: Endotracheal intubation and extubation, cardio-pulmonary resuscitation, open airway suctioning, bronchoscopy, sputum production. Others may include certain chest physiotherapy, noninvasive positive pressure ventilation for acute respiratory failure (CPAP, BiPAP3-5) and high flow oxygen therapy. **NIV / HFNO only in a negative pressure (preferred) or single room with minimum staff present using airborne precautions.** For further advice on aerosol generating procedures and PPE, please refer to www.hpsc.ie

* For further information on the respiratory management of patients with COVID-19, please visit www.IrishThoracicSociety.com.

AHO/22/03/03

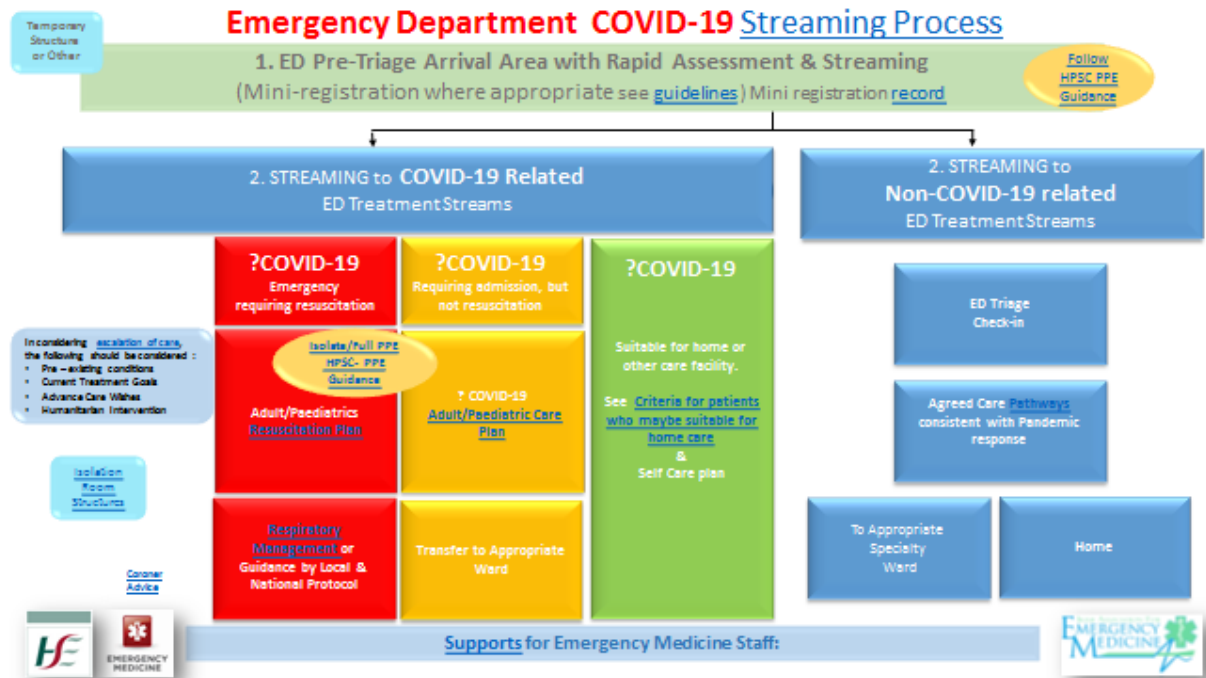
Clinician's Name: _____ Signature: _____ MCRN/PIN: _____ Date / Time DD/MM/YY HH:MM

All Patients Should Be Routed Through The Navigation Hub

13 Appendix 3

13.1 ED Streaming process

Streaming (pre-triage) flow diagram



https://hse.drsteevenslibrary.ie/ld.php?content_id=32848274

All Patients Should Be Routed Through The Navigation Hub

14 Appendix 4:

14.1 Acute Floor Flow diagram

