Principles for resuming elective surgery

Advice for NSW health services

This document outlines the key principles for resuming non-urgent elective surgical procedures to safely increase access to services, while maintaining service capability to respond should a surge in pandemic activity occur.

In response to COVID-19 preparedness, the NSW Ministry of Health directed all local health districts (LHDs) and private operators on 26 March 2020 to suspend all non-urgent elective surgery, operating only on Category 1 and stratified Category 2 cases.

This suspension was supported by professional societies and colleges, as well as by clinicians within NSW LHDs.

Since this time, the slowing of the spread of COVID-19 has shifted the focus of health services and clinical teams to preparing to resume some elective surgery.

There are a number of issues that must be addressed at the state, district and local level when recommencing elective surgery. Readiness and ability to resume elective surgery will vary across states.

It is imperative that resuming elective surgery in any health facility does not impede that facility's capacity to manage current COVID-19 pandemic activity or its capacity to respond to a potential surge in COVID-19 levels in the coming months.

Evaluating and addressing each of the principles below will support health facilities provide safe, high quality patient care and ensure that surgery resumes in a gradual manner.

This will allow flexibility for the health system to respond dynamically should a second wave of COVID-19 infections occur, while balancing the risk to patients of delaying planned surgery against the risks of undergoing non-urgent elective surgery.

Given the rapidly changing conditions of both the COVID-19 pandemic and the NSW health system, this advice will be regularly updated to reflect contemporary evidence and current advice from health authorities.

Key principles

1. Awareness of local COVID-19 prevalence, surgical demand and hospital capacity
2. Ensuring facility readiness to resume elective surgery
3. Sufficiency of resources and consumables
4. Safety and continuity of the workforce
5. Prioritisation of elective surgery cases
6. Patient preparedness for elective surgery

More detail is outlined below for each key principle.

NSW GOVERNMENT

ACI-0426 [06/20]

1. Awareness of local COVID-19 prevalence, surgical demand and hospital capacity

The NSW Ministry of Health is aiming to gradually resume the currently closed theatre and endoscopy lists, depending on local circumstances, during the initial gradual return of semi-urgent elective surgery.

Clinical review of urgency and risk of continued delay for all waitlisted patients must inform the decision to proceed to surgery.

Selection of patients suitable to undergo elective surgery during the resumption period should be based on clinical need and guided by the following, as identified by the Commonwealth National Cabinet:

- Low risk, high value procedures
- Patients at low risk of post-operative deterioration
- Children awaiting procedures for which they have exceeded the clinically recommended wait time
- Assisted reproductive procedures
- Endoscopic procedures
- Procedures associated with screening programs
- Critical dental procedures

2. Ensuring facility readiness to resume elective surgery

Consider which sites across a hospital or LHD are suitable and ready to resume elective surgery.

Review critical care requirements for elective surgery, including intensive care and close observation unit capacity. Intensive care bed availability must be maintained and continue to be built up in preparation for potential higher occupancy associated with COVID-19.

Be aware of patient flow changes that have occurred in facilities, particularly with the creation of COVID-19 positive zones in wards, theatres and intensive care units, which will further impact on the capacity of these units.

Consider undertaking ambulatory or day only cases to minimise the impact of elective surgery on inpatient bed capacity across the hospital.

Ensure sufficient staff and equipment are available to provide safe care to surgical patients across all phases of their hospital journey.

Ensure sufficient capacity in medical imaging, allied health and hospital corporate services to support increased surgical service requirements without compromising staff safety or the hospital's ability to address a potential surge in local COVID-19 cases.

To promote equity of access, theatre lists may be allocated to departments rather than individual surgeons.

Strategies to address increased volumes of patients waiting for elective surgery should be developed. These may include:

- Extending hours of theatre operation, where safe and feasible to do so.
- Pooling lists for increased efficiency.
- Coordinating waitlist management at the LHD level.
- Concentrating high complexity work in tertiary hospitals.
- Designation of COVID-19 and non-COVID-19 theatres to minimise transmission risk and reduce turnover time between patients.

Where operating theatres have been converted to negative pressure, these should remain preserved for confirmed COVID-19 surgical cases or aerosol generating non-operative procedures such as endoscopy and bronchoscopy.

3. Sufficiency of resources and consumables

Sufficient stock of surgical supplies, implants and equipment must be secured prior to resuming elective surgery, including confirmation of ongoing supply chains with vendors.

Adequate cleaning and sanitation products, including environmental cleaning products, must be available and not detract from the ability of the facility to address a potential surge in local COVID-19 cases.

Personal Protective Equipment

Facilities should not resume non-urgent elective surgery until adequate PPE and other supplies are available. Sufficient stored inventory to support operating theatre activity should be confirmed by the LHD and continuously monitored prior to relaxing restrictions on elective surgical activity.

Reliability of equipment and consumable supply chains should also inform plans to resume elective surgery.

Monitor and map the use of PPE and surgical consumables to ensure adequate supply, being aware that usage profiles for procedures will have changed for many procedures in the current pandemic environment.

Mapping the use of PPE for individual surgical procedures may further inform which procedures and case volumes can recommence.

4. Safety and continuity of the workforce

Elective surgical cases must be consultant surgeon and anaesthetist led.

Multidisciplinary staffing coverage for routine hours and extended hours, if required, must be confirmed prior to resuming elective surgery.

Staff should be routinely screened for symptoms of COVID-19 using the clinical and epidemiological criteria, and if symptomatic, should be tested and quarantined.

Contingency plans should be in place for the potential situation of newly diagnosed or vulnerable healthcare workers.

Vulnerable staff undertaking essential work, who are most at risk of acquiring COVID-19, should undertake risk assessments and implement mitigation strategies. Where necessary, these staff may be redeployed to alternative duties.

Training and educational activities in the operating theatre should be thoroughly risk-assessed prior to recommencing.

Hospitals should have social distancing policies in place for staff, patients and visitors.

5. Prioritisation of elective surgery case

In planning to resume elective surgery, a multidisciplinary committee should be established within the hospital or LHD to develop a prioritisation strategy based on clinical need and facility capacity.

A prioritisation strategy should consider:

- volumes of postponed patients
- prioritisation across and within specialties
- care teams required and available for clinical work
- a phased approach to re-opening dormant operating theatres
- plans to increase the time available for surgery
- coordination of local strategy with those developed in peer and LHD facilities.

6. Patient preparation for elective surgery

Risk Assessment

Patients with confirmed COVID-19, or those in a high risk category, or from a high risk setting for COVID-19, should not undergo elective surgery unless postponing the procedure creates a greater risk to life.

COVID-19 testing must be undertaken in line with NSW Health testing criteria and prioritisation guidelines, which does not recommend routine COVID-19 testing pre-operatively for elective surgery patients.

Assessment of clinical urgency and local capacity to safely undertake the case should be made by a multidisciplinary team.

If a decision is made to go ahead with elective surgery, patients should not be instructed to self-isolate prior to admission.

Identification of suspected or probable COVID-19 cases

As per the CDNA guidelines for Public Health Units, an individual must meet both clinical and epidemiological risk factors to be considered a suspected or probable case:

Clinical Criteria

- Does the patient have a fever (≥37.5°C) or history of fever (e.g. night sweats, chills)?
- Does the patient have an acute respiratory infection (e.g. cough, shortness of breath, sore throat)?

Epidemiological criteria

In the 14 days prior to illness onset:

- Has the patient had close contact with a confirmed or probable case?
- Have they travelled interstate or internationally?
- Were they a passenger or crew member on a cruise ship?
- Are they a healthcare, aged or residential care worker with direct patient contact?
- Do they live, or have they travelled through a geographically localised area with elevated risk of community transmission?
- Are they a hospitalised patient, where no other clinical focus of infection or alternate explanation of illness is evident?

Patient Preparation

Wherever possible, usual preoperative activities should also be maintained, with consideration for alternative methods for conducting face to face appointments to minimise hospital attendance.

If a patient has recovered from COVID-19, and is considering returning to a high risk setting, such as a hospital for an elective surgical intervention, they should confirm:

- at least 10 days have passed since the onset of acute illness
- they have been afebrile for the previous 48 hours
- acute illness has resolved for at least 24 hours prior to admission
- PCR negative on at least two consecutive respiratory specimens collected at least 24 hours apart and at least 7 days after symptom onset.

Appendix 1: Patient Screen Questionnaire

AFFIX PATIENT STICKER

Name .....

MRN .....

DOB .....

Patients must meet at least one criteria from BOTH clinical and epidemiological risk factors to be considered a probable or suspected case.

Clinical criteria	Yes	No	Notes
Does the patient have a fever (≥37.5°C)?	☐	☐	
A history of fever (e.g. night sweats, chills)?	☐	☐	
Does the patient have an acute respiratory infection (e.g. cough, shortness of breath, sore throat)?	☐	☐	

Epidemiological criteria	Yes	No	Notes
In the 14 days prior to illness onset:			
Has the patient had close contact with a confirmed or probable case?	☐	☐	
Have they travelled interstate or internationally?	☐	☐	
Were they a passenger or crew member on a cruise ship?	☐	☐	
Are they a healthcare, aged or residential care worker with direct patient contact?	☐	☐	
Do they live, or have they travelled through a geographically localised area with elevated risk of community transmission	☐	☐	
OR Are they a hospitalised patient, where no other clinical focus of infection or alternate explanation of illness is evident?	☐	☐	

Completed by: (name)	
Role:	Signed:
Please specify any further actions necessary, or additional COVID-19 related concerns:	

Appendix 2: Testing COVID-19 positive patients prior to elective surgery

This document provides recommendations for the testing of patients who require surgery AND who have previously had a confirmed COVID-19 diagnosis.

While patients scheduled for elective surgery do not require prior testing for COVID-19 or quarantine, there is no statement about how to manage patients presenting for elective surgery or other procedures who have had a recent diagnosis of COVID-19.

Although this is likely to be a small number of patients, it is appropriate to have a process for managing these patients for surgery and other procedures.[3]

NSW Health has requirements for releasing patients from isolation which rely on time from symptoms only, except for anyone who needs to enter a high risk setting (which includes healthcare environments).[1] This requires two negative swabs at least 24 hours apart prior to entering the high risk setting.

The majority of patients scheduled for elective surgery will have been in the community and very few will have had follow up swabs.

Patients who are positive for COVID-19 and require surgery or other procedures should be streamed into a COVID positive surgical/procedural stream.[2]

Recommendation

If patients have had confirmed COVID-19 and met clinical clearance criteria more than 3 months ago, or have had two negative swabs, testing prior to elective surgery or procedures is not required.

Timing of swabs

The initial swab should be done 10-14 days prior to surgery and the result should be available prior to obtaining the second swab.

Clinical priority category 1

Patients who require an elective surgical procedure within 1 month and have had COVID-19 infection within the past 3 months

Defer surgery, where possible, if patient remains symptomatic from COVID 19.

If the patient is symptomatic and surgery cannot be deferred, manage as per positive swab in table below (swab not required).

If asymptomatic from COVID-19 for more than 72 hours and at least 10 days after COVID-19 symptom onset and unable to defer surgery, as a minimum, obtain at least one swab prior to surgery/procedure and treat as per positive swab table below until COVID-19 status is known.

Table 1. Initial Swab result

Positive	⇒ Treat as COVID-19 Repeat swab not required	Admit to COVID-19 unit (contact and droplet precautions) Surgery/procedure to proceed with contact, droplet and airborne precautions for AGPs
Negative	⇒ Repeat swab	See Table 2

Table 2. Follow up swab result (taken at least 24 hours later)

Positive	⇒ Treat as COVID-19	Admit to COVID-19 unit (contact and droplet precautions) Surgery/procedure to proceed with contact, droplet and airborne precautions for AGPs
Negative	⇒ Treat as usual	Admit to usual ward, standard precautions, surgery/procedure as usual

1. NSW Health, COVID-19 – Release from Isolation
2. Royal College of Anaesthetists, Association of Anaesthetists, Intensive Care Society and Faculty of Intensive Care Medicine – Restarting planned surgery in the context of the COVID-19 pandemic
3. Ai Tang Xiao, M.D, Yi Xin Tong, M.D, Ph.D, Sheng Zhang, M.D, Profile of RT-PCR for SARS-CoV-2: a preliminary study from 56 COVID-19 patients, Clinical Infectious Diseases, 2020. https://doi.org/10.1093/cid/ciaa460

Clinical priority category 2

Patients are scheduled for an elective surgical procedure within 90 days. For those who develop COVID-19 within this period:

If asymptomatic from COVID-19 for more than 72 hours and at least 10 days after COVID-19 symptom onset and unable to defer surgery, obtain at least one swab prior to surgery/procedure as above.

If surgery can be deferred:

Table 3. Initial swab result

Positive	⇒	Can surgery be deferred?	Defer surgery/procedure Repeat swab in 14 days If unable to defer, treat as COVID-19 positive
Negative	⇒	Repeat swab	See Table 4

Table 4. Follow up swab result

Positive	⇒	Can surgery be deferred?	Defer surgery/procedure Repeat swab in 14 days If unable to defer, treat as COVID-19 positive
Negative	⇒	Treat as non-COVID-19 If prior swab was positive, repeat swab	Admit to usual ward, surgery/procedure Proceed as usual if two negative swabs

Clinical priority category 3

Patients who require surgery within 12 months and have had COVID-19 in the three months prior to elective surgery.

Defer surgery for at least 3 months from clinical clearance date.

If the patient cannot be deferred, follow the above recommendations for initial and follow up swabs, and subsequent patient management.

If uncertain, consult the infectious diseases unit at your facility for advice about clearance and isolation.

Please note, these recommendations are subject to change based on advice from health authorities.

CDNA National guidelines for public health units

NSW Health Release from Isolation

Document information	
Version number	1
Original publication date	9 June 2020
Developed by	Surgery Community of Practice
Consultation	Anaesthetic CoP, NSW Ministry of Health, Clinical Excellence Commission
Endorsed by	Nigel Lyons
Review date	May 2020
Reviewed by	
For use by	District and Network Chief Executives, Directors of Medical Services, Clinical Directors of Surgery, Surgery Operations Managers, Departments of Anaesthesia and Perioperative Service

TRIM: ACI/D20/1086 ACI_0426 [06/20]