New FDA-approved Technology for Outpatient PICC Lines: Improving the Overall Health of Patients while Saving Providers Time and Money

Background
Many diagnoses require patients to receive medications intravenously. Common examples of these diagnoses include osteomyelitis, “diabetic foot” infection, Lyme disease, urinary tract infections, malnutrition, hyperemesis, different cancers, etc. The intravenous medications required to treat these health disorders may include antibiotics, total parenteral nutrition, and chemotherapy, which needs to be administered through a vascular access device (VAD). There are many clinical factors that determine the appropriate VAD for the prescribed therapy; and for home infusion, the most commonly utilized are midlines and peripherally inserted central catheters (PICC lines).

Challenges with traditional PICC lines
When a PICC line is required, specially trained nurses or interventional radiology inserts the line. This requires patients being sent to an emergency room (ER) or admitted to an acute care hospital for PICC placement by a nurse or physician. In traditional practice, PICC placement is followed by confirmatory chest X-ray (CXR) prior to the administration of the IV medication. The CXR is administered to determine whether the catheter tip is properly located according to current guidelines, within the lower 1/3 of the superior vena cave (SVC) to the junction with the right atrium, known as the cavaoatrial junction (CAJ). The process of taking and reading the CXR is costly, time consuming, and exposes the patient to harmful radiation. Poor initial tip placement and insufficient image quality may lead to orders for repeat X-rays, consuming more resources and subjecting the patient to additional radiation. The more time patients spend in a hospital environment, their risk of infection increases as does the overall costs of medical care.

The Solution
With technology advances and ongoing clinical training, there are new options available to avoid the ER or hospital admission for catheter placement and first-dose medications. Care Resource is the first company in the northeast to utilize VasoNova vascular positioning system (VPS)™ technology, which has been approved as an alternative to a confirmatory CXR for PICC placement. VasoNova VPS, sold by Teleflex Incorporated, combines Doppler ultrasound and intravascular ECG to provide “real-time navigation” for PICC insertion

VPS provides a safer, more precise, and more cost-effective way to accurately confirm the correct tip placement for a PICC. Because VPS provides an alternative to needing a CXR, inserting the PICC line can be performed at Care Resource’s ambulatory infusion suite, a doctor’s office or even in a patient’s home. Using this technology can prevent discharge delays when hospital resources or radiology is not available to insert or confirm line placement, and can prevent admissions for line placements and first dose.

About Care Resource
Care Resource is southern New England's leading provider of outpatient infusion therapy services. Founded by experienced healthcare professionals focused on innovation, quality and collaboration, Care Resource offers state-of-the-art facilities and employs the most skilled clinicians, including infusion pharmacists, dietitians and IV nurses, to improve clinical outcomes for patients and reduce healthcare costs.

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