

STATE OF FLORIDA
BOARD OF NURSING

FILED DATE - JUL 07 2017
Department of Health
Angel Sanchez
Deputy Agency Clerk

IN RE: THE PETITION
FOR DECLARATORY
STATEMENT OF
RICHARD P. PEARSON, RN

FINAL ORDER

THIS CAUSE came before the BOARD OF NURSING (hereinafter Board) pursuant to §120.565, Florida Statutes, and Rule 28-105, Florida Administrative Code, at a duly-noticed meeting in Tampa, Florida on June 8, 2017, for the purpose of considering the Petition for Declaratory Statement (attached as Exhibit A) filed by RICHARD P. PEARSON, RN (hereinafter Petitioner). Having considered the petition, the arguments submitted by counsel for Petitioner, and being otherwise fully advised in the premises, the Board makes the following findings and conclusions.

RULING ON MOTION TO INTERVENE

The Florida Association Of Nurse Anesthetists' Motion To Intervene was granted.

FINDINGS OF FACT

1. This petition was noticed by the Board in Vol. 43, No. 10, dated January 17, 2017 of the Florida Administrative Register. Subsequent to the notice, Petitioner filed an Amended Petition.

2. Petitioner, RICHARD P. PEARSON, RN, is registered nurse licensed to practice nursing in the State of Florida, having license number RN 9213405. He is also licensed as an EMT.

3. Petitioner has been employed for 10 years at Tampa General Hospital as a trauma resuscitation nurse in the emergency room, primarily in the trauma and major medical rooms.

4. Petitioner is certified in advanced cardiac life support, pediatric advanced life support, neonatal resuscitation, and advanced trauma care.

5. Petitioner has completed the nurses air medical crew core curriculum, and acts a preceptor for special operations combat medics who rotate through the emergency room.

6. Petitioner inquires if it is within the scope of his nursing practice to:

a. administer analgesic dosages of .05 mg/kg of ketamine intravenously or intramuscularly, no more frequently than once every four hours; and

b. administer ketamine for moderate sedation or sedation/analgesia during time limited procedures to patients who respond purposefully to verbal commands and maintain spontaneous ventilation under the immediate and direct supervision of a physician or certified registered nurse anesthetist involved in the procedure.

7. Petitioner would administer the ketamine pursuant to the policies and procedures developed by an inter-disciplinary team at Tampa General Hospital, which would be substantially similar to the Procedural Sedation Consensus Statement adopted by professional associations listed in the petition.

8. Petitioner would not administer ketamine at a dose that is deemed to be general anesthesia.

CONCLUSIONS OF LAW

1. The Board has jurisdiction over this matter pursuant to Section 120.565, Florida Statutes, and Rule 28-105, Florida Administrative Code.

2. The petition filed in this cause is in substantial compliance with the provisions of Section 120.565, Florida Statutes, and Rule 28-105, Florida Administrative Code.

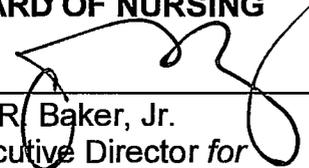
3. The scope of practice of a registered nurse is defined in § 464.003(20), Florida Statutes, to include:

The administration of medications and treatments as prescribed or authorized by a duly licensed practitioner authorized by the laws of this state to prescribe such medications and treatments.

WHEREFORE, the Board hereby finds that under the specific facts of the petition, as set forth above, it is within the scope of Petitioner's education, training and experience to administer analgesic dosages of .05 mg/kg of ketamine intravenously or intramuscularly, no more frequently than once every four hours. It is not within the scope of Petitioner's education, training and experience to administer ketamine for moderate sedation or sedation/analgesia during time limited procedures .

DONE AND ORDERED this 26th day of June, 2017.

BOARD OF NURSING



Joe R. Baker, Jr.
Executive Director for
Jody Bryant Newman, EdD, EdS, Chair

NOTICE OF APPEAL RIGHTS

Pursuant to Section 120.569, Florida Statutes, the parties are hereby notified that they may appeal this Final Order by filing one copy of a notice of appeal with the

clerk of the department and by filing a filing fee and one copy of a notice of appeal with the District Court of Appeal within thirty days of the date this Final Order is filed.

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing Final Order has been furnished by U.S. Mail to Petitioner Cynthia A. Mikos, Esquire, 401 East Jackson Street, Suite 3100, Tampa FL 33602 and James W. Linn, 315 South Calhoun Street, Suite 830, Tallahassee FL 32301, and by email to Donna Oxford,

Donna.Oxford@myfloridalegal.com this 7 day of July, 2017.



Deputy Agency Clerk

1701/303927

FLORIDA DEPARTMENT OF HEALTH
BOARD OF NURSING

Amended Petition for Declaratory Statement
Before the Board of Nursing

In re: Richard P. Pearson, RN
_____ /

FILED
DEPARTMENT OF HEALTH
DEPUTY CLERK

CLERK: *Bridget Coates*

DATE 5.8-2017

Petitioner, Richard P. Pearson, RN, by and through the undersigned attorneys and pursuant to Florida Statutes §120.565 and Florida Administrative Code Rule 28-105, seeks the Florida Board of Nursing's ("Board") opinion as to whether the intravenous or intramuscular administration of ketamine for purposes of analgesia and procedural sedation to patients in the hospital emergency department is within his scope of practice of the registered nurse.

1. Petitioner, Richard Pearson is a registered nurse ("RN") licensed by the Florida Board of Nursing pursuant to Florida Statutes Chapter 464 holding license number RN 9213405 since 2004. He can be contacted through undersigned counsel.

2. Mr. Pearson is currently employed at Tampa General Hospital ("TGH") as a Trauma Resuscitation Nurse in the emergency department ("ED") where he has practiced for the past decade, primarily in the trauma and major medical rooms. He holds multiple certifications, including Advanced Cardiac Life Support ("ACLS"), Pediatric Advanced Life Support ("PALS"), Neonatal Resuscitation Program ("NRP") Advanced Trauma Care for Nurses ("ATCN) certification, and has completed the Nurses Air Medical Crew Core Curriculum. Also a licensed EMT, Mr. Pearson serves as a preceptor for the Special Operations Combat Medics that rotate through the ED and formerly served as the clinical instructor for paramedic students at TGH. A copy of Mr. Pearson's curriculum vita is attached as Exhibit 1.

3. Mr. Pearson seeks the Board's determination as to whether it is within his scope of practice as a registered nurse to administer ketamine to patients in the ED under two circumstances:

- a. intravenously or intramuscularly for patients needing pain control by administering analgesic dosages of 0.5 mg/kg or less no more frequently than once every four hours; and
- b. for purposes of moderate sedation or sedation/analgesia during time limited procedures for patients who respond purposefully to verbal commands and maintain spontaneous ventilation under the direct supervision of a physician, CRNA, or anesthesiologist's assistant with delineated privileges for monitored anesthesia care when the supervising practitioner is in the room and involved in the procedure for which the sedation is required.

In both instances, the administration of ketamine would be conducted pursuant to an order by a duly licensed practitioner and in accordance with policies and procedures established by TGH. At no time would Mr. Pearson administer ketamine at a dose that is deemed to be general anesthesia.

4. Ketamine is approved by the United States Food and Drug Administration as a nonbarbiturate anesthetic producing an anesthetic state characterized by profound analgesia, normal pharyngeal-laryngeal reflexes, cardiovascular and respiratory stimulation, and occasionally a transient and minimal respiratory depression. Ketamine is noted for its ability to produce a state of anesthesia while preserving respiratory drive and protective airway reflexes¹.

¹ Rakic and Golembiewski, *Low-Dose Ketamine Infusion for Postoperative Pain Management*, 24 *Journal of PeriAnesthesia Nursing*, 254, 254 (August 2009).

5. In low or subdissociative doses ketamine has been shown to confer “potent, analgesic and amnestic effects that are accompanied by preservation of protective airway responses, spontaneous respiration and cardiopulmonary stability.”² Analgesic dosages of ketamine are generally less than 1.0 mg/kg and are commonly referred to as low dose ketamine. *Id.* In low doses, ketamine has shown opioid-sparing effects which have made it a useful agent in many situations, including for pain relief post-operatively, in palliative care settings, and for patients with a tolerance to opioids. It is especially helpful when seeking to avoid the respiratory depression associated with the use of opioids and benzodiazepines.

6. Additionally, ketamine has been used as a short term sedative in emergency departments for procedural sedation and rapid sequence intubation. Procedural sedation is defined as a technique of administering sedatives or dissociative agents with or without analgesics to induce a state that allows the patients to tolerate an unpleasant procedure while maintaining cardiorespiratory function according to a Procedural Sedation Consensus Statement adopted by multiple national nursing and medical associations (“Consensus Statement”).³ The Consensus Statement conditions its approval for RNs to administer procedural sedation, including ketamine, on the following factors: the presence of a physician, ARNP, or other health care professional credentialed and privileged for procedural sedation, additional training and competency documentation for the RN, the presence of at least two licensed professionals at the bedside of the patient (including the RN who is not involved in conducting the procedure), the availability of age appropriate resuscitation equipment and supplies, and written policies,

² Motov, Rockoff, Cohen, et al, *Intravenous Subdissociative-Dose Ketamine Versus Morphine for Analgesia in the Emergency Department: A Randomized Controlled Trial*, 66 *Annals of Emergency Medicine*, 222-229 (September 2015).

³ Procedural Sedation Consensus Statement signed by Air & Surface Transport Nurses Association, the American Academy of Emergency Medicine, the American Association of Critical Care Nurses, the American College of Emergency Physicians, the American Nurses Association, the American Radiological Nurses Association, the American Society for Pain Management Nursing, the Emergency Nurses Association and the National Association of Children’s Hospitals and Related Institutions dated 3/20/08.

procedures, clinical guidelines and protocols for procedural sedation. A copy of the Consensus Statement is attached as Exhibit 2. Mr. Pearson seeks to administer ketamine for purposes of procedural sedation in accordance with the approved policies and procedures of TGH which will contain conditions substantially similar to those described in the Consensus Statement.

7. In the Amended Final Order dated February 28, 2014 in *In Re Petition for Declaratory Statement of Lancia L. Simmons, RN*, this Board approved Ms. Simmons' administration of low dose ketamine in the burn unit of TGH for pain control during time limited procedures such as dressing changes. During 2003, in *In Re Linda C. Noelke, RN*, the Board concluded that it was not within Ms. Noelke's scope of practice to administer ketamine for purposes of rendering a patient insensible to pain in an ambulatory surgery center when no anesthesia provider was present. Here, Mr. Pearson, like Ms. Simmons, seeks to administer low dose ketamine for pain control and for procedural sedation during time limited procedures. He however would administer procedural sedation during procedures performed by the emergency department medical staff, such as reductions of dislocated bones, wound debridement, and intubations under the direction and supervision of a properly credentialed professional.

8. The administration of ketamine by registered nurses has come before Boards of Nursing in other states where licensees have sought regulatory guidance. The New York and Oregon Boards of Nursing have specifically addressed the issue of ketamine administration by RNs and have issued policy statements which state it is within the scope of practice of registered nurses to administer low dose ketamine as long as specific criteria are met. The Texas Board of Nursing has discussed the issue and while it declined to specifically issue a policy statement, it implies in its FAQs that it may be within the scope of practice for registered nurses with appropriate training and in appropriate settings to administer low dose ketamine. The State of

Washington's Nursing Care Quality Assurance Commission in an Advisory Opinion dated 3-13-15 found that low-dose ketamine provides effective analgesia for the treatment of post-operative pain, neuropathic pain, and chronic pain, especially related to patients with opioid tolerance. The Washington board cited studies finding that use of ketamine results in a decrease in opioid requirements in surgical and non-surgical patients, fewer interventions to manage severe pain, a positive impact on knee immobilization after total knee arthroplasty, a decrease in post-operative nausea and vomiting and reduced pain scores for as long as one-year after surgery. They concluded that an RN may administer analgesic, sedating and anesthetic agents for acute and chronic pain using low-dose anesthetics and for emergency care, including rapid sequence intubation under conditions similar to those listed in the Consensus Statement. The Minnesota Board of Nursing in its Statement of Accountability for Administration of Medications Classified as Anesthetics by the Registered Nurse adopted in October 2005 and reaffirmed in December of 2009 found that the administration of medications classified as anesthetics, such as ketamine, for the purpose of procedural sedation and analgesia require particular attention by the RN, including specialized competencies and immediate availability of emergency personnel. The Wyoming State Board of Nursing in its Opinion: IV Administration of Low-Dose Ketamine for Pain in Adults dated October 10, 2013 and revised October 2016 found that it is within the scope of practice for an appropriately trained RN to administer and monitor low-dose ketamine infusion for the purpose of pain control. The Wyoming Opinion outlines that a ketamine infusion for pain relief should be initiated in a nursing care unit with a low patient to nurse ratio, such as the emergency department or palliative care area, by RNs with additional education, skills and demonstrated competence. The Nebraska Board of Nursing in its Advisory Opinion on Low-Dose Ketamine adopted June, 2014 and reaffirmed in April 2016 also approved the appropriately

trained RN to administer and monitor low-dose ketamine infusions for pain control. Arizona, Alaska and Nevada have also issued opinions that RNs may administer low-dose ketamine for analgesia in select situations.

9. The scope of practice of a registered nurse is defined in Florida Statutes §464.003(20) as follows:

“Practice of professional nursing” means the performance of those acts requiring substantial specialized knowledge, judgment, and nursing skill based upon applied principles of psychological, biological, physical, and social sciences which shall include, but not be limited to:

(a) The observation, assessment, nursing diagnosis, planning, intervention, and evaluation of care; health teaching and counseling of the ill, injured, or infirm; and the promotion of wellness, maintenance of health, and prevention of illness of others.

(b) The administration of medications and treatments as prescribed or authorized by a duly licensed practitioner authorized by the laws of this state to prescribe such medications and treatments.

(c) The supervision and teaching of other personnel in the theory and performance of any of the acts described in this subsection.

A professional nurse is responsible and accountable for making decisions that are based upon the individual’s educational preparation and experience in nursing.

10. Mr. Pearson would administer ketamine at sub-anesthetic doses as prescribed or authorized by a duly licensed practitioner authorized to prescribe it. Pearson has been informed that TGH would develop policies and procedures approved by a multidisciplinary team, including representatives from pharmacy, medicine and nursing, whereby ketamine may be administered in the ED under conditions with which Mr. Pearson would comply.

ARGUMENT

11. The Board of Nursing has discretion to determine if a particular set of facts, with respect to a specific licensee, results in actions which are within the scope of practice of the registered nurse.

12. The registered nurse may administer medication pursuant to an order of a duly authorized practitioner. In the facts presented, Mr. Pearson would administer ketamine pursuant to the order of a duly authorized practitioner.

13. The registered nurse is responsible and accountable for making decisions that are based upon the individual's educational preparation and experience in nursing. Mr. Pearson has nearly 10 years of experience working with patients in the emergency department of a large, urban hospital emergency department, including caring for people with trauma and complex medical conditions. He is nationally certified in multiple areas of cardio-pulmonary resuscitation and trauma care and will demonstrate his competence to safely administer ketamine should the Board approve this petition. Under these circumstances, Mr. Pearson's educational preparation and experience in nursing support his ability to administer ketamine in these limited situations.

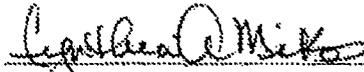
14. Mr. Pearson will administer ketamine in extremely low doses to patients for pain relief or alternatively for purposes of procedural sedation in an area of the hospital where practitioners trained in airway management are readily available to support the patient. When administering ketamine for procedural sedation, the credentialed physician or authorized practitioner will directly supervise the administration of the medication. In both instances, the administration of ketamine will be accomplished pursuant to policies and procedures developed

by the hospital. As previously stated, ketamine is much less likely than other sedating agents to cause respiratory depression. Mr. Pearson will not administer ketamine as an anesthetic.

15. This Board and multiple other boards of nursing across the country have determined that the administration of low-dose ketamine for analgesia or procedural sedation is within the scope of practice of a registered nurse, like Mr. Pearson, under conditions like those outlined herein.

WHEREFORE, Mr. Pearson respectfully requests that the Board issue a declaratory statement opining that his administration of low dose ketamine to patients in the TGH ED for analgesia or procedural sedation is within his scope of practice as a registered nurse.

Respectfully submitted,



JOHNSON POPE BOKOR RUPPEL & BURNS,
LLP.

Cynthia A. Mikos, Esq.

Florida Bar No.: 0984256

401 E. Jackson Street, Suite 3100

Tampa, FL 33602

Tel: (813) 225-2500

Fax: (813) 223-7118

E-Mail: cynthiam@jprfirm.com

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the fully executed foregoing instrument has been furnished via email (lee_ann_gustafson@osag.state.fl.us) and U.S. Mail to LeeAnn Gustafson, Office of the Attorney General, The Capitol, PL-01, Tallahassee, FL 32399 and via facsimile (850-487-9537) and U.S. Mail to the Florida Department of Health, Agency Clerk, 4052 Bald Cypress Way, Bin A02, Tallahassee, Florida 32399 on this 8th day of May, 2017.



Cynthia A. Mikos

RICHARD PEARSON

Appt 208 11769 Trevally Loop, Trinity, Florida 34655 H: 727 203 8263 ♦ C: 7275045528 ♦ floridarich50@yahoo.com

PROFESSIONAL SUMMARY

Motivated registered nurse with 16 years of clinical experience gained in med/surg, telemetry, oncology and intensive care. Currently in my tenth year at Tampa General Hospital in the Emergency Department specializing in trauma.

SKILLS

IV skills	S.O.C.M. preceptor
ICU bedside - ventilators, invasive monitoring, drip titration.	Complex patients
Teaching and mentorship	Trauma care

CERTIFICATIONS

Basic Life Support (BLS) Certification Advanced Cardiac Life Support (ACLS) Pediatric Advanced Life Support (PALS) Certification ATCN - Advanced Trauma Care for Nurses Air Medical Crew Core Curriculum (AMCCC) Emergency Medical Technician (EMT) Neonatal Resuscitation Program (NRP)

WORK HISTORY

Registered nurse, 03/2007 to Current

Tampa General Hospital – Tampa, Florida

- Working in the emergency department and as part of the trauma team.
- Also work as a hospital preceptor for the S.O.C.M. medics that rotate through the department.
- Preceptor for student nurses, new graduate nurses and experienced staff.
- Educator for trauma program teaching in the class room, skills lab and preceptor for trauma program.
- Cross trained to work in trauma, triage and pediatrics.
- Provide lectures and mentors new nurses transitioning to emergency room nursing.

Clinical Instructor, 08/2009 to 08/2014

Hillsborough Community College – Tampa, Florida

- Clinical preceptor for paramedic students in a clinical capacity in the emergency department.

Registered Nurse, 03/2004 to 03/2007

University Community Hospitals

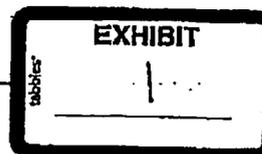
- Tarpon Springs, Florida Registered Nurse working in the intensive care unit becoming full time charge nurse.
- Dealing with the challenges and autonomy of working in a community hospital.
- Worked with new staff transitioning to the Intensive Care Unit.

Staff Nurse, 09/2000 to 02/2004

South Manchester University Hospitals – Manchester, UK

- Staff nurse graduating to senior staff nurse in a twenty eight bedded Medical Assessment Unit where I took charge responsibility.
-

EDUCATION



Diploma: Nursing, 2000
Manchester University -

Bachelor of Arts: History and Politics, 1997
Manchester Metropolitan University - Manchester U.K.
History and Politics

Procedural Sedation Consensus Statement

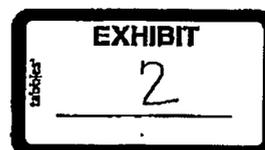
The immediate availability of interventions including procedural sedation is critical to serving the needs of our patients. Preserving life, restoring health, and alleviating suffering have been fundamental to the practice of nursing and medicine for centuries. We are challenged as health care professionals to provide this care in a manner that meets the Institute of Medicine's *Six Quality Aims* of safe, effective, timely, efficient, equitable, and patient centered care. Patients with emergency medical conditions frequently experience significant treatable pain and anxiety. There is ample evidence to support the routine use of procedural sedation by appropriately trained and credentialed emergency nurses and physicians.

PRINCIPLES FOR PROCEDURAL SEDATION IN EMERGENCY CARE SETTINGS

- **Patients** have a right to expect that:
 - their survival and recovery will always be top priorities;
 - their care will be provided in a safe and patient centered manner;
 - their comfort will be assessed and pain managed in an equitable, timely, and efficient manner;
 - their care in emergency care settings will be consistent with current medical knowledge and practice;
 - their emergency caregivers will be appropriately trained and credentialed; and
 - they will be provided sufficient information, when possible, to allow them to participate in therapeutic decisions and provide informed consent.
- The primary goal of procedural sedation for patients in emergency care settings is to manage pain and anxiety while facilitating immediate interventional procedures.
- The response to sedating medications follows a broad continuum that varies from patient to patient. Care must be customized to both the patient and the clinical situation, and caregivers must be able to recognize and manage potential complications.
- Procedural sedation is safe and effective when performed by appropriately trained, credentialed, and supported emergency nurses and physicians.

We, the undersigned organizations, agree:

1. Medications including, but not limited to, etomidate, propofol, ketamine, fentanyl, and midazolam are utilized by healthcare professionals to facilitate management of a continuum of painful conditions. These extend from simple pain management and maintenance sedation to moderate-deep sedation for painful procedures. Because of the myriad ways these medications might be used, it is best to focus on the goal of the intervention rather than the medication itself.
2. Procedural sedation is defined as a technique of administering sedatives or dissociative agents with or without analgesics to induce a state that allows the patients to tolerate an unpleasant procedure while maintaining cardiorespiratory function. (American College of Emergency Physicians [ACEP] Clinical Policy for Procedural Sedation and Analgesia in the Emergency Department, *Annals of Emergency Medicine* 2005).



3. Procedural sedation medications may be administered by a registered nurse (RN) ***in the presence of a physician, advanced practice registered nurse, or other health care professional credentialed and privileged for procedural sedation.*** RNs administering such medications must possess the training and competencies described in item 4 below.
4. Administration of medications for procedural sedation by a RN is a specialized skill that requires specific knowledge and competencies including, but not limited to:
 - a. An understanding of the principles of oxygen delivery, transport and uptake, and respiratory physiology.
 - b. Demonstrated competency in airway management appropriate to the age of the patient including monitoring patient oxygenation and ventilation (e.g. skin color, respiratory rate, pulse oximetry, secondary confirmation of endotracheal tube placement), initiation of resuscitative measures, and utilization of oxygen delivery devices (e.g. nasal cannula, mask, basic airway techniques, oral/nasal airways, bag valve mask).
 - c. Demonstrated knowledge of anatomy, physiology, pharmacology, cardiac dysrhythmia recognition, and complications related to procedural sedation and analgesia.
 - d. Ability to initiate cardiac resuscitation procedures (e.g. CPR, cardioversion, defibrillation)
 - e. Identification and differentiation of the various levels of sedation.
 - f. Demonstrated competence in pre-procedural, procedural, and post-procedural nursing care from the initial patient evaluation to patient discharge (e.g. patient assessment and monitoring, IV fluid administration, medication administration).
 - g. The ability to recognize complications and intervene appropriately.
 - h. Knowledge of the legal/liability ramifications associated with an independently licensed RN administering procedural sedation.
5. Procedural sedation requires the presence of two licensed professionals at the bedside. One licensed professional must be a RN whose competency in procedural sedation has been verified. This RN may administer the medication or monitor the patient and must not be involved in performing the procedure. Health care professionals monitoring the patient undergoing procedural sedation must not have other responsibilities that would compromise their ability to adequately monitor the patient before, during, and after the procedure.
6. Resuscitation equipment and supplies must be age appropriate and readily available for the patient undergoing any procedure. At a minimum, equipment should include oxygen and oxygen delivery devices, suction devices and suction source, cardiac and pulse oximetry monitoring devices, defibrillator, oral/nasal airways, intubation equipment, alternative airways, bag-valve mask device, equipment to allow secondary confirmation of endotracheal tube placement, reversal agents and ACLS medications. (ACEP Guidelines for Equipment and Supplies for Use in Pediatric Patients in the ED, 2000; Alaska Board of Nursing Advisory Opinion on Nurse Administration of Sedating and Anesthetic Agents, 2007)
7. Written policies, procedures, clinical guidelines, and protocols for procedural sedation should be in place in the institution. These policies should be age appropriate and should include, but not be limited to:
 - Equipment and supplies
 - Mandatory education and competency validation
 - Risk management
 - Quality monitoring to include patient outcomes
 - Required documentation

Signed by:

Air & Surface Transport Nurses Association
American Academy of Emergency Medicine
American Association of Critical Care Nurses
American College of Emergency Physicians
American Nurses Association
American Radiological Nurses Association
American Society for Pain Management Nursing
Emergency Nurses Association
National Association of Children's Hospitals and Related Institutions

3/20/08

ADDENDUM

Procedural Sedation Consensus Statement

Definitions

Advanced Practice Registered Nurse (APRN) is an umbrella term given to a RN who has met advanced educational and clinical practice requirements beyond the two to four years of basic nursing education required of all RNs. APRNs include nurse practitioners, clinical nurse specialists, nurse anesthetists, and nurse midwives. Nurse practice acts vary widely among states. They define the scope of practice for APRNs within that particular state. (American Nurses Association [ANA] Nursing Facts, www.nursingworld.org)

Certified Registered Nurse Anesthetists are master's prepared advanced practice nurses who provide anesthetics to patients in every practice setting, and for every type of surgery or procedure. (<http://www.aana.com>)

Credentialing is a term applied to processes used to designate that an individual, program, institution or product have met established standards set by an agent (governmental or non-governmental) recognized as qualified to carry out this task. The standards may be minimal and mandatory or above the minimum and voluntary. Licensure, registration, accreditation, approval, certification, recognition or endorsement may be used to describe different credentialing processes but this terminology is not applied consistently across different settings and countries. Credentials are marks or "stamps" of quality and achievement communicating to employers, payers, and consumers what to expect from a "credentialed" nurse, specialist, course or program of study, institution of higher education, hospital or health service, or healthcare product, technology, or device. Credentials may be periodically renewed as a means of assuring continued quality and they may be withdrawn when standards of competence or behavior are no longer met. (Styles and Affara, 1997, International Council of Nurses Fact Sheet, http://www.icn.ch/matters_credentiaing_print.htm)

Deep sedation/Analgesia is a drug-induced depression of consciousness during which patients cannot be easily aroused but respond purposefully following repeated or painful stimulation. The ability to independently maintain ventilatory function may be impaired. Patients may require assistance in maintaining a patent airway, and spontaneous ventilation may be inadequate. Cardiovascular function is usually maintained. (American Society of Anesthesiologists [ASA] policy statement on Continuum of Depth of Sedation Definition of General Anesthesia and Levels of Sedation/Analgesia, Approved by ASA House of Delegates on October 13, 1999, and amended on October 27, 2004)

Dissociative agents/dissociative sedation is described as a "trance-like cataleptic state characterized by profound analgesia and amnesia, with retention of protective airway reflexes, spontaneous respirations, and cardiopulmonary stability. (American College of Emergency Physicians [ACEP] Clinical Policy for Procedural Sedation and Analgesia in the Emergency Department, *Annals of Emergency Medicine* 2005)

General anesthesia is a drug-induced loss of consciousness during which patients are not arousable, even by painful stimulation. The ability to independently maintain ventilatory function is often impaired. Patients often require assistance in maintaining a patent airway, and positive pressure ventilation may be required because of depressed spontaneous ventilation or drug-induced depression of neuromuscular function. Cardiovascular function may be impaired. (ASA policy statement on Continuum of Depth of Sedation Definition of General Anesthesia and Levels of Sedation/Analgesia, Approved by ASA House of Delegates on October 13, 1999, and amended on October 27, 2004)

Minimal sedation (Anxiolysis) is a drug-induced state during which patients respond normally to verbal commands. Although cognitive function and coordination may be impaired, ventilatory and cardiovascular functions are unaffected. (ASA policy statement on Continuum of Depth of Sedation Definition of General Anesthesia and Levels of Sedation/Analgesia, Approved by ASA House of Delegates on October 13, 1999, and amended on October 27, 2004)

Moderate sedation/Analgesia (Conscious Sedation) is a drug-induced depression of consciousness during which patients respond purposefully to verbal commands, either alone or accompanied by light tactile stimulation. No interventions are required to maintain a patent airway, and spontaneous ventilation is adequate. Cardiovascular function is usually maintained. (ASA policy statement on Continuum of Depth of Sedation Definition of General Anesthesia and Levels of Sedation/Analgesia, Approved by ASA House of Delegates on October 13, 1999, and amended on October 27, 2004)

Presence as used in the statement "*In the presence of* a physician, advanced practice registered nurse, or other health care professional describes the location of the health care professional" as being physically present at the patient's bedside or within the confines of the patient's immediate treatment space.

Privilege is an exceptional or extraordinary right, immunity or exemption belonging to a person in virtue of their office or status. **Clinical privileges** include, as appropriate to the organization, privileges, membership on the medical staff and other circumstances pertaining to the furnishing of medical care under which a physician, dentist or other licensed health care practitioner is permitted to furnish such care by a health plan or by a federal or state agency that either administers or provides payment for the delivery of health care services. ([http://www.qlc.hhs.gov/authorities/docs/datacollection .pdf](http://www.qlc.hhs.gov/authorities/docs/datacollection.pdf))

Procedural sedation is defined as the technique of administering sedatives or dissociative agents with or without analgesics to induce a state that allows the patient to tolerate unpleasant procedures while maintaining cardiorespiratory function. (ACEP clinical policy for procedural sedation and analgesia in the emergency department -- *Annals of Emergency Medicine* 2005)

Six Quality Aims as defined by the Institute of Medicine are:

- **Safe:** Avoiding injuries to patients from the care that is intended to help them.
- **Effective:** Providing services based on scientific knowledge to all who could benefit and refraining from providing services to those not likely to benefit thereby avoiding under use and overuse, respectively.
- **Patient-centered:** Providing care that is respectful of and responsive to individual patients' preferences, needs, and values and ensuring that patient values guide all clinical decisions.
- **Timely:** Reducing waits and sometimes harmful delays for both those who receive and those who give care.
- **Efficient:** Avoiding waste, including waste of equipment, supplies, ideas, and energy.
- **Equitable:** Providing care that does not vary in quality because of personal characteristics such as gender, ethnicity, geographic location and socioeconomic status.

(*Crossing the Quality Chasm, IOM Report.* National Academies Press, 2001)

BIBLIOGRAPHY

CLINICAL and ORGANIZATIONAL POSITION STATEMENTS

ACEP Policy Statements. Procedural Sedation In the Emergency Department (2004) and Delivery of Agents for Procedural Sedation and Analgesia by Emergency Nurses (2005).

ACEP Clinical Policy: Procedural Sedation and Analgesia in the Emergency Department. *Ann Emerg Med.* 2005 Feb; 45(2):177-196.

ACEP Clinical Policy: Evidence-Based Approach to Pharmacologic Agents Used in Pediatric Sedation and Analgesia in the Emergency Department. *Ann Emerg Med.* 2004 Oct; 44(4):342-377.

ACEP Guidelines for Equipment and Supplies for Use in Pediatric Patients in the ED (2000). Available at <http://www3.acep.org/practres.aspx?id=29134>

Alaska Board of Nursing Advisory Opinion Nurse Administration of Sedating and Anesthetic Agents (2007). Available at <http://www.dced.state.ak.us/occc/pub/nur1809.pdf>

American Nurses Association (ANA). (1991). Endorsement of position statement on the role of the registered nurse in the management of patients receiving IV conscious sedation for short-term therapeutic, diagnostic, or surgical procedures. Available at www.ana.org/readroom/position/olnt/ilsedate.htm

American Society of Anesthesiologists (ASA). (2004). Continuum of depth of sedation: Definition of general anesthesia and levels of sedation/analgesia. Available at <http://www.asahq.org/publicationsAndServices/standards/20.pdf>

ENA Position Statement: Procedural Sedation and Analgesia in the Emergency Department. (2005)

ENA and ACEP Joint Position Statement: Delivery of Agents for Procedural Sedation and Analgesia by Emergency Nurses. (2005)

Institute of Medicine. (2001). *Crossing the Quality Chasm, IOM Report.* National Academies Press.

International Council of Nurses (1997). Styles and Affara, Credentialing Fact Sheet. Available at http://www.icn.ch/matters_credentiaing_print.htm

Joint Commission on Accreditation of Healthcare Organizations (JCAHO). (2005). Comprehensive accreditation manual for hospitals: The official handbook. Oakbrook Terrace, IL.

CLINICAL PRACTICE AND RESEARCH ARTICLES

Anderson JL, Junkins E, Pribble C, Guenther E. Capnography and Depth of Sedation During Propofol Sedation in Children. *Ann Emerg Med.* 2007 Jan; 49(1): 9-13.

- Bassett KE, Anderson JL, Pribble CG, Guenther E. Propofol for Procedural Sedation in Children in the Emergency Department. *Ann Emerg Med.* 2003 Dec; 42(6): 773-782.
- Burton JH, Bock AJ, Strout TD, Marcolini EG. Etomidate And Midazolam for Reduction of Anterior Shoulder Dislocation: A Randomized, Controlled Trial. *Ann Emerg Med.* 2002 Nov; 40(5): 496-504.
- Burton JH, Miner JR, Shipley ER, Strout TD, Becker C, Thode HC. Propofol for Emergency Department Procedural Sedation and Analgesia: A Tale of Three Centers. *Acad Emerg Med.* 2006 Jan; 13(1):24-30.
- Campbell SG et al. Procedural Sedation and Analgesia in a Canadian Adult Tertiary Care Emergency Department: A Case Series. *Can J Emerg Med.* 2006 Mar; 8(2):85-93.
- Chudnofsky CR et al. A Combination of Midazolam and Ketamine for Procedural Sedation and Analgesia in Adult Emergency Department Patients. *Acad Emerg Med.* 2000 Mar; 7(3): 228-235.
- Dickinson R, Singer AJ, Carrion W. Etomidate for Pediatric Sedation Prior to Fracture Reduction. *Acad Emerg Med.* 2001 Jan; 8(1): 74-77.
- Diliddo L, D'Angelo A, Nguyen B, Bailey B, Amre D, Standu C. Etomidate Versus Midazolam Procedural Sedation in Pediatric Outpatients: A Randomized Clinical Trial. *Ann Emerg Med.* 2006 Oct; 48(4): 433-440.
- Falk J, Zed PJ. Etomidate for Procedural Sedation in the Emergency Department. *Ann Pharm.* 2004 Jul/Aug; 38: 1272-1277.
- Frank LR, Strote J, Hauff SR, Bigelow SK, Fay K. Propofol by Infusion Protocol for ED Procedural Sedation. *Am J Emerg Med.* 2006; 24: 599-602.
- Godambe SA, Elliot V, Matheny D, Pershad J. Comparison of Propofol/Fentanyl Versus Ketamine/Midazolam for Brief Orthopedic Procedural Sedation in a Pediatric Emergency Department. *Pediatrics.* 2003 Jul; 112(1): 116-123.
- Green SM. Research Advances in Procedural Sedation and Analgesia. *Ann Emerg Med.* 2007 Jan; 49(1):3 1-36.
- Green SM, Krauss B. Clinical Practice Guideline for Emergency Department Ketamine Dissociative Sedation in Children. *Ann Emerg Med.* 2004 Nov; 44(5):460-47 1.
- Green SM, Hummel CB, Wittlake WA, Rothrock SG, Hopkins GA, Garrett W. What is the Optimal Dose of Intramuscular Ketamine for Pediatric Sedation? *Acad Emerg Med.* 1999 Jan; 6(1): 2 1-26.
- Guenther E, Pribble CG, Junkins EP, Kadish H, Bassett KE, Nelson DS. Propofol Sedation by Emergency Physicians for Elective Pediatric Outpatient Procedures. *Ann Emerg Med.* 2003 Dec; 42(6): 783-75 1.
- Hunt GS, Spencer MT, Hays DP. Etomidate and Midazolam for Procedural Sedation: Prospective, Randomized Trial. *Am J Emerg Med.* 2005; 23: 299-303.

Miner JR, Biros M, Krieg S, Johnson C, Heegaard W, Plummer D. Randomized Clinical Trial of Propofol versus Methohexital for Procedural Sedation during Fracture and Dislocation Reduction in the Emergency Department. *Acad Emerg Med.* 2003 Sept; 10(9): 931-937.

Miner JR, Danahy M, Moch A, Biros M. Randomized Clinical Trials of Etomidate Versus Propofol for Procedural Sedation in the Emergency Department. *Ann Emerg Med.* 2007 Jan; 49(1): 15-22.

Miner JR, Martel ML, Meyer M, Reardon R, Biros M. Procedural Sedation of Critically Ill Patients in the Emergency Department. *Acad Emerg Med.* 2005 Feb; 12(2): 124-128.

Parlak M, Parlak I, Erdur B, Ergin A, Saglioglu. Age Effect on Efficacy and Side Effects of Two Sedation and Analgesia Protocols on Patients Going through Cardioversion: A Randomized Clinical Trial. *Acad Emerg Med.* 2006 May; 13(5): 493-499.

Roback MG, Wathen JE, MaKenzie T, Bajaj L. A Randomized, Controlled Trial of IV Versus IM Ketamine for Sedation of Pediatric Patients Receiving Emergency Department Orthopedic Procedures. *Ann Emerg Med.* 2006 Nov; 48(5): 605-612.

Roback MG, Wathen JE, Bajaj L, Bothner JP. Adverse Events Associated with Procedural Sedation and Analgesia in a Pediatric Emergency Department: A Comparison of Common Parenteral Drugs. *Acad Emerg Med.* 2005 Jun; 12(6): 508-513.

Ruth WJ, Burton JH, Bock AJ. Intravenous Etomidate for Procedural Sedation in Emergency Department Patients. *Acad Emerg Med.* 2001 Jan; 8(1): 13-18.

Sacchetti A, Senula G, Strickland J, Dublin R. Procedural Sedation in the Community Emergency Department: Initial Results of the ProSCED Registry. *Acad Emerg Med.* 2007 Jan; 14(1): 4-14.

Taylor D, O'Brien D, Ritchie P, Pasco J, Cameron P. Propofol Versus Midazolam/Fentanyl for Reduction of Anterior Shoulder Dislocation. *Acad Emerg Med.* 2004 Jan; 12(1): 13-19.

Vinson, Bradbury. Etomidate for Procedural Sedation in Emergency Medicine. *Ann Emerg Med.* 2002 Jun; 39(6): 592-598.

Wilman EV, Andolfatto G. A Prospective Evaluation of "Ketofol" (Ketamine/Propofol Combination) for Procedural Sedation and Analgesia in the Emergency Department. *Ann Emerg Med.* 2007 Jan; 49(1): 23-30.

Zink BJ, Darfler K, Salluzzo RF, Reilly KM. The Efficacy and Safety of Methohexital in the Emergency Department. *Ann Emerg Med.* 1991 Dec; 20(12): 1293-1298.

2/11/08