



## **Pediatric Chemotherapy Administration Standards and Competencies for Practice and Education (Atlantic Provinces Pediatric Hematology Oncology Network [APPHON]/Réseau d'Oncologie Hématologie Pédiatriques des Provinces Atlantiques [ROHPPA])**

### **Purpose**

To ensure competency of the Registered Nurse administering pediatric chemotherapy in the Atlantic Provinces.

### **Background**

The Canadian Association of Nurses in Oncology/L'Association Canadienne des Infirmières en Oncologie (CANO/ACIO) (2001) describes the nursing roles (Generalist Nurse; Specialized Oncology Nurse; and Advanced Oncology Nurse), and the core competencies required (2001, 2006, and 2011) to provide the care all patients with cancer are entitled according to stated standards. Whether from a generalist or a specialist nurse, patients are entitled to knowledgeable and skilled care, including administration of chemotherapy. CANO/ACIO (2001) also notes that children with cancer are “a population that requires specific attention and a body of knowledge in pediatric oncology nursing”. The Atlantic Provinces Pediatric Hematology/Oncology Network/Réseau d'Oncologie Hématologie Pédiatriques des Provinces Atlantiques (APPHON/ROHPPA) (2007) delineates the competencies required to provide the nursing care required by this pediatric population in the Atlantic Provinces.

The Association of Pediatric Hematology/Oncology Nurses (APHON)] states that safe, competent, and consistent administration of chemotherapy and biotherapy to children and adolescents requires specific knowledge and specialized skills (2007, 2011). APHON has developed and maintained a curriculum for pediatric oncology Registered Nurses (RNs), with the overall objective to establish international education and practice standards. The APHON Standard of Practice is: *chemotherapy and biotherapy administered to children and adolescents should be provided by RNs who have completed the APHON Chemotherapy and Biotherapy Provider Course **and** a clinical practicum (APHON, 2011).*

CANO/ACIO has developed a *National Strategy For Chemotherapy Administration (Toolkit)* that includes standards and competencies for a RN working in oncology. Additional work is being done to complete an educational resource list for oncology RN's. This document is for both pediatric and adult based practice. In Canada, CAPHOL (Canadian Association of Pediatric Hematology/Oncology Leaders) and CPHOD (Council of Canadian Pediatric Hematology/Oncology Directors) have made recommendations requiring chemotherapy administration to children and adolescents be provided by RNs who have completed the APHON Chemotherapy and Biotherapy Provider Program.

Therefore, APPHON/ROHPPA chemotherapy administration standards and requirements will reflect both CANO's and APHON's standards and requirements.

## APPHON/ROHPPA Chemotherapy Administration\* Standards for Practice and Education

### Standard:

Chemotherapy and biotherapy administered to children and adolescents in the Atlantic Provinces will be provided by Registered Nurses who have completed the APHON Chemotherapy and Biotherapy Provider Program, have demonstrated clinical competency, and maintained knowledge and competency according to APPHON/ROHPPA specifications.

### Competency Requirements

- 1.a** The nurse will demonstrate **knowledge competency** by successful completion of the APHON Pediatric Chemotherapy and Biotherapy Provider Course – *The Pediatric Chemotherapy and Biotherapy Curriculum*. The RN will be termed a Pediatric Chemotherapy and Biotherapy Provider (APON, 2011).
- 1.b** The nurse will demonstrate **continuing knowledge competency** by:
- Reviewing the APHON Biannual renewal updates provided by APHON
  - Maintaining his/her status as an APHON Pediatric Chemotherapy and Biotherapy Provider with renewal every 2 years by an online written exam
  - Participating in continuing education specific to care of a child or adolescent with cancer including administration of chemotherapy and biotherapy is recommended. This could include, but is not limited to, participation in oncology related in-services, workshops, conferences, committees and associations, completion of oncology certification or oncology related university credits, and completion of self learning projects such as oncology related self learning packages, and video or article reviews
- 2.a** The nurse will demonstrate **initial clinical competency** in administering chemotherapy by:
- Successful demonstration of **at least three supervised\*\* chemotherapy administrations**, to a child, adolescent or adult. Clinical competency must be reflective of the level of care the nurse will provide at his/her institution (APPHON/ROHPPA, 2012), and local institutional policies. The APPHON/ROHPPA *Pediatric Chemotherapy Administration Clinical Competency Checklist* must be completed in entirety to assess initial chemotherapy/biotherapy administration competencies. Additional learning opportunities may be required to meet all clinical competencies.
  - A nurse who will administer **peripheral vesicants**, either by IV infusion or IV push, must have an **additional supervision** of a peripherally administered vesicant.

**Supervision** must be by a *competent chemotherapy administration supervisor\*\** at the nurse's institution (or a designated provincial or intraprovincial supervisor). Competency will be assessed using the APPHON/ROHPPA *pediatric chemotherapy administration clinical competency checklist*.

**Note:** It is recognized that some centres have institutional policies that limit who may administer any peripheral or any intravenous push antineoplastic medications, or may require extra supervisions of the nurse.

- 2.b** The nurse will demonstrate **continuing clinical competency** by:
- Completing an annual administration to a child, adolescent or adult supervised by a competent chemotherapy provider or administration supervisor\*\* using the APPHON/ROHPPA *pediatric chemotherapy administration competency checklist*.
  - Each nurse will maintain a record of administrations and achieve a minimum of 20 administrations in a 2-year period, preferably at regular intervals. Administrations may be to a child, adolescent **or adult**.
  - Both the nurse and her manager (or designate) should keep copies of the competency records.

**Grandfather clause** – In the past, RNs with previous pediatric chemotherapy administration education have not been required to complete the APHON Provider course but have been required to read the APHON renewal updates and maintain continued clinical competency as above. However, at least one APHON Pediatric Chemotherapy and Biotherapy Provider with current status was required on site and available while pediatric chemotherapy is being administered. *Going forward, it is APPHON's short term objective to have all RN's administering chemotherapy to children and adolescents have APHON provider status. Health centres using this clause must have a deliberate plan to have all grandfathered RNs become APHON providers.*

**If a nurse has been unable to maintain the demonstration of clinical skills** due to low chemotherapy administration volume or other reasons, they may again demonstrate clinical competency by successful completion of at least three supervised chemotherapy administrations. Clinical competency must be shown reflective of the level of care the nurse will provide at his/her institution (APPHON/ROHPPA, 2012), and local institutional policies.

**Dose adjustment of oral chemotherapy** is a Beyond Entry Level Competency. **Only nurses at a subspecialty level who have completed the BELC learning program** and have maintained the BELC certification, [or a pediatric oncologist, subspecialty oncology clinical pharmacist, subspecialty oncology clinical nurse specialist (Janeway Children's Health and Rehabilitation Centre, St. John's) or subspecialty oncology nurse practitioner (IWK Health Centre, Halifax)], may make oral dose modifications.

**Competency Documentation:** Health Centres that provide pediatric chemotherapy administration are expected to maintain documentation of the APHON provider status/renewal and competency achievement/maintenance of all staff who administers chemotherapy.

## Definitions

\* **Chemotherapy Administration** – refers to the whole process of providing chemotherapy to a patient. This includes: patient assessment, education, checking, administering, and safe handling of the agent as well as the ongoing monitoring of the patient while the medication is infusing.

\*\* **Competent chemotherapy administration supervisor**– a RN who has completed the APHON Pediatric Chemotherapy Biotherapy Provider course, **and** has demonstrated current clinical and knowledge competency based on the *APPHON/ROHPPA Pediatric Chemotherapy Administration Standards and Competencies for Practice and Education*, **and** has at least 2 years of chemotherapy administration experience.

## References

Association of Pediatric Hematology Oncology Nurses (APHON) (2011). The pediatric chemotherapy and biotherapy curriculum. 3rd ed.

Association of Pediatric Hematology Oncology Nurses (APHON), (2014). Scope and Standards of Pediatric Hematology/Oncology Nursing Practice.

APPHON/ROHPPA (2012). Levels of Care Approach for Hematology/ Oncology Care of Adolescents and Children within the Atlantic Provinces

APPHON/ROHPPA *Pediatric Chemotherapy Administration Clinical Competency Checklist* (2009).

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