



Telechemotherapy Procedure

1. Guiding Principles

This procedure provides recommendations for WA Country Health Service (WACHS) staff involved with the safe handling of cytotoxic drugs and the delivery of low risk systemic anticancer therapy (SACT) to medical oncology and haematology patients via telehealth. The following processes are aligned with current evidence based practice and drawn from national resources including the [Cancer Institute NSW, Cancer Treatments Online - eviQ¹](#), The [Clinical Oncology Society of Australia \(COSA\)²](#), and the [COSA Clinical practice guidelines for TeleOncology³](#).

TeleChemotherapy is a model of care that enables regional medical oncology and haematology patients to receive low risk cancer treatments at a local site with the support of specialist clinicians based at a metropolitan cancer centre via video supervision. The processes outlined in this procedure are intended to be a resource for WACHS staff. When care requires specific processes or procedures that may vary in practice across particular sites, staff should seek guidance from senior clinicians and refer to local policy and procedure.

2. Procedure

The [Queensland remote chemotherapy supervision guide \(QReCS\) \(2019\)⁴](#) has been endorsed by COSA and WACHS. Components of this procedure have been modified from the QReCS model to accommodate a regional WA perspective.

This procedure is to be read in conjunction with The Australian Commission on Safety and Quality in Health Care National Safety and Quality Health Service Standards [User Guide for Medication Management in Cancer Care 2020⁵](#).

2.1 Low Risk Anticancer Therapy

For the purpose of this procedure and with a relatively low to medium risk of complications, including those not normally expected to produce hypersensitivity and vesicant reactions, can be administered via TeleChemotherapy. The range of treatments provided at regional TeleChemotherapy facilities should increase gradually, as per [section 2.2](#).

2.2 Staged Approach

Low-risk SACT protocols considered suitable for administration via the WACHS TeleChemotherapy service will be determined by the WACHS Cancer Clinical Governance Group (CCGG). The CCGG will meet monthly and determine timelines for moving between stages (outlined below) and the addition of protocols which may subsequently include combination therapy.

- Stage 1- Low Risk
 - First cycle has been administered at a cancer centre without adverse event
 - Short Infusion time (approximately 4 hours or less)
 - Single drug (includes cytotoxic, monoclonal antibodies and immunotherapy)
 - Non vesicant drugs
- Stage 2 – Medium Risk
 - Medium Infusion time (4 – 6 hours)
 - One or two drugs
 - First cycles (approved by WACHS CCGG) possible
- Stage 3 – High Risk
 - Medium to high infusion time (greater than 6 hours)
 - Multiple drugs
 - Device connection (infusor)
 - Special instructions/consideration (e.g. extravasation, acute reaction)

2.3 Treatment Exclusion

TeleChemotherapy is a low risk medical oncology/haematology service and the following SACT protocols will not meet the criteria for referral:

- Protocols delivered via intrathecal, intracavity or intravesical routes.
- High risk of grade 3 and 4 toxicities.
- High risk of dose limiting side effects that may require a dose adjustment.
- High risk of adverse drug reactions.
- Vesicant drugs (in stage 1).
- Protocols that involve complex premedication, supplementary or inpatient hydration requirements.
- Medications with short expiry dates that cannot be compounded and delivered to a recipient site within required timeframes.

2.4 Patient Eligibility

The medical oncologist/haematologist is to consider the patient medically suitable to receive treatment via the WACHS TeleChemotherapy service and complete a comprehensive eReferral.

The review, acceptance and triage of new patient referrals will be completed by the regional Clinical Nurse Consultant-Oncology Coordination (CNC-OC), in collaboration with the regional TeleChemotherapy team and treating medical oncologist/haematologist.

If the CNC-OC is unavailable another chemotherapy competent nurse will act as a delegate.

If there is any uncertainty related to the suitability of a patient or protocol for a TeleChemotherapy service this is to be discussed with the WACHS CCGG.

The patient assessment is to include:

- Baseline performance status assessed against the Eastern Cooperative Oncology Group (ECOG) scale ⁶ (is to be 0, 1 or 2).
- Prognosis.
- Age and comorbidities.
- Lifestyle behaviours.
- A willingness to attend appointments and comply with treatment.
- An understanding of side effects that are potentially serious and require urgent medical attention.
- Language and cognition.
- Cultural and spiritual needs.
- Support networks.
- Transport requirements and proximity to a hospital with acute care facilities.
- Supporting healthcare professionals involved (specialists, community GP, ACCHS, local regional hospital).

When appropriate and with the consent of the patient, include Aboriginal Liaison Officers (ALO) and Aboriginal Health Workers (AHW) to ensure cultural advice is incorporated and considered during patient assessment.

2.5 Patient Exclusion

Patients **not** suitable for the WACHS TeleChemotherapy service include:

- Patients who have not been referred to the service or whose referral has not been triaged and accepted.
- Current inpatients.
- Paediatric patients.
- Patients with a rapidly progressive disease who require treatment as a matter of urgency.
- Patients who require treatment for an oncological emergency.
- Patients receiving end of life care.
- Patients with uncontrolled pain.
- Patients at risk of acute haemorrhage.

Patients are to receive their treatment at the metropolitan cancer centre if:

- they do not meet referral criteria at the point of diagnosis
- there is a subsequent change in ECOG
- there is a change in treatment plan not suitable for delivery via the WACHS TeleChemotherapy service.

2.6 Patient Pathway to the WACHS TeleChemotherapy Service

The pathway for referring regional patients with a cancer diagnosis to medical oncology/haematology services is outlined in the [WACHS Referral to Regional Cancer Centres Medical Oncology Services Procedure](#) and the WACHS Referral to Regional Cancer Centres Haematology Services (pending). If eligible, the following processes are to occur prior to the delivery of any SACT via the WACHS TeleChemotherapy service.

- Patient is to have a pre-treatment review with the medical oncologist/haematologist face to face or via telehealth.
- AHW and ALO are to be included when appropriate at the earliest possible point in the patient's pathway.
- Completion of consent and documentation in the patient medical record as per [section 2.7](#).
- The patient and caregiver(s) are to be provided with information outlining the advantages and disadvantages of the WACHS TeleChemotherapy service and the likely outcomes if those disadvantages occur.
- The patient is to be scheduled for treatment at a metropolitan cancer centre and completes the first cycle with no recorded adverse events.
 - At the discretion of the medical oncologist/haematologist the patient can be considered appropriate to receive the first cycle at a TeleChemotherapy site with approval by the WACHS CCGG.
- The patient is to be provided the choice of TeleChemotherapy for the continuation of treatment when clinically appropriate.
- The medical oncologist/haematologist is to complete an eReferral to the WACHS TeleChemotherapy service.
- A CNC-OC or delegate is to review, triage, accept or redirect the referral in collaboration with the medical oncologist/haematologist and regional teams responsible for admission of the patient for day chemotherapy.
- A CNC-OC or delegate in consultation with the lead TeleChemotherapy nurse is to notify regional clerical staff to schedule forthcoming appointments at the recipient site and update webPAS accordingly.
- A CNC-OC or delegate is to notify the regional pharmacist and WACHS cancer pharmacist of the upcoming appointment and treatment plan.
- TeleChemotherapy clerical staff are to schedule a telehealth consultation ("Telehealth at WA Health Site") for the medical oncologist/haematologist based at the metropolitan cancer centre in the regions patient administration system (webPAS).
- TeleChemotherapy clerical staff are to schedule a treatment appointment/admission as directed by the clinical staff.

- Appointments are to be scheduled according to assessment of the patient, treatment, and any laboratory investigations or tests specific to the treatment protocol.
- Regional clerical staff are to inform the patient/caregiver(s) of all forthcoming appointments.
- The treatment plan is to be communicated to primary health care provider.

2.7 Treatment Planning, Documentation and Consent

- Documentation of TeleChemotherapy consultations are to be in accordance with the [WACHS Health Record Management Policy](#), MP 0094/18 [My Health Record Policy](#) and [WACHS Documentation Clinical Practice Standard](#).
- Appropriately trained interpreters or cultural support person(s) are to be provided where deemed appropriate or at the request of the patient and caregiver(s).
- The medical oncologist/haematologist is to document a full patient assessment including medication history (inclusive of details regarding previous SACT), treatment plan, baseline investigations and current functional status, in the patient medical record at the tertiary site, prior to the initiation of cancer treatment.
- The medical oncologist/haematologist is to ensure all documentation related to the consultation is faxed or emailed via [MyFT](#) to the regional hospital for inclusion in the local patient medical record.
- The TeleChemotherapy nurse attending the telehealth appointment is to document the consultation and ensure this is added to the patient medical record at the regional site.
- Where appropriate the medical oncologist/haematologist is to inform patients and caregiver(s) of the teratogenic risk of SACT on fertility and provide options for fertility preservation.
- The medical oncologist/haematologist is to clearly document that the patient is eligible and appropriate or not eligible and the reason why for treatment delivered via the WACHS TeleChemotherapy service.
- On each subsequent day of treatment the decision to proceed with SACT is to be clearly documented by the medical oncologist/haematologist in the patient's medical record.
- Consent processes are to be carried out and documented as per OD 0657/16 [WA Health Consent to Treatment Policy 2016](#) and a [MR59A WACHS Consent to Cancer Treatment](#) completed.
- Any gaps in documentation or consent which result in delays to the patients care are to be escalated to the prescribing medical officer immediately with subsequent completion of a Datix CIMS clinical incident report.

2.8 Prescribing, Verification, Procurement and Dispensing of Treatment

- SACT protocols are to be WACHS endorsed. [The Cancer Institute NSW, Cancer Treatments Online](#) – eviQ¹. are endorsed for use in WACHS
- Medication orders for SACT are to be prescribed on the appropriate WACHS endorsed medical record form ([MR860 series Fiona Stanley Hospital Antineoplastic Therapy Charts](#)) or when a MR860 is not available, on the MR170G WACHS Antineoplastic Therapy Charts available from the WACHS Cancer Pharmacist).
- Prescribing, dispensing and administration is to comply with the WACHS [Anticancer Therapy Prescribing Procedure](#).
- In the absence of an electronic oncology management system, the prescribing, dispensing and administration healthcare records are to be maintained, accurate and comply with the WACHS [Health Record Management Policy](#)
 - Facsimile and copies of the MR860/MR170G are to be avoided and any copy is to be clearly identified utilising the stamp provided.

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- The treatment chart is to comply with the Pharmaceutical Benefits Scheme (PBS) paperless claiming requirements (signed, dated, prescriber number, hospital provider number and relevant streamline authority number endorsed) or a PBS compliant script must be provided.
- Only consultant medical oncologists/haematologists or speciality advanced trainee register under supervision can prescribe SACT.
- The WACHS cancer pharmacist or the regional pharmacist (with the support of the WACHS cancer pharmacist) is to undertake the clinical verification of the treatment order and document on the chart in the box provided, that this has been completed in accordance with the [COSA Guidelines](#)²
- Treatment charts/orders are to include the following details:
 - Three (3) points of patient identification including name, date of birth and unit medical record number (UMRN).
 - The date the SACT is to be administered.
 - Protocol name and therapeutic goal e.g. curative, metastatic or palliative.
 - Cycle number and day of cycle.
 - Patient height (in centimetres) and weight (in kilograms) and where appropriate a body surface area (BSA in m²)
 - The route and sequencing of administration for each medication.
 - The rate of administration for each medication where applicable.
 - All supportive care treatments specific to the protocol are included

- The name, signature, prescriber number and date of the medical oncologist/haematologist/speciality advanced trainee registrar prescribing the medications.
 - The name, signature and date of the oncology pharmacist responsible for verification.
 - All known medication allergies are to be recorded on the prescription and if no allergies are reported by the patient then 'nil known drug allergies' (NKDA) will be recorded.
 - All dose modifications are to be legible and signed by the medical oncologist prescribing the medications. The rationale for all dose modifications is to be reflected in the patient's medical record.
- All cytotoxic SACT that require compounding are to be externally procured by the regional pharmacist via the iPharmacy application to a Therapeutic Goods Administration (TGA) licensed sterile compounding facility and delivered to each recipient site within agreed timeframes.
 - Non-hazardous SACT, such as subcutaneous fixed dose monoclonal antibodies and supportive therapies, may be supplied for preparation using a closed system and appropriate personal protective equipment (PPE) within the cancer unit. [Australian Consensus Guidelines for safe handling of monoclonal antibodies 2014](#)⁷.
 - Non-cytotoxic SACT that require complex dosage calculations at the point of compounding are to be prepared in a sterile licenced compounding facility
 - When compounding of SACT is carried out by a TGA licensed sterile compounding facility the regional pharmacist at the regional site is responsible for dispensing of the supplied product against the treatment chart prior to the product being released to nursing staff for administration to the patient.
 - The regional pharmacy is responsible for ensuring any Pharmaceutical Benefit Scheme (PBS) claim is completed for the SACT.

2.9 EviQ Antineoplastic Drug Administration Course (ADAC)

Nursing staff that administer SACT are to complete the endorsed eviQ education⁸ training programme. Demonstration of competence, knowledge and proficiency in the administration of cancer treatment is only achieved following:

- Completion of all ADAC e-learning modules and additional modules dedicated to Central Venous Access Devices (CVAD) and Extravasation via the Learning Management System (LMS).
- A clinical placement that provides the opportunity to develop the clinical skills base in safe handling and administration of systemic anticancer therapy, peripheral intravenous cannulation (PIVC) and CVAD care.
- Review of practical competencies and completion of ADAC reassessment e-learning module every 2 years.

In addition to the ADAC programme nursing staff are to complete and update all mandatory training requirements according to the Learning Frameworks

2.10 Patient Education

Education of the patient and their caregiver(s) is to begin at the initial visit and be a continuous and vital part of the treatment journey. When care is coordinated between sites, participant and recipient nursing staff are to provide information which is consistent and appropriate to the individual treatment being delivered. The recipient nurse providing education is to complete [MR59B WACHS Cancer Services - My Education Checklist](#) and document the process in the patient's medical record.

Education is to be delivered in an open communication style which includes:

- Inclusion of family, friends and caregiver(s) on the basis of the patients learning needs, abilities and preferences.
- The provision of trained interpreters and/or a cultural support person(s) if required.
- Inclusion AHW and ALO's when appropriate or at the request of the patient or carer.
- Access to a pre-treatment patient education video to be viewed prior to attending for a first treatment.
- Individually tailored education incorporating diagnosis, treatment type, plan and intent of treatment.
- The provision of written information and support packages, in languages other than English where appropriate from resources such as [eviQ: Cancer Treatments Online](#)¹ and [Cancer Council WA](#)⁹.
- Oral cancer treatment is subject to the same standards as treatment delivered via other routes, with additional education required to safeguard and support self-administration by patients and their caregiver in the home.
- Additional information if receiving treatment via an Elastomeric pump i.e. how to deal safely with cytotoxic spills at home and a take home spill kit.
- Scheduling of forthcoming appointments and any laboratory tests or investigations.
- Venous access required and types of venous access available.
- Risk, symptoms and management of extravasation.
- Explanation of immediate, early and delayed side effects of treatment and how these are to be managed.
- An understanding of what side effects are potentially serious and require urgent medical attention.
- Where applicable an explanation of all Immune Related Adverse Events (irAEs) and when to seek medical advice.
- Self-care strategies such as dietary advice and the importance of meticulous oral hygiene.

- The supply of a patient treatment diary and cancer treatment medical alert card.
- The process of contacting clinical staff in and out of hours to manage any treatment related side effects.
- How and when to take medications on discharge.
- Safe procedures for handling medications, body secretions and waste in the home.
- Introduction to the allied health team and initiation of appropriate referrals.
- Information on cancer support services with an emphasis on financial and psychosocial resources.

2.11 Vascular Access Devices

Vascular access devices (VAD) are inserted into veins via peripheral or central vessels for diagnostic or therapeutic purposes and can expose patients to a range of complications. Nursing staff are to carry out an ongoing assessment of their patient's vascular access needs which incorporates the nature and duration of treatment, benefits, risks and any potential impact on quality of life.

Adherence to the five (5) Moments for Hand Hygiene and to the principles of aseptic technique are required at all times when caring for patients with a VAD

At eWhen required, venous access will be obtained with evidence of vein patency, choice of device, gauge and access site documented in:

- [MR179A WACHS Central Venous Access Device \(CVAD\) Insertion and Assessment Record](#),
- [MR179B WACHS Central Venous Access Device \(CVAD\) Insertion Site Assessment Continuation Sheet](#),
- [Mr179C WACHS CVAD Access-Dressings Continuation Sheet](#) or
- [MR179 WACHS Peripheral Intravenous Cannula Observation Record](#)
- If venous access via a peripheral intravenous cannula (PIVC) proves difficult consideration of a suitable CVAD is to be discussed with the patient and escalated to the medical oncologist/haematologist promptly.
- Patients with a PIVC are to be cared for as per [WACHS Peripheral Intravenous Cannula \(PIVC\) Management Clinical Practice Standard](#).
- Patients with a CVAD are to be cared for as per [WACHS Central Venous Access Devices \(CVAD\) Management Clinical Practice Standard](#).
- If any of the following risks or complications occur seek senior nursing advice and escalate concerns to the patient's medical oncologist/haematologist:
 - Failure to achieve suitable access following two attempts.
 - CVAD catheter occlusion.

- CVAD catheter migration.
- Skin changes which may include evidence of local/systemic infection.
- Vascular changes indicating evidence of venous thrombosis.
- Phlebitis.
- Infiltration/extravasation (see [section 2.13.1](#) for management).

2.12 Nursing Pre-Assessment and Administration of SACT

Delivery of SACT is to be carried out by ADAC competent nurses. Nursing staff are responsible for the following:

- Checking the sound and visual quality of the Telehealth equipment.
 - Equipment or connectivity concerns are to be escalated to the Telehealth Service Desk immediately.
- Checking there is a completed MR59A WACHS Consent to Cancer Treatment.
- Documentation in the patient's medical record as outlined in [section 2.8](#).
- Patient education as per [section 2.10](#).
- The treatment protocol has been prescribed, verified and dispensed accurately as per [section 2.8](#).
- The prescribed doses of medications are appropriate for the patient's height, weight body surface area (BSA) and where appropriate, area under the curve (AUC)
 - Changes in weight are to be assessed at each visit and the subsequent impact on BSA and dose assessed.
 - BSA is to be calculated using the Mosteller formula¹⁰

$$BSA (m^2) = \sqrt{\frac{\text{height (cm)} \times \text{weight (kg)}}{3600}}$$

- Discrepancies of the prescribed dose are to be clarified with the WACHS senior pharmacist cancer services and escalated to the patient's prescribing medical oncologist/haematologist if required. This process and outcome is to be documented in the medical record.
- Analysis of the patient's blood results and any additional investigations e.g. lung function tests or gated heart scan.
- Recording and documentation of patient vital signs.
- Subjective and objective assessment and documentation of patient toxicities as per the Common Terminology Criteria for Adverse Events (CTCAE)¹¹
 - Seek senior cancer nursing guidance and escalate toxicities greater than grade 1 to the patient's medical oncologist/haematologist.
- Assessment of psychosocial health via the completion of a [National Comprehensive Cancer Network \(NCCN\) Distress Thermometer¹²](#) or the [Supportive Care Needs Assessment Tools for Indigenous People \(SCNAT-IP\)¹³](#).
- Venous access is to be obtained and checked as per [section 2.11](#).

- Reassessment and review of any patient allergies, alerts or previous adverse drug reactions.
- Administration of all pre-medications as per the treatment protocol allowing for an appropriate time span to elapse before the initiation of any SACT.
- In the event of pre-medications being self-administered by the patient at home nursing staff are to perform a check to confirm this has occurred.
- Adhering to the principles of the 5 rights of medication administration and complete and countersign the 'Time-Out' verification procedure as set out in [MR59C WACHS Cancer Services - Cancer Treatment Nursing Assessment](#) for each individual medication.
- Preparation of equipment prior to approaching the patient area with a SACT:
 - Portable trolley with waste bag attached.
 - Intermittent IV line primed with a compatible non SACT solution and additional luer-lock devices which maintain a closed system for drug delivery.
 - In-line and end of line micron filters required as per the treatment protocol.
 - Kidney dish, dressing packs and medication cups.
 - Disposable gauze squares if a bolus treatment is scheduled.
 - Chlorhexidine 2% in 70% alcohol swabs.
 - Plastic-backed absorbent sheets.
 - Purple cytotoxic waste container and a dedicated cytotoxic sharps container if administering treatment via subcutaneous/intramuscular route.
- Don PPE as per [WACHS Personal Protective Equipment \(PPE\) Procedure](#).
- The administration and sequencing of all SACT is to be detailed in the treatment protocol.
- All intermittent intravenous (IV) lines are to have a completed IV medication label attached to the line with a cytotoxic label attached where appropriate.
- All SACT infusions are to be administered via a secondary IV line. When the treatment is completed an IV flush from the primary line is to be administered as per the treatment protocol.
- Two chemotherapy competent registered nurses are to complete and countersign all components of the treatment protocol.
- Supervision of the patient during the delivery of treatment, monitor for any adverse events and escalate appropriately.

2.13 Management of Immediate Onset Side Effects

In the setting of life-threatening airway and/or breathing and/or circulation problems initiate Medical Emergency Response (MER) procedures as per [WACHS Clinical Escalation of Acute Physiological Deterioration including Medical Emergency Response Policy](#) and complete [MR140 WACHS MER/Code Blue Response](#).

2.13.1 Extravasation

Extravasation is the unintentional installation or leakage of a substance such as an anti-cancer drug out of a blood vessel into surrounding tissue. The severity of injury is dependent on the properties of the drug, the amount of drug extravasated and the timely recognition by staff to initiate appropriate management. The patient is to be educated to report any swelling, stinging, burning or pain at their access site.

- The contents of the extravasation kit should be as per [EviQ: Extravasation Kit - Recommended Contents](#)¹⁴
- The extravasation kit contents are to be reviewed routinely and be replenished by pharmacy and nursing staff when items have deteriorated or expired.

As soon as an extravasation is suspected the nurse is to:

- Cease infusion immediately and leave VAD insitu.
- Explain all care to the patient and provide reassurance.
- Don PPE.
- Obtain extravasation kit.
- Aspirate any residual drug from the VAD using a sterile luer-lock syringe.
- The designated onsite medical officer is to be notified immediately to review and arrange suitable treatment and follow up.
- The medical oncologist/haematologist is to be informed of the extravasation and any management strategies implemented.
- For specific drug classification and treatment nursing staff should refer to [EviQ: Extravasation Management](#)¹⁵ and provide patients with the accompanying EviQ information sheet for care at home.
- Document details of the incident and any follow up arrangements in the patient's medical record and [MR59C WACHS Cancer Nursing Assessment and Care Plan version 1.00](#).
- Complete a Datix CIMS clinical incident report.

2.13.2 Hypersensitivity

Hypersensitivity is an exaggerated response by the immune system to a drug or other substance and reactions. Symptoms range from mild cutaneous reactions or in the presence of anaphylaxis, severe respiratory distress and cardiovascular collapse. Such reactions generally occur immediately, during, or within a few hours of drug administration. However, they can occur one to two days after administration and patients should be prompted to report any symptoms to their treating team, general practitioner or via HealthDirect. Onsite medical, pharmacy and nursing staff are to ensure they understand

the causes of drug reactions, and know how to identify and manage reactions:

- Be familiar with and refer to [EviQ: Hypersensitivity Reaction](#).¹⁶
- Any previous drug sensitivity is investigated and reported to the designated onsite medical officer and medical oncologist/haematologist.
- Premedications are administered as per the treatment protocol.
- The nurse is to remain with the patient for the first 10 minutes of the infusion of a drug with known hypersensitivity risk.
- Continue close observation of the patient and vital signs for any features or symptoms of a hypersensitivity reaction.
- When hypersensitivity is suspected or there are any other signs of physiological compromise the infusion is stopped immediately.
- The patient's care is to be escalated as per MP0086/18 [WA Health Recognising and Responding to Acute Deterioration Policy](#), [WACHS Clinical Escalation of Acute Physiological Deterioration including Medical Emergency Response Policy](#) and local procedures.
- Explain all care to the patient and provide reassurance.
- Upon resolution of symptoms and discussion with the medical oncologist/haematologist rechallenge may be considered at a reduced infusion rate and after the administration of additional medications suitable to treat a hypersensitivity reaction such as hydrocortisone and/or promethazine.
- All details of the incident and any treatment administered are documented in the patient's medical record and [MR59C WACHS Cancer Services - Cancer Treatment Nursing Assessment and Care Plan](#).
- Adverse drug reactions are reported to pharmacy and reflected in the patient's treatment plan to guide the management of ongoing therapy.
- Completion of a Datix CIMS clinical incident report.

2.14 Escalation and Transition of Care

If a patient arrives to the treatment area unwell or subsequently becomes unwell during treatment, it may be necessary for care to be transitioned to ED, the inpatient environment or to a tertiary facility. In the setting of life-threatening airway and/or breathing and/or circulation problems nursing staff must initiate MER procedures. Early intervention has been shown to reduce morbidity and mortality in the deteriorating or unwell patient and nursing staff are to promptly escalate any concerns to senior nursing colleagues at the site and the designated onsite medical officer. The designated onsite medical officer will maintain close contact with the medical oncologist /haematologist regarding patient management. Each WACHS facility has a formal documented escalation procedure which should be adhered to with reference to the following WACHS wide policies:

- [WACHS Admission, Discharge and Intra-Hospital Transfer CPS](#),
- [WACHS Assessment and Management of Inter-Hospital Patient Transfers Policy](#)

- [WACHS Clinical Escalation of Acute Physiological Deterioration including Medical Emergency Response Policy](#)
- [WACHS Inter-Hospital Clinical Handover Form Procedure](#)

2.15 Management of Delayed Side Effects

SACT may cause a wide range of side-effects and patients experience will vary and can be difficult to predict. Severity of side-effects may depend on the type and dosing of cancer treatment as well as the individual health and well-being of the patient. For assistance in business hours patients and their carer(s) are to be provided with contact details of the TeleChemotherapy unit and advised to contact Health Direct when advice is required out of hours.

Detailed information related to the management of irAEs can be found at [eviQ management of immune-related adverse events](#).¹⁷

Detailed information on the management of neutropenic patients and neutropenic fever is included in the [WACHS Nursing Management of the Neutropenic ADULT Haematology and Oncology Patient Procedure](#) and at [eviQ Immediate Management of neutropenic fever](#).¹⁸

The following side effects are potentially serious, require urgent medical attention and are to be acted upon immediately by the patient:

- A temperature over 38°C or fever and chills which might be indicative of infection
- Chest pain
- New onset shortness of breath
- Diarrhoea that continues over 24 hours
- Persistent vomiting that lasts more than 24 hours or nausea lasting more than 48 hours despite taking anti-nausea medication
- Abnormal bruising and/or bleeding
- Constipation that has lasted over 48 hours
- A productive cough or shortness of breath
- Any other sudden decline in physical or emotional health

2.16 Discharge

AHW, ALO, interpreters and cultural support people are to be included in discharge planning as appropriate to support patients, family and staff.

Prior to discharge from the treatment area the nurse is to ensure that the patient and caregiver have been provided with and/or has a clear understanding of the following:

- Written education information on the treatment being administered and expected side-effects.
- Preventative care and supportive strategies for side effects such as nausea and vomiting, mucositis and diarrhoea.

- Take home medications are labelled and dispensed by regional pharmacy as per the treatment protocol.
- Additional supportive resources i.e. cancer treatment medical alert card and treatment diary.
- Cytotoxic precautions in the home with provision of [EviQ Chemotherapy Safety at Home](#)¹⁹ patient information sheet and take home spill kit if required.
- Advice to follow in the event of being unwell at home.
- Contact details for clinical staff in and out of hours.
- Forthcoming appointments for medical review, treatment and any investigations required relevant to the disease and treatment

2.17 Cytotoxic Waste Management

Cytotoxic waste is any item which may be contaminated with a cytotoxic drug. This includes administration lines, bags, empty vials, needles and syringes and all excreted waste.



Cytotoxic materials are identified by a purple symbol representing a cell in late telophase

Clinical and non-clinical staff must refer to [EviQ: Safe Handling and Waste Management of Hazardous Drugs](#)²⁰ and [WACHS Waste Management Policy](#) for information on how to safely manage cytotoxic waste and adhere to the following:

- Always utilise the correct type of PPE.
- All cytotoxic waste is to be segregated and disposed of into a leak proof, hard walled purple cytotoxic container clearly identifiable by a purple cytotoxic waste label.
- Cytotoxic sharps are to be disposed of in a dedicated, purple cytotoxic container which must be capped at all times when not being accessed.
- Cytotoxic contaminated linen or PPE is to be placed in a purple cytotoxic waste bag and disposed of in a cytotoxic bin. Contaminated linen is not to be laundered and is to be incinerated as per other cytotoxic waste.
- While awaiting collection and disposal from facility support services, cytotoxic waste containers are to be stored in a secure area, in a large purple cytotoxic bin lined with a thick purple cytotoxic plastic bag.
- Contaminated washable items such as patient or staff clothing are to be handled with PPE, placed in a cytotoxic waste bag, remain separate from other items of clothing and be laundered at a high temperature as soon as possible.

- Nursing staff are to ensure cytotoxic waste bins are removed and replenished by their facilities support services in a timely fashion to avoid overfilling and potential occupational hazard.
- Clinical and non-clinical staff are to report all hazards and incidents which occur as a result of cytotoxic waste management to their line manager utilising a Safety Risk Report Form (SRRF) and [WACHS Hazard/Incident Management Procedure](#).
- Complete a Datix CIMS clinical incident report if the incident involved the patient or resulted in interruption or delay of treatment.

2.18 Cytotoxic Spills

A cytotoxic spill constitutes leakage of cytotoxic material from any VAD, administration line, bags or patients body fluid including blood, urine, stool or vomit. A cytotoxic spill requires immediate attention and is to be effectively controlled to avoid unnecessary contamination of the environment. Clinical and non-clinical staff are to refer to [EviQ: Clinical Procedure - Hazardous Drug Spill Management](#)²¹ for information on how to safely manage a hazardous drug spill and adhere to the following:

- Cytotoxic medications are to be transported in a robust, leak proof, hard walled, secure container between pharmacy and the treatment area.
- A cytotoxic spill kit is to be available in areas where cancer treatment in all forms are prepared, transported, administered or disposed.
- Clinical and non-clinical staff from areas where a spill kit is required should review the spill kit contents routinely and replenish via iProcurement when items have deteriorated or expired.
- Allocate staff responsibility for management of spill.
- Remove patient from spill area, explain all care and provide reassurance.
- If a spill occurs always utilise the correct type of PPE.
- Manage spill as per cytotoxic spill kit instructions.
- Display hazard sign(s) around perimeter of spill to alert staff, patients and visitors and direct them to stay clear.
- Clinical and non-clinical staff are to report all accidents/incidents which occur as a result of a cytotoxic spill to their line manager or after hours manager utilising a Safety Risk Report Form (SRRF) as per WACHS Hazard/Incident Management Procedure.
- Complete a Datix CIMS clinical incident report if the incident involved the patient or resulted in interruption or delay of treatment.

3. Definitions

CTCAE	The Common Terminology Criteria for Adverse Events is a descriptive terminology which can be utilised for adverse events (AE) reporting. A grading (severity) scale is provided for each AE term.
Cytotoxic	Agent capable of disrupting growth and function of both healthy and diseased cells. Various mechanisms of action.
ECOG	The Eastern Cooperative Oncology Group performance status is a measurement of patients' level of functioning in terms of their ability to care for themselves.
Immune Related Adverse Event (irAE)	Immune-mediated side-effects of immune checkpoint inhibitor therapy resulting in severe dysregulation of the immune system. May result in severe or life-threatening inflammation of a range of organs/systems
Mucositis	A complication of some cancer therapies in which the lining of the digestive system becomes inflamed. Often seen as sores in the mouth
Systemic Anticancer Therapy (SACT)	Anticancer drugs used in the treatment of solid tumours and haematological cancers through the delivery of agents that travel through the blood to cells all over the body
TeleChemotherapy	The delivery of outreach chemotherapy via the use of telehealth, using telecommunication methods such as videoconference
Telehealth	The provision of healthcare remotely by means of telecommunications technology
Toxicity	The extent to which something is poisonous or harmful
Vesicant	A drug which if leaks out of a vein may cause blistering and tissue injury that may be severe and can lead to tissue necrosis

4. Roles and Responsibilities

All WACHS clinical staff are accountable for their own practice and are to provide care:

- Within their registration status.
- In accordance with the codes and guidelines approved by their relevant National Board supported by Australian Health Practitioner Regulation Agency (AHPRA).
- Within their scope of practice and competence.
- Within their prescribed responsibilities and duties as defined in their Job Description Form (JDF).
- Within the context of practice that they are operating.
- As per local policy and procedure.

All WACHS employees take reasonable care to ensure his or her own safety and health at work and to avoid adversely affecting the safety or health of any other person by:

- Following all instructions and safe working procedures established to protect their safety and that of others.
- Reporting all identified hazards and accidents/incidents in the workplace to their line manager utilising a Safety Risk Report Form (SRRF).
- Carry out duties within their prescribed responsibilities and duties as defined in their JDF.
- Comply with local policy and procedure.

The WACHS Cancer Clinical Governance Group:

- Provide overarching governance of development and review of cancer treatment protocols, prescribing tools and related processes.
- Support WACHS staff to implement this procedure by the provision of advice, information and regular updates on the processes related to the development, approval and review of cancer treatment protocols and prescribing tools.

The Regional Cancer Clinical Governance Group:

- Promotes the quality framework required for the region to implement safe and effective cancer care. The group will function to ensure safe and evidence based care is provided to country patients and all practices meet the Australian Commission on Safety and Quality in Healthcare- National (ACQSHN) and Quality Health Service Standards (QHSS).
- Provides clinical governance and leadership over regional cancer services.
- Reviews relevant policies, procedures and processes to ensure the safe and efficient delivery of evidence based cancer and palliative care in the region.
- Promotes professional development as an integral part of cancer service provision in the region.

- Ensures cancer services in the region are monitored and evaluated to meet best practice consideration to consumer/carer and stakeholder expectations and satisfaction.
- Minimises clinical risk and identify improvement opportunities through measurement and clinical review.
- Makes recommendations to rectify gaps in delivery of cancer care in the region.

The Medical Oncologist/Haematologist is responsible for:

- Managing all of the medical oncology/haematology components of the treatment plan.
- Prescribing the anticancer treatment, supportive intravenous fluids and medications on the MR860 or MR170G.
- Consulting with the patient before each cycle of treatment or at pre- determined intervals as clinically appropriate.
- Presenting the patient as clinically appropriate at a tumour specific multidisciplinary team meeting.
- Making decisions regarding the safety of administering the prescribed protocol to a patient in a TeleChemotherapy unit.
- Obtaining and documenting informed consent on the MR59A WACHS Patient Consent to Cancer Treatment.
- Documenting a treatment plan.
- Completing the medication order in accordance with the legislative requirements and the [COSA Guidelines](#)².
- Identifying and documenting allergies and previous adverse drug reactions.
- Requesting and reviewing the relevant laboratory and diagnostic tests prior to the commencement of each cycle.
- Being contactable by telephone to assist with the management of the immediate adverse effects of SACT
- Managing the delayed and long term effects of therapy.
- Obtaining Individual Patient Approval (IPA) from the Chair of the Regional Drug and Therapeutics/Medication Safety Group Committee when a non-formulary drug prescription or a protocol not endorsed for use is proposed.
- Applying to the Chair of the Regional Drug and Therapeutics/Medication Safety Group Committee for approval for a medication access program (MAP).
- Documenting dose modifications in the relevant section of the chart and in the patient's medical record.
- Communicating with the local on-site medical officer the possibility of adverse events related to the treatment.
- Being available on the telephone (via the usual pathways) during office hours for treatment related questions.

The Onsite Local Medical Officer is responsible for

- Admission of the patient for day chemotherapy.
- Supportive care for the patient during the admission.
- Clinical review on admission to the service and management of clinical issues as per assessment.
- Management of acute adverse events as per [section 2.13](#), [section 2.14](#), and delayed effects as per [section 2.15](#) and the escalation of patient care as clinically appropriate.
- Liaison with the medical oncologist when the patient, carer or clinician is concerned in any way.

The Clinical Nurse Consultant – Oncology Coordinator is responsible for

- Review, triage, accepting or redirecting the referral in collaboration with the medical oncologist/haematologist.
- Escalate to regional CCGG
- Escalate referral to the WACHS CCGG's when appropriate
- Completion of the MR59 WACHS Cancer Coordination Admission form.
- Referral to appropriate support (inclusive of AHW/ALO) and Allied Health services as required.
- Notifying the regional clerical staff to schedule a forthcoming appointment in collaboration with the lead TeleChemotherapy nurse.
- Notifying the regional pharmacist and WACHS cancer pharmacist of the upcoming appointment and treatment plan.

The Pharmacist is responsible for:

- Ensuring the prescription chart meets legal/PBS/clinical requirements.
- Clinically verifying all prescribed cancer therapy and documenting this verification procedure as per the [COSA Guidelines](#)²
- Discussing discrepancies in the order with the prescriber.
- Ensuring no known allergies or the allergy and adverse drug reaction history has been recorded on the chart.
- Documenting an up to date medication history and reconciliation in the medical record.
- Supplying medication as per the prescription within dose banding limits.
- Checking the MR860 or MR170G is labelled with a site specific sticker that identifies the site and provider number.
- Ensuring access to supply of supportive medications, medication for emergency management of anaphylaxis and hypersensitivity and extravasation antidotes.
- Signing the chart to indicate pharmacy verification has been completed.
- Supply of the prescription components in a timely manner.
- Provide education to patients, carers and health professionals.

The Chemotherapy Competent Registered Nurse is responsible for:

- Nursing care in accordance with the [COSA Guidelines](#)²
- Nursing admission to the TeleChemotherapy service as per the MR111
- Completing the pre-treatment education and nursing assessment prior to the commencement of treatment at the TeleChemotherapy site.
- Ensuring the correct equipment/giving set is available.
- Understanding the nursing care required for the specific protocol including pre and post medications, fluid requirements, extravasation and hypersensitivity potential.
- Reviewing the current laboratory data to ensure results are within acceptable parameters for the protocol - current is usually accepted as within 24 hours of anticancer therapy but may be clinically appropriate within shorter or longer timeframes.
- Reporting to the prescriber toxicities and laboratory results outside of the normal parameters before administration.
- Escalation of care as per [section 2.13](#), [section 2.14](#) and [section 2.15](#).
- Validating informed consent prior to the administration of anticancer therapy.
- Independently completing the time out checklist.
- Administering medications as per the prescription.
- Signing the chart with date and time to indicate the medication has been administered.
- Identifying and documenting allergies and adverse drug reactions
- Referral to support (inclusive of AHW/ALO) and allied health services.
- Communicating in writing with the prescribing medical oncologist when the treatment has been administered; include toxicity assessment and other relevant clinical assessment details.

5. Compliance

Failure to comply with this procedure may constitute a breach of the WA Health Code of Conduct (Code). The Code is part of the [Integrity Policy Framework](#) issued pursuant to section 26 of the [Health Services Act 2016](#) (WA) and is binding on all WACHS staff which for this purpose includes trainees, students, volunteers, researchers, contractors for service (including all visiting health professionals and agency staff) and persons delivering training or education within WACHS.

WACHS staff are reminded that compliance with all policies is mandatory.

6. Records Management

All WACHS clinical records must be managed in accordance with [Health Record Management Policy](#).

7. Evaluation

Printed or saved electronic copies of this policy document are considered uncontrolled.
Always source the current version from [WACHS HealthPoint Policies](#).

Compliance with adherence to this procedure is to be evaluated via routine incident review processes

8. Standards

National Safety and Quality Health Service Standards – 1, 2, 4, 5, 8

The Australian Commission on Safety and Quality in Health Care National Safety and Quality Health Service Standards User Guide for Medication Management in Cancer Care 2020

9. Legislation

Medicines and Poisons Act 2014 (WA)

Occupational Safety and Health Act 1984 (WA)

10. References

1. The Cancer Institute of NSW. eviQ Cancer Treatments Online [Internet]. Sydney NSW (Australia): 2017 [cited 2020 April 30] Available from: <https://www.eviq.org.au/>
2. Clinical Oncological Society of Australia. Guidelines for the Safe Prescribing, Dispensing and Administration of Cancer Chemotherapy [Internet]. Sydney NSW (Australia): 2008 [cited 2020 April 30]. Available from: <https://www.cosa.org.au/publications/guidelines.aspx>
3. Clinical Oncology Society of Australia (COSA) Clinical Practice Guidelines for TeleOncology
4. Queensland remote chemotherapy supervision guide (QRECS) (2019)
5. The Australian Commission on Safety and Quality in Health Care National Safety and Quality Health Service Standards User Guide for Medication Management in Cancer Care 2020 [Internet]. Sydney NSW (Australia): 2017 [cited 2020 April 30] Available from: <https://www.safetyandquality.gov.au/publications-and-resources/resource-library/nsqhs-standards-user-guide-medication-management-cancer-care>
6. Eastern Cooperative Oncology Group ECOG Performance Status
7. Alexander M, et al, Australian consensus guidelines for the safe handling of monoclonal antibodies for cancer treatment by healthcare personnel. Internal Medicine Journal 2014 (44) [cited 2020 Jul 28] Available at http://edcan.org.au/assets/edcan/files/Alexander_et_al-2014-Internal_Medicine_Journal.pdf
8. The Cancer Institute of NSW eviQ Education [Internet]. Sydney NSW (Australia): 2008 [cited 2020 Jul 28]. Available from: <https://education.eviq.org.au/>
9. Cancer Council Western Australia [Internet]. Perth WA (Australia): 2020 [cited 2020 Jul 28]. Available from: <https://www.cancerwa.asn.au/>
10. Mosteller R.D. Simplified calculation of body-surface area. N Engl J Med 1987 Oct 22;317(17):1098) [cited 2020 June 29] Abstract available at <http://www.ncbi.nlm.nih.gov/pubmed/3657876>

11. National Cancer Institute Division of Cancer Treatment and Diagnosis: [Common Terminology Criteria for Adverse Events \(CTCAE\) v5.0](#)
12. National Comprehensive Cancer Network (NCCN) [Distress Thermometer and Problem List](#)
13. Menzies School of Health Research [Supportive Care Needs Assessment Tool for – Indigenous People](#)
14. eviQ [Extravasation Kit - Recommended Contents](#)
15. eviQ [Extravasation Management](#)
16. eviQ [Hypersensitivity Reaction](#)
17. eviQ [Management of immune-related adverse events \(irAEs\)](#)
18. eviQ [Immediate management of neutropenic fever](#)
19. eviQ [Chemotherapy safety at home](#)
20. eviQ [Safe Handling and Waste Management of Hazardous Drugs](#)
21. eviQ [Hazardous Drug Spill Management](#)

11. Related WACHS Forms

[MR140 WACHS MER/Code Blue Response](#)
[MR179 WACHS Peripheral Intravenous Cannula Observation Record](#)
[MR179A WACHS Central Venous Access Device \(CVAD\) Insertion and Assessment Record](#)
[MR179B WACHS Central Venous Access Device \(CVAD\) Insertion Site Assessment Continuation Sheet](#)
[MR179C WACHS CVAD Access-Dressings Continuation Sheet](#)
[MR 59 WACHS Cancer Coordination Admission Form](#)
[MR 59A WACHS Consent to Cancer Treatment](#)
[MR 59B WACHS Cancer My Education Checklist](#)
[MR 59C WACHS Cancer Nursing Assessment and Care Plan](#)
[MR 59D WACHS Cancer Treatment Infusion Observation Chart](#)
[MR 59E WACHS Cancer Services Continuation Sheet](#)
[WACHS Medical Alert Cancer Treatment](#)
[WACHS Safety Risk Report Form \(SRRS\)](#)

12. Related WACHS Policy Documents

[Admission, Discharge and Intra-Hospital Transfer CPS](#)
[Anticancer Therapy Prescribing Procedure](#)
[Assessment and Management of Inter-Hospital Patient Transfers Policy](#)
[Cancer Institute NSW- Cancer Treatments Online - EviQ - Endorsed For Use In Clinical Practice Policy](#)
[Central Venous Access Devices \(CVAD\) Management Clinical Practice Standard](#)

[Chemotherapy Administration Clinical Practice Standard](#)
[Clinical Escalation of Acute Physiological Deterioration including Medical Emergency Response Policy](#)
[Environmental Cleaning Policy and Procedures](#)
[Hazard/Incident Management Procedure](#)
[Infection Prevention and Control Policy](#)
[Inter-Hospital Clinical Handover Form Procedure](#)
[Managing Risks of Hazardous Chemicals and Dangerous Goods Procedure](#)
[Medication Administration Policy](#)
[Nursing Management of the Neutropenic ADULT Haematology and Oncology Patient Procedure](#)
[Occupational Safety and Health Policy](#)
[Personal Protective Equipment \(PPE\) Procedure](#)
[Peripheral Intravenous Cannulae \(PIVC\) Management CPS](#)
[Referral to Regional Cancer Centres Medical Oncology Services Procedure](#)
[Waste Management Policy](#)

13. Related WA Health System Policies

[MP0038/16 Insertion and Management of Peripheral Intravenous Cannulae in Western Australian Healthcare Facilities](#)
[MP0095 Clinical Handover Policy](#)
[OD065/16 Clinical and Related Waste Management Policy](#)
[OD0611/15 Clinical Incident Management Policy](#)
[OD0657/16 Consent to Treatment Policy](#)
[MP 0131/20 High Risk Medication Policy](#)
[MP0086/18 Recognising and Responding to Acute Deterioration Policy](#)

14. Policy Framework

[Public Health](#)

**This document can be made available in alternative formats
on request for a person with a disability**

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