



INFUSION NURSES SOCIETY

Frequently Asked Questions Related to COVID-19 Health Care Challenges

INS acknowledges the plight of the public, our members and valued colleagues, as we work collectively to manage the many concerns associated with COVID-19. Many are asking if INS is able to give “new guidance” regarding modification for adherence to the *INS Infusion Therapy Standards of Practice*. While we are presently unable to recommend modifications to the established standards of practice (e.g., extend dressing change intervals, extend administration set change intervals, etc.), we recognize the challenges many are facing due to the limited number of caregivers and the scarcity of supplies.

When experiencing scarcity or depletion of PPE and other health care supplies, due to the Covid-19 pandemic, each organization must determine the best alternative practices in order to ensure safest care for the patient and protection for the caregiver.

Question 1: Our organization is trying to limit the number of times we enter the room for patients in COVID-19 isolation. For that reason, we are connecting several long extension sets to our pump administration tubing. This allows us to bring the pump outside the patient’s room, silence alarms, program and change infusion bags.

Answer: While this practice is not ideal and not recommended, if organizations must resort to this method during the COVID-19 crisis, clinicians must evaluate the following risks and challenges to provide the safest care possible:

- **Tubing:** Long expanses of tubing, which facilitate bringing the pump outside the patient’s door, will add these potential safety risks:
 - Tubing on the floor will increase the risk for infection.
 - Multiple luer connections of the added extension sets will increase the risk for tubing disconnection, creating loss of medication. It will open the system to air and will increase the risk of infection.
 - Incomplete or inaccurate infusion rates may result from drugs remaining in the added length of tubing after secondary infusions are complete.
 - Delayed medication administration, due to drug remaining in the added length of tubing.
 - Inaccurate infusion rates, due to the added challenge of distance on the operating mechanism of the infusion pump.
- **Assessment:** Lack of patient assessment during medication administration will pose additional risks to patient safety including:
 - Delayed response and intervention for infiltrations or extravasations.
 - Absence of or delayed assessment of patients’ response to medication, including allergic/hypersensitivity reactions.
 - Delayed response to indications of complications, including assessment of pain, numbness, redness, tenderness, change of temperature or color at the infusion site, or associated extremity.
 - Inability to perform increased assessment needs for critically ill/sedated patients (patients who are unable to communicate).
- **Alarm Response:** Silencing or canceling perceived “nuisance pump alarms” such as air-in-line alarms, or upward/downward occlusion alarms, without assessing the patient and infusion system, bypasses the pump-issued safety system, which is intended to protect the patient from harm.

Question 2: How long can we leave a CVAD dressing on when we are short on PPE or we don't have enough nurses to change every 7 days in homecare settings?

Answer: There is no supportive evidence that enables INS to change the timeliness recommended in the *Infusion Therapy Standards of Practice* for CVAD dressing change. The risk for central line-associated bloodstream infection (CLABSI) is increased, if dressing changes are not performed at recommended intervals. The following suggestions may be helpful when managing homecare patients under the extreme circumstances created by the COVID-19 crisis:

- **Maintain Dressing Integrity:** It is imperative that each CVAD dressing change be performed with great care to ensure the dressing remains intact until the next dressing change.
 - Be careful to allow adequate dry time after cleansing and prepping the skin and before applying the dressing.
 - Once placed, smooth/rub the transparent dressing over the entire surface to ensure the adhesive is bonded well to the patient's skin.
 - When applicable, place a stockinette, or other similar stretch garment, over the CVAD dressing to reduce friction, snagging or tugging on the CVAD.
 - Instruct the patient to keep the dressing dry to maintain integrity. Offer suggestions or supplies needed to facilitate bathing, if necessary.
- **Report Dressing Dislodgement:** Instruct the patient to notify the home health agency if the dressing has become loose or soiled.
 - Provide a means by which the homecare patient may communicate with the homecare agency during the COVID-19 crisis.
- **Train Patient Family/Friend to Perform CVAD Dressing Change:** If homecare clinicians are truly unable to perform a CVAD dressing change in a timely manner, it might be prudent to teach a patient's reliable friend or relative the steps to perform a CVAD dressing change, for patients in homecare settings. There are risks in engaging an amateur/novice to perform this skilled task. Organizations must address the following, if resorting to this alternate approach to skilled nursing:
 - PICC dislodgement is a significant risk, especially for those who are new to dressing change practice. Instructions for amateur/novice persons must address how to avoid catheter slippage, if the securement device is removed with dressing change, according to manufacturer instructions.
 - Provide information on aseptic technique and the practice thereof.
 - Dressing change kit and supplies must be provided by the homecare agency. Instructions must include how and why each item is used and disposed.
 - Instructions must include assessment of skin and CVAD exit site and information on how to report concerns when necessary.

Question 3: During the COVID-19 crisis, can we use pump administration sets for longer periods of time than the *Infusion Therapy Standards of Practice* indicate?

Answer: There is no supportive evidence that enables INS to change the timeliness recommended in the *Infusion Therapy Standards of Practice* for administration set change. Administration set change intervals are dependent on the type of infusate administered, the duration of use (see Tables 1 & 2 below), or when suspected contamination or breach of the system has occurred. Extending the use of administration sets beyond these dates increases the risk for infection.

Table 1 - Administration Set Change Frequency by Administration Type		
Administration Type	Administration Set	Set Change Frequency
Continuous	Primary and secondary sets	No more frequently than every 96 hours
Intermittent	Primary and secondary sets	Every 24 hours
Hemodynamic and arterial pressure monitoring	Disposable or reusable transducer and/or dome and other components of the system, including the administration set	Every 96 hours

Table 2 - Administration Set Change Frequency by Infusate

Infusate Type	Administration Set	Set Change Frequency
Blood and blood components	Continuous or single unit	At end of 4 hours
Intravenous fat emulsion (IVFE)	Continuous or single dose	Every 24 hours
Parenteral nutrition	Continuous with intravenous fat emulsion	Every 24 hours
	Continuous without intravenous fat emulsion	Every 24 hours
	Cyclic or intermittent delivery	Every 24 hours
Propofol infusions		Every 6-12 hours

Question 4: With the looming shortages, our company is trying to be creative in making sure that we have everything we need for the safety of our patients. As is widely known, face masks are at a premium. We work with complex patients who need TPN and, therefore, all have central lines. Are there any recommendations for nurses and caregivers using reusable masks for CVC dressing changes? We've had a lot of discussion on this, since they are essentially a barrier, but wanted to know what the stance INS' position is.

Answer: Since all vascular access device dressing changes are performed following aseptic technique, all supplies used in this procedure, including the face mask, must be sterile. Sterile face masks are included in most dressing change kits (although this could vary, depending on supplier) and are immediately available at the start of a given procedure. The CVAD site and surrounding skin is quite vulnerable to contamination during the dressing change process. Therefore, it is essential that all components of the process are sterile, in order to prevent CLABSI.

For more information please contact:

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