NCCP advice for Medical Professionals on the management of patients undergoing Systemic Anti-Cancer Therapy (chemotherapy) in response to the current coronavirus (COVID-19) pandemic

Overview

Current events surrounding the COVID 19 pandemic are challenging and all public health bodies are placing the safety of patients, staff and communities first in all decisions.

This is an evolving situation. This advice is based on current information, it is additional to the advice of the NPHET, the HSE and the DoH, and will be updated as necessary.

The NCCP acknowledges that each hospital is working under individual constraints, including staff and infrastructure, and as a result will implement this advice based on their own unique circumstances.

The purpose of this advice is to maximise the safety of patients and make the best use of HSE resources, while protecting staff from infection. It will also enable services to match the capacity for cancer care to patient needs if services become limited due to the COVID-19 pandemic.

Any clinician seeking to apply or consult these documents is expected to use independent medical judgement in the context of individual clinical circumstances to determine any patient's care or treatment.

This advice is available on the NCCP website here[1]. The NCCP asks that this advice is not posted on hospital websites or elsewhere due to the risk of out of date versions being in circulation. We would advise that sites wishing to add this advice to their own websites should link directly to the NCCP webpage. This will ensure that the correct version is available.

There is also patient advice on the NCCP website which is available here[2]. This is also updated regularly.

[1] https://www.hse.ie/cancerinfocovid-19hcp

[2] https://www.hse.ie/eng/services/list/5/cancer/news/covid-19.html

Information on COVID-19 vaccination is available online from the HSE here:

https://www.hse.ie/eng/health/immunisation/hcpinfo/covid19vaccineinfo4hps/

Information for cancer healthcare professionals on vaccinations is available on the NCCP website at: https://www.hse.ie/eng/services/list/5/cancer/profinfo/covid-19.html

Receipt of the vaccine (in either healthcare workers or their patients) does not eliminate the need to use appropriate PPE and to adhere to public health advice in relation to COVID-19.

NPHET, HSE and DoH advice:

Hospitals and hospital staff will operate under the overarching advice of the National Public Health Emergency Team (NPHET), the HSE and the DoH. Information is available at:

- HSE HPSC - https://www.hpsc.ie/a-z/respiratory/coronavirus/novelcoronavirus/guidance/
- HSE Coronavirus (COVID-19) - www.hse.ie/coronavirus
- DoH Coronavirus (COVID-19) - https://www.gov.ie/en/campaigns/c36c85-covid-19-coronavirus/

The NCCP has defined a number of principles to underpin the delivery of cancer care, where this needs to be delivered outside of cancer centres or the usual designated place of care. These are outlined on the NCCP website at:
https://www.hse.ie/eng/services/list/5/cancer/proinfo/covid-19.html

Communication with patients receiving Systemic Anti-Cancer Therapy (SACT) (Chemotherapy) for the treatment of cancer

1. Communicate with patients and support their mental wellbeing, signposting to charities and support groups where available, to help alleviate any anxiety and fear they may have about COVID-19.
2. Patients should have the opportunity to discuss and consider the following when suggested by their Consultant:
    - Proposal for a treatment deferral or treatment break
    - Modifications to their treatment to reduce the risk of immunosuppression or reduce the number of day ward attendances required to deliver the treatment
3. Patients who continue to attend for treatment should be:
    - Contacted 24-48 hours prior to their planned SACT appointment to ascertain their COVID-19 exposure status.
    - Advised to follow the relevant parts of the guidance of the NPHET, the HSE and the DoH.
    - Advised to attend appointments without family members or carers, where possible, to reduce the risk of contracting or spreading the infection.

- Visitor Allowance - where possible, patients should have a relative or significant other with them at time of diagnoses, when bad news is being given or at the end of life, if this can be accommodated.
- Advised to contact their dayward acute oncology service if they feel unwell to ensure their symptoms are appropriately assessed.
- Informed as to the steps being taken in the hospital to reduce the risk of infection by:
    i. Minimising face to face contact
    ii. Ensuring that any patients with COVID-19 symptoms are identified for the safety of the patient and others
    iii. Minimising the time patients spend in daywards and waiting rooms

Advice to patients on reducing risk of Covid-19 infection

Patients with cancer should be advised to follow HSE advice on minimising their risk of exposure to COVID-19. Specific advice is available on the HPSC[3] and HSE[4] websites for those at increased risk of severe illness from COVID-19 due to an underlying health condition. Patients should review this advice and begin to take additional precautions from two weeks before their treatment commences. Patients should be advised at the end of treatment as to how long they should continue to follow any additional precautions.

Vaccination is key to reducing risk of severe illness from COVID-19 infection. However, vaccination may not have the same benefits for people who are immunocompromised and additional public health and infection prevention control measures are advisable.

Data indicates that those with severe immunocompromise do not have adequate protection following a primary COVID-19 vaccine course. There is evidence that protection can be enhanced by an additional mRNA vaccine dose, representing an extension of the primary vaccination series.

An **additional vaccine dose**[5] has been recommended for patients with cancer aged 5 years and older who were immunosuppressed at the time of their initial COVID-19 vaccine course. In this patient cohort, a third dose of vaccine is therefore required to complete the primary vaccination schedule

All patients over 12 years of age who are immunocompromised and have received an additional dose, should also be given a **booster dose** a minimum of three months after completion of their primary vaccination course. In most cases, this will be a fourth dose of vaccine.

Please see vaccine section later in document for further information.

[3] https://www.hpsc.ie/a-z/respiratory/coronavirus/novelcoronavirus/guidance/peopleatincreasedriskofsevereillness/
[4] https://www2.hse.ie/conditions/covid19/people-at-higher-risk/

[5] https://www2.hse.ie/screening-and-vaccinations/covid-19-vaccine/get-the-vaccine/weak-immune-system/

Patients, COVID-19 exposure and treatment decisions

Information on the exposure of patients to COVID-19 will inform treatment decisions. The risk of cancer not being treated in line with the original treatment plan must be balanced with the risk of the patient being immunosuppressed and becoming seriously ill from COVID-19.

COVID-19 testing is available to patients commencing or continuing SACT on the clinical recommendation of their clinician.

In terms of COVID-19 exposure patients may:

1. Have active COVID-19 disease – these patients should ideally have their SACT treatment deferred until they are clinically well and no longer infectious. If clinically necessary to continue with treatment during the recommended deferral period, consideration should be given to administering the patient's treatment in isolation, to minimise their contact with other vulnerable patients

    - Immunocompetent patients should have attendance deferred for 10 days from the date of symptom onset (or date of test if asymptomatic), once the symptoms have substantially or fully resolved for the final two days (48 hours) of the 10 day period
    - Immunosuppressed patients should have attendance deferred for 14 days from the date of symptom onset (or date of test if asymptomatic), once the symptoms have substantially or fully resolved for the final two days (48 hours) of the 14 day period.
    - Profoundly immunosuppressed patients should have attendance deferred for 21 days from the date if symptom onset (or date of test if asymptomatic) once the symptoms have substantially or fully resolved for the final two days (48 hours) of the 21 day period. This is due to the possibility of prolonged viral shedding by these patients. These patients should be identified based on an individual risk assessment taking into account severity of illness, ongoing respiratory symptoms, immunocompetence and vaccination status.

2. Have suspected COVID-19 disease as per the HPSC algorithms – these patients should be tested in line with the HPSC algorithm and their treatment deferred. Where there is a strong clinical suspicion of COVID-19, particularly if known to be a contact with a confirmed case, then a negative test result should be interpreted with caution due to the false negative rate. Separately, where testing turnaround time is considerably delayed, patients should be risk assessed as if they have confirmed COVID-19 disease, noting that if clinically well they can resume treatment once 10 days have passed since onset of first symptoms and they are 5 days fever free.

3. Be a close contact of a confirmed case of COVID-19 but have no symptoms.

All patients should ideally have their SACT treatment deferred until the 7 days since last contact with a positive case[6] has passed, unless it is deemed necessary by the treating Consultant that the treatment should proceed, considering the risk:benefit ratio of treatment. If proceeding with treatment, the patient should ideally receive their treatment in isolation from other patients receiving treatment. If the patient needs to attend for treatment during this time, they should perform an antigen on the morning of attendance if able to do so. If they are unable to perform a test, they should have a test (antigen or PCR) performed on arrival and avoid contact with others until the result is available.

4. Have had no known exposure - these patients should continue with their SACT treatment in line with the recommendations in the proceeding sections.

Use of facemasks by patients in ambulatory care settings

1. Patients should be reminded that hand hygiene and social distancing remain the key measures by which they can protect themselves and others from COVID-19.
2. Face masks are recommended for everyone attending a healthcare setting.

    - Respirator masks (FFP2) should also be offered to patients in multi-bed or open areas who are able to wear them[7]. Patients who cannot tolerate a respirator mask should be provided with a surgical mask.

There is information on how to use a face covering available on the HPSC website[8]

Advice for Oncology/Haematology SACT Day Ward and Inpatient Wards Services

1. Consult the most up-to-day information for health care professionals on the HPSC website[9] and link with your local infection prevention and control team for specific advice.
2. Operate under the hospital advice.
3. All patients who are admitted to an acute hospital for an overnight stay must be tested for COVID-19 as per hospital policy.
4. Patients receiving supportive care treatment only should have their treatment deferred based on the recommendation of their treating Consultant considering the risk: benefit ratio of treatment.

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[6] Note that due to current turnaround time for testing, contacts of suspect cases should be treated as contacts of confirmed cases for this risk assessment, rather than having a focus on the test result. This will be kept under review.

[7] https://healthservice.hse.ie/staff/coronavirus/policies-procedures-guidelines/prevent-the-spread-of-coronavirus-in-the-workplace.html#:~:text=Healthcare%20workers%20should%20wear%20respirator%20masks%20(FFP2)%20in%20settings%20where,primary%20care

[8] https://www2.hse.ie/conditions/coronavirus/face-masks-disposable-gloves.html

[9] https://www.hpsc.ie/a-z/respiratory/coronavirus/novelcoronavirus/guidance/

5. Patients receiving treatment for their cancer should continue treatment based on the recommendation of their treating Consultant considering the risk: benefit ratio of treatment. This should consider:
    a) The intention of treatment - balancing the risk of cancer not being treated in line with the original treatment plan with the risk of the patient being immunosuppressed[10] and becoming seriously ill from COVID-19.
    b) The level of immunosuppression associated with the proposed treatment and cancer type, and any other patient-specific risk factors particularly those with respiratory disease in addition to their cancer
    c) Patients with significant lymphocytopenia
6. Inpatient Oncology/Haematology wards: Hospitals should maintain their inpatient Oncology/Haematology wards to allow patients to continue to be cohorted appropriately. These wards may be relocated during the COVID-19 situation.
7. Out-patients / Day wards
    a) Minimise face-to-face contact by:
        - Implementing telephone or video consultations (particularly for follow-up appointments and pre-treatment consultations) in line with the State Claims Agency Risk Advisory Notice - Providing Telehealth: Virtual Sessions
        - Deferring non-essential face-to-face follow up
        - Using community/home delivery services for medicines if capacity allows
        - Using local services for blood tests if possible.
        - Hospitals should consider off-site or physically separate phlebotomy services for cancer patients on SACT treatment not requiring day ward attendance
    b) Minimise time in the day ward waiting area by:
        - Implementing a two day treatment model[11], whereby patient assessments (consider virtual) and blood tests (consider community services options, GP, Community Intervention Team, Public Health) are conducted on the day prior to treatment to improve patient flow and decrease wait times. Where possible, bloods would be taken in community in advance of treatment day and the patient review undertaken utilising telehealth or a virtual consultation.
        - Careful scheduling
        - Encouraging patients not to arrive early
        - Texting patients when you are ready to see them, so that they can wait in a lower risk environment e.g. their car.
    c) Consider relocating SACT day wards to a site that can maintain a COVID-19 free environment and has an entrance for patients that is not shared with patients attending other areas of the hospital.
        - Clear governance arrangements should be in place where day wards are relocated or patients treatment location is moved

[10] Patients may have their treatment plan modified to reduce the risk of immunosuppression

[11] NCCP Oncology Medication Safety Review 2014 – recommendation 14

d) SACT day wards should be reconfigured to maintain the social distancing as advised. It is acknowledged that this may result in a decrease in chairs available for treatment in some cases.
e) Contact patients 24-48 hours prior to their planned SACT appointment to ascertain their COVID 19 exposure status.
f) Consider triaging patients attending for chemotherapy in a separate area to the day ward. This triage should include confirming their COVID-19 exposure status and a temperature check.
g) Day wards should implement options to isolate patients (as detailed in Section 4 Patient and COVID-19 exposure) who are defined as a 'close contact' from other patients.
h) Consideration must also be given to the patient's means of transport to the unit, with shared transport alongside other patients to be avoided during the 7 day 'close contact' follow up.

8. Isolation facilities[12] should be prioritised for patients:
   a) With significant lymphocytopenia
   b) With significant respiratory co-morbidity

   If there are insufficient isolation facilities available, patients should be prioritised according to the expected treatment benefit.
9. If a SACT service experiences capacity issues[13] due to the COVID-19 pandemic then patients should be prioritised based on treatment intent and the risk: benefit ratio of treatment. Priority should be given to the continuation of treatment for those with curative intent, including, where necessary, the transfer of a patient to an alternative location to continue treatment.

Advice on future delivery of Systemic Anti-Cancer Therapy Services

Cancer services in hospitals have put many steps in place to adapt and respond to the initial challenges of dealing with COVID-19, many of which meant that a reduced and/or modified service was available. As hospitals emerge from the current surge in the COVID-19 case numbers, there will be unique challenges in returning to previous service levels while continuing to respond to the constraints of the COVID-19 pandemic.

Cancer services need to consider the following areas when agreeing SACT future delivery steps as certain deferred services resume and increased diagnosis of and surgical treatment of cancers is predicted.

1. Patients and treatment scheduling

The next phase will see patients re-enter the hospital system who may have had delays/ deferrals to their ongoing treatment. It is important to continue to communicate with these patients and to consider the individual risk: benefit ratio of SACT when making treatment decisions with patients.

[12] Access to isolation facilities to facilitate SACT treatment, particularly in the in-patient setting, may be limited depending on service demands.

[13] Such as limited resources (workforce, facilities, intensive care, equipment)

1. Consideration will be required for the COVID-19 exposure of patients[14] and options on the cohorting of patients for treatment, where appropriate, to minimise on-going risk of transmission. In all cases, national guidance should continue to be adhered to as appropriate in your service.
2. Patients should continue to be triaged 24 - 48hours prior to their planned SACT appointment.
3. Hospitals should embed the two day model of pre-SACT treatment bloods utilising community services.
4. Scheduling of assessments and appointments should ensure minimal waiting times for patients in communal waiting areas.

2. Infrastructure

a. Physical distancing measures will need to remain in place. This may require reconfiguration of day wards which may result in loss of capacity.
    i. Additional space and extended opening hours/days may be required to ensure that capacity is maintained.
b. Waiting rooms may also require reconfiguration.
c. Reconfiguration/ Relocation of day wards should consider;
    i. The requirement for isolation capacity including an option to create additional isolation capacity utilising existing chair/bed space.
    ii. Ensuring that the entrance is not shared with patients attending other areas of the hospital.
d. A triage area is required in a separate area to the day ward for the triage of patients attending the day ward.
e. Co-location of oncology day wards and oncology outpatients is recommended.
f. Where patients are required to attend the hospital for phlebotomy services these services should be provided in an area which supports physical distancing and minimal waiting times.
g. Telemedicine should remain in place for outpatient clinics and assessments where appropriate.
h. Inpatient beds allocated to cancer services should be cohorted.

Advice on COVID-19 vaccinations and patients with cancer

Patients with cancer have an increased risk of severe Covid-19. Clinicians should advise all patients with cancer to avail of the vaccine as soon as it is offered to them unless clinically contraindicated.

[14] Patients may have no suspicion of COVID-19 exposure or may have active COVID-19 disease, suspected COVID-19 disease or be a close contact of either a suspected or confirmed case of COVID-19

Additional dose

An **additional mRNA vaccine**[15] dose should be given to those aged 12 and older with immunocompromise associated with a suboptimal response to vaccines who have completed their primary course, regardless of whether the primary course was of an mRNA or an adenoviral vector vaccine. This is an extended primary vaccination course. The additional vaccine should be given after a minimum interval of two months following the last dose of an authorised Covid-19 vaccine. The additional vaccine dose is recommended for patients who have undergone stem cell transplantation in the 12 months prior to their initial vaccine course.

Patients with cancer affected include:

- all patients with advanced or metastatic cancers
- haematological cancer - receiving treatment, pending treatment, or within 5 years of treatment
- All cancer patients receiving (or within 6 weeks of receiving):
  - systemic cytotoxic chemotherapy
  - targeted therapy
  - monoclonal antibodies or immunotherapies
  - surgery or radical radiotherapy for lung or head and neck cancer

Children aged 5-11 years[16]:

An additional dose should be given to those aged 5-11 years with immunocompromise associated with a suboptimal response to vaccines at the time of vaccination, who have completed their primary course – this is an extended primary vaccination course. The additional vaccine should be given after at least 28 days following the second dose.

These additional doses will be given through HSE vaccination centres, or hospitals for inpatients and GPs may also vaccinate some people.

In these patient cohorts, a third dose of vaccine is required to complete the primary vaccination schedule.

[15] https://www2.hse.ie/screening-and-vaccinations/covid-19-vaccine/get-the-vaccine/weak-immune-system/

[16] https://rcpi-live-cdn.s3.amazonaws.com/wp-content/uploads/2021/12/NIAC-Recommendations-on-COVID-19-vaccination-for-children-aged-5-to-11-years.pdf

Booster dose

An mRNA **booster vaccine dose** is recommended for those aged 12 and older who are immunocompromised and have received an additional dose,after a minimum interval of three months.

For those with immunocompromise associated with a suboptimal response to vaccines who have completed a three dose primary series, this will be a fourth dose of vaccine.

Those who have had COVID-19 after their additional dose but need a booster dose will need to wait:

- 3 months after symptoms started or from positive test result for those aged 16 or older
- 6 months after symptoms started or from positive test result for those aged 12 to 15

https://www2.hse.ie/screening-and-vaccinations/covid-19-vaccine/get-the-vaccine/covid-19-vaccine-booster-dose/

On the 5th April 2022, the National Immunisation Advisory Committee (NIAC)[17] have advised a second booster for:

- Those aged 65 years and older
- Those aged 12 years and older with immunocompromise associated with a suboptimal response to vaccines

These recommendations are yet to be operational and this advice document will be updated once the recommendations have been operationalised.

FAQs for Healthcare Professional – Covid-19 Vaccination for Adult Patients with Cancer are available on the NCCP website[18].

A **Patient FAQs** document on Covid-19 and Cancer Treatment is also available on the NCCP website[19].

Staffing and Capacity

Hospitals should maintain their cancer services staff to support the running of the cancer service.

Cancer services staff should be maintained where possible or prioritised for return from re-deployment as appropriate to the ongoing service demands associated with COVID-19 in each hospital[20]. Additional resources may also be required to scale up services that have been deferred during the initial COVID-19 response.

[17] https://rcpi-live-cdn.s3.amazonaws.com/wp-content/uploads/2022/04/20220405-NIAC-Recommendations-Medium-Term-Strategy-for-COVID-19-Vaccination-Programme-including-Second-Booster.pdf
[18] https://www.hse.ie/eng/services/list/5/cancer/profinfo/covid-19.html
[19] https://www.hse.ie/eng/services/list/5/cancer/news/covid-19.html
[20] https://www.hse.ie/eng/staff/workplace-health-and-wellbeing-unit/covid-19-guidance/

Guidance has been published on the 'Derogation for the Return to Work of Healthcare Workers (HCWs) who are essential for Critical Services' on the HSE website[21],[22] and the related NCCP guidance document[23].

Service reconfiguration as a result of the requirements outlined above will require additional staffing to support the return to previous service levels and to maintain those service levels in the future.

[21] https://www.hse.ie/eng/staff/workplace-health-and-wellbeing-unit/covid-19-guidance/derogation-for-the-return-to-work-of-healthcare-workers.pdf
[22] https://www.hse.ie/eng/staff/workplace-health-and-wellbeing-unit/covid-19-guidance/quick-guide-for-healthcare-worker-management.pdf
[23] https://www.hse.ie/eng/services/list/5/cancer/profinfo/derogation%20interpretation.pdf