# Overview of the New 2016 INS Standards of Practice

Throughout this course the *Infusion Nurses Society Standards of Practice* have been referenced and you are strongly encouraged to deliver I.V. therapy according to these evidence-based statements for patient safety and liability protection. The new *INS Standards of Practice* that were published in January/ February of 2016 contain 5 new Standards of Practice, revisions to selected Standards of Practice, and a few modifications of Practice Criteria. The following is an overview of the new Standards and Practice Criteria changes as they relate to this I.V. Therapy Education program. We encourage you to obtain the complete document to gain comprehensive information. The 2016 *INS Standards of Practice* may be accessed at: www.ins1.org.

## NEW STANDARDS OF PRACTICE:

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| **Infusion Teams** (standard #4) | • Standard 4 notes the proven benefits of an Infusion Team.<br>• The implementation of an Infusion Team in an organization or entity will improve the I.V. Therapy delivered to all patients. |
| **Standard Precautions** (standard #19) | • Standard 19 delineates practice specific steps that relate to the proper use of Personal Protective Equipment (PPE) to protect the nurse from transmissible bloodborne pathogens. |
| **Vascular Visualization** (standard #22) | • Standard 22 states equipment such as ultrasound, near-infrared technology, or Transillumination is recommended to be used when venous access is difficult and/or after failed venous access attempts, to reduce patient trauma and potential excess vein damage affiliated with multiple attempts.<br>• Proper education related to the type of vascular visualization equipment and its use should be obtained to facilitate success and prevent patient harm. |
| **Central Vascular Access Device (CVAD) Tip Location** (standard #23) | • Standard 23 recommends the use of a "real time" method, such as ECG technology to verify the CVC tip location, to increase accuracy, facilitate more rapid initiation of the therapy, and to reduce costs.<br>• This approach to verify the internal tip location of PICCs is currently used in an increasing number of organizations and institutions across the country.<br>• Various PICC manufacturers offer this technology and education regarding its appropriate use, as well as onsite clinical support to facilitate proper application of this technology.<br>• Practice Criteria also emphasizes the safest CVC tip location for patients; the cavoatrial junction (CAJ) is noted to be the proper point of the catheter tip location for both children and adults. |
| **Nerve Injuries** (standard #47) | • Standard 47 now clearly lists the high risk nerve injury venipuncture and arterial access sites.<br>• Some venous access sites listed as high risk, which are often used by nurses or anesthesia, include:<br>  ○ The dorsal hand<br>  ○ The radial wrist<br>  ○ The volar (inner) wrist<br>• These sites would ideally be avoided for I.V. access to prevent permanent nerve injury in a patient.<br>• Arterial access sites with the greatest risk of nerve injury include:<br>  ○ The brachial artery<br>  ○ The radial artery<br>  ○ The axillary artery |

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| | • Recognizing the signs and symptoms of nerve contact is imperative when performing any vascular access procedure.<br>• This Standard lists these signs and symptoms and directs the nurse or healthcare individual to stop the procedure immediately if present! As a review, these signs and symptoms are:<br>  ○ Extreme pain<br>  ○ "Electrical shock" sensation that radiates<br>  ○ Tingling or burning sensation<br>  ○ Numbness<br>• Immediate discontinuation of any vascular access procedure when any of these signs and symptoms are stated to occur, is the healthcare individual's duty and may prevent permanent nerve injury. |

## REVISIONS & MODIFICATIONS OF SELECTED STANDARDS PRACTICE CRITERIA:

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| **Vascular Access Device (VAD) Planning**<br>(standard #26) | • Practice Criteria for Short Peripheral Catheters and Midline Catheters no longer contains a specific pH parameter for acceptable infusates of 5-9.<br>• The Practice Criteria now says "consider the infusate characteristics (e.g. irritant, vesicant, osmolality) in conjunction with anticipated duration of infusion therapy (e.g. less than 6 days) and availability of peripheral vascular access sites."<br>• This Standard still requires the nurse to determine the risk of chemical phlebitis related to the type of infusate and assess the I.V. site for signs and symptoms of chemical phlebitis, to avoid peripheral vein damage and peripheral venous depletion<br>• Limitation of specific infusates into midline catheters is now listed in this Standard as well. Practice Criteria (3) for Midline Catheters states "Do not use midline catheters for continuous vesicant therapy, parenteral nutrition or infusates with an osmolality greater than 900 mOsm/L."<br>• Practice Criteria (4) for Midline Catheters continues with this statement: "Use caution with intermittent vesicant administration due to the risk of undetected extravasation"<br>• It is now imperative that the nurse or healthcare provider properly and completely assess the vascular access site to detect chemical phlebitis early and take appropriate action. This may include I.V. site rotation or requesting a device with a central tip location, to preserve peripheral vasculature. |
| **Flushing & Locking**<br>(standard #40) | • Practice Criteria (D)(3) qualifies the following: "After confirmation of patency by detecting no resistance and the presence of a blood return, use syringes appropriately sized for the medication being injected."<br>• This statement allows for the use of a syringe smaller than a 10 mL barrel size, such as a 5 mL or 3 mL barrel size syringe, to deliver I.V. medications into CVC's or midline catheters.<br>• Remember the catheter patency is still to be verified, noting ease of flush and a blood return, using a larger barrel size syringe; according to manufacturer's directions for use, prior to the use of a smaller barrel size syringe to avoid catheter damage.<br>• Practice Criteria (I) lists Heparin 10 units per mL or preservative free 0.9% sodium chloride to lock CVAD's. This lower strength of Heparin is recommended in an effort to reduce the occurrence of Heparin-Induced Thrombocytopenia and Thrombosis (HITT).<br>• As a reminder, always refer to organization/institution policies and procedures for the proper volume of normal saline flush solution and the strength and volume of a Heparin lock solution. |

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| **Administration Set Change**<br>(standard #42) | • Standard 42.2 now states "In addition to routine changes, the administration set is changed whenever the peripheral catheter site is changed or when a new central vascular access device (CVAD) is placed."<br>• This practice will help assure the sterility and integrity of the I.V. infusion system, preventing possible bloodstream infection risk for the patient.<br>• Initiating a new I.V. tubing system with the insertion of a new vascular access device will provide the best I.V. care and promote patient safety.<br>• Practice Criteria (III) now includes the statement "do not attach the exposed male luer end of the administration set to a port on the same set ("looping")."<br>• "Looping" an I.V. tubing is considered inappropriate and risks contamination of the entire infusion system.<br>• Practice Criteria (IV) (A) now states that the administration sets for all parenteral nutrition solutions, either an amino acid/dextrose formula (i.e. "basic") or total nutrient admixture (i.e. TNA or "triple-mix") are to be changed at lease every 24 hours.<br>• Practice Criteria (IV) (B) now states that the administration sets to administer I.V. fat emulsions (i.e. lipids) infused separately are to be changed every 12 hours. |

Once again, we encourage you to review the 2016 *INS Standards of Practice* in its entirety by visiting the Infusion Nurses Society website at www.ins1.org.