

SECTION 8B: PUMPS & DRUG ADMINISTRATION	POLICY: 8B.0
POLICY: ADMINISTERING IV MEDICATIONS: DISPENSING & DELIVERY	PAGE: 1 OF: 3

PURPOSE:

- To provide information on how medications can be dispensed and delivered / administered in the home setting.

POLICY:

- Medication will be administered by a Registered Nurse or a teachable patient / caregiver in accordance with a physician's order, any available / provided pharmacy or manufacturer instructions, and Agency policy.

GENERAL INFORMATION:

- The pharmacy provider determines how medications will be dispensed.
- Medications can be dispensed in a variety of ways. They may come in an elastomeric pump, syringe, IV bag, mini bag plus system, or they may simply come in a vial that requires them to be pooled, reconstituted, and/or diluted.

METHODS OF DISPENSING:

- Elastomeric Pump: This may also be referred to as a Medi-ball or Accuflo device. An elastomeric pump is filled with the prescribed medication and uses an internal pressurized mechanism to deliver medication intravenously. It does not require electricity or gravity for administration. When the tubing is connected to the access device (i.e., peripheral IV or central venous catheter), and the clamp is opened, the medication will start to infuse into the vein at a pre-set rate. Elastomeric pumps may be set to run for a set period like 30 minutes up to 2 hours. As the medication infuses, the ball deflates. Once the infusion is complete, the ball will be completely deflated and empty. The nurse and/or patient should allow the ball to completely empty before disconnecting and discarding it.
 - The elastomeric pump comes with pre-primed tubing already connected. No additional attachments are needed for administration.

SECTION 8B: PUMPS & DRUG ADMINISTRATION	POLICY: 8B.0
POLICY: ADMINISTERING IV MEDICATIONS: DISPENSING & DELIVERY	PAGE: 2 OF: 3

- Syringe: Medications in a syringe may given manually by the nurse and/or patient as an IV push (IVP). IVP medications should be given slowly, typically defined as over 2-10 minutes if a specific length of time is not dictated in the MD order.
 - Medications in a syringe that require a longer infusion time may be given via a syringe driver style pump (i.e., Freedom 60, Freedom Edge, SCIG60 Infuser, Graseby, etc). The syringe is secured into the cradle of the pump and the pump utilizes a syringe driver that slowly pushes/advances the plunger of the syringe to infuse medication into the vein.

- Mini Bag Plus System: The medication is in powder form in a vial that is connected to a small bag of sterile IV solution. Once connected, the nurse and/or patient will squeeze the bag forcing the solution into the vial until the vial is halfway full which allows for mixing. Once mixed, the vial is flipped to the top with the bag underneath and by squeezing air into the vial, the solution flows back into the bag.
 - Once all the solution is back in the bag, the IV bag can be hung from an IV pole and infused via a peristaltic infusion pump or via gravity flow.

- Intravenous (IV) Bag: Medical grade plastic bags from 100ml – 1000ml in volume, most often made from polyvinyl chloride (PVC).

METHODS OF DELIVERY/ADMINISTRATION:

- Ambulatory Infusion Pump: A small battery or electrically powered pump that infuses medicine into the body at a chosen rate. These pumps are designed to be portable or wearable allowing for freedom of movement for the patient while an infusion is in progress. These pumps can be programmed to run at the desired rate using multiple modes including continuous, intermittent, or variable modes. The most commonly used infusion pumps in the home are the Curlin and CADD Solis and/or Prizm, and the Sapphire pump. You may also encounter the Zyno or Vista. Other types of infusion pumps used in the home care setting include:
 - Elastomeric Pump – A small, circular, lightweight device filled with prescribed medication that uses pressure to deliver medication into the vein (see Methods of Dispensing section above).
 - Syringe Pump – Syringe pumps, or syringe drivers, are motorized devices that accurately control the movement of a fluid/medication from a syringe by mechanically inserting or

SECTION 8B: PUMPS & DRUG ADMINISTRATION	POLICY: 8B.0
POLICY: ADMINISTERING IV MEDICATIONS: DISPENSING & DELIVERY	PAGE: 3 OF: 3

retracting the plunger of the syringe. The body of the syringe is held steady to the body of the unit so that the only movement is from the action of the motor. The most common syringe pumps used in the home setting are the Freedom 60, Freedom Edge, and SCIG 60 Infuser.

- Enteral Feeding Pump – Enteral feeding pumps deliver nutrition over a slow or extended period of time through feeding tubes for patients who are unable to intake orally. A tube is inserted through the mouth, nose, or surgically in the abdomen. The pump tubing attaches to the end of the tube outside of the body. The most common enteral pumps used in the home are the Kangaroo, Joey, and Infinity pump.
- Gravity: Gravity administration sets rely on gravity and flow rate regulators to infuse medication into a patient. Gravity infusion rates can be set in drops per minute, which will equate to milliliters per hour. Dial-a-Flow tubing is a common example of tubing that uses gravity.
 - Dial-a-Flow – Medical tubing used to regulate the flow of liquid/medication through an IV. The tubing is primed with the medication, spiked into an IV bag, attached to the patient's access device, and unclamped allowing the medication to flow into the patient. The bag/tubing must be above the patient to allow gravity to work. This tubing comes with a dial that allows the nurse to easily set/turn the dial to the ordered infusion rate.
- IV Push or Bolus: An IV(Intravenous) push/bolus injection delivers a single dose of a medication directly into the bloodstream and takes very little time. It is usually given slowly over 2-10 minutes or per the MD order. Medications given IV push will be supplied in a syringe or the nurse will draw the medication up into a syringe for administration.
 - Feeding Bolus: When a patient is receiving enteral feedings, a bolus feeding may be ordered. This type of feeding is given at a faster rate than a feeding that is infused via a feeding pump. Bolus feedings are drawn up into a syringe, attached to the feeding tube, held, or hung above the tubing and the patient allowing the feeding to flow into the patient via gravity.

SECTION 8B: PUMPS & DRUG ADMINISTRATION	POLICY: 8B.0
POLICY: ADMINISTERING IV MEDICATIONS: DISPENSING & DELIVERY	PAGE: 4 OF: 3

DOCUMENTATION:

Nurse should document:

- The method and route of administration (i.e. IV push, infusion, oral, IV, enteral, etc.)
- The type of pump used for medication delivery along with the infusion rate.