The legislative mandate of the College of Licensed Practical Nurses of Alberta (CLPNA) is to serve and protect the public by ensuring its members deliver safe, competent and ethical nursing care. Practice guidelines provide guidance in a particular aspect of clinical care provision that enables Licensed Practical Nurses (LPNs) to make informed decisions based on the best available evidence.

These guidelines support nursing judgment and help LPNs meet expectations of professional behaviour and requirements for practice as set out in legislation, regulation, Standards of Practice, Code of Ethics, and Practice Policies.
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Introduction

The College of Licensed Practical Nurses of Alberta (CLPNA) has a mandate to ensure Licensed Practical Nurse (LPN) services in Alberta are provided in a manner that protects and serves the public through excellence in practical nursing. The purpose of this Medication Management Guideline is to provide guidance to LPNs by enhancing the understanding of the LPN role and expected practices in medication management. Guidelines are not intended to be exhaustive but to provide guidance in making informed decisions.

The Canadian Patient Safety Institute defines medication management as client-centered care optimizing safe, effective and appropriate drug therapy provided in collaboration with clients and their health care team(s). This guideline refers to the assessment, planning, preparation, implementation, administration, evaluation and documentation required in the management of medication.

The guideline is based on federal and provincial legislation, the professional Standards of Practice and Code of Ethics adopted by the CLPNA, and the Competency Profile for LPNs. It is also informed by Accreditation Canada’s Medication Management Standards, guidelines provided by the Institute for Safe Medication Practices and the Canadian Patient Safety Institute, and the work of other nurse regulators across Canada.

The LPN’s Role in Medication Management

Medication administration must be performed in accordance with legislation, regulatory standards and policy documents, and employer policy. The LPN may administer medication under the following conditions:

- The LPN must have the education, knowledge, and competence to accept and transcribe medication orders according to best practice;
- The LPN must have the education, knowledge, and competence to safely prepare, initiate, administer, monitor, titrate, and discontinue medications;

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3 Accreditation Canada, Medication management standards (April 2016).
4 All bolded text is defined in the Glossary located at the end of this guideline.
• The LPN must adhere to the core rights and checks of medication administration to ensure client safety; and
• The LPN’s decision to administer medications must always include the client’s individual needs determined through health assessment, the LPN’s competence and the availability of supports in the practice environment to ensure safe medication administration.

Authorization for Medication Administration

Federal and Provincial Legislation

Drugs in Canada are controlled at a federal level by the Food and Drug Act, the Controlled Drugs and Substances Act and the regulations associated with those Acts – including the Natural Health Products Regulations.

In Canada drugs are categorized into three schedules, or four categories:

1. **Schedule 1** drugs require a prescription as a condition of sale.
2. **Schedule 2** drugs are available without a prescription but must be obtained from a pharmacist.
3. **Schedule 3** drugs are available without a prescription from the self-selection area of a pharmacy.
4. **Unscheduled** drugs are not listed in a National or Provincial schedule and may be sold from any retail outlet.⁵


The LPN’s authorization to administer medication in Alberta is primarily governed by two pieces of provincial legislation, the Government Organization Act and the LPN Profession Regulation.

Schedule 7.1 of the Government Organization Act contains a list of high risk health service activities, known as restricted activities. These activities may only be performed by regulated health professionals who have been specifically authorized in their profession’s regulation to do so. This requirement ensures that only professions with the necessary competencies can perform the restricted activities defined in the Government Organization Act. Although medication administration is not a specific restricted activity, the route or way a medication is administered may be a restricted activity. The Government

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Organization Act does not place restrictions on the administration of medications by non-invasive routes, which include oral, topical, or inhalation.

Section 13 of the LPN Profession Regulation permits LPNs to perform the restricted activity of administering anything by an invasive procedure on body tissue below the dermis for specific purposes. Therefore, under the LPN Profession Regulation the LPN may prepare, initiate, monitor, titrate and discontinue the delivery of medications that include, but are not limited to, the following routes: intravenous and injection via intradermal, intramuscular, and subcutaneous routes. The exceptions to this broad authorization (outlined below) include administration of medication for the purposes of medical assistance in dying, and administering medications for the purpose of performing renal dialysis and immunization.

NOTE: Please refer to the Competency Profile for LPNs regarding the LPN scope of practice specific to medication administration.

Medical Assistance in Dying (MAID)
In June 2016 the federal government enacted legislation that allows for the provision of medical assistance in dying under certain circumstances. In Canada, the Criminal Code allows nurses to assist a physician or nurse practitioner (NP) in the provision of MAID as per the direction of their respective regulatory bodies. A nurse who is assisting a physician or NP must also be under the direction of the physician or NP, otherwise they cannot assist. Only a physician or NP can assess eligibility for MAID and only the physician or NP can administer the substance(s) that causes death.

It is essential for the LPN to understand that LPNs will have a limited role in MAID.

The CLPNA recommends that:

- all LPNs review the Medical Assistance in Dying: Guideline for Nurses in Alberta document available on the CLPNA website to better understand the associated rights, responsibilities and obligations; and
- any LPN who has been asked to participate in MAID contact a Practice Consultant at CLPNA for advice.

Renal Dialysis & Immunization
In accordance with the LPN Profession Regulation, the CLPNA considers Renal Dialysis and Immunization to be areas of Specialized Practice. In order for LPNs to provide immunizations or practice dialysis nursing they must complete education approved by CLPNA and receive authorization from the CLPNA Registrar.
LPN Profession Specific Documents

In all aspects of medication administration the LPN is expected follow the Standards of Practice, Code of Ethics, and the most current Competency Profile for LPNs, where competencies specific to medication administration are outlined.

It is important to consider a number of factors in full utilization of LPN competencies, including an assessment of the client, the nurse, and the environment. These factors are derived from the evidence-informed Decision-Making Framework for Quality Nursing Care established by a collaborative working group of representatives from the Canadian Council for Practical Nurse Regulators, the Canadian Nurses Association, and the Registered Psychiatric Nurses of Canada.6

Employer Policies

While the CLPNA has the regulatory authority to define the scope of practice for LPNs in Alberta, employer organizations define the role of the LPN specific to the practice environment(s). This may vary depending on the specific care requirements, care delivery model, and staff mix in the practice area. LPNs must work within the role articulated by employer job description and policy.

With respect to medication administration, legislation does not specify what medications can be administered by which provider. This allows flexibility for employers to determine what medications are appropriate for certain providers to administer based on client needs, provider competencies, and the resources available in that specific care environment. LPNs must follow employer policy around the medications considered appropriate for them to administer within a given care environment. In certain areas of practice, employers may require LPNs to obtain site-specific education before performing certain activities within their facility.

Individual Competence

As members of a regulated health profession, LPNs have the responsibility and accountability for autonomous nursing practice. Nursing competency represents the integrated knowledge, skills, behaviours, attitudes, critical thinking, inquiry and clinical judgments required by LPNs to provide safe, competent and ethical nursing care.

The expected competencies of an LPN for medication management can be found in the current Competency Profile for LPNs. LPN competencies specifically related to medication management include understanding of the pharmacokinetics and pharmacodynamics associated with medication administration; relative assessments; safe handling, preparation and administration of medications;

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monitoring and managing any adverse effect or reaction; teaching clients; and evaluating and documenting/communicating the client response to medication.

The core importance with the administration of any medication is to ensure it is appropriate for that client. This means that the LPN is knowledgeable about the medication, safe recommended dosage, appropriate route, indications, contraindications, side effects, interactions, precautions, onset, duration, excretion, related-lab values, appropriate evaluation and documentation.\(^7\)

**Medication Orders**

**Authorized Prescriber**

LPNs require an order from an **authorized prescriber** before administering medication to a client. Authorized prescribers may include physicians, medical residents, nurse practitioners, pharmacists, midwives and dietitians.\(^8\) LPNs are responsible for knowing and staying up to date on who is an authorized prescriber. In order to act on a medication order appropriately, LPNs and other health care professionals may need to discuss prescribing authority with the prescriber as some health care professionals may have limited prescribing authority.

**Components of a Routine Medication Order**

Acceptable medication orders are clear, complete, current, legible, and clinically relevant. The LPN should clarify any missing components and unclear directions with the authorized prescriber as soon as possible and before taking any further action. A complete order includes the:

- client’s full name;
- date prescribed;
- medication name, strength and dosage;
- route;
- dose frequency (i.e., how often the medication is to be administered);
- reason the medication is prescribed (for PRN medications); and
- signature of the authorized prescriber.\(^9\)

*If the order is unclear, incomplete or there is any question of accuracy, the LPN must contact the authorized prescriber for clarification prior to administration.*

**Abbreviations**

Abbreviations and acronyms are a short-hand form of communication often used in medical prescriptions, orders, and documentation (e.g., mg for milligrams). Although abbreviations and

\(^7\) Patricia Potter et al., eds., *Canadian Fundamentals of Nursing* (Toronto, ON: Mosby/Elsevier Canada, 2015), 663.

\(^8\) ACP, “Understanding the Prescriber Lists,” [https://pharmacists.ab.ca/articles/understanding-prescriber-lists](https://pharmacists.ab.ca/articles/understanding-prescriber-lists).

acronyms can seem like a quick shortcut, the use of abbreviations is also one of the most common causes of medication errors. The Institute for Safe Medication Practices has published a list of Dangerous Abbreviations, Symbols and Dose Designations and Accreditation Canada recommends that employers provide a list of abbreviations, symbols and dose designations that are not to be used in their workplace. LPNs should familiarize themselves with the dangerous abbreviations and symbols and must ensure their workplace policy regarding abbreviations and symbols is followed by clarifying any unapproved abbreviations used in an order before proceeding.

If a medication order contains an unapproved abbreviation and/or symbol, the LPN has a responsibility to clarify the order before continuing with the medication administration process.

Orders transmitted via technology

The CLPNA supports the appropriate use of technology to communicate a medication order. All components of a complete medication order must be met regardless of the format. All shared information must be handled in a manner that upholds the privacy and confidentiality of client information. Additionally, medication orders need to be received in a manner that allows the person receiving the order to verify the authorized prescriber who is providing the order. A medication order received via fax or electronic transmission must be transcribed in the appropriate manner.

The LPN must follow employer policy as to
- when the receipt of faxed or electronically transmitted orders for medications are acceptable; and
- how faxed or electronically transmitted orders are to be transcribed.

The LPN must ensure accurate transcription and recording of all order instructions in a timely manner upon client admission, end of service, transfer to another level of care, or, as otherwise required.

The LPN must validate the accuracy, clarity and completeness of the transcription of the order before assessing the client and administering the medication.

Verbal and Telephone Orders

Although authorized prescribers are expected to provide written orders (or enter the order into the electronic health record) whenever possible, in some situations an authorized prescriber may need to initiate or change medications before they are able to provide the written order in-person. Verbal or telephone orders can be more error-prone than written orders due to the increased potential of

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11 Accreditation Canada, Medication Management, 43.
miscommunication or misunderstanding. Verbal or telephone orders should be limited to emergent or urgent situations.

A medication order received verbally or by telephone must be transcribed in the appropriate manner and verified by the authorized prescriber as soon as possible within the time frame defined by employer policy. If an order has not been verified within this time frame, the LPN must not proceed with further medication administration until this has been addressed.

In addition to the standard components of a routine medication order, a complete verbal and telephone medication order must also include:

- the time and date the order was transcribed;
- a notation that this was a verbal or telephone order;
- the LPN’s signature and credentials; and
- identification of the authorized prescriber (by name, practice ID or as otherwise required by employer policy).

The LPN must confirm the accuracy of the order by reading it back in its entirety to the authorized prescriber. The LPN must ensure that accurate transcription and recording of all instructions occurs in a timely manner.

The LPN is to follow employer policy regarding:

- Whether verbal and telephone orders for medications can be accepted and in which situations;
- Which care providers may accept them; and
- How verbal and telephone orders are to be transcribed.

Intermediaries

An intermediary is someone who communicates a verbal prescription between an authorized prescriber and a pharmacist. For example, an LPN may be asked to be an intermediary in a homecare setting. Use of an intermediary is not preferred practice as it leads to an increased risk of error; it should only be used as a last resort, and only if the LPN is supported to act as an intermediary under employer policy.

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13 Accreditation Canada, Medication Management, 43.
LPNs acting as intermediaries must:

- understand that both the LPN and the authorized prescriber are responsible for the accuracy and appropriateness of the order. The authorized prescriber should be available to speak with the pharmacist directly if necessary.
- not communicate verbal prescriptions for narcotics or controlled drugs, including benzodiazepines and other Targeted Substances as defined in the Controlled Drugs and Substances Act and its Regulations.
- only transmit new prescriptions to a pharmacist verbally if:
  - it is an unusual or urgent situation; and
  - the LPN speaks directly to both the authorized prescriber and the pharmacist.
- only transmit an authorized prescriber’s authorization to refill an existing prescription:
  - if supported by employer policy; and
  - if there are no changes to the prescription.
  - this must be followed by appropriate documentation from the authorized prescriber.
- communicate to the pharmacist the reason for which the medication is being prescribed as well as the name and credential of the LPN acting as the intermediary.
- confirm a new prescription that is communicated verbally to a pharmacist as soon as possible through direct communication between the authorized prescriber and the pharmacist or through electronic transmission.\(^5\)

**In acting as an intermediary the LPN must:**

- **be authorized by the prescriber to communicate a verbal prescription to the pharmacist on behalf of the authorized prescriber; and**
- **simultaneously send an electronic or faxed copy of the prescription to the pharmacy.**

**Order Sets**

An order set is a pre-determined, evidence-based tool ordered by an authorized prescriber to manage a common state of disease (e.g., community acquired pneumonia) or address a general clinical need (e.g., standardized admission orders). Across an organization, the use of order sets can help to ensure consistency in care, best practice, accurate communication, and client safety. Order sets must be client-specific and the authorized prescriber should identify the particular orders that apply to a particular client. The use of ‘standing orders’ that are not client-specific is no longer considered best practice.

The Institute for Safe Medication Practices (ISMP) recommends the use of order sets as a way to reduce incorrect or incomplete prescribing, to ensure clarity when medical orders are communicated between health care professionals and to standardize client care. However, if poorly designed, order sets can

contribute to errors and increase risk to clients.\(^\text{16}\) ISMP has established guidelines for developing standard order sets, available online at https://www.ismp.org/tools/guidelines/StandardOrderSets.asp. These guidelines should be embedded in employer policy and practice.

The LPN may implement a client-specific order set in an electronic or pre-printed format received from an authorized prescriber.

Protocols

A protocol is an organizationally-approved guide for practice that is to be implemented by health care professionals managing specific client health needs in their practice environment.\(^\text{17}\) For example, the Basal Bolus Insulin Therapy (BBIT) protocol was developed to standardize and improve diabetes management in hospital.\(^\text{18}\) A protocol should be evidence-based and developed using standardized criteria.

In implementing a medication-based protocol it is essential for the LPN to complete the required client assessment to determine if the client meets the criteria set forth by the protocol. As with all aspects of medication management, the LPN must have the knowledge, skill and competence required to:

- determine if the protocol is clear, complete, and appropriate for the client in the specific care environment; and
- perform any of the intervention(s) outlined within the protocol.

In addition, the LPN must ensure employer policy supports the LPN in implementing the protocol within that specific practice environment.

Protocols for Schedule 1 Drugs

Before implementing a protocol that requires the LPN to administer a Schedule 1 drug to a client, the LPN must obtain a client-specific order from an authorized prescriber. If the protocol is unclear or missing any of the information listed above the LPN must seek clarification from the authorized prescriber.

Emergency Situations

In emergency situations where it is not possible to obtain an order before implementing the protocol and delay in treatment would place a client at risk of serious harm, an LPN may implement a protocol according to employer policy while simultaneously contacting the authorized prescriber.

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Medication Rights & Checks

Best practice in medication administration involves practicing these 8 core medication rights and checks. The CLPNA expects LPNs to be aware of and follow any additional medication rights and checks required by employer policy. The LPN must use the following core medication rights, in accordance with employer policy to ensure safe nursing practice every time a medication is administered:

- Right reason
- Right client
- Right medication
- Right dose
- Right route
- Right time and frequency
- Right to refuse
- Right documentation

Right Reason

The LPN should know the client-specific reason(s) for administering a particular medication. The LPN must also have the knowledge, skill and judgment to assess the appropriateness of this medication for this client.

Right Client

Client-specific identifiers help eliminate medication errors and ensure clients receive the medication(s) intended for them.

The LPN must follow employer policy for client identification. Best practice supports the use of two client-specific identifiers, although appropriate identifiers will vary by population, environment and client preference.

Right Medication

The LPN should only administer medications they prepare themselves and are accountable to ensure that the right medication is prepared appropriately for the right client. If there is any uncertainty about whether the client is receiving the right medication, the LPN must withhold the medication and confirm the order with the authorized prescriber.

Right Dose

The LPN has a responsibility to ensure dosage calculations are accurate (as prescribed) and appropriate. The CLPNA has developed an eLearning module for drug calculation available at

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19 Alberta Health, Continuing Care Health Service Standards (Government of Alberta, 2016), 29.
21 Potter et al., Fundamentals of Nursing, 681.
For guidelines on administering medication on a range dose or sliding scale, see pages 19-20.

If a medication order indicates a dose that requires calculation or conversion the LPN should have another nurse verify that the dose calculated is correct. This is referred to as an independent double check. For more information on independent double checks, see page 16.

The LPN must use additional caution when calculating doses of medication for pediatric clients since children metabolize medications differently than adults. Additional considerations must also be given when administering medications to other populations such as geriatric clients or clients with renal insufficiency, substance abuse and/or addiction issues.

Right Route

The route of administration is determined in collaboration with the care team and ordered by the authorized prescriber. Under the LPN Profession Regulation the LPN may perform the restricted activity of administering fluids and medications by injection or infusion. Refer to the Competency Profile for LPNs to view the full list of routes for medication administration within the LPN scope of practice. Routes that are shaded within the Competency Profile are areas of practice which require additional post-basic education or training (informal or formal).

LPNs must work within the role and scope of the LPN articulated by employer policy. For example, in some facilities or under certain circumstances there may be medications that only a physician or nurse practitioner can administer.

Administration by Other Delivery Devices

Medication may be administered via other delivery devices such as spacer devices (aerosol holding chamber), infusion pumps, or insulin pens. To administer medication by a delivery device, the LPN must have the related education and competence to use the device appropriately and follow any related employer policies.

Right Time and Frequency

The LPN is responsible to know when they are administering a time-critical medication. In the event of a delayed or missed dose the LPN must document the actual time of medication administration in the client record as soon as possible.

Right to Refuse (and Right to Know)

An integral concept of client-centered care is a client’s right to be informed and decide whether or not they wish to accept the proposed nursing care. The LPN is expected to demonstrate respect for a client’s needs, values and preferences.

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22 Ibid, 674.
23 Accreditation Canada, Medication Management, 59.
If the LPN is concerned about a client’s capacity to consent, the LPN is expected to consult with the care team and authorizing prescriber. In the event a client refuses a medication the LPN must document the reason(s) for the refusal and advise the care team and authorized prescriber as appropriate.

Right Documentation (and Right Evaluation)

After the client’s medication has been administered, the LPN must complete the right documentation as soon as possible to decrease the risk of error. The LPN must complete the right evaluation to assess the client for any side effects, adverse reactions, as well as monitor the effectiveness of the medication and document the outcome.

Checks

Before administering any medication, the LPN must ensure that the following information is correct:

- Right client
- Right medication
- Right dose
- Right route
- Right time and frequency

It is critical that this information be correct; therefore, it must be checked three times.

Check 1: Before preparing the medication and/or removing from its container/packaging.
Check 2: While preparing and once the dose of medication ordered is removed from its container/packaging.
Check 3: After the preparation process has been completed and before administering to the client.

High-Alert Medications & Independent Double Checks

High-alert medications are those that present a risk of causing serious injury or death if used incorrectly. The Institute for Safe Medication Practices has developed lists of high alert medications for acute care, community, ambulatory, and long-term care settings. These lists are available at [https://www.ismp.org/tools/highalertmedicationLists.asp](https://www.ismp.org/tools/highalertmedicationLists.asp). LPNs should inquire as to whether their employer organization has developed a high-alert medication list for their staff. As independent double checks may be required by employer policy, LPNs are expected to have the knowledge, skill, and competence to perform and request an independent double check.

To ensure accuracy and reduce the possibility of medication errors associated with high-alert medications, an independent double check at the point of care is best practice. An independent double check

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25 Ibid.
check is the process in which a second regulated health care professional independently verifies the core medication rights and checks before the medication is administered to a client.26

**Medication Reconciliation**

Medication reconciliation is a formal process which aims to ensure accurate and comprehensive medication information is collected and communicated consistently across transitions of care. The purpose of this process is client safety to ensure the appropriateness of client medications. As members of collaborative client/health care provider teams, LPNs are responsible for taking steps to support medication reconciliation within their role.27

**Steps to Medication Reconciliation**

1. Obtain the **best possible medication history** and identify discrepancies. Each medication should be verified against the client’s medication profile prior to administration.
2. Resolve discrepancies with the care team.
3. Document the reconciled list and communicate any medication changes.
4. Continually update the reconciled medication list as necessary.28

Additional information on medication reconciliation can be found at: [www.ismp-canada.org](http://www.ismp-canada.org) and [www.who.int](http://www.who.int).

**Medication Preparation**

The LPN is expected to demonstrate the knowledge and ability to appropriately prepare medications for administration according to best practice and employer policy. Best practice includes:

- Preparing medications only after an order has been verified as complete. The LPN has a responsibility to clarify unclear or incomplete orders with the authorized prescriber.
- Preparation of medication at a time when medication can be administered immediately following preparation to avoid leaving medications unattended.
- Preparing medications in a space without interruptions and distractions. Reduced focus creates a higher risk of medication errors.29
- Preparing medication for one client at a time (see Rights and Checks).
- Each LPN must prepare only the medication that they will be administering to the client.30

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• Medications in ward stock (bulk supply) are to be poured into medication cups that are clearly labeled. The LPN has a responsibility to clarify the contents of an unlabeled or unclearly labeled container before proceeding.

• Medications packaged in unit doses should be opened as close to the location of administration to the client as possible.

• Before splitting a medication, determine whether the tablet is one that is appropriate to split. If medication tablets need to be split, ensure a clean break.

• Before crushing a medication, determine whether the medication is one that can be safely crushed.

• Medications must not be handled directly. Pour medications into a cup or give directly to the client. If administration of the medication requires direct handling clean gloves are required.

• Labelling the medication cup with the client name, drug name(s), dose(s) and administration time.

• Following appropriate hand hygiene when preparing any medication.

• Following appropriate handling precautions if the medication is a hazardous medication.

Preparing Medications from Ward Stock

LPNs may prepare medication from ward stock (bulk supply) provided there is a client-specific order from an authorized prescriber and this practice is supported by employer policy. Preparing medication from ward stock does not fall under the restricted activity of dispensing if it is being prepared to give to the client for immediate administration (e.g., application, ingestion, inhalation, injection, insertion, or instillation).

Mixing Medications

An LPN may be required to combine two or more medications for immediate administration by injection or ingestion (as ordered), or mix a medication and an IV solution for immediate infusion. Compounding is when medications are mixed for the purposes of dispensing; however, in this context the LPN is mixing medications for the purpose of immediate administration.

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30 CLPNNS, Medication Administration, 12.
32 Ibid.
33 Potter et al., Fundamentals of Nursing, 682.
34 See the following document for a list of medications that should not be crushed: ISMP, Oral Dosage Forms That Should Not Be Crushed 2016, http://www.ismp.org/tools/donotcrush.pdf.
35 AHS, “Pre-Pouring Medications.”
Although LPNs are not authorized to perform the restricted activity of compounding Schedule 1 or 2 drugs, mixing medications (including Schedule 1 or 2 drugs) for immediate administration is within the scope of LPN practice and can be performed as long as employer policy supports LPNs in this role.

**Pre-Pouring Medication**

Pre-pouring medication, including the LPN preparing medications in a dosette for later administration or pre-filling syringes, is not best practice and not recommended as it increases the risk of error or client harm. Pre-pouring medication occurs when medication is prepared and then stored for later use, instead of being immediately administered to a client. The practice of pre-pouring medication is known to lead to client safety errors.\(^\text{37}\) Whenever possible, a pharmacy should be utilized to prepare medications in appropriate packaging such as blister packs or medication strips.

**Pass and Bridge Medications**

Pass medications are used in practice when the client is leaving an inpatient unit and will need to take medications while they are out on pass.

Bridge medications are used in practice to provide the client with the required doses of medication to provide coverage until the client has the opportunity to have their prescription filled by the pharmacy, which usually takes place within 24 hours.

Whenever possible, a pharmacy should be utilized to prepare medications in appropriate packaging such as blister packs or medication strips.

_The LPN is expected to follow any employer policy and procedural guidelines related to “pass” and “bridge” medications._

**Sample Medication**

LPNs may administer sample medications to clients pursuant to a client-specific order from an authorized prescriber if supported by employer policy.

_LPNs are not authorized by the Food and Drug Act to accept medication samples from pharmaceutical companies or their representatives, or distribute medication samples to clients._\(^\text{38}\)

**Range Doses**

Range doses may be prescribed for client’s requiring flexibility in their medication regimen. Range dosing occurs when an authorized prescriber prescribes a medication order that allows for medication administration in a range of dose or frequency. An example of a range dose medication order is _Morphine 5-10 mg IV q4h PRN_. Range dosing should be based on an established care plan designed to meet the potential variations in a client’s specific and timely need for medication.\(^\text{39}\)

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\(^{37}\) Ibid.

\(^{38}\) _Food and Drugs Act_, RSC 1985, c F 27, s 14(2).

\(^{39}\) CLPNNS, _Medication Administration_, 14.
Using leftover or unused portions of a range dose for breakthrough pain management is not best practice.\textsuperscript{40} Therefore, using the above example, if 5 mg of Morphine is administered based on an appropriate nursing assessment and in two hours pain management is not achieved, the current range dose order cannot be utilized to “top up” within the ordered time frame. The LPN must obtain an additional order from an authorized prescriber.

The Institute for Safe Medication Practices recommends that employer policy should specify expectations for range dose medication orders, including:

- which medications may be ordered and administered following an order stating a range dose;
- suitable ranges for specific medications;
- the format to be used for prescribing a range dose and instructions for accurate interpretation;
- the knowledge, skill and competencies required of health care professionals to assess the client and determine the appropriate dose within the range prescribed for the client; and
- the documentation and monitoring requirements for the client’s response to the range of medication administered.\textsuperscript{41}

\textit{As employer policy allows, the LPN may administer medications according to a medication order containing a range dose as provided for by an authorized prescriber. In the event of any uncertainty, the LPN has a responsibility to clarify the correct interpretation of a range dose with the authorized prescriber prior to administering the medication.}

\section*{Sliding Scales}

A sliding scale is an objective tool used to manage a progressive increase or decrease in medication dose based on a pre-defined measurement of another indicator. For example, in sliding scale insulin therapy, the amount of insulin administered is based on the client’s blood glucose level: as your blood glucose level increases so does the insulin dosage.\textsuperscript{42}

Although sliding scale insulin therapy is still common, many organizations are moving away from traditional sliding scale insulin therapy (fast acting insulin alone) and towards basal bolus insulin therapy or BBIT (a combination of long acting, short acting and correction insulin).\textsuperscript{43} Even in organizations who have adopted BBIT protocols, correction insulin may be given using a sliding scale protocol.


\textsuperscript{41} Ibid.


\textsuperscript{43} “Basal Bolus Insulin Therapy,” \textit{Alberta Health Services}, http://www.albertahealthservices.ca/scns/Page12948.aspx
Following an appropriate client assessment and the rights and checks of medication administration, the LPN may administer medication on a sliding scale based on a client-specific order from an authorized provider and according to employer policy.

PRN Orders

PRN orders are client-specific orders for medications to be administered only as required based on clinical need, rather than according to a fixed schedule. The order must include the reason and indications for use; if this information is missing, the LPN has a responsibility to seek clarification from the authorized prescriber. PRN orders will require that a certain amount of time passes between doses (e.g., no more than one dose every three hours) or a maximum amount that can be given, and are considered incomplete if they do not.

The LPN must be aware of why the PRN medication was prescribed and when to administer it, based on the appropriate client assessment. The LPN must also follow the rights and checks of medication administration and employer policy before administering any PRN medication.

Administration and Management of Controlled Drugs and Substances

The LPN may administer controlled drugs and substances, including narcotics, in accordance with the federal Controlled Drugs and Substances Act, employer policy, and associated regulations.

Administration and Documentation of Narcotics

Narcotics are considered high-alert medications. For the LPN administering a narcotic it is best practice to document/reconcile the narcotic count sheet with the MAR. If administering a narcotic on a PRN basis the LPN must document that it was given, why it was given, and the client response into the client chart (e.g., nursing/progress notes). These practices should be followed in addition to any documentation policies set out by the employer to ensure best practice and mitigate drug diversion.

Naloxone

As deaths and emergency care visits related to fentanyl and other opioid overdoses in Alberta continue to rise, the provincial government has been pursuing various measures to combat the opioid crisis and focus on harm reduction. Naloxone is the primary drug used in Alberta to reverse the effects of opioid overdose.

The CLPNA has developed a Fact Sheet, Naloxone and the Role of the Licensed Practical Nurse in Alberta to provide members with information on the role of the LPN in protecting the public by providing education and interventions to prevent and counteract opioid overdose. The CLPNA website and FACT Sheet will be the most up to date source of information.

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44 Potter et al., Fundamentals of Nursing, 677.
45 Ibid.
Across all care settings, LPNs may educate clients about Naloxone use, indications, and availability. LPNs may also be requested to administer Naloxone to clients under a client-specific physician order or medical protocol.

Naloxone has been unscheduled in certain community practice settings and in these locations LPNs may distribute Take-Home Naloxone Kits (THN kits) to clients and provide instructions for Kit use.

LPNs may also distribute THN kits in Emergency Departments and Urgent Care Centres without an order from an authorized prescriber if the use of the THN kit is for the emergency treatment of opioid overdose outside of a hospital setting and the LPN has appropriate training and employer support.

Off-Label Use of Medication

In Canada, prescription drugs must be approved for use by Health Canada. The approval defines the population the drug can be prescribed for, the clinical indication(s) the drug can be used to treat, and the recommended administration dosages. Although drug companies can only market and promote their drugs for the approved clinical indications, clinicians can prescribe the drug for off-label indications. Off-label use of medication refers to the use of medication in a dose, for an indication, or population, beyond those identified for the drug through Health Canada’s approval process.

Health Canada provides a Drug Product Database containing product specific information on drugs approved for use in Canada. Researching this database enables health professionals to look up the specific medication and confirm approved usage.

Drugs can be prescribed for off-label use when:

- Approved by Health Canada for use in Canada; and
- The authorized prescriber has based their order on best practice and evidence-based information; or
- The medication is prescribed as part of a current study approved by one of Alberta’s Health Research Ethics Boards.

LPNs receiving an order for an off-label use of a medication must ensure that they are well informed about the medication and the rationale for its use for this particular client. When preparing an order for off-label use, the LPN must have the knowledge, skill, and competence required to administer the medication as prescribed and evaluate its effectiveness for the client.

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47 Ibid.
48 SSCSAST, Prescription Pharmaceuticals in Canada.
49 CLPNBC, Practice Standard - Medication Administration, 3.
Medication Administration for the Purpose of Research

When administering medication for research purposes the LPN has a responsibility to ensure:

- a signed research consent form is placed in the client chart; the client must be informed that they may, as a subject of the research study, receive a placebo instead of a medication with active ingredients;
- the medication is administered specific to the research protocol;
- the core rights and checks of medication administration are completed as with any other medication; and
- documentation and evaluation of the client is completed according to the research protocol and best practice.

Medication Administration for Aesthetic Purposes

Aesthetic nursing services, such as injecting fillers or other substances, are procedures that are not taught in the practical nurse program and require additional education and experience to gain the post-basic competence to perform these procedures.

LPNs providing aesthetic nursing services within their scope of practice must have supervision by a physician. The physician must be trained in dermatology and be on-site and available to assist as necessary when aesthetic procedures and treatments are being performed.

Administration of Cannabis for Medical Purposes

Cannabis may be used for medical purposes to help manage the symptoms associated with a variety of disorders and conditions. The use of medical cannabis is similar to other medication therapies that may be part of a client’s overall care. LPNs are responsible for following medication administration procedures when administering medical cannabis, including completing appropriate assessments and documentation.

LPNs must ensure that the medication rights and checks are followed and they have the individual competence to administer medical cannabis. This includes understanding the various forms of medical cannabis, how those forms may impact the dosage, and knowledge of the indications and contraindications for use. LPNs must also evaluate the effectiveness of the medical cannabis through appropriate nursing assessments, and be able to identify and manage any adverse effects. Additionally, LPNs should ensure they are aware of and in compliance with any employer policies specific to the use and administration of medical cannabis.

LPNs are encouraged to access Health Canada’s Information for Health Care Professionals – Medical Use of Cannabis at https://www.canada.ca/en/health-canada/services/drugs-.

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50 Potter et al., Fundamentals of Nursing, 1045.
medication/cannabis/information-medical-practitioners.html for more information on the use, dosing, adverse effects and drug interactions associated with medical cannabis.

**LPNs are authorized to administer medical cannabis in all practice settings if the following requirements are met:**

- the client has a medical document and client-specific order,
- the medical cannabis is appropriately packaged and clearly labeled,
- the LPN’s employer has authorized the use of medical cannabis within the practice setting, and
- the individual LPN has the competencies required to administer medical cannabis (i.e., the indications for use, routes of administration, dosing, adverse effects and contraindications).

The LPN has a responsibility to seek clarification before administering medical cannabis if they are unsure of whether the medical cannabis has been legally obtained, if the packaging does not clearly indicate the product, or the medical document and client-specific order is unclear or incomplete.

**Administration of Complementary and/or Alternative Therapies**

The Competency Profile for LPNs identifies the common complementary and alternative therapies that LPNs should be familiar with. The LPN must demonstrate the knowledge and ability to assess and consider risk factors associated with the proposed complementary or alternative therapy, including:

- delayed treatment;
- contraindications with conventional treatment or medication(s);
- understanding of the health risks and potential interactions.

When delivering natural health products and complementary or alternative medicines as a part of nursing care, the LPN must document the provided interventions in the client’s health record.  

If additional information about a proposed product or medicine is needed to follow the medication rights and checks, Health Canada maintains a database with information on licensed natural health products available at https://health-products.canada.ca/lnhpdbpsnh/index-eng.jsp. This database includes information about ingredients, dosage forms, indications and contra-indications, as well as known adverse reactions.

**An LPN may assist with or administer a substance for the purpose of providing complementary or alternative therapy if:**

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• the therapy is within the scope of practical nursing as outlined in the Health Professions Act (Schedule 10, s 3), and in accordance with the LPN Profession Regulation, the CLPNA’s Standards of Practice, Code of Ethics, and CLPNA policy and practice documents;
• the individual LPN has the competencies required to safely assist with or administer the complementary or alternative substance to the client;
• the LPN is acting on a client-specific order from an authorized prescriber or otherwise authorized regulated health professional (e.g., a naturopathic doctor);
• the client has received enough information to make an informed decision to receive the complementary or alternative therapy;
• the LPN has assessed the appropriateness of the intervention for the specific client; and
• employer policy supports the use of complementary therapy as part of a client-specific established care plan.

Immunization and Vaccine Administration

Under the LPN Profession Regulation, LPNs must complete an immunization certification program authorized by the CLPNA as meeting the requirements for Specialized Practice and receive authorization from the CLPNA Registrar before administering vaccines in Alberta. Information on currently recognized courses and the requirements for obtaining an Immunization Specialty with the CLPNA is available at https://www.clpna.com/members/continuing-education/lpn-specializations/.

In accordance with the Public Health Act, LPNs performing immunizations or conducting assessments in respect of immunizations must report information about immunization events and adverse events to the provincial immunization repository. In practice, LPNs must also record vaccine lot numbers and expiry dates in the client’s health record.

As immunizers, LPNs are responsible for safe and appropriate storage, handling, and transport of vaccines. Provincial regulations set out under the Public Health Act create guidelines for standardized practice.

LPNs who have received authorization from the CLPNA to administer vaccines may proceed under the following conditions:

• the recipient of the immunization is 5 years of age or older;
• the employer has protocols in place respecting immunizations; and
• an authorized practitioner is available for consultation while the restricted activity of administering a vaccine is being performed.52

LPNs providing Schedule 1 vaccines outside of an immunization program recognized by the Public Health Act and authorized by the Medical Officer of Health will require a client-specific order before administering a vaccine to a client.

52 Licensed Practical Nurses Profession Regulation, Alta Reg 81/2003, s 13(4).
Allergy Testing and Desensitizing Injections (Immunotherapy)

Allergy testing is completed through skin (intradermal injection) and patch testing. This is an additional competency for LPNs, meaning that the LPN requires post-basic education before practicing in this area. As with any other medication, LPNs must have the knowledge and competence to manage adverse reactions related to allergy testing.

Desensitizing injections are provided for the purpose of building immunity. In providing immunotherapy through desensitizing injections, the LPN must have additional knowledge on immunity and the management of severe allergic responses including anaphylaxis.

**LPNs providing desensitizing immunotherapy must have obtained an Immunization Specialty with the CLPNA.**

Information on currently recognized courses and the requirements for obtaining an Immunization Specialty with the CLPNA is available at [http://clpna.com/members/continuing-education/lpn-specializations/](http://clpna.com/members/continuing-education/lpn-specializations/)

Evaluating Client Outcomes

The LPN is expected to demonstrate the knowledge and ability to provide ongoing assessment, monitoring, and evaluation of medication effectiveness. The LPN must be able to recognize and manage adverse medication reactions, including anaphylaxis. This includes recognizing signs and symptoms, implementing protocol, and documenting according to employer policy and LPN competencies as outlined in the LPN Competency Profile.

**In practice this means that the LPN must be aware of:**

- the type and frequency of monitoring required for specific medications as it pertains to their role in providing care; and
- any effects of the medication(s) that must be monitored, managed, documented and reported as appropriate.

Documentation

Documentation is one of the main communication tools that health care providers use to share client information, and it may be electronic, paper-based or a combination of both. The LPN is expected to ensure accurate, concise, complete and timely documentation using appropriate medical terminology and avoiding the use of abbreviations.

Documentation should include the LPN’s assessment, nursing diagnosis, implementation of interventions, and evaluation of outcomes. The LPN must sign or initial all documentation according to employer policy. Inaccurate or incomplete documentation places the LPN in breach of professional and legal requirements and potentially places the client at risk.
The CLPNA supports documentation completed in accordance with best practice, the CLPNA Practice Policy specific to Documentation, and any additional requirements set out by employer policy. The CLPNA has created an online study module for LPNs wishing to review documentation best practice; the materials are available on the CLPNA website at www.studywithclpna.com.

The LPN is expected to complete documentation immediately following administration of medication, noting the specific time of administration (or if the client declined their medication), and the LPN’s assessment of the client’s response (such as pain level and/or vital signs). The LPN must clearly document any medication errors or omissions and required interventions.

**Medication Administration Record (MAR)**

The MAR is a facility or organizationally maintained record of medication administered to a client within the facility/organization. The MAR should reflect accurate documentation of all medications administered to the client. This will include the date, time, route, dose and the signature of the administering nurse.

In the event a client declines or refuses a medication, this information should also be documented on the MAR, and as per employer policy, to ensure an accurate and complete record.

**Storage, Disposal and Transportation of Medication**

The LPN is expected to demonstrate knowledge and ability to apply infection prevention and control standards in safe storage, handling, removal and disposal of medications, while practicing according to employer and manufacturer policy. This includes ensuring the appropriate storage of medications that are susceptible to chemical reactions in a refrigerated or darkened environment to prevent photodegradation which could affect drug stability. If a medication, or a portion thereof, is not going to be used, it needs to be disposed of in a safe and appropriate manner.

**Disposal of Controlled Drugs and Substances**

The requirements for the management of controlled drugs and substances in health-care facilities are outlined under federal legislation. The Controlled Drug and Substances Act gives authority to health-care organizations to establish policies governing the administration, storage, and safe handling of controlled drugs and substances. These policies can include a requirement for narcotic waste to be witnessed and co-signed by two health care professionals as a means of monitoring and minimizing drug diversion.

**Over-the-Counter Medications**

Over-the-Counter medications are Schedule II, III and Unscheduled drugs outlined in the Alberta Pharmacy and Drug Act and the supporting Scheduled Drugs Regulation. These medications can be acquired without a prescription.

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53 Potter et al., Fundamentals of Nursing, 207.
The *LPN Profession Regulation* does not authorize LPNs to prescribe medications; having a discussion with a client or family member and making recommendations about over-the-counter medications and/or natural health products may be viewed as pseudo-prescribing. Therefore, LPNs should advise their clients to seek advice about over-the-counter medication from a health care professional who is authorized to provide such information (e.g., an authorized prescriber).

In the event a client has an existing order (e.g., post-operative) for over-the-counter medication from an authorized prescriber, the LPN may discuss and provide education on this over-the-counter medication and suggest that the client or family pick some up to have on hand upon discharge, only if this advice is consistent with the order in place. This advice would be considered appropriate as there is a covering order from an authorized prescriber in place. To provide this education the LPN needs to be aware of the client’s specific health information and medication history.

**Client’s Own Medication**

**Self-Administration**

The LPN is responsible for teaching clients about their medications, potential side effects, the importance of adhering to the established medication regime, and evaluating the effects of the medications and the client’s technique used in self-administration.⁵⁴

LPNs caring for clients who are self-administering medications are expected to:

- assess the client’s competence and ability to safely self-administer their medication;
- confirm a client’s agreement to self-administer;
- ensure storage of self-administered medication is safe and appropriate, with access available as needed;
- provide teaching, coaching, and supervision as needed; and
- complete documentation according to regulatory standards, best practice and employer policy.

*LPNs assisting clients with self-administration of medication should not reconstitute or prepare medications in advance for the client to take at a later time. Best practice guidelines only support the reconstitution and preparation of medication immediately prior to administration. Reconstitution can affect the storage requirements, stability, and subsequent efficacy of the medication.*

**Acute Care and Continuing Care Facilities**

Acute care and continuing care facilities are expected to develop policy for management and administration of a client’s own medication based on federal and provincial legislation and best practice. An LPN will require a client-specific order from an authorized prescriber in order to administer a client’s own medication within these settings. LPNs will be held to regulatory standards and should advocate for best practice in employer policy.

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Home Care and Supportive Living Settings

Clients in home care or supportive living settings may require assistance if they are unable to manage their medications on their own. The LPN role should include continued education of the client, their family and any unregulated health care employee about the medication’s purpose, regimen, benefits and side effects.\(^{55}\) Client education should also include information about the safe and appropriate storage of medication.

Having an established process for recording medication administration is a best practice safeguard for both the LPN and the client.

*The LPN must sign off on a medication administration sheet to confirm the medication was administered by the nurse as prescribed. The LPN should also document if they witness the client self-administer prescribed medication, clearly stating that the medication was self-administered.*

Supervision and Assignment of Components of Medication Administration to Health Care Aides

A collaborative document outlining the *Decision-Making Standards for Nurses in the Supervision of Health Care Aides* was developed by the College of Licensed Practical Nurses of Alberta, the College and Association of Registered Nurses of Alberta, and the College of Registered Psychiatric Nurses of Alberta.\(^{56}\) The document highlights that although a nurse may assign tasks to a health care aide (HCA), it is the nurse who remains responsible for the overall assessment and monitoring of the client, the assignment of tasks and supervision of the HCA, and the assessment, administration and evaluation involved with any PRN medication.

The HCA may be assigned to assist with medication administration providing the intervention is appropriate to client needs, within the competencies of the individual health aide, supervised by a regulated nurse (LPN, RN, RPN), and supported by employer policy.\(^{57}\) While supervising and assigning care tasks to an HCA, the LPN must implement standards for assignment of care, ensure continuity of care, provide guidance as needed, and evaluate and reassign care as needed.\(^{58}\)

Where HCAs are assigned to assist with medication administration a formalized medication administration system must be in place. The HCA’s role should be clearly outlined in employer policies to further guide quality care and safety in practice.

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\(^{55}\) Potter, et al., *Fundamentals of Nursing*, 663.


\(^{57}\) Ibid, 4.

\(^{58}\) CLPNA, *Competency Profile*, s R, X.
Assigning Assistance with PRN Medications

It is not appropriate for an HCA to perform a client assessment and then administer a PRN medication as the HCA is in an assist only role; however, an HCA may be assigned to support a client by assisting with their PRN medications following client assessment by a nurse.

Assigning Assistance with Insulin Administration

Subject to employer policy, LPNs may assign an HCA to assist with insulin administration provided it is within the HCA’s competency to do so. For example, unless a client is taking insulin as an activity of daily living, employer policy may state that the LPN may only assign an HCA to assist with the following components of insulin administration:

- bringing the insulin to the client; and
- assisting the client in preparing the injection site.

In such cases, after the client self-injects, the LPN may assign the HCA with the task of assisting the client to dispose of the needle in a biohazard container. However, when the client is capable, they should be encouraged to place the needle in the biohazard container themselves.\(^59\)

Supervising a Practical Nurse Student Assigned to Perform a Restricted Activity

To perform restricted activities as part of their training, students must be enrolled in a practical nurse program approved by the CLPNA. The student must also have the consent of, and be under the supervision of, a regulated member.\(^60\)

Section 21(1)(2) of the *LPN Profession Regulation* states that a practical nurse student receiving training in providing a restricted activity may perform the restricted activity under supervision. The supervision must be by a regulated member who is authorized to perform the specific restricted activity being learned and who is available to provide assistance. In all cases the LPN is expected to be aware of and follow employer policy regarding the supervision and assignment of care to practical nurse students.

Although medication administration is not a specific restricted activity, aspects can involve the performance of a restricted activity; for example, administering medication by injection is considered a restricted activity.

*While supervising and assigning care tasks to a practical nurse student, the LPN must implement standards for assignment of care, ensure continuity of care, provide guidance as needed, and evaluate and reassign components of medication administration as needed.*\(^61\)

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\(^61\) CLPNA, *Competency Profile*, s R, X.
Co-Signing for Students

Practical nurse students are expected to document the care they provide in accordance with employer and academic policies. It is best practice for the practical nurse student to have a co-sign for narcotics and physician orders. In these contexts, having a co-sign means to obtain an independent double-check.

Medication Safety

In a client-centered care environment a key component of medication administration is the assurance of safe medication management. The LPN plays an important role in client safety in the area of medication administration through infection prevention, and control, appropriate management of hazardous medications, reduction of potential medication errors, and reporting of adverse events or near misses.

Safety and Infection Prevention and Control

The minimum competencies for safety and infection prevention and control specific to medication administration are defined in the Competency Profile for LPNs. This includes the safe storage, handling, removal and disposal of medications according to best practice and employer policy.

For more information, Alberta Health’s resources for infection prevention and control are available at: http://www.health.alberta.ca/health-info/prevent-infections.html. Additionally, CLPNA has an Infection, Prevention and Control Self Study Course available as a resource.

Hazardous Medications

Hazardous medications include those used for cancer chemotherapy, antiviral drugs, hormones, some bioengineered drugs, and other miscellaneous drugs. According to the National Institute for Occupational Safety and Health (NIOSH) Working Group on Hazardous Drugs, hazardous medications are those that have one or more of the following characteristics:

- carcinogenicity
- teratogenicity or other developmental toxicity
- reproductive toxicity
- organ toxicity at low doses
- genotoxicity, or
- a structure and toxicity profile that mimics existing drugs already determined as hazardous by the above criteria.

The LPN must follow best practice, manufacturer guidelines, and employer policy for safe management of hazardous medications. Although no single precaution will cover all the various scenarios in which a

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62 CPSI, "Medication Management."
64 Ibid, 3.
health care provider may be exposed to hazardous medications, general guidance for typical health care situations includes the use of personal protective equipment and appropriate ventilation.65

**Strategies to Reduce Medication Errors and Adverse Events**

The Health Quality Council of Alberta (HQCA) has been involved in several projects that aim to improve medication safety in Alberta: a Medication Management Checklist for Supportive Living is available on their website [here](#) and a website with resources around the risks of using abbreviations in medication orders is available [here](#).

The following safety strategies should be utilized to reduce medication errors and ensure client safety:

- Perform the core medication rights and checks and complete medication reconciliation.
- Follow nursing protocols and employer policies to decrease medication errors.66
- Employ strategies to stay focused and reduce distractions, for example by placing “Do Not Disturb” signs in areas where medications are being prepared.67
- Ensure medications and medical sharps are stored, handled, used and discarded safely, according to manufacturer instruction(s), employer policy, and provincial and national guidelines as appropriate.
- Discuss how to prevent medication related client safety incidents with the client, family members and caregivers as applicable.
- Provide clients with information about who to contact if they have concerns with their medication regime.
- Identify and report concerns with medication orders, packaging or labeling to appropriate team members, managers, and pharmacy.
- Support the development of employer policies that provide guidance for team members to raise safety concerns with the authorized prescriber or pharmacist.
- Follow established guidelines within their practice environment to report any near misses, medication errors or adverse events.
- If an adverse event or near miss occurs, work with team members to consider strategies to avoid a recurrence as appropriate.

**Reporting Adverse Events, Medication Errors or Near Misses**

Safe medication administration requires collaboration among the members of the health care team. Medication errors can be a result of individual mistakes, systems issues, or a combination of both. The CLPNA holds LPNs accountable for their individual competence in medication administration.

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65 Ibid, 2.
66 Potter et al., *Fundamentals of Nursing*, 673.
67 Ibid.
The LPN is expected to take appropriate and timely steps to report and resolve medication errors, adverse events or near misses. The LPN must follow specific reporting criteria and processes as outlined in employer policy.

Once the LPN is aware of a missed or delayed dose, the LPN must document what they did about it, including the actual time of medication administration in the client record, and who they informed about the missed or delayed dose.

Conclusion

In most practice settings, medication administration is a significant role for LPNs. LPNs are responsible to ensure they possess the required knowledge, skill, and judgment to administer medications safely and competently. The CLPNA supports a collaborative and interdisciplinary approach which includes clients and families as beneficial to safe medication administration practices.
Glossary

Administration (of a drug): The supplying of a dose of a drug to a person for the purpose of immediate ingestion, application, inhalation, insertion, instillation or injection.\(^6^8\)

Adverse event: An injury from a medicine or lack of an intended medicine; including adverse drug reactions and harm from medication incidents.\(^6^9\)

Aseptic technique: A health care procedure designed to reduce the risk of transmission of pathogenic microorganisms.\(^7^0\)

Authorized prescriber: A health care professional who is authorized by legislation and permitted by their regulatory college, employer and practice setting to prescribe medications.

Best possible medication history: A complete snapshot of a client’s actual medication use including drug name, dosage, route and frequency. A best possible medication history is created using a systematic process of interviewing a client and/or their family, and a review of at least one other reliable source of information to verify all of a client’s medication use.\(^7^1\) It includes both prescribed and unprescribed medication and any alternative or complementary products a client is using.

Compound: To mix together 2 or more ingredients, of which at least one is a drug for the purposes of dispensing a drug or drugs, but does not include reconstituting a drug or drugs with only water.\(^7^2\)

Dispense: To provide a drug pursuant to a prescription for a person, but does not include the administration of a drug to a person.\(^7^3\)

Emergency situation: A “medical situation in which immediate care is required.” In other words, in an emergency, the client would be placed at a significant risk if the clinical intervention is delayed.\(^7^4\)

Hazardous medications: Hazardous medications are medications known or suspected to cause adverse health effects when health care workers are inadvertently exposed. The National Institute for Occupational Safety and Health (NIOSH) in the United States has identified six characteristics of hazardous drugs; drugs exhibiting one or more of these characteristics should be handled as hazardous and appropriate precautions taken. See the section on Hazardous Medications, page 31, for further information.

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\(^{68}\) Government Organization Act, RSA 2000, Sch 7.1.


\(^{70}\) Stedman’s Medical Dictionary for the Health Professions and Nursing, 5th ed., s.v. “aseptic technique.”


\(^{72}\) Government Organization Act, RSA 2000, Sch 7.1.

\(^{73}\) Government Organization Act, RSA 2000, Sch 7.1.

\(^{74}\) Accreditation Canada, Medication Management, 5.
**High Alert medications:** High-alert medications are drugs that bear a heightened risk of causing significant client harm when used in error. Although mistakes may or may not be more common with these drugs, the consequences of an error are clearly more devastating to clients. Use these lists to determine which medications require special safeguards at your practice site to reduce the risk of errors.  

**Intermediary:** in the context of medication administration, an intermediary is someone who is used to communicate a verbal prescription between an authorized prescriber and a pharmacist.

**Invasive Procedure:** Denoting a procedure requiring insertion of an instrument or device into the body through the skin or a body orifice for diagnosis or treatment.

**Medical assistance in dying:** (a) the administering by a medical practitioner or nurse practitioner of a substance to a person, at their request, that causes their death; or (b) the prescribing or providing by a medical practitioner or nurse practitioner of a substance to a person, at their request, so that they may self-administer the substance and in doing so cause their own death.

**Medication:** a drug as defined in the *Pharmacy and Drug Act*.

**Near miss (good catch/close call):** an event that could have caused harm or resulted in unwanted consequences, but did not because the event was caught and prevented.

**PRN medication:** (from the Latin: pro re nata) administration of prescribed medication on an as needed basis; as necessary rather than on a fixed schedule.

**Protocol:** an organizationally-approved guide for practice that is to be implemented by health care professionals managing specific client health needs in their practice environment.

**Restricted Activity:** activities listed in Schedule 7.1 of the *Government Organization Act* are considered to present high risk to the public if performed by an individual without the proper education, training and experience. Restricted activities can only be performed by regulated health workers who are specifically authorized in legislation to do so. The restricted activities that LPNs are authorized to perform are listed in the LPN Regulation.

**Rights and Checks:** See Medication Rights and Checks section on page 14 for expanded definition.

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76 *Stedman’s Medical Dictionary for the Health Professions and Nursing*, s.v. “invasive.”
78 ISMP, “Definition of Terms.”
79 *Stedman’s Medical Dictionary for the Health Professions and Nursing*, s.v. “pro re nata.”
Schedule 1: Drugs that require a prescription as a condition of sale, and in a pharmacy must be stored and sold only in the dispensary. Drugs in this schedule include all federally scheduled drugs and certain others, some of which are specific to Alberta. The latter may appear to be non-prescription drugs (as there will be no symbol directly on the drug label). 81

Schedule 2: Drugs that do not require a prescription as a condition of sale but are only available from the pharmacist. There is no opportunity for client self-selection as drugs are stored and sold in the dispensary. 82

Schedule 3: Drugs that are available without a prescription from the self-selection area of a pharmacy. Although no prescription is required, they can only be sold from a licensed pharmacy or an institution pharmacy. 83

Transcribing/Transcription: The process of writing down or copying the medication order given by the authorized prescriber. 84 This order can be verbal, paper-based or in electronic form.

Unscheduled: Drugs not listed in Schedule 1, 2, or 3 that may be sold from any retail outlet. 85

81 ACP, Understanding Alberta’s Drug Schedules, 3, 5.
82 Ibid.
83 Ibid.
84 Ibid, 6.
85 Ibid, 3.
References


*Cannabis Act,* SC 2018, c 16.

*Cannabis Regulations,* SOR 2018-144.


*Criminal Code of Canada*, RSC 1985, c C-46.

*Food and Drug Act*, RSC 1985, c F-27.


University of California, San Francisco. “Sliding Scale Therapy.”