Medication Management

Draft for Consultation

Medication Management

This interpretive document provides direction for nurses[1] (Registered Nurses (RNs), Nurse Practitioners (NP) and Licensed Practical Nurses (LPNs)), in relation to the professional expectations for safe, competent, compassionate, and ethical medication management in all practice settings, and in all employment and volunteer relationships (e.g., employed or self-employed; camp nurse). The principles and sub-principles outlined in this document reflect the expectations for nursing practice related to medication management to decrease risk to the public and promote public protection.

As self-regulated professionals, nurses are responsible and accountable to practice within their individual scopes of practice[2] and to follow the standards of practice as set out by their respective regulatory bodies. Nurses are responsible to know what they are educated, authorized and competent to perform.

This document should be used in conjunction with associated federal and provincial Acts and Regulations, relevant Association of Registered Nurses of Newfoundland and Labrador (ARNNL) and College of Licensed Practical Nurses of Newfoundland and Labrador (CLPNNL) resources, documents, employer/agency policies, and evidence-informed practices.

Introduction

The Canadian Patient Safety Institute (2018) defines medication management as client-centred care optimizing safe, effective and appropriate drug therapy provided in collaboration with clients and their health care teams.

Medication management is more than performing the technical task of administering medication. It is an iterative process that requires the utilization of nursing knowledge, skill and judgment to ensure safe medication use.

To reduce errors and/or adverse events related to medication management, nurses reflect on their individual scopes of practice, and their standards of practice in all activities related to medication management.

To provide the safest and most appropriate care in medication management practices, nurses, as reflective practitioners, consider:

- their education;
- their authorization;
- their competence;
- the need for collaboration; and,
- the provision of client-centred care.

See **Appendix A** for a reflective algorithm.

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[1] Throughout this document, the term **nurses** will refer to Registered Nurses (RNs), Nurse Practitioners (NPs) and Licensed Practical Nurses (LPNs).

[2] Information regarding scope of practice is available from the applicable regulatory body, ARNNL or CLPNNL

An important consideration in medication management is the determination of the most appropriate nurse to provide care. Determining the most appropriate care provider requires critical thinking and judgement and consideration of:

- *The Client* (e.g., complexity of care, variability of client's condition, predictability of outcomes of care).

- *The Environment* (e.g., the context of practice including the location where care takes place; the availability of and access to resources, including support for nurses, policies, procedures, medical directives and protocols to guide decision making).

- *The Nurse* (e.g., individual skill and ability, education, proficiency, experience and expertise, ability to manage outcomes).

It is important for nurses to recognize that the client, the environment and the nurse are interrelated and cannot be considered individually, or in isolation.

Nurses:

- comply with professional standards, codes of ethics and employer policies;
- work within individual scopes of practice;
- utilize nursing knowledge, skill and judgment to practice safely, competently, compassionately, and ethically;
- participate in medication reconciliation at client transitions of care;
- use the nursing process in medication management;
- adhere to federal, provincial, regulatory, and employer risk management and harm reduction strategies;
- integrate infection prevention and control practices, standards and guidelines in all aspects of medication management;
- have knowledge of the actions, interactions, usual dose, route, side effects and adverse effects of medications;
- have knowledge of drug dose calculations;
- assess the appropriateness of a medication for the client based on their health status or condition;
- have knowledge of the client's allergies and sensitivities;
- uphold the client's rights in the medication management process;
- educate clients on the management of their own health including informing them about their medication, anticipated effects, side effects, contraindications, self-administration, treatment plan and follow-up;
- monitor the client before, during and following medication administration;
- evaluate the effect of the medication on the client's health status;
- manage the side effects or adverse effects of the drug; and,
- document according to regulator and employer requirements.

> **1.   Education Principle: Nurses practice using evidence-informed knowledge, skill and judgement.**

During educational preparation nurses attain the entry-to-practice competencies required for safe, competent, compassionate and ethical care. Throughout their career, nurses build on their foundational knowledge. Continuing competence promotes good nursing practice, assists in preventing poor practice, and contributes to the quality of nursing practice and best possible client outcomes. Competence is acquired and maintained through life-long learning, and the integration of learning into nursing practice.

1.1 Nurses participate in medication reconciliation in collaboration with the client/family and health care team.

Medication reconciliation is a systematic and comprehensive review of all the medications a client is taking to ensure that medications being added, changed or discontinued are assessed and documented. Medication reconciliation is intended to facilitate accurate communication within the health care team at care transition points. Medication reconciliation can reduce the incidence of medication errors and adverse drug events. It enables authorized prescribers to make the most appropriate prescribing decisions for the client.

1.2 Nurses utilize best practices in medication preparation.

Medication preparation is an important aspect of medication management. Nurses use their knowledge, skill, and judgement when preparing a client's medication(s). Preparation may include selecting, calculating, mixing, crushing, labelling, drawing up or pouring medications.

Compounding is an act of pharmacy that involves the preparation of medication(s) that contain individual ingredients that are mixed together in the exact strength and dosage form to meet the client's unique needs. Crushing medications, reconstituting medications for parenteral administration or mixing two different types of medications (e.g., insulin) are not considered compounding.

Nurses must not pre-pour medications in advance of the scheduled time for medication administration. Pre-poured medications cannot accurately be compared to the medication administration record; it can blur accountability for ensuring the "rights" of medication administration and, it increases the possibility of medication errors (College and Association of Registered Nurses of Alberta (CARNA), 2015).

1.3 Nurses follow the rights of medication administration.

It is best practice for nurses to utilize a series of systematic steps/checks to ensure safe and competent medication administration. Nurses are responsible and accountable to know all the rights applicable to the medication being administered and to their practice setting. The number of rights vary by medication and the route of administration, and

employer policies may identify a set number of rights required to be validated by the nurse.

The nurse also:

- confirms and documents known drug allergies/sensitivities and reactions;
- administers PRN medication only for the purpose it was prescribed and after a nursing assessment;
- conducts a nursing assessment when administering **range doses**, including the client's response to the previous doses of medication;
- must not administer any unused portion of the range dosage within the same time frame that a selected dosage was given;
- adheres to agency policy and in the absence of policy, advocates for clarification on the practice of administering **over-the-counter medications**; and,
- is knowledgeable of agency/employer policies that require nurses to perform a series of checks prior to medication administration, including **independent double checks** of certain high-risk medications.

1.4 Nurses transcribe medication orders to maximize therapeutic effects, support client choice, and comply with agency/employer policy.

Transcribing is within the scope of practice of nurses. Nurses are expected to know and adhere to the approved practices and policies related to transcription within their practice settings such as appropriate times for medications to be administered, stop dates, cosigning requirements, and approved abbreviations. Nurses support client choice, including adherence to their personal medication regime. Nurses adhere to evidence-informed knowledge regarding administration times to maximize therapeutic effects.

Nurses transcribe orders as they are written and do not substitute generic names or **therapeutic interchanges** unless authorized by the agency.

1.5 Nurses utilize best practices in the safe handling, storage, and disposal of medications.

It is in the best interest of the client, the nurse, others, and the environment for nurses to maintain knowledge of, and be skilled in, the use of safety precautions required as they handle, prepare, administer and dispose of medications. Cytotoxic medications, for example, may be considered hazardous materials and as such require special handling and disposal techniques. Spills related to certain medications may also require special attention. Nurses know and follow requirements for safe storage and transport of medications; for example, temperature control for vaccines.

The Institute for Safe Medications Practices (ISMP) (2018a), Health Canada, and others have developed key messages to guide both nurses and clients on the safe storage and disposal of medications. They recommend returning unused medications to the

pharmacy. Disposal in the trash is not acceptable as it may lead to unwanted or unintended access by others (e.g., children, pets). When 'take-back' or 'return-to-pharmacy' options are not readily available, nurses should advocate for other reasonable alternatives.

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2.   Authorization Principle: Nurses know the medication management practices that they are authorized to complete.

Authorization for nursing practice is granted through legislation, regulation and/or policy. Nurses know their individual scope of practice, their agency/employer policies and the laws that influence their practice.

2.1 Nurses require a prescription from an authorized prescriber for medications requiring prescriptions.

Legislation defines who is authorized to prescribe medications. If there is a requirement for clarification on who is authorized to prescribe medications, nurses must seek clarification with the prescriber, applicable legislation, and/or the agency/employer.

Nurses must know their role and responsibility in the verification of medication prescriptions for the order-entry system used in their practice areas (e.g., paper, electronic). This may require the nurse to seek out continuing education.

2.2 Nurses accept medication prescriptions[3] that are complete, accurate, and clear.

Medication prescriptions such as 'provide medications as at home', 'resume medications as pre-op', or 'resume medications post discharge' are not acceptable as they are incomplete and may lead to errors.

2.3 Nurses consult with the authorized prescriber and/or pharmacy on medication prescriptions that are unclear and require clarification.

In the interest of client safety, nurses question medication prescriptions that are:
- unclear;
- outside the normal dosage range;
- inconsistent with therapeutic client outcomes;
- not in adherence with best practices;
- prescribed for **off-label** use;
- contrary to safety standards; or,
- using error-prone or unauthorized abbreviations.

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[3] In the health care system, the word 'order' is often used to identify medication prescriptions as well as non-medication procedures. In this document, the word 'prescription' is used where 'order' may be used in the practice setting.

As responsible and accountable health care professionals, nurses advocate within the health care system to: initiate proactive measures to decrease error-prone situations; report all errors and near misses; identify the full context of all errors; and, minimize client effect if an error occurs.

The use of abbreviations in medication management have been identified as an underlying cause of serious, even fatal medication errors (ISMP, 2017a, 2018b). Nurses use only employer approved abbreviations and symbols, or they avoid their use.

2.4 Nurses only accept verbal medication prescriptions in emergent, urgent or exceptional situations.

Situations where verbal prescriptions are acceptable include (but may not be limited to):
- emergent or urgent situations where delay in treatment would place the client at risk of harm;
- when the prescriber is not present, and urgent or emergent direction is required to provide appropriate client care;
- when the prescriber is away from the client care area where access to the health record is not possible; or,
- when the prescriber is consulting via telehealth without the ability to enter their prescription into the health record.

The nurse is responsible to know which forms of electronic media are authorized by their employer for communication of medication prescriptions when they cannot be written or entered directly into the health record. Employer policy should dictate the parameters for accepting, recording, or co-signing of verbal prescriptions including acceptable methods for communicating medication prescriptions (e.g. facsimile, second person to listen).

Nurses are not responsible for ensuring that verbal medication prescriptions are signed by the authorized prescriber.

2.5 Nurses comply with federal and provincial legislative requirements for medication management.

Examples of legislative requirements include (but are not limited to):

Sample Medications

Nurses cannot distribute sample medications. The federal Food and Drugs Act (1985, 14s., s.2) does not identify nurses as one of the professionals authorized to distribute sample medications to clients.

Dispensing

The Pharmacy Act (2012) identifies dispensing as a practice of pharmacy.

RNs are referred to ARNNL documents e.g., *Dispensing by Registered Nurses (RNs) Employed Within Regional Health Authorities (RHAs).*

It is not within the scope of practice of LPNs in Newfoundland and Labrador to dispense medications.

Nurses refer to agency/employer policy and their regulatory body for further direction related to dispensing medications.

Cannabis for Medical Purposes

Please refer to the ARNNL and CLPNNL (2018) memo *Direction on Role of RNs, NPs and LPNs in Administering and Distribution of Medical Cannabis.*

Immunizations

Nurses comply with federal and provincial administration and surveillance policies and documentation guidelines, as well as employer/agency authorization and policy, when administering immunizations[4]**.**

Privacy and Confidentiality

Nurses adhere to the legislative and ethical principles of privacy and confidentiality in all forms (e.g., written, electronic) used to communicate client information. Examples of expected practices and value statements about privacy and confidentiality are outlined in other resources such as: the *Canadian Nurses Association Code of Ethics for Registered Nurses* (2017); The *Standards of Practice and Code of Ethics for Licensed Practical Nurses in Canada* (2013); agency policies; and, relevant provincial legislation such as the Personal Health Information Act (2008), and Health Research Ethics Authority Act (2006).

3.	**Competence Principle: Nurses are responsible and accountable to practice medication management competently**

Competence is defined as having the integrated knowledge, skills, attitudes, and judgment required to safely and effectively practice nursing. Competence reflects the level of critical thinking, knowledge, and judgement involved in nursing interventions, including medication management.

3.1 Nurses use their knowledge, skill, and judgement when determining their involvement and the involvement of others in medication management.

Nurses use their knowledge, skills, and judgment to:

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[4] The Public Health Agency of Canada outline core competencies for health care professionals when administering immunizations in Canada. www.phac-aspc.gc.ca

- follow-up with the authorized prescriber, the client, and other members of the health care team when a client refuses a medication;
- reflect on their role and the potential need for their ongoing involvement or oversight[5] when other care providers (including colleagues, students, family-members, support workers) participate in medication management;
- follow up with the client and family and evaluate the effectiveness of self-administration; and,
- assist colleagues and provide support and direction as required.

3.2 Nurses use their knowledge, skills, and judgement when implementing pre-printed order sets and/or medical directives.

When implementing or making care decisions based on pre-printed order sets or medical directives, the nurse maintains the principles applicable to medication management and refers to employer policies. Details related to the RNs responsibilities and accountabilities related to medical directives and pre-printed orders are available in ARNNL documents, e.g. *Medical Directives and Pre-Printed Orders: Authorization for Registered Nurse Practice.*

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4. **Collaboration Principle: Nurses collaborate with the client, the family, and other members of the health care team when planning for, implementing, and evaluating medication management.**

Collaboration is intended to build consensus and work together on common goals, processes and outcomes. Nurses collaborate, as well as communicate and consult with the client, the family, and other members of the health care team. This process is integrated throughout all aspects of medication management.

4.1 Nurses involve clients/families in the management of their medications.

Informed and capable clients have the right to make decisions about accepting or declining a medication or to self-administer medication. Nurses work to provide medication information to clients in an open, accurate, understandable, timely and transparent manner.

If a client refuses a medication, the nurse:

- determines the reasons for refusal;
- assesses the client's level of understanding about the medication and its effects;
- discusses the potential consequences;
- collaborates with the prescriber; and,
- documents the situation.

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[5] Oversight refers to clinical supervision in the provision of monitoring, guidance and providing feedback. (Kennedy et al, 2007)

4.2 Nurses document in accordance with legislative, regulatory, professional and agency/employer requirements.

Documentation is a form of communication between health care professionals and is a vital component of medication management and collaboration. It is central to identifying medications that have, and have not, been administered, and by whom. The medication administration record is a record of medication prescribed and administered to a client. This document forms part of the health record. The nurse must be knowledgeable, and have access to, the approved medication administration record for use in the practice area and maintain competence in its usage.

Documentation also provides information regarding the outcomes or effects of the administered medications. The requirements related to documentation apply in all types of documentation systems (e.g. paper or electronic) and in all formats used (e.g. SOAP, DAR).

ARNNL and CLPNNL have both outlined professional expectations in relation to documentation. Details are available in ARNNL's *Documentation Standards* and CLPNNL's *Documentation Practice Guideline.* Agency/employer policies may further dictate required practices in the practice setting.

Nurses report and document adverse events, errors, omissions, near misses and any other required reporting in relation to medications or client response to medications. Nurses remain knowledgeable of the processes for required reporting and documenting in relation to agency/employer requirements, as well as provincial or federally required reporting (e.g., adverse events following immunizations; Canada Vigilance Program).

5.	Client-Centred Care Principle: Nurses practice medication management in a way that promotes and supports client-centred care.

Client-centred care includes an approach to nursing care in which clients are viewed as whole; placing the client and their significant others at the center of care, using their needs and wishes to inform the health care plan.

5.1 Nurses practice medication management in accordance with their code of ethics.

Nurses recognize, respect and promote a client's right to make informed decisions about their medication management. Nurses follow policy and procedures for obtaining informed consent consistent with legislation, agency/employer policy and best practices.

Nurses recognize the client's right to develop or maintain their optimal level of functioning and independence.

Nurses support clients and/or families to administer their medications in the home and, as appropriate, in health care settings. Clients, capable of self-administration, may be

independent or may require some education and assistance; such as, reminders to take medications, help in opening containers or filling mechanical aids, or preparing/preloading or mixing medications. It may also include leaving medications with competent client/family members to administer at a pre-determined time e.g., with their meal.

Nurses provide information to the client/family regarding safe medication storage and administration including scheduling, dosage, route, potential adverse effects, and instructions for addressing adverse effects and communicating with the relevant health care professionals. Nurses assess the client/family member's ability to assume and maintain responsibility for medication administration and document instructions and all relevant client information on the appropriate record.

Nurses adhere to agency/employer policy and, in the absence of policy, advocate for clarification on the practice of client/family medication administration.

References and Resources

Accreditation Canada, the Canadian Institute for Health Information, the Canadian Patient Safety Institute, and the Institute for Safe Medication Practices Canada. (2012). *Medication Reconciliation in Canada: Raising the Bar – Progress to Date and the Course Ahead.* Ottawa, ON: Accreditation Canada. Retrieved from https://www.ismp-canada.org/download/MedRec/20121101MedRecCanadaENG.pdf

Association of Registered Nurses of Newfoundland and Labrador. (2005). Medication Standards. St. John's: Author. Retrieved from https://www.arnnl.ca/sites/default/files/documents/ID_Medication_Standards.pdf

Association of Registered Nurses of Newfoundland and Labrador. (2008*). Medical Directives and Pre-Printed Orders: Authorization for Registered Nurse Practice*. St. John's: Author. Retrieved from https://www.arnnl.ca/sites/default/files/documents/ID_Medical_Directives_and_Pre_Printed_Orders.pdf

Association of Registered Nurses of Newfoundland and Labrador. (2010). Documentation Standards for Registered Nurses. St. John's: Author. Retrieved from https://arnnl.ca/sites/default/files/documents/ID_Documentation_Standards.pdf

Association of Registered Nurses of Newfoundland and Labrador. (2015). Continuing Competence Program Framework. St. John's: Author. Retrieved from https://arnnl.ca/sites/default/files/RD_CCP_Framework_Revised.pdf

Association of Registered Nurses of Newfoundland and Labrador. (2017*). Dispensing by Registered Nurses (RNs) Employed Within Regional Health Authorities*. St. John's: Author. Retrieved from https://www.arnnl.ca/sites/default/files/documents/ID_Dispensing_by_Registered_Nurses_Employed_within_Regional_Health_Authorities.pdf

Association of Registered Nurses of Newfoundland and Labrador and College of Licensed Practical Nurses of Newfoundland and Labrador. (2018). Memo: *Direction on Role of RNs, NPs and LPNs in Administering and Distribution of Medical Cannabis.* Retrieved from https://www.clpnnl.ca/sites/default/files/2018-12/Direction_on_Role_of_RNs%2C_NPs_and_LPNs_in_Administering_and_Distribution_of_Medical_Cannabis_0.pdf

Brunt, B.A. (2005). Critical thinking in nursing: An integrated review. *The Journal of Continuing Education in Nursing, 36* (2), 60-67.

Canadian Agency for Drugs and Technologies in Health. (2009). *Pyxis® and medDISPENSE® Automated Medication Dispensing Systems: A Review of the Clinical Benefits and Harms, Cost-Effectiveness, and Guidelines for Use*. Retrieved from

https://www.cadth.ca/sites/default/files/pdf/htis/L0068%20Automated%20Medication%20Dispensing%20Systems%20final.pdf

Canadian Council for Practical Nurse Regulators. (2013). Standards of Practice and Code of Ethics for Licensed Practical Nurses in Canada. Retrieved from https://www.clpnnl.ca/sites/default/files/2016-10/StandandsofPracticeandCodeofEthicsforLPNs_0.pdf

Canadian Council for Practical Nurse Regulators. (2013). Entry-to-Practice Competencies for Licensed Practical Nurses. Retrieved from https://www.clpnnl.ca/sites/default/files/2016-11/entry.pdf

Canadian Nurses Association. (2017). Code of Ethics for Registered Nurses. Ottawa: Author. Retrieved from https://www.cna-aiic.ca/-/media/cna/page-content/pdf-en/code-of-ethics-2017-edition-secure-interactive.pdf

Canadian Nurses Protective Society. (1994). infoLAW: Consent to Treatment: The Role of the Nurse. Vol.3, No.2. Retrieved from https://www.cnps.ca/upload-files/pdf_english/consent.pdf

Canadian Nurses Protective Society. (2000). InfoLAW: Delegation to other health care workers. Vol.9, No.2. Retrieved from https://www.cnps.ca/index.php?page=90

Canadian Nurses Protective Society. (2007). InfoLAW: Medication Errors. Vol. 5, No.2. Retrieved from https://www.cnps.ca/index.php?page=97

Canadian Patient Safety Institute. (2008). Domain 1: Contribute to a culture of patient safety. *The Safety Competencies*: *Enhancing Patient Safety Across the Health Professions* (1st Ed.). Ottawa: Author. https://www.cna-aiic.ca/-/media/cna/page-content/pdf-en/code-of-ethics-2017-edition-secure-interactive.pdf

Canadian Patient Safety Institute. (2018). Medication Management. Retrieved from http://www.patientsafetyinstitute.ca/en/topic/pages/medication-management.aspx

Centre for Health Information. (2018). Healthe NL. Retrieved from https://www.nlchi.nl.ca/index.php/ehealth-systems/healthe-nl

College and Association of Registered Nurses of Alberta. (2015). *Medication Guidelines.* Edmonton: Author. Retrieved from http://www.nurses.ab.ca/content/dam/carna/pdfs/DocumentList/Guidelines/MedicationGuidelines_Mar2015.pdf

College of Licensed Practical Nurses of Newfoundland and Labrador. (2016). Continuing Competency Program Toolkit. St. John's: Author. Retrieved from https://www.clpnnl.ca/sites/default/files/2018-11/CCP_Toolkit_Aug_2018.pdf

College of Licensed Practical Nurses of Newfoundland and Labrador. (2017). Documentation Practice Guideline. St. John's: Author. Retrieved from https://www.clpnnl.ca/sites/default/files/2017-04/Practice_Guideline_Documentation_Jan2017.pdf

College of Registered Nurses of Nova Scotia. (2017). *Medication Guideline for Registered Nurses.* Nova Scotia: Author. Retrieved from https://crnns.ca/publication/medication-guidelines-for-registered-nurses/

Controlled Drugs and Substances Act .S.C. 1996, c.19. Government of Canada. Retrieved from https://laws-lois.justice.gc.ca/eng/acts/C-38.8/

Food and Drugs Act. R.S.C., 1985, c. F-25. Government of Canada. Retrieved from https://laws- lois.justice.gc.ca/PDF/F-27.pdf

Government of Newfoundland and Labrador Department of Health and Community Services (2011). *Newfoundland and Labrador Immunization Manual.* Retrieved from http://www.health.gov.nl.ca/health/publichealth/cdc/health_pro_info.html#disease

Health Canada. (2018). Canada Vigilance Program. Retrieved from: https://www.canada.ca/en/health-canada/services/drugs-health-products/medeffect-canada/canada-vigilance-program.html

Health Research Ethics Authority Act. SNL 2006. H-1.2. Retrieved from https://www.assembly.nl.ca/Legislation/sr/statutes/h01-2.htm

Institute for Safe Medication Practices. (2013). Independent Double Checks: Undervalued and Misused: Selective Use of This Strategy Can Play an Important Role in Medication Safety. Retrieved from https://www.ismp.org/resources/independent-double-checks-undervalued-and-misused-selective-use-strategy-can-play

Institute for Safe Medication Practices. (2017a). Recommendations, List of Error Prone Abbreviations. October 2, 2107. Retrieved from https://www.ismp.org/recommendations/error-prone-abbreviations-list

Institute for Safe Medication Practices. (2017b). Quarterly Action Agenda, July 13, 2017. Retrieved from www.ismp.org/sc?id=2965

Institute for Safe Medication Practices (ISMP). (2018a). ISMP Canadian Safety Bulletin: Safe Storage and Disposal of Medications. June 27, 2018. Retrieved from https://www.ismp-canada.org/download/safetyBulletins/2018/ISMPCSB2018-06-StorageDisposal.pdf

Institute for Safe Medication Practices. (2018b). *Reaffirming the "do not use: Dangerous abbreviations, symbols and dose designations" list. Canada Safety Bulletin.* Retrieved from https://www.ismp-canada.org/download/safetyBulletins/2018/ISMPCSB2018-05-DoNotUseList.pdf

Kennedy, T., Lingard, L., Baker, G., Kitchen, L., Regehr, G. (2007). Clinical oversight: Conceptualizing the relationship between supervision and safety. *Society of General Internal Medicine, 22*; 1080-1085.

Kliger, J., Blegen, M., Gootee, D., & O'Neill, E. (2009). Empowering frontline nurses: a structured intervention enables nurses to improve medication administration accuracy. *Joint Commission Journal on Quality and Patient Safety, 35(*12): 604-612.

Licensed Practical Nurses Act, SNL 2005. L-12.1. Retrieved from https://www.assembly.nl.ca/Legislation/sr/statutes/l12-1.htm 17b

Narcotic Control Regulations. C.R.C., c. 1041. Retrieved from https://laws-lois.justice.gc.ca/eng/regulations/C.R.C.,_c._1041/index.html

Perry, A.G., Potter, P.A., & Ostendorf, W.R. (2018). *Clinical nursing skills & techniques.* (9th ed.), St. Louis MO: Mosby.

Personal Health Information Act. SNL 2008. P-7.01 Retrieved from https://www.assembly.nl.ca/Legislation/sr/statutes/p07-01.htm

Pharmacy Act, SNL 2012 P-12.2. Retrieved from https://www.assembly.nl.ca/Legislation/sr/statutes/p12-2.htm

Pharmacy Regulations, 2014, 94/14. Retrieved from https://www.assembly.nl.ca/Legislation/sr/regulations/rc140094.htm

Public Services Health and Safety Association. (nd.) *Safe Handling of Hazardous Drugs in Healthcare.* Retrieved from https://www.pshsa.ca/wp-content/uploads/2013/11/PSHSA-Whitepaper-Safe-Handling-of-Hazardous-Drugs-in-Healthcare.pdf

Registered Nurses Act, SNL 2008. R-9.1. Retrieved from https://www.assembly.nl.ca/Legislation/sr/statutes/r09-1.htm

Glossary

Critical Thinking or Inquiry is a process of purposeful thinking and reflective reasoning where practitioners examine ideas, assumptions, principles, conclusions, beliefs, and actions in the context of nursing practice. The critical inquiry process is associated with a spirit of inquiry, discernment, logical reasoning, and application of standards (Brunt, 2005).

Delegation is the formal process where a nurse transfers authority to a support worker to perform a task that is traditionally performed by a nurse (Canadian Nurses Protective Society, 2000).

Evidence-informed is practice which is based on successful strategies that improve client outcomes and are derived from a combination of various sources of evidence, including client perspective, research, national guidelines, policies, consensus statements, expert opinion and quality improvement data.

Independent double checking of a high-alert medication is a strategy that is used to help detect potentially harmful medication errors before they reach clients (Institute for Safe Medication Practices (ISMP), 2013). An independent double check requires two qualified health-care professionals to separately check each component of the work process (check the prescription, compare the medication to the prescription and medication administration record, calculate the dosage, compare the result and check the client identifiers). An independent double check is completed just prior to the medication being administered. Two people are unlikely to make the same mistake if they work independently. If they work together or influence the checking process by suggesting what the checker should find, both could follow the same path to an error. The person asking for the double check should not influence the individual checking the product in any way (Institute for Safe Medication Practices, 2013).

Informed consent refers to the clients have a right to determine what happens to their bodies; and the health professionals' inherent duty to provide clients with enough information to make an informed decision. The cornerstone to achieving informed consent is developing a good therapeutic nurse-client relationship with the client. Clients must be provided with enough information specific to the circumstances to allow him/her to make an informed decision. To ensure understanding and that suitable information has been provided, the patient or his or her agent should be provided with an opportunity to ask questions (http://www.nlpb.ca/pharmacy-practice/frequently-asked-questions/).

Off-label use of medications refers to the practice of using a Health Canada-approved drug for a purpose that is not indicated by the manufacturer but has been deemed potentially beneficial for the client by the prescriber. An example is prescribing a route or dose for a medication that is different from what was originally approved or

prescribing a medication for a child that has only been approved for use in the adult population.

While the product monograph is a valuable source of information including indications, benefits, dosing, contraindications or potential adverse reactions, it may include details about off-label use. The nurse may need to consult with the prescriber and/or a pharmacist for support and expert opinion prior to administering the medication.

Over-the-counter medications are in schedule III of the National Association of Pharmacy Regulatory Authorities. Nurses can recommend and/or assist clients in the selection of over-the-counter medications when supported by agency policy (inclusive of documentation). The nurse must have the knowledge, skills and judgement about the client's diagnosis, current medications and potential interactions about the specific over-the-counter medication being recommended (CARNA, 2015; College of Registered Nurses of Nova Scotia, 2017).

Range doses are medication prescriptions in which the dose, frequency or route of administration for a medication is prescribed in a range (e.g. Morphine 2 mg - 4 mg IV q3h prn for pain). Range doses are used in situations where a client's need for the medication varies from day to day or within the same day. A range dose prescription gives the nurse the flexibility to make a decision on the appropriate dose of medication to administer, based on their assessment of the client immediately prior to medication administration.

Therapeutic interchanges are defined as the substitution of equally effective medications, for example, substitution within a class of medications such as antibiotics or proton pump inhibitors. The use of therapeutic interchanges may be implemented to support best practices and improve cost effectiveness (ARNNL, 2005).

Appendix A: Medication **Management Reflection Algorithm**

In the provision of the safest and most appropriate care in medication management practices, nurses, as self-regulated, reflective practitioners consider:

Education	Authorization	Competence	Collaboration	Client-Centred Care
Do I have the knowledge, skills and judgement: • To prepare this medication? • To clarify prescriptions if needed? • To administer this medication? • To evaluate its effectiveness? • To identify and respond to the outcomes (expected and unexpected) of this medication? Do I know what best practice states?	Is what I'm being asked to do within the realm of nursing? Am I authorized : • By legislation? • By the regulatory body? • By the agency/employer/ employment relationship to administer this medication? Is there an employer policy in place? Is there a complete, accurate and clear medication prescription? Medical directive or pre-printed order? Do I have the resources in place to identify, monitor and intervene, if needed, to support safe medication management?	Do I possess the necessary knowledge, skills and judgment: • To complete the appropriate physical assessment? • To implement medical-directives or pre-printed order set? • To provide direction to others? • To provide education? • To provide follow-up?	Did I identify who I need to collaborate with? Did I collaborate with others? Is informed consent needed? Can I document in accordance with legislative, regulatory, professional and agency/employer requirements?	Am I the best person to give this medication to this client? At this time? In this setting? Is this in the best interest of my client?

Education — red box:
If NO to any of these questions, STOP. Do not give medication. Seek additional education as required.

Education — green box:
If you answered YES to these questions, next reflect on authorization.

Authorization — red box:
If NO to any of these questions, STOP. Do not give medication. Collaborate with others and clarify authorization. Advocate for changes if required.

Authorization — green box:
If you answered YES to these questions, next reflect on competence.

Competence — red box:
If NO to any of these questions, seek out the additional education and necessary resources prior to giving the medication.

Competence — green box:
If you answered YES to these questions, next reflect on collaboration.

Collaboration — red box:
If NO to any of these questions, clarify who to collaborate with and collaborate prior to administering medication. Advocate for changes if required.

Collaboration — green box:
If you answered YES to these questions, next reflect on client-centred care

Client-Centred Care — red box:
If NO to any of these questions, collaborate with others to determine who can provide medication management for this client that is in the client's best interest.

Client-Centred Care — green box:
If you answered YES to these questions, and satisfied the requirements of the previous reflections, you can proceed.

The broken lines between columns reflects the interrelationship between principles.