

**Guidance on the
resumption
of scheduled surgical
services for adults (non-maternity)
in acute hospitals during
the COVID-19 era**

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This document is the result of collaboration between the following organisations:

- **National Clinical Programme in Surgery**
- **National Clinical Programme in Anaesthesia**
- **National Clinical Programme in Trauma and Orthopaedic Surgery**
- **National Clinical Adviser and Group Lead (Acute Operations)**
- **Health Protection Surveillance Centre**

Document Revision History		
Version number	Date	Updates to document
V1	10/8/20	Approved for Release
V1.1	24/8/20	Update to align with ECDC
V1.2	2/11/20	<ul style="list-style-type: none"> • Minimising Exposure Risk Clarification. • Change in risk designation from colour indicator to <25 and ≥25. • All admissions, day case and in-patient, are required to have SARS-CoV-2 testing prior to admission when 14-day incidence is ≥ 25/100,000 population in the region where the patient lives or the hospital is sited. • Reduced period of infectiousness for patients with COVID-19 in community who did not require hospitalisation from 14 to 10 days, with final five of those days fever free • Removal of healthcare algorithm and replace with link to HSE occupational health advice. • Emphasis on diagnostics and phlebotomy having appropriate clinical governance and follow-through within the hospital services.

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Foreword

July 27th 2020

On 1th May, the National Public Health Emergency Response Team (NPHE) approved the interim guidance scheduled care pathway for acute operations which included risk assessment of patients in advance of hospital attendance/ admission and SARS-CoV-2 testing for patients to undergo aerosol generating procedures or an inpatient stay. Since then the COVID-19 epidemiological curve has remained flattened and we are in a low incidence environment with intermittent local clusters/ outbreaks which are being managed by testing, contacting tracing and isolation. Whilst socio-economic activity is increasing, the embedded practice of hand hygiene, physical distancing, masking and respiratory etiquette act as control measures to limit spread.

Since May data has been gathered on the impact of the risk assessment questionnaire and testing in mitigating the risk of patients being admitted with undetected COVID-19. There is now sufficient data to inform us that, in a low incidence environment, a pathway that includes minimizing exposure risk through self-isolating as far as is practical and a structured risk assessment questionnaire is an effective method of risk mitigation. In addition, in low incidence environments false positive results become problematic, as well as the logistics of getting the test result in a timely fashion which then becomes a barrier to accessing healthcare as opposed to an enabler of safe healthcare. In this iteration of the guidance, control is given to the hospital to determine its risk level using data provided centrally and, based on local incidence, to decide whether testing is required to be part of the patient pathway. It is recommended that, in the absence of local or specialty-based needs, in a low incidence environment (14-day cumulative new cases/100,000 population is <25) testing would not be required unless there were local epidemiological pressures and that where and when the 14-day incidence is ≥ 25 new cases/100,000, it is required that testing is included as part of the pathway. The risk assessment of the hospital and its environment should be done in a regular and structured way with a multidisciplinary team including infection prevention and control, the perioperative clinical director and management with clear communications lines. The data used to inform this decision would include the HPSC 14-day epidemiology report, Health Atlas COVID cases map and hospital local epidemiological information.

This guidance should not supersede clinical judgment and should be adapted to local or specialty requirements under the governance of the local risk assessment team.

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Executive Summary

Maintaining functional surgical services is a core responsibility of a health service and critical to public health in our country. Surgery has many vital benefits: alleviation of pain and other symptoms; treatment of injury; improvement of quality of life; curing disease and prolonging life. Everything possible must be done to ensure that patients have access to the surgery they need in a timely fashion.

Delivering surgical services in a safe manner in an environment where COVID-19 is endemic is challenging. High level guidance on reducing risks associated with COVID-19 has been produced nationally. The current document provides more specific guidance to assist hospitals in the implementation of safe pathways of care for patients undergoing scheduled surgery.

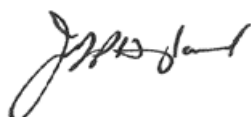
The current situation is characterized by rapid change as we learn from experience in Ireland and abroad. Working together, we must respond to the challenge to build a system of surgical care that is responsive, safe, efficient and effective.



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Definitions of Terms

<p>COVID-19 testing:</p>	<p>A laboratory test for SARS-CoV-2 RNA. The testing should be PCR for RNA, not serology for antibodies. If testing is required, swabbing should take place within three days prior to admission, the results of which must be available prior to admission.</p>
<p>COVID-19 risk assessment (Appendix 4)</p>	<p>A series of questions designed to assess symptoms or exposure to COVID-19, these maybe in the form of a questionnaire, telephone or virtual health assessment.</p> <p>COVID assessment needs to take place;</p> <ul style="list-style-type: none"> • virtually at 14 days prior to admission/procedure • virtually 7 days prior to admission/procedure (where practical) • within three days prior to any hospital attendance • on arrival at the hospital
<p>Minimising exposure risk</p>	<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 as much as possible in the two weeks prior to scheduled surgery 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 but does not guarantee that the patient is not incubating the virus.</p> <p>Minimising the exposure risk (cocooning as much as practicable) reduces the risk of a patient having a procedure with undetected COVID-19 which may be associated with a worse outcome or complications.</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. More details can be found at: https://www2.hse.ie/conditions/coronavirus/cocooning.html</p>
<p>Non-COVID pathway</p>	<p>For patients who have undergone assessment for COVID-19 and who:</p> <ul style="list-style-type: none"> • have not shown any signs or symptoms of COVID-19 in the last 14 days

	<ul style="list-style-type: none"> • have not been identified as a COVID-19 contact <p>AND where applicable,</p> <ul style="list-style-type: none"> • have had a ‘virus not detected’ result on a sample taken within the three days prior to attendance
<p>Risk Designation</p>	<p>14-day incidence <25 cases / 100,000 population*:</p> <p>All patients should undergo a structured risk assessment prior to admission. TESTING IF CLINICALLY INDICATED.</p> <p>14-day incidence ≥ 25 cases / 100,000 population*:</p> <p>It is required that all patients are tested for SARS-CoV-2 in addition to the structured risk assessment.</p> <p>TESTING GENERALLY REQUIRED</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> <p>*European council</p>
<p>Virtual clinic:</p>	<p>This refers to a method of clinical review that can either be by telephone or video, where the patient does not attend the clinical setting in person. An information technology platform can be used which allows for video interaction between health care worker and patient. It is imperative to document the platform used in the patients’ clinical notes and that consent has been obtained for this type of consultation. As with face to face clinics, for required diagnostics including phlebotomy, it is essential to ensure patient follow up has appropriate clinical governance and follow-through within the hospital services.</p> <p>For more information on virtual clinic operation and governance, please visit the link here</p>

Purpose

This document will act as guidance for healthcare managers and staff to deliver care to patients in the peri-operative setting during and after the COVID-19 pandemic.

Scope

This guidance document applies to:

- Non-COVID-19 adult (non-maternity) patients undergoing scheduled surgery in the operating departments
- All patients receiving general, regional, local anaesthesia or sedation
- All HCW within the peri-operative pathway

Introduction

Restoration of elective activity will be guided by avoiding harm and mitigating risk of deferral of procedure or services in line with clinical guidelines, local outbreaks, and appropriate use of infection prevention and control measures such as hand hygiene, social distancing, respiratory etiquette and appropriate use and supply of Personal Protective Equipment (PPE). This will be based on consultation with the patient and clinical decisions.

There should be clear prioritisation protocols that reflect local and national needs, alongside availability of local resources. The National Clinical Programme for Surgery has developed clinical guidance for surgeons on prioritisation of urgent scheduled surgical conditions, which can be accessed at the RCSI website [here](#).

Scheduling modifications will be organized in order to increase hospital capacity, including extending hours of elective surgery later into the evening and on the weekends.

It is expected that surgeons will work with hospitals and patients to prioritise their patients' needs for surgery, accounting for risk factors and co-morbidities, while having regard also for the safety and availability of health care workers and hospital facilities. The professional judgment of surgeons can be relied upon to balance risk and to prioritise their patients.

Resumption of scheduled care within the hospital setting must occur in a manner which optimises patient care while minimizing risks to the public, to healthcare staff, and to the wider health service. A key challenge will be in maintaining adequate capacity to deal with a potential resurgence of COVID-19 cases (HIQA, 18/06/2020)¹.

Hospitals should maintain a focus on clinically led pathway improvements / redesign to ensure that patients who benefit from hospital attendance have access to services while eliminating unnecessary hospital attendances and further reduce risks for patients requiring hospital care and treatment. In addition, audits of process and outcomes should be established within each unit before starting non-urgent surgery and a management team should be established that will review cases with adverse outcomes.

The risk of undiagnosed COVID-19 in patients presenting to hospitals for scheduled surgery was ill-understood in the early phases of the pandemic, so data was collected to inform future decision making. An Irish series of 1608 patients undergoing scheduled surgery prior to the end of the lockdown period were screened preoperatively using a COVID-19 questionnaire only (without addition of a COVID-19 PCR swab). There was a low incidence of post-operative COVID-19 PCR (1.05%) or clinical diagnosis (0.93%) observed in this cohort. Post-operative admission to ITU for any reason was low (1.36%) as was 30 day mortality (0.56%). The questionnaire-only approach compared favorably to other screening strategies, especially in an environment where COVID-19 incidence is low.

It will be vital to share information on good practice, problems and complications as quickly as possible without the need to await peer reviewed publication.

As outlined by the World Health Organisation (WHO) in their document 'Maintaining essential health services: operational guidance for the COVID-19 context' which was published on 1st June 2020²;

¹ Resurgence of COVID-19 cases (HIQA, 18/06/2020)

² Maintaining essential health services: operational guidance for the COVID-19 context (WHO)

“Countries are making difficult decisions to balance the demands of responding directly to the COVID-19 pandemic with the need to maintain the delivery of other essential health services. Establishing safe and effective patient flow (including screening for COVID-19, triage and targeted referral) remains critical at all levels (WHO 2020)³.

In response to the COVID-19 pandemic, scheduled surgical services were suspended nationwide to support the management and delivery of care to COVID-19 patients. Service reconfiguration and financial investment will be required in order to adhere to national infection prevention and control and prevention guidelines and Public Health advice. Surgical services must now adapt existing delivery models for scheduled surgical services for non-COVID care.

This resumption of services requires a collaborative approach between all stakeholders within the perioperative clinical governance structure.

This document provides principles, recommendations and key considerations in order to facilitate the safe resumption of scheduled surgery. Some of these adaptations are flexible, depending on location and community incidence and will flex over time, other adaptations will continue for a period and those that are found to be safe, efficient and effective may become routine in post-pandemic practice.

The National Cancer Control Programme (NCCP) has issued separate guidance for medical professionals for both surgical oncology and testing for COVID-19 in asymptomatic patients undergoing elective cancer surgery in response to the current novel coronavirus pandemic. These guidelines can be accessed [here](#). The patient NCCP patient pathway for admission for scheduled cancer surgery during the COVID-19 pandemic is outlined in Appendix 6.

Maintaining a scheduled surgical service will require significant changes in hospitals. Patients undergoing scheduled surgery will need new guidance on how to prepare for surgery and hospitals must provide a separate, segregated pathway for these patients throughout their surgical journey to ensure they remain as safe as is practically possible. This means new

³ Establishing safe and effective patient flow (WHO 2020)

arrangements from the time of admission to the time of discharge and the provision of separate ring-fenced wards for the exclusive use of patients undergoing scheduled surgery.

This document is developed by The National Clinical Programme for Anaesthesia (NCPA), The National Clinical Programme for Surgery (NCPS), The National Clinical Programme in Trauma & Orthopaedic Surgery (NCP TOS), and Dr Vida Hamilton, National Clinical Advisor and Group Lead (NCAGL) for Acute Hospitals, in association with the Health Protection Surveillance Centre and provides guidance and key considerations in order to resume and maintain surgical services in the context of COVID-19.

High Level Principles for Patients/Staff:

1. Capacity will need to scale up and down in response to continued COVID-19 demand and an assumed return of acute surgery/trauma demand. There should be a recovery management team in place (with multi-professional and multi-disciplinary clinical input), to provide coordination and oversight of relevant policies and communications at a local level
2. Healthcare facilities used for surgery should have the appropriate multi-disciplinary expertise to deliver the complexity of care required
3. As far as practically possible, there should be strict separation of scheduled care facilities from unscheduled surgery facilities. It is important to note that ring-fenced beds remain an important principle to reduce risk arising from all healthcare-associated infections
4. For specific orthopaedic procedures, consideration should be given to using the existing standalone hospitals to deliver care.
5. Scheduling modifications to increase hospital capacity, including extending hours of scheduled surgery later into the evening and on the weekends should be considered.
6. Preoperative COVID-19 assessment questionnaire and if required, COVID-19 testing should be carried out within the three days prior to the point of admission to enable proper planning. If practical, consideration could be given to having a standby list of potentially suitable patients in the event a procedure was cancelled due to a positive test.
7. Scheduled surgery also requires careful planning to ensure consistent seven-day care and arrangement for in-hospital and post-discharge rehabilitation. Such planning should happen prior to admission and should prioritise short hospital stay

Chapter 1: Pre-Admission Unit Services

1.1 Background

Pre-operative assessment allows the opportunity to identify existing comorbidities, carry out required investigations and help ensure all patients are in optimum health when presenting for surgery. This requires a collaborative approach with multidisciplinary teams within the perioperative clinical governance structure (NCPA, 2014)⁴.

As with face to face clinics, for required diagnostics including phlebotomy and SARS-CoV-2 testing, it is essential to ensure patient follow up has appropriate clinical governance and follow-through within the hospital services.

Cancellation of scheduled surgery may occur for many reasons, including the COVID-19 pandemic. The risks and benefits of carrying out a procedure in the current climate should be explained to each patient at initial appointment when the decision to operate is discussed. This allows the patient the opportunity to make an informed decision and to understand that there is no guarantee that their procedure will be carried out on the proposed date and that such decisions are dependent on hospital prioritisation. In addition, possible reasons for further cancellation/postponement should be outlined to each patient (e.g. COVID-19 incidence, increase in COVID-19 patients attending hospital, increase in critical care bed occupancy, road map for recovery phases, decreased bed capacity and the possibility of further investigations being required following pre-operative assessment), to ensure the patient is in optimum health prior to procedure, or any issues that may arise on day of scheduled surgery. This information should be reinforced at initial pre-operative assessment appointment.

1.2 Pre-Admission Unit (PAU) Recommendations

- Hospitals should identify a prioritisation list of patients for pre-operative assessment from the various surgical specialties available in the hospital. This should include a list of their proposed activity divided into new patient additions and patients who may have

⁴ Perioperative clinical governance structure (NCPA, 2014)

been previously assessed. This will enable timely pre-assessment of patients who can have their surgery completed within the available limits

- Given the imposed physical restrictions that we have experienced during lockdown, patients may have become physically deconditioned; to optimise their recovery, consideration should be given to a pre-operative exercise programme, we recommend the use of Joint Schools (HSE, 2015)
- An estimate of available operating theatre session times will also have to be provided to establish what can be scheduled in the present COVID-19 era. This available resource should be matched to the number of patients that require pre assessment
- In the absence of electronic health record, patient's medical notes must be available for all appointments
- During the COVID-19 era, it will be important to know the current address of the patient and to confirm that this is where they will be residing in the pre-attendance period. This will support the utilisation of the risk designation
- Local protocols should be established to allow for sharing of records between hospitals. This will assist in facilitating the option for a patient to have pre-operative assessment conducted by staff in a local site and surgery carried out in a different site, thus helping to reduce travel in current restrictions
- If a patient resides in a residential care facility (RCF) then the hospital should establish if there is COVID-19 transmission in the RCF and if so, surgery should generally be deferred until such time that there have been no new cases of COVID-19 in the RCF for 14 days.
- If a patient's surgery is cancelled due to an outbreak within their RCF then communication should be made with the surgical team for appropriate follow up and management plan, this should be clearly documented in the patient record
- A review of patient notes, particularly where pre-assessment took place prior to COVID-19 pandemic should be carried out, as cancelled or deferred surgeries may lead to an expiration of pre-assessment
- Patients with expired pre-assessment should have re-assessment organized and this should be virtual where possible
- If a patient is required to attend in person, then COVID-19 assessment will need to be conducted over telephone three days prior to attendance

- There should be consideration of whether post-surgery facilities such as rehabilitation hospitals will be operational and able to support patients post-operatively. (Currently many rehabilitation hospitals are taking patients who have recovered from COVID-19 from acute hospitals. These individuals are no longer infectious to others so capacity is the only barrier to transfer).

1.3 Staffing in PAU

- In order for the safe and effective delivery of pre-assessment services, experienced staff must be returned from their redeployment as part of the COVID- 19 response
- If these recommendations require expansion of the role of the staff in PAU, education and training should be provided
- Local consideration to workforce may be required in order for these recommendations to be implemented
- Staff should be actively promoted to have the seasonal influenza vaccination

1.4 Virtual PAU Clinics

- Experienced PAU nurses should review referrals alongside patient's medical notes to decide on appropriate method for pre-assessment
- All pre-assessments should initially be undertaken virtually where appropriate to the needs of the patient
- Local sites should ensure accuracy of completed referral forms to PAU which is essential to deliver safe, effective and quality patient flow
- Patient education classes should be carried out virtually where possible
- Local agreement should be made on the expiration date of pre-assessment validity
- A virtual re assessment should be undertaken to ascertain if there are any health changes or concerns that have arisen or if any investigations need to be repeated in patient with expired pre-assessment
- In cases where a consultant anaesthesiologist review is required after preoperative assessment by the PAU nurse, this review initially should be carried out virtually where appropriate

1.5 Pre-operative Investigations

- Local protocols should be established to assess the requirement for tests/investigations to ensure only what is necessary is undertaken. National Institute for Health & Care

Excellence (NICE) guidelines 2016⁵ provides recommendation for routine preoperative tests for elective surgery

- If a patient requires any tests/investigations, every effort will be made to have these done on a single patient visit to the hospital
- All investigations should be determined by patient's medical condition, co morbidities and procedure requirements

1.6 Patient Information for PAU

- Patients should be advised to download and use the HSE COVID tracker app
- Patients and their carers, should be actively encouraged to have the seasonal influenza vaccination

Patient information for Virtual Clinics

- All patients should be pre-assessed initially by virtual means (where practical and appropriate): by telephone, telehealth, or completion of a questionnaire to minimise attendance in hospital
- Patients should be sent an appointment with instructions and support on how to have a virtual consultation. Information for patients on virtual consultations is available to download from [here](#)
- The patient should be given the option of having a carer/relative present on all virtual appointments
- **As with face to face clinics, for required diagnostics including phlebotomy, it is essential to ensure patient follow up has appropriate clinical governance and follow-through within the hospital services.**
- For more information on virtual clinic operation and governance, please visit the link [here](#)

Patient information when Attending in Person

- Infection prevention and control measure are important to reduce the risk of transmission. Patients should adhere to current guidance on the use of face coverings,

⁵ National Institute for Health & Care Excellence (NICE) Guidelines 2016

respiratory hygiene, social distancing and good hand hygiene. Further information can be found [here](#).

- If patients are required to attend in person, they should be sent an appointment time and, if they travel by private car they may be asked to wait in their car until just before their appointment time
- A patient information leaflet should accompany the appointment letter indicating any necessary instructions pertaining to the procedure. General patient information leaflets for patients attending hospital can be downloaded from [here](#).
- Patients using public transport should wear a face covering and try to arrive at the clinic as close as possible to their allocated appointment time, as there will be limited seating available in waiting areas. It is recognized that this may not be possible in all cases if people are travelling from rural areas with a restricted public transport service
- If the patient has been brought by car, it is generally preferable that the accompanying adult remains in the car, but it is recognised that this may not always be possible. No children are to accompany individuals for procedures
- Patients and accompanying adult should be provided with the opportunity to clean their hands using alcohol based hand rub when entering hospital/clinic or after touching face covering.
- If there is a requirement for the patient to be accompanied into the clinic/unit, the accompanying adult must not have any signs or symptoms of COVID-19 or have had a risk of exposure. They may be asked for their contact details and asked to leave the hospital until such time as the patient can be collected when the appointment is finished
- In line with the National Public Health Emergency Team (NPHE) recommendations patients should be reminded to wear a cloth face covering. If they do not have a cloth face covering they should be provided with a facemask at reception/registration

1.7 COVID-19 Risk assessment in PAU

Patients who are required to attend PAU in person should have a risk assessment for COVID-19 symptoms carried out within three days prior to attendance. See Appendix 4 for COVID risk assessment questionnaire

1.8 Social Distancing in PAU

- PAU waiting areas and assessment room should adhere to national guidelines on social distancing
- Adherence to national guidelines on social distancing may require staggered scheduling of in hospital appointments to avoid crowds gathering in excess of waiting area capacity
- PAU assessment and waiting rooms may require reorganisation and reconfiguration of or transfer of unit to another area within the hospital to meet national guidelines on social distancing

1.10 Personal Protective Equipment (PPE) in PAU

- Surgical masks should be worn by healthcare workers when they are providing care to people and not able to maintain the national recommendation on social distancing regardless of the COVID-19 status of the person
- Surgical masks should be worn by all healthcare workers for all encounters, of 15 minutes or more, with other healthcare workers in the workplace where workers are not able to maintain the National Recommendation on Social Distancing (HPSC, 15/05/2020)⁶

Appendix 3 shows the non-COVID patient pathway for PAU.

⁶ National Recommendation on Social Distancing (HPSC,15/05/2020)

1.11 Pre-Attendance Work Up

This table has been illustrated in a poster format in appendix 5 for display in clinical areas. Please refer to the HPSC [link](#) for a list of the recognized Aerosol Generating Procedures (AGP's)

PLAN	Day case	Day case surgery	In patient surgery
	Non AGP Not requiring general anaesthetic	AGP or general anaesthetic	AGP or general anaesthetic
Pre-assessment	Yes	Yes	Yes
Advise to Minimise Risk Exposure for 14 days prior to attendance	No	No	Yes
14 day virtual pre op check	No	No	Yes
7 day virtual pre op check (when practical)	No	No	Yes
COVID Risk assessment questionnaire within 3 days of attendance	Yes	Yes	Yes
COVID testing	<p>Requirement for testing will be dependent on structured risk assessment, status of local incidence or specific patient/procedure cohort</p> <p>Incidence < 25 cases / 100,000 population /14 days Testing only if clinically indicated</p> <p>Incidence ≥ 25 cases /100,000 population /14 days Testing is required Within 3 days of attending</p>		
COVID Risk assessment on admission prior to procedure	Yes	Yes	Yes
Post discharge Infection status follow up	No	No	Yes

1.12 Requirements Prior to Day Case Non Aerosol Generating Procedure

- Once the patient has been deemed ready to undergo a proposed procedure, a member of staff must inform the patient of their admission date
- COVID-19 Risk assessment must be carried out within the three days prior to admission
- COVID-19 Risk assessment must be repeated on the day of surgery prior to the procedure

1.13 Requirements Prior to Day Case aerosol generating procedure

- Once the patient has been deemed ready to undergo proposed procedure, a member of staff must inform the patient of their surgery date and either forwarded or directed to the patient information on attending hospital as outlined in Section 1.6
- The COVID-19 risk assessment must be completed within 3 days of the procedure and repeated on the day of surgery prior to the procedure
- Depending on the phase of the pandemic, if COVID-19 sampling and testing is required, it must be carried out within 3 days prior to admission by the hospital (see section 2.4) i.e. if low, testing is generally not required and if high, then testing is generally required for all patients attending who may require an AGP. The logistics of this process may need to be worked out locally for each hospital site
- If required and with prior agreement, COVID-19 sampling and testing was carried out elsewhere, then the COVID-19 testing results must be available prior to patient admission
- Local protocol outlining the pathway for swabbing must be established. It must detail where COVID-19 sampling will be performed, by whom and the appropriate pathway for communication with and transportation of specimens to the laboratory. The protocol should also outline how these results will be communicated to team and how the team will communicate with the patient. This protocol must also accommodate the return of test results for scheduled surgery following the weekend and a bank holiday

The National Clinical Programme in Surgery published a Laparoscopic Cholecystectomy pathway (2015), this aerosol generating procedure (AGP) has been developed, to incorporate current guidance to provide an illustration of a AGP Pathway in the COVID-19 era. (See appendix 1)

1.14 Requirements for Inpatient Aerosol Generating Procedure

- Once the patient has been deemed ready to undergo a proposed inpatient procedure, a member of staff must inform the patient of their admission date and the requirement to restrict their movements to minimise their exposure risk for 14 days prior to surgery. They should also be issued with, or directed to the patient information on attending hospital as outlined in Section 1.6
- COVID-19 risk assessment must be carried out within the 3 days prior to admission
- Depending on the phase of the pandemic, if COVID-19 sampling and testing is required, it must be carried out within 3 days prior to admission by the hospital (see section 2.4) i.e. if low incidence status, i.e. <25 new cases / 100,000 / 14 day incidence no testing is required unless clinically indicated, but if ≥ 25 new cases / 100,000 / 14 day incidence, then testing is required for all patients attending who may require an AGP
- Sampling and testing (where required) for COVID-19 may be carried out elsewhere, but COVID testing results must be available prior to patient admission (Please refer to *note above for details of patients who have already had laboratory confirmed COVID-19)
- Local protocol outlining the pathway for testing (where required) must be established. It must detail where COVID-19 testing will be performed, by whom and how these results will be communicated to the team and how the team will communicate with the patient. This protocol must also accommodate the return of test results for scheduled surgery following the weekend and a bank holiday
- Fourteen days prior to admission the patient should be telephoned to confirm that they will follow advice on minimising their exposure risk and to confirm they have not been exposed to COVID-19 within their social circle and have currently have no clinical features of COVID-19
- Seven days prior to admission the patient, if practical and where resources are available, the patient should be telephoned to confirm that they are continuing to follow the advice on minimising their exposure risk and to confirm they have not been exposed to COVID-19 within their social circle and currently have no clinical features of COVID-19
- COVID-19 risk assessment must be repeated on the day of surgery prior to the procedure
- Following discharge, infection status should be ascertained 2 weeks post discharge

Chapter 2: COVID-19 testing prior to scheduled admission

2.1 Background

In this iteration of the guidance, control is given to the hospital to determine its risk level using data provided centrally and, based on local incidence, to decide whether testing is required to be part of the patient pathway. In general, the recommendation is that, in the absence of local or specialty-based needs, in a low incidence environment (<25 new cases/100,000 population/14-day cumulative) testing would not be required unless there were local epidemiological pressures and that in the higher incidence environment i.e. ≥ 25 new cases/100,000/14 days testing is required as part of the pathway. Specific guidance for cancer surgery is outlined in section 2.5

It is essential to ensure that patient SARS-CoV-2 testing occurs and has appropriate clinical governance and follow-through within hospital services.

The risk assessment of the hospital and its environment should be done in a regular and structured way with a multidisciplinary team including infection prevention and control, perioperative clinical director, management and nursing with clear communications lines. The data used to inform this decision would include the HPSC 14-day epidemiology report, Health Atlas COVID cases map and hospital local epidemiological information.

- Risk designation will be determined by review of the 14-day incidence national and regional, local clusters and outbreaks in the community and hospital settings and issued to designated contacts in hospitals and acute operation programme leads regularly as determined by local risk assessment team.
- Each hospital should have a multidisciplinary team with representation from clinical leads in microbiology /ID/ IPC and include the peri-operative clinical director with representation from management and nursing that will govern the review of the regional risk designation to determine requirements for COVID-19 testing prior to surgery.
- It is suggested that this team meet twice weekly (Monday and Thursday) in the first instance and then as epidemiologically indicated to review the latest information and

have an effective communication mechanism to ensure the information is easily accessible for departments scheduling surgery.

- In the event that testing capacity is unable to meet demand, clinical prioritisation should be implemented as guided by the hospital or HG COVID-19 committee or equivalent.

2.2 Regional risk designation

Regional risk designation		
Data	<25 cases / 100,000 population/14 days	≥ 25 cases / 100,000 population/14 days
Requirements	COVID-19 risk assessment required Pre-procedure SARS-Cov-2 RNA TEST not required unless clinically indicated	COVID-19 risk assessment required PLUS Pre-procedure SARS-Cov-2 RNA TEST required
Incidence may be overlaid by local information and result in enhanced measures.		

2.3 Status Low risk

Definition: <25 cases / 100,000 population/14 days

- All patients should have a COVID-19 risk assessment carried out
- Patients generally DO NOT REQUIRE pre-procedure SARS-Cov-2 RNA TEST unless clinically indicated

Summary: There is no national recommendation to test patients for SARS-CoV-2 unless the risk assessment determines that there is a risk due to geographical location or presence of symptoms. Certain procedures, interventions, treatments may require testing as part of their patient pathway.

2.4 Status Higher risk

Definition: ≥ 25 cases / 100,000 population/14 days

- All patients should have a COVID-19 risk assessment carried out

- It is recommended that all patients have pre-admission SARS-CoV-2 testing within 72 hours of admission. (Local adaptations with respect to timing may have to apply to accommodate capacity).
- Patients should be specifically advised to restrict their movements to minimise their exposure risk between having their pre-procedure SARS-CoV-2 test and coming into hospital for their procedure
- If surgery is delayed but is carried out within 24 hours of the scheduled time, then the SARS-CoV-2 test remains valid
- If surgery delayed and the patient discharged, then the test will need to be repeated if the interval between testing and rescheduled admission is more than 3 days
- If a situation arises where pre-procedure testing was indicated but was not carried out, or the result is not available, these cases should be risk assessed on a case-by-case basis to determine if surgery can go ahead and whether PPE needs to be escalated to that of a COVID-19 unknown case.
- Patients from the community who did not require hospital admission for COVID-19 and who are 10 days or more post onset of symptoms and with no fever for the last five days are regarded as non-infectious. For patients from residential care settings, and those who were hospitalized for COVID-19 but discharged and require early outpatient review, they are regarded as no longer infectious 14 days post onset of symptoms and with no fever for the last five days. Patients who are no longer infectious may attend outpatient services with the same IPC precautions that apply to patients in whom there is no clinical suspicion of COVID-19. Repeat testing is generally not appropriate in people with a previous confirmed diagnosis of COVID-19 unless there is a specific clinical indication. If there is a specific concern, please discuss the patient with a Consultant Microbiologist or Infectious Disease Physician.

*Summary: Where local incidence rates are ≥ 25 cases / 100,000 population/14 days, it is **necessary** to carry out a COVID-19 risk assessment **AND** test patients for SARS-CoV-2 prior to scheduled admission.*

2.5 Elective Cancer Surgery

All cancer patients undergoing elective surgery should have an RT-PCR test for SARS-CoV-2 within 3 days prior to admission. The National Cancer Control Programme has issued separate

guidance for Medical Professionals for testing for SARS-CoV-2 in asymptomatic patients undergoing elective cancer surgery in response to the current novel coronavirus pandemic. These guidelines can be accessed [here](#). The patient NCCP patient pathway for admission for scheduled cancer surgery during the COVID-19 pandemic is outlined in Appendix 6.

Chapter 3: Day of surgery admission (DOSA) in COVID-19 era

3.1 Background

A Day of Surgery Admission or DOSA refers to an elective, stay-case, surgical patient who is admitted on the day of their surgical procedure, all necessary work-up having been carried out prior to admission. It does not include day cases or minor operations. The ability of an institution to provide DOSA for multi-day stay elective surgery patients is dependent upon maximising quality and efficiency in pre-operative patient management and hospital bed management (NCPS, 2011)⁷

During the Orthopaedic Prospective Funding pilot in 2011–2013, DOSA rates increased from practically zero to over 70% in the 12 orthopaedic hospitals participating in the pilot (case mix unit review, 2012), with a subsequent reduction in average length of stay (AvLoS). Since then the models of care for Elective surgery (NCPS, 2013)⁸, Pre-Admission units (NCPA, 2014)⁹ and Trauma and Orthopaedic Surgery (NCP TOS 2015)¹⁰ all advocate for the concept of admitting a patient on the morning of surgery, to a dedicated day of surgery admission area.

DOSA patients must have appropriate pre-admission assessment and discharge planning arrangements as this avoids unnecessary same day cancellations. DOSA provides an increased level of patient satisfaction and outcomes as well as an increase in theatre productivity and has produced significant savings on bed days. It is now a routine part of the surgical care pathway.

Admission on the day of surgery in the COVID-19 era is now more important to limit the total in-patient journey.

⁷ Pre-operative patient management and hospital bed management (NCPS, 2011)

⁸ Models of care for Elective surgery (NCPS, 2013)

⁹ Pre-Admission units (NCPA, 2014)

¹⁰ Trauma and Orthopaedic Surgery (NCP TOS 2015)

3.2 Day of Surgery Admission area

- A dedicated area within the hospital should be allocated for patients to be admitted on the day of surgery. This may be an area of the pre admission unit, an area of the elective ward or a separate area entirely
- The 'DOSA area' must adhere to national guidelines regarding social distancing
- All patients admitted on the day of surgery must have followed the 'pre-admission' protocol, including the COVID-19 assessment questionnaire
- During higher risk phases of the pandemic, patients must have had a pre-procedure SARS-CoV-2 RNA PCR test performed within the three days prior to attendance at the 'DOSA area' and the result indicates that SARS-CoV-2 RNA has not been detected
- A specific time for attendance should be given to the patient in advance to assist with social distancing
- If patients have travelled by car, they should wait in the car until just before their appointment time
- Patients and accompanying adult should wear a face covering in public spaces. They will be provided with one if they do not have one. Should the face covering become wet or soiled a replacement will be offered. Touching face covering or face is not recommended
- Patients and accompanying adult should be offered the opportunity to clean their hands with alcohol-based hand rub when entering hospital or after touching face covering
- If accompanied by a friend or relative, this person should wait outside of the hospital, where possible until it is confirmed that the procedure will go ahead as scheduled
- On arrival, the patient will undergo a repeat COVID-19 risk assessment. If any symptoms are present the patient should have appropriate assessment and if appropriate the procedure may be deferred
- If the procedure is deferred due to the patient having symptoms of COVID-19, then immediate care should be arranged and appropriate follow up from the surgical team must be arranged
- In the event of on day deferral of surgery, the patient must be advised to follow HSE [guidelines on COVID-19](#) including contacting their GP
- Where possible, the patient should walk to theatre from DOSA

- Time needs to be allocated on the morning of surgery for a final anaesthesia review if required

3.3 Staffing in DOSA

All staff should complete a self-check for COVID-19 prior to starting work and absent themselves and inform their line-manager and occupational health if symptomatic. For occupational health guidance on COVID-19, please visit the HSE website [here](#).

- Every effort should be made to reduce footfall of healthcare workers through DOSA to minimise patient exposure
- Health care workers moving between clinical areas should be avoided where possible
- Nurses working in DOSA must have relevant skills and knowledge specific to the clinical area i.e. pre-operative surgical patient assessment
- Daily access to clerical/administrative support for the DOSA unit is required. The amount of time will depend on the throughput of patients

3.4 Consent

Obtaining informed consent from patients should be performed in line with the Irish Medical Council Guide to Professional conduct & Ethics (1), the Code of Practice for Surgeons (2) and the HSE National Consent Policy (3).

During the COVID-19 pandemic, clinicians should consider, and provide patients with, information on how the pandemic might alter the risks and benefits of their treatment. The situation regarding COVID-19 is evolving rapidly and to guide clinicians in their decision making the National Clinical Programme in Surgery, The National Clinical Programme in Trauma and Orthopaedic Surgery in conjunction with the RCSI have published guides to consenting in the COVID-19 situation (RCSI, 2020)¹¹

- Each hospital should have a multi-disciplinary team who will review the 14 day cumulative, local clusters and outbreaks in the community and hospital setting to inform risk. Regional risk designation may be overlaid by local information and result in enhanced measures

¹¹ <https://www.rcsi.com/dublin/coronavirus/surgical-practice/clinical-guidance-for-surgeons>

- Doctors consenting must know where to access this latest information and should be aware of up-to-date data on COVID-19 for the hospital where they operate to consent patients, as well as to risk access each procedure
- The infection prevention and control team (IPCT) and occupational health team should be sufficiently resourced to provide this information and any interpretive comment (e.g., community versus hospital-acquisition, newly-confirmed infection in patients and staff) in real-time, with onward dissemination of information by Hospital Management so it is readily available to clinical staff to aid in consenting
- Doctors consenting patients should refer to RCSI guidance on consenting in COVID-19 era

3.5 Personal Protective Equipment in DOSA

- Surgical masks should be worn by healthcare workers when they are providing care to people and not able to maintain the national recommendation on social distancing regardless of the COVID-19 status of the person
- Surgical masks should be worn by all healthcare workers for all encounters of 15 minutes or more, with other healthcare workers in the workplace where workers are not able to maintain the national recommendation on social distancing (NPHET, 15/05/2020)
- It is important that each patient's infection or colonisation status is incorporated into every evaluation and not limited to COVID-19, for example patients for whom transmission-based precautions, such as contact precautions are required because of carriage of antimicrobial resistant organisms (e.g., MRSA, CPE, VRE)

3.6 Social distancing in DOSA

- DOSA waiting areas and assessment room must adhere to national guidelines on social distancing
- Adherence to national guidelines on social distancing may require staggered appointment times for attendance
- DOSA areas may require reorganisation and reconfiguration of or transfer of unit to another area within the hospital to meet national guidelines on social distancing
- Congestion in DOSA must be avoided, therefore timing of patient flow requires careful monitoring and managing to adhere to national guidelines on social distancing

- At all times unnecessary footfall in operating departments must be minimised

Chapter 4: Operating Theatre

4.1 Operating department in a COVID-19 era

Scheduled operations were cancelled nationwide in response to the COVID-19 pandemic, for a number of months in some cases. Each hospital must have a robust system in place, whereby national and local surveillance data is readily available and hospital management teams, in collaboration with multi-disciplinary team need to monitor the national and local COVID-19 rates and use this information to determine when scheduled admission can incrementally recommence in their locality.

- The principles of routine infection prevention and control during scheduled surgery should be strictly adhered to, including avoidance of unnecessary entry and exit from the operating theatre during surgery
- The number of people in the theatre should be limited to those required for clinical or education purposes
- Strict security measures are required at entrances to operating department to prevent unauthorised access

4.2 Prioritisation, Capacity and Scheduling

Careful evaluation of the likely throughput and factors affecting successful surgery are needed in order to plan effective delivery of scheduled surgical services.

- Resumption of scheduled surgery requires a gradual approach in each hospital agreeing a phased strategy in opening operating departments
- Review of patient flow through the operating department will be required on an on-going basis
- Scheduling modifications to increase theatre capacity, including extending hours of elective surgery later into the evening and on the weekends should be considered
- Many operating department have allocated space that has been reconfigured as critical care areas in the COVID-19 response, it is essential that these areas are available to support the resumption of surgery and ensure efficient patient flow. If these areas are unable to be returned at present due to critical care occupancy rates then scheduling needs to reflect a reduction in capacity

- In the event of further surge requiring an expansion in critical care capacity and utilisation of operating department areas, this will reduce capacity and impact the provision of surgical services
- Communication to waiting list patients in each hospital regarding the local situation is essential
- Communication to GP's of changes in patient pathways and variation in local practice as a result of changing local of COVID-19 is essential
- Pathways should be implemented to allow General Practitioners contact the surgical/orthopaedic service if their patient's condition deteriorates or red flag symptoms occur
- Pathways must also be in place that allow the post elective care patient attend for acute review via an alternate pathway to ED i.e. ASAU
- Given the potential risks associated with carrying out elective surgery in an uncertain environment, patients must be made aware of conservative self-management options available to them compared to operative intervention

4.3 Staffing and skill mix in the operating department

- In order for the safe and effective delivery of operating services, experienced staff may be required to return from their redeployment as part of the COVID-19 response, according to local needs
- Theatre teams should be allocated to the care of non-COVID-19 patients for a whole working session and should not switch between non-COVID-19 and undifferentiated or confirmed infection cases where possible
- Should these recommendation require additional workforce, then local consideration needs to be given to this as appropriate

4.4 Availability of Interdependent Services

- Access to and availability of interdependent services e.g. critical care occupancy, / high dependency unit (HDU) bed availability, radiography, laboratory testing & processing, pathology etc. intra-operative spinal monitoring, sterile services is essential for the resumption and expansion of surgery

- Five working days' notice is required for loan sets, in order to ensure Sterile Services Departments have adequate time to process them, without endangering whole hospital decontamination capacity
- The blood transfusion committee should be notified of planned surgeries with a potential requirement for blood in advance, as part of the supply demand management process, acknowledging that scheduled surgeries may be subject to last minute cancellations

4.5 Social Distancing in the operating department

- Each operating department should carry out a review of their patient pathway to minimise risk and ensure social distancing can be maintained wherever practical
- All areas of the operating departments must adhere to national guidelines on social distancing where practical including office space, changing facilities and break rooms. This may require staggered start and break times
- Congestion in the operating department must be avoided, therefore timing of patient flow requires careful monitoring and managing to adhere to national guidelines on social distancing where practical
- Operating department may require reorganisation and reconfiguration to meet national guidelines on social distancing
- Consideration should be given to separate entry and exit points where possible if this is required to meet national guidance on social distancing
- At all times footfall in operating departments must be minimised

4.6 Documentation

- A review of the perioperative checklist documents should be conducted to include the COVID-19 risk assessment, requirement for COVID-19 testing and where indicated a SARS-CoV-2 PCR (COVID-19) test result

4.7 Personal Protective Equipment in the Operating Department

The Health Protection Surveillance Centre (2020) state that "As part of standard precautions it is the responsibility of every healthcare worker (HCW) to undertake a risk assessment PRIOR to performing a clinical care task as this will inform the level of infection prevention and control precautions needed including the choice of appropriate PPE for those who need to be present".

- Departments must ensure adequate availability of PPE

- Standard precautions should be continued as usual
- Surgical masks should be worn by healthcare workers when;
 - Care delivery where recommended social distancing is not possible, regardless of the COVID-19 status
 - All encounters with patient or staff, of 15 minutes or more, where recommended social distancing is not possible
- PPE required for carrying out an aerosol generating procedure on a surgical patient who is not known or suspected to have a respiratory illness that is spread by the droplet or airborne route:
 - Surgical face mask, Type IIR,
 - Eye protection (only if risk of splashing)
 - Disposable plastic apron (or gown depending on procedure)
 - Disposable gloves
- Patients who have had a “SARS-CoV-2 RNA not detected” result from COVID-19 test and who have no symptoms are classed a low risk (HPSC, 15/05/2020)¹²
- If an accompanying person is deemed necessary to be with the patient in the holding bay/for induction of anaesthesia e.g. prison officers, patients with special needs, the appropriate PPE, and precautions should be used but with regard to the needs of patient – some people including those with intellectual disability may not be able to cope with a carer being masked – a visor or other pragmatic solution may be an alternative. Staff will be required to escort this ‘accompanying person’ out of the department ensuring hand hygiene is adhered to
- The Safe Site Surgery briefing should be used as an opportunity for the whole theatre team to agree which category of PPE should be worn by whom and when
- Please be aware that surgical helmets are not protective against aerosols and droplets. We recommend that consideration be given to wearing a surgical mask underneath the hood (Parvizi et al. 2020)
- Based on an individual risk assessment, practitioners may consider use of a respirator mask in place of a surgical mask and a gown in place of a plastic apron for; Bag mask ventilation, intubation/extubation, LMA insertion/removal, flexible optical intubation

¹² Ref to be inserted

- For guidance on bronchoscopy, visit the HSE Repository at : <https://hse.drsteevenslibrary.ie/c.php?g=679077&p=4874377> or click [here](#)
- Naso-gastric tube insertion and airway insertion are not aerosol generating procedures (AGP) associated with an increased risk of infection.

4.8 Anaesthesia in operating department

- Local/regional anaesthesia should be the preferred choice to invasive airway management whenever possible for elective surgery in COVID-19 era
- In the low incidence environment, patients who have been risk assessed and have no exposure risk or symptoms can be anaesthetised in an anaesthetic room
- In the higher risk environment, patients who have fulfilled the risk assessment questionnaire requirements and have a COVID-19 test reported as SARS-CoV-2 RNA not detected can be anaesthetised in an anaesthetic room
- In the low incidence environment, patients who have been risk assessed and have no exposure risk or symptoms can be extubated in theatre or recovery.
- In the higher risk environment, patients, who have fulfilled the risk assessment questionnaire requirements and, with a COVID-19 test reported as SARS-CoV-2 RNA not detected, can be extubated in theatre or recovery
- The use of perspex barriers/boxes are not supported by evidence and are not recommended. If they are used the institution must have a documented process for decontamination between patients with appropriate traceability

4.9 Cleaning and decontaminating in operating department

- No supplementary cleaning is required in addition to standard cleaning procedures for a non-COVID-19 pathway
- There is no requirement to remove equipment from the operating theatre for patient on the non-COVID-19 pathway
- Perioperative staff should receive on-going education on the principles and standards for cleaning required in the operating department

4.10 Ventilation air changes in operating & anesthetic rooms

The ventilation system in the operating theatre suite has four main functions:

1. Dilution of bacterial contamination
2. Control of air movement within the theatre suite, such that the transfer of airborne bacteria from less clean to cleaner areas is minimised

3. Control of space temperature and humidity
 4. To assist in the removal and dilution of waste anaesthetic gases
- Managers must ensure that plant is inspected, tested and validated by a competent person according to the relevant Health Technical Memorandum (HTM)
 - Comprehensive records of ventilation systems performance, repair and maintenance must be maintained
 - Positive pressure air ventilation systems in theatre should be used for surgical procedures on the non-COVID-19 pathway
 - For patients on the non-COVID-19 pathway, there is no requirement for additional theatre downtime between cases, unless there is another infection diagnosis for which longer downtime is routinely indicated
 - Patients should not have significant contact (for example in waiting areas or clinical spaces) with patients who have not had prior similar evaluation to minimise the risk that they are unintentionally exposed to patients with COVID-19

Chapter 5: Elective Surgical Beds

5.1 Background

The National Clinical Programme in their Elective surgical model of care 2013 discussed the separation of elective and emergency surgical care to improve quality of patient care and facilitate the effective use of facilities.

Furthermore, the Trauma and Orthopaedic surgery Model of Care (2015) outlines the importance of infection prevention and control in orthopaedic patients and recommended that orthopaedic patients should be cared for in designated orthopaedic wards.

Very early research on a small cohort shows that patients who contracted COVID-19 in the perioperative period had a high risk of pulmonary complications, a higher likelihood of requiring ITU care, had an increase in 30-day mortality (Lei *et al*, 2020. COVID Surg Collaborative, 2020). It is therefore recommended that patients who have undergone the pre assessment process described in this document should be cohorted together to minimize the risk of intra hospital transmission.

It is now imperative that this strict separation of elective and emergency beds takes place to enable surgical services to be safely conducted in the COVID-19 era.

5.2 Ring Fenced Non-COVID-19 Surgical Beds

- The number of beds should be determined locally based on type of surgery being undertaken and AvLOS
- The beds should be equipped with piped oxygen and suction equipment
- The ward should remain open 24/7 for the post-operative stay of elective surgical patients
- The ward should be clearly marked and footfall of staff be reduced to a minimum
- The surgical elective bed stock must be protected should not be declared as open acute bed stock and not counted in HSE returns as such
- All patients must meet the admission criteria
- There must be executive agreement to protect the surgical bed capacity, including zero tolerance for elective surgical beds being used in 'escalation' on weekends or nights
- Failure to adhere to ring-fencing should be accompanied by suspending any elective surgical activity until cohorting of patient on the non-COVID-19 pathway can resume
- System of bed management should support short stay care
- Where possible, patients should walk to theatre from the designated elective surgical area

5.3 Admission criteria for Non-COVID-19 Ring Fenced Beds

- Patient must confirm that they have followed appropriate measures prior to admission to the greatest extent practical (minimising exposure risk, avoiding people with symptoms and have no symptoms on COVID-19 risk assessment)
- Patients must have either been determined as not requiring testing based on the risk assessment and local occurrence or must have provided a sample for testing for SARS-CoV-2 RNA taken within three days of surgery and reported as not detected
- Patient must be undergoing a surgical operation/procedure
- Patient must have followed an appropriate pre assessment route

5.4 Staffing in Scheduled Surgery Ring Fenced Area

- In order for the safe and effective delivery of scheduled surgical care, experienced staff may be required to return from their redeployment as part of the COVID-19 response, according to local needs
- Health care workers moving between clinical areas should be avoided where possible
- Every effort should be made to reduce footfall of healthcare workers through scheduled surgery ring fenced area to minimise patient exposure
- Nurses staffing scheduled surgery ring fenced area must have relevant skills and knowledge specific to the clinical area i.e. pre and post-operative surgical patient care
- An appropriate number of clerical staff should be only assigned to scheduled surgery to oversee the administration and smooth running of the ward
- A full complement of Health and Social Care Professionals (HSCP) must be available
- Staff should have had refresher training in Infection Prevention and Control including review of hand hygiene training, surgical scrub (for theatre) and standard precautions

5.5 Social Distancing in Scheduled Surgery Ring Fenced Area

- Scheduled surgery ring fenced area must adhere to national guidelines on social distancing this may require a review of bed spacing and capacity
- Scheduled surgery ring fenced area may require reorganisation and reconfiguration of or transfer of unit to another area within the hospital to meet national guidelines on social distancing
- Congestion in scheduled surgery ring fenced area must be avoided, therefore timing of patient flow requires careful monitoring and managing to adhere to national guidelines on social distancing
- At all times footfall in scheduled surgery ring fenced area must be minimized
- Clinical reviews should be staggered and planned to minimise footfall and adhere to national guidelines on social distancing, where social distancing isn't possible then surgical mask should be worn

5.6 Personal Protective Equipment in scheduled surgery ring fenced area

- Standard precautions should be continued as usual
- Surgical masks should be worn by healthcare workers when;

- Care delivery where recommended social distancing is not possible, regardless of the COVID-19 status
- All encounters with patient or staff, of 15 minutes or more, where recommended social distancing is not possible
- In the event of carrying out an aerosol generating procedure on a surgical patient who is not known or suspected to have a respiratory illness that is spread by the droplet or airborne route the following PPE is recommended
 - Surgical face mask, Type IIR
 - Eye protection (if splash risk)
 - Disposable plastic apron (or gown depending on procedure)
 - Disposable gloves

In the event of a post-op surgical patient experiencing a respiratory deterioration and requiring high flow oxygen/airvo type intervention, local policies should be in place as to where that treatment may be safely delivered and the appropriate PPE required, along with consideration as to whether testing for SARS-CoV-2 RNA is required to rule out hospital acquired/community acquired COVID-19 which was asymptomatic/incubating on admission. Treatment should not be delayed pending assessment or testing.

5.7 Visitor restrictions

- Visiting should be restricted
- Strictly controlled visitor access should be facilitated where appropriate to the needs of the patient
- Local visitation policy reflecting national guidance should be adhered to
- Where possible, electronic devices (tablets, smart speakers etc.) should be facilitated to allow patients social contact and support

Chapter 6: Discharge and surveillance

6.1 Background

When a patient has undergone an inpatient stay and surgical procedure, there should be a system of follow-up with the patient to ensure they have not been confirmed as having COVID-19 infection within 14 days of discharge from hospital and have not developed signs/symptoms

or required antimicrobial therapy from their GP for surgical site infection within 30 days of their procedure date

6.2 Discharge from scheduled surgery ring fenced area

- Every effort should be made to adhere to getting patients discharged home by 11am.
- A summary of the patient's investigations and procedures must be given to the patient on discharge and a discharge letter sent to GP (by Healthlink where possible)
- A patient information leaflet should be provided on discharge and include a relevant contact point for unplanned care due to an unforeseen complication of the procedure e.g. G.P., a virtual clinic, the ASAU or review clinic in the absence of ASAU for clinical examination rather than attending an undifferentiated care pathway (ED)
- Patient to notify the hospital in the event they are confirmed to have COVID-19 infection within 14 days of discharge
- Local protocol should determine which cohort of patients are suitable for nurse-led discharge

6.3 Post discharge infection surveillance

- It is recommended that the patient is reviewed for infection, including COVID-19 and surgical site infection between 2 to 3 weeks post discharge
- This information so far as possible this should be collected virtually
- Local agreement should be made around 'who' collects post discharge infection information
- Any creation of surgical site infection surveillance services, should follow existing guidance on Surgical Site Infection (WHO 2016 ; Global guidelines on the prevention of surgical site infection, European SSI surveillance protocol 2017)
- Surgical infection rate data including COVID-19 and surgical site infection should be collected locally and reviewed on a regular basis
- If a patient has reported a post-operative infection then local protocols will apply
- The patient's post discharge infection status should be documented within the patient's clinical notes
- Appropriate review and follow up should be arranged following virtual consultation if infection present

- In the event of COVID-19 symptoms or confirmed COVID-19 infection within 14 days of discharge, then the patient must be advised to contact their GP for advice on follow-up and the local IPCT should be informed immediately, so the possibility of healthcare-acquired infection can be investigated

6.4 Review Clinic

- For sites that do not have an ASAU then consideration should be given to a dedicated space suitable for a daily review clinic for review of scheduled inpatient and day case procedures who run into complications and need to avoid the Unscheduled (ED) route into services
- Clear governance agreements should be arranged locally for a review clinic including admission criteria
- If patients are required to attend in person, they should be sent an appointment time and reminded to adhere to government advice on using public transport
- If they have travelled by car they should be asked to wait in their car until just before the appointment time. If they have travelled by public transport, an appropriate area should be identified for them to wait.
- Where possible, patients using public transport should only arrive into the clinic at their allocated appointment time, as there will be limited seating available in waiting areas

Chapter 7: Staff Health & Wellbeing

- At the start of each day, all staff should complete a self-assessment for symptoms of COVID-19 to check that they do not currently have symptoms of COVID-19. For further information on occupational health, please click [here](#).
- If symptoms develop during a shift, staff should immediately report to their line manager/person in charge. A local pathway should be established for management (including testing) of staff who develop symptoms while either on or off duty
- Records should be kept of any close and casual contacts of members of staff/patients/other by the line manager/person in charge to facilitate rapid contact tracing in the event of a positive test. Rapid testing pathways for COVID-19 should be used where available to expedite prompt contact tracing. Consider a sign-in log at entrance to departments

- Staff start times, break times and finish times should be staggered to avoid congestion in changing areas or staff rest rooms
- Adherence to National Social Distancing Guidelines should be maintained for any staff handover or briefings where practical (consider performing these in small groups rather than a single large group setting) If distance cannot be maintained see guidance on mask use
- All staff should be encouraged to have the seasonal influenza vaccine
- Consideration must be given to staff who have been providing care on COVID-19 wards including ICU. These staff members may have feelings of stress and fatigue and may require additional support

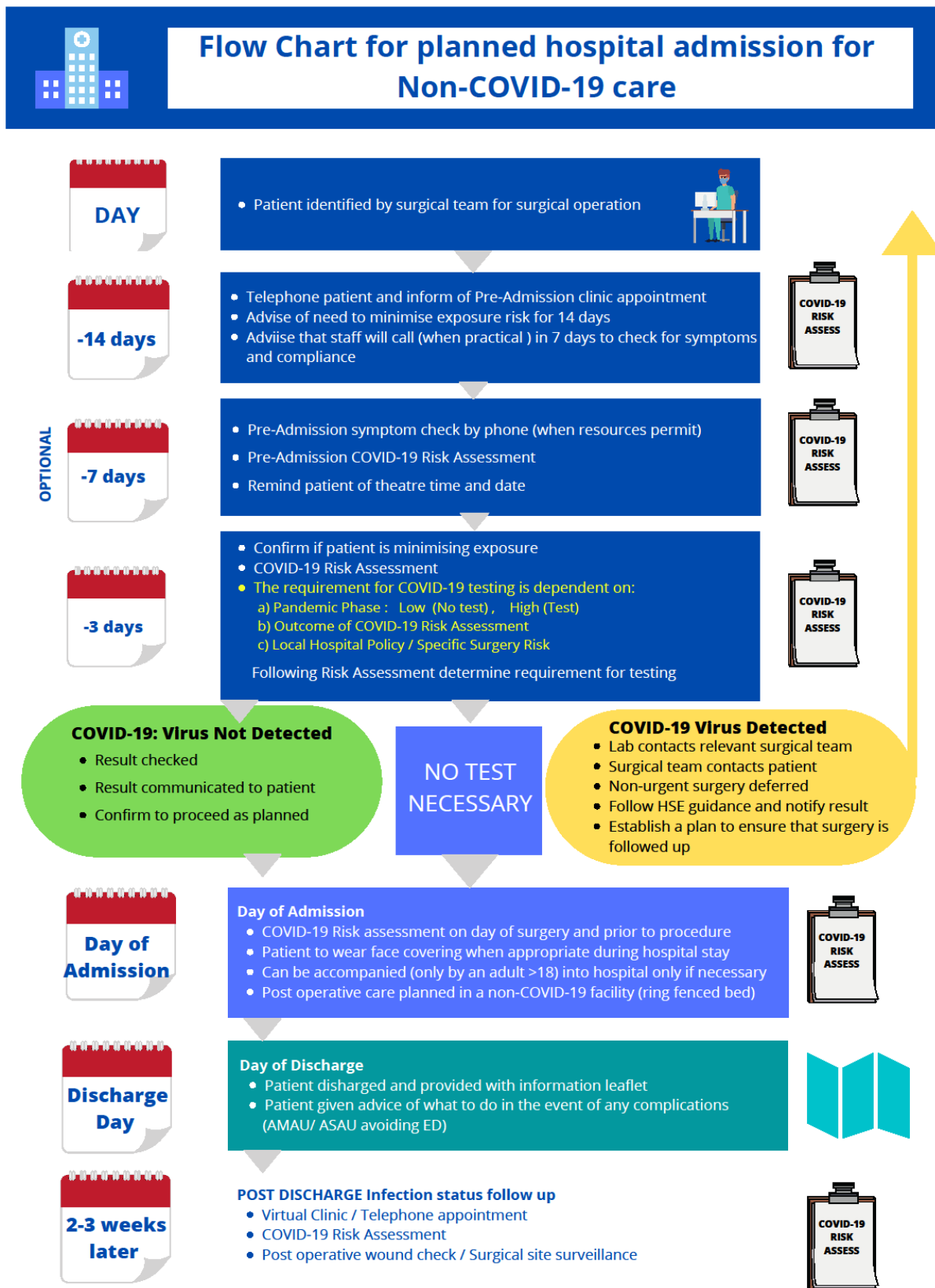
Glossary

AGP	Aerosol Generating Procedure
ASAU	Acute Surgical Assessment Unit
AvLOS	Average Length of Stay
CPE	Carbapenemase Producing Enterobacterales
DOSA	Day of Surgery Admissions
ED	Emergency Department
ECDC	European Centre for Disease Control
ERAS	Enhanced Recovery after Surgery
GP	General Practitioner
HCW	Healthcare Worker
HDU	High Dependency Unit
HPSC	Health Protection Surveillance Centre
HTM	Health Technical Memorandum
HSE	Health Service Executive
HSCP	Health and Social Care Professionals
ITU	Intensive Therapy Unit
IPCT	Infection Prevention Control Team
MRSA	Meticillin Resistant <i>Staphylococcus aureus</i>
NAGP	Non Aerosol Generating Procedure
NCAGL	National Clinical Adviser and Group Lead
NCPA	National Clinical Programme in Anaesthesia
NCPS	National Clinical Programme in Surgery
NCPTOS	National Clinical Programme Trauma and Orthopaedic Surgery
NICE	National Institute for Health & Care Excellence
NPHE	National Public Health Emergency Team
PAU	Pre-admission unit
PPE	Personal Protective Equipment
PPG	Policy, Procedure, Guideline
RCF	Residential Care Facility
VRE	Vancomycin Resistant Enterococci
WHO	World Health Organisation

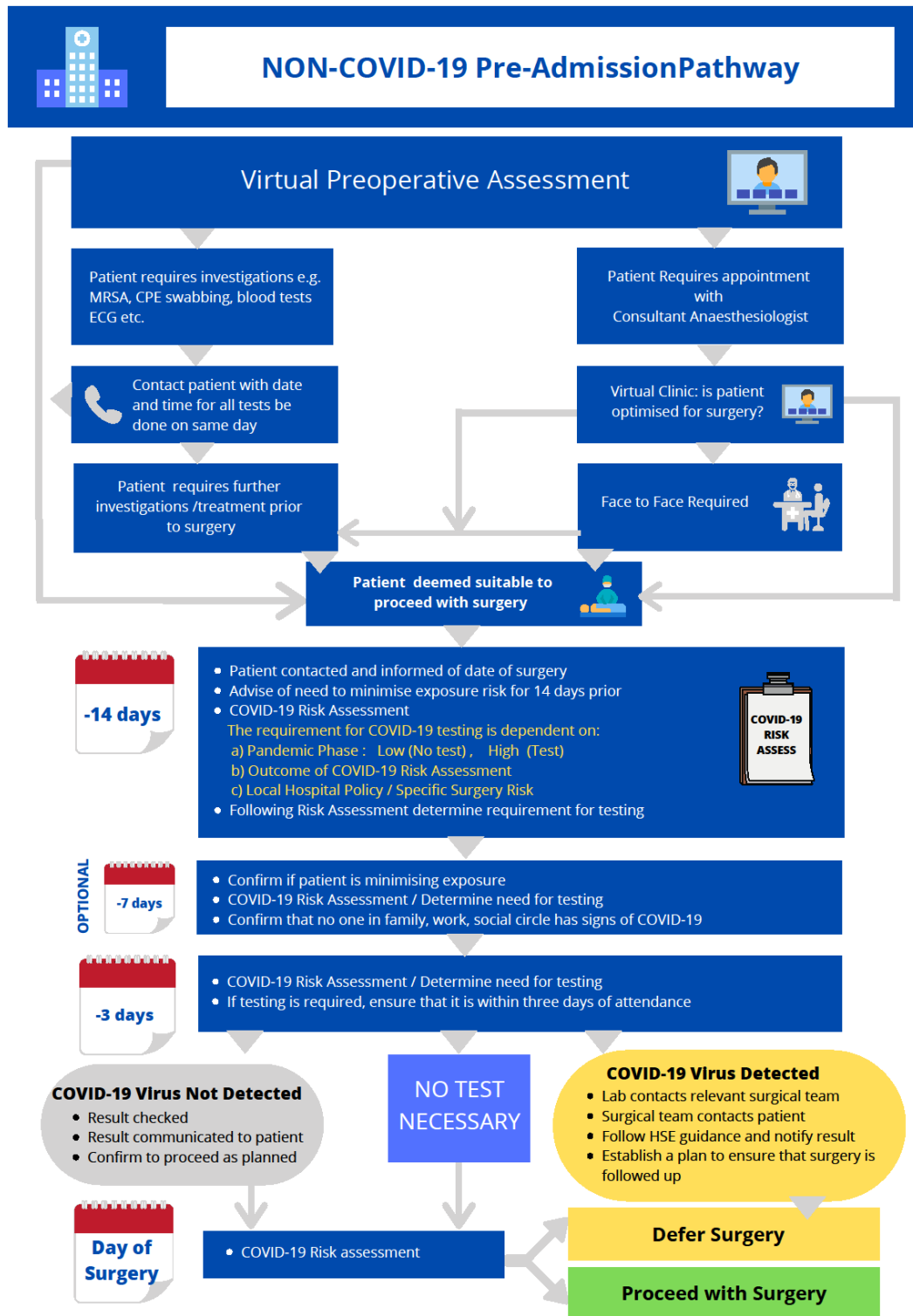
Appendices

Appendix 1 – Laparoscopic Cholecystectomy Pathway

For Laparoscopic Cholecystectomy Pathway, please click [here](#) and view under Stakeholder Consultation



Appendix 3: Flow Chart for Non-COVID Pre -Admission Pathway



13.10.20 v6

HOSPITAL
LOGO**COVID-19 Risk Assessment**
For use in OPD, Day Case and In-patient setting**Patient Details**

Affix Patient Label or Complete

Patient Name: _____ DOB: _____

Consultant: _____ Patient MRN: _____

Risk Assessment Form Completed

Date: _____

Planned attendance / admission

Date: _____

COVID-19 Signs and SymptomsHas the patient had an **acute** onset of any of the following signs or symptoms in the last 14 days? Tick if present

Fever / Chills	Dizziness*	NOTES
Dry Cough	Diarrhoea*	
Shortness of breath	Sputum Productions +/- Blood staining*	
Fatigue / muscle tiredness	Abdominal Pain*	
Sudden loss of smell or taste	New Confusion**	
Nausea/ Vomiting*	Lethargy**	
Chest Pain*	Loss of Appetite**	
Sore Throat*	Unexplained change in baseline**	

*Less Common Symptoms ** More likely in an older populations

If the patient has experienced an acute onset of any of the above symptoms, recommend deferring the appointment due to the suspicion of COVID-19. Advise patient to follow public health advice, isolate and contact GP.
If the patient has no symptoms, proceed to assessing COVID-19 exposure risk

COVID-19 Exposure Risk

1. Has the patient been diagnosed with COVID-19 in the last 14 days ?	Yes / No
2. Has anyone in the patient's family, work, residential care or social circle had SARS-CoV-2 detected in the last 14 days?	Yes / No
3. Has the patient returned from a country that is not on the green list within the last 14 days The latest Green list is available to view here: (https://www.gov.ie/en/publication/8868e-view-the-covid-19-travel-advice-list/)	Yes / No

If the answer is Yes to any of the above questions, recommend deferring appointment for 14 days and provide advice on following public health advice. If answer is No to both questions above, proceed to Question 3

Has the patient been actively physical distancing to minimise their exposure risk? (Note: This is not necessary for OPD appointments)	Yes / No / N/A
--	----------------

If the answer is No, provide advice on the importance of minimising exposure risk and proceed to assessing COVID-19 and when to test.

Please complete the reverse side of this form.

PAGE 1 of 2

COVID-19 Risk Assessment

For use in OPD, Day Case and In-patient setting



Affix Patient Label or Complete Patient Name: _____ DOB: _____

Consultant: _____ Patient MRN: _____

COVID-19 Advice on when to test

Attendance Type	Incidence < 25 New Cases /100,000 /14 days	Incidence ≥ 25 New Cases /100,000 /14 days
Outpatient	Testing not required unless: <ul style="list-style-type: none"> for designated patient /procedural group or local policy indicates 	Testing not required unless: <ul style="list-style-type: none"> for designated patient /procedural group or local policy indicates
Day-Case	Testing not required unless : <ul style="list-style-type: none"> for an AGP procedure for designated patient /procedural group or, local policy indicates 	Testing for SARS-CoV-2 is required (Unless the patient has previously had a laboratory confirmed test for SARS-CoV-2):
In-patient	Testing not required unless : <ul style="list-style-type: none"> for an AGP procedure for designated patient /procedural group or, local policy indicates 	Testing for SARS-CoV-2 is required (Unless the patient has previously had a laboratory confirmed test for SARS-CoV-2)

A. Patients from the community who did not require hospital admission for COVID-19 (lab confirmed) and who are 10 days or more post onset of symptoms and with no fever for the last five days are regarded as non-infectious.

B. Patients from residential care settings, and those who were hospitalized for COVID-19 but discharged and require early outpatient review, they are regarded as no longer infectious 14 days post onset of symptoms and with no fever for the last five days.

C. Patients who are no longer infectious may attend outpatient services with the same IPC precautions that apply to patients in whom there is no clinical suspicion of COVID-19.

D. Repeat testing is generally not appropriate in people with a previous confirmed diagnosis of COVID-19 unless there is a specific clinical indication. If there is a specific concern, please discuss the patient with a Consultant Microbiologist or Infectious Disease Physician.

Is the patient likely to have an aerosol generating procedure whether a day case or planned admission? Yes / No

Is the patient to be admitted as an in patient or day case, living in an incidence area ≥ 25 cases /100,000 population / 14 days? Yes / No

Is the patient part of a designated patient cohort for who testing is recommended irrespective of incidence? e.g. cancer surgery Yes / No

If YES to any of the above, then organise testing for SARS-CoV-2 within three days of attendance at hospital
If NO, then testing is not required due to a low exposure risk

CORONAVIRUS (SARS-CoV-2) Test Information

TEST NOT REQUIRED <input type="checkbox"/>	NOTES
TEST REQUIRED <input type="checkbox"/> Date Sample taken: _____	VIRUS DETECTED <input type="checkbox"/> VIRUS NOT DETECTED <input type="checkbox"/> INDETERMINATE <input type="checkbox"/>
TEST RESULT Date of Result: _____	



Note: If the result is INDETERMINATE, recommend repeat

Result of COVID-19 Risk Assessment

Proceed Defer Procedure Results/Information Pending

Completed by: _____ Signature: _____

Date : _____ Time: _____ PIN/IMC: _____ PAGE 2 of 2

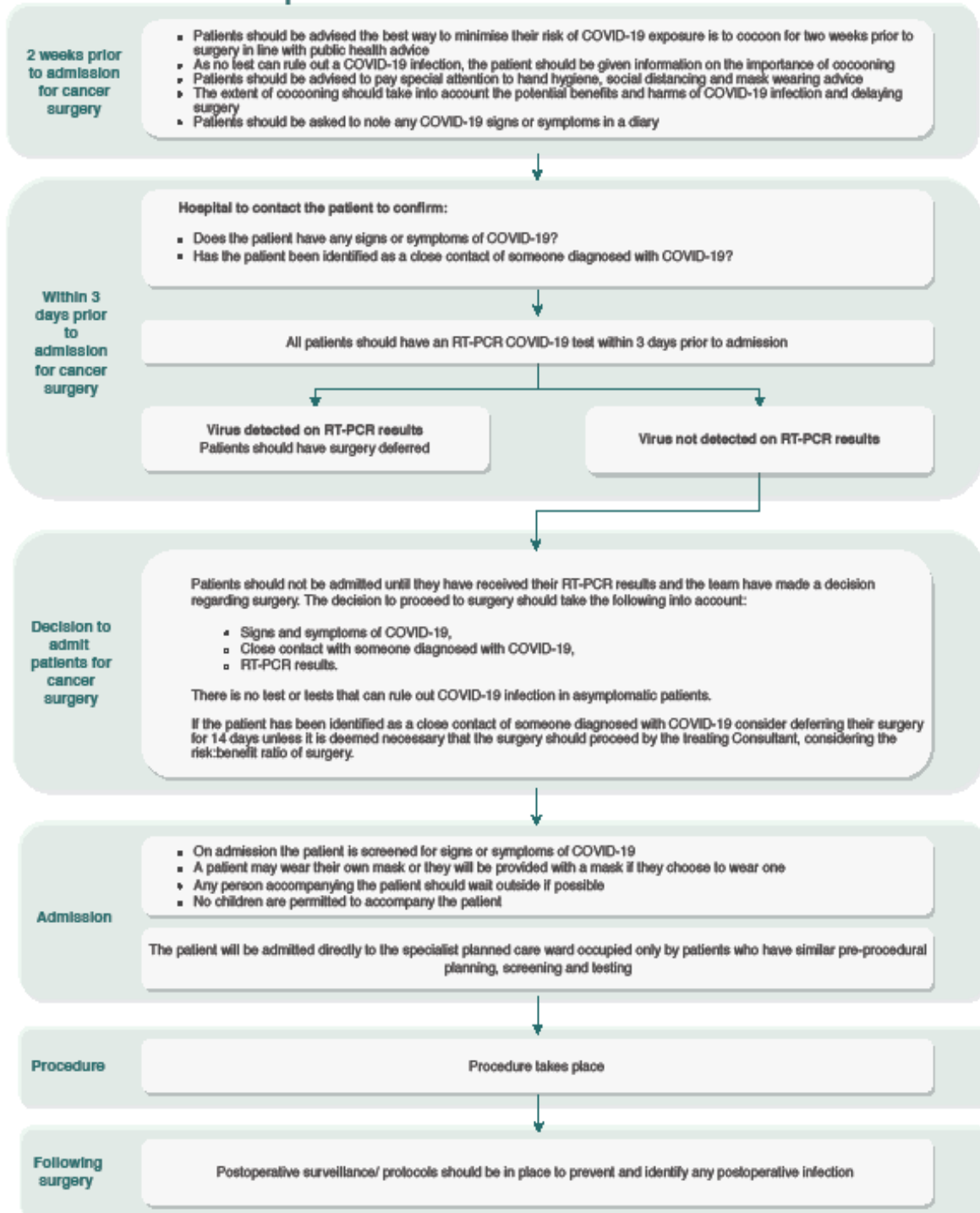
 <h1>PRE-PROCEDURE WORK UP DURING COVID-19 ERA</h1>		Day Case NO AGP	Day Case with AGP	Planned Admission
<h2>PLAN</h2> <p>Pre-assessment</p> <p>Minimising Exposure Risk for 14 days prior</p> <p> 14 Day Check</p> <p>7 day Check (when practical)</p> <p>COVID-19 Risk Assessment (<3 days)</p> <p>Coronavirus Test (Swab) (<3 days)</p> <p>COVID-19 Risk Assessment (on admission)</p> <p>Post discharge Infection Status Follow up</p>	✓	✓	✓	
	✗	✗	✓	
	✗	✗	✓	
	✗	✗	✓	
	✓	✓	✓	
	<p>Requirement for testing will be dependent on structured risk assessment, status of local incidence, specific patient or procedure cohort</p> <p>< 25 cases /100,000 over 14 days Testing only if clinically indicated</p> <p>≥ 25 cases /100,000 over 14 days Testing Required < 3 days</p>			
	✓	✓	✓	
✗	✗	✓		

AHO 2.11.20 V8

Appendix 6: NCCP Patient pathway for admission for scheduled cancer surgery during the COVID-19 pandemic



NCCP patient pathway for admission for scheduled cancer surgery during the COVID-19 pandemic



Version:3
Last updated: 24/09/2020

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Review

This document has been collaboratively collated for health care professionals in practice, for those involved in the delivery of surgical care during the current COVID-19 epidemic. This document will be updated regularly over the coming months as policy changes.

Many of these resources are themselves dynamic and will change, update or disappear. Please contact us with other resources you think we should share and to let us know if there are any out of date or incorrect links (surgeryprogramme@rcsi.ie).

Knowledge is evolving rapidly and some of the advice may change or go out of date so cross-check your sources if you are unsure.

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Useful links

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<https://www.hpsc.ie/az/respiratory/coronavirus/novelcoronavirus/guidance/infectionpreventionandcontrolguidance/aerosolgeneratingprocedures/AGPs%20for%20confirmed%20or%20possible%20COVID19.pdf><https://www.hse.ie/eng/about/who/cspd/ncps/><https://hse.libra>

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HSE COVID-19 - Clinical Guidance and Evidence

HSE <https://hse.drsteevenslibrary.ie/Covid19V2/home>