



NK4 – Evidence-Based Practice

NK4: Provide one example, with supporting evidence, of how clinical nurses incorporate professional specialty standards or guidelines to implement a practice new to the organization.

Introduction

KFSHRC-J is committed to high professional standards of care to promote and guide safe clinical practice. Clinical nurses are supported by executives and leaders to review professional standards, which, when implemented for best practice, continuously enhance the nursing knowledge base and promote continuing education, resulting in excellent patient outcomes. Further, clinical nurses within KFSHRC-J understand the importance of professional standards in healthcare to ensure clinical proficiency and safety; and that it forms the baseline for quality care.

Example: Incorporating the Oncology Nursing Society (ONS) Chemotherapy Safety Standards, Domain 3: Ordering, Preparing, Dispensing, and Administering Chemotherapy for Bone Marrow Transplant Patients Receiving High Dose Conditioning Chemotherapy at KFSHRC-J- Standardization of Pre-Administration Checking of Chemotherapeutic Agents by a Nurse-Led Time-out Process

Bone Marrow Transplant (BMT) patients form a significant part of the patient population at KFSHRC-J. During the year 2021, a total of 54 patients underwent BMT procedures. Treatment of BMT patients usually includes high doses of chemotherapy agents and radiation. Despite significant effort and positive intention, errors in the course of chemotherapy administration remain problematic. Medication errors include incorrect preparation, overdosing, under dosing, schedule and timing errors, and administration to the wrong patients (Neuss et al., (2016). Against this backdrop, nurses of the adult Oncology/Hematology-BMT/Palliative unit decided to incorporate the chemotherapy time-out process for the BMT conditional protocol for ensuring increased safety in administration.

Table NK4.1: Oncology Staff Professional Development Group

Name & Credential	Job Title	Department
Maiden Salas, BSN RN	Staff Nurse 1 (SN1) Acting Nurse Clinician, Leader	Oncology

Mohammad Badawi, BSN RN	Nurse Clinician Co Leader	Oncology
MaryJane Paica, BSN RN	SN1, Clinical Nurse	Oncology
Lerato Mosia, BSN RN	SN1, Clinical Nurse	Oncology
Judy Enciso, BSN RN	SN1, Clinical Nurse	Oncology
Paul Badillo, BSN RN	SN1, Clinical Nurse	Oncology
Shynymol Varghese, Dip.N RN	SN1, Clinical Nurse	Oncology
Kathleen De Castro, BSN RN	SN1, Clinical Nurse	Oncology
Ghadeer Faea, BSN RN	SN1, Clinical Nurse	Oncology
Doaa AlSaddah, BSN RN	SN1, Clinical Nurse	Oncology
Karen Tabucol, BSN RN	SN1, Clinical Nurse	Oncology
Fatmah Bashmail, BSN RN	SN1, Clinical Nurse	Oncology
Liza Briza, BSN RN	SN1, Clinical Nurse	Oncology
Princess Austria, BSN RN	SN1, Clinical Nurse	Oncology
Razan Al Hindi, BSN RN	SN1, Clinical Nurse	Oncology
Kemban Tan, BSN RN	SN1, Clinical Nurse	Oncology
Melanie Paguagan, BSN RN	SN1, Clinical Nurse	Oncology
Yara Al Harbi, BSN RN	SN1, Clinical Nurse	Oncology

On March 8, 2021, Maiden Salas, BSN RN, SN1, Acting Nurse Clinician, and clinical nurse Paul Badillo, BSN RN, met with other members of the Staff Professional Development Group (See table NK4.1) of the Oncology unit to discuss streamlining and standardizing the pre-checking of chemotherapeutic agents for BMT patients before administration. During this meeting, all members decided that reference to an oncology professional organization or society was necessary. It was also agreed upon that nurses should consider professional membership of the ONS moving forward. **Evidence NK4.1 ONS Standard, Domain 3: Ordering, Preparing, Dispensing, and Administering Chemotherapy (3.14.5) page 6 and Staff Membership to Oncology Nursing Society**

On July 31, 2021 during the Unit Council meeting, Maiden and the team discussed the progress toward implementing the ONS Chemotherapy standards. The focus was on *Domain 3*, which refers to *ordering, preparing, dispensing, and administering chemotherapy: A second person, a practitioner or other personnel approved by the health care setting to prepare or administer chemotherapy, performs three independent verifications.* **NK4.2 Unit Council Meeting Minutes and CIPP-3787 Medication Administration and Nursing Responsibilities**

Proposed New Practice Based on Standard

The 12 steps of the chemotherapy time-out process, developed by Kalo et al., (2019), and published in the ONS Clinical Journal of Oncology Nursing, was identified as the new practice for implementation. These 12 steps of the chemotherapy time-out process were developed for chemotherapy pre- administration checking for BMT patients at KFSHRC-J. The time-out process form was presented to the Head Nurse, Ahmed Omari, BSN RN, BMTCN, for approval and then to Gabrielle Hutchens, MAppmgt (Nurs) RN, CPHIMS, CPHQ, CSSGB, Nursing Quality Improvement Coordinator from the Nursing Practice and Research department, for approval. **Evidence NK4.3 Chemotherapy Safety Reducing errors with a nurse-led time-out process; April 2019, Vol. 23, No. 2 Clinical Journal of Oncology Nursing**

Education

Maiden provided in-service education sessions for all staff nurses (Team A on November 21, 2021, and Team B on November 23, 2021) on the rationale for the chemotherapy time-out process, the steps, and the use of the form prior to administration of chemotherapy. Guidelines for utilizing and implementing the new practice change were sent via official email to all staff in the Oncology unit.

Implementation of New Standard

On November 24, 2021, the new practice was implemented, and on December 27, 2021, during the Unit Council meeting, the guidelines for completing the chemotherapy time-out process checklist was shared to update the Unit Council on the new practice (Chemotherapy Time-Out Process steps for BMT Conditioning Protocol) related to staff training completion and implementation. **Evidence NK4.4 Staff Professional Development Group Progress Report and Education Attendance**

Guidelines for completing the Chemotherapy timeout process checklist include:

- Applicability to the chosen BMT conditioning protocol
- The primary and secondary nurses must complete all applicable checks in their respective roles
- The primary and secondary nurses must sign the form after checking
- The form is kept in the patient's file within the unit until discharge
- Upon discharge, the form must be removed and placed in the Chemotherapy Time-out Folder. **Evidence NK4.5 Chemo Time-out Checklist; Evidence NK4.AD1 Completed Chemotherapy Time-Out Process for BMT Conditioning Protocol**

Clinical nurses within the unit express confidence in the chemotherapy time-out process in providing safe patient care, which is in keeping with the first strategic objective of KFSHRC General Organization to ***deliver world class customer experience, quality***

and safety of care to our patients. Also, because the chemotherapy time-out practice change is new to the unit, it will result in this practice change being added to the Standard of Practice and unit-specific orientation program. **Evidence NK4.AD2 Updated Adult Oncology SN1 Orientation Manual December 05, 2021, page 16**

References

Kalo, K., Karius, D., Bena, J. F., Morrison, S. L., & Albert, N. M. (2019). Chemotherapy Safety: Reducing errors with a nurse-led time-out process. *Clinical journal of oncology nursing*, 23(2).

Neuss, M. N., Gilmore, T. R., Belderson, K. M., Billett, A. L., Conti-Kalchik, T., Harvey, B. E., ... & Polovich, M. (2016). 2016 updated American Society of Clinical Oncology/Oncology Nursing Society chemotherapy administration safety standards, including standards for pediatric oncology. *Journal of oncology practice*, 12(12), 1262-1271.