TITLE: INFUSION ADMINISTRATION AND MONITORING BEST PRACTICE GUIDELINES	POLICY NUMBER: NUR002
URAC STANDARDS: N/A	ACHC STANDARDS: DRX2-10D, DRX5-1D, DRX5-5E, DRX5-5F, DRX5-7C, DRX7-8I, DRX7-21A
TJC STANDARDS: IC.02.01.01, MM.05.01.07, MM.06.01.01, MM.07.01.01, NPSG.01.01.01, PC.01.02.07, PC.02.01.01, PC.02.01.03, PC.02.02.05, PC.02.03.01	INS STANDARDS: 8, 10, 11, 12, 13, 16, 17, 18
EFFECTIVE DATE: 8/1/2023	REVISION DATE: 3/10/2025
REVIEWED DATE: 8/1/23, 3/10/25	APPROVAL AUTHORITY: KATHLEEN PATRICK, PRESIDENT

I. GUIDELINE

These Practice Guidelines have been created by CarepathRx solely for its internal use and the use of its contracted clinical partners. Best practice guidelines comprise nursing procedures and interventions that are based on INS, ACHC, TJC and IgNS Standards to promote patient safety and improve patient outcomes.

II. PRE-PROCEDURE

A. Verify patient using two (2) identifiers.

B. Verify patient consent for treatment.

C. Perform hand hygiene (refer to Infection Control policy on *Hand Hygiene*) before and after having direct contact with patient, after contact with body fluids, and before and after donning gloves.

D. Assess and document the patient's temperature, pulse, respirations, blood pressure and pertinent physical findings.

E. Assess and manage the patient's pain, as appropriate.

F. Review patient's medications, both prescription and non-prescription.

G. Assess patient's previous response to therapy, signs or symptoms of a reaction and adverse effects.

H. Review prescriber's order for administration of medication(s) or solution(s). The prescriber's order should include:

1. Patient's first and last name
2. Patient's date of birth
3. Prescriber's name
4. Prescription order date
5. Medication name

6. Dosage of medication to be administered.
7. Strength of medication, if applicable
8. Rate of administration
9. Frequency of medication to be delivered.
10. Route of administration
11. Specific directions for use, if applicable
12. Medication start date
13. Medication end date
14. Flushing orders, if applicable
15. Prescriber's signature

I. Verify the medication or the solution matches the product label.

J. Confirm that all items delivered are consistent with the order.

K. Verify patient's allergies

L. Assemble equipment on a clean, disinfected, aseptic field.

M. Skin antisepsis should always be performed using a friction scrub for 30 seconds and allowed to dry for 60 seconds.

N. Establish intravenous (IV) and/or subcutaneous (SC) access using Aseptic Non-Touch Technique (ANTT) or assess patency of venous access device (VAD) prior to preparing medication or solution for administration.

O. Inspect medication or solution for administration. Check the drug expiration date and inspect vial(s)/cassette/syringe/infusion bag for cracks, particulate matter, and clarity of medication.

1. All drugs products and/or compounded sterile preparations (CSPs) will be labeled with specific storage instructions and. Confirm all products have been stored according to labeling instructions.
2. The expiration date will be on the label and confirmed as within date.

P. Refer to package insert for mixing instructions.

Q. Prepare medication or solution for administration adhering to ANTT immediately prior to use.

R. Use a filter needle to withdraw medications from an ampule.

S. Discard contaminated sharps in a leakproof, puncture-resistant sharps container.

T. Ensure anaphylactic kit is present and medication/supplies are not expired.

U. Educate patient/caregiver on:

1. Procedure
2. Risks, benefits, and goals of treatment
3. Infection control (refer to policies on *Standard Precautions, Aseptic Non-Touch Technique and Hand Hygiene*).

4. Activity precautions
5. Proper care of access
6. Routine site inspection for redness, swelling or pain.
7. Educational material provided for the dispensed medication(s)
8. Setup, features, routine use, cleaning and troubleshooting infusion pump and supplies.
9. Signs and symptoms of a reaction, including those that may occur post treatment.
10. Signs and symptoms of access device complications
11. Adverse effects of treatment
12. Safe storage of medication (appropriate conditions of light and temperature) and supplies
13. Disposal of medications, supplies, and equipment
14. Emergency preparedness information
15. The appropriate provider of treatment (the prescriber **OR** the pharmacist; **BOTH** the prescriber and the pharmacist) to contact during business hours, the availability of an answering system to receive calls during evenings, nights, weekends and holidays and the accessibility of a Pharmacist, Nurse, and Dietician 24 hours a day, 7 days a week. Notify the pharmacy by calling the number listed at the top of the medication label. (See **ALGORITHM FOR NOTIFICATION OF PHARMACIST AND PROVIDER**)

III. PROCEDURE

A. During the procedure:

1. The nurse shall assess patient's vital signs (temperature, pulse, respirations, and blood pressure) at regular intervals according to the prescriber order, organizational policies, procedures, and practice guidelines
2. The nurse shall closely monitor the patient during the infusion for any changes in vital signs or potential ADRs and manage/report them to the prescriber.
3. Assess access device complications.
4. The nurse shall document all activities during the infusion including, but not limited to, infusion rate changes, vital sign assessment, signs/symptoms of ADRs and action taken, and patient complaints (e.g., not feeling well, feeling flushed, headache, nausea, etc.)
5. Infusion administration sets (tubing) should be changed every 24-72 hours, unless specified on the product label. Open systems for infusions administered daily or scheduled doses to be changed daily (every 24 hours), whereas closed systems such as continuous infusions or intermittent infusions on an infusion pump to be changed every 48 to 72 hours, or as indicated on the product label. Some products require daily tubing change regardless of closed or open systems, such as TPN.
6. Filters will be utilized according to the drug manufacturer's administration recommendations and patient/caregiver home mix.
7. Once started, all parenteral fluids shall be completely used or discarded within 24 hours. Parenteral fluids must not be stopped, disconnected, refrigerated, and/or restarted.
8. Infusions of lipid emulsions should be completed within 12-24 hours as instructed on the product label.

IV. POST-PROCEDURE

A. If a butterfly needle was used to administer a single dose, it must be removed immediately following the infusion.

B. Dispose of contaminated sharps in a non-permeable, puncture-resistant, tamper-proof, biohazard container. Sharps with safety mechanism engaged to be disposed of with other supplies by double bagging and placing in household garbage.

C. Post Infusion Monitoring

1. Refer to medication package insert or therapy specific guidelines for post infusion monitoring.
2. In the absence of specified instructions for post infusion monitoring, the nurse will remain with the patient for at least 30 minutes following first and subsequent medication administration(s) of specialty or immunotherapy infusions to monitor vital signs (temperature, pulse, respirations, and blood pressure) and response to therapy
3. Nurse will remain with the patient for at least 30 minutes following first dose administration of intravenous antimicrobials, antibiotics, and antifungals to monitor vital signs (temperature, pulse, respirations, and blood pressure), potential reactions or adverse effects and response to therapy

D. Document

1. Pertinent physical findings
2. Patient's response to infusion therapy, including symptoms, side effects or adverse events and patient's perception of effectiveness.
3. Patient or caregiver's understanding of education, competence, ability, and willingness to comply with procedures.
4. Access device related documentation:

    a. site preparation
    b. infection prevention
    c. date and time of insertion
    d. number of attempts
    e. number of access sites and location
    f. type, length, and gauge/size of VAD inserted.
    g. blood return and patency
    h. type of dressing and securement device, if applicable
    i. external length of catheter, if indicated
    j. arm circumference, if indicated
    k. condition of access site prior to and after infusion therapy
    l. condition of the removed IV catheter, such as tip intact or measured length of the removed catheter
    m. related to each regular assessment of the access site or VAD: condition of the site, dressing, type of catheter securement, dressing change, site care, patient report of discomfort/pain, and changes related to the VAD or access site.
    n. upon removal: date and time of removal, condition of site, condition of access device, reason for removal, dressing applied.

5. Receipt of education provided (verbal or written)
6. Pain assessment

V. SELF-ADMINISTRATION OF MEDICATION BY CAREGIVER

A. The patient and/or caregiver is educated about the prescribed infusion therapy including, but not limited to:

1. Procedure
2. Risks, benefits, and goals of treatment
3. Infection control (refer to policies *on Standard Precautions, Aseptic Non-Touch Technique and Hand Hygiene*)
4. Activity precautions
5. Proper care of access
6. Routine site inspection for redness, swelling or pain.
7. Educational material provided for the dispensed medication(s)
8. Setup, features, routine use, cleaning and troubleshooting infusion pump and supplies.
9. Signs and symptoms of a reaction, including those that may occur post treatment.
10. Signs and symptoms of access device complications
11. Any adverse effects of treatment
12. Safe storage of medication (appropriate conditions of light and temperature) and supplies
13. Disposal of medications, supplies, and equipment
14. The appropriate personnel (When to notify the prescriber, when to notify the pharmacy and when to notify both) to contact during business hours, the availability of an answering system to receive calls during evenings, nights, weekends and holidays and accessibility of a Registered Pharmacist 24 hours a day, 7 days a week. Notify the pharmacy by calling the number listed at the top of the medication label. (See CarepathRx policy on Algorithm for Notification of Pharmacist and Provider)

B. Teaching considerations

1. Teaching method will be based on assessment of age, developmental and cognitive level, literacy, language preference and physical limitations.
2. The nurse will use the Teach-Back Method to evaluate patient/caregiver learning.
3. All teaching will be documented in the clinical record.

C. Patient and/or caregiver compliance will be monitored as needed by the nurse.

D. Double lumen implanted port: **BOTH** lumens need to be flushed and locked per protocol.

VI. FIRST DOSE OF MEDICATION

A. The first dose will be administered by an RN trained to respond to life-threatening hypersensitivity or anaphylactic reactions. Patients requiring a first dose in the home setting will be assessed on a case-by-case basis. See Operations policy on First Dosing in the Home.

VII. TRAINING

This policy will be posted on the company shared drive.

VIII. REFERENCES

Infusion Nurses Society. 8th Edition (2021). Infusion Therapy Standards of Practice. *Journal of Infusion Nursing, Volume 44.*

Accreditation Commission for Health Care (7/21/2022). *ACHC Standards.*

The Joint Commission. (2022). *Joint Commission Resources E-dition*

IgNS Immunoglobulin Therapy Standards of Practice. Edition 2.1. *Advancing Ig Therapy Practice.*

VII. APPROVAL HISTORY

Approved By:	Title:	Date:
Kathleen Patrick	President	08/01/2023
Kathleen Patrick	President	03/10/2025