

## PNEUMATIC TOURNIQUET

- documenting and communicating tourniquet information and its affects during hand offs to facilitate continuity in patient care, and
- employing corrective actions in the event of a patient injury.

[1: Regulatory Requirement]

Tourniquets and accessories have been associated with patient injuries.<sup>106,108,112,113</sup> Education provides a foundation to guide safe patient care and minimize these risks.<sup>111</sup>

Competency verification confirms that personnel have knowledge regarding the use of the pneumatic tourniquet and appropriate corrective action to be taken in the event of a patient injury.<sup>176-179</sup>

- IX.b. Perioperative personnel should receive education that addresses human factors related to the management of patient care for patients undergoing pneumatic tourniquet-assisted operative or other invasive procedures. [2: Moderate Evidence]

Human factors include the interpersonal and social aspects of the perioperative environment (eg, coordination of activities, teamwork, collaboration, communication).

In a synthesis of the literature on perioperative nursing competency published between 2000 and 2008, researchers identified two domains of perioperative competency:

- specialized knowledge, described as familiarity with standards and guidelines of perioperative practice, and
- human factors, described as interpersonal and social team interactions.

The researchers recognized teamwork and communication as important aspects of patient safety and indicators of perioperative competency.<sup>176</sup>

In a qualitative focus group study exploring the perceptions of perioperative nurses on competency, researchers identified three themes as competency requirements:

- technical and procedural knowledge—the knowledge, psychomotor skills, and situational awareness required for competency in the perioperative setting;
- communication skills—the need for communication and team building skills, collegial support, and the ability to decipher and share complex clinical information; and
- managing and coordinating flow—the ability to anticipate needs, organize and prioritize resources, manage conflicts, and grasp the full perspective of the situation.

The findings of the study highlight the importance of human factors as a competency requirement for perioperative nurses.<sup>180</sup>

Education, collegiality, and collaboration are standards of perioperative nursing and primary responsibilities of the perioperative RN who practices in the perioperative setting.<sup>53,179</sup>

## Recommendation X

**Documentation should reflect activities related to the care of the patient undergoing pneumatic tourniquet-assisted operative or other invasive procedures.**

Documentation is a professional medicolegal standard. Documentation of nursing activities is dictated by the health care organization's policy and regulatory and accrediting agency requirements and is necessary to inform other health care professionals involved in the patient's care. Highly reliable data collection is not only necessary to chronicle patient responses to nursing interventions, but also to demonstrate the health care organization's progress toward quality care outcomes.<sup>181</sup>

- X.a. **Patient assessments, the plan of care, interventions implemented, and evaluation of care related to use of a pneumatic tourniquet should be documented.** [1: Regulatory Requirement]

At the patient care level, documentation facilitates continuity of patient care through clear communication and supports collaboration among health care team members.

Perioperative documentation that accurately reflects the patient experience is essential for the continuity of outcome-focused nursing care and for effective comparison of realized versus anticipated patient outcomes.<sup>181</sup>

**Effective management and collection of health care information that accurately reflects the patient's care, treatment, and services provided is a regulatory and accreditation requirement for both hospitals and ambulatory settings.**<sup>169,170,182-187</sup>

- X.a.1. **Documentation should include**
- pneumatic tourniquet system identification,
  - limb occlusion pressure,
  - cuff pressure,
  - skin protection measures,
  - location of the tourniquet cuff,
  - skin integrity under the cuff before and after use of the pneumatic tourniquet,
  - the person placing the tourniquet cuff,
  - time of inflation and deflation,
  - assessment and evaluation of the entire extremity including preoperative and postoperative pulses distal to the tourniquet, and
  - systemic reactions to ischemia and reperfusion.

- X.b. The perioperative RN should include information about pressure settings, the duration of the pneumatic tourniquet inflation, and patient outcomes when transferring the care of the patient to other caregivers. [2: Moderate Evidence]

Transfer of care reports facilitate continuity in care.<sup>73</sup>

