NOVA SCOTIA COLLEGE OF NURSING

MEDICATION GUIDELINES FOR NURSES

The Nova Scotia College of Nursing (NSCN) is the regulatory body for licensed practical nurses (LPNs), registered nurses (RNs) and nurse practitioners (NPs) in Nova Scotia. Our mandate is to protect the public by promoting the provision of safe, competent, ethical and compassionate nursing services by our registrants. The term nurse in this document refers to LPNs, RNs, and NPs unless otherwise stated.

Contents

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Our practice support tools are developed using current reference material. The source of this material is available upon request.

This tool is a resource for nurses in all practice settings to help them understand the principals associated with medication management. Like all regulatory tools, use this document in conjunction with employer policy, applicable legislation and the standards of practice and code of ethics for LPNs, RNs and NPs.

Additional information is provided when guidance related to the scope of practice differs among LPNs and RNs. Information specific to the role of NPs or RN Prescribers in prescribing medication is not discussed in this tool, except as it relates to providing guidance to RNs accepting medication orders written by NPs or RN Prescribers. Further information about the NP's accountabilities for prescribing medications can be found in the *Nurse Practitioner Standards of Practice*. Further information about the RN Prescribers accountabilities for prescribing medications can be found in the *Standards of Practice for RN Prescribers*.

> Registered nurses that have attained additional education and registration requirements to become a registered nurse authorized to prescribe (RN-AP) have the authorization to prescribe medications within their specific area of prescribing competence and practice. The role of an RN Prescriber would not replace or duplicate services currently provided by nurse practitioners, but rather would complement these services and would allow health care providers to most appropriately treat the needs of the patient.

Principles of Medication Administration

> Medication administration: the act of giving medications to an individual client through a specific medication route (e.g., enteral, percutaneous, parenteral).

Nurses are accountable to their clients to manage medication administration safely, competently, ethically and compassionately. To fulfill this accountability, it is important that nurses consider the following principles related to medication management:

1. Authority
2. Competence
3. Education
4. Risk and safety
5. Collaboration

Interwoven within these principles is the need for nurses to consider the most appropriate care provider to administer medications to clients. Determining the most appropriate care provider requires nurses to conduct a risk assessment. This assessment should involve the following considerations:

- Needs of the client - known vs unknown, if the plan of care is established, predictability or consistency of client response
- Supports in the practice environment -accessibility of practice supports including authorizing mechanisms such as policies, procedures and care directives
- Individual nurse - self-assessment of their individual competence, experience, ability to manage outcomes

It is important for nurses to recognize that these 3 things are interrelated and cannot be considered in isolation. More information on the scope of practice and effective utilization of LPNs and RNs can be found in the Nursing Scope of Practice practice guideline.

See Appendix A for a decision tree to assist nurses in determining if they should administer a medication.

There are no restrictions on the types of medications LPNs can administer. There are however, certain contexts and clinical situations where LPNs may not be authorized to administer medication via a specific high-risk route. Some routes of administration, such as an IV or IV push, have a higher degree of risk associated because the potential for untoward outcomes is greater. High-risk is associated with a greater potential for unpredictability .

Principles of Medication Management

PRINCIPLE 1: AUTHORITY

A nurse's authority to administer medication is granted through legislation, regulation and policy. Nurses must be aware of and understand the scope of practice of the nursing profession, their individual scope of practice and their scope of employment.

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

Federal and Provincial Legislation

Prescribing, compounding, dispensing and administering medications are activities that are defined in both federal and provincial legislation for specified health professionals. As members of an interprofessional collaborative team, nurses should be aware of and understand the implications of relevant legislation, as well as the roles and responsibilities of each team member involved in the delivery of medications to clients.

Examples of relevant legislation that impact medication administration can be found in Appendix B.

1.2 Nurses require an order from an authorized prescriber for all medications in schedules I or II of the Drug Schedules Regulations made under Nova Scotia's Pharmacy Act. Exception: Nursing Act 174(1) authorizes LPNs and RNs to administer naloxone intranasally or intramuscularly as a life-saving measure under their own authority; and provide take-home naloxone kits under their own authority. Please refer to Modifications of Scope Related to Naloxone Fact Sheet for more information.

Authorized Prescribers

In Nova Scotia, authorized prescribers include:

- NPs
- RN Prescriber
- Physicians
- Midwives
- Dentists
- Optometrists
- Pharmacists

Nurses are authorized to take medication orders from nurse practitioners and RN Prescribers. Physician assistants are not authorized prescribers, rather they are granted the authority to prescribe a defined list of medications and interventions under the supervising physicians license under NSH policy.

The type of medication that individual authorized prescribers can prescribe varies depending on their professional designation, the schedule(s) of drugs they are authorized to prescribe and their scope of practice. Prescribers are accountable to know which medications they are authorized to prescribe.

Types of Authorizing Mechanisms

Medication Order

A medication order is the direction provided by an authorized prescriber for a specific medication to be administered to a specific client. Medication orders may be received in writing or electronically or delivered verbally in-person or by telephone.

Acceptable forms of medication orders include:

- Prescriptions
- Orders in the client record
- Care directives
- Pre-printed orders

- Copy of a pharmacy telephone order

A complete medication order must include:

- Client's full name
- Date of order
- Medication name
- Frequency
- Strength, quantity and concentration, where applicable
- Route of administration
- Purpose for a PRN medication
- Authorized prescriber's name, signature and designation

Orders such as "provide medications at home", "resume medications as pre-op", or "resume medications post-discharge" are not acceptable as they are incomplete and can lead to errors .

E-Signature

Nurses may accept orders that have been created, signed, and transmitted via an employer approved electronic delivery system.

Agencies should have clear policies outlining expectations of nurses receiving orders electronically. Nurses are encouraged to work with their employer and the broader health care team to develop policies on how orders are received, documented, and authenticated in an electronic documentation system.

When the order is intended for a client to use at home, the order must include:

- the dosage with instructions; including frequency, interval or maximum daily dose
- how long the drug is to be used, where applicable

Care Directives

A care directive is an order or authorization, which exists as an organizational policy and is developed and approved by an authorized prescriber and the organization for an intervention or series of interventions to be implemented by another care provider for a range of clients with identified health conditions, in specific circumstances exist. The intervention(s) must be within the scope of practice of the care provider implementing them. The authorized prescriber who writes the order holds the ultimate responsibility for the interventions. Refer to *Care Directives Practice Guideline* and employer policy for further guidance.

Pre-Printed Orders

A pre-printed order is a list of orders for a specific client for a specific health condition from which the authorized prescriber selects the applicable orders. Pre-printed orders must:

- Include the client's identifying information (e.g. name, ID number)
- Include the signature of the authorized prescriber
- Be included in the client's health record

When pre-printed orders are used, the client is first assessed by the authorized prescriber who then selects the appropriate interventions from a set of pre-printed orders. These orders are to be implemented as written unless the nurse determines a client-specific contraindication (e.g. allergy).

See Appendix C for guidance to determine if an order is clear, complete and appropriate.

Over the Counter Medications and Devices

Nurses may recommend and administer OTC medications or devices as long as they have the knowledge, skill and judgement (competence) to do so and there is an employer policy supporting this practice. The nurse must ensure the OTC medication or device they are recommending is treating an already diagnosed condition and not new symptoms which would require further assessment by a nurse or medical practitioner. Nurses cannot personally gain from the promotion of any recommended OTC medications and devices as per the Nursing Act.

RN PRACTICE

RNs are authorized to recommend and administer OTC medications in any context of practice as long as the RN possesses the required competencies.

LPN PRACTICE

Independent Practice

LPNS are authorized to recommend and administer OTC medications as part of a well-established plan of care with readily anticipated outcomes based on a discussion with the client and using the effectiveness of any previous OTC medications as a reference point.

Collaborative Practice

When the client's condition has changed and the required OTC dose has changed or they require a new OTC medication or device the LPN will collaborate with the RN or other appropriate health professional to collaboratively determine the OTC medication or change in dose and make changes in the nursing portion of the plan of care.

Refer to the *Nurses Recommending and Administering Over the Counter Medications or Devices Practice Guideline* for further information.

1.3 Nurses do not compound or dispense medications

Compounding

Compounding 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. Compounding is not within the scope of nursing practice.

Crushing medications, reconstituting medications for parenteral administration or mixing two different types of insulin are not considered compounding.

Dispensing

Dispensing is the interpretation, evaluation and implementation of a prescription drug order, including the preparation, packaging, labeling and delivery of a drug or device in an appropriately labeled container for administration and/or use by a client. Dispensing is not within the scope of nursing practice.

Repackaging or providing medications after they have been dispensed by a pharmacy is considered 'supplying' not dispensing and is therefore within the nursing scope of practice. Other situations that are often incorrectly referred to as dispensing include:

The Food and Drug Regulations permit the distribution of drugs samples to and by authorized prescribers. Employer policy is required to support NPs to distribute drug samples.

RNs and LPNs can only distribute drug samples under an authorized prescriber's order or care directive. Agency policies pertaining to the distribution of drug samples should address their procurement, storage, access, distribution/supplying and proper disposal.

- Filling a mechanical aid or alternative container from a client's own blister pack or prescription bottle to facilitate self-administration or administration by a caregiver.
- Repackaging and labeling drugs from a client's own supplies.
- Administering medications prepared by a pharmacy.
- Administering medications from a stock supply (dispensed by pharmacy).
- Providing clients with their own blister packs or prescription bottles.
- Providing clients with medications obtained from a ward stock or 'night cupboard'.
- Providing medications from an agency pharmacy upon a client's discharge from an institution when they are unable to get their medications from their community pharmacy.

These are all within the professional scope of practice of nursing as long as the nurse has the required competencies and follow employer policy.

Key Points: Authority

- Nurses must be aware of and comply with federal and provincial legislation
- Examples of relevant legislation that impact medication administration can be found in Appendix B.
- Nurses require an order from an authorized prescriber which could be a direct order, a pre-printed order, or a care directive
- Nurses should be aware of the differences in scope of practice related to the recommendation and administration OTC medication and devices.
- Nurses should be aware of what is meant by compounding and dispensing and how this may impact their practice.

PRINCIPLE 2: COMPETENCE

2.1 Nurses are required to have the knowledge, skills and judgement to safely administer medications.

Medication Competencies

In order to safely and competently administer medications, nurses need the knowledge, skills and judgment to:

- Obtain a complete medication history from clients, including medication reconciliation.
- Determine that each medication order is clear, accurate, current and complete; and take appropriate action if clarification is needed (see Appendix C).
- Assess the appropriateness of a medication for a client, considering the client's age, weight, pathophysiology, laboratory data, medication history, allergies, vital signs and knowledge/beliefs about drugs (see Appendix C).
- Discuss concerns about medication orders with the appropriate interprofessional team member in order to appropriately prepare and administer medications.
- Ensure medication orders are transcribed according to employer policy.
- Have knowledge about the medication(s) being administered, including therapeutic actions, possible risks, adverse effects, contraindications and interactions with other substances.
- Administer medications correctly.
- Obtain informed consent before administering medications.
- Monitor the effectiveness of medications.
- Manage adverse reactions.
- Consult with the appropriate care provider when client outcomes are not as expected, or client needs exceed the scope of practice of the nurse.
- Accurately document outcomes.
- Teach clients how to manage their own health, including medications.

Medication reconciliation: a systematic process used to obtain a complete and accurate current list of a client's medications, i.e., name, dose, frequency, route, which is then compared to a physician's admission, transfer and discharge medication orders to identify and resolve any discrepancies

It is important for nurses to identify the needs of the client, the supports in the practice environment and the scope of practice of the individual nurse when determining who is the appropriate nurse to administer the specific medications.

See Appendix A for a decision tree to assist you in determining if you are the most appropriate nurse to administer a medication.

Medication Rights

Safe and competent medication administration requires the application of a safety framework or the "9 Rights" to the medication administration process:

- Right client
- Right medication
- Right route
- Right time
- Right dose
- Right reason
- Right response
- Right education
- Right documentation

2.2 Nurses use their knowledge, skills and judgment and work within their legislated scope of practice when implementing orders for medications which require nurses to determine doses and administration times.

PRN Medications

PRN or "as needed" medications are administered to clients following a comprehensive nursing assessment and are given only for the purpose for which they are ordered.

Nurses are then responsible to monitor the client to determine the medication's effectiveness and document the outcomes.

An order for a PRN medication should include:

- Purpose of the medication
- Frequency with which it may be administered

When a PRN medication is administered, the reason for its administration and the client's response should be documented.

PRN medication orders must be administered as ordered; for example: if the order is for morphine 2mg every 4 hours, the nurse cannot give 0.5mg every hour. If the PRN order is not meeting the clients' needs, the nurse must collaborate with the authorized prescriber and have the order re-evaluated to ensure the client's needs are met.

Range Doses

Range doses refer to medication orders in which the dose and frequency of medication is prescribed in a range (e.g., acetaminophen 500 - 1000 mg PO Q4-6H as needed for pain). These range doses are often prescribed when a client's need for medication varies.

Comprehensive client assessments are critical when administering range doses, including the client's response to previous doses of the medication. If the nurse determines the range dose prescribed is inadequate in meeting the client's needs, they should contact the prescriber. Clear communication among clients, nurses, physicians and pharmacists is vital for a range dose system to work effectively.

RN PRACTICE

RNs are authorized to administer range doses for clients in any context of practice as long as the RN possesses the required competencies.

LPN PRACTICE

Independent Practice

LPNS are authorized to administer range doses as part of a well-established plan of care with readily anticipated outcomes based on a discussion with the client and using the effectiveness of any previous dosages as a reference point.

Collaborative Practice

When the client's need for a range dose has changed, become more frequent or less effective, the LPN is expected to consult with the RN to collaboratively determine the range dose.

Sliding Scales and Algorithms

Some medications may be ordered according to a sliding scale or algorithm. These tools guide nurses in determining the dose of a medication based on a client's laboratory values or other parameters. Nurses must be aware of employer policy regarding the use of sliding scales and algorithms and ensure that these policies are current and based on evidence.

RN PRACTICE

RNs are authorized to administer medications using sliding scale and/or algorithms as long as they possess the required competencies. RNs should self-assess their competence and seek additional education if required. Additionally, the employer may require the RN to participate in employer-based education prior to engaging in these skills.

LPN PRACTICE

Independent Practice

LPNs are authorized to administer medications using sliding scale and/or algorithms in the appropriate context, including where:

- A baseline of assessment parameters has been established and documented in the client's plan of care
- The algorithm is part of a well-established plan of care for a client whose outcomes are reasonably anticipated
- The LPN has the appropriate knowledge, skill and judgment.

LPNs are required to participate in employer-based education before they can engage in these skills.

Collaborative Practice

When the client's needs are not established, well known or easily anticipated or if findings in relation to the assessment parameters are unpredictable or frequently changing, the LPN is expected to use the sliding scale or algorithm in consultation with the RN.

Not Authorized

LPNs are not authorized to determine insulin correction or adjustment doses using protocols or care directives.

2.3 Nurses document all aspects of medication administration.

Transcribing Medication Orders

Transcribing is the process of transferring a prescriber's medication order from an order sheet to the medication administration record (MAR). When transcribing medication orders and determining the appropriate administration schedule, nurses must apply professional judgment to maximize the therapeutic effect of the drug, support client choice and comply with employer policy.

In some practice settings, other individuals, such as ward clerks or other clerical staff, may participate in completing the paperwork involved in transcribing orders. Nurses are accountable for validating the accuracy and completeness of the transcription before the administration of medications to the client.

Before administering the medication(s), nurses are responsible to assess the medication appropriateness and verify that the medication orders, pharmacy labels or medication administration records are accurate and complete, including the client's name and identification number, as well as the medication's name, strength, dose, route, timing and frequency of administration, as per employer policy.

Collaborative Practice

LPNs are authorized to transcribe orders for medications they cannot administer, as long as they can administer the medication via another route. For example IV metoprolol- the LPN may not be authorized to administer the metoprolol intravenously but can give it orally and therefore can transcribe the order. In these cases, the LPN is accountable to make sure their transcription is verified by an RN.

Documentation

Documentation of medication administration usually takes place in the medication administration record but could also be within the notes section of the client record. Nurses are accountable for ensuring timely, accurate documentation of all medications they administer. All documentation of medication administration should include:

- Client's name
- Name of drug(s)
- Date and time of administration
- Dose
- Route
- Site (as applicable)
- Nurses signature/designation as per employer policy

Nurses are required to document:

- Any adverse reactions to medication
- The client's response,
- Any related interventions
- Information provided to a client and communications with other members of the healthcare team.

For further information, please refer to the *Documentation Guidelines for Nurses Practice Guideline* and the employer policy.

Documenting Medications Administered by Others

Emergencies

Nurses should only document medications that they have personally administered and should not permit anyone else to document for them except in an emergency. For example, in a cardiac arrest, a healthcare provider is usually designated to record all medications given by team members. However, the healthcare providers who actually administer the medications should countersign this record as soon as possible after the event.

Self-Medication

In certain care contexts, clients may self-administer medications; however, as the nurse caring for the client, the nurse maintains responsibility for monitoring and documenting the client's medication usage. Employer policy should be in place to support this practice.

Students

When working with nursing students, nurses should be knowledgeable about policies pertaining to the administration of medications by them, including any restrictions placed on students' practice. The nursing student should document in the medication administration record (MAR) and the entry should not be co-signed as this blurs the lines of accountability.

Key Points: Competence

- Nurses are required to have medication competence and be aware of the 9 medication rights
- Nurses should be aware of the differences in scope of practice related to implementing orders which requires them to determine doses and administration times such as PRN meds, range doses sliding scale and algorithms.
- Nurses are required to document all aspects of medication administration which includes transcription, documenting in the client record and the medication administration record

PRINCIPLE 3: EDUCATION

3.1 Nurses seek knowledge when administering non-traditional medications.

Complementary and Alternative Medications

Before administering complementary and alternative medications or providing advice about their use, nurses must have a prescription from an authorized prescriber and be knowledgeable about the therapeutic benefits, side effects, contraindications and potential interactions with other prescribed medications. Further information on your roles and responsibilities in relation to complementary and alternative medications are outlined in Complementary & Alternative Health Care: A Guideline for Nurses .

Investigational Medications

Investigational medications are used in human clinical trials and must be approved by an independent research ethics board. These medications require an order and additional written consent, the process for which must be outlined in the research protocol.

RN PRACTICE

RNs may only administer investigational medications to those clients involved in the clinical trial and are accountable to apply the principles of safe medication administration, including carefully monitoring client outcomes and documenting relevant findings as outlined in the research protocol.

LPN PRACTICE

Collaborative Practice

LPNs are authorized to administer Phase III investigational medications administered via the PO, IM, or S/C route, but not via the IV route. Employers and LPNs wishing to engage in this practice must consult an NSCN Practice Consultant for guidance in developing policies and processes.

Restricted, Non-Formulary and Special Access Medications/Emergency Release Medications

Nurses may be requested to administer:

- Restricted medications: formulary medications that are restricted for a specific indication or specialty.
- Non-formulary medications: not on an employers formulary or approved for general use and requires special authorization.
- Special access medications: only authorized through the Special Access Program of Health Canada, for use in serious or life-threatening conditions for which conventional therapies have failed or are unsuitable or unavailable.

RN PRACTICE

RNs are required to have an order and a signed and dated client consent form before administering any restricted, non-formulary or special access medications.

LPN PRACTICE

Collaborative

LPNs may administer restricted and non-formulary medications when the administration of the medication is part of an established plan of care with clear and predictable client outcomes.

Not Authorized

LPNs are not authorized to administer Special Access/Emergency release medications.

Off-Label Use of Medications

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 by the prescriber for a client.

Nurses should be knowledgeable about the scientific rationale for the off-label use of a medication as well as the possible side effects. Prior to administering an off-label medication, nurses may need to speak with the prescriber or a pharmacist if there are any questions or concerns. Nurses also need to communicate to the client the reason for the off-label use of a medication and associated risks.

See Appendix C if you have questions related to the use of off-label medications.

LPN PRACTICE

Collaborative

LPNs are required to collaborate with the RN when administering medications for an off-label use.

3.2 Nurses know the limits of their knowledge, skills and judgement and seek assistance and additional knowledge as needed.

Procedural Sedation and Analgesia

Procedural sedation and analgesia (PSA) is used to control pain or psychological stress during procedures, such as suturing or cast application. Clients receiving PSA have a slightly depressed level of consciousness and are usually able to maintain their airway and respond appropriately to verbal commands and physical stimulation.

RN PRACTICE

RNs are authorized to administer PSA via any route as long as they possess the required competencies and it is supported by employer policy. RNs should self-assess their competence and seek additional education if required. Additionally, the employer may require the RN to participate in employer-based education prior to engaging in these skills.

LPN PRACTICE

Collaborative

In specific and limited contexts, the LPN may be authorized to administer oral, rectal or injected (intramuscular or subcutaneous) sedation medication. Employers and LPNs wishing to engage in this limited practice should consult an NSCN Practice Consultant for guidance in developing policies and processes. The employer may require the LPN to participate in employer-based education prior to engaging in these skills.

Not Authorized

LPNs are not authorized to administer IV sedation or medications intended for the purpose of general anesthesia.

Patient Controlled Analgesia

Patient-controlled analgesia (PCA) is a method of pain control that gives clients the power to control their pain. In PCA, a computerized pump is connected directly to a client's intravenous (IV) line or subcutaneous line (S/C).

RN PRACTICE

RNs are authorized to care for clients receiving PCA as long as they possess the required competencies. RNs should self-assess their competence and seek additional education if required. Additionally, the employer may require the RN to participate in employer-based education prior to engaging in these skills. RNs who obtain the required competencies can provide care for clients receiving PCA in any practice context.

LPN PRACTICE

Independent

LPNs are authorized to care for clients with an established PCA pump. LPNs who have obtained the necessary competency through additional employer-based education, learning and mentorship opportunities can engage in these interventions.

Collaborative

When a PCA pump is initialized or when syringes or cartridges are replaced and changes are required, in drug, drug concentration or increased dosage, LPNs may be the second care provider/co-signature to the RN. LPNs may replace established PCA cartridges or syringes of the same medication, in the same concentration at the same or lower rate, acting as the first or second care provider/co-signature.

In certain specific and limited contexts, like palliative care, the LPN may be authorized to:

- Initiate S/C PCA
- Replace cartridges or syringes with different or increased concentrations, dosages or rates for either IV or S/C PCAs

Employers and LPNs wishing to engage in this limited practice must consult an NSCN Practice Consultant for guidance in developing policies and processes with the understanding that these skills are not transferrable to client care outside a dedicated palliative care unit.

Not Authorized

LPNs are not authorized to initiate IV PCA pumps or fill or add medications to a cartridge or syringe.

Immunizations

Vaccines have a significant positive impact on the health of the population by controlling the spread of vaccine preventable disease. Administering vaccines safely, competently and ethically requires additional knowledge, skills and judgement.

Nurses are authorized to administer vaccines provided they possess the required competencies. Nurses should self-assess their competence and seek additional education if required. Additionally, their employer may require the nurse to participate in employer-based education prior to engaging in this intervention. Nurses should consult, collaborate or refer clients to an appropriate care provider if the care of the specific client is outside of their scope of practice.

Key Points: Education

- Nurses have knowledge of non-traditional medications such as complementary and alternative therapies, investigational, restricted, non-formulary and special access ,emergency release and off-label use of medications.
- Nurses seek assistance and additional knowledge of medications such as procedural sedation and analgesia PCA and vaccines.

PRINCIPLE 4:RISKS AND SAFETY

4.1 Nurses only accept verbal orders in emergent or urgent situations.

Verbal and Telephone orders

Authorized prescribers should write medication orders whenever possible. However, nurses can accept verbal or telephone orders from authorized prescribers when it is in the best interest of a client and there are no reasonable alternatives, such as during an urgent or emergent situation. Authorized prescribers should review and countersign these orders within the timeframe indicated in the employer policy.

Due to a higher risk of medication errors associated with verbal or telephone orders, the nurse must communicate clearly and document the conversation with the prescriber in a timely manner. When taking a verbal or telephone order, nurses should:

- ensure all elements of a medication order are included and note the time and date of the conversation
- read the order back to the prescriber to confirm accuracy and sign the entry as per employer policy
- indicate on the order form that the verbal or telephone orders were read back to the prescriber, when possible
- document their nursing assessment, actions taken and any client outcomes associated with the order

LPN PRACTICE

Independent

Occasionally, an LPN may be required to take a telephone order for a medication they cannot administer because it is not part of their individual scope of practice or scope of employment. The LPN may take the telephone order as long as they are competent to administer the medication in a different form (e.g. orally).

Not Authorized

LPNs are not authorized to take telephone/verbal orders for intravenous chemotherapy, sedation or PCA/epidural pain medication.

Using Technology to Transmit Medication Orders

Faxes, emails, smartphones and other wireless devices are now frequently being used to communicate client information in healthcare settings. All information transmitted electronically, such as orders sent by fax or email, are considered part of the client record.

Nurses are accountable to verify the appropriateness of a faxed or electronically transmitted order in the same manner as they would for all orders by following employer policy. Nurses should be aware of and follow employer policies for transmitting client information electronically, such as the use of encryption software, user verification or secure point-to-point connections.

If the employer does not have a policy on the use of technology, you should not accept orders in this manner. Orders received via text messaging, social media sites and/or sent to a nurse's personal email account are not acceptable.

For more information on text messaging see *Documentation Guidelines for Nurses Practice Guideline* and *Social Media Practice Guideline*.

4.2 Nurses only use employer-approved abbreviations.

The use of abbreviations in the medication process can be hazardous to client safety due to the risk of errors occurring when prescriptions or medication orders are written, transcribed or read. You should only use abbreviations that are approved by the employer.

4.3 Nurses should not pre-pour medications.

Pre-pouring of medications occurs when one nurse prepares a medication but does not administer it immediately or has another nurse administer it. Nurses should not pre-pour medications as this practice increases the risk of errors and blurs the lines of accountability.

Emergency Situations

There may be situations in which more than one healthcare professional is required to assist in medication administration. For example, in the event of a cardiac arrest, one nurse may prepare and label medications while another nurse or authorized health professional may administer them.

In these situations, both the nurse preparing the medications and the nurse administering the medication would be required to document the medication administration in the client's health record. Employer policy should support this practice and further define accountabilities.

Immunization Clinics

In the practice context of an immunization clinic, it may be acceptable for the nurse to prepare multiple doses of vaccine to be administered by multiple nurses. This practice is specific and limited to certain circumstances and must be supported by employer policy. Nurses should be familiar with the employer's policy specific to mass preparation of medications.

Client Self-Administration

In some contexts, it may be appropriate for the nurse to pre-pour medications to be self-administered by the client over time. This may include filling a mechanical aid or alternative container from a client's own blister pack or prescription bottle to facilitate self-administration.

4.4 Nurses utilize evidence informed practice when handling, storing and transporting controlled drugs and substances (CDS).

Federal legislation and regulations through the Controlled Drugs and Substances Act and the Narcotic Control Regulations, establish requirements for the appropriate handling, storing and transporting of controlled drugs and substances. Employer policies must be established to support these requirements, such as:

- Who can receive the delivery of controlled drugs
- Who can access locked medication storage cabinets
- Who can perform controlled drug counts
- How to document drug counts
- How to manage discrepancies

In most facilities, nurses are authorized to:

- Receive the delivery of controlled drugs
- Access locked medication storage cabinets
- Perform controlled drug counts

While federal regulations stipulate requirements for management of controlled drugs and substances in health care facilities, these same regulations do not apply to controlled drugs and substances in the client's home. Because there is a potential for diversion of controlled drugs and substances, nurses should educate the client and family on safe storage and disposal of any prescribed controlled drugs in their possession. This could include:

- Advising clients to keep only the minimum amount of their controlled drug in the home.
- Requesting a smaller supply from their provider or pharmacist.
- Ensuring medications are stored safely out of sight, preferably in a locked box or cupboard.
- Avoiding discussion about the controlled drug being present in the home when in public spaces.
- Advising clients to return any controlled drugs that are no longer required to a pharmacy for proper disposal.

Community Practice and Transportation of CDS

On September 5, 2018, Health Canada issued two s56(1) exemptions authorizing nurses (RNs and LPNs) practising in community settings to transport controlled drugs and substances. More information on the transportation of controlled substances in Canada can be found here.

Under the Controlled Drugs and Substances Act (CDSA) and its regulations, nurses, other than nurse practitioners, can only conduct activities with controlled substances if they have been prescribed by a practitioner and they are employees of a hospital. Health Canada recognized that nurses are often responsible for primary care in the community; and therefore, within this context nurses often conduct activities with controlled substances.

These exemptions authorize nurses to possess, provide, administer, transport, send and deliver controlled substances while providing health care services at community health facilities under certain conditions. Please refer to the exemptions for more details. In addition to the activities above, the exemption allows nurses working at community health facilities to transport and provide controlled substances, prescribed by a practitioner, to the client.

Nurses should work with their employer to determine if their facility qualifies under these exemptions.

4.5 Nurses take action to resolve or minimize the risk of harm to clients from medication errors or adverse reactions.

Medication errors are preventable events related to incorrect administration of medications that pose a risk to client safety. An error may occur when medication is not administered according to the "9 Rights" and if medication is improperly reconstituted or administered despite knowledge of contraindications or a medication allergy.

Some examples of medication errors include:

- Near miss: a client safety incident that does not reach the client and therefore no harm occurs.
- No-harm incident: a client safety incident that reaches the client but no discernible harm occurs.

There are many factors that can lead to medication errors, including:

- provider fatigue
- inattention and/or distraction
- workload and time pressures
- ineffective verbal and written communication between healthcare team members
- packaging and dispensing errors
- borrowed medications
- insufficient knowledge

Nurses and healthcare employers must work collaboratively to:

- Identify system and individual risk factors
- Initiate proactive measures to decrease error situations
- Report all errors, no harm and near misses
- Intervene to minimize the potential for client health to be compromised as a result of medication errors

There are organizational strategies in place to support quality medication administration practice that have been initiated. Some examples include:

- 24-hour access to current medication administration resources (e.g., CPS)
- Implementation of scheduled maintenance processes for equipment used in the administration of medications (e.g., IV pumps)
- Provision of an appropriate environment for nurses to prepare medications

- Provision of uninterrupted time for nurses to administer medications
- Provision of sufficient support and continuing education opportunities for nurses to further develop their competencies related to pharmacology
- Integration of information related to medication systems within orientation programs for new employees

Reporting Errors: No Harm Incidents and Near Misses

When medication errors occur, immediate steps should be taken to safeguard clients, resolve issues and inform the client and family. A supportive, no-blame culture encourages interprofessional dialogue, reflection, problem analysis and the development of preventive strategies.

The facts of a medication error must be documented in a client's health record, including;

- Medication that was incorrectly administered
- Client assessment and status
- Corrective actions taken to safeguard the client
- Follow-up monitoring

Employer specific forms such as incident or occurrence reports, may also be required in the event of an error, near miss or no-harm incident. However, the fact that an incident report was completed should not be documented in a client's health record and copies of these reports should not be added to the client record. Employer policy should be followed when responding to and documenting the error. Anyone involved in a medication error may be asked to participate in an employers quality improvement review which is conducted to improve client care and reduce future risks. Nurses in formal and informal leadership roles may also be asked to participate in quality improvement initiatives aimed at preventing medication errors.

Independent Double Check

The Institute for Safe Medication Practices in Canada recommends conducting independent double-checks with high-risk processes, such as preparations that require complex calculations and high-alert drugs.

An independent double-check is a process in which a second practitioner conducts a verification of the medication and/or calculations. The verification can be performed in the presence or absence of the first practitioner. However, the critical aspect is to emphasize the independence of the 'double-check' by ensuring that the first practitioner does not communicate to the second practitioner what they would expect the second practitioner to see. Some employers have established a policy that requires nurses to perform double-checks of certain medications with another colleague prior to administration. Nurses are accountable to know, understand and follow their employer policies relating to double-checking and high-risk medications.

Key Points: Risk and Safety

- Nurses many only accept verbal orders in emergent or urgent situations.
- Nurses only use employer abbreviations.
- Nurses do not pre pour medication. Special considerations should be given to emergency situations, immunizations clinics and clients self-administering medications.
- Nurses must be aware of their accountabilities and scope of practice related to controlled drugs and substances
- Nurses take actions to manage and mitigate the risk of harms to clients from medication error or adverse reactions.

PRINCIPLE 5: COLLABORATION

5.1 Nurses consult with the authorized prescriber or pharmacist when orders are unclear and require clarification.

Nurses are accountable to take action if orders are unclear. This requires a nurse to assess the medication order to determine if it is legible, accurate, current and complete. If the order is not clear, the nurse must consult with the authorized prescriber who ordered the medication or another appropriate healthcare provider. The decision tree in Appendix B will assist nurses with decision making related to clarification of an order.

5.2 Nurses collaborate with clients in the management of their medications.

Informed Consent

Clients have the right to make decisions about accepting or refusing a medication or to self-administer medications. Nurses should verify informed consent with the client before administering medications.

Informed consent can be recorded formally, such as on a consent form, stated verbally or can be implied (e.g., the client holds out their arm for an injection). Policy and procedures for obtaining informed consent from the client should be developed and implemented based on best practices and applicable legislation.

In a situation where a client refuses a medication, nurses are expected to:

- Determine the reasons for refusal
- Assess the client's level of understanding about the medication's effects
- Document
- Follow up with the prescriber as appropriate using nursing judgement

In situations where there is concern or question about a client's capacity to consent, nurses should consult with the appropriate healthcare provider to determine the appropriate action.

For more information on Capacity see the *Assessing Capacity Practice Guideline*.

Covert Medication Administration

Covert medication administration is the practice of administering medications to a client without their knowledge or consent. Nurses are accountable to ensure a client is aware of the medication that is being administered to them. When a client has made an informed choice not to take a medication, it should be withheld, and the prescriber should be informed.

If it has been determined that a client does not have capacity to make an informed choice about their medications the substitute decision maker will make the choice on the client's behalf. You must be aware of provincial legislation such as the Adult Capacity and Decision-making Act, and/or the Personal Directives Act that are related to the role of substitute decision makers in client care and employer policies.

Medications from Home

In some settings, such as summer camps, respite care or shelters, clients often bring their prescription and over-the-counter medications from home and expect the nurse to administer them.

Whenever possible, clients should be encouraged to self-administer these medications. If nurses are required to administer them, there should be an employer policy to support this practice.

There must be an approved order from an appropriate prescriber and the medications must be in their original containers and appropriately labeled, i.e. with an affixed prescription label. If there is a discrepancy between the prescription label and the administration directions from a client/family, the nurse must clarify the order with the authorized prescriber. When clients bring prescription and over-the-counter medications into a healthcare facility, nurses must follow employer policy related to the use of these medications.

Placebos

A placebo may be administered when its use has been discussed with the client involved, informed consent has been acknowledged and the client's signature has been received and witnessed. The administration of placebos to clients without their knowledge and consent is inappropriate and unethical.

When clients are participating in a placebo-controlled study, they should understand their chance of receiving a placebo versus the investigational drug. Intentionally withholding information regarding placebo use denies clients the opportunity to make their own decisions.

5.3 Nurses appropriately assign and supervise medication management when unregulated care providers are part of the care team.

Unregulated care providers (UCPs) can be employed in a variety of contexts of practice and perform client care activities under the supervision of professional nursing staff. Many of the care activities performed by UCPs in these settings involve assisting clients with performing activities such as bathing, mobilizing and feeding. Some of the care activities performed by UCPs may also include assisting clients with the administration of some medications.

UCPs can be delegated or assigned the application of medicated creams and ointments, both prescription and OTC. In these settings, the nurse retains the accountability to assess the client to determine the appropriateness and effectiveness of the medication within the established plan of care due to unregulated care providers not having the knowledge to perform a comprehensive client assessment. The UCP is accountable to apply the cream/ointment as prescribed, document the application and collaborate with the nurse. Nurses should be aware of employer policy with respect to UCPs assisting with medication administration or the application of medicated creams and ointments including documentation.

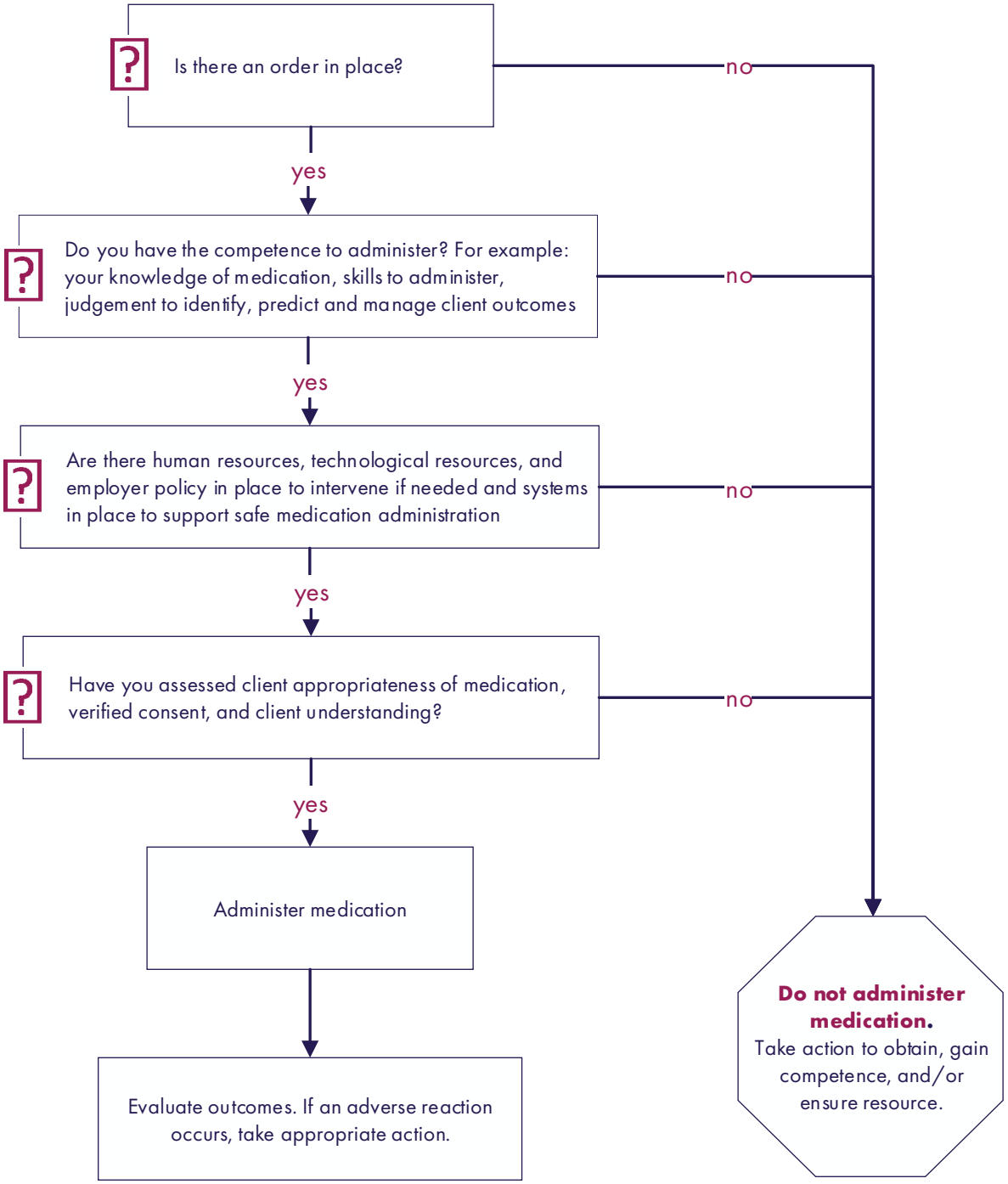
Key Points: Collaboration

- Nurses consult and collaborate with authorized prescribers or pharmacists when orders require clarification.
- Nurses collaborate with client in the management of their medication such as obtaining informed consent, managing client refusal, covert medication administration, medication from home and placebos.
- Nurses appropriately assign and supervise medication management when UCP are part of the care team.

Suggested Reading

- Care Directive Practice Guideline
- Nurses Recommending and Administering Over the Counter Medication or Devices Practice Guideline
- Documentation Guidelines for Nurses Practice Guideline
- Assessing Capacity Practice Guideline
- Social Media Practice Guideline

Appendix A - Decision Tree: Should I give this medication?



Appendix B - Federal and Provincial Legislation Related to Medication Administration

Federal

The Food and Drug Act and Regulations defines prescription drugs and non-prescription drugs and governs the sale and distribution of drugs in Canada. For example, according to the Food and Drug Regulations, the distribution of medication samples is limited to authorized prescribers.

The Controlled Drugs and Substances Act, the Narcotic Control Regulations, Part G of the Food and Drug Regulations and the Benzodiazepines and Other Targeted Substances Regulations govern the production, distribution, importing, exporting, sale, prescribing and use of controlled drugs and substances in Canada.

The New Classes of Practitioners Regulations (NCPR) added NPs as authorized prescribers under the Controlled Drugs and Substances Act and lists those controlled drugs and substances that NPs are authorized to prescribe.

The Cannabis Act and Cannabis Regulations govern the use of both recreational and medical cannabis. Under the Cannabis Regulations, NPs are defined as health care practitioners authorized to prescribe medical cannabis for clients requiring this controlled substance as part of their treatment plan.

Provincial

The Nursing Act defines the professional scope of practice of LPNs, RNs and NPs in Nova Scotia.

The Pharmacy Act defines the Nova Scotia Drug Schedules and the responsibilities of pharmacists in community settings, e.g., long-term care facilities, private agencies, physicians' offices.

The Hospitals Act regulates the practice of pharmacists and pharmacies within the hospital settings. Although the Hospitals Act does not specifically refer to the nurse's role in medication administration, you are expected to follow hospitals/agencies medication policies.

The Homes for Special Care Act governs many long-term care facilities throughout the province, including nursing homes, homes for the aged, homes for the disabled and residential care facilities. The Regulations state that medication orders must be in writing and signed by an authorized prescriber, which can be a nurse practitioner, a physician or a pharmacist.

The Prescription Monitoring Act and Regulations are the provincial legislation that authorizes NPs and physicians to prescribe controlled drugs and substances in Nova Scotia and describes the requirements for participation in the prescription monitoring program (PMP) to be authorized to prescribe controlled drugs and substance.

Appendix C - Is the order clear, complete and appropriate?