

IREDELL HEALTH SYSTEM

Administration of Medications with Dose and Frequency Ranges, Multiple Orders	
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Nursing Leadership P&T Committee	Date: 04/2018 Date: 04/2021

Purpose: To establish guidelines for the administration of medications when medication orders include dose and frequency ranges and multiple orders with therapeutic duplications.

Policy:

- Medications that involve a range will be administered after an assessment of the patient needs. Staff will follow the guidelines below when administering medications that are ordered with dose and/or frequency ranges as well as multiple orders with therapeutic duplications to ensure that these orders are used in a safe and effective manner.
- The licensed personnel may need to select the dose of medication given within the provider's range of medication ordered.
- All PRN orders must include an indicator, the reason for the medication. If no indicator is included in the order, the provider must be contacted by a pharmacist to clarify the reason for the medication.
- If more than one order for the same type of medication (e.g. analgesics, antiemetics, bowel movements, etc) is received without distinguishing criteria for use, the provider must be contacted by a pharmacist for clarification.
- If these guidelines are not sufficient to adequately guide staff when carrying out orders, the provider will be contacted by a pharmacist or licensed personnel for further clarification.
- A 0-10 Pain scale will be used in all areas to determine severity of pain, except for those areas, such as PACU, Pediatrics or ICU/CCU, where other population-specific pain scales exist.
- Determination of severity of other symptoms, such as nausea, will be based upon the patient's self-report or the nurse's observation of patient behaviors, such as vomiting.

Procedure:

I. Determining Dose to Administer With Range Orders

If dose range orders are received, licensed personnel will follow these guidelines:

- A. The clinician will determine the amount of medication to be administered by the clinical assessment to include (not all inclusive):
1. Pain intensity
 2. Respiratory rate / effort
 3. Vital signs

4. Previous dose of sedative / narcotic and response
Please Note: Medication dosages may need to be individualized according to patient's specific needs or requests. The reason(s) for such individualization should be clearly documented in the medical record.
 5. Patient weight and size
 6. Age
 7. Other medication the provider has ordered
 8. Clinical history (narcotic naïve or narcotic tolerant), clinical presentation / behavior. For the narcotic naïve patient, start at the lowest dose and reassess pain in 30 minutes to 1 hour. If pain persists, the remaining dose of medication may be given; however, the next dose cannot be given until the full frequency interval from max dose time has elapsed.
 9. Anticipated pain perceived by the patient prior to a treatment, therapy, or procedure
- B. The licensed personnel will contact the provider as needed for order clarification or to recommend a change to the medication orders.

II. Monitoring of Intravenous Sedative Agents in the Critical Care Units

- A. When intravenous sedative agents are ordered in the critical care areas, the order shall include the desired sedation level (RASS sedation score), starting rate, incremental units and frequency for rate changes and maximum dose. See "Titrated Medications" policy.
- B. If more than one sedative agent is ordered, the provider will be notified by a pharmacist for clarification.

III. Determining Frequency of PRN Medications

When a pharmacist receives a PRN order containing a range frequency such as q4-6 hrs or q6-8 hrs, the pharmacist shall interpret and enter that order as the shortest frequency of the range. Example: q4-6 hrs would be interpreted as q4 hrs.

IV. Therapeutic Duplications

There shall not be more than one medication order for the same therapeutic class, with the same indication, by the same route, active on a patient's EMR. If a new PRN medication is ordered, the existing PRN medication with the same indicator and route will be discontinued by pharmacy.

When a medication is ordered with multiple routes of administration, without specific instruction as to which form is to be utilized first, these steps will be followed:

- A. The oral route will be used for mild to moderate PRN indication
- B. The parenteral route will be used:
 - i. For severe PRN indication
 - ii. When oral route is not practical (NPO, nausea, etc)
 - iii. When previous dose of oral medication has been ineffective

If providers do not address overlapping PRN indicators for differing routes, pharmacy may address to be administered with the least invasive to most invasive as defined by the patient. (i.e. oral route first, then IV, then IM, then rectally).

V. Definitions

The following definitions may be helpful when PRN medications are ordered for specific indications or symptoms.

- A. Agitation: Progressive anxiety coupled with acute stress response that causes behaviors such as panic attacks, excessive startle reflexes, excessive motor function, and paranoia.
- B. Anxiety: A state of apprehension in response to a real or perceived threat that is often accompanied by a physiologic response mediated by neural and endocrine pathways. It is a painful emotional state characterized by feelings of uneasiness, tension, apprehension, and worry.
- C. Confusion: A loss of intellectual ability in one or more areas, including memory, concentration, attention, orientation, comprehension, and interpretation of the environment.
- D. Delirium: An acute reversible state characterized by a range of symptoms that can vary from a slight clouding of consciousness to global impairments and psychosis.
- E. Pain: A stimulus sensed by the patient that is real or perceived characterized by the patient's definition. Pain is whatever the experiencing patient/client says it is, where it is and when it is. The patient's self-report is the single most reliable indicator of the existence, intensity, location and character of pain.

VI. Documentation:

- 1. Medication administration
- 2. Clinical assessment appropriate to determine range
- 3. Patients response to PRN medication, as soon as reasonable possible, usually about an hour.

INITIAL EFFECTIVE DATE: 09/2002

DATES REVISIONS EFFECTIVE: 06/2005, 02/2010, 04/2018, 04/2021

DATES REVIEWED (no changes): 04/2011, 04/2013

Index: Medication, Ranges Dose Frequency