



ARIN Position Statement

Nurse Staffing in Interventional Radiology

Introduction/Problem Statement

Adequate nursing staffing levels positively affect patient safety, patient care outcomes, the nursing work environment, as well as lowering costs for a health system (AACN, 2016; Aiken, 2011; ANA, 2012).

Nurses bring a highly specialized focus to the care environment. As defined by [the ANA \(n.d.\)](#), "Nursing is the protection, promotion, and optimization of health and abilities, prevention of illness and injury, facilitations of healing, alleviation of suffering through the diagnosis and treatment of human response, and advocacy in the care of individuals, families, groups, communities, and populations" (para. 1).

The Joint Commission (JC) specifies in PC 03.01.01, "A registered nurse supervises perioperative nursing care." This statement is cross walked to Centers for Medicare and Medicaid Services (CMS) standards. CMS states that, "There must be supervisory and staff personnel for each department or nursing unit to ensure, when needed, the immediate availability of a registered nurse for bedside care of any patient." Moreover, the perioperative circulating role is performed, "Under the supervision of a qualified registered nurse who is immediately available to respond to emergencies."

The role of the nurse in procedural areas is collaborative and care is provided simultaneously with other members of the procedure room team which differs from settings where nursing care is often delivered independently. Procedural nursing care is multidisciplinary with a proceduralist, a nurse, a radiologic technologist and, if the patient is receiving general anesthesia or monitored anesthesia care (MAC), then with an anesthesiologist or a certified registered nurse anesthetist (CRNA). The radiology nurse is knowledgeable of best nursing practices and maintains the standards of nursing care at all times. This is accomplished through a comprehensive orientation and training in radiology nursing with an established plan for continuing education and annual review with competency assessment of essential topics specific to the many practice environments of the radiology nurse. Routine tasks associated with the procedure can often be delegated to and completed by different persons of different specialties. Clinical nursing care in the procedural and peri-procedural areas does not simply consist of a series of predefined tasks that can be completed by any member of the clinical team. It is the continual application of the nursing process through the development of an evolving patient-specific plan of care throughout the patient's procedure to ensure optimal patient outcomes.

ARIN Position

It is the position of ARIN that there is consistent, reliable and competent nursing presence in procedure rooms and peri-procedure areas always. To ensure there is immediate availability of a registered nurse, one nurse per procedure room is the expectation, regardless of the sedative administered with few exceptions. When the nurse is administering procedural sedation, the nurse can have no other responsibilities apart from monitoring the patient and administering medications per order during the

case. Regardless of sedation type or presence of an anesthesia provider, the nurse conducts continual patient assessments and intervenes as necessary to ensure patient safety, comfort, and early intervention during adverse events thereby ensuring optimal outcomes. At the completion of the procedure, prior to leaving the procedure room, the nurse performs an immediate post-procedure assessment to ensure neurovascular, cardiovascular, and skin integrity among other systems. This assessment should include a pain assessment and current vital signs. The proceduralist, anesthesia provided, and the nurse collaboratively develop an appropriate patient-specific plan for post procedure monitoring. The nurse facilitates this transition of care through handoff and ensuring that adequate education and discharge planning will be provided for.

There are exceptions to the one-to-one standard of nursing staffing that should be applied judiciously since the presence of a nurse enhances patient safety and provides for the holistic needs of the patient. Exceptions would be in procedures that meet the following criteria: 1) sedation is not required; 2) IV is not required; 3) the patient has had the procedure before (i.e. routine catheter exchanges) or the procedure can typically be performed at the bedside; and 4) there are minimal risks to performing the procedure.

Additional nursing support should be available to assist with critical care patients or patients of high acuity, co-morbidities and management of adverse events (AORN, 2014; ANA, 2012).

Rationale and Supporting Information

The topic of nursing staffing/ratios in procedural areas has not been reported in the research literature to date so the ARIN position is based on related practice environments, expert consensus and opinion, and clinical experience. Seminal research conducted by Aiken et al. (2011) suggests that nurse/patient ratio is related to better patient outcomes. Kane et al. (2007) meta-analysis suggests increased nurse staffing lowers the occurrence of hospital related mortality and adverse patient events. The radiology nurse is an integrated patient care team member, who immediately intervenes in urgent and emergent circumstances (Ritchie, 2009).

In 2016, the Society of Interventional Radiology (SIR) published their standards of practice for staffing guidelines stating at least one member of the healthcare team should be an RN to provide monitoring, care and sedation throughout the procedure (Baerlocher, et.al., 2016). The American College of Radiology (2014) in a joint practice statement recommends one nurse for each procedure room. The American Association of Nurse Anesthetists' (2016) practice standard recommends that there is one team member with the sole responsibility of sedation administration and monitoring of the patient's hemodynamic status and response to sedation. The society further states that this team member should not be involved in any tasks associated with the procedure that could compromise the continuous monitoring of the patient. Similarly, the American Society for Gastrointestinal Endoscopy (ASGE) (2010), a group which shares a common procedural based practice setting, requires that the RN should be limited to administration of sedation and monitoring while a secondary team member should be assigned to technical assistance.

Conclusion

The goal of the radiology nurse is to competently care for patients to ensure their safety and wellbeing throughout the procedure. The nurse strives to maintain or improve the patient's status so that it is equal to or better than their pre-procedure condition. The practice of radiology nursing is guided by the art and science of nursing and includes scientific principles, evidence-based practices, and patient advocacy (ANA & ARIN, 2013). Nursing presence in the procedural and peri-procedural settings is paramount to patient safety and optimal outcomes. It is through continuous and vigilant nursing care that this is accomplished. Individual facility policies and procedures should address staffing situations in which more than one radiology nurse is required (ANA, 2012). Therefore, ARIN's position is that at least one radiology RN must be devoted to each patient undergoing an invasive procedure with sedation.

References and Other Resources

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Author/authors: ARIN Clinical Practice and Research Committee and Greg Laukhuf, ND, RN, CRN

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