

Standards



College & Association of
Registered Nurses of Alberta

Medication Management Standards

March 2021

Approved by the College and Association of Registered Nurses of Alberta (CARNA) Provincial Council, March 2021.

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Purpose

The purpose of the **medication**¹ management **standards** is to outline the minimum expectations for **regulated members** for medication management. Medication management is a multi-professional, evidenced-based approach to help ensure safe medication practices. Health-care professionals and **clients** work together to facilitate the safe and effective use of prescription and over-the-counter medications (Accreditation Canada, 2016; Bulechek, Butcher, Dochterman, & Wagner, 2013; Edwards & Axe, 2015).

These standards apply at all times to all regulated members regardless of role or practice setting, and are specific to medication management. The standards are grounded in the foundational *Practice Standards for Regulated Members* (CARNA, 2013) and the Canadian Nurses Association *Code of Ethics for Registered Nurses* (2017). The directions, concepts, and principles in this document align with other CARNA documents that are listed in Appendix A.

Standards for Medication Management

These standards identify the expectations for regulated members for medication management. The criteria in the following standards illustrate how the regulated member must meet the standard, and all criteria must be met in order to achieve the standard. The criteria are not written in order of importance.

¹ Words or phrases in ***bold italics*** upon first mention are defined in the Glossary.

Standard 1: Safety

Regulated members are responsible and accountable to provide safe medication management.

Criteria

The regulated member must

- 1.1 understand human and system factors that increase risk of **medication incidents** and take steps to prevent them;
- 1.2 apply principles of safe medication practices;
- 1.3 identify the need for, and participate in, activities that create safe medication systems and practices;
- 1.4 integrate infection prevention and control principles, standards and guidelines into medication management;
- 1.5 participate in an **antimicrobial stewardship** program;
- 1.6 follow the **rights of medication administration**;
- 1.7 assess if the client has the physical capability and the mental capacity for safe administration of the medication;
- 1.8 safeguard medication and not leave medication unattended;
- 1.9 appropriately assign medication assistance, when required, to unregulated health-care workers;
- 1.10 ensure all orders for medications, **protocols**, and **order sets** that contain Schedule 1 medications (see Appendix B) are client-specific and signed by an **authorized prescriber**;
- 1.11 not use a **standing order**;
- 1.12 question **medication orders** that are unclear, incomplete, outdated, illegible, inappropriate, or unsafe;
- 1.13 verify **medication administration records** are complete;
- 1.14 verify the prescription label contains all the required information as outlined in the Alberta College of Pharmacy's (ACP) *Standards of Practice for Pharmacists and Pharmacy Technicians* (2020);
- 1.15 accept **verbal medication orders** (including by telephone) only in **urgent or emergent circumstances** and according to employer requirements. Such orders

must be read back to the **authorized prescriber** to confirm accuracy and then accurately documented;

- 1.16 only act as an **intermediary** between an authorized prescriber and a pharmacist or pharmacy technician in urgent or emergent circumstances;
- 1.17 receive (and send, if authorized to prescribe) **electronic medication orders** only through a secure network in accordance with legislation and employer requirements;
- 1.18 ensure **medication reconciliation** is performed with the client and family where appropriate, at all **care transition** stages, and reconcile any discrepancies;
- 1.19 only administer medications prepared by themselves or a pharmacist (or pharmacy technician), except in urgent or emergent circumstances when the medication may be prepared by another health-care professional as outlined in employer requirements;
- 1.20 manage any harm, disclose to the client and inform the authorized prescriber when a medication incident has occurred, according to employer requirements;
- 1.21 recognize, act on and report medication incidents, **close calls**, or **adverse reactions** through the appropriate administrative method as soon as possible. Report serious adverse drug reactions and medical device incidents according to employer requirements and as mandated by the *Protecting Canadians from Unsafe Drugs Act* (2019);
- 1.22 use personal protective equipment for hazardous medications;
- 1.23 communicate changes in medication orders with the staff involved in the client's care and to the client and/or their family;
- 1.24 have a medication order from an authorized prescriber and informed client consent prior to administration of **investigational medication** or a **placebo** that is part of a formal research program;
- 1.25 only administer medication for **off-label** use when supported by the employer requirements;
- 1.26 ensure Health Canada requirements have been met when administering a medication obtained through their **Special Access Programme**;
- 1.27 use procedures and safeguards for **high alert medications** (e.g., **independent double checks**, warning labels, programmable pumps) as identified in employer requirements;
- 1.28 follow employer requirements regarding the use of abbreviations, acronyms and symbols;

- 1.29 **store**, handle, transport, and dispose of medications safely and follow employer requirements;
- 1.30 **transcribe** medication orders completely, accurately and according to employer requirements; and
- 1.31 assess if the medication is appropriate for the client.

Standard 2: Authority

Regulated members follow current legislation, standards, and policies about medication management.

Criteria

The regulated member must

- 2.1 only administer Schedule 1 medications when there is a client specific order from an authorized prescriber;
- 2.2 follow employer requirements when administering medications that do not require an order from an authorized prescriber: Schedule 2, 3, and unscheduled drugs (see Appendix B) and natural health products;
- 2.3 follow employer requirements for vaccine, biological, blood and blood product administration;
- 2.4 administer medications only within their competence, scope of practice, and when supported by employer requirements;
- 2.5 **compound** medication according to the ACP's *Standards of Practice for Pharmacists and Pharmacy Technicians* and *Standards for Pharmacy Compounding of Non-Sterile Preparations* (2018), and employer requirements;
- 2.6 **dispense** medication only:
 - a. following a comprehensive assessment and medication review,
 - b. when a pharmacist is not available,
 - c. when there is a medication order,
 - d. according to employer requirements,
 - e. based on client need, and
 - f. when following the ACP's *Standards of Practice for Pharmacists and Pharmacy Technicians* for dispensing;

- 2.7** in addition to 2.6 when dispensing drug samples:
- a) ensure there is a record of the drug dispensed, preferably in the Pharmaceutical Information Network;
 - b) document any collaborative discussions with authorized prescribers about dispensing the drug sample;
 - c) ensure dispensing decisions about drug samples are based solely on the client's health and need;
- 2.8** only accept drug samples as authorized in the *Prescribing Standards for Nurse Practitioners*;
- 2.9** follow federal legislation and regulations, and employer requirements related to the acquisition, access, counts (including documentation of withdrawals and administration, and discrepancies) of controlled drugs and substances; and
- 2.10** question policy that does not reflect current evidence and information from reputable organizations.

Standard 3: Knowledge

Regulated members are knowledgeable about the medications they administer and those that their clients are taking, whether prescribed, over-the-counter, or natural health products.

Criteria

The regulated member must

- 3.1** be knowledgeable about the therapeutic effects and side effects of the medication, its interactions with other medications, and contraindications;
- 3.2** provide education, and counselling where necessary, to clients and their families about the medications they are taking, including:
 - a. the reason why it has been ordered,
 - b. possible side effects,
 - c. what the medication does,
 - d. how it works,
 - e. probability of effectiveness,
 - f. the risks of not taking it,

- g. how the medication will interact with other medications,
 - h. when and how to seek medical attention, and
 - i. how to self-administer (e.g. preparation and routes);
- 3.3 be knowledgeable and competent to administer the medication via the specified route;
 - 3.4 follow employer requirements for use of the **client's own medication** and self-administration;
 - 3.5 obtain and document a **best possible medication history**, including the client's use of non-prescription and natural health products, as outlined in employer requirements;
 - 3.6 address concerns of **problematic polypharmacy** with the client, the inter-professional team and the authorized prescriber or **most responsible health practitioner**;
 - 3.7 have the knowledge, skill and competence to recommend an appropriate **over the counter medication** in accordance with employer requirements;
 - 3.8 evaluate and document the therapeutic effect of the medication;
 - 3.9 assess the client for any adverse reaction to a medication, take immediate action to remedy harm, inform the authorized prescriber and document;
 - 3.10 withhold a medication when it would pose a risk of harm to the client and consult the authorized prescriber immediately or as soon as possible;
 - 3.11 document and sign for the administration of a medication in the medication administration record, including: the client name, medication name, dose, route, site (if applicable), date and time of administration, signature and designation, and other relevant information;
 - 3.12 follow employer requirements for documenting **medication administration** when a designated recorder is used in urgent or emergent circumstances;
 - 3.13 prepare medications at time of administration. Medication should not be **pre-poured**;
 - 3.14 communicate to the authorized prescriber and document when a client refuses a medication (including the reason); and
 - 3.15 document the initiation and completion of medications administered over time (e.g. intravenous medications).

Standard 4: Ethics

Regulated members follow the *Code of Ethics for Registered Nurses* and ethical principles in all aspects of medication management.

Criteria

A regulated member must

- 4.1 assess the client's understanding of the medication to be taken and obtain **informed consent** prior to medication administration; use a **decision maker** when the client is unable to provide informed consent as outlined in legislation and in employer requirements;
- 4.2 not administer any medication without informed consent unless in urgent or emergent circumstances as outlined in employer requirements;
- 4.3 respect the client's decision and right to refuse a medication where the client has capacity and makes an informed decision;
- 4.4 follow employer requirements when using **covert medication administration**;
- 4.5 incorporate principles of **harm reduction** into medication management with respect to a client who has a substance use disorder; and
- 4.6 interact with the client from a place of **cultural humility** and support a **culturally safe** environment during medication management.

Glossary

Adverse reaction – A noxious and unintended effect caused by a health product (Health Canada, 2019).

Antimicrobial stewardship – An interdisciplinary activity that promotes appropriate selection, dosing, route and duration of antimicrobial therapy to:

- optimize patient clinical outcomes,
- minimize antibiotic adverse effects/toxicity,
- reduce the selection of certain pathogenic organisms (e.g. *Clostridium difficile*), and
- reduce or stabilize antimicrobial resistance (Alberta Health Services, 2013).

Authorized prescriber – A health-care professional authorized in Alberta to perform the restricted activity of prescribing a Schedule 1 medication.

Best possible medication history (BPMH) – A medication history created using a systematic process of interviewing the client/family and a review of at least one other reliable source of information to obtain and verify the client's use of prescribed and non-prescribed medication, including natural health products (Institute for Safe Medication Practices (ISMP), 2019; Potter, Astle, Stockert, & Hall, 2019).

Care transition – The points when a patient moves to, or returns from, a particular physical location or contact with a particular health-care professional to ensure safe and effective coordination and continuity of care. This includes between home, hospitals, long term care, out patients, clinics etc. It is more than a clinical handover (World Health Organization, 2016).

Clients – The people, patients or residents who benefit from registered nursing care. A client may be an individual, a family, group, community or population.

Close calls – Also known as near miss; an event, situation, or incident that took place but caught before reaching the client (ISMP, 2009).

Client's own medication – Medications brought into a facility by the client.

Compound – The preparation and mixing of two or more ingredients of which at least one is a medication for the purposes of dispensing a medication, but does not include reconstituting a medication with only water (Government Organization Act, R.S.A. 2000, c. G-10, Sch. 7.1, 1[b]). Compounding a medication is a restricted activity that regulated members are authorized to perform in certain circumstances, e.g. adding a medication to an intravenous solution for administration.

Covert medication administration – The administration of medication to a client without their knowledge or consent, in a disguised or deceptive form, when they lack the capacity to take medicines or to understand the consequences of refusing to take medicines. It requires a complex, multidisciplinary assessment, and employer requirements which are based in sound ethical and legal principles that must be followed (Kelly-Fatemi, 2016).

Cultural humility – A process of openness, self-awareness, being egoless, and incorporating self-reflection and critique after willingly interacting with diverse individuals (Foronda, Baptiste, Reinholdt, & Ousman, 2016).

Culturally safe – An outcome based on respectful engagement free from racism and discrimination so that patient is a powerful player, not a passive receiver, of health care (Yeung, 2016).

Decision-maker – A decision maker may be an alternate decision maker, co-decision maker, or specific decision. The type of decision maker is outlined in employer requirements according to legislation.

Dispense – With respect to drugs, to provide a drug pursuant to a prescription for a person, but does not include the administration of a drug to a person. To dispense, compound, provide for selling or sell a Schedule 1 drug or Schedule 2 drug within the meaning of the Pharmacy and Drug Act (Government of Alberta, 2019); This is a restricted activity that regulated members are authorized to perform.

Electronic medication orders – The use of electronic means to communicate medication orders which are then kept as a part of the client record.

Harm reduction – Policies, programs and practices to reduce the adverse health, social, and economic consequences of legal and illegal psychoactive drugs without necessarily reducing drug consumption (CNA, 2017).

High alert medications – Medications that have an increased risk of harming a client when used in error and require special employer safeguards to reduce the risk of incidents and minimize harm (ISMP, 2018).

Independent Double-Checks – A process where a second health-care professional (HCP) verifies a medication before it is administered to a patient. The result from the first check is not communicated with the HCP performing the second check and the second check must be performed independently (Institute for Safe Medication Practices, 2019).

Intermediary – A person who communicates prescriptions between a prescriber and a pharmacist or pharmacy technician.

Informed consent – The informed agreement of a client or alternate decision maker (if applicable) prior to the client undergoing a treatment or procedure after being provided with the relevant information about the treatment or procedure, its risks, alternatives, and the consequences of refusal (Alberta Health Services, 2011).

Investigational medication – Medication(s) not available in the Canadian market, which are used in human clinical trials to determine their safety and effectiveness

Medication – In this document, *medication* refers to all scheduled drugs, over the counter medication, blood and blood products, biologics, vaccines, and natural health products.

Medication administration – The supplying of a dose of a drug to a person for the purpose of immediate ingestion, application, inhalation, insertion, instillation, or injection (Government of Alberta, 2019).

Medication administration records (MAR) – A list of specific medications based on current prescriber orders and is a permanent part of their health record. The health-care professional, documents immediately after the drug or device is administered. The MAR serves as a legal record of the drugs administered to a client by a health-care professional (Alberta Health Services, 2014).

Medication incident(s) – Any preventable event that may cause or lead to inappropriate medication use or patient harm while the medication is in the control of the healthcare professional, patient, or consumer. Medication incidents may be related to professional practice, drug products, procedures, and systems, and include prescribing, order communication, product labelling/ packaging/ nomenclature, compounding, dispensing, distribution, administration, education, monitoring, and use (ISMP, 2019).

Medication order(s) – A means to communicate a desired treatment or diagnostic test with other health-care professionals and can include medications, devices, laboratory tests, procedures, etc.

Medication reconciliation – The systematic and comprehensive review of all the medications a client is taking (best possible medication history) (ISMP, 2019).

Most responsible health practitioner – The health practitioner responsible and accountable for the specific treatment/procedure(s) provided to a client, and who is authorized to perform the duties required to fulfill the delivery of such a treatment/procedure(s) within their scope of practice (Alberta Health Services, 2016).

Off-label – The use of a medication beyond what Health Canada has reviewed and authorized to be marketed in Canada and as indicated on the product label: i.e. using the medication for an illness or disease other than what it was authorized for. The

authorized indication for a drug can only be obtained when the manufacturer files an application that is then granted by Health Canada. The manufacturer can then market the medication for that indication only. However, drug doses, when and how often to take a drug, and the type of patient (e.g., children, pregnant women, and elderly) uses may also be considered “off-label” (The Canadian Agency for Drugs and Technologies in Health, 2017).

Order sets – A set of orders that are current, evidence-based and include a version number (Accreditation Canada, 2016).

Over the counter medication (OTC) – Medication that does not require a prescription which are taken to treat minor health problems at home. (Government of Alberta, 2018).

Placebo – A substance that does not contain an active drug ingredient.

Problematic polypharmacy – The term problematic polypharmacy describes circumstances when:

- multiple medications are prescribed or used inappropriately;
- medication use is not based on evidence of efficacy for the condition or for the individual for whom they are prescribed;
- the intended benefit of medication is not realized;
- the risk of harm from a drug, or combinations of drugs, outweighs the benefits or is likely to result in unwanted drug interactions.

Pre-poured – A delay between preparation and administration of a medication or the preparation of multiple medications for different clients. Pre-pouring poses potential safety risks for the client and other clients. (Health Quality Council of Alberta, 2012).

Protocols – A formal document that guides decisions and includes interventions for specific health-care problems to guide clinical decision-making. Protocols are a set or series of treatment interventions that can be implemented by the care provider (e.g., nurse) for a specific group of clients with identified health conditions when specific circumstances and criteria exist.

Regulated members – Includes registered nurses, graduate nurses, certified graduate nurses, nurse practitioners, graduate nurse practitioners, and RN or NP courtesy registrants on the CARNA registry.

Rights of medication administration – The core rights of medication administration that reduce medication incidents and at the very least include the right: client, medication, dose, route, time, documentation, reason, and response.

Special Access Programme – Access to non-marketed medication not approved for sale in Canada. Access to this program is for practitioners treating patients with serious or life-threatening conditions when conventional therapies have failed, are unsuitable, or unavailable (Health Canada, 2018).

Standard(s) – An authoritative statement that describes the required behaviour of every nurse; used to evaluate individual performance. Standards describe the minimum expectations that must be met by members of the profession.

Standing order – A non client-specific order which does not specifically identify conditions and circumstances that must be present to administer the medication(s) or implement treatment(s).

Store – Each medication has storage requirements for temperature, humidity and light that help it remain effective over a certain period of time (Accreditation Canada, 2018). Medication should be locked up or supervised and not be accessible to clients, family or visitors. Waste or discarded medication is stored safely until it can be returned to pharmacy (Health Quality Council of Alberta, 2012).

Verbal medication orders – Orders given verbally, including over the phone, in urgent or emergent circumstances by an authorized prescriber when it is in the best interest of a client and there are no reasonable alternatives. Verbal and telephone orders have a higher potential for errors as these orders can be misheard, misinterpreted and/or mistranscribed.

Transcribe – For the purposes of medication management, the process of transferring a prescriber’s medication order to the medication administration record.

Urgent or emergent circumstances – A situation when direction is required to provide appropriate client care where, if not obtained, delay in treatment would place a client at risk of serious harm.

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Appendix A: Related CARNA Documents

The directions, concepts, and principles in this document align with other CARNA documents:

- *Complementary and Alternative Health Care and Natural Health Products Standards* (2018)
- *Decision-Making Standards for Nurses in the Supervision of Health Care Aides* (CARNA, College of Registered Psychiatric Nurses of Alberta & College of Licensed Practical Nurses of Alberta, 2010)
- *Documentation Standards for Regulated Members* (2013)
- *Guidelines for Medication and Vaccine Injection Safety* (ACP, CARNA & College of Physicians and Surgeons of Alberta, 2018)
- *Infection Prevention and Control Standards* (2019)

Appendix B: Drug Schedules

The Alberta provincial schedules are mostly aligned with the national drug-scheduling model developed by the National Association of Pharmacy Regulatory Authorities (NAPRA). There are four categories of drugs:

Schedule 1: Drugs that require a prescription as a condition of sale.

Schedule 2: Drugs that are available only from the pharmacist and without a prescription. There is no opportunity for patient self-selection.

Schedule 3: Drugs that are available without a prescription from the self-selection area of a pharmacy.

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