Welcome to the first column in a series addressing the 2006 Infusion Nursing Standards of Practice. I have used the Standards to guide my practice for many years. In the 1980s, I moved from critical care to homecare and was given a position to develop a home infusion therapy program. At that time, home infusion therapy was in its infancy, and there was relatively little literature to draw upon. I joined INS (at that time called the Intravenous Nursing Society), obtained a copy of the Standards, and used them as the foundation for developing our organization’s policies and procedures. Little did I know that I would eventually have the exciting opportunity to work with INS and a group of expert clinicians in revising this important document. In this column, I will be providing a focused discussion on some of the Standards that have generated most of the questions from nurses. I will highlight some of the research references that were used to support the Standards and provide updated references as available. I welcome your feedback as we launch this new feature of the Journal of Infusion Nursing.

Infusion Nursing Standards of Practice
Lisa A. Gorski, MS, APRN,BC, CRNI®, FAAN

Standard 43.1: Catheter stabilization shall be used to preserve the integrity of the access device and to prevent catheter migration and loss of access.

Standard 43.2: Catheters shall be stabilized using a method that does not interfere with assessment and monitoring of the access site or impede vascular circulation or delivery of the prescribed therapy.

Standard 43.3: Catheter stabilization shall be performed using aseptic technique.

Standard 43: Catheter Stabilization

The term stabilization is used interchangeably with securement when referring to a structure, support, or foundation that makes something less likely to fall, give way, or become displaced. Catheter stabilization is increasingly recognized as an important intervention in reducing the risk for phlebitis, infection, catheter migration, and catheter dislodgment. When the catheter is stabilized, there is less movement of the catheter in and out of the insertion site, and the catheter is less likely to be dislodged. Studies examining catheter stabilization have focused primarily on peripheral IV catheters and peripherally inserted central catheters (PICCs). One of the changes to the 2006 Standards is that the Practice Criteria now recommend the use of manufactured catheter stabilization devices as preferred over other methods, such as sterile tapes and surgical strips. INS does not endorse any particular device.

Both healthcare worker safety issues and clinical research have prompted this change. Suturing is no longer recommended due to the risk for healthcare provider needlestick injuries. Sutures are also associated with increased risk for infection. In a prospective randomized study, 170 patients with PICCs were randomly assigned to either sutures or to the placement of a manufactured securement device. Significant findings included shorter securement time and fewer PICC-related bloodstream infections in the group using the manufactured securement device; there was 1 needlestick injury in the suture group. Two prospective studies cited in the Standards compared the use of tape to a securement device in the stabilization of peripheral IV catheters and found significantly decreased rates for scheduled IV restarts.
as well as an overall reduction in complications. Since the publication of the Standards, Schears' summarized pooled product evaluation data on the use of 1 available securement device (StatLok, Venetec International, San Diego, CA) with peripheral IV catheters from 83 institutions representing over 10,000 patients. Although he acknowledges the need for an independent, randomized trial, the data demonstrating significant reductions in complications and restarts are compelling enough to believe that catheter stabilization devices do improve outcomes in relation to peripheral IV catheters.

The use of catheter stabilization devices represents a significant change in practice. Education emphasizing proper use of the product, maintenance of aseptic technique, and catheter stabilization during the placement procedure is absolutely essential. There are several commercially available manufactured stabilization devices. It is imperative that infusion nurses read and incorporate specific manufacturer’s directions for use and frequency of replacement into organizational procedures.

REFERENCES