TE AHO O TE KAHU CANCER CONTROL AGENCY

COVID-19 Cancer Surgery Guidance

VERSION 2: Reviewed and reissued 18th August 2021

Te Aho o Te Kahu (Cancer Control Agency) is working closely with clinicians to develop a consistent approach to cancer services during this challenging time. The priority is to support the continuity of cancer services, whilst taking every effort to ensure safety of staff and patients and preventing the spread of COVID-19.

Approach to cancer surgery

Whilst the focus is on preserving the delivery of cancer treatment, we also need to be prepared for scenarios where delivery of care may be compromised. The guidance in this document supports a nationally consistent approach to any changes in treatment.

Considerations include:

- There must be a balance between the risk of cancer not being treated optimally with the risk of illness and spread of COVID-19. This balance of risk is different in New Zealand to other jurisdictions.
- We must consider the impact decisions will have on our most vulnerable cancer patients, Māori and Pacific, and patients with comorbidities.
- This guidance does not preclude the need for clinical judgement and clinicians will need to be having clear discussion on the risks and benefits of treatment, and treatment preferences with their patients.

This guidance is part of whole system planning for cancer care, aligning with radiology, medical oncology, radiation oncology and haematology guidance. The aim is to support the whole of the cancer care pathway to be operating at a consistent level at different hospital capacities.

Equitable delivery of care

Māori and Pacific peoples experience multiple and disproportionate barriers to accessing cancer diagnoses, treatment and care. Consequently, these population groups are frequently diagnosed and receive treatment at a relatively later stage and have worse cancer-related outcomes. The presence of pandemic conditions have been shown to dramatically accelerate systemic drivers of inequity including access to adequate income, shelter and food security. There is good evidence that standardisation of care across treatment pathways reduces inequities[1].

We recognise that any limitation of services for patients based on survivability of their cancer will disproportionately impact Māori and other priority populations. DHBs should actively mitigate the impact of diagnostic and treatment decisions on inequity at all alert levels. This includes **supporting Māori and other priority populations to have a prioritised, efficient, coordinated and streamlined diagnostic and treatment pathway**. As capacity returns, DHBs should continue to strive for equity.

This guidance document fits into a wider framework of activity to mitigate the likely exacerbation of inequities in cancer care in the context of COVID-19. This includes the development of a monitoring framework to drive equity action during the pandemic.

[1] Seneviratne S, Campbell I, Scott N, Shirley R, Lawrenson R. Impact of mammographic screening on ethnic and socioeconomic inequities in breast cancer stage at diagnosis and survival in New Zealand: A cohort study Disease epidemiology - Chronic. BMC Public Health 2015;15(1)

Factors to consider when booking surgical cases

The focus of surgical services during the COVID-19 pandemic must be to continue the delivery of essential cancer care as resources allow. The following need to be considered when booking cases:[2]

1. Risk of progression with delay
2. Impact of such progression
3. Available alternatives
4. Likely outcomes with and without intervention
5. Available resources and potentially competing cases

Throughout the pandemic, surgical options should be selected that have:

1. The shortest hospital stay with the fewest complications
2. The least likelihood of needing critical care or shortest duration in critical care
3. The highest life expectancy and return to best functional capacity
4. The lowest combined utilisation of hospital resources
5. The lowest risk of transmitting SARS-Cov2 to healthcare workers.

Resilience across teams

Surgical units should continue to put plans in place to mitigate the risk to patient care and service delivery if staff were affected by COVID-19. This includes:

- Splitting surgical teams to work within bubbles to reduce the chance of an entire surgical unit being stood down to self-isolate
- Establishing protocols to divert patients to other centres if capacity is reduced for short periods.

Staff, patient and whānau safety

There are concerns regarding the possibility of transmission of COVID-19 between patients, whānau and healthcare staff. RACS and several specialty societies have written guidance on the balance of risk of surgery during the pandemic[3]. International advice may be less relevant to New Zealand surgeons than advice from areas with high community spread.

Certain procedures are associated with increased risk to staff, with head and neck surgeons among the most susceptible group[4]. Therefore, the level of caution in proceeding with some procedures may be greater than for others. Because of the risk of exposure to anaesthetic teams during intubation and extubation, known COVID-19 positive patients should only be offered surgery for service activity level one conditions until recovery[5]. Surgical teams should follow the Ministry of Health recommendations for the use of PPE[6].

[2] Webber, Lawrence. Considerations for HPB surgeons in a complex triage scenario. 2020.

[3] Royal Australasian College of Surgeons. Coronavirus information hub. Royal Australasian College of Surgeons. [Online] 3 April 2020. https://www.surgeons.org/media-centre/coronavirus-information-hub

[4] The Australian Society of Head and Neck Surgery. Guidance for ENT surgeons during the COVID-19 pandemic. The Australian Society of Head and Neck Surgery. [Online] 20 March 2020. http://www.asohns.org.au/about-us/news-and-announcements/latest-news?article=78

[5] Australian and New Zealand College of Anaesthetists. Coronavirus/COVID-19 Resources: CLINICAL RESOURCES. *ANZCA Library*. [Online] Australian and New Zealand College of Anaesthetists, April 2020. https://libguides.anzca.edu.au/covid-19/clinical.

[6] https://www.health.govt.nz/our-work/diseases-and-conditions/covid-19-novel-coronavirus/covid-19-information-specific-audiences/covid-19-personal-protective-equipment-workers/personal-protective-equipment-use-health-and-disability-care-settings

Safety also needs to be considered in the context of delayed or deferred treatment. Departments should consider the following:

- Have robust processes for managing wait lists to ensure patient safety is maintained. There must be timely and clear communication with patients/whānau and primary care, including a point of contact for patients and their whānau.
- Departments must have a process for reviewing wait lists to identify those whose clinical situation is becoming more urgent. Review of referrals should be SMO led and decisions documented and communicated.
- A transparent process for auditing all referrals that have been declined and sent back to GP must be in place and include data by ethnicity.
- Establish options to increase capacity to manage any backlog and anticipated surge. This may include maximising existing human and theatre resources within DHBs.

Multidisciplinary Meetings

Multidisciplinary meetings should continue, noting that the form of meetings may change, e.g. virtual conferences. Clinical teams may face difficult decisions and if resources are constrained, care may deviate from usual pathways. Many of these pathways were already contributing to inequities. It is recognised that in times of stress biases may can be exacerbated, which may impact decision making and increase inequities. These issues should be acknowledged within multidisciplinary meetings. Where a Māori or Pacific patient's care does not follow the usual treatment pathway, the MDM should consider what can be done to maximise the potential for Māori or Pacific health gain and equity.

Outpatient referrals

- Patients meeting the "high suspicion of cancer" definitions with a clinical need to be assessed within two weeks should be accepted at all alert levels[7]. The investigation and diagnosis of these patients should be facilitated.
- We acknowledge the concern that any limiting of services will disproportionately impact Māori. Māori and vulnerable patients, who are likely to have undergone barriers and delays in reaching this point of the pathway, may be given increased priority.
- Virtual clinics should be utilised where possible and appropriate. If a patient requires an in-person assessment or procedure, this should be done in one visit
- Some investigation and treatment may occur in non-hospital settings (e.g. private providers) and alternative methods of triaging or assessing patients should be considered.
- Patients not meeting high suspicion of cancer definitions but still requiring investigation for cancer should be accepted but may receive a virtual care plan or be investigated in non-hospital settings.

Cancer surgery service activity levels

The COVID-19 situation is likely to be ongoing for some time, and as such planning must take a long-term approach. The National Hospital Response (NHR) Framework uses colour-coded alert levels to clearly communicate when a whole-of-hospital adjustment to services is required because of an escalation of the COVID-19 situation. Different DHBs may be at different alert levels on the NHR Framework and hospitals can move up or down the alert levels, as needed. **Note**: DHB alert levels are distinct from the Government alert levels (1-4).

[7] Ministry of Health. Faster Cancer Treatment: High suspicion of cancer definitions. *Ministry of Health.* [Online] April 2016. https://nsfl.health.govt.nz/system/files/documents/publications/high_suspicion_of_cancer_definitions_0.pdf

DHBs should develop plans that allow for regional links to be activated if their local alert levels changes, to allow the care of Service Activity Level 1, 2, and 3 patients to continue. This should include the use of private facilities if available.

Green Alert	Preparation
Yellow Alert	Maintain Service Activity Levels 1, 2, 3, 4 as able
Orange Alert	Maintain Service Activity Levels 1, 2, 3 as able
Red Alert	Maintain Service Activity Levels 1 and 2 as able

To help with consistency across tumour types a list of procedure considered appropriate for Service Activity Levels has been included in Appendix 1.

Service Activity Level 1

Acute/emergency care

- Immediately life threatening
- Bleeding cancers
- Obstructed or perforated bowel cancers
- Cancer causing airway compromise

Service Activity Level 2

Urgent high-risk cancer

- Curative intent
- Unlikely to have major resource implications or ICU requirement
- Limited options for alternative or delaying treatment (time sensitive)
- Examples: inguinal orchidectomy for testicular tumours, imminently obstructing bowel cancer, penile cancer, head and neck cancers, sarcoma surgery

Service Activity Level 3

- Curative intent
- May have resource implications or ICU requirement for a short time eg cystectomy, gastrectomy
- Cannot be safely deferred for more than 3 months as this would affect overall survival
- Examples: bowel resection, mastectomy for HER2 and triple negative breast cancer, rectal cancer after short course radiotherapy, investigation and treatment for most gynaecological cancers

Service Activity Level 4

- Palliative procedures in patients with good functional status
- Curative procedures for slow growing tumour types
- Examples: partial nephrectomy for small renal cancers, minimally symptomatic early bowel cancer

Service Activity Level 5

- Surveillance procedures
- Palliative procedures in patients with marginal/poor functional status

Appendix 1

Note: this is not a comprehensive list of all tumour types and all surgeries, rather a selection of examples to support consistency across tumour types.

Service Activity Level and key principal	**Breast**	**Colorectal**	**Urological**	**Melanoma**	**Thyroid**	**Cardiothoracic**	**Head and Neck**
1) Immediately life threatening		• Bowel obstruction • Overtly bleeding • Perforation	• Bleeding tumours • Acute complications		• Progressive airway symptoms	• Malignant effusion with tamponade not amenable to percutaneous drainage • Obstructive intracardiac tumours • Bleeding or obstructing airway tumours • Infected pleural space with sepsis not amenable to drainage with chest drain • Perforated cancer oesophagus with mediastinal sepsis	• HNC causing airway obstruction or life-threatening haemorrhage (or impending)
	Brain metastases and spinal cord compression in suitable patients across all tumour streams						
2) Curative intent / no ICU needed; clinical urgency		• Symptomatic primary cancer	• Penectomy • Inguinal orchidectomy	• Stage III nodal resections • Bleeding symptomatic tumours	• Proven or suspected anaplastic thyroid cancer • Proven or suspected medullary thyroid cancer	• Node negative lung cancer • Biopsy proven lung cancer <2cm or SPNs • Presumed limited stage node positive lung Cancer on PET suitable for adjuvant treatment	• High risk HNC where delay of >1/12 likely to impact survival • Stage III metastatic HNC (includes SCC/melanoma) • Locally advanced stage I/II oral cancer where deferral > 1/12

					• Proven or suspected ATA high/moderate risk differentiated thyroid cancer • Prophylactic thyroidectomy in MEN2 for those with ATA highest/high risk RET mutation	• Chest wall tumours of high malignant potential not manageable by alternative therapy • Staging to start treatment (mediastinoscopy, EBUS, diagnostic VATS for pleural dissemination) • Mediastinal tumours requiring diagnostic operation to start treatment, diagnosis not amenable to needle biopsy • Early stage Thymic carcinoma • Bulky thymoma	may complicate resection (eg mandible) or lead to unresectability • Upper ADT SCC where tracheostomy/ICU not required • Sinonasal cancer – high grade • Parotidectomy – SCC/melanoma • Neck dissection • Upper ADT High risk SCC where ICU required overnight and cleared by ICU/anaesthesia to be done
3) Curative intent / may need ICU; Deferral would compromise overall survival	• Surgical resection of breast cancers that are endocrine non responsive • Her2 positive, high grade or locally advanced • Low risk and low resource forms of reconstruction or oncoplastic closure only	• Asymptomatic primary e.g NBSP or surveillance detected	• Prostatectomy for high risk prostate cancer • Cystectomy with curative intent • Initial bladder cancer resection • Curative nephrectomy	• T1a and greater Melanoma and High risk cSCC primary excisions +/- SNB		• High risk thoracic surgical resections with early stage lung cancer predicted to require ICU admission e.g. Vo2 max <12 ml/kg/min, PP0 FEV1/DLCO <30%, extensive CV risk factors • Bulky Thymic lesion with myasthenia graves	• Upper ADT High risk SCC where ICU required overnight and not cleared by ICU/anaesthesia to be done • Lower risk HNC where delay of >1/12 unlikely to impact survival • Parotidectomy – adenocarcinoma • Sinonasal cancer – lower grade • HN Skin SCC

4) Curative procedures for indolent tumours; palliative procedures for people with good quality of life	• Surgical resection of remaining types of case, including all types of breast reconstruction, and oncoplastic breast conservation procedures.	• Potentially resectable metastatic disease • Stoma reversal	• Treatment of small renal mass • Palliative nephrectomy or cystectomy • Radical prostatectomy for intermediate risk tumours	• Low risk cSCC, MIS and BCC	• ATA low risk differentiated thyroid cancer • Diagnostic thyroid surgery for indeterminate cytology (Bethesda 3 & 4 nodules)	• Thymoma (non-bulky, asymptomatic) • Predominantly ground glass nodules or cancers • Indolent histology (e.g. carcinoid, slowly enlarging solitary pulmonary nodule) • Pulmonary oligometastases unless clinically necessary for pressing therapeutic or diagnostic indications (i.e. surgery will impact treatment) • VATS pleurodesis for malignant effusions	• Parotidectomy – low grade tumours • Palliative tumour debulking/resection procedures (eg locally curative with palliative intent) • Palliative thyroplasty to minimize aspiration and improve communication.
5) Enhance quality of life; surveillance procedures; palliative procedures for people with poor function	• Revisional and symmetrising surgery	• Exenteration			• Surgery for symptomatic thyroid disease where malignancy has not been excluded	• Pulmonary metastatic disease • Diagnostic VATS for query mesothelioma or malignant effusion with minimal symptoms • High risk thoracic surgical cases with node positive lung cancer or advanced stage or who are PET node positive and not suitable for alternative treatment	• Palliative facial rehabilitation • Secondary reconstructive procedure e.g. grafts, dilatation, thyroplasty, flap debulking