# Resolution Title: Ultrasound-Guided Peripheral Intravenous Access

1 2 3	Whereas,	Peripheral intravenous cannulation (PIV) is a frequent procedure in emergency department patients; and
4 5 6 7	Whereas,	Patients with difficult peripheral venous access may undergo multiple attempts to achieve intravenous access with resultant delays in diagnosis and treatment, utilization of additional staff resources and decreased patient satisfaction; and
8 9 10	Whereas,	Patients with difficult peripheral venous access may require central venous access which increases patient morbidity and mortality as well as health care costs; and
11 12 13 14	Whereas,	The utilization of ultrasonography for the placement of peripheral intravenous cannulation is a well validated procedure that decreases time to diagnosis and treatment, increases patient satisfaction and decreases patient throughput time; and
15 16 17 18	Whereas,	There are data to support the ability of emergency nurses to safely and effectively perform ultrasound-guided peripheral venous access after appropriate education and training; therefore, be it
19 20 21	Resolved,	That the Emergency Nurses Association (ENA) develop an official statement to support the inclusion of ultrasound-guided peripheral venous access within the scope of practice of registered nurses.

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#### **BOARD COMMENTS:**

The ENA board of directors recommends adoption. Developing an official statement that this procedure is within the scope of practice of emergency nurses may help encourage institutions to train nurses in a procedure that promotes safe practice and patient comfort.

#### RESOLUTIONS COMMITTEE COMMENTS:

The ENA Resolutions Committee supports adoption of this proposal.

#### RESOLUTION BACKGROUND INFORMATION:

Peripheral intravenous cannulation is a common procedure for patients in the emergency department. Obtaining PIV access in patients with obesity, shock, dehydration, extremes of age, vascular pathologies, chronic illness, a history of intravenous drug use or a history of multiple previous cannulations can be difficult even for the experienced nurse. 1.2 Patients with difficult peripheral access often undergo multiple venipunctures, which may include blind attempts to access a vein based on knowledge of "normal" anatomy. Failed attempts to obtain access may result in patient dissatisfaction, deterioration and/or suffering and culminate in the placement of a central line. Central line placement can have both immediate and delayed adverse events for patients including arrythmia, pneumothorax, cardiac tamponade, thrombosis, great vessel damage or sepsis. Additionally, patients with difficult PIV access utilize more staff resources, suffer from delays in diagnosis and

Additionally, patients with difficult PIV access treatment and have decreased satisfaction.<sup>2</sup>

The effectiveness of ultrasound to guide the placement of PIV cannulation is well established.<sup>1,3–6</sup> The use of ultrasonography for peripheral line placement has several benefits including decreasing time to diagnosis and treatment, decreasing patient throughput time and increased patient and provider satisfaction. Additionally, patients who undergo peripheral ultrasound guided PIV cannulation are spared from both short-term and long-term central line adverse events, which increase morbidity, morality and health care costs.<sup>2</sup>

Multiple evidenced-based articles validate the competency of the emergency nurse in the use of the ultrasonography for PIV cannulation.<sup>2,3,7,8</sup> Research has demonstrated that emergency nurses performing ultrasonography for PIV cannulation have placement rates similar to physicians, protect patients from central lines and decrease the time to diagnosis and treatment.<sup>3,7,8</sup>

### **RELATIONSHIP TO ENA PHILOSOPHY AND BYLAWS:**

The mission of ENA is to "advocate for patient safety and excellence in emergency nursing practice." This resolution serves ENA's mission by:

Defining a standard to serve as a basis for emergency nursing practice;

- Identifying and disseminating information regarding key trends affecting and pertinent to emergency nursing; and
- Advocating for effective patient care.

This resolution supports the following beliefs from the ENA Code of Ethics:

- The emergency nurse acts with compassion and respect for human dignity and the uniqueness of the individual.
- The emergency nurse maintains competence within, and accountability for, emergency nursing practice.
- The emergency nurse acts to protect the individual when health care and safety are threatened by incompetent, unethical or illegal practice.
- The emergency nurse exercises sound judgment in responsibility, delegating and seeking consultation.



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ENA's Vision Statement states, "ENA is indispensable to the global emergency nursing community." This statement would provide support for emergency nurses seeking to implement evidence-based practice changes to improve care for patients.

#### FINANCIAL CONSIDERATIONS:

Development of the statement could be accomplished within the current ENA committee structure. As such, it would incur no additional expenses.

### **REFERENCES:**

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### **ADDITIONAL READING AND RESOURCES:**

Infusion Nurses Society. (2011) Infusion nursing standards of practice. Journal of Infusion Nursing, 34, 1S.

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159 160

161

162