Caution with oral chemotherapy for cancer

**Introduction**
Cancer is one of the most prevalent diseases in Australia. Cancer is estimated to directly affect 1 in 3 men and 1 in 4 women in the first 75 years of life, increasing to 1 in 2 men and 1 in 3 women by the age of 85.

There have been major advances in the detection and management of cancer and the way in which cancer patients are treated is changing, improving care and survival outcome. The increasing availability of orally administered cancer chemotherapy permit the management of patients in the community setting, minimising the need for patients to travel to, or stay in a hospital.

However, like the cancer chemotherapy given in hospital, orally administered cancer chemotherapies are often still complex and may involve taking multiple drugs in different cycles on treatment, and periods of rest, to allow for recovery of normal systems such as bone marrow, skin and mucous membranes. Orally administered cancer chemotherapies have the potential to cause serious toxicities or fatal outcomes if used incorrectly.

When cancer chemotherapies are given in a hospital, specialist cancer doctors, pharmacists and nurses are involved in checking the regimen and ensuring the correct administration of the treatment. The availability of orally administered cancer chemotherapies through the Pharmaceutical Benefits Scheme (PBS) can mean that specialist checks in the hospital environment are bypassed.

This notice is intended to highlight processes for community health professionals that are considered to minimise risk associated with oral chemotherapy for cancer and has been produced in conjunction with a notice and audit tool for health services.

**Reported errors**
- The treatment outcome for a patient with breast cancer on a multi-drug regimen was potentially compromised when an insufficient quantity of orally administered cancer chemotherapy was provided resulting in insufficient supply for the patient to complete the desired course of treatment between review appointments.

**Moving from potential harm to safe care**

**Recommendations to be followed before prescribing, dispensing or administering oral chemotherapy for cancer**
Patients need to be aware of their treatment plan. There is also a responsibility for community health professionals to be familiar with the patient’s treatment plan and to check orally administered cancer chemotherapy to ensure correct prescription, dispensing and administration. Essential to this is the sharing of clinical information and treatment plans between all members of the healthcare team.
Recommendations for oral chemotherapy for cancer

Check the information provided from the treating oncologist and patient

1. Review documentation to establish that there is ready access to a treatment plan with contact details for the treating oncologist or haematologist (this may take the form of a letter from the treating specialist to the General Practitioner (GP)).

2. Establish if the patient has been provided with instructions for which days they should take their orally administered cancer chemotherapy and which days they should not (this may be in the form of a calendar or schedule).

3. Determine if the patient is taking any other medicine, either prescribed or over the counter, that may interact with the orally administered cancer chemotherapy.

4. Establish if the patient requires or has recently had a blood test (and if so request the results) and ask the patient for their current weight (and height).

5. Establish if the patient is already taking the orally administered chemotherapy and if they have experienced any side effects.

Check the treatment plan against the prescription

6. The treatment plan should include:
   - patient details including height and weight
   - the diagnosis,
   - details of the prescribed protocol (sometimes called a regimen or pathway), including the treatment schedule
   - instructions for the timing of blood tests
   - directions for any dosage changes
   - instructions on when to refer the patient back to the treating specialist or a hospital emergency department setting (eg severe side effects such as fever, weight loss, abnormal blood tests, or on a set date or number of treatment cycles)
   - name and contact details for the oncology specialist.

7. Ensure that prescribed dosages and directions are consistent with the information provided in the treatment plan.
   - Check the orally administered chemotherapy dosage. Some cancer chemotherapies are based on patient weight or body surface area. You may need to perform a body surface area (BSA) calculation which gives a value as m² before calculating the medication dosage (see helpful resources).
   - Check if the orally administered chemotherapy regimen or dosage should be altered as a result of significant changes in patient parameters such as patient weight, blood tests or side effects.

8. Clarify any unclear or confusing instructions regarding the dosage, regimen, or monitoring requirements with the treating medical oncologist prior to prescribing, dispensing or administering the treatment.

9. Where possible, supply only the required quantity of medication to complete a given cycle, (rather than the PBS quantity/manufacturer pack which may exceed requirements.)

10. Check that supportive therapies (for example, antiemetics for nausea and vomiting) are prescribed or have already been supplied.

Ensure the patient and/or carer understands the prescribed instructions for the oral chemotherapy

11. Take particular care that the patient clearly understands the cycle length, the number of days on active treatment, when not to take the treatment and laboratory test requirements.
   - Consider providing a calendar with the days clearly marked with when to take active treatment if not already available.

12. Ensure the patient understands the indication for each medication, the expected side effects, management of side effects and has contact details for specialist advice.

Ensure the patient and/or carer understands how to handle and store the prescribed oral chemotherapy

13. Orally administered chemotherapy that is cytotoxic, must be clearly labelled and any containers used clearly identified with a purple cytotoxic warning (ancillary) label by the dispensing pharmacist.
   - Oral cytotoxic medications must be swallowed whole (not cut or crushed).
   - Oral cytotoxic medications should not be filled in a dose administration container (for example, Dossette, Webster pack) with other medications. If a dose administration container is necessary, the cytotoxic medication must be filled in a separate, clearly labelled ‘cytotoxic’ container to other medications. The container must be well sealed to avoid accidental opening.
   - If oral cytotoxic medications are to be administered by a carer or staff in an aged care facility, instructions must be supplied to use protective gloves (for example, powder free nitrile or latex gloves) when handling to avoid occupational exposure.
   - Carers and staff should also be instructed that cytotoxic exposure may also occur through exposure to body fluids and waste. Appropriate instructions must be available for handling of bodily fluids and linen or clothing contaminated with bodily fluids (for example, vomit, blood, and excreta). Precautions should continue for up to seven days after the completion of a treatment cycle.

14. All medication must be stored as per temperature requirements (such as room temperature or refrigerator) and safely out of reach of children.

Helpful resources

- The patient’s treatment plan.
- The treating oncologist.
- The treating hospital pharmacy department.
- Information on cancer treatment protocols, Body Surface Area (BSA) calculators, drug interactions, waste management and patient support: www.eviq.org.au
- Information about chemotherapy for GPs (Peter MacCallum Cancer Centre): www.petermac.org/informationaboutchemotherapyforgps
- Example Cancer Treatment Plan and Summary Templates, American Society of Clinical Oncology: www.asco.org/ascov2/Practice+&+Guidelines/Quality+Care/Quality+Measurement+&+%Improvement/Chemotherapy+Treatment+Plan+and+Summary/Cancer+Treatment+Plan+and+Summary+Resources