NCCP Guidance on the Management of Acute Capacity Challenges in Systemic Anti-Cancer Therapy Ambulatory Day Units

<table>
<thead>
<tr>
<th>Version</th>
<th>Date published</th>
<th>Amendment</th>
<th>Approved By</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8th December 2022</td>
<td></td>
<td>COVID-19 SACT Advisory Group and NCCP Executive Management Team</td>
</tr>
</tbody>
</table>

All comments and feedback are welcome at oncologydrugs@cancercontrol.ie

Use of this document is the responsibility of the user and is subject to HSE’s terms of use available at http://www.hse.ie/eng/Disclaimer

This information is valid only on the day of printing, for any updates please check https://www.hse.ie/eng/services/list/5/cancer/proinfo/medonc/sactguidance/
# Table of Contents

1. Introduction .................................................................................................................. 3
2. Scope................................................................................................................................. 4
3. Options for the Acute Management of Capacity in Medical Oncology and Haematology Ambulatory Day Units ........................................................................................................ 4
   3.1 Procedures undertaken in the Ambulatory Day Unit ............................................ 4
   3.2 Extending working hours ..................................................................................... 5
   3.3 Off-site Additional Medical Oncology/Haematology Ambulatory Day Unit ...... 6

Appendix 1. National strategies/reports .............................................................................. 9
Appendix 2. Policies, procedures, protocols and guidelines (PPPGs) .............................. 11
References:........................................................................................................................ 12
1 Introduction

Systemic Anti-Cancer Therapy (SACT) involves the systemic treatment of cancer including, but not limited to chemotherapy, targeted therapies and immunotherapies. SACT is primarily delivered in 26 acute hospitals nationally, including nine cancer centres, either as a day patient or for more complex treatments, as an in-patient. Each of these hospitals has one or more ambulatory day units for the assessment and management of patients and administration of SACT, including oral anti-cancer medicines (OAMs) and supportive care. The ambulatory day units may provide care for medical oncology patients or haematology patients or a combination of both.

It is estimated that the number of patients receiving SACT for the treatment of their cancer will grow by 42-48% between 2015 and 2025 (1). The use of SACT has increased significantly over the past ten years, with a variety of new and effective therapeutics becoming available that has led to improved cure rates and long-term remission rates, better quality of life and longer survival (2).

Capacity issues in ambulatory day units have been and continue to be a concern to the NCCP. It is estimated that these units have been working at 20% over capacity on a daily basis for the past number of years (3). There are a number of contributing factors to these capacity issues, including but not limited to;

1. The incidence and prevalence of cancer are growing (4).
   a. The number of patients receiving SACT is increasing (5). The NCRI estimates that the number of patients requiring SACT will increase by 58-81% between 2015-2045.
   b. Survival rates have improved (2). Improved patient outcomes often require patients to receive long-term SACT or receive subsequent treatment for a recurrence of their cancer or new cancers, which has increased the demand for SACT in Ireland.
   c. Staffing has not increased in parallel with the growing numbers of patients.

2. The availability of SACT treatment options has increased with many taking longer to administer to the patient. Treatment regimens are often complex comprising of multiple drugs and supportive therapies.

3. Limited infrastructure investment to increase capacity in recent years.

4. Reduction in treatment spaces in 2020 to facilitate social distancing as a result of COVID-19.

5. The delay in the referral pathway experienced during COVID-19 and the HSE cyber-security breach is expected to result in surges of referrals of patients requiring SACT, potentially causing waiting lists for some hospitals (6). This is resulting in some patients being diagnosed at a later stage resulting in an increased complexity of care.
Given the existing and ongoing challenges with capacity in ambulatory day units, it is important to consider options for managing acute capacity issues, when they arise, in the short to medium term. These options may need to be utilised if circumstances change acutely, for example staff shortage, to ensure patient treatment can continue without undue delay. This document lists some of the options and considerations that may be utilised in an ambulatory day unit when facing an acute capacity challenge.

2 Scope
It is important to note that capacity is a recognised challenge for Ireland’s acute hospitals and a number of national strategies, reports and reviews support the need to improve medical oncology and haemato-oncology ambulatory day unit capacity. These are detailed in Appendix 1.

This document focuses on options for the management of acute capacity issues, and does not obviate the need for a long-term solution to SACT delivery capacity.

3 Options for the Acute Management of Capacity in Medical Oncology and Haemato-oncology Ambulatory Day Units
There are a number of potential solutions that could be implemented quickly to positively impact on capacity issues. The solutions to address the capacity issues in the short to medium term will be site specific. Capacity within hub and spoke configurations should be utilised where available.

3.1 Procedures undertaken in the Ambulatory Day Unit
When managing an acute capacity challenge, it is worthwhile considering whether any activities currently undertaken in the ambulatory day unit are impacting on SACT delivery and whether they could be undertaken in a different location.

The following could be considered:

1. Restrict use of ambulatory day unit treatment chairs/beds to the treatment of patients with cancer, prioritising the administration of parenteral SACT.

2. Consider whether the following tasks occur in treatment chairs/beds and if they could be undertaken in a different location:
   a) Treatment for non-malignant conditions
   b) Pump disconnections
3. Where possible, utilise community services (7).

4. Undertake oral anti-cancer medicine (OAM) clinics in a designated space that does not impact the delivery of parenteral SACT.

5. Consider cohorting patients on suitable subcutaneous treatments to an area that does not impact on delivery of parenteral SACT.

6. Where not already in place, consider utilising the two-day treatment model, whereby patient assessments and/or blood tests are conducted on the day prior to treatment (or up to a maximum of 72 hours) (8).

7. Minimise administrative space allocated in the clinical area of the day ward.

3.2 Extending working hours

Extending working days and/or opening day units at the weekend may be an option for increasing capacity. There are a number of considerations when extending working hours, including but not limited to:

1. Workforce requirements including nursing, medical doctors, pharmacy, laboratory, clerical, security, portering, cleaning, etc. The roles of all staff should be clearly documented.

2. Patient and regimen selection.

   Certain patients and regimens may be more amenable to treatment outside core hours. This will vary locally and will depend on services available and the agreed staffing complement. Specific considerations may be:

   a) Patients who are stabilised on long-term/lifelong parental SACT treatment may be more appropriate for treatment outside core hours, as they likely require less resource-intensive monitoring/supportive care.

1 Serum blood/urine analysis should be within acceptable parameters, no more than 72 hours prior to commencement of the next cytotoxic drug administration.
b) Consider the length of treatment, supportive care and workup for the regimen. For example, CISplatin containing regimens require more supportive care and monitoring than a single agent trastuzumab regimen.

c) Consider the cost and stability of the SACT as well as the availability of pharmacy services. High cost products with a short stability are unlikely to be useful for administration outside core hours due to an increased risk of wastage. Low cost agents that can be prepared in advance or outsourced to a third party provider and stored on the ambulatory day unit may be more appropriate. Extra storage facilities may also need to be considered.

3.3 Off-site Additional Medical Oncology/Haemato-oncology Ambulatory Day Unit

Setting up an off-site additional ambulatory day unit may be considered to address acute capacity challenges. This type of facility would be an extension of the acute hospital medical oncology and haemato-oncology ambulatory day unit.

This off-site additional unit is for the management of an acute capacity issue; its intention is not to facilitate treatment of patients closer to home. This is in contrast to SACT outreach and Type 4 facilities as outlined in the NCCP Draft SACT Model of Care 2021 (9), which are medium to long-term approaches to increase capacity.

There are a number of considerations when setting up an off-site additional ambulatory day unit, including but not limited to:

1. Location.
   a) The unit should be geographically close to the acute hospital so as not to impact existing patient accessibility.

2. Workforce requirements including nursing, medical doctors, pharmacy, laboratory, clerical, security, portering, cleaning, etc. The roles of all staff should be clearly documented.

3. Governance.
   a) The governance of the off-site additional ambulatory day unit in relation to the acute SACT hospital must be clearly documented.

   b) If outside of the governance of the SACT hospital, please refer to the NCCP Guidance on the Provision of Parenteral SACT and Supportive Care in Community Services (7).

   c) Governance arrangements need to remain cognisant of the fact that the overall responsibility for the patient remains with the medical oncologist or haematologist and the SACT hospital.

4. Patient and regimen selection.
Certain patients and regimens may be more amenable to treatment in an off-site additional ambulatory day unit. This will vary locally and will depend on services available and the agreed staffing compliment at the additional site. Specific considerations may be:

a) Patients who are stabilised on long-term/lifelong parental SACT treatment may be more appropriate for treatment at the additional ambulatory day unit as they may require less resource intensive monitoring/supportive care.

b) Consider cohorting patients on lower complexity SACT to treat in the off-site location potentially on specified days such as bisphosphonates, sub-cutaneous daratumumab or trastuzumab.

c) Consider the length of treatment, supportive care and workup for the regimen. For example, CISplatin-containing regimens require more supportive care and monitoring than a single agent, subcutaneously administered medicine such as trastuzumab.

d) Consider the cost and stability of the SACT as well as the availability of pharmacy services. For example, high cost products with a short stability may be less amenable to administration at an off-site location due to an increased risk of wastage. Low cost agents that can be prepared in advance or outsourced to a third party provider and stored at the off-site ambulatory day unit may be more appropriate. Extra storage facilities may also need to be considered.

5. Pharmacy supply arrangements.

a) Hospital pharmacies can supply SACT for administration in the off-site location. This should be documented appropriately in the relevant policies, procedures, protocols and guidelines (PPPGs).

b) It may be possible to outsource supply to a third party provider for certain medicines.

6. Policies, Procedures, Protocols and Guidelines (PPPGs) (see Appendix 2 for more detail).

a) Local SACT hospital PPPGs and National Guidance, where available, should be followed e.g. risk management, general data protection regulation (GDPR), incident reporting.

b) PPPGs must be in place for the management of SACT, including side effects. This should include reference to the acute oncology services (AOS\(^2\)) pathway and the NCCP Oncology Medication Safety Review Report (2014) recommendation on PPPGs (8).

7. Data reporting.

\(^2\) Acute Oncology Services (AOS) refers to the unscheduled care of medical oncology and haematological patients.
NCCP Guidance on the Management of Acute Capacity Challenges in Systemic Anti-Cancer Therapy Ambulatory Day Units | V1

a) The medical oncology KPI\(^3\) should be collected, and reported, as per standard practice in all SACT hospitals.

b) Hospital In-Patient Enquiry (HIPE) data should be recorded as per standard practice in all SACT hospitals.

8. Emergency equipment and pathways must be available (with corresponding PPPGs) including kits to deal with spillages and extravasation of SACT.

9. Consider access to relevant ICT systems and, where this is not possible, consider how electronically reported information will be conveyed.

\(^3\) Medical Oncology KPI: For patients receiving a new parenteral systemic therapy in the day ward setting, the timeline between the date that it is agreed that the patient is deemed ready to treat and the administration of the new parenteral systemic therapy will not exceed 15 working days. This include haemato-oncology patients.
Appendix 1. National strategies/reports

National Development Plan 2021-2030*: calls out the need for expansion and improvement of medical oncology units and day wards and investment in aseptic compounding infrastructure in line with the National Cancer Strategy 2017-2026.

Draft Systemic Anti-Cancer Model of Care (9): describes the need for devolvement of lower complexity SACT to be delivered in an appropriate location closer to the patient’s home. This may be in Type 3 or Type 4 SACT services in a SACT Outreach setting. This supports the patient experience and also creates capacity in the Type 1 and Type 2 SACT hospitals for more complex SACT regimens, including the centralisation of certain SACT services.

Guidance on the Built Environment of a haematology/oncology day ward (10): describes the necessary facilities and layout of an ambulatory day unit which will facilitate the delivery of high quality, safe patient care and enhance the patient experience. A well designed day unit can also facilitate efficient patient flow. The guidance should be used in planning new developments and major refurbishments. It should also be used to audit existing facilities and identify possible short term improvements that can be made with appropriate funding.

The National Cancer Strategy 2017-2026 (2): states that current services are coming under pressure and patient numbers will continue to increase. A rolling plan of capital investment will be required to ensure that high quality facilities are available for patients and staff, that our health personnel can progress in line with developments in cancer worldwide and that the potential for on-going improvements in outcomes is maximised. This rolling plan for capital investment must place SACT services as a priority.

Sláintecare (11): The Sláintecare vision is to achieve a universal single-tier health and social care system where everyone has equal access to services based on need. Its slogan is ‘Right Care. Right Place. Right Time’. At the moment, this vision may not be achieved for SACT services where day unit facilities are suboptimal, space is lacking and impacting on the timely access to SACT.

NCCP Oncology Medication Safety Review Report 2014 (8): is an assessment of ambulatory day unit medication policies and practices in the 26 SACT hospitals, from a patient safety and quality perspective. The review identified the following key points highlighting that the existing standards in ambulatory day units were variable and that there was evidence of overcrowding:

- Some hospitals had adapted facilities and others have purpose built units.

NCCP Guidance on the Management of Acute Capacity Challenges in Systemic Anti-Cancer Therapy Ambulatory Day Units | V1

- It was apparent that the designated day unit space in some hospitals was never intended to cater for the volume of patients currently attending the service.
- There was wide variation in the space allocated to each cubicle/treatment bay. In some units, there was less than a metre between patients receiving treatment.
- A number of day units had no specified areas for preparation of medicines.
- Only eleven units had designated isolation facilities.
- The space available for waiting areas also varied, with patients in some units waiting in corridors, while other units had designated waiting areas.

Midterm Capital Funding Review NCCP Submission Cancer Day Ward Facilities for Systemic Anti-Cancer Therapy (Oncology/Haematology Oncology Day Wards) (3): This report highlights that all day units are currently operating at 20% beyond the capacity they were designed to accommodate. An increase in capacity of 70-100% to be achieved by 2025 on an incremental basis is recommended in this report. This recommendation considers the 2014 Review and the increasing patient numbers.

COVID-19: Patients on active cancer treatment are considered to be among the ‘extremely medically vulnerable’ and potentially at higher risk of COVID-19 associated morbidity and mortality. In response to the COVID-19 pandemic and in planning for the probable emergence of other novel viruses in the future, SACT services must be modelled for increased capacity, not simply for the estimated increase in patient numbers, but also to allow for physical distancing and isolation where necessary.

The measures taken by ambulatory day units to reduce the risk of virus transmission resulted in reduced capacity to allow for physical distancing.

5 https://www.hpsc.ie/a-z/respiratory/coronavirus/novelcoronavirus/guidance/vulnerablegroupsguidance/
Appendix 2. Policies, procedures, protocols and guidelines (PPPGs)

Agreed policies, procedures, protocols and guidelines (PPPGs) must be in place as appropriate to the SACT service and associated acute SACT hospital(s). These PPPGs should align to national advice, guidelines and regimens where available. The following areas at a minimum should be detailed in the PPPGs put in place locally:

1. The management and administration of patients during their SACT treatment, including discharge or onward referral.
2. The range of services, including treatments that can be safely and appropriately provided in the SACT facility.
3. Patient selection criteria relevant to the SACT facility.
4. The roles and responsibilities for staff, including staff in off-site additional ambulatory day unit and hospital settings.
5. The education and training requirements of staff.
6. Communication pathways between health professionals in off-site additional ambulatory day unit, as well as with the acute referring hospital.
7. Information and education to be provided to the patient.
8. Contact details to be provided to patients, including phone numbers for advice and emergencies.
9. The accessing, recording and transmission of patient data both on paper and electronic systems, as appropriate to the service.
10. The management of adverse incidents and near misses. This will include the reporting of such incidents in line with HSE policies. Risk management must also be conducted to ensure that the service adequately plans for potential risks.
11. Referral to medical oncology/haematology services or acute oncology services, including out of hours services, when necessary.
12. The collection and disposal of clinical and cytotoxic waste products. This includes the management of cytotoxic spillages.
References: