Background
The COSA guidelines have been developed by a national multidisciplinary working group of cancer care professionals and provide an update of the guidelines published in 2010 (1):
- Aim to prevent medication errors and patient harm by standardising the complex process of providing systemic cancer therapy
- Define best practice using up-to-date literature alongside the expert, consensus opinion of cancer care specialists
- Provide evidence-based recommendations for the safe delivery of cancer therapy by medical, pharmacy and nursing staff
- Align with the flow of patient care through the prescribing, dispensing and administration process
- Provide a point of reference for practitioners for medications for the treatment of cancer and can be used as a framework to aid best practice within the multidisciplinary team
- Easily accessible on the web-based Wiki platform of Cancer Council Australia

Methodology
Methodology followed the format outlined in Cancer Council Australia’s guide to the development of web-based clinical practice guidelines on the Wiki platform (2).
- Formation of a multidisciplinary working group of pharmacists, nurses, doctors, health librarians, a project manager and a Wiki developer
- Application of the PICO (Population/Intervention/Comparator/Outcome) technique to define answerable clinical questions for each subject area
- Organisation of clinical questions to:
  - Address the general principles and processes relating to the safe provision of cancer therapy
  - Align with the flow of patient care prescribing, dispensing and administration of cancer therapy
- Systematic review of the literature and assessment of the strength of the evidence using the NHMRC rating system for level of evidence and grades of recommendation (3)
- Public consultation and publication on the Wiki platform of Cancer Council Australia
- Dissemination of the guidelines through email alerts, social media and cancer conferences

Examples of Clinical Questions (Total = 37)
General Information on requirements for the safe provision of cancer therapy (n=18)
- What competencies and skills are required for staff providing cancer therapies?
- What information should be included in a treatment protocol for cancer therapy?
- What special considerations are required to minimise risk when providing cancer therapy to older adults and paediatric patients?
- Which cancer medications are more prone to errors?
- What factors should be considered when using electronic systems to support the delivery of cancer therapy?
- How can risk assessment and quality assurance activities minimise errors in cancer therapy?

The Role of the Prescriber (n=6)
- What are the responsibilities of the Prescriber when prescribing cancer therapy and associated medications?
- How should information be presented in a medication order to minimise errors?

The Role of the Pharmacist (n=7)
- What are the responsibilities of the Pharmacist when dispensing and supplying cancer therapy?
- What is the procedure for the Pharmacist when clinically verifying cancer prescriptions?
- How should information be presented on a medication label for cancer therapy to minimise errors?
- What is best practice when dispensing and supplying intrathecal therapy?

The Role of the nurse (n=4)
- What are the responsibilities of the Nurse when administering cancer therapy?
- What information and assessments are required prior to administering cancer therapy?

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References
- National Health and Medical Research Council (NHMRC). NHMRC levels of evidence and grades for recommendations for guideline developers, 2009.
- National Health and Medical Research Council (NHMRC). NHMRC levels of evidence and grades for recommendations for guideline developers, 2009.

What makes a good clinical guideline?
- Reliable
  - Developed by a well-respected, professional organisation (COSA)
  - Hosted on a secure website by Cancer Council Australia
  - Opened for public consultation prior to final publication
- Applicable and evidence-based
  - Uses the PICO technique to define clinical questions and facilitate the literature search
  - Uses NHMRC methodology to review literature & inform the recommendations
  - References link directly to source abstracts and evidence-based
- Structured and user-friendly
  - Format enables easy navigation. Users can locate information relevant to their question quickly
  - Available & accessible to everyone online. No printing or subscription needed
- Current & reviewable
  - Uses up-to-date peer reviewed literature to develop recommendations
  - Format enables ongoing review and updates of individual sections of the guidelines as new evidence becomes available

Discussion and the Future
- Safety initiatives should be proactive, multidisciplinary and structured with the patient as the key focus.
- The guidelines define the roles and responsibility of each of the professional groups in the delivery of cancer therapy. They align sequentially with the flow of the patient’s care through the prescribing, dispensing and administration process.
- One of the hurdles in developing the guidelines was the limited availability of high-level study data to support the recommendations and apply the PICO formula. A small number of unintended incidents or errors informed the content where it was identified the same incident(s) could happen in other institutions and lead to patient harm.
- Ensuring guidelines reflect current evidence is essential. The guidelines are maintained on the Wiki platform enabling updates of each section as new literature is published.
- Consultation of content is an important component of a good guideline. The cancer community can provide comments at any time which can then be reviewed by subject matter experts and authors in a timely manner.
- Practically assessing the impact of safety practices on patient outcomes and identifying key areas of vulnerability and risk-reduction strategies is a key component of medication safety. An audit tool to assist institutions in measuring compliance and key performance indicators is under development.

Definitions in the guidelines
Cancer therapy is defined as ‘Medications used to treat cancer including targeted agents, cytotoxic chemotherapy, monoclonal antibodies and biological therapies administered by all routes, including parenteral and oral’.
- Supportive therapy is defined as ‘Medications that prevent or treat toxicity and adverse effects from the cancer therapy’.

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