







Peri-Operative Non-COVID Patient Pathway A Guidance Document Rev 1.5

National Clinical Programme in Surgery

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

The current situation is characterised 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.

Signoff post consultation period

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Definitions of Terms

COVID pathway	An undifferentiated pathway of care where the patient will not have undergone screening prior to attendance.
Non-COVID pathway	For patients who have either undergone a COMD-19 test with a 'Virus not detected' result within 72 hours of attendance or who have not shown any signs or symptoms of COVID-19 in the last 14 days.
Cocooning	The purpose of cocooning prior to a scheduled surgery is to minimise the exposure risk to COVID-19 in the community. Cocooning plus pre-admission testing minimises the risk of having a procedure with undetected COVID-19 and thus minimises the risks associated with peri-operative COVID-19. It is a patient safety strategy. More details can be found at: https://www2.hse.ie/conditions/coronavirus/cocooning.html
COVID screening:	A series of questions designed to assess symptoms or exposure to COVD-19, these may be in the form of a questionnaire, telephone or virtual health assessment.
Interin	 COVID screening needs to take place 24-48 (or 72 if over a weekend) hours prior to any hospital attendance, on arrival to hospital virtually at 14 days prior to surgery virtually 7 days prior to surgery
	See appendix 7 for COVID Screening questionnaire (currently being developed)
COVID testing:	A laboratory test which should be carried out 48 hours prior to admission, the results of which must be available prior to admission.
Virtual clinic:	A non face-to-face method of clinical review, this may be on an information technology platform such as, 'Anytime, anywhere'

allowing for a video interaction between health care worker and patient or as a telephone clinic. It is imperative to document the platform used in the patients' clinical notes as well as that you have gained the patients' consent for this mode of review.

Purpose

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

Scope

This guidance document applies to:

- Non-COVID 19/low risk patients undergoing scheduled surgery in the operating departments
- All patients receiving general, regional, local anaesthesia or sedation
- All HCW within the operating department and recovery rooms

Introduction

Restoration of scheduled activity will be guided by avoiding harm and mitigating risk of deferral of procedure or services in line with clinical guidelines, and appropriate use and supply of Personal Protective Equipment (PPE). This will be based on clinical decisions with a focus on:

- Procedures representing low risk, high value care as determined by specialist societies
- Selection of patients who are at low risk of post-operative deterioration

There should be clear prioritisation protocols that reflect local and national needs, alongside availability of local resources.

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

It is expected that surgeons will work with hospitals 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 judgement 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 eliminate 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.

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 Organization (WHO) in their document 'Maintaining essential health services: operational guidance for the COVID-19 context' which was published on 1^{st} June 2020^2 ;

"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.

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

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

³ Establishing safe and effective patient flow (WHO 2020)

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 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.

Service reconfiguration and financial investment will be required in order to adhere to national infection control and prevention guidelines and Public Health advice.

This document provides principles, recommendations and key considerations in order to facilitate the safe resumption of scheduled surgery. Some of these adaptations may be reversed in time, others continued for a period and those that are found to be safe, efficient and effective may become routine in post-pandemic practice.

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 safe. This means new 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, provides guidance and key considerations in order to resume and maintain surgical services in the context of COVID-19.

Five 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 multidisciplinary 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 multidisciplinary expertise to deliver the complexity of care required
- 3. Changes to previous care pathways should include the strict separation of scheduled surgery facilities from unscheduled care to manage COVID risk. It is important to note that ring-fenced beds for high-risk surgery remains an important principle for reasons other than COVID. For example, many operations require ring-fenced beds to reduce risk arising from other nosocomial infection (e.g. orthopaedic surgery, transplant surgery, cardiothoracic surgery, etc.). For orthopaedic procedures, consideration should be given to using the existing standalone hospitals to deliver care
- 4. Scheduling modifications to increase hospital capacity, including extending hours of scheduled surgery later into the evening and on the weekends should be considered.
- 5. Preoperative COVID-19 status of the patient should be known within 24-72 hours of the point of admission to enable proper planning. 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.

Cancellation of scheduled surgery may occur for many reasons including COVID-19 pandemic, as seen in the current situation. 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

⁴ Perioperative clinical governance structure (NCPA, 2014

to operate is discussed. This allows the patient the opportunity to make an informed decision and understand that there is no guarantee that their procedure will be carried out on proposed date. In addition, possible reasons for further cancellation/postponement should be outlined to each patient e.g. COVID-19 prevalence, increase in COVID patients attending hospital, increase in critical care bed occupancy, roadmap for recovery phases, decreased bed capacity and the possibility of further investigations being required following preoperative 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 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 lived under 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
- An estimate of available operating theatre session times will also have to be provided to establish what can be scheduled in the present COVID 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
- 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, defer surgery or transfer if possible to another RCF setting two weeks prior to admission to facilitate surgery
- If a patient's surgery is cancelled due to a transmission 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 patients notes, pre-assessed prior to COVID-19 pandemic should be carried out as cancelled or deferred surgeries may lead to an expiration of preassessment
- Patients with expired pre-assessment should have reassessment organized, this should be virtual where possible
- If a patient is required to attend in person then COVID-19 screening will need to be conducted over telephone 24-48 hours 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 post Covid-19 patients from acute hospitals)

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

1.4 Virtual PAU Clinics

- Experienced PAU nurses should review referrals alongside the patient's medical notes to decide on an appropriate method for pre-assessment
- All pre-assessments should initially be undertaken virtually
- 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 reassessment should be undertaken to ascertain if there are any health changes or concerns that have arisen or if any investigations need to be repeated inpatient 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 scheduled 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 the patient's medical condition,
 comorbidities and procedure requirements

1.6 Patient Information for PAU

- All patients should be pre assessed initially by virtual means: by telephone, telehealth, or completion of a questionnaire to minimise attendance in hospital
- If patients are required to attend in person, patients should be sent an appointment time and asked to wait in their car, where possible and appropriate to their needs, until shortly before their appointment time
- 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
- A patient information leaflet should accompany the appointment letter indicating any necessary instructions pertaining to the procedure
- When patients are attending hospital for an appointment, it is preferable the
 accompanying adult remains in the car but recognised that this may not always be
 possible. No children are to accompany individuals for procedures

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

- If there is a requirement for the patient to be accompanied into the clinic/unit, the accompanying adult will be asked, where possible, to return to their vehicle and to leave contact details to collect the patient when the appointment is finished
- Patients and accompanying adult should wear a face covering for the entire hospital/ clinic visit, if tolerated. 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 sanitize hands when entering hospital/clinic or after touching face covering
- Patients should be sent an appointment with instructions and support on how to join the virtual screening platform
- The patient should be given the option of having a carer/relative present on all virtual appointments

1.7 COVID-19 Screening in PAU

 Patients who are required to attend PAU in person should have screening for COVID symptoms carried out 24-72 hours prior to attendance. See Appendix 7 for COVID screening form

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 staggering of in hospital appointments
- 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

1.9 Personal Protective Equipment 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 (HSPC.15/05/2020)⁶

1.10 Pre-intervention Work Up

	Inpatient surgery	Day case aerosol generating or general anaesthetic day case surgery	Day case non-aerosol generating surgery
Pre-assessment	Yes	Yes	Yes
Cocooning	Yes	No	No
14-day virtual pre-op check	Yes	No	No
7-day virtual pre-op check	Yes	No	No
COVID test	Yes (O)	Yes	No
COVID screen 24 hours pre- admission	Yes	Yes	Yes
COVID screen on admission	Yes	Yes	Yes
Infection status follow up	Yes	No	No

^{*}See glossary of terms for definitions ** see appendix 9 $\,$

1.11 Requirements for Inpatient Aerosol Generating Surgery

- Once the patient has been deemed ready to undergo a proposed inpatient procedure, a member of staff must inform the patient of their surgery date and the requirement for cocooning prior to surgery
- COVID screening and testing must be carried out 24-72 hours prior to admission
- COVID testing may be carried out remotely but COVID testing results must be available prior to patient admission

⁶ National Recommendation on Social Distancing (HSPC.15/05/2020)

- Local protocol outlining the pathway for swabbing must be established. It must detail
 where COVID testing will be performed, by whom and how these results will be
 communicated to patient and team. This protocol must also accommodate the return
 of test results for scheduled surgery following the weekend and a bank holiday
- 14 days prior to admission the patient should be telephoned to confirm that they
 following cocooning advice and to confirm they have not been exposed to COVID-19
 within their social circle have currently have no clinical features for COVID
- 7 days prior to admission the patient should be telephoned to confirm that they
 following cocooning advice and to confirm they have not been exposed to COVID-19
 within their social circle and currently have no clinical features of COVID
- COVID screening must be carried out on the morning of surgery
- Following discharge infection status should be ascertained 2 weeks post-discharge

1.12 Requirements Prior to Day Case aerosol generating surgery

- Once the patient has been deemed ready to undergo the proposed procedure, a member of staff must inform the patient of their surgery date
- COVID screening and testing must be carried out 24-72 hours prior to admission by the hospital unless alternative arrangements have been agreed by another provider.
- If with prior agreement, COVID testing was carried out remotely then the COVID testing results must be available prior to patient admission
- If it has been agreed between the hospital and alternative provider that COVID testing may be carried out remotely, the results must be available prior to patient admission
- Local protocol outlining the pathway for swabbing must be established. It must detail
 where COVID testing will be performed, by whom and how these results will be
 communicated to the patient and team. This protocol must also accommodate the
 return of test results for scheduled surgery following the weekend and a bank holiday
- COVID screening must be carried out on the morning of surgery

1.13 Requirements Prior to Day Case Non-Aerosol Generating Surgery

- Once the patient has been deemed ready to undergo a proposed procedure, a member of staff must inform the patient of their surgery date
- COVID screening must be carried out 24-72 hours prior to admission

COVID screening must be carried out on the morning of surgery

Chapter 2- Day of surgery admission (DOSA) in COVID era

2.1 Background

A Day of Surgery Admission or DOSA refers to a scheduled, 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 scheduled surgery patients is dependent upon maximising quality and efficiency in pre-operative patient management 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 (casemix unit review, 2012), with a subsequent reduction in the 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 an appropriate pre-admission assessment and discharge planning arrangements, 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 era is now more important to limit the total inpatient 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)

2.2 Day of Surgery Admission

- 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 scheduled surgery ward or a separate area entirely
- The 'DOSA area' must adhere to national guidelines regarding social distancing
- Patients admitted on the day of surgery must have followed the 'pre-admission'
 protocol, including but not limited to: COVID symptom check, exposure and
 temperature check (see glossary of terms)
- Patients must have a 'Virus not detected' COVID screen dated within 24-72 hours prior to attendance at the 'DOSA area'
- A specific time for attendance should be given to the patient in advance to assist with social distancing
- Patients should be sent an appointment time and asked to wait in their car, where possible and appropriate to their needs, until shortly before their appointment time
- Patients and accompanying adult should wear a face covering for the entire hospital/ clinic visit, if tolerated. 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 sanitize hands when entering hospital/ clinic or after touching face covering
- If accompanied by a friend or relative, this person should wait outside of the hospital, where possible
- On arrival, the patient will undergo repeat COVID screening. If any symptoms are present, the procedure may be deferred
- If the procedure is deferred, due to the patient having symptoms of COVID then 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
- Where possible patients should walk to the theatre from DOSA
- Time needs to be allocated on the morning of surgery for a final Anaesthesia review if required

2.3 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. See appendix 8 for Healthcare Worker Algorithm.

- 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

2.4 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 COVID19 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 COVID19 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 a guide to consenting in the COVID situation (RCSI, 2020)¹¹

- Doctors consenting must know their community prevalence and weekly intrahospital transmission rates to consent patients as well as to risk access to each procedure
- Hospital Management should make weekly intrahospital transmission and community
 prevalence rates readily available to medical staff to aid in consenting
- Doctors consenting patients should refer to RCSI guidance on consenting in COVID era

¹¹

2.5 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 (HSPC, 15/05/2020)

2.6 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 staggering of 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 the 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 3- Operating Theatre

3.1 Operating department in a COVID era

Scheduled operations were cancelled nationwide in response to the COVID pandemic, for a number of months in some cases. Hospital management teams in collaboration with the multi-disciplinary team need to monitor the national and local COVID-19 prevalence rates and use this information to determine when scheduled surgery 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

3.2 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 ongoing basis
- Scheduling modifications to increase theatre capacity, including extending hours of scheduled 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
- Communication to waiting list patients in each hospital regarding the local situation is essential
- Pathways should be implemented to allow General Practitioners to contact the surgical/orthopaedic service if their patients condition deteriorates or red flags symptoms occur.
- Given the potential risks associated with carrying out scheduled surgery in an uncertain environment, patients must be made aware of conservative selfmanagement options available to them compared to operative intervention

3.3 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 patients for a whole working session and should not switch between non-COVID and COVID surgery, where possible
- Should these recommendations require additional workforce then local consideration needs to be given to this as appropriate

3.4 Availability of Interdependent Services

- Access to and availability of interdependent services e.g. Critical Care occupancy, /
 High dependency unit bed availability, radiography, laboratory testing & processing,
 pathology etc. intraoperative 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 high volume requirement for blood products in advance as part of the supply
 demand management process, acknowledging that scheduled surgeries may be subject
 to last minute cancellations

3.5 Social Distancing in the operating department

- Each operating department should carry out a review of their non-COVID patient pathway to minimise risk and ensure social distancing can be maintained
- All areas of the operating departments must adhere to national guidelines on social distancing
- 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
- 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 to meet national guidance on social distancing
- At all times footfall in operating departments must be minimised

3.6 Documentation

 A review of the perioperative checklist documents should be conducted to include COVID screening and COVID-19 test result

3.7 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 universal 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,
 - o Eye protection,



O Disposable plastic apron

- o Disposable gloves
- Patients who have had a "virus not detected" result from COVID-19 Test and have no symptoms are classed a low risk (HSPC. 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. children who require a parent, prison officers, patients with special needs, the appropriate PPE, and precautions must be adhered

- to. 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

3.8 Anesthesia in the operating department

- Local/regional anaesthesia should be the preferred choice to invasive airway management whenever possible for scheduled surgery in COVID era
- Patients with a negative COVID-19 test and showing no symptoms of the infection can be anaesthetised in an anaesthetic room
- Patients with a negative COVID-19 test and showing no symptoms of the infection can be extubated in theatre or recovery

3.9 Cleaning and decontaminating in operating department

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

3.10 Ventilation air changes in operating & anaesthetic 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 pathway
- For patients with a negative infection status on the non-COVID pathway, there is no requirement for additional theatre downtime between cases

Chapter 4- Scheduled Surgical Beds

4.1 Background

The National Clinical Programme in their Elective Surgical Model of Care 2013 discussed the separation of scheduled and emergency surgical care to improve the 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. COVIDSurg Collaborative, 2020). It is therefore recommended that patients who have undergone the prescreening criteria described in this document should be cohorted together to minimize the risk of intrahospital transmission.

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

4.2 Ring Fenced Non- COVID 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 scheduled surgical patients
- The ward should be clearly marked and footfall of staff be reduced to a minimum
- The scheduled surgical 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 scheduled surgical beds being used in 'escalation' on weekends or nights
- Failure to adhere to ring-fencing should be accompanied by suspending any scheduled surgical activity until cohorting of the patient on the non-COVID pathway can resume
- System of bed management should support short stay care
- Where possible patients should walk to the theatre from the ring fenced area

4.3 Admission criteria for Non-COVID Ring Fenced Beds

- The patient must inform the hospital that they have followed appropriate measures prior to admission (cocooning, avoiding people with symptoms, no symptoms on questioning)
- Patients must have a COVID not detected' result date and timed within 24-72 hours of surgery
- Patient must be undergoing a surgical operation/procedure
- A patient must have followed an appropriate pre-assessment route

4.4 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

4.5 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 the 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 the 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

4.6 Personal Protective Equipment in scheduled surgery ring-fenced area

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

- o Disposable plastic apron
- o Disposable gloves

4.7 Visitor restrictions

- Visitor access must be restricted
- Local visitation policy should be adhered to
- Where possible, electronic solutions such as remote presence devices (tablets, smart speakers etc.) to allow patients social support contact

Chapter 5- Discharge and surveillance

5.1 Background

When a patient has undergone an inpatient stay and surgical procedure, the need to follow up with the patient to assess their exposure to COVID symptoms within the acute hospitals and assess their surgical wound.

5.2 Discharge from scheduled surgery ring fenced area

- Every effort should be made to adhere to the 'home by 11 am' protocol
- A summary of the patients investigations and procedures must be given to the patient on discharge
- 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).
- Local protocol should determine which cohort of patients are suitable for nurse-led discharge

5.3 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 WHO guidance on Surgical Site Infection (WHO 2016; Global guidelines on the prevention of surgical site infection)
- Surgical infection rate data including COVID-19 and surgical site infection should be collected locally and reviewed on a regular basis
- 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 on post-discharge follow up then the patient must be advised to follow HSE guidelines on COVID-19

5.4 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, patients should be sent an appointment time and asked to wait in their car, where possible and appropriate to their needs, until shortly before their appointment time
- 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 6- 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 (Appendix 8)
- 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 the entrance to departments
- Staff start times, break times and finish times should be staggered to avoid congestion in changing areas or staff restrooms
- Adherence to National Social Distancing Guidelines should be maintained for any staff handover or briefings (consider performing these in small groups rather than a single large group setting)

Glossary

ASAU Acute Surgical Assessment Unit

AvLOS Average Length of Stay

Appendices

Appendix 1: Interim guidance on Management of Day Case Procedures.

(Non-aerosol generating procedures (AGPs) e.g. non-invasive radiology, colonoscopy, minor procedures).

From Guidance to support resumption of service V1.0 19/06/2020 HSE & Health Protection Surveillance Centre

This document does not supersede clinical judgment and describes methods to mitigate risks associated with delivering care to patients in whom there is no clinical suspicion of COVID-19 in an environment where SARS-CoV-2 is prevalent. It provides a framework for services that will need to be tailored to local conditions and specialty needs.

Before scheduling the procedure

All patients should have a pre-scheduling engagement that is virtual by telephone or other suitable means, to ascertain that they are not:

- 1. Suffering from any symptoms or signs of COVID-19
- 2. Restricting their movements due to being a close contact of COVID-19
- 3. Suffering from acute infectious disease other than that related to the procedure
- 4. Indirect contact (face- to-face meeting) with anyone who is suffering from the symptoms or signs of COVID-19.

They should be advised that if they develop symptoms of COVID-19 or are told that they are a Contact of COVID-19 that they should contact the hospital to re-schedule their procedure.

In addition, they need to be advised that they need a means to get to the hospital and a designated individual to stay with them for 12/24 hours after any procedure involving sedation or Anaesthesia. It is preferable if the accompanying adult remains in the car but recognised that this may not always be possible. No children are to accompany individuals for procedures.

Note: Patients who have had COVID-19 and who are 14 days or more post-onset of symptoms and with no fever for the last 5 days are regarded as non-infectious but may continue to have a positive test. They may have day case procedures 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 during the 12 weeks after diagnosis. If there is a specific concern please discuss the patient with a Consultant Microbiologist or Infectious Disease Physician.

Pre-procedural evaluation

Any pre-procedure evaluation is organised by the hospital. It is not the responsibility of the patients GP to perform the evaluation.

Prior to admission

Patients should be sent an appointment time and asked to wait in their car, where possible and appropriate to their needs, until shortly before their appointment time. Included in this communication should be a patient information leaflet indicating the requirements pertaining to the procedure.

Patients should be reminded of the national recommendation to wear a cloth face covering when in indoor areas where distance cannot be maintained. They should wear a face covering when entering the building and while registering or waiting unless they are under 13 years or can't tolerate wearing the face covering. If they do not have a cloth face-covering they should be provided with a facemask at reception/registration. Patients and an accompanying person should perform hand hygiene on arrival.

Once delivered, the accompanying adult will be asked; to return to their vehicle and to leave contact details for patient collection unless there is an adequately spacious waiting area or the patient needs them to be present.

Patients will be asked to keep their face covered, if tolerated except when in a clinical space and removal is required to facilitate communication, examination or the procedure. Should it become wet or soiled they should be provided with replacement will be offered.

On admission

The patient will be screened for the symptoms and signs of COVID-19. If any are present the procedure will be cancelled and the person advised to go home, self- isolate and contact their doctor for advice on testing. If the patient's reports that they have had signs of COVID-19 within 14 days of the procedure, the procedure will be cancelled and the person advised to go home, self- isolate and contact their doctor for advice on testing

Post procedurally, the patient will recover in an area dedicated to planned care and including only patients who have had a similar pre-procedural evaluation. As soon as is reasonably practical and safe they will leave the hospital to return to their home.

Appendix 2: Interim Guidance on the Management of Procedures that are Day Case.. involving Anaesthesia or aerosol generating procedures (AGPs).

From Guidance to support resumption of service V1.0 19/06/2020 HSE & Health Protection Surveillance Centre

This document does not supersede clinical judgment and describes methods to mitigate risks associated with delivering care to patients in whom there is no clinical suspicion of COVID-19 in an environment where SARS-CoV-2 is prevalent. It provides a framework for services that will need to be tailored to local conditions and specialty needs.

Before scheduling the procedure

All patients should have a pre-scheduling engagement that is virtual, by telephone or other suitable means, to ascertain that they are not

- 1. Suffering from any symptoms or signs of COVID-19
- 2. Restricting their movements due to being a close contact of COVID-19
- 3. Suffering from acute infectious disease other than that related to the procedure
- 4. In direct contact (face to face meeting) with anyone who is suffering from the symptoms or signs of COVID-19.

They should be advised that if they develop symptoms of COVID-19 or are told that they are a Contact of COVID-19 that they should contact the hospital to re-schedule their procedure.

In addition, they need to be advised that they need a means to get to the hospital and a designated individual to stay with them for 12/24 hours after any procedure involving sedation or anaesthesia. It is preferable if the accompanying adult remains in the car but recognised that this may not always be possible. No children are to accompany individuals for procedures.

Pre-procedural evaluation

Pre-procedure evaluation is organised by the hospital. It is not the responsibility of the patients GP to perform the evaluation or arrange testing.

Within the 3 days prior to the procedure, the patient should attend to be assessed for clinical features of COVID-19 (signs or symptoms) and for a COVID-19 test (for example if the procedure is on Monday they should have the test taken on or after Friday). They should not have the procedure until it has been confirmed that their test has been reported not-detected.

Note the requirement for testing does not apply to patients who have had COVID19 and who are 14 days or more post-onset of symptoms and with no fever for the last 5 days. These patients are regarded as non-infectious but may continue to have a positive test. They may have procedures with the same IPC precautions that apply to patient in whom there is no clinical suspicion of COVID-19. Repeat testing is generally not appropriate during the 12

weeks after diagnosis. If there is a specific concern please discuss the patient with a Consultant Microbiologist or Infectious Disease Physician.

Note also in certain in some circumstances, if the hospital has capacity to provide the service, it may be preferable for the person to attend on the day of the procedure with rapid turnaround testing performed before the procedure is performed. In this case the assessment for clinical features (symptoms) should be carried out by telephone or video-link within the 3 days prior to the procedure.

Pre-sedation, anaesthesia assessment

As much as can be should be assessed virtually and additional investigations and/or in-person history and examination should be scheduled to occur on the same day as pre-procedural COVID-19 evaluation and testing to minimize the number of hospital visits.

Prior to admission Patients should be sent an appointment time and asked to wait in their car, where possible and appropriate to their needs, until shortly before their appointment time. Included in this communication should be a patient information leaflet indicating the requirements pertaining to the procedure. Patients should be reminded of the national recommendation to wear a cloth face covering when in indoor areas where a distance of 2m cannot be maintained. They should wear a face covering when entering the building and while registering or waiting unless they are under 13 years or can't tolerate wearing the face covering. If they do not have a cloth face-covering they should be provided with a facemask at reception/registration. Patients and an accompanying person should perform hand hygiene on arrival. Once delivered, the accompanying adult will be asked to return to their vehicle and to leave contact details for patient collection unless there is an adequately spacious waiting area or the patient needs them to be present.

Patients will be asked to keep their face covered, if tolerated except when in a clinical space and removal is required to facilitate communication, examination or the procedure. Should it become wet or soiled they should be provided with replacement will be offered.

On admission the patient will be screened for the symptoms and signs of COVID- 19. If any are present the procedure will be cancelled and the person advised to go home, self-isolate and contact their doctor for advice on testing. If the patients reports that they have had signs of COVID-19 within 14 days of the procedure the procedure will be cancelled and the person advised to go home, self- isolate and contact their doctor for advice on testing

The patient will be admitted to a dedicated scheduled pre-operative area.

Post procedurally, the patient will be admitted to an area dedicated to planned care and including only patients who have had similar pre-procedural evaluation and testing.

On discharge the patient will be given an information leaflet including the means to contact the hospital or attend for unplanned care due to an unforeseen complication of the procedure e.g. G.P., a virtual clinic, the ASAU or AMAU for clinical examination rather than attending an undifferentiated care pathway (ED).

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Appendix 3: Laparoscopic cholecystectomy pathway

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Appendix 4: Interim Guidance on the Management of a Planned Hospital Admission

From Guidance to support resumption of service V1.0 19/06/2020 HSE & Health Protection Surveillance Centre

This document does not supersede clinical judgment and describes methods to mitigate risks associated with delivering care to patients in whom there is no clinical suspicion of COVID-19 in an environment where SARS-CoV-2 is prevalent. It provides a framework for services that will need to be tailored to local conditions and specialty needs.

It applies to planning for a hospital stay or planned interventions that may impact adversely on the patient outcome in the event that they are incubating or have undetected COVID-19 at the time of the procedure/treatment. This includes surgery and immunosuppressant treatments such as chemotherapy or radiotherapy. In each case the treating clinician needs to consider the expected benefits of the procedure/treatment, the patients expressed preferences and the strength of evidence that the specific procedure or risk is associated with increased risk in the context of undetected COVID-19. The potential risk of spread of undetected COVID-19 to other patients and to healthcare workers must also be considered.

Note this guidance is not intended to create barriers to access to care. Whereof necessity admission for care must be scheduled at shorter notice for practical reasons the approach outlined here may be adapted. For example the patient could be checked for symptoms or history or contact and be tested on the day of procedure/treatment before the procedure/treatment is administered if necessary. For patients who require frequent scheduled admissions (for example some chemotherapy or radiotherapy regimens) at a minimum the patient could be checked for symptoms or history or contact in all cases. Testing of asymptomatic patients may be waived in some circumstances based on a risk assessment that takes account of current local epidemiology.

Before scheduling the procedure

Engagement 1

All patients should have a pre-scheduling engagement. Where possible this should be 14 days or more before the scheduled procedure. This engagement should be virtual, by telephone or other suitable means, to ascertain that they are not:

- 1. Suffering from any symptoms or signs of COVID-19
- 2. Restricting their movements due to being a close contact of COVID-19
- 3. Suffering from acute infectious disease other than that related to the procedure
- 4. In direct contact (face to face meeting) with anyone who is suffering from the symptoms or signs of COVID-19.

They should be advised that if they develop symptoms of COVID-19 or are told that they are a Contact of COVID-19 that they should contact the hospital to re-schedule their procedure.

In addition, they need to be advised that they need a means to get to the hospital and a designated individual to stay with them for 12/24 hours after any procedure involving sedation or anaesthesia. It is preferable if the accompanying adult remains in the car but recognised that this may not always be possible. No children are to accompany individuals for procedures.

NOTE Patients who have had COVID-19 and who are 14 days or more post-onset of symptoms and with no fever for the last 5 days are regarded as non-infectious but may continue to have a positive test. They may be scheduled for hospital admission 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. If there is a specific concern please discuss the patient with a Consultant Microbiologist or Infectious Disease Physician.

Reducing risk of acquiring COVID-19 in the pre-procedure period

Each individual, in so far as possible, should minimise their risk of exposure to others during the 14 days prior to admission. It is especially important that they avoid exposure to people with symptoms of COVID-19 but they are advised to limit exposure to others also to avoid risk of exposure to people who may have asymptomatic or pre-symptomatic infection.

The most effective measure is to cocoon for 2 weeks in advance of admission. Where this is not possible, it is recommended that contact is minimized with people outside of their immediate social group to the greatest possible extent and that social distancing, mask-wearing and hand washing/sanitizing is used to minimize infection risk.

If an individual is in a residential care setting, establish if there is COVID-19 transmission in the RCF and if so defer surgery or remove to another setting two weeks prior to admission.

Pre-procedural evaluation

With respect to each attendance at the hospital patients should be reminded of the national recommendation to wear a cloth face covering when in indoor areas where distance cannot be maintained. They should wear a face covering when entering the building and while registering or waiting unless they are under 13 years or can't tolerate wearing the face covering. If they do not have a cloth face covering they should be provided with a facemask at reception/registration. Patients and accompanying person should perform hand hygiene on arrival.

Once delivered, the accompanying adult will be asked to return to their vehicle and to leave contact details for patient collection unless there is an adequately spacious waiting area or the patient needs them to be present.

Patients will be asked to keep their face covered, if tolerated except when in a clinical space and removal is required to facilitate communication, examination or the procedure. Should it become wet or soiled they should be provided with replacement will be offered.

In addition, the patient needs means to get to the hospital. It is preferable if the accompanying adult remains in the car but recognised that this may not always be possible. No children are to accompany individuals for admission. Pre-procedure evaluation is organised by the hospital. It is not the responsibility of the patients GP to perform the evaluation or arrange testing.

Within the 3 days prior to the procedure, the patient should attend to be assessed for clinical features of COVID-19 (signs or symptoms) and for a COVID-19 test (for example if the procedure is on Monday they should have the test taken on or after Friday). They should not

have the procedure until it has been confirmed that their test has been reported notdetected.

Note in certain in some circumstances, if the hospital has capacity to provide the service, it may be preferable for the person to attend on the day of the procedure with rapid turnaround testing performed before the procedure is performed. In this case the assessment for clinical features (symptoms) should be carried out by telephone or video-link within the 3 days prior to the procedure.

Anesthesiology pre-assessment clinic

Pre-sedation, anaesthesia assessment

As much as can be should be assessed virtually and additional investigations and/or in person history and examination should be scheduled to occur on the same day as pre-procedural COVID-19 evaluation and testing to minimize the number of hospital visits

At this time the patient's medical file can be made up and sent to their admission ward which should only care for patients with planned admission who been assessed to manage the risk of inadvertent introduction of COVID-19 as above.

Day of admission

Patients should not attend unless they have been informed that their COVID-19 test indicates "VIRUS NOT DETECTED" and given an attendance time.

On arrival the patient will be screened for the symptoms and signs of COVID-19. If any are present the procedure will be cancelled and the person advised to go home, self-isolate and contact their doctor for advice on testing.

If the patients reports that they have had signs of COVID-19 within 14 days of the procedure the procedure will be cancelled and the person advised to go home, self- isolate and contact their doctor for advice on testing

If there are no indications of COVID-19, the patient will be admitted to a dedicated scheduled pre-operative area

Post procedurally, the patient should be admitted to an area dedicated to planned care and including only patients who have had similar pre-procedural planning, screening and testing.

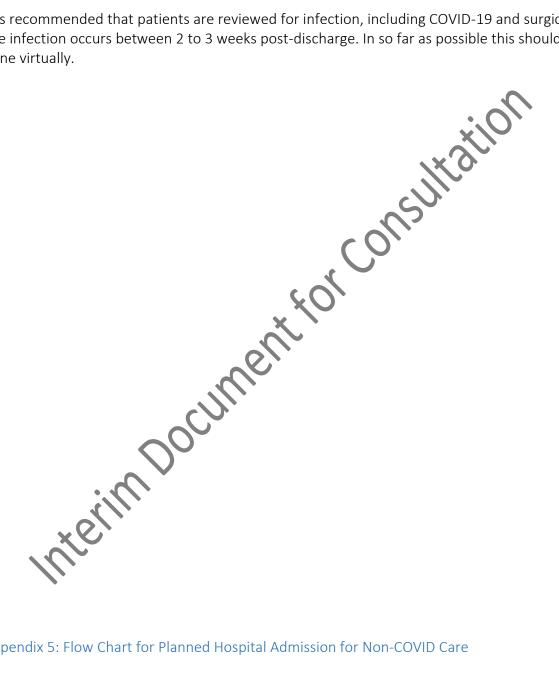
On discharge

The patient should be given an information leaflet including the means to contact the hospital or attend for unplanned care due to an unforeseen complication of the procedure whether it is the GP, a virtual clinic or the ASAU/ AMAU rather than attending an undifferentiated care pathway.

If being discharged to another healthcare or long stay residential center (LSRC) after a stay case the patient should be tested for COVID-19 within 24 hours of discharge and consideration given to 'cocooning' on return to the LSRC for 14 days.

Surveillance

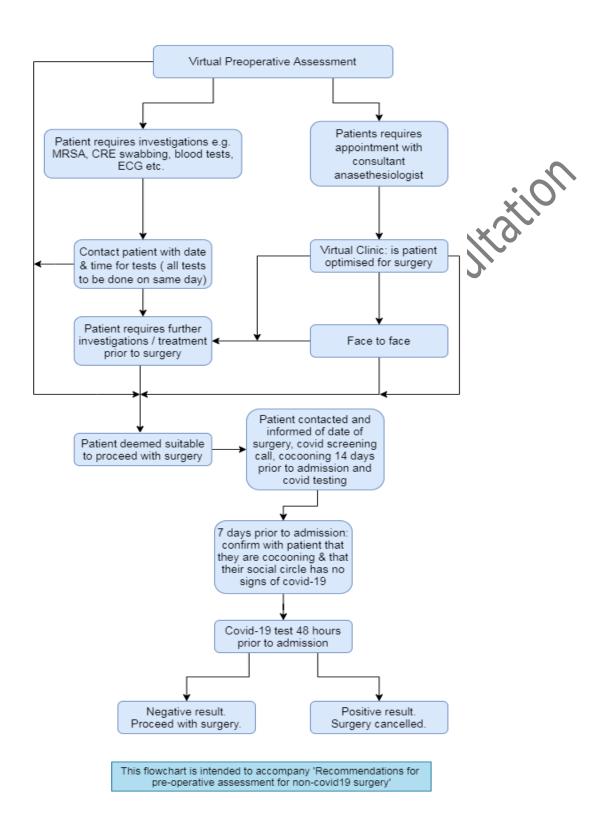
It is recommended that patients are reviewed for infection, including COVID-19 and surgical site infection occurs between 2 to 3 weeks post-discharge. In so far as possible this should be done virtually.



Appendix 5: Flow Chart for Planned Hospital Admission for Non-COVID Care

Inpatient hospital stay patient pathway	
Day	
Patient identified by surgical team for surgical operation	
♠	
Telephone pre admission clinic appointment -advise of 14 co-cocooning -advise will call in 7 days to check symptoms and compliance	COVID symptom checklist
Pre admission symptom check phone call -pre admission symptom check -remind patient of theatre date and requirements for face coving	COVID symptom checklist
attend hospital for COVID test and symptom check - Patient attends Swabbing Clinic for COVID-19 swab - Confirm patient is cocooning/self isolating - Risk assessed for COVID-19 symptoms	Local protocol for COVID test COVID symptom checklist
COVID Negative result -Result checked -Results communicated with patient - Confirm to proceed as planned -COVID Positive result -Laboratory contacts relevant Surgical team -Surgical team contacts patient -Non urgent surgery deferred -Follow local positive result protocol -Establish plan for follow up surgical care	
Day of admission -COVID symptom check on arrival - patient to wear face mask at all times in hospital -Wait in car untill admission time to minimise time in hospital -Can be accompanied by a relative, but not to come into the hospital if at all possible. not to be accompanied by under 18.	COVID symptom checklist
Post operative planned care in a non covid facility	
Day of discharge -discharge with patient information leaflet stating what to do if any complications (AMAU/ASAU) avoiding ED	patient information leaflet
Post care COVID symptom check -Patient called in telephone/ virtual clinic -COVID symptom check -Post operative wound check	COVID symptom checklist

Non-Covid PAU Pathway

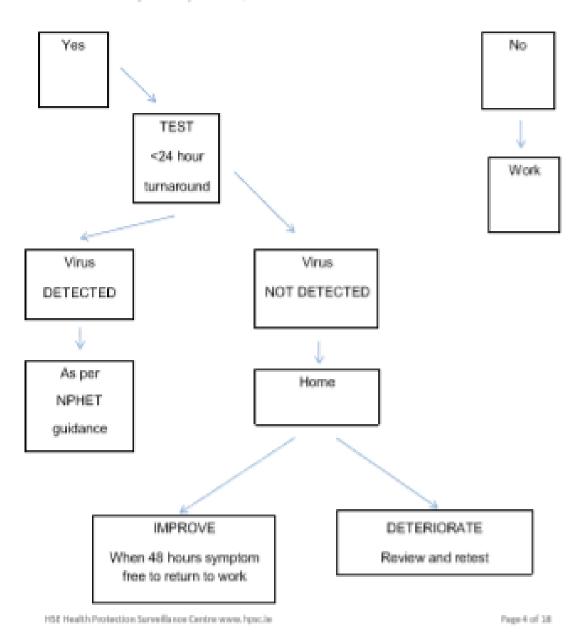


Interim Document for Consultation Interim Document for Consultation

Appendix 8: Daily Self-Assessment for Staff

Healthcare Worker Algorithm Pre-work check Most common:				
Cough	Shortness of breath	Myalgia		
Fatigue	Fever >38.0°CNote	Loss of taste / smell		
Less common:				
Anorexia	Sputum production	Sore throat		
Dizziness	Headache	Rhinorrhoea		
Conjunctival congestion	Chest pain	Haemoptysis		
Diarrhoea	Nausea / vomiting	Abdominal pain		

Note: Fever may be subjective report if measured with a thermometer >=38.0



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PRE-PROCEDURE WORK UP DURING COVID-19

PLAN

Pre-assessment

Cocooning



14 Day Check

7 day Check

Coronavirus Test (Swab)

COVID-19 Screen 24 hours pre-admission

> COVID-19 Screen on Admission

Infection Surveillance

Day Case NO AGP

















Day Case with an AGP















Planned Admission

















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	Perioperative Nurses	
	Group	

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.

Peri-operative patient pathway Rev 1 Published xxxx/2020 in coming months 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.

References

Archer J, Ereidge S, Hosni S, Odeh A, (2020) *Mortality and pulmonary complications in patients undergoing surgery with perioperative SARS-CoV -2 Infection: an international cohort study:available from* https://www.thelancet.com/action/showPdf?pii=S0140-6736%2820%2931182-X

British Orthopaedic Society (2020) **Re-starting non-urgent trauma and orthopaedic care**: Full guidance available from https://www.boa.ac.uk/uploads/assets/ee9cdbed-4427-458c-82d1075edb09945f/BOA-Guidance-for-restart-full-doc-final2.pdf

Health Information and Quality Authority (18 June 2020) Evidence summary for care pathways support for the resumption of scheduled hospital care in the context of COVID-19.

Ref Day of Surgery Admission Casemix Ireland. (2012). Case Mix Unit Review of Prospective Funding December 2012.

Department of Health (2018) Framework for Safe Nurse Staffing and Skill Mix in General and Specialist Medical and Surgical Care Setting in Ireland available from: https://www.gov.ie/en/publication/2d1198-framework-for-safe-nurse-staffing-and-skill-mix-in-general-and-speci/

Institute for Health & Care Excellence (NICE) guidelines 2016 "Routine preoperative tests for elective surgery" available from: https://www.nice.org.uk/guidance/ng45/resources/routine-preoperative-tests-for-elective-surgery-1837454508997 Accessed 6th May 2020

Health Protection Surveillance Centre (2020) "Appropriate use of PPE in healthcare settings" available from https://www.hpsc.ie/a-z/respiratory/coronavirus/novelcoronavirus/guidance/infectionpreventionandcontrolguidance/webinarresourcesforipc/ Accessed 16th May 2020

Health Service Executive (2013) *Model of Care for Elective Surgery* available from https://www.hse.ie/eng/services/publications/clinical-strategy-and-programmes/model-of-care-for-elective-surgery.pdf

Health Service Executive (2014) *Model of Care for Pre Admission Units*. available from https://www.hse.ie/eng/services/publications/clinical-strategy-and-programmes/anaesthesia-model-of-care-for-preadmission-units.pdf Accessed 3rd May 2020

Health Service Executive (2019) *The National Consent Policy* available from https://www.hse.ie/eng/about/who/qid/other-quality-improvement-programmes/consent/national-consent-policy-hse-v1-3-june-2019.pdf

Health Service Executive (2020) "PPE guidance for Staff" available from

https://healthservice.hse.ie/staff/news/coronavirus/prevent-the-spread-of-coronavirus-in-the-workplace.html Accessed 14th May 2020

Lei S, Jiang F, Su W, Chen C, Chen J, Mei W, et al. Clinical characteristics and outcomes of patients undergoing surgeries during the incubation period of COVID-19 infection. EClinicalMedicine. 2020:100331.

Health Service Executive (2015) Model of care for trauma and Orthopaedic Surgery.

Available from https://www.hse.ie/eng/services/publications/clinical-strategy-and-programmes/national-model-of-care-for-trauma-and-orthopaedic-surgery-2015.pdf
Accessed 20th June 2020

Royal College of Surgeons in Ireland (2018) *Code of Practice for Surgeons* available from http://rcsi.ie/files/surgery/docs/20180212115142 Code%20of%20Practice%20for%20Surgeons%20.pdf

Royal College of Surgeons in Ireland (2020) Consenting in the COVID situation: consenting support briefing document available from https://www.rcsi.com/dublin/coronavirus/surgical-practice/clinical-guidance-for-surgeons

The Medical Council(2019) *Guide to Professional Conduct for Registered Medical Practitioners* (8th Ed)available from https://www.medicalcouncil.ie/news-and-publications/reports/guide-to-professional-conduct-and-ethics-8th-edition-2016-.pdf

World Health Organization (2016) Global Guidelines on the prevention of Surgical Site Infection available from: https://www.who.int/gpsc/ssi-prevention-guidelines/en/

World Health Organization (2020) *Maintaining essential health services: operational guidance for the COVID-19 available from* https://www.who.int/publications/i/item/10665-332240

Useful links

https://www.hrsoie/a/respiratory/coronavirus/novelcoronavirus/guidance/infectionpreventionandcontrolguidance/webinarresourcesforipc/

https://www.hpsc.ie/az/respiratory/coronavirus/novelcoronavirus/guidance/infectionpreven tionandcontrolguidance/aerosolgeneratingprocedures/AGPs%20for%20confirmed%20or%20 possible%20COVID19.pdfhttps://www.hse.ie/eng/about/who/cspd/ncps/https://hselibrary.ie/wp-content/uploads/2020/05/Evidence-Summary-COVID-19-Laminar-Airflow-in-Operating-Theatres.pdf

(HSPC.15/05/2020) https://healthservice.hse.ie/staff/news/coronavirus/prevent-the-spread-of-coronavirus-in-the-workplace.html

https://www.hpsc.ie/a-

 $\underline{z/respiratory/coronavirus/novelcoronavirus/guidance/infectionpreventionandcontrolguidanc}\\ \underline{e/webinarresourcesforipc/}$

https://www.who.int/infection-prevention/tools/surgical/SSI-surveillance-protocol.pdf

Interim Document for Consultation