OBJECTIVES

- To describe the requirements for a medication order.
- To provide standardized processes for creating and acting upon medication orders, including as-needed or as-required (pro re nata [PRN]) medication orders (e.g., range dose medication orders).

APPLICABILITY

Compliance with this document is required by all Alberta Health Services employees, members of the medical and midwifery staffs, Students, Volunteers, and other persons acting on behalf of Alberta Health Services (including contracted service providers as necessary).

ELEMENTS

1. Exceptions to the Medication Orders Procedure

   1.1 Emergency Medical Services (EMS)

      a) For medication orders in the pre-hospital environment, EMS shall continue to follow the EMS Medical Control Protocols.

      b) During inter-facility transfers, EMS shall, whenever possible, follow this Alberta Health Services (AHS) Medication Orders Procedure with regard to medication orders.
primary care Physicians) that are not affiliated with AHS, health care providers shall follow this policy, whenever possible.

2. Ordering Medications

2.1 Only an authorized prescriber has the authority to order medications.

a) Students of regulated health disciplines are not authorized prescribers.

(i) Medication orders written or electronically entered by students shall not be implemented until approved by an authorized prescriber.

2.2 Medication Order Requirements

a) All medication orders (including verbal and telephonic orders) shall include the following:

(i) date order written;

(ii) time order written;

(iii) patient’s name (first and last);

(iv) at least one (1) other patient identifier per the AHS Patient Identification Policy (e.g., date of birth, unique lifetime identifier, personal health number);

(v) weight of patient (for all weight-based dosing [e.g., pediatric, neonatal]) using International System of Units (SI units) (e.g., kilograms [kg], grams [g]);

(vi) name of the medication:

• generic name preferred; and

• formulation (if applicable) (e.g., carbamazepine controlled release, morphine sulfate extended release);

(vii) dose:

• described in SI units, if applicable;

   Note: For intermittent medication doses based on patient weight or body surface area, the dose should be calculated by the authorized prescriber and documented in the medication order.

(viii) strength/concentration (if applicable);

(ix) route of administration;
(x) time interval (frequency);
(xii) indication for pro re nata (as-needed or as-required; PRN medication orders), when necessary to provide clear direction (e.g., when the medication may have multiple indications);
(xiii) indication for all medications (recommended);
(xiv) duration of the order (where required);
(xv) number of refills authorized, and interval between each refill (where required);
(xvi) monitoring requirements (if applicable); and
(xvii) prescriber’s authentication (prescriber’s name, designation and signature).

- Signature includes either an original, handwritten signature, or an electronically generated signature within an AHS computerized provider order entry (CPOE) system.

2.3 Medication orders shall conform to the AHS Do Not Use List of Abbreviations, Symbols, and Dose Designations for Medication-Related Documentation Policy.

2.4 Hand-written medication orders shall not be crossed out or written over. When changing a medication order (e.g., changing the dose of a medication), the authorized prescriber shall provide a new medication order to clearly indicate the change required.

2.5 When a patient is to have nothing by mouth (nil per os; NPO), the authorized prescriber shall ensure that orders are provided for the continued administration of essential oral medication, as well as any medications that require a route change or dosage adjustment (e.g., insulin).

2.6 Medication Hold (Suspend) Orders

a) Hold (suspend) medication orders should only be used when a specific timeframe, number of doses, or clinical parameter is indicated.

b) Hold (suspend) medication orders that do not include a specific timeframe or clinical parameter should be clarified with the authorized prescriber. (See section 3 below).
2.7 Verbal and Telephonic Medication Orders
   a) Refer to the AHS *Verbal and Telephonic Medication Orders* Procedure, for information on providing, accepting, and acting upon verbal and telephonic medication orders.

3. Obtaining Clarification of Unclear, Inappropriate, or Incomplete Medication Orders

3.1 Clarification of Medication Orders
   a) Seek clarity for unclear, inappropriate, or incomplete medication orders (e.g., “take medications from home” or “resume medications”).
      (i) The health care professional shall clarify the order with the authorized prescriber in a timely fashion.
   b) When the order is clarified, the following shall be documented on the health record:
      (i) which order is being clarified; and
      (ii) the new clarified order per the Medication Order Requirements in section 2.2 above.
   c) If, after seeking clarification, concerns about a medication order remain, the health care professional shall follow these steps, as appropriate:
      (i) discuss the situation with their supervisor indicating their concern, and the steps taken to address the concern. The supervisor shall provide further direction to the health care professional regarding how to address this matter;
      (ii) notify members of the care team (e.g., pharmacy, nursing), as needed, regarding any changes or delays in the medication process; and
      (iii) document on the health record the concerns with the medication order and the steps taken to address the concerns.

4. Consultation Medication Orders

4.1 Medication orders written as part of a consultation shall be implemented under the direction of the most responsible authorized prescriber, or their designate.

4.2 The most responsible authorized prescriber shall provide this direction on the patient health care record by:
   a) requesting medication orders be entered onto the patient’s health record (orders may be implemented); or
b) requesting medication orders be provided as suggestions (approval from the most responsible authorized prescriber is required before being implemented).

5. Transcribing Medication Orders

5.1 Health care professionals transcribing medication orders shall ensure the medication order is accurate, complete, and complies with the requirements outlined in section 2.2 above, and document as per Zone/program/site processes.

5.2 If an unregulated health care provider (e.g., Unit Clerk) initiates transcription, they shall follow local medication order transcribing processes within the limits of their authorized role or job description.

   a) A health care professional shall complete the transcription process where initiated by an unregulated health care provider by verifying that the orders are accurate, complete, and comply with the requirements outlined in section 2.2 above. This verification shall be documented as per Zone/program/site processes.

6. As-needed or As-required Orders (PRN Medication Orders)

6.1 All PRN medication orders shall include the requirements listed in section 2.2 of this document.

6.2 When multiple PRN orders are required for the same indication, guidance for use should be provided where necessary, such as priority, sequence, and/or patient condition for use.

6.3 PRN medication orders shall indicate the specific time interval between doses (e.g., every 3 hours).

   a) PRN medication orders shall not include a range time interval for frequency of administration.

      (i) Example:

         Do Not Use: morphine 2 mg IV every 3-4 hours PRN

         Use: morphine 2 mg IV every 3 hours PRN.

6.4 Where clinically appropriate, PRN medication orders should include a dose limit/maximum within a specific period of time.

   a) Example:

      acetaminophen 650 mg orally every 4 hours PRN to a maximum of 3000 mg per 24 hours.
6.5 When a new PRN medication is ordered for the same indication as a previous PRN medication order, the authorized prescriber shall review all previous orders and discontinue where appropriate.

6.6 Range dose medication orders shall be interpreted in the following manner:

a) Only one (1) dose shall be administered within the prescribed time interval.

b) Based on a comprehensive assessment of the patient prior to administration and in collaboration with the patient and/or patient’s family, select a medication dose that is within the range ordered, within the ordered time interval (i.e., frequency), and within the 24-hour dose limit/maximum (if ordered) for that patient.

c) If on assessment post-dose it is determined that the dose was not adequate to relieve the patient’s symptoms, the health care professional shall not provide an additional dose of the medication within the prescribed time interval, even if the total dose provided would remain within the prescribed range dose.

   (i) Based on the patient’s condition and plan of care, the health care professional may:

      • provide appropriate care measures as an alternative to medications; or

      • use another appropriate existing PRN medication order; or

      • contact the authorized prescriber to obtain an additional medication order.

   (ii) Example:

      • Order: morphine 2.5 – 5 mg by intermittent IV infusion every 4 hours PRN for pain.

      • Interpretation: Based on patient assessment, the health care professional selects four (4) mg of morphine to be administered. On post-dose assessment (e.g., 30 minutes post-dose), the health care professional determines the dose administered did not relieve the patient’s pain. The health care professional cannot give any more morphine under this range medication order until four (4) hours after the last morphine dose was administered. The health care professional shall either:

          • provide appropriate non-pharmacological care measures; or
o use another appropriate existing PRN medication order; or

o contact the authorized prescriber for an additional medication order.

7. Quality Assurance

7.1 When monitoring compliance with the AHS Medication Orders Policy and Procedure, Zone/program/site operations may review medication orders to ensure adherence to the medication order requirements and principles.

DEFINITIONS

Authorized prescriber means a health care professional who is permitted by Federal and Provincial legislation, their regulatory college, Alberta Health Services and practice setting (where applicable) to prescribe medications.

Computerized provider order entry (CPOE) means an application that allows health care providers to use a computer to directly enter medical orders electronically in inpatient and ambulatory settings, replacing the more traditional order methods of paper, verbal, telephone, and fax.

Family(-ies) means one or more individuals identified by the patient as an important support, and who the patient wishes to be included in any encounters with the health care system, including, but not limited to, family members, legal guardians, friends and informal caregivers.

Health care professional means an individual who is a member of a regulated health discipline, as defined by the Health Disciplines Act (Alberta) or the Health Professions Act (Alberta) and who practises within scope and role.

Health care provider means any person who provides goods or services to a patient, inclusive of health care professionals, staff, students, volunteers and other persons acting on behalf or in conjunction with Alberta Health Services.

Health record means the Alberta Health Services legal record of the patient's diagnostic, treatment and care information.

Medication means any substance or mixture of substances manufactured, sold or represented for use in the diagnosis, treatment, mitigation or prevention of a disease, disorder or abnormal physical state, or its symptoms, in human beings, and restoring, correcting or modifying organic functions in human beings.

Order means a direction given by a regulated health care professional to carry out specific activity (-ies) as part of the diagnostic and/or therapeutic care and treatment, to the benefit of a patient. An order may be written (including handwritten and or electronic), verbal, by telephone or facsimile.
Patient means an adult or child who receives or has requested health care or services from Alberta Health Services and its health care providers or individuals authorized to act on behalf of Alberta Health Services. This term is inclusive of residents, clients and outpatients.

Range dose medication orders means an order in which the medication dose may vary over a prescribed range, depending on the patient’s status.

Student means those individuals enrolled in an entry-level health care discipline education program leading to initial entry-to-practice as a regulated or non-regulated health care provider.

REFERENCES

- Alberta Health Services Governance Documents:
  - Do Not Use List of Abbreviations, Symbols, and Dose Designations for Medication-Related Documentation Policy (#PS-08)
  - Medical Staff Rules and Bylaws
  - Medication Orders Policy (#PS-93)
  - Patient Identification Policy (#PS-06)
  - Verbal and Telephonic Medication Orders Procedure (#PS-93-02)

- Alberta Health Services Resources:
  - EMS Medical Control Protocols

- Non-Alberta Health Services Documents:
  - Medication Guidelines, 2015 (College and Association of Registered Nurses of Alberta)

VERSION HISTORY

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