Agency Nurse Orientation

Pre-Op & PACU

Fundamental Guide

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Introduction

This orientation guide is has been created to help orient you to UCM's Pre-Op & PACU prior to your arrival to our unit. However, it does not include all protocols and policies. All agency nurses are expected to comply with UCM's standards of care, policies and procedures.

For more information, refer to our Intranet's Policy and Procedures

Resources

- This booklet reviews fundamental information regarding our policies/procedures for pre-op and pacu. A general, in-person nursing orientation will be provided. Also, refer to our Intranet when on unit for any additional policies and procedures. Note, access is only allowable on-site of our secure workstation computers.

- Our Nurse Managers and Clinical Educator are your primary clinical and administrative resources on the unit. Please do not hesitate to ask questions when needed.

Perianesthesia Scope & Standards for Phases of Care

Our guidelines and polices are supported by the American Society of Perianesthesia Nurses (ASPAN). This professional organization represents the specialty of perianesthesia nursing and is responsible for describing and creating the scope of perianesthesia nursing. The scope of perianesthesia nursing practice entails the cultural, social complexities, developmental and age-specific assessment, diagnosis, intervention, and evaluation of individuals across the perianesthesia continuum and phases of care. A patient may have sedation/analgesia and/or anesthesia for a procedure or surgery. Below are ASPAN's phases of care and staffing (American Society of PeriAnesthesia Nurses, 2023, p. 48-53).

This scope of perianesthesia nursing practice includes, but is not limited to:

Preanesthesia Phase

- Preadmission
- Day of Surgery/Procedure

Postanesthesia Phase

- Phase I
- Phase II
- Phase III (Extended Care)

PREANESTHESIA PHASE

Preadmission

Perianesthesia nursing roles during this phase focus on assessing the patient and developing a plan of care designed to meet the preanesthesia physical, psychological, educational, sociocultural and spiritual needs of the patient/ family/significant other. The nursing roles also focus on preparing the patient/ family/significant other for his or her experience throughout the perianesthesia continuum. Interviewing and assessment techniques are used to identify potential or actual problems that may occur.

Staffing for preadmission units (e.g., preadmission testing, preanesthesia testing, preoperative assessment clinic, preanesthesia assessment unit, and preoperative teaching unit) is dependent on patient volume, patient health status and required support for preanesthesia interventions.

Day of Surgery/Procedure

Perianesthesia nursing roles during this phase focus on validation of existing information and completion of preparation of the patient. The perianesthesia registered nurse continues to assess the patient and develops a plan of care designed to meet the physical, psychological, educational, sociocultural and spiritual needs of the patient/family/significant other.

Staffing for Day of Surgery/Procedure

Due to the varied complexities of these units, recommended staffing ratios must be determined by individual institutions based on but not limited to the following criteria:

- Patient safety
- Number and acuity (patient characteristics including age, cultural diversity and requirements of care based on preoperative interventions and type of procedure) of patients
- Complexity (management of patient acuity) and required nursing interventions –
  Examples include: average time in patient preparation (e.g., education, testing, history completion, patient education, preoperative testing, intravenous access, completion of required paperwork/electronic charting, blood product administration)
  – Medication reconciliation/administration (antibiotics, sedation, anxiolytics, etc.)
  – Moderate sedation and subsequent monitoring for invasive procedures –
  Procedures (e.g., insertion of invasive lines, regional blocks)
  – Need for additional monitoring
- Additional processes of the specific unit (e.g., blending of levels of care)

POSTANESTHESIA PHASE

Phase I Care

The perianesthesia registered nursing roles during this phase focus on providing postanesthesia nursing care to the patient in the immediate postanesthesia period and transitioning them to Phase II level of care, the inpatient setting, or to an intensive care setting for continued care.

Two registered nurses, one of whom is Perianesthesia Registered Nurse Competent in Phase I Postanesthesia Nursing, are in the same room/unit where the patient is receiving Phase I Care. The Phase I Registered Nurse must have immediate access and direct line of eyesight when providing patient care. The second registered nurse should be able to directly hear a call for assistance and be immediately available to assist.

- Staffing should reflect patient acuity. In general, a 1:2 nurse-patient ratio in Phase I allows for appropriate assessment, planning, implementing and evaluation for discharge as well as increased efficiency and flow of patients through the Phase I area
- The need for additional Phase I perianesthesia registered nurses and support team members is dependent on the patient acuity, complexity of patient care, patient census, and the physical facility.
- The new model allows for flexibility in assignments as patient acuity changes
- New admissions should be assigned so that the nurse can devote his/her attention to the care of that admission until critical elements are met
- Staffing patterns should be adjusted as needed based on changing acuity and nursing requirements and as discharge criteria are met
- For the patient with isolation requirements, plans must be made to provide a safe

environment with recommended staffing ratios maintained based on the acuity of the patient and type of isolation precautions (e.g., negative pressure room)

- The perianesthesia registered nurse will maintain appropriate staffing recommendations when planning for transport of patients in or out of the unit

CLASS 1:2 ONE NURSE TO TWO PATIENTS

Examples may include, but are not limited to the following:

a. Two conscious patients, stable and free of complications, but not yet meeting discharge criteria

b. Two conscious patients, stable, eight years of age and under, with family or competent support staff present, but not meeting discharge criteria

c. One unconscious patient, hemodynamically stable, with a stable airway, over the age of eight years and one conscious patient, stable and free of complications

CLASS 1:1 ONE NURSE TO ONE PATIENT

Examples may include, but are not limited to the following:

a. At the time of admission, until the critical elements are met which include:

Patient has a stable/secure airway
Patient is hemodynamically stable
Patient is free from agitation, restlessness, and combative behaviors
Initial assessment is complete
Report has been received from the anesthesia care provider
The nurse has accepted the care of the patient

b. Airway and/or hemodynamic instability

Examples of an unstable airway include, but are not limited to, the following:

– Requiring active interventions to maintain patency such as manual jaw lift or chin lift or an oral airway
– Evidence of obstruction, active or probable, such as gasping, choking, crowing, wheezing, etc.
– Symptoms of respiratory distress including dyspnea, tachypnea, panic, agitation, cyanosis, etc.

c. Any unconscious patient eight years of age and under

– A second nurse must be available to assist as necessary

d. Patient with isolation precautions until there is sufficient time for donning and removing personal protective equipment (PPE) and washing hands between patients. Location dependent upon facility guidelines.

CLASS 2:1 TWO NURSES TO ONE PATIENT

Example may include, but is not limited to the following:

a. One critically ill, unstable patient

Phase II Care

Perianesthesia nursing roles during this phase focus on preparing the patient/ family for discharge from the facility.

Two personnel, one of whom is perianesthesia registered nurse competent in Phase II Postanesthesia Nursing, are in the same room/unit where the patient is receiving phase ii level of care. The second person should be able to directly hear a call for assistance and be immediately available to assist. The need for additional registered nurses and support staff is dependent on the patient acuity, age, complexity of patient care, family support, patient census, and the physical facility.

Generally, a 1:3 nurse patient ratio allows for appropriate assessment, planning, implementing care and evaluation for discharge as well as increasing efficiency and flow of patients through the Phase II.

- The need for additional Phase II perianesthesia registered nurses and support team members is dependent on the patient acuity, complexity of patient care, patient census, and the physical facility
- This model allow for flexibility in assignments, as patient acuity is subject to change
- New admissions should be assigned so that the Phase II perianesthesia nurse can devote his/her attention as needed to appropriate discharge assessment and teaching.
- Staffing patterns should be adjusted, as needed based on changing acuity and nursing requirements and as discharge criteria are met
- For the patient with isolation (negative or positive) requirements, plan must be made to provide a safe environment with recommended staffing ratios maintained based on the acuity of the patient and type of isolation precautions
- The perianesthesia registered nurse will maintain appropriate staffing recommendations when planning for transport of patients in or out of the unit.

CLASS 1:3 ONE NURSE TO THREE PATIENTS

Examples include, but are not limited to:

a. Over eight years of age

b. Eight years of age and under with family present

CLASS 1:2 ONE NURSE TO TWO PATIENTS

Examples include, but are not limited to:

a. Eight years of age and under without family or support staff present

b. Initial admission to Phase II

CLASS 1:1 ONE NURSE TO ONE PATIENT

Example includes, but is not limited to:

a. Unstable patient of any age requiring transfer to a higher level of care

Extended Care

The nursing roles in this phase focus on providing the ongoing care for those patients requiring extended observation/intervention after transfer/discharge from Phase I and Phase II care.

Two competent personnel, one of whom is a registered nurse possessing competence appropriate to the patient population, are in the same room/unit where the patient is receiving extended care level of care. The need for additional registered nurses and support staff is dependent on the patient acuity, complexity of patient care, patient census and the physical facility.

CLASS 1:3/5 ONE NURSE TO THREE-FIVE PATIENTS

Examples of patients that may be cared for in this phase include, but are not limited to:

a. Patients awaiting transportation home

b. Patients with no caregiver

c. Patients who have had procedures requiring extended observation/ interventions (e.g., potential risk for bleeding, pain management, PONV)

d. Patients being held for an inpatient bed

Blended Postanesthesia Care

Perianesthesia units may provide Phase I, Phase II and/or Extended Care within the same environment. This may require the blending of patients and staffing patterns.

In the blended environment, the perianesthesia registered nurse uses clinical judgment and critical thinking based on patient acuity, nursing observations and required interventions to determine staffing needs.

A copy of ASPAN's Perianesthesia Nursing Standards, Practice Recommendations and Interpretive Statement is located on the unit for review

Overview of Pre-Op & PACU Unit

CCD6 - Adult inpatients and Same Day Admission

- **Exceptions**: Procedures for pediatric patients or outpatients who require instruments/equipment/nursing that are site-specific (e.g., Robotic, Arthroscopy, Body tomography, Intraoperative CT, Microelectrode recording, Laser); Multiple team procedures

DCAM : Adult outpatients

- **Exceptions**: Procedures for children and inpatients/same day admit patients (SDA) that require instruments/equipment/nursing that are site- specific (e.g., arthroscopy, cataract surgery).

Comer: Pediatric inpatient, outpatient & Same Day Admission

Preadmission

Patient that requires anesthesia or sedation are required to have an evaluation done prior to procedure or surgery. This includes a review of health history, physical assessment, testing, patient preferences (such as gender pronouns, culture, beliefs, advance directive, etc.), psychosocial, discharge planning, and patient education (such as specific pre-op instructions). The purpose of thoroughly assessing these components is to improve efficiency of the patient's surgery/procedure.

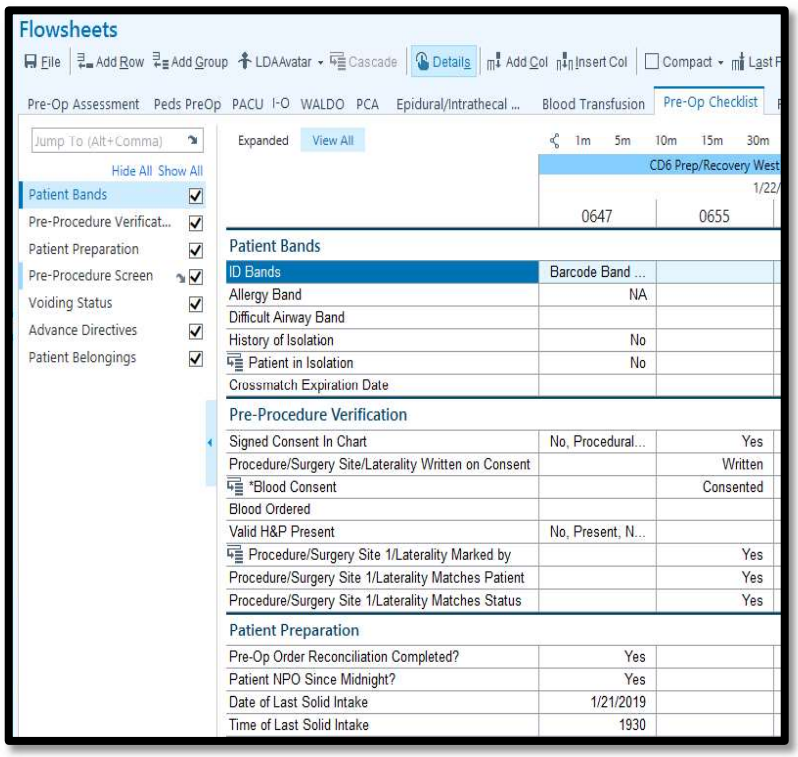
Pre-Op

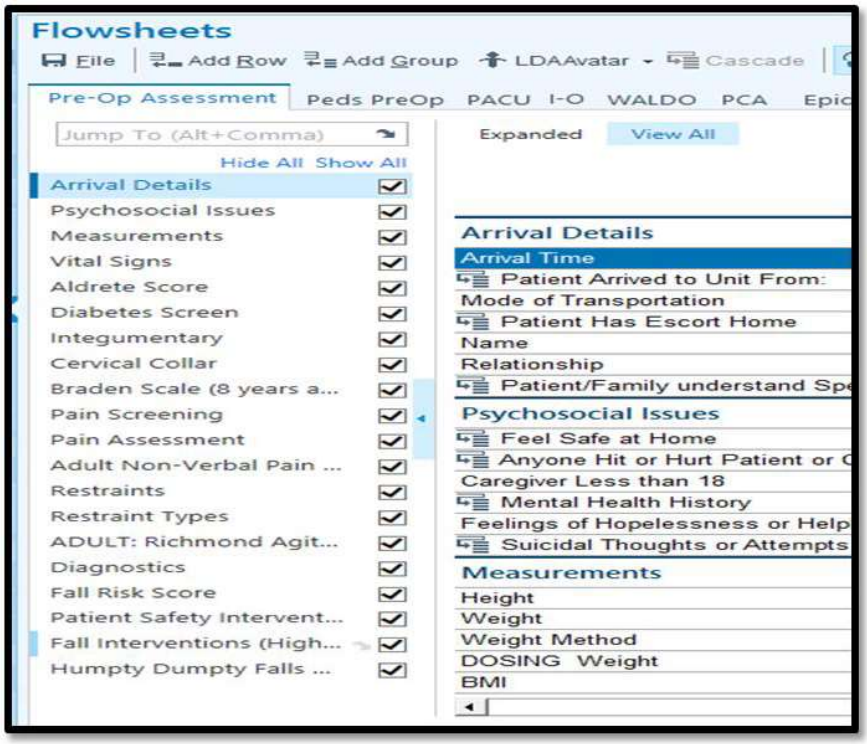
A patient may be transferred to pre-op from an in-patient area or may be same day admission. However, both will require a complete nursing assessment and management, which includes the following:

- Verification of patient identity
- Review of preadmission evaluation and testing
- Pertinent preoperative assessment (npo status, review of medication use, allergies, vital signs, pain and comfort assessment, ekg, glucose and pregnancy testing, verification of surgical prep, etc.)
- Patient safety and psychosocial needs
- Anesthesia history, including any complication with patient and immediate family members
- May include medication intervention (antibiotics, sedation, etc.) and procedures at bedside
- Availability of safe transport home and accompanying responsible person
- Review of plan of care for pre and post care, including discharge planning and post-op instructions

- Documentation and communication of important information per UCM's policy and protocol

Sample of UCM's Epic Documentation for Pre-op





OR Readiness

SANDPO is an acronym used at our facility to ensure the patient is ready for surgery. All involved team members have completed their evaluation, consents are sign, site is marked, documentation noted, and the operating room is ready for the patient's arrival. Our EPIC Educator will provide specific information regarding this process.

Levels of Sedation

Minimal Sedation: the patient is able to respond normally to speech & touch, and able to maintain their airway, breathing and circulation without any additional interventions such as vasopressors or mechanical circulatory devices.

Moderate Sedation: the patient is able to respond purposefully to verbal commands and touch, and able to maintain their airway, breathing and circulation without any additional interventions such as vasopressors or mechanical circulatory devices.

Deep Sedation: The patient is difficult to rouse, responds only after repeated and often painful stimuli, may need assistance maintaining their airway open and may require oxygen, circulation is maintained without any additional interventions such as vasopressors or mechanical circulatory devices.

General Anesthesia: the patient does not respond to any stimuli, they need assistance with maintaining their airway, may require ventilatory and circulatory support such as mechanical ventilation, vasopressors or mechanical circulatory support.

Stages of Anesthesia

Stage I: Begins with initial anesthesia and ends with the loss of consciousness. Patient is able to respond normally to speech & touch, and able to maintain their airway, breathing and circulation without any additional interventions such as vasopressors or mechanical circulatory devices.

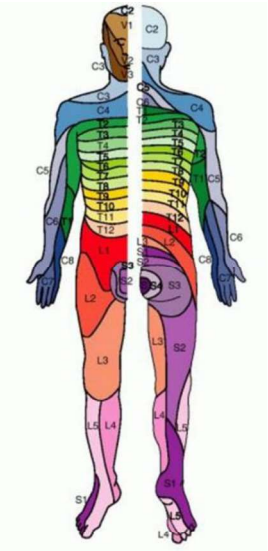
Stage II: Stage of delirium; Starts with the loss of consciousness and end with the onset of a regular breathing pattern. Cardiac arrest r/t failed airway management, vomiting, and laryngospasm are more likely to occur during this stage.

Stage III: Surgical Anesthesia; Lasts from the start of a regular breathing pattern to the cessation of spontaneous respirations; Patient does not respond to painful stimuli; Surgery may begin; 4 planes that begin with the loss of eyelid reflexes and end with intercostal muscle paralysis

Stage IV: Overdose Stage; characterized by medullary depression; It can be fatal unless the patient receives complete support of the respiratory and circulatory systems.

Neuraxial anesthesia (NA): commonly used for lower abdominal and lower extremity surgery. The sensory level required for a specific surgery is determined by the dermatome level of the skin incision and by the level required for surgical manipulation.

- Physiologic effect of neuraxial anesthesia (NA) are the result of blockade of sympathetic, motor and sensory nerves, the compensatory reflexes, and unopposed parasympathetic tone. The extent of various physiologic effects dependent on the extent and speed of onset of the block, and patient factors.
    - Cardiovascular — Hypotension (47% occurrence) and bradycardia are the most common and important physiologic effects of neuraxial anesthesia, and are the result of sympathetic blockade and associated reflexes
    - Pulmonary — High NA can cause paralysis of accessory muscles of respiration, and can theoretically lead to bronchospasm.
    - CNS— decrease the dose of both intravenous and inhalational anesthetics needed to reach a defined level of sedation.
    - Thermoregulation — As with general anesthesia, hypothermia can occur during NA; more likely with higher levels of block (use active warming methods)
    - Renal — Direct effects of NA on renal function are of little clinical significance, as long as blood pressure and intravascular volume are maintained



Patients who have spinal blocks for anesthesia or have surgery to set up epidural analgesia for pain management, must be assessed postoperatively for level of spinal analgesia post-surgery, where the expectation is the dermatome level will recede over time. Epidural analgesia levels must be assessed for the expectation of sufficient coverage of dermatome levels to control postoperative pain. Note block may wear off quickly, start oral pain medication as ordered.

Pre-op and PACU/Post-op Orders

Pre-op orders to be entered prior to patient arrival in the Pre-op

PACU orders entered upon arrival to the PACU

- PACU orders entered by DACC
- Surgery/procedure specific orders for the PACU phase of care to be entered by surgical/procedural service

OR to PACU Process

- Report called to Charge RN
  - Charge RN assigns patient to bay and provides report sheet to assigned PACU RN
- PACU RN prepares for patient's arrival
- Upon patient admission to PACU, additional report given at the bedside from anesthesia and surgical provider
- Patient connected to Phillips Monitor and initial assessment performed

Handoff

According to ASPAN's recommendation, the handoff report should include, but not limited to the following information (American Society of PeriAnesthesia Nurses, 2023, p. 80):

- Patient name, age, allergies
- Pertinent medical history
- Name of proceduralist/surgeon
- Type of anesthesia/sedation and reversal and last dose; any other medication given
- Any unusually events or complications
- Estimated blood loss and replacement
- Clinical history and assessment, not limited to:
  - Level of consciousness
  - Vital signs
  - Surgery site, drainage tubes, implanted devices
  - Amount of intravenous fluids infused and remaining amount
  - Medication given and effect
  - Pain management plan and previous history (including opioid use and tolerance)
  - Testing and treatment
  - Other assessment findings (neuro status, etc.)

- Review of postoperative orders
- Plan of care
- Sensory devices
- Social Support

PACU Phase I *(initial and ongoing assessment)*

Phase I requires continuous, close observation and high evaluation of airway and sufficient ventilation management, and assessment until stable. This includes the initial and ongoing assessment and documentation components, which includes, but not limited to the following:

- Information received from handoff report from anesthesia and surgery team members
- Airway assessment
- Vital Signs, Pain, and postanesthesia score system (for discharge assessment)
    - Vital Signs (HR, BP, RR, O2 Saturation)
        - Q15 x 1 hour, Q30 x 1 hour, and hourly until discharged
        - Depending on patient condition, vital signs may be required every 5 minutes
    - Pain
        - Assessed on admission, with vital signs, after interventions and at discharge
        - Start PCA if ordered, requires 2 RNs verification check
        - Document POSS Scale with vital signs for PCA and Epidural
    - Temperature
        - On admission
        - Blankets and warming measures are used on patients with temps less than 36 degrees Celsius
        - Temperature should be monitored every 30 minutes on patients requiring active warming or cooling measures
- Neurological assessment (including level of sedation, presence of emergence delirium, pupillary response)
- Neurovascular assessment
- Sensory and motor function assessment
- Assessment based on the surgery or procedure
    - Generalized assessment completed on admission and at discharge, with more frequent focused assessments as warranted by the patient's condition or as ordered
- Nausea
- Swallow evaluation
- Comfort; Position of patient during procedure or surgery

- Skin, wound, and surgical incision/dressing assessment
- Safety needs
- Surgical Drains
- Intake and Output
    - IV Fluids and other intakes recorded every hour
    - Urine output recorded every hour for patients with indwelling urinary catheters and as ordered for other patients
    - Other outputs (drains, etc.) recorded on admission, as ordered, and as needed based on assessment
- Vascular access
- Medication management
- Plan of care, nursing interventions, and outcomes
- Psychosocial needs (include family)
- Collaboration of interprofessional team

Potential complications in Phase I: delirium, airway compromise, cardiac depressions, pain, nausea, vomiting, and irregular body temperature

Goal of Phase I: stabilize patient and transition to phase II, inpatient, or ICU for continued care

PACU Phase II *(initial and ongoing assessment)*

Phase II can include the same initial and ongoing assessment and documentation components listed in Phase I in addition to the following:

- Muscular strength and mobility status and progression
- Anticipation of any medical equipment necessary for discharge
- Family involvement in care of patient
- Review of discharge instructions with patient and responsible individual caring for patient at home (a written copy of discharge instructions provided)
- Information on any follow up visits
- Discharge criteria

Note, patients that receive moderate sedation or monitored anesthesia care may arrive to PACU already in Phase II. The patient must be able to maintain airway and ventilation (unless baseline was low due to underline conditions), hemodynamic stable, tolerable pain and nausea, and able to ambulate appropriately based on procedure and baseline. In these substances, vital signs assessment should occur at least on arrival and prior to discharge from phase II, and as clinical condition requires.

Potential complications in Phase II: Prolonged drowsiness (evaluate if cause is related to hypotension, hypoxia, hypercarbia, hypoglycemia, or electrolyte abnormalities); nausea; vomiting

Goal of Phase II: prepare patient/caregiver for care home or extended care

Other PACU Complications

- Emergence Delirium (AKA Emergence Agitation)
  - Incidence in children can be as high as 30% ages 2-4 years old, Elder patients with orthopedic procedures, and substance abuser
  - Occurs 10-30 min after awakening from anesthesia
  - S/S: dissociative look, restlessness, screaming, confusion
  - Treatment: Most importantly, rule out hypoxia; Parental presence can help significantly in children; Versed may be ordered by anesthesia provider
- Corneal Abrasion
  - A rare complication during surgery; most common cause of eye pain with or without visual impairment in PACU
  - Occurs: Any type of surgery; prolonged surgery; exposure of cornea; trauma; surgery in non-supine position
  - S/S: Onset immediate after emergence from anesthesia, usually unilateral, painful, foreign body sensation, conjunctival erythema, tearing, photophobia, normal pupillary reflexes, blurred vision to no visual deficit
  - Treatment: Contact Anesthesia Provider; Proparacaine and antibiotic medication is ordered. Patient given specific discharge instructions and follow up visit
- Spinal Epidural Hematoma (SEH)
  - Accumulation of blood in the loose areolar tissue between the vertebrae and the dura of the spinal canal.
  - Highest Risk: Those on anticoags or antiplatelet or vascular surgery patients who receive neuraxial anesthesia (spinal/epidural)
  - S/S: progressive motor block, sensory block, or bowel and bladder dysfunction; back pain is a less common presenting complaint
  - Dx: MRI, or CT Scan
  - Treatment: urgent neuro/ortho. surgery service consult for decompression laminectomy (since neurologic recovery is possible if done within 8 hrs. symptom)

- Postoperative Urinary Retention (POUR)
    - Inability to urinate after a procedure or surgery due to anesthesia, medications, pain, and the physiologic changes of surgery and trauma to the bladder
    - Risk Factors: Advanced age; Males; Pre-existing neuro disease (CP, neuropathy, MS); Surgery (Anorectal, joint arthroplasty, hernia repair); Meds (anticholinergic agents, beta-blockers); Excessive fluid administration; Neuraxial anesthesia
    - Dx: Assessment of urine volume via bladder scanner
    - Evaluation: Follow provider's orders on intermittent catheter vs indwelling catheter
- Somnolence (prolonged drowsiness)
    - must rule out other causes such as hypotension, hypoxia, hypercarbia, hypoglycemia, electrolyte abnormalities

Fall Scale

PreOp

- Morse Fall Scale (18y.o. and older)
- Humpty Dumpty Pediatric patients

PACU

- All patients in the PACU are considered a fall risk due to anesthesia/sedation.
- Safety maintained with additional consideration to the patient's level of consciousness, age, pre-condition, surgical procedure

PADSS (Post Anesthesia Discharge Scoring System)

- Discharge criteria scoring system used on all anesthesia patients to evaluate readiness for discharge
- Safety maintained with additional consideration to the patient's level of consciousness, age, pre-condition, surgical procedure

Aldrete Scoring System

- Discharge criteria scoring system used on all moderation sedation patients to evaluate readiness for discharge

PACU Phase III *(Extended Stay)*

- Focus on providing the ongoing care for those patients requiring extended observation/intervention after transfer/discharge from Phase I and Phase II care
    - When Waiting for a Floor Bed (Patient is floor status)
        - Vital signs Q4 or as ordered, cardiac monitoring can be discontinued if <u>not</u> on continuous telemetry monitoring
        - Meals can be ordered IF diet ordered
        - Review and activate floor orders to keep patient on scheduled time medications and blood draws
    - When Waiting for a ICU Bed
        - Critically ill surgical patients who have recovered from anesthesia but need to stay in the PACU an extended or prolonged period of time because of the severity of illness or the need to be observed for complications.
        - Review and activate critical care orders and continue critical care monitoring

Discharge Planning

- Written orders for discharge from PACU must be placed by provider (Anesthesia sign out and note)
- The patient must meet the following minimum criteria:
    - Alert and oriented to time and place (or return to cognitive baseline)
    - Airway is patent; All vital signs are stable; Pain and comfort is tolerable level
    - Discharge scoring system is used to assess patient recovery from anesthesia
    - Safety needs and interventions completed
    - Ability to ambulate consistent with baseline/surgery limitations
- Review discharge instructions with patient and family/accompanying responsible adult as appropriate
    - Provide a copy of written discharge instructions
    - Additional resources to contact of problems arise.
- Arrangements for safe transport from the institution

UNIVERSITY OF CHICAGO MEDICAL CENTER

POLICY NAME: Discharge Criteria for Out-Patients
POLICY NUMBER: P/PACU PC-05
ISSUE DATE: SEPTEMBER, 2018
REVISED DATE: FEBRUARY, 2019, NOVEMBER, 2021, FEBRUARY, 2022

PURPOSE:

The outpatient Post Anesthesia Care Unit (PACU) must demonstrate specific criteria for discharge to ensure their safe transition from the hospital to their outpatient setting.

Policy:

1. All patients who have received anesthesia care must be discharged from the Post Anesthesia Care Unit (PACU) by an anesthesiologist and have:
   a. A Post Anesthesia Evaluation Note entered by an Attending Anesthesiologist.
   b. A Discharge from PACU order in place.
   c. Discontinuation of all PACU phase of care orders.

2. The anesthesiologist, in collaboration with the primary service, will evaluate any patient whose condition continues to warrant close observation after routine recovery to determine alternatives for discharge.

3. Refer to Appendix A for discharge criteria for post anesthesia outpatients.

4. The surgical and/or procedural service must enter orders to discharge the patient from the hospital.

5. D cam OR: Starting at 1900, nursing staff will evaluate for patients that may not be fully recovered and/or whose condition may continue to warrant close observation beyond the D OR normal hours of operation. These patients will be transferred to either the CDOR or COR (Comer OR) PACU and/or be evaluated by the anesthesiologist and primary service to determine an appropriate unit for discharge no later than 2000.

6. Post-sedation (non-anesthesia) patients will follow UCM Policy and Procedure PC 16, Moderate and Deep Sedation by Non-Anesthesiologists.

7. Refer to Appendix C for Criteria for Discharge Post Sedation.

Criteria for Discontinuation of Monitoring Following a Non-anesthesia Procedure with Moderate and Deep Sedation

1. When the procedure has been completed, the patient's vital signs and responsiveness shall be monitored by a licensed health care provider until the patient meets discharge criteria, having returned to his/her pre-procedure state.

2. Any patient who received naloxone or flumazenil will require a minimum 2-hour period of observation following the last administration of the reversal agent.

3. During this immediate post sedation period, in addition to the Credentialed Monitoring Assistant or recovering RN, there will be at least one other staff member in the unit. This additional staff member should be able to directly hear a call for assistance in the case of an emergency.

4. Refer to Appendix B for Criteria for Discontinuation of Procedural Monitoring.

REFERENCES:

ASPAN (2020). 2021-2022. Perianesthesia Nursing: Standards, Practice Recommendations and Interpretive Statements. *American Society of PeriAnesthesia Nurses(ASPAN). Cherry Hill, NJ: ASPAN.org.*

CROSS-REFERENCES:

University of Chicago Medical Center (2020). Moderate & Deep Sedation by Non-Anesthesiologists. *University of Chicago Medical Center Policy and Procedure Manual*, PC 16.

University of Chicago Medical Center (2020). Transportation Assistance. *University of Chicago Medical Center Policy and Procedure Manual, Department of Social Work.*

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APPENDIX A: Discharge Criteria for Post Anesthesia Patients

1) Discharge of all post anesthesia care patients is based on the following established criteria:

a) Patent Airway

b) Adequate/stable respiratory function

c) Awake, oriented and responding appropriately/or at baseline.

d) Stable vital signs

e) Adequate perfusion

f) Temperature greater to or equal to 36 degrees C and/or acceptable patient comfort level without signs or symptoms of hypothermia.

g) Adequate pain control as deemed by patient, nurse and anesthesiologist.

h) Ability to ambulate with a steady gait, or return to baseline mobility, as appropriate

i) A non-distended bladder

j) Ability to void, if indicated

k) No unexpected bleeding or drainage

l) Minimal or absent nausea and vomiting

m) Ability to swallow, if applicable/indicated

n) Any tubes intact and patent, if applicable

o) Surgical or procedural site(s) dressing(s) intact

2) Epidural or spinal anesthesia (in addition to all criteria for general anesthesia):

a) Return of normal or baseline sensation
b) Return of full or baseline strength
c) Patient should void prior to discharge. Exception may be made on a case by case basis after consultation with the attending anesthesiologist and the attending surgeon/proceduralist.

3) In cases where one or more of these criteria are unable to be met, a patient may still be discharged from the PACU if there is a consensus between the surgery/procedure service, the anesthesiologist, and the PACU nurse. Exceptions to discharge criteria are documented by the physician discharging the patient.

4) The anesthesiologist, in collaboration with the primary service, will evaluate any patient whose condition continues to warrant close observation after routine recovery to determine alternatives for discharge.

5) Post-sedation (non-anesthesia) patients will follow UCM Policy and Procedure PC 16, Moderate and Deep Sedation by Non-Anesthesiologists.

6) Discharge of Local Anesthesia Patients requires:

a) Surgeon's discharge orders

b) Completion of the surgeons pre-established discharge criteria

c) Documented focused nursing assessment and, at minimum, one set of vital signs

7) In addition to the discharge criteria above, all outpatients will:

a) Be discharged with a responsible adult who will accompany the patient home and be able to report any post-sedation complications. This is not required for patients who have received only a local anesthetic. In the event the patient is being transported by an agency, discharge instructions will be given to the responsible receiving adult via phone. Documentation shall include the name, phone number and relationship of the adult who received those instructions

   If discharge to home arrangements is deemed unacceptable for patient safety, the RN will notify the primary service and the discharging anesthesiologist

b) Have a completed After Visit Summary (AVS) and, if applicable, a written prescription.

c) Be given a copy of the AVS, other written instructions and contact numbers, all of which have been discussed with the patient and responsible adult.

d) Indicate that they and/or their adult escort have received and understood the postoperative/post procedure instructions by signing a copy of the AVS.

e) Have the signed copy of the AVS placed in their chart.

Ride Service Criteria: Post-Procedure/Post-operative Patients

The PACU RN will review and assess the patient discharge plan. The PACU RN will attempt to resolve any barriers (i.e. no responsible adult present or readily available to pick the patient up).

Patients may be discharged from the PACU if determined safe to travel in ride share vehicle without a responsible adult as determined by the DACC (Department of Anesthesia and Critical Care) attending. Refer to UCMC Department of Social Work: Transportation Assistance Policy.

1. Patients who have received anesthesia care from an anesthesiologist may be considered on a case-specific basis. The decision will be made by a DACC attending and the procedural/surgical service attending.
2. The Recovery/PACU RN must document the communication with the DACC attending and the procedural/surgical service attending regarding the discharge ride service plan details.
3. Procedural/surgical service will be contacted for disposition planning/orders if ride service plan not acceptable to DACC attending or procedural/surgical service attending completing the discharge.
4. The patient may order their own ride share vehicle for post-discharge travel.
5. The PACU RN may use the UCM ride share service if deemed necessary based on lack of other available options.
6. The PACU RN should page the Adult Social Work on-call pager (8165) for any further assistance needed.

Appendix B: Criteria for Discontinuation of Monitoring Following a Non-anesthesia procedure with moderate or deep sedation.

When the procedure has been completed, the patient's vital signs and responsiveness shall be monitored by a licensed health care provider until the patient meets discharge criteria, having returned to his/her pre-procedure state.

Any patient who received naloxone or flumazenil will require a minimum 2-hour period of observation following the last administration of the reversal agent.

A. During this immediate post sedation period, in addition to the recovering RN, there will be at least one other staff member in the unit. This additional staff member should be able to directly hear a call for assistance in the case of an emergency.

B. Patients will be monitored until the following criteria are met:

1. Modified Aldrete score of ≥ 9 or a return to the patient's baseline;
2. Protective reflexes are intact;
3. No evidence of procedural complications (including bleeding from the wound site);
4. Pain adequately controlled; and
5. A minimum of 15 minutes has elapsed after the end of the procedure.

Appendix C: Criteria for Discharge Following a non-anesthesia procedure with moderate or deep sedation

Patients are discharged from the post-sedation recovery area and health care setting following execution of a physician's order after they have met criteria as approved by Medical Staff. An outpatient must be discharged with a responsible adult who will accompany the patient home and be able to report any post-sedation complications.

A. The patient may be discharged once the following discharge criteria are met:

1. The patient has no pain or, if the patient has pain it is adequately controlled and not unexpected given the patient's medical condition and procedure.
2. The patient's vital signs (BP, HR, RR) have returned to within 10 % of baseline or are appropriate as judged by an LIP. The patient's room air saturation is 96% or higher or has returned to the pre-procedure baseline.
3. Modified Aldrete score of ≥ 9 or a return to the patient's baseline.
4. Protective reflexes are intact and the patient exhibits no signs of respiratory distress.
5. The patient is not suffering from nausea, vomiting or dizziness.
6. A minimum of 30 minutes has elapsed since the end of the procedure.

If discharge criteria are not met, exceptions may be made by a qualified License Independent Practitioner (LIP). All patients require a discharge order entered by qualified LIP.

Post-Discharge Instructions

Written post-discharge instructions will be provided to the patient and the responsible adult accompanying the patient. Information will include:

1. Relevant dietary and medication instructions;
2. Post-discharge activity instructions

UNIVERSITY OF CHICAGO MEDICAL CENTER

POLICY NAME: DISCHARGE MEDICATIONS
POLICY NUMBER: P/PACU- PC-06
ISSUE DATE: September, 2018
REVISED DATE: NOVEMBER, 2018, November 2021, February, 2022

Policy:

1. Medications dispensed from any inpatient pharmacy or medication dispensing system, (such as: Omnicell) may not be sent home with a patient. This includes, but is not limited to, creams, ointments, eye drops etc. dispensed from the Operating Room (OR) pharmacies and used in the OR. This includes all prescription medications and over the counter medications. Registered nurses may not give medications that are intended for home use to the patient.
    - Exception is made for the Meds2Beds program: medication(s) dispensed via the outpatient pharmacy may be endorsed to the PACU RN in anticipation of the patient's discharge. Home medications may be given to these patients in line with the UCM Pharmacy standard operating procedure (SOP).

2. Patient home medications will be managed per UCM Policy and Procedure PC 144: Home Medication Management.

3. A physician order is required for all medications given in the Preoperative or Post Anesthesia Care Unit (PACU) areas. An outpatient prescription cannot be utilized as an order.

REFERENCES:

Illinois General Assembly. Joint Committee on Administrative Codes. Section 1330.530 Onsite institutional pharmacies. Refer to: http://www. ilga.gov/comm ission/jcar/admincode/068/06801330sections.html.

CROSS-REFERENCES:

University of Chicago Medical Center (2020). Home Medication Management. *University of Chicago Policy and Procedure Manual*, PC 144.

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The University of Medical Center
Policies and Procedures Manual

Policy: PC 05 Do Not Resuscitate Orders (DNR)--Inpatient Treatment Limitation
Issued: February 1989
Revised: December 2019

POLICY:

Cardiopulmonary resuscitation (CPR) is attempted whenever a patient suffers a cardiopulmonary arrest unless a do-not-attempt resuscitation order (DNAR Order) has been written.

The decision to enter a DNAR Order should be based on (1) a competent, fully informed patient or his/her Surrogate or Legal Guardian expressing the desire to refuse an attempt at CPR, even when the attempt is medically appropriate, and/or (2) a lack of a reasonable expectation of success if CPR is attempted.

This policy governs the following Advance Directive options:

- Do Not Attempt Resuscitation
- Do Not Attempt Resuscitation/Do Not Intubate
- Treatment Limitations
- Comfort Measures Only

DEFINITIONS:

1. Adult: A person 18 years of age or older or an emancipated minor.

2. Attending Physician: The physician of record who has primary responsibility for the patient's care, or his/her attending physician designee. This term does not apply to resident physicians or fellows.

3. Competence: A competent patient is an Adult who has decisional capacity and who is able to communicate his/her understanding of the nature and prognosis of his/her disease and the consequences of a DNAR Order. Competence must be determined by the Attending Physician or, if absent, the fellow or Senior Resident (defined below) on the Attending Physician's service at the Attending Physician's direction.

4. Do Not Attempt Resuscitation (DNAR) Order: An order entered in a patient's current medical record indicating that, in the event of a cardiac or respiratory arrest during the current admission, CPR intubation, defibrillation and life sustaining medications will not be attempted.

5. Do Not Intubate (DNI) Order: An order entered in a patient's current medical record indicating that during the current admission, intubation will not be attempted. If a patient is currently intubated, reintubation will not be attempted. This order must be accompanied by a DNAR Order.

6. Treatment Limitations: An order entered in a patient's current medical record indicating the refusal for specific treatment interventions such the use of blood products, vasopressor/inotropic agents, dialysis, parenteral nutrition, or antibiotics.

7. Comfort Measures Only (CMO) Order: An order entered into the patient's current medical record which changes the goals of medical care from curative to comfort and dignity and refers to the medical treatment of a dying person where the natural dying process is permitted to occur with a focus on quality rather than quantity of life.

8. Legal Guardian: An individual appointed by a court to serve as a representative of a minor patient or a patient who the court has determined cannot act on his/her own behalf. To qualify as a Legal Guardian for purposes of this policy, the individual must have obtained and provided UCMC with an order from the Probate Court of Cook County, or other court with jurisdiction over the patient, that specifically authorizes the guardian to consent to the entry of a DNAR Order, and the order must be validated by the Office of Legal Affairs.

9. Surrogate: An agent who:

a. Is appointed under a properly executed Durable Power of Attorney for Health Care or under a Declaration for Mental Health Treatment,
or
b. Falls within the definition of a surrogate under the Illinois Health Care Surrogate Act Implementation policy. (See policies numbered A03-11, A03-12, A03-14, and A03-15).

10. IDPH Uniform DNR Form: The "IDPH Uniform Practitioner Order for Life-Sustaining Treatment (POLST) Form," issued by the Illinois Department of Public Health (IDPH).

PROCEDURE:

1. Orders and Documentation

All DNAR Orders must be entered by a physician, advanced practice nurse (APN), resident, or fellow after discussion and documentation of the discussion with the responsible Attending Physician confirming their agreement with the proposed DNAR status. Details of that documentation will include a description of the rationale for the DNAR Order and reference to any discussions with the patient and/or his/her family, Legal Guardian, or other Surrogate concerning the advisability of the DNAR Order. The documentation in the medical record should also include reference to any living will or durable power of attorney for health care, reference to the disposition of any IDPH Uniform DNR Form at admission, reference to any pertinent consultations, such as the Ethics Consultation Service, and the names of witnesses as required by Section 5 below. If the patient is admitted under the care of an APN, the collaborating physician or the medical director of the unit (or his/her attending designee) will function as the responsible Attending Physician and participate in the discussion as outlined above.

2. Attending Co-signature

The APN, resident or fellow may enter the initial DNAR Order, however, the Attending Physician must co-sign the DNAR Order and note as soon as possible and no later than 48 hours

after the order is placed. In the case when the patient is discharged prior to those 48 hours, the Attending Physician must sign that order prior to the patient's discharge.

An order for Comfort Measures Only order may be entered by the APN, resident or fellow after discussion and documentation of that discussion with the Attending Physician. The Attending Physician must sign this order within 48 hours of the order being placed. This order must be accompanied by a DNAR Order with Treatment Limitations in the patient's current medical record.

3. Nursing Implementation of DNAR Order

When the nurse acknowledges the signed UCMC DNAR Order, he/she will update identifiers and communication tools to communicate the DNAR status.

4. DNAR Orders When CPR is Not Medically Indicated

An Attending Physician may make a determination that an attempt to perform CPR is not medically indicated because it has no reasonable chance of success. The determination is based on the patient's clinical status. When CPR attempts are not medically indicated, the Attending Physician should discuss this with the patient and/or patient's family, Surrogate, or Legal Guardian. However, the consent of the patient, patient's family, Surrogate, or Legal Guardian is not required to write a DNAR Order when CPR attempts are not medically indicated.

5. Patient Request for a DNAR Order

a. The fully informed, autonomous decision of a competent Adult patient to refuse to have CPR attempted will be honored and a DNAR Order will be entered in EPIC For an incompetent patient who has appointed a Surrogate or has a Surrogate under the Health Care Surrogate Act (See Administrative Policy 03-14), the Surrogate's request that a DNAR Order be entered will be honored. For an incompetent patient who has a Legal Guardian, the Legal Guardian's request that a DNAR Order be entered will be honored provided he/she meets all of the requirements in the definition of a Legal Guardian (See above).

b. Each request made in these situations must be witnessed by two people 18 years or older. While the witnesses do not need to sign anything, the names of the witnesses must be documented in the patient's medical record (e.g. the progress note or the physician's order).

c. For an incompetent patient who has not appointed a Surrogate, but who has executed a living will, if the conditions of the living will have been met, a DNAR Order should be entered in EPIC. (See Administrative Policy 03-06.)

d. For a patient who is not considered an Adult, the decision to enter a DNAR Order should be reached through the consensus of the Attending Physician, the patient (where appropriate), and the minor patient's parents, Legal Guardian, or other Surrogates(s).

e. For an incompetent patient who does not have family members or Surrogates willing to help make DNAR decisions, a DNAR Order may be entered only if attempts to perform CPR are not medically indicated, as set forth in Section B above. It is strongly recommended that the Ethics Consultation Service (2-1453, pager #3522) be contacted.

6. IDPH Uniform DNR Form

a. A patient may present a completed IDPH Uniform DNR Form upon admission, at which point the inpatient staff will make a copy of the IDPH Uniform DNR Form, put the copy in the patient's medical record, and return the original form to the patient. Staff will honor the DNR directives expressed in the IDPH Uniform DNR Form until the Attending Physician conducts a review with the patient or his/her Surrogate.

b. The Attending Physician will review the clinical condition of the patient and counsel the patient and/or his/her family, Surrogate, or Legal Guardian regarding the advisability of a DNAR order, *AND EITHER*

i. Void the IDPH Uniform DNR Form if the Attending Physician and patient (or patient's Surrogate or Legal Guardian, or minor patient's parent) agree that a DNAR is not appropriate;
OR
ii. Place a UCMC DNAR standard order that specifies DNR status and/or treatment limitations (see attachment). The UCMC order will govern during the hospitalization.

c. For patients who do not present with a completed IDPH Uniform DNR Form upon admission, an Attending Physician, resident (second year or higher), APN, or physician assistant should complete and sign, a new IDPH Uniform DNR Form as part of any discussion with the patient and/or his or her family, Legal Guardian, or other Surrogate regarding the advisability of a DNAR Order. An attending co-signature is not required to complete the IDPH Uniform DNR Form. In addition to the practitioner's signature, one individual, 18 years of age or older, must witness the patient's signature. By signing the IDPH Uniform DNR Form, the witness is attesting that the patient or patient's Surrogate has had an opportunity to read the form and has signed the form or acknowledged their signature or mark on the form in the presence of the witness. Witnesses may include family members, friends, and health-care workers who did not sign the IDPH Uniform DNR Form as the "Attending Practitioner". A copy will be filed in the patient's medical record, and the original will immediately be returned to the patient.

7. Disagreements or Ambiguity Regarding Advisability of a DNAR Order

Differences of opinion regarding a DNAR Order may arise among a patient, his/her family, his/her Surrogate, his/her Legal Guardian, or his/her health care team. In cases of disagreement, the Attending Physician is responsible for leading efforts to resolve the situation through discussions with the relevant parties. If the disagreement is not resolved, it is strongly recommended that the Ethics Consultation Service (2-1453, pager #3522) and/or the Office of Legal Affairs (2-1057, pager #7602) be contacted.

8. Right of Conscience

If a physician treating a patient is unable to comply with requests for a DNAR Order because of his/her personal beliefs or conscience, the physician must transfer care of the patient to another physician who is willing to comply. If a health care practitioner other than a physician is unable to comply with requests for a DNAR Order because of his/her personal beliefs or conscience, and the health care practitioner is not able to find another health care professional to whom the patient's care can be transferred, then he/she must notify their supervisor so that another health care professional can be found.

9. Review of DNAR Orders

The DNAR status of each patient subject to a DNAR Order should be reviewed regularly by the patient's care team including the Attending Physician to determine if it remains consistent with the patient's condition. The care team should document this review in the medical record.

10. Revocation of DNAR Orders

A patient may revoke his/her request/consent for a DNAR Order and/or the IDPH Uniform DNR Form. The revocation will be documented in the progress notes, and the Attending Physician will be notified as soon possible. This does not apply to DNAR Orders entered at the Attending Physician's discretion (See Section 4 above).

11. DNAR Orders During Procedures Requiring Sedation or Anesthesia

When a patient with a DNAR Order is scheduled for surgery, the patient (or his/her Surrogate or Legal Guardian) will be consulted by the medical team, which may include the primary service, anesthesia team and/or the procedure/ surgical team, about whether the DNAR Order should be suspended during the operation and period spent in the recovery room. If the DNAR Order is temporarily suspended, a physician or APN must reenter the DNAR order once the patient returns to the floor or intensive care unit, after discussion with the Attending Physician, surgeon or anesthesiologist.

12. Change in Service

If a patient subject to a DNAR Order is transferred to a different medical service, the care team of the receiving service will review the patient's status and condition and enter a new DNAR Order, or discontinue or modify the existing DNAR Order after discussion with the Attending Physician as outlined in section 1. Unless the existing DNAR Order from the sending service is modified, it will remain in force.

13. Organ Donation Patients.

An appropriate organ donation treatment may be applied or continued temporarily in the event of a patient's death notwithstanding the existence of a DNAR order.

Interpretation, Implementation and Revision:

The Office of Legal Affairs (2-1057) is responsible for the interpretation and revision of this policy. The content of the DNAR Order will be created and all changes reviewed by the CPR Subcommittee of the Medical Staff Committee, and at a minimum will include review by physicians knowledgeable and experienced in writing and executing resuscitation and intubation of patients who suffer from cardiac and pulmonary arrest.

CROSS-REFERENCES:

1. Dr. CART (Cardiopulmonary Arrest Resuscitation Team), Policy PC 44
2. Advance Directive--Living Will, Policy A08-15
3. Patient Self Determination Act Implementation, Policy A03-11
4. Advance Directive --Durable Power of Attorney for Health Care, Policy A08-17
5. Health Care Surrogates, Policy A08-18
6. Advance Directive--Declaration for Mental Health Treatment, Policy A08-26

References:

1. Civil Administrative Code of Illinois (Department of Public Health Powers and Duties Law) (20 ILCS 2310/2310-600).
2. Hospital Licensing Act (210 ILCS 85/6.19).
3. Health Care Surrogate Act (755 ILCS 40/65)
4. IDPH Uniform Practitioner Order for Life-Sustaining Treatment (POLST) Form, available at http://www.dph.illinois.gov/forms-publications

The University of Chicago Medical Center
Policy and Procedure Manual

Policy: PC 128 Documentation of Patient Care
Issued: February 1991
Revised: December 2021

PURPOSE:

The patient medical record is shared across all patient care settings. To garner the quality benefits and
to aid utilization of the shared record, users must follow a common set of principles when documenting patient care.

POLICY:

UCMC will initiate and maintain a complete and accurate medical record for every individual assessed, cared for, treated, or otherwise served. Documentation in the medical record shall be sufficient to identify the patient, support diagnoses, justify treatments, document patient course, and provide continuity of care.
Medical record documentation must be timely, meaningful, authenticated, and legible. All relevant documents and entries should be entered into the medical record at the time the service is rendered. The electronic medical record (EMR) must be used for documentation in all areas where it is available. Every individual documenting in the medical record is responsible for the entire content of their documentation, whether the content is original, copied, pasted, imported or reused. In addition, they are responsible for the proper maintenance of their In Basket and must review it regularly to prevent delinquencies in the medical record. Faculty should ensure that resident notes are consistent with this policy prior to co-signing any note.

The EMR is the expected modality for documentation of patient care and the use of paper documentation should be minimized. All electronic and scanned patient care documentation will be maintained as a permanent part of the patient's record.

PROCEDURE:

All persons having a professional role in patient care at the Medical Center or who facilitate communication or interaction between providers and patients shall:

1. Use the EMR as the primary mode of documentation of the core content of patient care.
2. Record relevant patient data and patient care as close to real time as possible. If information is dictated into a patient record, the transcriber and the dictator must record their full name, title and the date/time the dictation is recorded.
3. Include authentication using electronic login access to the EMR that is conducted through individual logins, pursuant to the Access Control Policy (POL-AC).
4. Ensure all clinical entries in a patient's medical record are accurately dated, timed and

authenticated by (i) electronic signature or (ii) written signature and professional title, printed name and professional title (e.g., MD, RN).

5. Supervise entries by healthcare students in a patient's medical record.
6. Use approved abbreviations. An official *"Do Not Use"* list can be found in the Abbreviations policy (PC 81).
7. Corrections: When charting on paper, it is prohibited to erase, use white-out or to use any other method of eradication. If an error is made, draw a single line through statement, followed by date, time and initials. The original entry must remain legible. All paper documentation must be scanned and uploaded into the EMR
8. Use secure electronic modalities (such as MyChart) to communicate with patients about patient care issues.

DOCUMENTATION CORRECTIONS:

When corrections to entries, amendments or addenda (used to clarify existing documentation) are needed, the new entries must:

- Be clearly and permanently identified as an amendment, correction or delayed entry
- Clearly indicate the date, time, and author
- Never result in the deletion of the original content, but instead clearly identify all original content, and identify or refer to the date and incident (original content) for which the delayed entry, amendment or correction is written
- Identify any sources of information to support the delayed entry, amendment or correction.

When charting on paper, erasing, using white-out or any other method of eradication is prohibited. If an error is made, the author should draw a single line through the statement, followed by date, time and their initials. The original entry must remain legible.

If an author documents on the wrong patient or uses an incorrect patient's medical record number, page the Health Information Management (HIM) chart correction team at 4484.

Edits or corrections of notes must be corrected by the original author. Any edits or additions made to a completed/signed document must be labeled as an addendum.

All other identified chart corrections (i.e., results posted or documents scanned to incorrect patient) must be reported to HIM directly in Epic via the Request Chart Correction tool (see Attachment A).

In the event results are sent to the incorrect provider, it must be reported to HIM directly in Epic via the Request Chart Correction tool.

EDUCATION & TRAINING:

All persons having a professional role in patient care at the Medical Center or who facilitate communication or interaction between providers and patients are required to receive training and education on documentation of patient care as it pertains to their role.

CROSS-REFERENCES:

A08-39	Legal Medical Record
A08-24	Medical Record Authentication
A02-16	Authority to document on the Medical Records
N1505	Documentation of Patient Ca Nursing
N1405A	Discharge of Patient Management of Medical Record
PC 13	Informed Consent
PC 36	Operative Report
PC 92	History & Physical
PC 157	Patient Education
PC 148	Inpatient Anticoagulant Medication Therapy POL-AC Access Control

INTERPRETATION, IMPLEMENTATION, AND REVISION:
Health Information Management Committee is responsible for the review, revision and implementation of this policy.

POLICY NAME: Emergency Alarm System
POLICY NUMBER: P/PACU Prep/R- PS-01
ISSUE DATE: SEPTEMBER, 2018
REVISED DATE: NOVEMBER, 2018, November, 2021, February, 2022

PURPOSE:
To immediately alert an anesthesiologist and/or staff of an emergency in the Preoperative (Pre-op) or Post Anesthesia Care Unit (PACU) areas

Policy:
An emergency alarm system will notify an anesthesiologist and/or staff in the Perioperative areas that an anesthesiologist and/or staff are needed immediately.

1. **CDOR**
    a. There are two emergency alarm system options available in each patient bay: STAFF ASSIST and CODE

    b. When activating the STAFF ASSIST button, the dome light outside of the patient's bay will flash red, a "STAFF ASSIST" text message and the patient's bay number will appear on the central command console and the message will be sent to the integrated wireless phones of all CDOR Pre-op and PACU staff and the CDOR PACU Resident

    c. When activating the CODE button, the dome light outside of the patient's bay will flash blue, a "CODE" text message and the patient's bay number will appear on the central command console and the message will be sent to the integrated wireless phones of all CDOR Pre-op and PACU staff, the CDOR Anesthesia Coordinator (64470), E1 (64470), PACU Resident (67000), PACU Attending Senior Resident (67005) and the PACU Charge Nurse (68862)/Pre-op Charge RN (68863).

    d. To urgently page the anesthesia coordinator/EI, page 4470 and indicate the patient’s location and call back number. A drop down template in the paging system may be used.

2. **DOR (D-cam)**
    a. To urgently call for help, activate the D-cam operating room the overhead intercom system to the particular patient location. The intercom system is located at the nurse's desk in Pre-op and PACU.
    b. Post DOR anesthesia Coordinator Sign off:
        i. PACU staff will notify E1 that immediate assistance is needed.
        ii. In the event of E1 not available, the PACU staff will call a Dr. CART by dialing 1-4-7.

3. **COR (Comer)**
    a. To urgently call for help, activate the Comer operating room the overhead intercom system to the particular patient location. The intercom system is located at the nurse's desk in Pre-op and PACU.
    b. Page the Comer anesthesia coordinator and Pediatric anesthesiologist on call and must include in the page the patient's location and call back number. A drop down template in the paging system may be used.
    c. Attending anesthesiologist covering Labor and Delivery maybe contacted for help in emergency situations via phone 55137/pager 3578.

4. **Prep Recovery CCD 5th Floor**
    a. The Prep Recovery nurse will call 147 for a Dr. Cart for immediate patient assistance.

CROSS-REFERENCES:

University of Chicago Medical Center (2018). Adult Rapid Response Team (RRT). *University of Chicago Medical Center Policy and Procedure Manual*, PC 161.

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All Op-Time Users

Status Board Icons and Triggers

Summary

The OR Status Boards display a variety of icons to communicate information.

Status Board Icons

Icon	Meaning
SANDPO 	The green light indicates the patient can move forward from pre-op to the OR
	Scheduled add-on surgery (with future date)
	Add-on surgery in the case depot
	Procedure length was manually adjusted
	Patient has orders that need to be acknowledged
	This patient has signed and held orders
	A delay is associated with this surgery
	Patient has a latex allergy
	Strict isolation
	Droplet isolation
	Airborne isolation
	Contact isolation
	Protective isolation
	Special handling isolation
	Standard Isolation Precautions
	Contact - MDRO
	Stat Orders
	Discharge
	Case Alert - Case notes need to be reviewed

Document Version 3
Produced by: Chicago Biomedical Information Services
Revised: 05/13/2014

Status Board Icons and Triggers

SANDPO Triggers

S	The Surgical service member (MD, DO, APN, PA) clicks the **Surgeon Ready** button to indicate surgical service is available and the patient may be taken to the operating room.
A	The Anesthesiologist (Attending only) clicks the **Anesthesia Pre-Op Complete** button to indicate that the assessment is complete.
N	The Pre-op Nurse clicks the **Pre-op Nursing Ready** button to indicate the nursing documentation is complete. **Note:** Optionally, the Nurse can click the **Events** button and enter a **Time In** next to **IN PRE NURSING READY**.
D	Appears automatically when the seven required Pre-op Checklist flowsheet rows have been populated: • Signed Consent in Chart • Procedure/Surgery Site/Laterality Written • Valid H&P Present • Relevant Pre-op documentation matches • Surgery Site/ Laterality Marked by Surgeon • Surgery Site/ Laterality Matches Patient Response • Surgery Site/ Laterality Matches OpTime
P	The Pre-op Nurse clicks the **Patient Ready** button to indicate the patient is ready to go to surgery **Note:** Optionally, the Nurse can click the **Events** button and enter a **Time In** next to **IN PRE PATIENT READY**.
O	The Circulating Nurse documents the case tracking event "**ROOM READY FOR PATIENT"** once the room is clean and ready for the next patient and he/she is confident that all supplies and equipment will be available when needed.

Document Version 3
Produced by: Chicago Biomedical Information Services
Revised: 05/13/2014

The University of Chicago Medical Center Policy and Procedure

POLICY NAME: Falls Prevention and Post-Fall Management
POLICY NUMBER: PC 149
ISSUE DATE: January 1998
REVISED DATE: January 2021

PURPOSE:

To minimize the risk of falls among all patients.
To increase awareness of risk factors for falls among health care providers and patients.
To protect the patient's right to autonomy, dignity, and security.
To guide the management of patient care post-fall.

DEFINITIONS:

Patient Fall: A patient fall is "a sudden, unintentional descent, with or without injury to the patient, that results in the patient coming to rest on the floor, on or against some other surface (e.g., a counter), on another person, or on an object (e.g., a trash can). (NDNQI 2020)

Universal Safety Precautions: Safety precautions that may be applied to any patients during any admission to UCMC. These include but are not limited to the following:
1. Obstacles Removed from Room
2. Bed Low & Locked
3. Side Rails Up
4. Call light within reach
5. Non-Skid Footwear

High Risk Fall Precautions: Precaution put in place for patients identified as "high risk for fall". These include but are not limited to the following:
1. Universal Safety Precautions
2. Yellow ID Band
3. Fall Risk Signage (Inside/Outside of Patient Room)
4. Additional interventions to create individualized plans of care to minimize fall risk
    a. Bed/chair alarm on
    b. Remain within arms' reach while in bathroom/on bedside commode
    c. Encourage family to stay
    d. Evaluate need and eligibility for direct patient observation

POLICY:

All adult and pediatric patients will be assessed for fall risk upon admission to the emergency department, inpatient units, labor & delivery or peri-operative units. Fall precautions will be implemented as appropriate and documented in the electronic medical record (EMR). Ambulatory patients 18 years and over will be assessed every visit and as needed as outlined in this policy. Post fall management will be completed as outlined in this policy.

All staff members are responsible for implementing the intent and directives contained within this policy, and for creating a safe environment of care. Any staff member, physician, or family member may request that a

patient be placed on Fall Precautions regardless of Fall Risk Score.
All falls must be reported to Risk Management. The Fall Prevention Committees will review all incidences of falls and evaluate the effectiveness of fall activities including assessment, intervention and education.

PROCEDURES:
Recognizing that every patient's safety status may potentially be compromised by the nature of their illness or by their treatment, basic safety issues will be addressed for all patients. For those patients identified as a higher level of risk, more in-depth prevention interventions will be implemented. Universal Safety Precautions are implemented and documented for all patients at the point of entry to the Medical Center.

Adult (ED, Inpatient, L&D, Peri-Operative) Fall Assessment & Interventions
Assessment & Documentation: The nurse assesses and documents all adult inpatient's risk factors relating to falling, upon admission, at the beginning of every shift, at transfer, post-procedure, and whenever there is a change in the patient's condition.

The Fall Risk Scale is used to assess risk factors in adult inpatients. The categories include:

a. History of Falling
b. Medications and contributing physiological factors
c. Ambulatory Aid
d. Medical Devices
e. Gait/Balance/Transferring/Mobility
f. Mental Status

Fall Interventions: Patient care interventions that may reduce the risk of falling must be examined in the context of larger goal of maximizing function and minimizing disability. Interventions should be linked to individual risk factors. (See Attachment 1)

Universal Safety Precautions are interventions initiated for all adult patients and documented each shift. Documentation occurs in the Safety Section of the Daily Care Flowsheet as well as in the Care Plan. The following are Universal Safety Precautions used to minimize the risk for fall:

- Patient/Family education on Universal Fall Safety Interventions
- Provide patient and family orientation to environment and routine.
- Bed Low & Locked
- Call light within Reach
- Use of non-slip footwear
- Side rails up as appropriate for patient condition
- Remove Obstacles-Arrange furniture and objects so they are not obstacles and remove unnecessary furniture in rooms.
- Purposeful Rounding: 5P's- Pain, Positioning, Personal Needs, Placement, and Presence
- Keep all assistive devices (glasses, walker, etc.) available to patients.

High Risk Fall Precautions are interventions used for patients classified as being at high risk for falling. Patients with a score of ≥ 45 must have Universal Safety Precautions, a yellow ID band and signage placed inside and outside their room. Additionally, the interventions listed below are utilized to develop an individualized plan of care to minimize the risk for falls for patients that are scored "high risk" for falling.
The following are High Risk Fall Precautions used to minimize the risk for fall:

- Use of Bed/Chair Alarm

- Remain within arms' reach of patient while in bathroom/on bedside commode
- Educate patient and family when there is a risk of falling and reinforce as much as possible to call for assistance with ambulating/toileting
- Encourage family to stay with high-risk or confused patient, when possible
- Door to room open, unless isolation or privacy required
- Communicate fall risk to physicians/APP, food service staff, therapy services, patient transportation, diagnostic and procedural areas
- Assign high risk patients to rooms near the nursing station whenever possible

Education: Patients and their families are educated on the patient's risk for falls and the Falls Prevention interventions. Educational handouts are located within the Adult Fall Prevention Toolkit on the intranet.

Pediatric (ED, Sedation, Cancer Center, Special Procedures Area, Inpatient & Peri-Operative) Fall Assessment & Interventions

1. The Humpty Dumpty Scale (Attachment 2) is the falls assessment tool used to assess fall risk factors in pediatric patients.
2. The nurse assesses and documents a fall assessment and associated interventions for all pediatric inpatients upon admission, at the beginning of every shift, at transfer, post-procedure and whenever there is a change in the patient's condition. See Attachment 2 for a list of low and high risk interventions recommended for children.
    a. Any patient in the outpatient setting that has received sedation should receive education from the nurse that they are at an increased risk for falling at time of discharge.
    b. Any inpatient discharged from the sedation area and returning to an inpatient unit will be reassessed by the home unit for fall risk.

3. All pediatric patients under three years of age should be placed in a crib with a climber-hood as appropriate. Should a parent request a full-sized bed, the parent must be educated regarding risk of injury and/or falls related to bed choice and review the Patient Safety Parental Agreement Form located within the Pediatric Fall Prevention Toolkit on the intranet.
4. A Score of ≥ 12 on the Humpty Dumpty Scale indicates that a patient has been identified as high risk for falling. See attachment two for a list of High Risk Fall interventions recommended for children.
5. Pediatric patients and their families are educated on the patient's risk for falls and fall prevention interventions utilizing the appropriate "Prevent your Child from Falling" educational brochure located within the Pediatric Fall Prevention Toolkit on the intranet.

Ambulatory

1. Ambulatory patients aged 18 years and over, under the care of and having an appointment with a Physician or Advanced Practice Provider, are screened every visit for fall risk.
2. Ambulatory patients who receive short term therapies including but not limited to chemotherapy, hydration, pain management, total parenteral nutrition and blood transfusion as ordered by their provider should also be screened for fall risk at each treatment visit.
3. The Fall Risk Assessment (Attachment 3) is located within the Rooming tab of the electronic medical record (EMR) and is used to screen ambulatory patients for fall risk.
4. The registered nurse (RN), licensed practical nurse (LPN) or medical assistant (MA) completes a fall risk assessment questionnaire (see Attachment 3), which is required by Centers of Medicare and Medicaid Services (CMS), and documents the patient's responses upon rooming of the patient and whenever there is a change in the patient's condition. If the fall risk assessment is "yes" to any of the four questions, the RN, LPN or MA will complete the fall risk scale and document the results upon rooming the patient. A high risk icon will then automatically appear in the patient row in the schedule to notify the providers and clinicians.

5. Physical Therapy consultation and treatment is considered for ambulatory patients identified as "high risk" for falling as deemed appropriate and feasible by the patient's provider.
6. Patients and their families are educated on the patient's risk for falls and fall prevention interventions utilizing the appropriate "Preventing Falls in the Clinic" and "Preventing Falls at Home" educational brochure located within Epic and the Intranet.

Post-Fall Management

In the event of a fall which occurs on site, the following processes will be implemented by the primary nurse:

1. Complete Post-Fall Assessment of patient
2. Communicate event to provider
3. Communicate event to department leadership
4. Complete a post-fall huddle
5. Update fall prevention plan
6. Document facts of event in patient's medical record
    a. Event note using **.fall** smart text in EHR (inpatient, perioperative, L&D, EDs)
    b. Event note using **.ambpostfall** smart text (ambulatory)
7. Submit Event Report in the Event Reporting System
8. Contact provider immediately regarding physiologic changes from post-fall assessments that may require further intervention.

INTERPRETATION, IMPLEMENTATION, AND REVISION:

The Department of Patient Safety/Risk Management and Department of Nursing are responsible for the interpretation, implementation and revision of this policy.

ATTACHMENTS:

1. Adult Fall Risk Assessment Tool & Interventions
2. The Humpty Dumpty Scale- Falls Assessment Tool and Pediatric Patient Falls Safety Protocol
3. Ambulatory Fall Risk Assessment, Fall Risk Scale and Fall Precautions

CROSS-REFERENCES:

PC 128 Documentation of Patient Care
UCM Protocol: Direct Observation Monitoring Pediatric and Adult Inpatients

Applicable Elsevier Clinical Skills:

1. Fall Prevention- CE
2. Fall Prevention (Pediatric) – CE
3. Safe Environment (Pediatric) – CE

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Attachment 1: Adult Fall Risk Assessment Tool and Interventions

Patient care interventions that may reduce the risk of falling must be examined in the context of larger goal of maximizing function and minimizing disability. Interventions should be linked to individual risk factors. The following are interventions used to minimize the risk for fall:

Universal Safety Precautions may include but are not limited to the following:

Patient/Family education on Universal Fall Safety Interventions
Provide patient and family orientation to environment and routine.
Bed Low,& Locked
Call light within Reach
Use of Non-slip footwear
Side rails up as appropriate for patient condition
Remove Obstacles- Arrange furniture and objects so they are not obstacles and remove unnecessary furniture in rooms.
Purposeful Rounding: 5 P's- Pain, Positioning, Personal Needs, Placement, and Presence
Keep all assistive devices (glasses, walker, etc.) available to patients.

High Risk Fall Precautions may include but are not limited to the following:
Universal Safety Precautions
Yellow Falls identification bracelet applied
Yellow Falls sign placed inside and outside patient room
Use of Bed Alarm
Remain within arms' reach of patient while in bathroom/on bedside commode
Educate patient and family when there is a risk of falling and reinforce as much as possible to call for assistance with ambulating/toileting
Encourage family to stay with high-risk or confused patient, when possible
Door to room open, unless isolation or privacy required
Communicate fall risk to ancillary departments
Consider placing high risk patients near nursing station

Fall Risk Factors	Score	Row Information
History of Falling	25	Score 25: Patient has fallen within the last 6 months or during current or previous hospitalization
	0	Score: 0: Patient does not have a history of falling
Medications & Physiologic Risk Factors	15	Score 15 if patient has more than one medical diagnosis, any physiologic risk factor or is on any medication listed below: *Does the patient have any of the following conditions:* · Alcohol/substance abuse · Altered elimination · Altered oxygenation · Cardiac arrhythmia · Electrolyte imbalance · Neurologic deficit/stroke · Orthostatic hypotension · Seizure disorder · Severe anemia · Vasovagal syncope *Is the patient on any of these medications:* · Antiarrhythmic · Antidepressant · Antihypertensive · Benzodiazepines · New Chemotherapy · Diuretics · Laxatives · Opioids · Sedatives/hypnotics *Additionally: Consider the addition of any new medications.*
	0	Score 0: Patient does not have any medical diagnosis, physiological risk or not on any high risk medications as noted above.
Ambulatory Aid	30	Score 30: if patient uses furniture to assist with ambulation
	15	Score 15: if patient uses crutches, cane or walker
	0	Score 0: if patient walks without a walking aid
Medical Devices	20	Score 20: if the patient has any medical device: ALPs, chest tubes, drains, feeding tubes, infusion/PCA/epidural pump, NGT to suction, oxygen therapy, urinary catheter, wound-vac, L- VAD cords
	0	Score 0: if patient doesn't have any medical devices
Gait- Balance- Transferring -Mobility	20	Score 20 (impaired gait): patient walks with head down, poor balance, grasps onto furniture, a support person, or a walking aid and cannot walk without assistance. AM-PAC score <18
	10	Score 10 (weak gait): characterized by a stooped posture, but can lift head without losing balance. Steps are short and may shuffle. AM-PAC Score 19 – 23.
	0	Score 0 (normal gait): characterized by the patient walking with head erect, arms swinging freely at side and striding without hesitation. AM-PAC Score 24.
		Note: Check patient's ability to accurately assess his/her own ability to walk alone.
Mental Status	15	Score 15: if patient is forgetful or unrealistic related to ability to walk. Patient with confusion, short-term memory loss, delirium, dementia, impulsiveness, A & O <4, developmental delays, GCS <14, CIWA score >8.
	0	Score 0: if patient assessment and demonstrated ability match.

Attachment 2: The Humpty Dumpty Scale- Falls Assessment Tool and Pediatric Patient Falls Safety Protocol

Humpty Dumpty Falls Prevention Program™

Preventing falls, enhancing safety.

Falls Assessment Tool
The Humpty Dumpty Scale - Inpatient

Parameter	Criteria	Score (circle)
Age	Less than 3 years old	4
	3 to less than 7 years old	3
	7 to less than 13 years old	2
	13 years and above	1
Gender	Male	2
	Female	1
Diagnosis	Neurological Diagnosis	4
	Alterations in Oxygenation (Respiratory Diagnosis, Dehydration, Anemia, Anorexia, Syncope/Dizziness, etc.)	3
	Psych/Behavioral Disorders	2
	Other Diagnosis	1
Cognitive Impairments	Not Aware of Limitations	3
	Forgets Limitations	2
	Oriented to own ability	1
Environmental Factors	History of Falls or Infant-Toddler Placed in Bed	4
	Patient uses assistive devices or Infant-Toddler in Crib or Furniture/Lighting	3
	Patient Placed in Bed	2
	Outpatient Area	1
Response to Surgery/Sedation/ Anesthesia	Within 24 hours	3
	Within 48 hours	2
	More than 48 hours/None	1
Medication Usage	Multiple usage of: Sedatives (excluding ICU patients sedated and paralyzed) Hypnotics Barbiturates Phenothiazines Antidepressants Laxatives/Diuretics Narcotic	3
	One of the meds listed above	2
	Other Medications/None	1
Rev: 09/2008	TOTAL	

Date: _____

Name: _____

MR#: _____

Acct#: _____

D.O.B.: _____

Age: _____

At risk for falls if score is 12 or Above

Minimum Score 7
Maximum Score 23

Patient Falls Safety Protocol on back

AT THE FOREFRONT OF MEDICINE
UChicago Medicine
Comer Children's

Pediatric Patient Falls Safety Protocol

Interventions to help prevent pediatric falls:

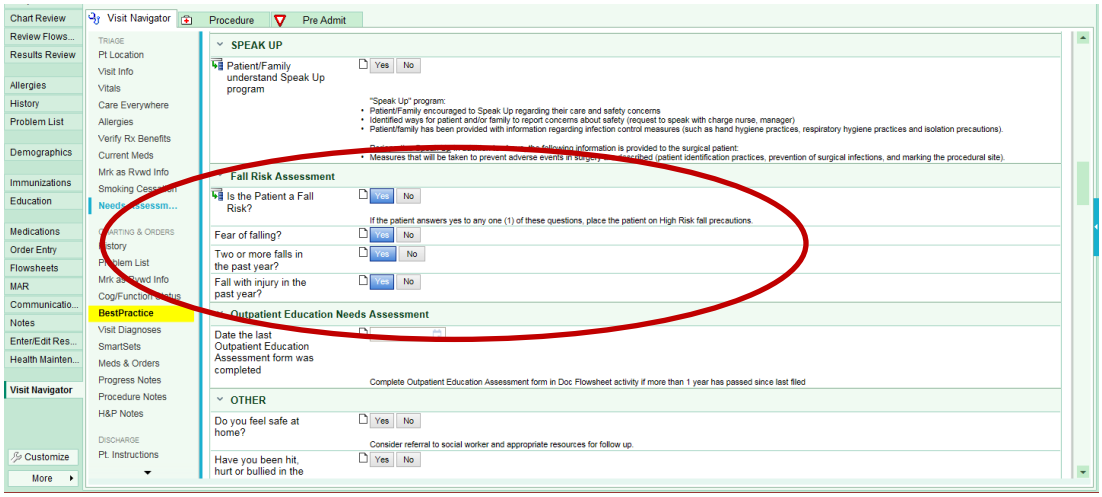
- Orientation to room
- Bed in low position, brakes on
- Side rails x 2 or 4 up, assess large gaps, such that a patient could get extremity or other body part entrapped, use protective barriers to close off spaces/gaps in bed.
- Use of non-skid footwear for ambulating patients, use of appropriate size clothing to prevent risk of tripping
- Assess eliminations need, assist as needed
- Call light is within reach, educate patient/family on its functionality
- Environment clear of unused equipment, furniture's in place, clear of hazards
- Assess for adequate lighting, leave nightlight on
- Patient and family education available to parents and patient
- Document fall prevention teaching and include in plan of care
- Educate patient/parents of falls protocol precautions
- Check patient minimum every 1 hour
- Accompany patient with ambulation
- Place in developmentally appropriate bed
- Consider moving patient closer to nurses' station
- Assess need for 1:1 supervision
- Evaluate medication administration times
- Keep door open at all times unless specified isolation precautions are in use
- Document in nursing education activity patient/family education

Initiate fall prevention care plan. In addition, the following are High Risk Fall Precautions (score 12 and above) used to minimize the risk for fall:

- Identify patient i.e. fall risk ID band, signage etc.
- Use of bed alarm
- Remain within arms' reach of patient while in bathroom or on bedside commode

Attachment 3: Ambulatory Fall Risk Assessment, Fall Risk Scale and Fall Precautions

3.1 Ambulatory Fall Risk Assessment (CMS Required Questionnaire)



- **If the fall risk assessment is "yes" to any of the four questions, the RN, LPN or MA will complete the fall risk scale and document the results upon rooming of the patients.**

3.2 Ambulatory Fall Risk Scale:

Risk factors	Score	
a. History of Falling Within Past 3 months	25 = 0 =	Yes No
b. Does the patient have more than one clinic visit today?	15= 0 =	Yes No
c. Ambulatory Aid	30 = 15 = 0 =	Does not use an ambulatory aid, needs assistance to walk Uses crutches, cane, walker or Scooter Walks independently without assistance or ambulatory aid
d. Active lines, drains or attached to any medical device	20 = 0 =	Yes No
e. Gait/Balance/Transferring/Mobility	20 = 10 = 0=	Uses an ambulatory aid or is attached to a medical device Does not use an ambulatory aid, needs assistance to walk Walks independently without assistance or ambulatory aid
f. Mental Status	15 = 0 =	Impaired memory or unable to function independently with activities of daily living Able to function independently with activities of daily living

Tally up the fall risk score.

- **If fall risk score is less than 45, implement the universal fall precautions**
- **If fall risk score is 45 and greater, implement the universal and high risk fall precautions**

3.3 Ambulatory Fall Prevention Precautions

Universal Fall Precautions

a. Patient and family orientation to environment
b. Call light within reach, if applicable
c. Use of non-slip footwear
d. Remove obstacles. Arrange furniture and objects so they are not obstacles.
e. Keep all assistive devices (glasses, walker, etc.) available to patients.

High Risk Fall Precautions

a. Educate patient and family when there is a risk of falling and reinforce as much as possible to call for assistance with gowning/ambulating/toileting
b. Offer patients a wheelchair if readily available in clinic area
c. Place a yellow ID band on patient
d. Forgo weights unless medically necessary. If necessary, utilize gait belt, two- person assist, or wheelchair scale
e. Bring all items necessary for rooming/treatment to patient as much as possible (e.g., machine to conduct vitals, point of care tests, gowns)
f. Assist patient on and off the exam table (Do not leave patient unattended while on exam table)
g. Place fall risk signage outside the door
h. Encourage family to stay with high-risk or confused patient, when possible
i. Door to room open, unless isolation or privacy required
j. Communicate fall risk to physicians, therapy services, patient transportation, and procedural areas if applicable.

University of Chicago Medical Center

Policy: Informed Consent for Procedures and Treatment
Policy Number: PC13
Issued: April 1989
Revised: February 2023

Policy
It is the policy of The University of Chicago Medical Center (UCMC) to provide sufficient information to patients to enable them to exercise their right to make informed decisions regarding their health care.

UCMC personnel have a legal and ethical duty to refrain from treating a patient unless treatment has been authorized by the patient or patient representative, or unless an exception to consent pursuant to this policy exists.

The patient's consent is obtained to protect the patient from unauthorized treatment and to assure that the patient is informed of the risks and benefits of treatment and reasonable alternatives. The consent process presents an opportunity for the patient and the licensed independent practitioner to establish a mutual understanding about the care, treatment, and services the patient will receive.

The information presented in the informed consent process will be provided orally using words, phrases and language which can be understood by the patient or person giving consent. The information may include written, graphic, or videotaped materials, but by itself written material alone is not sufficient. Attention should be given to assessing that the person giving consent appears to understand.

I. Definition

Informed consent shall mean that the patient has been given sufficient information by physicians involved in their procedure and treatment to make an informed decision. The following elements may be included in the informed consent process:

- Patient/legal guardian's preferred language for medical decision making is determined
- When needed the patient/legal guardian is given access to a qualified medical interpreter

- Inform the patient of the name of the physician or other practitioner who has primary responsibility for and/or will perform the patient's care, treatment, or services.
- The name(s) of the LIP(s) who will conduct the surgical/procedural intervention and administer the anesthesia
- Whether physicians other than the operating practitioner, including but not limited residents, will be performing important tasks related to the surgery
- Material risks and benefits for the patient related to the procedure and anesthesia including common side effects or complications

- The likelihood of the patient achieving his/her goals and any treatment alternatives, including the risks and benefits
- The probable consequences of declining recommended or alternative therapies
-
- Explanation of expected difficulties, recovery time, pain management and restrictions post-operatively during admission and after discharge when applicable
- Time and opportunity for the patient/parent/guardian/POA to ask questions
-

Decisional capacity means the ability to understand and appreciate the nature and consequences of a decision regarding medical treatment or forgoing life-sustaining treatment, and the ability to reach and communicate an informed decision in the matter, as determined by the attending physician.

Minor: Individual under the age of 18.

Emancipated Minor is a person who is at least 16 years of age but under 18 years of age who has been adjudicated by a Court pursuant to the Illinois Emancipation of Minors Act to be a mature minor who has demonstrated the ability and capacity to manage his own affairs and to live wholly or partially independent of his parents or guardian and who has obtained the legal status of an emancipated person with power to enter into valid legal contracts. Any Court Order that adjudicates a minor to be emancipated must be reviewed by Legal Affairs.

II. Responsibility

While the physician who will be the attending for the procedure or the treatment is responsible for assuring that the patient has been fully informed and the patient has consented to the procedure or treatment, any of the following licensed clinical professionals may inform the patient, respond to the patient's questions, and obtain the patient's consent:

- The physician or Advanced Practice Nurse or Physician Assistant who will be performing the procedure or treatment;
- Another licensed physician (including a resident)
- Another licensed APN who, pursuant to his/her collaborative nurse agreement, is qualified and permitted to perform the type of procedure or treatment;
- Another PA who, pursuant to his/her written guidelines, is qualified and permitted to perform the type of procedure or treatment.

Educational materials may be provided to the patient by a registered nurse.

The physician(s) who will be the attending(s) for the procedure or the treatment is responsible for assuring that the patient is fully informed and the patient consents to the procedure or treatment. The attending physician for the procedure or treatment continues to be responsible for assuring the patient is fully informed even if he/she is not actually performing the procedure himself/herself.

If a member of the nursing staff discovers that the patient is not fully informed, the nurse notifies the attending physician or his/her designee.

III. Consent Procedures
The physician or designee will obtain an informed consent, as defined above, from the patient or the patient's representative.

Informed consent is required:

a) For all procedures performed in the operating room
b) For all procedures and all imaging diagnostic tests performed under moderate or deep sedation, general, spinal or epidural anesthesia.
c) For all procedures with significant potential for or actual cosmetic effects;
d) For all surgical procedures;
e) For all treatments or procedures where a Medical Center's policy requires informed consent)
f) For a procedure or treatment that has more than minimal risk to a patient. What constitutes minimal risk may vary from circumstance to circumstance and is an informed decision made by the physician.

IV. Exceptions
Circumstances when informed consent is not required appear below:

A. Medical Emergency: A medical emergency is a situation where delay for the purpose of obtaining consent would increase the risk of harm to the patient. Consent in a medical emergency is implied if the patient is unable to consent. The physician must document in the medical record the nature of the emergency and the patient's inability to consent.

The following criteria must be met for the exception to apply:
- There was a medical emergency
- Treatment was required in order to protect the patient's health
- It was impossible or impractical to obtain consent from either the patient or someone
- authorized to consent for the patient
- There was no reason to believe that the patient would decline the treatment, given the
- opportunity to consent.

B. Common and Ordinary Procedures: Written informed consent is not required when the nature and probable risks of the procedure or treatment are of such a common and ordinary nature as to be within the patient's understanding and knowledge (e.g., routine phlebotomy, medication injection, x-rays etc.)

C. HIV Testing: The Admission and Outpatient treatment Authorization and Consent forms used by the Medical Center and the clinics will include the statement that HIV tests may be done on the patient, unless the patient opts out of testing. The patient's signature on this Authorization will be documentation of consent to the test. There are certain limited circumstances when HIV testing does not require informed consent. Please refer to policy A-08-13B, Consent and Result

Reporting for HIV Testing of patients and A-08-13D Consent and Result Reporting for HIV-Hepatitis Testing in Event of Accidental Exposure to Non-UCMC Employees.

V. Documentation

It is the responsibility of the attending physician who is accountable for administering the treatment or performing the procedure to ensure that informed consent is appropriately documented and placed in the patient's medical record. Consents must be placed in the medical record prior to the procedure, regardless of whether consent was obtained in an inpatient or outpatient setting.

Consent form

The Hospitals utilize a consent form to document the fact that the informed consent process occurred. It is not a substitute for the informed consent process, only evidence that the process took place.

The Consent form must contain:

- Name of the patient, and when appropriate, patient's legal guardian
- Name of the Hospital
- The name(s) of the LIP(s) who will conduct the surgical/procedural intervention physicians other than the operating practitioner, including but not limited to residents, will be performing important tasks related to the surgery
- A discussion about the proposed care, treatment and services, including a description of the proposed procedure and the anesthesia to be used if applicable.
- Indications for the proposed procedure
- Material risks and benefits for the patient related to the procedure including common side effects or complications likelihood of the patient achieving his/her goals and any treatment alternatives, including the risks and benefits
- The probable consequences of declining recommended or alternative therapies
- Common problems that might occur during recuperation
- Signature of patient or legal guardian
- Date and time consent is obtained
- Statement that procedure was explained to patient or guardian
- Name/signature of person who explained the procedure to the patient or guardian.

Progress note

A progress note describing the informational exchange between the physician and patient should be placed in the medical record.

VI. Telephone Consent

In all cases, reasonable efforts should be made to obtain consent in person from the patient or the patient's legally authorized representative. Telephone consent is permitted only when such direct consent cannot be obtained from the patient or the patient's legally authorized representative.

The physician must inform the patient of all criteria listed under Informed Consent above. Telephone consent must be witnessed by at least one person from the medical staff other than the physician. The witness should sign the consent form. To witness telephone consent, the witness must listen to the oral consent:

(1) Either at the same time; or
(2) Immediately after the physician obtaining the consent.

VII. Adult Patients

Persons 18 years of age or older with decisional capacity must consent (or refuse to consent) and sign for treatment on their own behalf. This policy applies to the following exceptions.

A. Exceptions

1. Health Care or Mental Health Agent: If a patient lacks decisional capacity to make an informed decision, the agent under a Durable Power of Attorney for Health Care or Mental Health Treatment Preference Declaration may consent to and refuse treatment on behalf of the patient, and execute any documents needed.
2. Living Will: If a patient lacks decisional capacity and is in a terminal condition, a living will is sufficient to consent to or refuse treatment. However, if a patient has both, a Durable Power of Attorney for Health Care may trump the living will.
3. Health Care Surrogate: If an agent does not exist, a surrogate, determined under the provisions of the Illinois Health Care Surrogate Act, may consent to or refuse medical and/or life-sustaining treatment.
4. Guardian of the Person: If the patient lacks decisional capacity, a court appointed guardian of the person may consent to or refuse medical treatment for their ward. For patients under the age of 18, see Section VIII below.

Ongoing, repetitive procedures (adult and pediatric) require written informed consent only at the start of the course of therapy, unless the patient's condition has significantly changed to alter the risks and benefits.

VIII. Minor Patients

Unless an exception applies, the consent of at least one of a minor’s parents or the legally appointed guardian is necessary before the minor may be treated. A non-custodial parent has the right to make decisions about health care unless a court has specifically ordered otherwise. Any such court order should be reviewed by the Office of Legal Affairs. A child, who is in the custody of or in a placement approved by the Department of Children and Family Service, requires the consent of the DCFS or its designee.

A parent may designate, in writing, that someone else may consent to the minor's treatment in their absence (e.g., a grandparent, custodial relative, babysitter). Legal Affairs should be consulted if there are any questions about such designations.

Situations in which parental consent is not required appear below:

Minors (Individuals < 18 years of age) Who May Consent to All Medical Care

Minors who fit one of the following categories may consent to ALL medical care to the same extent as a person of legal age without the consent of a parent or guardian:

- The minor is legally married.
- The minor is a parent.
- The minor is pregnant.*
- The minor has been legally emancipated by a court.

*Pregnant minors may consent to abortion services. No notification of a parent or adult family member is required.

Specific Circumstances in Which Minors May Consent to Medical Care

Minor Not Living with Parent or Guardian
A minor who is at least 14 years old, living separate and apart from his or her parents or legal guardian, managing his or her own personal affairs, and unable or unwilling to return to the residence of his or her parent or legal guardian ("minor seeking care") can give consent for primary care services if: (1) the health care professional providing such care reasonably believes the minor understands the benefits and risks of the services, and (2) the minor is identified in writing as a "minor seeking care" by an adult relative, an attorney, a school social worker or homelessness liaison, a representative of a homelessness services agency, a representative of a religious organization, or a social service agency that provides services to at risk, homeless or runaway youth.

Contraceptives and Pregnancy Testing
Health care personnel may provide confidential contraceptives and pregnancy tests to minors without parental consent if the minor is married, a parent or pregnant, referred by a physician, clergyman or planned parenthood agency, or where a serious health hazard would be created by the failure to provide these services.

Emergency Contraception (EC)
EC (the morning-after pill) is a form of contraception that women can take up to 120 hours after intercourse to stop a pregnancy before it starts. Most EC can be sold without a prescription to women and men 17 years and older. Some forms of EC are also available to those 16 and younger without a prescription or proof of age. Minors do not need parental consent to obtain EC, and confidential services may be provided.

Sexually Transmitted Infections
Minors aged 12 and over may consent to confidential testing, treatment, and counseling for and vaccination against sexually transmitted infections (STIs). Providers must report incidents of STIs to departments of health in accordance with applicable statutes and ordinances; such reports are to remain confidential. Providers are encouraged, where appropriate, to involve a minor's family in the minor's treatment for STIs, but must first obtain the minor's consent.

HIV
Minors aged 12 and older may consent to testing, treatment and counseling for HIV. Minors aged 12 and older may also consent to anonymous HIV testing. Providers must report incidents of HIV to departments of health in accordance with applicable statutes and ordinances; such reports are to remain confidential. In addition, providers are encouraged, but not obligated, to

notify a minor's parent of a positive test result if the provider has been unsuccessful in persuading the minor to do so and believes that notification is in the minor's best interest.

Sexual Assault
A minor may consent to health services associated with criminal sexual assault or abuse. Such services include emergency contraception, pregnancy tests, counseling and treatment for STIs. A minor who presents for care within seven days of the assault may consent to the use of a sexual assault evidence collection kit. Minors aged 13 and older may give written consent to a hospital to release evidence and information from the kit to law enforcement officials. If medical personnel have reasonable cause to believe that the minor is an abused child under the Abused and Neglected Child Reporting Act, the abuse may need to be reported to the Department of Children and Family Services.

Emergency Care
A minor may receive health services without the prior consent of a parent or guardian when obtaining such consent is not reasonably feasible without adversely affecting the minor's health.

Substance Abuse Care
Minors aged 12 and older may consent to confidential outpatient counseling and treatment if they or a family member abuses drugs or alcohol. Providers are encouraged, where appropriate, to involve a minor's family in the minor's treatment for substance abuse, but must first obtain the minor's consent. However, if a provider is providing counseling to such minor and believes that parental notification is necessary to protect the safety of the minor or others, the provider may inform the parent of the minor's substance abuse counseling or treatment without the minor's consent.

Mental Health
Minors aged 12 and over may consent to confidential counseling or psychotherapy on an outpatient basis. Providers of such treatment may not notify parents of the minor's treatment services without the minor's consent unless the provider believes such notification is necessary; however, in such a case, the minor must be informed of the provider's intention to disclose. If the minor is under 17, counseling or psychotherapy sessions are limited to five in number until parental consent is obtained. In addition, parents can obtain psychological records if the provider does not find compelling reasons for denying access.

XI. Documentation of Deviation from Policy
The reason(s) for any deviation from this policy must be documented by a physician in the patient's medical record.

XII. Duration of Consent
A consent does not expire within any specific time period. It may be obtained in a clinical setting prior to admission and/or surgery/procedure and be valid as long as the risk/benefit assessment has not changed since the consent was obtained. However, a patient's situation must be considered to determine if a previously executed consent is valid or whether a new consent is required. The factors to consider include (a) a change in the patient's condition or prognosis

since the time of consent, (b) a significant passage of time, especially if there has been no or limited contact between the patient and the provider, and (c) the availability of a new alternative or information about risks and benefits. Contact the Office of Legal Affairs (2-1057) for advice concerning the validity of any consent.

Please note there are specific rules concerning sterilization procedures performed on patients whose care is paid for by the Illinois Public Aid Program.

Education
All faculty, trainees, staff, administrators, interpretive services and leaders receive training and education on the processes outlined in PC 13 Informed Consent upon hire and as needed with changes in policy and procedure minimally, every 5 years. This can be done through a variety of methodology incuding but not limited to the following:

- Staff Meetings & Huddles
- Email
- CBT (Computer Based Training) Modules

Any questions and/or concerns can be directed to the Office of Legal Affairs, Patient Safety/Risk Management, Regulatory Compliance and/or the Health Informatics Team

Interpretation, Implementation and Revision
The Office of Legal Affairs (2-1057) is responsible for the interpretation and revision of this policy. Health care providers are responsible for the implementation of this policy.

Cross- References:
05-05 Patient Rights and Responsibilities
A02-11 Photographs and other Images in the Hospital
PC 12 Human Subject Research
A02-07 Child Abuse Neglect Reporting
A-08-13B, Consent and Result Reporting for HIV Testing of Patients
A-08-13D Consent and Result Reporting for HIV-Hepatitis Testing in Event of Accidental Exposure to Non-UCMC Employees

NAME: Intravenous Lidocaine for Analgesia Guideline
GUIDELINE NUMBER: PGP-16
ORIGINAL ISSUE DATE: 2/2016
REVISED DATE: 12/2021

Scope

The following guideline is designed to provide a standardized approach for the safe and effective use of intravenous lidocaine for the management of acute and chronic pain. This guideline is applicable for all patients receiving intravenous lidocaine for pain management.

I. **Background**
   a. Lidocaine blocks both initiation and conduction of nerve impulses by blocking sodium channels which results in local anesthesia [1,2]
      i. Intravenous lidocaine has analgesic, anti-inflammatory and anti-hyperalgesic properties [3,4]
         1. The mechano-insensitive nociceptors, a subgroup of nociceptors that play a key role in the initiation and maintenance of hyperalgesia, are found to be sensitive to intravenous lidocaine [5]
      ii. Intravenous lidocaine has been studied in the perioperative setting and has shown to shorten hospital stay, reduce post-operative pain and opioid consumption [4,5,6,7,8]
   b. Lidocaine is also a class Ib antiarrhythmic agent that mitigates this mechanism of action by prolonging depolarization and decreasing automaticity of myocytes in the ventricles by blocking sodium-gated ion channels to reduce impulse conduction velocity [1,2]
   c. Intravenous lidocaine dosing for pain is variable based on weight compared to the dosing for arrhythmias.
   d. Clinicians should understand lidocaine pharmacokinetics and pharmacodynamics to use this medication safely and effectively

II. **Common Indications**
   a. FDA approved:
      i. Local and regional anesthesia
      ii. Acute treatment of ventricular arrhythmias
   b. FDA Unapproved
      i. Opioid Tolerance: typically for those ingesting greater than 100mg of oral morphine equivalents per day.
      ii. Post-operative pain management as part of multimodal analgesia
      iii. Severe intractable pain not controlled by escalating doses of opioids
      iv. Severe neuropathic pain
      v. Pain caused by burn injuries
      vi. Evidence of opioid-related hyperalgesia: when a painful stimulus is perceived as being out of proportion (unbearable) to the noxious stimulus under high dose opioid therapies

III. **Restrictions**
   a. Restrictions for use of lidocaine infusion for pain exist at UCM
      i. **Low-Dose Continuous Infusion: See** Appendix 1.
      ii. **Moderate-Dose Continuous Infusion: See** Appendix 2.
      iii. **Short duration, high-dose Infusion with bolus. See** Appendix 3.

IV. **Contraindications and Warnings to Lidocaine:**

Absolute

   a. Allergies to amide local anesthetics (i.e. bupivacaine)
   b. Adam-Stokes syndrome
   c. Wolff-Parkinson-White syndrome
   d. Severe degrees of SA, AV or intraventricular heart block
   e. Premixed injection may contain corn-derived dextrose and its use is contraindicated in patients with allergy to corn or corn-related products
   f. Severe hepatic dysfunction- Child Turcotte Pugh (Child's) score C
   g. Unstable Cardiovascular Disease:-: hypotension, shock
   h. Decompensated heart failure
   i. Acute MI or unstable angina
   j. Antiarrhythmic therapy (see drug interaction VIII)
   k. Seizure disorder
   l. Electrolyte Imbalance: hypokalemia < 3.5mmol/L, hyponatremia < 134mEq/ L

V. **Pharmacokinetics**
   a. Onset of action:
      i. Single bolus dose: 45-90 seconds
   b. Duration:
      i. 10-20 minutes
   c. Volume of distribution:
      i. 0.8 – 1.3 L/kg
      ii. Decreased in heart failure and liver disease
      iii. Crosses blood brain barrier
   d. Protein binding:
      i. 60-80%
   e. Metabolism:
      i. 90% hepatic via CYP1A2
   f. Excretion:
      i. Renal 98% (less than 10% unchanged in adults)
      ii. Dialyzable: Yes (hemodialysis)
   g. Elimination half-life:
      i. 1.5-2 hours, elderly 2.5 hours
      ii. Prolonged with hepatic dysfunction and heart failure

VI. **Baseline Labs and Procedures:**
   a. 12-lead electrocardiogram
   b. Liver function tests

VII. **Dosing**
   a. **Low-Dose Continuous Infusion: See** Appendix 1.

b. **High-Dose Continuous Infusion: See** Appendix 2.
c. **Short duration, high-dose Infusion with bolus. See** Appendix 3.

VIII. **Drug Interactions** (*selected, commonly used medications)*

a. Due to potential increase in serum lidocaine concentration and/or cardiac toxicity:
   i. Amiodarone
   ii. Protease inhibitors
   iii. Dofetilide
   iv. Ibutilide
   v. Sotalol
   vi. Flecainide
   vii. Propafenone
   viii. Procainamide
   ix. Phenytoin
   x. Tricyclic antidepressants
   xi. Fluoroquinolones
   xii. Azole antifungals
   xiii. Clarithromycin

IX. **Dispensing and Administration**

a. Dispensing:
   i. Intravenous lidocaine premix: 2000 mg in 250 mL (concentration: 8 mg/mL) of D5W
b. Administration:
   i. Y site incompatibilities: Amphotericin B cholesteryl sulfate complex, metoprolol, pantoprazole, nesiritide, propofol, tenecteplase, thiopental

X. **Adverse Effects**

a. Although lidocaine toxicity has not been documented with the low dose systemic infusions used for postoperative analgesia, the symptoms of toxicity follow a very predictable pattern. Therefore the following should guide monitoring for their appearance and for intervention.

Mild - Moderate Side Effects - potentially seen at Plasma Levels 3-5 mcg/ mL	**Signs of Toxicity - typically seen at plasma levels > 5 mcg/ mL**
• Light headedness, dizziness • Sedation • Visual disturbances • Impaired concentration • Headache • Dysarthria • Perioral tingling, numbness • Tinnitus • Muscle twitching, tremors • Metallic taste	• CNS: Tonic/ clonic seizures,' unconsciousness, coma • Cardiac: Sinus tachycardia, sinus arrest, partial / complete AV dissociation, cardiac arrest **If signs of severe toxicity are noted the following measures MUST take place:** 1. Stop infusion immediately, rule out inadvertent overdose by checking pump

If Mild-Moderate Side Effects are noted the following measures MUST take place: 1. Stop infusion immediately 2. Page resident physician. 3. Draw blood for plasma lidocaine level 4. Obtain Lipid Emulsion from the pharmacy	2. Call Rapid Response Team **and anesthesia overhead** 3. Notify attending 3. Administer 100% oxygen 4. Maintain airway 5. Administer benzodiazepine for seizure suppression if necessary 6. Avoid vasopressin, calcium channel blockers, beta blockers, local anesthetics 7. **Obtain 20% Lipid Emulsion from the pharmacy and administer IMMEDIATELY as follows**.

20% Lipid Emulsion Rescue for Lidocaine Toxicity

- Bolus: 1.5ml / kg (IBW), over 1 minute and repeat x1, after 3-5 minutes if needed, followed by
- Infusion: 15ml/kg/hr, increase to 30ml/kg/hr if patient is hypotensive continue for 10 minutes after symptoms resolve and patient is stable continue to monitor for signs or symptoms of potential recurrence after lipid emulsion

XI. Monitoring
   a. **Low-Dose Continuous Infusion: See** Appendix 1.
   b. **Moderate-Dose Continuous Infusion: See** Appendix 2.
   c. **Short Duration, High-Dose Bolus Infusion. See** Appendix 3.

INTERPRETATION, IMPLEMENTATION, AND REVISION:
The Palliative Care & Anesthesia Subcommittee is responsible for revisions and interpretation of this guideline. Pharmacy will be responsible for the implementation of this guideline.

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Appendix 1.

Low-dose Continuous Lidocaine Infusion for Analgesia (Lidocaine for Floor)

II. Purpose: To standardize postoperative administration of low-dose systemic lidocaine analgesia in order to provide optimal postoperative pain control while minimizing opioid medication usage and thereby, facilitate enhanced recovery after surgery (ERAS) or treatment of complex pain.

III. Restrictions

a. Orders are required to be entered as part of either an enhanced recovery pathway after surgery or by Acute Pain Service
b. Patients must receive **continuous telemetry** to receive lidocaine infusion for pain

IV. Dosing

a. **INTRAOPERATIVE USE:**

i. **Bolus**: 1-1.5 mg/kg (IBW – Max: 150mg) over 10 minutes x 1 (Optional, requires administration by anesthesiologist)
ii. **Continuous Infusion:** 0.5-3 mg/kg/hr (IBW) using the infusion pump settings in the anesthesia smart pump library.
1. **During wound closure the lidocaine IV infusion rate will be reduced to 1 mg/kg/hr.**

b. NON-OPERATIVE USE:

i. Lidocaine infusions will ONLY be continued for 24 hours post-operatively
ii. Dosing body weight is current actual body weight
iii. **Infusion rates are as follows (weight based dosing rate):**

Weight Category	**Infusion Rate (mg/min)**
Patients < 70 kg	0.5 mg/min
Patients 70-100 kg	0.75 mg/min
Patients > 100 kg	1 mg/min

V. Monitoring

a. Drug Level Monitoring:
i. Therapeutic Concentrations: 1.5-6 mcg/mL
ii. Timing of Levels
1. First level to be obtained when patient arrives to PACU
2. Subsequent levels to be obtained (daily) with AM labs
b. Assessment of toxicity to be performed Q4h (e.g. blood pressure, heart rate, central nervous system toxicity)
c. Stop infusion and notify physician immediately if signs of toxicity detected (see section X)
d. Continuous telemetry for dysrhythmia monitoring

Appendix 2.

Moderate-Dose Continuous Lidocaine Infusion for Analgesia
(Anesthesia Intra-Operative ONLY)

I. Definition:

a. Moderate-dose continuous infusion lidocaine is defined as a continuous infusion meeting ONE of the below criteria:
   i. Continuous infusion dose greater than or equal to 1 mg/kg/hr
   ii. Duration of therapy greater than or equal to 24 hours
   iii. A single bolus dose may be given on the floor (if not administered in the OR)

II. Restrictions

a. Acute Pain Service consultation is **required** to initiation Moderate-Dose Continuous Lidocaine Infusions for Pain
b. All Moderate-dose continuous infusion lidocaine for pain orders will be written by a member of the Acute Pain Service utilizing the high-dose continuous infusion order set
c. **Patients must be located in an intensive care unit or perioperative unit** with **continuous telemetry** to receive HIGH-dose continuous infusion lidocaine for pain.

III. Dosing

a. **Bolus**: 1-1.5 mg/kg (IBW – Max: 150mg) over 10 minutes x 1 (if not administered in OR)
b. **Continuous Infusion:** 0.5-3 mg/kg/hr (IBW)

IV. Monitoring

a. Clinical response
b. Drug Level Monitoring:
   i. Therapeutic Concentrations: 1.5-6 mcg/mL
   ii. Lidocaine levels must be obtained daily (0400)
      1. Lidocaine levels should be obtained 12 hours after initiating therapy and/or dose adjustment
c. Blood pressure, heart rate, central nervous system toxicity
d. Patients must be on continuous telemetry to monitor for dysrhythmias

Appendix 3.

Short Duration, High-Dose Infusion and Bolus for Analgesia (Board Certified Pain Specialist OR Emergency Medicine only)

I. Definition:

a. High-dose BOLUS infusion lidocaine is defined as a 30 minutes infusion meeting ALL of the below criteria:
   i. A single bolus dose of 1 mg/kg over 3 minutes
   ii. Followed by a single 4 mg/kg dose infused over 30-minutes

II. Restrictions

a. Ordering and administration is restricted to board certified pain physicians in the department of anesthesia and critical care AND emergency department attending physicians
b. All HIGH-dose continuous infusion lidocaine for pain orders will be written by a member of the Acute Pain Service OR an emergency department attending physician utilizing the high-dose bolus infusion orderset.
c. **Patients must be located in an intensive care unit, perioperative unit, emergency department, infusion services or DCAM pain clinic with continuous telemetry** to receive HIGH-dose continuous infusion lidocaine for pain.

III. Dosing

a. Bolus: 1mg/kg (IBW) over 2-5 minutes x 1
b. Bolus Infusion: 4 mg/kg (IBW) over 30 minutes x 1

IV. Monitoring

a. Clinical response via numeric rating scale q5 minutes
b. Drug level monitoring is not required
c. Blood pressure, heart rate, central nervous system toxicity
d. Patients must be on continuous telemetry to monitor for dysrhythmias

Guideline Title: Ketamine for Pain Guideline
Guideline Number: PGP-72
Issue Date: 3/2013
Revision Date: 06/2021

Scope:

The following protocol has been established in accordance to PC Policy 151 "Pain – Assessment, Documentation and Education" to reduce the likelihood of patient harm associated with low-dose ketamine for the management of refractory pain. This protocol is designed to provide an evidence-based and standardized approach for the safe and effective use of low-dose ketamine for the management of acute and chronic pain. This protocol is applicable only to patients that have been deemed to have a limited response to conventional multimodal analgesia including opioid therapy as defined by the Acute Pain Service or Palliative Care consultation teams.

I. Background:

a. Opioid resistance/refractoriness in the setting of pain management is mediated by a number of pathways, including upregulation of N-methyl-D-aspartate (NMDA).[1,2]
b. NMDA upregulation results in neuronal hyperexcitability manifesting as intractable pain, hyperalgesia, allodynia and changing character of pain (e.g. radiation of pain). [1,3]
c. Ketamine is an NMDA receptor antagonist that acts throughout the central nervous system and has been demonstrated in subanesthetic doses to be effective for pain relief in opioid resistant/refractory cancer pain syndromes.
d. Low-dose ketamine provides 'recoupling' of opioid receptor function for improved analgesia and reducing hyperalgesia "nociceptive wind-up" in the spinal cord by acting on the NMDA receptor sites in the central and peripheral nervous system.
e. "Low dose," also referred to as sub-anesthetic or analgesic dosed, ketamine is defined at UCM as:
    i. Adults: intravenous infusion: 0.06-0.5 mg/kg/hr (max 40 mg/hr) OR oral: 2-5 mg/kg/day using ideal or actual body weight, whichever is less.
    ii. Pediatrics: intravenous infusion: 0.06 – 0.3 mg/kg/hr OR oral: 0.2-0.5 mg/kg/dose (max 50 mg) PO 2 to 3 times daily using ideal body weight or actual body weight, whichever is less.
f. Clinicians should understand ketamine pharmacokinetics and pharmacodynamics to use this medication safely and effectively.

II. Common Indications

a. Opioid tolerance: typically for those consuming greater than 60 mg of oral morphine equivalents per day for at least 1 week.
b. Uncontrolled post-operative pain.

c. Severe intractable pain not controlled by escalating doses of opioids.
d. Opioid rotation has failed to improve side effects or intolerance of opioid analgesics.
e. Severe neuropathic pain including central sensitization.
f. Evidence of opioid induced hyperalgesia: a painful stimulus is perceived as being out of proportion (unbearable) to the noxious stimulus under high dose opioid therapy.

III. Restrictions

a. Restrictions for use of ketamine continuous infusion or oral therapy exist at UChicago Medicine

i. Continuous Intravenous Infusion: See Appendix 1.

ii. Oral: See Appendix 2.

iii. Intermittent Bolus: See Appendix 3.

IV. Contraindications and Warnings for Ketamine:

Absolute

a. Hypersensitivity to ketamine
b. Uncontrolled/active seizures
c. Active psychotic disorder(s)
d. Liver failure: Child Pugh class C

Relative

a. Elevated intracranial pressure (ICP) or intraocular pressure (IOP)
b. Uncontrolled hypertension
c. Severe ischemic heart disease or severe congestive heart failure
    a. Results in increased myocardial oxygen demand
d. Uncontrolled psychiatric issues

V. Pharmacokinetics

a. Absorption:
    i. 16% of administered drug is absorbed orally limiting its oral efficacy
b. Distribution:
    i. Protein binding: 27%
    ii. Volume of distribution: 2-3L/kg
c. Metabolism:
    i. Hepatic metabolism (N- demethylation)
    ii. Active metabolites: norketamine
d. Elimination:
    i. Renal elimination
    ii. Half-life: 2-3 hours

iii. Most of dose appears in urine as inactive metabolites; 4% excreted as ketamine or norketamine

VI. Dosing

a. Continuous Intravenous Infusion: See Appendix 1.
b. Oral: See Appendix 2.
c. Intermittent Bolus: See Appendix 3.

VII. Drug Interactions

a. There are no reports of clinically significant drug-drug interactions with the administration of ketamine.
b. Some drugs may increase the effects of ketamine:
    i. antifungals, barbiturates, opioids, and antidepressants

VIII. Dispensing and Administration:

a. Continuous Intravenous Infusion: See Appendix 1.
b. Oral: See Appendix 2.
c. Intermittent Bolus: See Appendix 3.

IX. Adverse Effects:

Adverse effects tend to be dose-related and are infrequent when used at subanesthetic doses. Side effects may be reduced with small reductions in dose.

a. **Cardiovascular**: Hypertension, tachycardia, increased cardiac output, hypotension
b. **Psychiatric**: Blunted affect, emotional withdrawal, thought disorders, delirium
c. **Central Nervous System (CNS)**: Tremors, tonic-clonic movements, fasciculation, increased intracranial pressure
d. **Gastrointestinal (GI)**: Hypersalivation, vomiting
e. **Neuromuscular/skeletal**: Increased skeletal tone
f. **Ocular:** Diplopia, nystagmus, increased intraocular pressure
g. **Respiratory:** Depression of cough reflex, respiratory depression or apnea with large doses or rapid infusions, laryngospasm
h. **Endocrine/Metabolic**: increased metabolic rate
i. **Psychotomimetic**: vivid dreams, hallucinations, floating sensations, visual-spatial disorders

X. Monitoring

a. Continuous Intravenous Infusion: See Appendix 1.
b. Oral: See Appendix 2.
c. Intermittent Bolus: See Appendix 3.

XI. Monitoring Exceptions:

a. Monitoring of patients receiving low dose ketamine for pain at the "end of life", and/or under Palliative Care/Comfort Care status (DNR/DNI) will be at the

discretion of the primary service in consultation with the Pain Services or Palliative Care Services. In such a setting, the patient should still be monitored for increased sedation, agitation, and increased oral secretions.

b. Monitoring should not prevent ambulation outside of the room.

XII. Holding Parameters

a. Increase in systolic BP > 20% of baseline
b. Respiratory depression (< 10 breaths/min for adults, < 2/3 the normal pediatric age-related RR) or desaturation below 90% on RA
c. Acute change in mental status (change in GCS, delirium)

XIII. Discharge Planning

a. Continuous Intravenous Infusion: See Appendix 1.
b. Oral: See Appendix 2.
c. Intermittent Bolus: See Appendix 3.

XIV. Outpatient Follow-up

a. Continuous Intravenous Infusion: See Appendix 1.
b. Oral: See Appendix 2.
c. Intermittent Bolus: See Appendix 3.

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Appendix 1.
Low Dose Continuous Intravenous

I. Restrictions:

a. Acute Pain Service or Palliative Care consultation is required to initiate therapy.
b. The indication is for the treatment of severe pain in patients with common indications listed under section II (under main ketamine protocol) of this document and as determined by the Acute Pain Service or Palliative Care consultation team.
c. All low-dose ketamine orders for the management of pain will be written by a member of the Acute Pain Service or member of the Palliative Care Team following consultation and utilizing the analgesic, sub-anesthetic, low-dose ketamine order set.

II. Dosing:

a. Intravenous administration of ketamine will only be performed in the setting of continuous pulse oximetry.
b. Intravenous ketamine will be limited to 0.06-0.5 mg/kg/hr (adults; max 40 mg/hr) and 0.06 – 0.3 mg/kg/hr (pediatrics) based on ideal body weight or actual body weight, whichever is less.
a. Starting dose:
    a. **Adults**:
        i. Normal renal or hepatic function: typically, 0.1- 0.15 mg/kg/hr based on ideal body weight or actual body weight, whichever is less.
    b. **Pediatrics:** 0.06 mg/kg/hr based on ideal body weight or actual body weight, whichever is less.
    c. Consider lower starting dose in patients with renal or hepatic dysfunction due to reduced ketamine & norketamine (active metabolite) clearance. Liver failure: Child Pugh class C.
        i. Contraindicated at UCM as no dosing recommendations can be provided.
b. Dose changes:
    a. Ketamine infusion is non-titratable and requires a palliative medicine or pain physician order to change an infusion rate.
c. <u>Current long acting scheduled opioid doses should be reduced when possible during ketamine initiation and dose titration. Opioid dose escalation should not be performed simultaneously with ketamine titration, due to risk of sedation and respiratory depression.</u>

III. Dispensing and Administration:

<u>Dispensing:</u>

a. Standard concentration: 200 mg/100 mL bag .

Administration:

a. Y-site ketamine compatibilities: fentanyl, hydromorphone, midazolam, morphine, propofol
b. May precipitate in line with diazepam (may need to 'sandwich' with saline or run in different line).

IV. Monitoring

The use of low-dose ketamine for pain will include the following monitoring:

a. Continuous Pulse Oximetry (CPO)
b. Routine vital signs, pain (NRS), & age-appropriate sedation scores every 2 hours for 2 hours, then every 4 hours for the duration of the infusion
c. At the start of an infusion or after an increase in dose, monitoring should be more frequent: every 2 hours for 2 hours (Pain Score, Sedation Level), then every 4 hours.
    a. If systolic blood pressure changes more than 20% from baseline, systolic blood pressure > 20% of baseline,, extreme changes in mental status, respirations are less than 10 breaths/minute (< 2/3 pediatric age-related RR), or if the patient is slow to arouse with continuous stimulation:
        i. Assess vital signs
        ii. Administer oxygen and provide positive pressure ventilation if necessary
        iii. Notify provider from ordering service, APS or Palliative Care
            1. Please page acute pain service or Palliative Care (pager #3294 or Phone #6-2394) if any changes in vital signs or mental status.
        iv. Prepare for reversal with naloxone, see reversal and management section for dosing recommendations (Section XII) Only if patient has already received opioids.
d. Hold Parameters:

If any of the following occur, notify a physician on the palliative care or pain service.

    a. Increase in systolic blood pressure by more than 20% of baseline (e.g., baseline: 120/80 mmHg increased to ≥ 144/80 mmHg) or systolic blood pressure > 160 mm Hg (or > 20% of baseline for pediatrics)
    b. Respiratory rate is < 10 breaths/min (< 2/3 pediatric age-related RR)
    c. Acute change in mental status (change in GCS, delirium) difficult to arouse despite continuous stimulation
e. Nursing should document total drug amount infused every 12 hours.
f. The Acute Pain or palliative consultation service will follow the patient while receiving ketamine infusion to monitor for effects and significant adverse effects.

Monitoring Exceptions:

a. Monitoring of patients receiving low dose ketamine for pain at the "end of life", and/or under Palliative Care / Comfort Care status (DNR/DNI) will be at the discretion of the primary service in consultation with the Pain Services or Palliative Care Services. In such a setting, the patient should still be monitored for

increased sedation, agitation and increased oral secretions.

b. Monitoring is not required while patient is ambulating or outside of their room. Patient not to leave unit with ketamine infusion running ("going outside to smoke"), unless under supervision of nursing staff.

V. Discharge Planning

a. No specific needs upon discharge after low-dose ketamine infusion.

VI. Outpatient Follow-up

a. No specific follow up needs upon discharge after low-dose ketamine infusion.

Appendix 2.
Oral Ketamine

I. Restrictions:

a. Acute Pain Service or Palliative Care consultation is required to initiate therapy.
b. The indication is for the treatment of severe pain in patients with common indications listed under section II (under main ketamine protocol) of this document and as determined by the Acute Pain Service or Palliative Care consultation team.
c. All low-dose ketamine orders for management of pain will only be written by a member of the Acute Pain Service or member of the Palliative Care Team following consultation and utilizing the analgesic, sub-anesthetic, low-dose ketamine order set.
d. Continuation of home therapy is not allowed without Palliative Medicine Service **OR** Acute Pain Service consultation.

II. Dosing:

Oral:

a. Starting Dose:
    a. **Adults**:
        i. Normal hepatic function: 0.5 mg/**kg** by mouth every 6 hours (max 2 mg/kg/day).
        ii. Consider lower starting dose in patients with hepatic dysfunction due to reduced ketamine & norketamine (active metabolite) clearance.
    b. **Pediatrics**:
        i. Normal hepatic function: 0.2 mg/kg/dose (max 50 mg/dose) by mouth every 8 to 12 hours (max 0.6 mg/kg/day or total of 150 mg/day).
        ii. Consider lower starting dose in patients with hepatic dysfunction due to reduced ketamine & norketamine (active metabolite) clearance.
    c. Liver failure: Child Pugh class C
        i. Contraindicated at UCM as no dosing recommendations can be provided.
b. Titration:
    a. **Adults**: Average oral doses of 200 mg per day in divided doses required for pain relief.
        i. Dosing may be increased daily by 0.5 mg/**kg** by mouth every 6 hours (2 mg/**kg**/day) until pain relief or side effects occur.
        ii. Relative maximum dose: 500 mg/day (in divided doses)
    b. **Pediatrics**:

i. Dosing may be increased daily by 0.1 mg/**kg**/dose up to 0.5 mg/**kg**/dose (max 50 mg/dose) every 8 to 12 hours (max 1.5 mg/**kg**/day or total of 150 mg/day).

c. <u>Current opioid doses should be reduced when possible during ketamine dose titration. Opioid dose escalation should not be performed simultaneously with ketamine titration, due to risk of sedation and respiratory depression.</u>

III. Dispensing and Administration:

<u>Dispensing:</u>

a. There is no commercially available oral formulation of ketamine.
b. Ketamine IV solution should be drawn up in an oral syringe by central pharmacy for the specific dose.
    i. Vials (100mg/mL – 5mL vial) should NOT be delivered to the floor as a bulk item.
c. Narcotics technician will then load the pre-filled oral syringes into the automated dispensing cabinet, under the patient's specific bin.

<u>Administration:</u>

a. The product may be diluted with fruit juice or cola to mask the bitter taste at the bedside.

IV. Monitoring

a. If systolic blood pressure changes more than 20% from baseline, extreme changes in mental status, if respirations are less than 10 breaths/minute (< 2/3 the pediatric age-related RR), or if the patient is slow to arouse with continuous pain and mental status should be monitored by a nurse one hour following administration then every 4 hours thereafter.
    i. Assess vital signs
    ii. Administer oxygen and provide positive pressure ventilation if necessary
    iii. Notify the physician
    iv. Please page acute pain service (pager #3294 or phone #6-2394) if any changes in vital signs or mental status.
    v. Prepare for reversal with naloxone, see reversal and management section for dosing recommendations (Section XII)
b. Hold Parameters:
    If any of the following occur hold the next dose of ketamine and notify a physician.

i. Change (increase/decrease) in systolic blood pressure by more than 20% of baseline (e.g., baseline: 120/80 mmHg increased to ≥ 144/80 mmHg or < 96/80 mmHg).
ii. Respiratory rate is < 10 breaths/min (< 2/3 the pediatric age-related RR)
iii. Acute change in mental status (change in GCS, delirium, unable to give pain score) difficult to arouse despite continuous stimulation.

c. The Acute Pain consultation service will follow the patient for at least 24 hours after initial IV infusion of ketamine to monitor for significant side effects. After this point they may follow the patient (or sign off) as they see fit.

Monitoring Exceptions:

a. Monitoring of patients receiving low dose ketamine for pain at the "end of life", and/or under Palliative Care / Comfort Care status (DNR/DNI) will be at the discretion of the primary service in consultation with the Pain Services or Palliative Care Services. In such a setting, the patient should still be monitored for increased sedation, agitation and increased oral secretions.
b. Monitoring is not required while patient is ambulating or outside of their room.

V. Discharge Planning

a. <u>Prescription must be written by palliative care or pain/anesthesia attending physician.</u>
b. Prescription must indicate the following:
    i. Dosage form & strength:
        a. Ketamine 50 mg capsule **<u>OR</u>**
        b. Ketamine 50 mg/mL oral solution
    ii. Quantity:
        a. Typically a 30-day supply
    iii. Refills
        a. Schedule III controlled substance, therefore, refills are permitted
c. Pharmacy Information:
    i. Patient must have prescription faxed to a compounding pharmacy at least 24 hours prior to discharge. Also, provide the patient with the original paper prescription to present to the pharmacy upon pick-up.
    ii. Family members may pick up the medication on behalf of the patient with the patient's permission and proper identification.
    <u>Compounding Pharmacies</u>:
        b. Martin Avenue Pharmacy
            i. 1247 Rickert Dr. Naperville, IL 60540
            ii. Phone: (630) 355-6400
            iii. Hours: 9am - 7pm Mon-Fri, 9am - 2pm Sat, Closed on Sundays
            iv. Delivery service available upon request (call Martin Avenue Pharmacy to set up)

c. Segreti Pharmacy
    i. 6144 Roosevelt Rd; Oak Park, IL 60304
    ii. Phone: (708) 383-6757
    iii. Hours: 9 am - 6pm Mon-Fri, 9am - 4pm Sat, Closed on Sundays

VI. Outpatient Follow-up

a. Patients must be seen in the UCM outpatient palliative medicine or anesthesia pain clinic within one week of discharge from hospital.

Appendix 3.
Intermittent Bolus Ketamine - Adults

I. Restrictions:

a. Administration is restricted to either critical care, PACU or emergency department.
b. Patients are required to be on continuous pulse oximetry and monitoring of pain (NRS), & sedation scores every 5 minutes for 30 minutes after administration.
c. The indication is for the treatment of severe pain in patients with common indications listed under section II (under main ketamine protocol) of this document and under the medical direction and approval by the attending physician of the Acute Pain Service, Palliative Care, OR Emergency Medicine service.

II. Dosing:

a. Starting Dose:
    a. Normal renal or hepatic function:
        i. Intravenous (IV) Bolus: 0.3 mg/kg (max dose: 20 mg) x 1
            1. May repeat at 0.15 mg/kg after 30 minutes if inadequate pain response
        ii. Intramuscular (IM) Bolus: 0.3 mg/kg (max dose: 20 mg) x 1
            1. May repeat at 0.15 mg/kg after 30 minutes if inadequate pain response
        iii. Consider lower starting dose in patients with BMI ≤ 18, age > 60 years, renal or hepatic dysfunction due to reduced ketamine & norketamine (active metabolite) clearance.

b. <u>Current opioid doses should be reduced when possible during ketamine dose initiation or titration. Opioid dose escalation should not be performed simultaneously with ketamine titration, due to risk of sedation and respiratory depression.</u>

III. Dispensing and Administration:

<u>Dispensing:</u>

b. Standard concentration: 200 mg/20 mL (10 mg/mL)

IV. Monitoring

The use of intermittent bolus ketamine for pain will include the following monitoring:

a. Continuous Pulse Oximetry (CPO)
b. Routine vital signs; Pain (NRS), & sedation scores every 5 minutes x 30 minutes after administration of a ketamine intermittent bolus dose followed by every 2 hours x 2 hours.
    a. If systolic blood pressure changes more than 20% from baseline or systolic blood pressure increases to > 160 mm Hg, or extreme changes in mental status, if respirations are less than 10 breaths/minute, or if the patient is slow to arouse with

continuous stimulation:

i. Assess vital signs
ii. Administer oxygen and provide positive pressure ventilation if necessary
iii. Notify the physician
iv. Prepare for reversal with naloxone, see reversal and management section for dosing recommendations (Section XII)

c. Hold Parameters:

If any of the following occur notify a physician on the palliative care or pain service.

a. Change (increase/decrease) in systolic blood pressure by more than 20% of baseline (e.g., baseline: 120/80 mmHg increased to ≥ 144/80 mmHg or < 96/80 mmHg) or systolic blood pressure > 160 mm Hg
b. Respiratory rate is < 10 breaths/min
c. Acute change in mental status (change in GCS, delirium, inability to give pain score)
d. Difficult to arouse despite continuous stimulation

V. Discharge Planning

a. Patients are to be monitored for 60 minutes after last administration of ketamine for to discharge.

VI. Transition to Continuous Intravenous Infusion

a. Continuous intravenous infusion requires consultation with the pain management service. (see Appendix 1).

Acute Pain Service (Pager #3294 or Phone #6-2394)

Malignant Hyperthermia in PACU Tip Sheet

Key Points

- Malignant Hyperthermia (MH) is an rare, inherited genetic disorder of the skeletal muscles that is usually triggered by certain halogenated anesthetic gases with or without administration of muscle relaxant, succinylcholine
  - The uncontrolled release of calcium from the skeletal muscle cells results in sustained muscle contraction
- MH has an acute and rapidly progressive onset
  - It usually occurs during anesthesia induction, possibly 2-3 hours after induction and **within the 1st hour in PACU.**
- MH crisis does not necessarily occur every time an MH susceptible patient is exposed to an triggering agent
- Reaction occurs more often in males vs females; 45%-52% occurs in those 19 years or younger

MH Triggering Agents

- Volatile Anesthetic Agents (desflurane, sevoflurane, isoflurane, halothane, enflurane) with/without administration of succinylcholine

Signs & Symptoms

- Unexplained high end-tidal carbon dioxide (ETCO2), tachypnea, sinus tachycardia, generalized muscle rigidity or masseter
- Later onset-hyperthermia (occurs as early as 15 minutes after onset of MH)

PACU Treatment *(initiate treatment immediately after suspected MH crisis)*

- Primary Nurse remain with the patient and call for assistance (MH & Crash Cart); Hyperventilate patient with 100% O2 at 10 l/min via ambu bag until anesthesia provider arrives for airway management

- Charge Nurse will call OR Charge Nurse to retrieve MH Cart and delegate roles
  - **Location of MH Cart**
    - **<u>CCD OR</u>**
    - Central Core Outside OR 18
    - Charge RN #5-4608

Tip sheets are only used as educational reference.
Always refer to UCM Intranet for policy and protocol, treatment orders, and Lexicomp

12/2023 T.Rice

- Assign 2-3 Nurses to reconstitute **Revonto (dantrolene sodium):** administer immediately
    - Acts as skeletal muscle relaxant used to treat hypermetabolism during a MH Crisis
    - Reconstitute with 60 preservative-free sterile water. Shake ~ 20 seconds
    - Initial dose is 2.5mg/kg RAPID IV Push and repeat continuously until symptoms subside
    - Post MH- 1mg/kg every 4-6 hours by bolus or 0.25mg/kg/hr. by infusion for a minimal of 24 hours
    - Has mannitol (Don't give Lasix)
- Assign nurse to start a peripheral iv if needed
- Assign a staff member to collect ice to start cooling measures
    - Apply ice packs to groin, axillae, and head
- Assign a nurse to hang cool iv fluids (located in MH Cart)
- Call MHAUS 1-800-644-9737 (Anesthesia provider)

- Monitor temperature closely- Stop cooling measure when temp. is < 100°F (38 °C)
- Insert foley catheter, monitor urine output
- Send labs (ABG, electrolytes, creatinine kinase (ck), serum/urine myoglobin, and coagulation
- Treat dysrhythmias *(Do not treat dysrhythmias with calcium channel blocking agents)*
- Treat Hyperkalemia:
    - **I**nsulin/Glucose
        - **Pediatrics-**Regular Insulin 0.1 units/kg IV; 25% Glucose 2ml/kg IV
        - **Adults-**Regular Insulin 10 units IV; 50% Glucose 2ml/kg IV
    - Calcium Chloride 10mg/kg or Calcium Gluconate 10-50mg/kg
    - Nebulized Albuterol 4mg
- Bicarbonate 1-2 meq/kg IV (if ABG shows metabolic acidosis)
- Prepare patient for transfer to ICU to continued monitoring and care

The University of Chicago Medical Center
Policy and Procedure Manual

Policy: Pain - Assessment, Documentation and Education
Policy: PC 151
Issued: December 2006
Revised: October 2021

PURPOSE:
It is the mission of the University of Chicago Medical Center inpatient and ambulatory settings to effectively manage patient's pain utilizing a comprehensive interdisciplinary approach.

POLICY:
1. All patients will be individually assessed for pain.

2. Patients will receive pharmacological and/or non-pharmacological interventions that prevent, reduce, or eliminate pain and will be reassessed for the effectiveness of the intervention.

3. Patients and families should be provided with an explanation of pain assessment frequency, method, interventions, and outcomes.

4. Staff members providing any aspect of pain management will be educated on the policy and related procedures or interventions.*4,7*

PROCEDURES:
A. Pain Assessment and Reassessment

Pain Assessment
The following hierarchy should be followed for pain assessment:

1. Attempts should be made to obtain a self-report for pain from all patients
2. Assessments of patients able to provide self-report should also include a goal score (acceptable intensity level).
3. Identify potential causes known to cause pain (procedures, etc.)
4. Observe patient behaviors
5. Surrogate (parent, significant other, family member, etc.) report of pain and changes in behavior/routine
6. Attempt an analgesic trial

Initial Pain Assessment
Patients will have a pain assessment completed upon each admission to the inpatient, outpatient (including triage areas) emergency room and perioperative/procedural area settings. The initial assessment of the patient's pain may include:

1) Onset of symptom
2) Pain Intensity
3) Goal Score (Acceptable Intensity Level)
4) Location
5) Quality
6) Non-verbal pain signs
7) Aggravating factors

8) Interventions (Alleviating factors)
9) Pain type
10) Effect on ADLs (as documented in the Functional Screen)

Note: Multiple pain sites are independently assessed

Pain Reassessment
If pain is not present upon admission, the patient will be re-assessed for the presence of pain with each set of scheduled vital signs. If pain is identified, a more detailed pain assessment is completed.

Reassessment may include: patient's pain goal score, pain intensity, quality, and location.

The frequency of reassessment should be based on the individual patient's pain level and report of acceptable level of pain (goal score). Minimally, this would include the following:

1. With each scheduled set of vital signs and more often as warranted by patient condition or acuity.
2. After each known pain-producing event
3. After each pharmacologic/non-pharmacologic intervention once sufficient time has elapsed for the treatment to reach peak effect *(exception: when patients are receiving scheduled pain medications and report an acceptable pain score/are at goal score reassessment is not required).* *1,3-8,7*
4. Patients receiving PCA, epidural or continuous opioid infusions require more frequent assessments, see policies:
    a. PC 95 Patient Controlled Analgesia (PCA),
    b. PC 99 Continuous and Patient Controlled Epidural Analgesia,
    c. PC 117 Opioid Analgesic Infusion, Continuous (non-PCA)
5. In an outpatient setting, patients are instructed to contact their care provider with feedback on the efficacy of the therapy prescribed.
6. In the Family Birth Center laboring patients pain will be assessed minimally every four hours using the self-reported numeric pain scale. Pain tolerance will also be assessed and self-reported as "coping", "non-coping", "acceptable", and "denies need for interventions" and "verbalizes understanding to request interventions as needed" minimally every four hours:
    a. All non-coping reponses will require intervention and reassessment every 1 hour for non-pharmacologic and every 30 minutes for patients receiving intravenous pharmacologic intervention.
    b. All coping responses do not require intervention or reassessment more frequently than every four hours unless requested by the patient even if pain goal score is not met. All laboring patients will be educated on the coping & non-coping pain tolerance assessment.

Note: With each new report of pain complete and document a full pain assessment.
The effectiveness of interventions (including pain score and presence of side effects) should be assessed and documented following all pain interventions.

RED FLAG CRITERIA: For inpatients, unrelieved pain demonstrated by two consecutive pain

scores above the patient's goal score warrants a phone call to the provider for alternative intervention.

B. Pain Assessment Tools (Appendix A)
Pain is assessed using the following pain assessment tools unless conditions exist that warrant the use of different pain assessment tools.

Self-report scales should be used whenever possible. Younger children and cognitively impaired adults may be able to provide self-report. Therefore, the ability of these individuals to use a self-report scale must be determined.

Self-Report Scales

1. The **0-10 Numeric Pain Scale** is used to assess cognitively developed children (usually around age 8 and older), adolescents and adults

2. **Faces Pain Scale Revised (FPS-R)** is recommended for use ages 4 up to 12 years or patients who may be cognitively impaired but are able to use the scale to provide a self-report. If preferred by the patient over the numeric scale it can be used beyond the age of 12.

Behavioral Scales

1. Non-Verbal Pain Scale (NVPS), is used to assess pain in sedated, intubated, and critically ill adults

2. The **PAINAD** scale is used to assess adult patients with advanced dementia or adult patients who are unable to self-report

3. Revised FLACC (r-FLACC) (F) Face; (L) Legs; (A) Activity; (C) Cry; (C) Consolable scale is used with infants, and children up to age 4, cognitively impaired children and adolescents, and critically ill children, adolescents, and young-adults unable to provide self-report. The r-FLACC incorporates caregiver input on child's behaviors when in pain.

4. NPASS (Neonatal Pain Agitation Sedation Scale) scale is used to assess pain in neonates and infants up to 36 months of age.

6. **NIPS** scale is used to assess newborn infants.

7. **Coping with Labor Algorithm** should be used in labor and delivery triage during pain assessment when assigning an acuity level as part of the Maternal Fetal Triage Index.

Pain Management
There is an interdisciplinary approach to pain management.

- Identification of pain as assessed by physicians, APNs, PAs, nurses and other interdisciplinary team members should result in the implementation of a pain management plan.
- Interdisciplinary pain management services are coordinated, as needed. These respective services document their interventions and patient outcomes in the patient medical record.
- Any healthcare professional providing direct care to the patient should report and act on any

pain complaints voiced by the patient.

- If necessary, a team conference is called to resolve any areas of contention in the pain management plan. If there are ethical implications for the patient's care, an Ethics Consult is called to assist in the resolution of the issue

The Acute Pain Service/Inpatient Consult Service and/or Palliative Care Consult Service provide consultation for difficult pain conditions, (e.g. post-surgical, chronic pain, terminally ill, inadequate analgesia) on request of the managing medical/surgical service.

- All patients reporting pain or demonstrating pain behaviors ought to be offered some form of pain intervention (pharmacological or non-pharmacological).
- Consider offering pain interventions to patients when their pain score is greater than their goal score.
- In patients unable to self-report, *interventions should be implemented* when pain scores are 4 or greater.
- Pain interventions should be offered to all patients when there are known causes of pain (e.g. for painful procedures or after surgery).

The patient/significant other is informed of his rights and responsibilities of pain management by the healthcare team. The patient participates in the decision-making process regarding options for pain management.

The patient's report of pain is accepted as the standard. Patient-specific pain management outcomes are established and if not achieved, elicit a review and modification of the pain management plan. The patient's personal goal for comfort/function level is determined and a plan of care is designed to try to meet this goal if possible.

Only the patient can self-report their pain goal. If a patient is unable to participate in the decision making process and/or identify their goal, the pain management process should include members of the patient care team, family members and/or significant others.

Include pain management in discharge plan. A need for home assessment and intervention should be assessed and addressed.

Healthcare professionals are knowledgeable about pain management, demonstrate basic pain assessment skills, and provide pain interventions in a prompt, caring fashion. Pain management education and/or competencies are incorporated into the orientation process and updated as needed to maintain pain management assessment/management skills.

Pain Assessment and Management During Sleep

- Pain assessments should be coordinated with other care, when possible to minimize sleep disruption.

- If the patient has been comfortable during the waking hours with occasional PRN medications (i.e. 1 or 2 doses), there is no need to wake the patient to assess pain or provide PRN analgesics unless the patient requests to be awakened.

- Pain analgesia should be given through the night if the patient has been receiving "around the

clock" medication for pain control and/or if the patient has been experiencing severe pain.

Monitoring for adverse effects should include the risk for over sedation and/or respiratory depression. Patients with the following conditions, may be at increased risk: [6]

- Obstructive Sleep Apnea
- Post-Op/Post/Procedure
- When existing doses of opioid analgesics are increased
- When new analgesic modalities are introduced

- Sleeping patients who are receiving opioids, should have their respiratory rate, pattern (regularity), and chest excursion (effort) assessed. [6,27] Patients found to have signs of respiratory depression or over-sedation (paradoxical rhythm, poor chest expansion/respiratory effort, snoring/noisy respirations, or desaturation) should be immediately aroused. Instruct the patient to take deep breaths, reposition as needed, contact the patient's provider, and continue to monitor. [6,27] Withhold any additional doses of narcotic analgesia unless indicated otherwise by ordering physician.

Documentation

Inpatient Settings

Licensed independent practitioners document their initial screening, pain assessment, follow-up assessments, and actions taken in the patient medical record. Nurses document their initial pain assessment in the Needs Assessment form. Patient's pain scores, pain goal score, assessments, and reassessments of pain are documented on the vital signs flowsheet under the Pain Rows. Expanded notation of the patient response is documented in notes if necessary. An interdisciplinary plan of care (IPOC) is initiated, reviewed, and updated for patients reporting pain per UCMC policy.

Ambulatory Setting

Screening questions about pain are asked during each patient visit and documented in the medical record. If a detailed assessment is required, it is completed with steps noted about appropriate follow-up actions taken by the healthcare provider and patient.

Patient Education on Pain

Patient education is provided to patients and family members/significant others to enhance understanding of the pain management plan. Discussion and education with the patient/family should also include the importance of compliance with the analgesic regimen and its adaptation to the patient's unique lifestyle.

Key elements in the patient education plan include:

- Importance of reporting pain/pain relief.
- Pathophysiology of the pain process.
- How to describe the intensity of his/her pain using an agreed upon pain rating scale, satisfaction with relief, and presence and severity of side effects. Information about medication, dose, route, frequency, and potential side effects and their management.
- Use of non-pharmacological pain relief methods.
- Explore concerns about the use of opioids, if voiced.

The family should receive hospital and community resources to contact for unresolved pain issues on discharge. All education of the patient and/or their family should be documented in the patient's

medical record by the registered nurse in the patient education navigator of the EMR.

INTERPRETATION, IMPLEMENTATION, AND REVISION:
The Department of Anesthesia and Critical Care Services, and the Department of Nursing are responsible for the interpretation, implementation and revision of this policy.

Appendix A: Pain Assessment Tools
Appendix B: References

CROSS-REFERENCES:
PC 16: Moderate and Deep Sedation by Non-Anesthesiologists,
A05-05: Patient Rights and Responsibilities,
PC 117: Opioid Analgesic Infusion, Continuous (Non PCA), PC 95: Patient-Controlled Analgesia (PCA),
PC 99: Continuous and Patient Controlled Epidural Analgesia,
PC 157 Patient Education

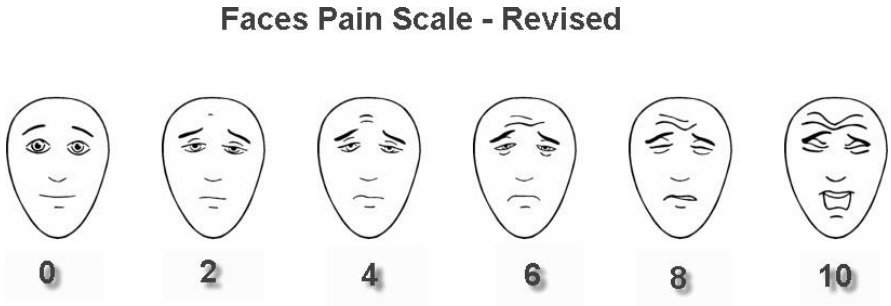
Appendix A
PAIN ASSESSMENT TOOLS

Numerical Pain Scale**:** Intended patient population: Cognitively developed children, adolescents and adults.

The patient is asked to identify how much pain he or she is having by choosing a number from 0 (no pain) to 10 (the worst pain imaginable).

The 0-10 Numeric Pain Scale:

Faces Pain Scale Revised (FPS-R): Intended patient population: Children ages 4-12 years or patients who may be cognitively impaired but are able to use the scale to provide a self-report. If preferred by the patient over the numeric scale it can be used beyond the age of 12.
Uses six faces with different expressions on each face. **"These faces show how much something can hurt. This face** *[point to left-most face]* **shows no pain. The faces show more and more pain** *[point to each from left to right]* **up to *this* one.** *[point to right-most face]* **It shows very much pain. Point to the face that shows how much you hurt** *[right now]***."**
Score the chosen face 0, 2, 4, 6, 8, or 10, counting left to right, so "0" equals "No pain" and "10" equals "Very much pain." Do not use words like "happy" and "'sad." This scale is intended to measure how children feel inside, not how their face looks.



r-FLACC: Intended patient population: infants, and children up to age 4 years, cognitively impaired children and adolescents, and critically ill children, adolescents, and young-adults unable to provide self-report. The r-FLACC incorporates caregiver input on child's behaviors when in pain.

Uses behavioral indicators to assess **pain**.. Each of the 5 categories is scored between 0 and 2, which results in a total score between 0 and 10.

- 0 = Relaxed and comfortable
- 1-3 = Mild discomfort
- 4-6 = Moderate **pain**
- 7-10 = Severe **pain** or discomfort or both

Revised FLACC (r-FLACC) (Face; Legs; Activity; Cry; Consolability):

Categories	0	1	2
Face	No particular expression or smile	Occasional grimace or frown, withdrawn, disinterested, **sad, appears worried**	Frequent to constant quivering chin, clenched jaw, **distressed looking face, expression of fright/panic**
Legs	Normal position or relaxed, **usual tone & motion to limbs**	Uneasy, restless, tense, **occasional tremors**	Kicking, or legs drawn up, **marked increase in spasticity, constant tremors, jerking**
Activity	Lying quietly, normal position, moves easily, **regular, rhythmic respirations**	Squirming, shifting back and forth, tense, **tense/guarded movements, mildly agitated, shallow/splinting respirations, intermittent sighs**	Arched, rigid or jerking, **severe agitation, head banging, shivering, breath holding, gasping, severe splinting**
Cry	No cry (awake or asleep)	Moans or whimpers; occasional complaint, **occasional verbal outbursts, constant grunting**	Crying steadily, screams or sobs, frequent complaints, **repeated outbursts, constant grunting**
Consolability	Content, relaxed	Reassured by occasional touching, hugging or being talked to, distractible	Difficult to console or comfort, **pushing caregiver away, resisting care or comfort measures**

Non-Verbal Pain Scale (NVPS)

Intended patient population: sedated, intubated, and critically ill adults.

NVPS rates non-verbal **pain** in 5 categories and 3 levels. Each of the five categories is scored from 0-2 resulting in a total score between 0-10.

- 0-2 = no **pain**
- 3-6 = moderate **pain**
- 7-10 = severe **pain**

NON-VERBAL PAIN SCALE (NVPS):

Categories	0	1	2
Face	No particular expression or smile	Occasional grimace, tearing, frowning, wrinkled forehead	Frequent grimace, tearing, frowning, wrinkled forehead
Activity (Movement)	Lying quietly, normal position	Seeking attention through movement or slow, cautious movement	Restless, excessive activity and/or withdrawal reflexes
Guarding	Lying quietly, no positioning of hands over areas of body	Splinting areas of the body, tense	Rigid, stiff
Physiology (Vital Signs)	Stable vital signs	Change in any of the following: *SBP > 20 mmHg *HR > 20/minute	Change in any of the following: *SBP > 30 mmHg *HR > 25/minute
Respiratory	Baseline RR/SpO2 Compliant with ventilator	RR > 10 above baseline, or 5% SpO2 Mild asynchrony with ventilator	RR > 20 above baseline, or 10% SpO2 Severe asynchrony with ventilator

Instructions: Each of the 5 categories is scored from 0 –2, which results in a total score between 0 and 10.

- Document total score by adding numbers from each of the categories. Scores of
- 0 – 2 indicate no pain,
- 3 – 6 moderate pain, and
- 7 – 10 severe pain.
- Pain score > 4 requires intervention, documentation, and reassessment.
- Document assessment with vitals on nursing flow sheet and complete assessment before and after intervention in nursing notes.

*Abbreviations: HR-heart rate: RR-respiratory rate; SBP-systolic blood pressure; SpO2-pulse oximetry

The PAINAD scale is used to assess adult patients with advanced dementia or adult patients who are unable to self-report

PAINAD Item Definitions

(Warden et al., 2003)

Breathing

1. *Normal breathing* is characterized by effortless, quiet, rhythmic (smooth) respirations.
2. *Occasional labored breathing* is characterized by episodic bursts of harsh, difficult, or wearing respirations.
3. *Short period of hyperventilation* is characterized by intervals of rapid, deep breaths lasting a short period of time.
4. *Noisy labored breathing* is characterized by negative-sounding respirations on inspiration or expiration. They may be loud, gurgling, wheezing. They appear strenuous or wearing.
5. *Long period of hyperventilation* is characterized by an excessive rate and depth of respirations lasting a considerable time.
6. *Cheyne-Stokes respirations* are characterized by rhythmic waxing and waning of breathing from very deep to shallow respirations with periods of apnea (cessation of breathing).

Negative Vocalization

1. *None* is characterized by speech or vocalization that has a neutral or pleasant quality.
2. *Occasional moan or groan* is characterized by mournful or murmuring sounds, wails, or laments. Groaning is characterized by louder than usual inarticulate involuntary sounds, often abruptly beginning and ending.
3. *Low level speech with a negative or disapproving quality* is characterized by muttering, mumbling, whining, grumbling, or swearing in a low volume with a complaining, sarcastic, or caustic tone.
4. *Repeated troubled calling out* is characterized by phrases or words being used over and over in a tone that suggests anxiety, uneasiness, or distress.
5. *Loud moaning or groaning* is characterized by mournful or murmuring sounds, wails, or laments in much louder than usual volume. Loud groaning is characterized by louder than usual inarticulate involuntary sounds, often abruptly beginning and ending.
6. *Crying* is characterized by an utterance of emotion accompanied by tears. There may be sobbing or quiet weeping.

Facial Expression

1. *Smiling or inexpressive*. Smiling is characterized by upturned corners of the mouth, brightening of the eyes, and a look of pleasure or contentment. Inexpressive refers to a neutral, at ease, relaxed, or blank look.
2. *Sad* is characterized by an unhappy, lonesome, sorrowful, or dejected look. There may be tears in the eyes.
3. *Frightened* is characterized by a look of fear, alarm, or heightened anxiety. Eyes appear wide open.
4. *Frown* is characterized by a downward turn of the corners of the mouth. Increased facial wrinkling in the forehead and around the mouth may appear.
5. *Facial grimacing* is characterized by a distorted, distressed look. The brow is more wrinkled, as is the area around the mouth. Eyes may be squeezed shut.

Body Language

1. *Relaxed* is characterized by a calm, restful, mellow appearance. The person seems to be taking it easy.
2. *Tense* is characterized by a strained, apprehensive, or worried appearance. The jaw may be clenched. (Exclude any contractures.)
3. *Distressed pacing* is characterized by activity that seems unsettled. There may be a fearful, worried, or disturbed element present. The rate may be faster or slower.
4. *Fidgeting* is characterized by restless movement. Squirming about or wiggling in the chair may occur. The person might be hitching a chair across the room. Repetitive touching, tugging, or rubbing body parts can also be observed.
5. *Rigid* is characterized by stiffening of the body. The arms and/or legs are tight and inflexible. The trunk may appear straight and unyielding. (Exclude any contractures.)
6. *Fists clenched* is characterized by tightly closed hands. They may be opened and closed repeatedly or held tightly shut.
7. *Knees pulled up* is characterized by flexing the legs and drawing the knees up toward the chest. An overall troubled appearance. (Exclude any contractures.)
8. *Pulling or pushing away* is characterized by resistiveness upon approach or to care. The person is trying to escape by yanking or wrenching him- or herself free or shoving you away.
9. *Striking out* is characterized by hitting, kicking, grabbing, punching, biting, or other form of personal assault.

Consolability

1. *No need to console* is characterized by a sense of well-being. The person appears content.
2. *Distracted or reassured by voice or touch* is characterized by a disruption in the behavior when the person is spoken to or touched. The behavior stops during the period of interaction, with no indication that the person is at all distressed.
3. *Unable to console, distract, or reassure* is characterized by the inability to soothe the person or stop a behavior with words or actions. No amount of comforting, verbal or physical, will alleviate the behavior.

2

Pain Assessment in Advanced Dementia Scale (PAINAD)

Instructions: Observe the patient for five minutes before scoring his or her behaviors. Score the behaviors according to the following chart. Definitions of each item are provided on the following page. The patient can be observed under different conditions (e.g., at rest, during a pleasant activity, during caregiving, after the administration of pain medication).

Behavior	0	1	2	Score
Breathing Independent of vocalization	• Normal	• Occasional labored breathing • Short period of hyperventilation	• Noisy labored breathing • Long period of hyperventilation • Cheyne-Stokes respirations	
Negative vocalization	• None	• Occasional moan or groan • Low-level speech with a negative or disapproving quality	• Repeated troubled calling out • Loud moaning or groaning • Crying	
Facial expression	• Smiling or inexpressive	• Sad • Frightened • Frown	• Facial grimacing	
Body language	• Relaxed	• Tense • Distressed pacing • Fidgeting	• Rigid • Fists clenched • Knees pulled up • Pulling or pushing away • Striking out	
Consolability	• No need to console	• Distracted or reassured by voice or touch	• Unable to console, distract, or reassure	
			TOTAL SCORE	

(Warden et al., 2003)

Scoring:

The total score ranges from 0-10 points. A possible interpretation of the scores is: 1-3=mild pain; 4-6=moderate pain; 7-10=severe pain. These ranges are based on a standard 0-10 scale of pain, but have not been substantiated in the literature for this tool.

Source:

Warden V, Hurley AC, Volicer L. Development and psychometric evaluation of the Pain Assessment in Advanced Dementia (PAINAD) scale. *J Am Med Dir Assoc.* 2003;4(1):9-15.

NPASS Neonatal Pain, Agitation & Sedation Scale

Intended patient population: Neonates and infants up to 36 months of age.

The N-PASS Tool: Neonatal Pain, Agitation, and Sedation Scale

Assessment Criteria	Sedation		Sedation/Pain	Pain/Agitation	
	-2	-1	0/0	1	2
Crying/Irritability	No cry with painful stimuli	Moans or cries minimally with painful stimuli	No sedation/ No pain signs	Irritable or crying at intervals Consolable	High-pitched or silent-continuous cry Inconsolable
Behavior State	No arousal to any stimuli No spontaneous movement	Arouses minimally to stimuli Little spontaneous movement	No sedation/ No pain signs	Restless, squirming Awakens frequently	Arching, kicking Constantly awake or arouses minimally/ no movement (not sedated)
Facial Expression	Mouth is lax No expression	Minimal expression with stimuli	No sedation/ No pain signs	Any pain expression intermittent	Any pain expression continual
Extremities Tone	No grasp reflex Flaccid tone	Weak grasp reflex ↓ muscle tone	No sedation/ No pain signs	Intermittent clenched toes, fists, or finger splay Body is not tense	Continual clenched toes, fists, or finger splay Body is tense
Vital Signs: HR, RR, BP, SaO_2	No variability with stimuli Hypoventilation or apnea	< 10% variability from baseline with stimuli	No sedation/ No pain signs	↑ 10% to 20% from baseline SaO_2 76% to 85% with stimulation – quick ↑	↑> 20% from baseline $SaO_2 \leq 75\%$ with stimulation – slow [arrow up] Out of sync/fighting vent

Note: Premature Pain Assessment: +1 if less than 30 weeks gestation/corrected age.

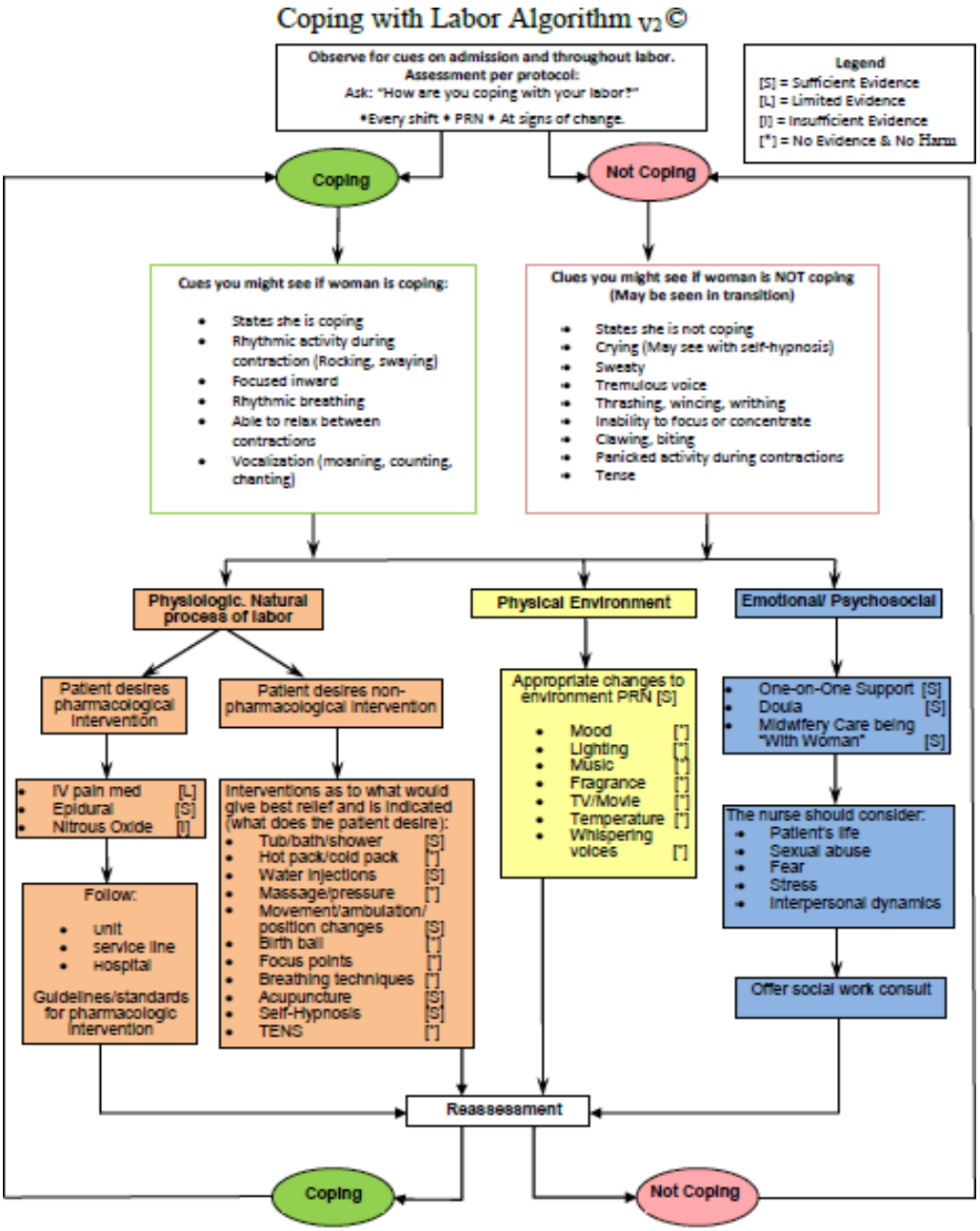
Neonatal/Infant Pain Scale (NIPS)

Used to assess **pain** in neonates. A score greater than 3 indicates **painParameters**	**0 point**	**1 point**	**2 points**
Facial Expression	• Relaxed muscles • Restful face • Neutral expression	• Grimace • Tight facial muscles-furrowed brow, chin, jaw, • negative facial expression – nose, mouth and brow	
Cry	• No Cry	• Whimper	• Vigorous

	• Quite	• Mild moaning, intermittent	Cry • Loud scream; rising, shrill, continuous • Note: Silent cry may be scored if baby is intubated as evidenced by obvious mouth and facial movement.
Breathing Pattern	• Relaxed • Usual pattern for this infant	• Change in Breathing • Indrawing, irregular, faster than usual; gagging; breath holding	
Arms	• Relaxed/Restrained • No muscular rigidity • Occasional random movements of arms	• Flexed/Extended, tense, straight arms • Rigid and/or rapid extension, flexion	
Legs	• Relaxed/Restrained • No muscular rigidity Occasional random leg movement	• Flexed/Extended, tense straight legs • Rigid and/or rapid extension, flexion	
State of Arousal	• Sleeping/Awake Quiet • Peaceful sleeping or alert • Random leg movement	• Fussy • Alert • Restless and thrashing	

Coping with Labor Algorithm *

Should be used in labor and delivery triage during pain assessment when assigning an acuity level as part of the Maternal Fetal Triage Index.



*UCM permission for use of the Coping with Pain Algorithm obtained from the Association of Women's Health, Obstetric and Neonatal Nurses' (AWHONN) Maternal Fetal Triage Index.

APPENDIX B

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PAIN MANAGEMENT TIP SHEET
Adult Inpatient/Outpatient, Pediatric, Perioperative

Initial Pain Assessment Patients will have a pain assessment completed upon each admission to the inpatient, outpatient, and emergency room and perioperative/procedural area settings. The initial assessment of the patient's pain may include:

• Onset of symptom	• Non-verbal pain signs
• Pain intensity	• Aggravating factors
• Goal score	• Interventions
• Location	• Pain type
• Quality	• Effect on ADLs

- **Establish an acceptable pain level**. **Script** "While we strive for all of our patients to be pain free, we know that this is often not possible. On a scale of 0-10 (0 no pain, 10 is the worst pain you could ever feel "as bad as it could be"), what do you consider a pain level that would be acceptable at this time?"

Pain Reassessment If pain is not present upon admission, patient should be re-assessed for the presence of pain with each set of scheduled vital signs. If pain is identified, a more detailed plan assessment is completed, including:

- Patient's pain goal score (for patients able to self-report)
- Pain intensity
- Quality
- Location

The frequency of the reassessment should be based on the individual patient's pain level and report of acceptable level of pain (goal score)

- With each set of vital signs and more often as warranted
- After each pharmacologic/non-pharmacologic intervention once sufficient time has elapsed for the treatment to peak effect. (30 minutes an average peak time after IV pain medication; 60 minutes an average peak time after oral medication)

  Reassesses pain. **Script** "Before you received your pain medication, you rated your X (describe where) pain as an X (state number they provided). On a scale of 0-10 (0 no pain, 10 is the worst pain you could ever feel), what is your pain level now?" (Prompt the patient, is it Better? Same? Worse?) If the same or worse provide additional treatment, (PRN medication, call physician if no prn order is available, consider non pharmacological treatment - hot/cold pack, reposition).

- Patients receiving PCA, epidural or continuous opioid infusions require more frequent assessments. **Script** "You are receiving pain medication by epidural/PCA, on a scale of 0-10 (0 no pain, 10 is the worst pain you could ever feel), what is your pain level now? (Prompt the patient by asking; is it Better? Same? Worse?) If the same or worse provide

additional treatment, (PRN medication, call physician if no prn order is available, consider non pharmacological treatment - hot/cold pack, reposition).

- In an outpatient setting, patients are instructed to contact their care provider with feedback on the efficacy of the therapy prescribed. **Script:** We would like to partner with you to decrease your pain and keep you comfortable. Please contact us if you think your pain is not well managed"

Pain Scales

- Self-Report Scales
  - The **0-10 Numeric Pain Scale** is used to assess cognitively developed children (usually around age 8 and older), adolescents and adults
  - **Wong-Baker 0-10 Faces Scale** is used to assess children (as young as age 3*) and cognitively impaired patients able to use the scale to provide a self-report
- Behavioral Scales
  - **Non-Verbal Pain Scale (NVPS)**, is used to assess pain in sedated, intubated, and critically ill adults
  - The **PAINAD** scale is used to assess adult patients with advanced dementia or adult patients who are unable to self-report
  - **FLACC** (F) Face; (L) Legs; (A) Activity; (C) Cry; (C) Consolable, is used with infants, pre-verbal children, cognitively impaired children and adolescents, and critically ill children, adolescents, and young-adults unable to provide self-report.
  - **NPASS** (Neonatal Pain Agitation Sedation Scale) scale is used to assess pain in neonates.
  - **NIPS** scale is used to assess newborn infants.

Documentation

- In-patient settings
  - Nurses document initial pain assessment in the Needs Assessment form. Patient's pain goal score, assessments and reassessments of pain are documented on the vital signs flowsheet under the Pain Rows
  - Expanded notation of the patient response is documented in notes if necessary
- Ambulatory setting
  - Screening questions about pain are asked during each patient visit and documented in the medical record. If a detailed assessment is required, it is completed with steps noted about appropriate follow-up actions taken by the healthcare provider and patient.
- Intra-Procedure
  - During the procedure, pain assessment must be assessed and documented every 5 minutes.
  - For adult patients, **0-10 Numeric Pain Scale or Non-Verbal Pain Scale (NVPS)** should be utilized

PAIN MANAGEMENT TIP SHEET
Adult Inpatient/Outpatient, Pediatric, Perioperative

Controlled Substance Waste

- Controlled substances must be wasted in a manner that prevents the dosage from being recovered.
- Waste process must be performed by a licensed practitioner within their scope of practice and must be witnessed by a second licensed practitioner. The witness must directly observe the wasting process.
- PCA infusion, continuous opioid or epidural infusion wastage: the volume of the remaining infusion is estimated by two licensed practitioners; the volume/dosage of Controlled Substance wasted should be documented on the PCA or epidural flow sheet and eMAR.
- All unused Controlled Substances removed from a Medication Dispensing Cabinet (MDC) must be documented in the MDC waste function by the licensed practitioner who is wasting the Controlled Substance and the licensed practitioner who is witnessing the Controlled Substance being wasted.

Controlled Substance Over-ride

- Medication overrides should be limited to circumstances which require urgent/emergent administration of a medication due to the patient's condition.
- A medical order must be placed and linked back to the override.
- Each Omnicell will have a list of approved over-ride medications. This will be reviewed annually by the Pharmacy & Therapeutics Committee or sooner when new meds are added.
- Pharmacy will ensure medications available for override are unit specific and removed only when there is emergent need.
- A double check with another licensed provider is required when removing high-alert medications
- Documentation of the override rationale is required in the Omnicell

References: PC 151 Pain - Assessment, Documentation and Education
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UNIVERSITY OF CHICAGO MEDICAL CENTER

POLICY NAME: Patient care for the post anesthesia care unit (PACU)
POLICY NUMBER: P/PACU PC-03
ISSUE DATE: SEPTEMBER, 2018
REVISED DATE: NOVEMBER, 2018; November, 2021, February, 2022

PURPOSE:

To ensure consistent standards of care to all patients admitted to Post Anesthesia Care Units (PACU)

Policy:

1. The PACU Charge RN, or designee, will notify Nursing management of inability to accept any patient.
2. Refer to Appendix A for care of the post anesthesia care unit (PACU) patient.

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CROSS REFERENCE:

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Appendix A: Care of Post Anesthesia Care Unit (PACU) patient

1. Supplemental oxygen will be available on admission. Oxygen may be adjusted or discontinued at the nurse's discretion based on the patient's condition and any ordered parameters.

2. Patients will be assigned both a bay and a primary RN on the Epic Status Board upon arrival to PACU by the RN assigned to the patient, or designee. The assigned RN, or designee, will maintain the patient event log through the course of the PACU stay to include IN POST, Ready for Anesthesia Sign-Out, Ready For Discharge, and Delay-No Floor Bed at the appropriate time in the patient's care.

3. Vital signs (pulse, blood pressure, respiration, and oxygen saturation) will be checked on admission, nominally every 15 minutes for the first hour, nominally every 30 minutes for the 2nd hour, and then hourly until the patient is discharged by an attending anesthesiologist. After the attending's discharge, bedside ECG monitoring may be discontinued for those patients being discharged to the medical/surgical floor. Bedside ECG monitoring will be continued for patients being admitted with orders for bedside ECG monitoring.

4. Pain will be assessed on admission, with vital signs, after interventions and at discharge.

5. A generalized head to toe assessment will be completed on admission and at discharge, with more frequent focused assessments as warranted by the patient's condition or as ordered.

6. Temperature will be taken on admission. Blankets and other warming measures will be used on patients with temperatures less than 36 degrees Celsius. Temperature will be monitored every 30 minutes on patients requiring active warming or cooling measures.

7. Refer to Appendix B for Hypoglycemic in Epic electronic medical record (EMR) and documentation of POCT blood glucose monitoring, as ordered.

8. An ECG rhythm strip shall be recorded and placed in the patient's record for all post anesthesia patients on admission and for any significant clinical change. ECG rhythm strips should be recorded and placed in the patient's chart minimally every 4 hours while in the PACU setting. All rhythm strips should be analyzed and include patient's name, date, time, heart rate, rhythm, PR interval, ORS duration and QT interval, and name and initials of individual interpreting the strip.

9. Arterial lines will be connected to a continuous flush system, and connected to a monitor as indicated.

10. Urine output will be recorded every hour for patients with indwelling urinary catheters and as ordered for other patients. Other outputs will be recorded on admission, as ordered, and as needed based on assessment.

11. IV fluids and other intakes will be recorded every hour.
12. After an anesthetic or sedation, all patients in the PACU are considered to be at Fall Risk. Safety will be maintained with additional consideration to the patient's level of consciousness, age, pre- condition, surgical procedure, and mobility.
13. Patients who have had lower extremity surgery, a lower extremity block, or spinal/epidural anesthesia will be attended to directly by staff at all times when they are mobile in the Perioperative area. Unless the patient is an infant, a wheel chair will be used to transport the Perioperative patient to the bathroom and to their vehicle. Infants may be held by the parent or guardian. Outpatients will be accompanied by hospital personnel from the Perioperative area to their vehicle.
14. Guest Boarder monitoring will follow UCMC standards based on the patient's conditions and orders.

Appendix B: Hypoglycemic Orders in the Epic EMR

Hypoglycemic Treatment: If Blood Glucose is 50-69 mg/dl and Patient is Alert and Eating
SPECIFIED Discontinue

Question	Answer	Comment
Instruction 1:	Treat hypoglycemia with 15 gms of carbohydrates, (4 oz of juice/non-diet soda or 8 oz milk).	
Instruction 2:	Notify MD.	
Instruction 3:	Recheck blood glucose every 15 minutes until blood glucose is greater than 70 mg/dl.	
Instruction 4:	Retreat hypoglycemia with 15 gms of carbohydrates until blood glucose is greater than 70 mg/dl.	
Instruction 5:	Provide a snack or meal within 1 hour after correction of hypoglycemia.	
Instruction 6:	Recheck blood glucose 1 hour after glucose is greater than 70 mg/dl and if still greater than 70 mg/dl, recheck blood glucose again in 1 hour, then resume previous glucose monitoring scheduling (qac and qhs - Patient is Eating).	

Hypoglycemic Treatment: If Blood Glucose is Less Than 50 mg/dl and Patient is Alert and Eating
[129973799] UNTIL SPECIFIED Discontinue

Question	Answer	Comment
Instruction 1:	Treat hypoglycemia with 30 gms of carbohydrates, (8 oz of juice/non-diet soda or 16 oz milk).	
Instruction 2:	Notify MD.	
Instruction 3:	Recheck blood glucose every 15 minutes until blood glucose is greater than 70 mg/dl.	
Instruction 4:	Retreat hypoglycemia with 30 gms of carbohydrates until blood glucose is greater than 70 mg/dl.	
Instruction 5:	Provide a snack or meal within 1 hour after correction of hypoglycemia.	
Instruction 6:	Recheck blood glucose 1 hour after glucose is greater than 70 mg/dl and if still greater than 70 mg/dl, recheck blood glucose again in 1 hour, then resume previous glucose monitoring scheduling (qac and qhs - Patient is Eating).	

Hypoglycemic Treatment: If Blood Glucose is less than 70 mg/dl and Patient is NPO or Not Alert
[129973800] UNTIL SPECIFIED Discontinue

Question	Answer	Comment
Instruction 1:	Treat hypoglycemia with 25 grams (1 amp) of 50% Dextrose IV.	
Instruction 2:	Notify MD.	
Instruction 3:	Recheck blood glucose every 15 minutes until blood glucose is greater than 70 mg/dl.	
Instruction 4:	Retreat hypoglycemia with 25 grams of 50% Dextrose IV until blood glucose is greater than 70 mg/dl.	
Instruction 5:	Recheck blood glucose 1 hour after glucose is greater than 70 mg/dl and if still greater than 70 mg/dl, recheck blood glucose again in 1 hour, then resume previous q 4 hour or q 6 hour monitoring.	

The University of Chicago Medical Center
Policy and Procedure Manual

The University of Chicago Hospitals
Policy and Procedure Manual

PATIENT-CONTROLLED ANALGESIA (PCA)

Policy: PC 95
Issued: March 1999
Reviewed: October 2019

PURPOSE:

It is the mission of the University of Chicago Medicine (UCM) inpatient and ambulatory settings to effectively manage patient's pain utilizing a comprehensive interdisciplinary approach. This policy will outline safe and effective administration of patient controlled analgesia (PCA).

POLICY:

All patients will be individually assessed for pain.

Patients and families should be provided with education on how their pain is going to be managed.

When patient controlled analgesia has been identified as the treatment choice, the patient will be educated on the risks and benefits of this choice. Patients <18 years of age require a written consent for this treatment from the parent/legal guardian.

Staff members providing any aspect of pain management which includes the use of patient controlled analgesia will be educated on the policy and related procedures or interventions.

DEFINITIONS:

Patient Controlled Analgesia (PCA)

PROCEDURE:

A. PAIN MANAGEMENT PRINCIPLES AND ACCOUNTABILITY FOR PATIENT CONTROLLED ANALGESIA

1. Identification of pain as assessed by physicians, APNs, PAs, nurses and other multidisciplinary team members should result in the implementation of a pain management plan.

Multidisciplinary pain management services are coordinated, as needed. These respective

services document their interventions and patient outcomes in the patient medical record.

Patient-specific pain management outcomes are established and if not achieved, elicit a review and modification of the pain management plan.

RED FLAG CRITERIA: For inpatients who are able to self-report their pain, unrelieved pain demonstrated by two consecutive pain scores above the patient's goal score warrants a phone call to the provider for alternative intervention. For patients unable to self-report pain scores, any pain greater than or equal to a 4 will warrant a phone call to the provider for alternative intervention. Additionally, the provider should ensure appropriate pain assessment tools are being utilized to measure the patient's pain in multiple dimensions

2. A Medical Order (standard order set, adult and pediatric versions) will be initiated by the patient's managing service. As a consult service, the Acute Pain Service (APS) can also initiate this order, but will not be expected to routinely do so. Once the PCA is started**, ONLY THE PATIENT MAY PUSH THE PCA BUTTON. The patient may be reminded by a family member or nurse to push the PCA button if he or she is uncomfortable.**

3. **Pediatrics:** The recommended patient age for PCA is seven (7) years or older, although the determining factor is the patient's ability to understand and appropriately use PCA rather than discriminate by age alone. A parent/legal guardian may assist the younger child in recognizing when he/she needs pain medication, but MAY NOT PUSH THE PCA BUTTON FOR THE CHILD.

In making the decision to place a child on a PCA device, the managing service physician should:

a. Obtain a written consent for this treatment from the parent/legal guardian
b. Document in the patient's medical record the need for the PCA and that the risks/benefits of this treatment have been discussed with the patient and family, noting their response to this discussion.
c. All pediatric patients receiving PCA-delivered analgesia will be monitored with continuous pulse oximetry. This may be discontinued per physician order.

4. PCA Criteria:

a. The patient must be mentally alert, and able to understand and participate in the use of the PCA.
b. IV access must be available.
c. All previous opioids must be discontinued with the initiation of PCA. However, in certain situations additional opioids or sedatives may be given to the patient while on PCA and will be ordered as needed by the managing service/Acute Pain service (APS)/ member of Department of Anesthesia and Critical Care (DACC).

5. The PCA cartridge is changed at least every ninety-six (96) hours and documented in the electronic medication administration record (eMAR).

6. The PCA tubing is changed every 96 hours, labeled and documented per policy (PC-230 Central Vascular Access Devices and PC231 Peripheral Vascular Access Devices).

Cartridge and tubing change should be coordinated, if possible, to avoid wasting opioid.

7. PCA set-up, pump programming, administration of loading dose(s), bolus doses, PCA cartridge or tubing change, wastage, and PCA discontinuation must be done by two RN's. (see Patient Care Policy PC143: High Alert Medications).

8. All loading doses and bolus doses must be administered via the PCA infusion pump.

9. A maintenance IV (solution and rate per managing service) must be piggybacked into the PCA tubing "Y" site as long as PCA analgesia is ordered for the patient.

10. Naloxone (Narcan) must be immediately available for emergency use to counteract extreme somnolence and respiratory depression. This is available in the Medication Dispensing Cabinet.

11. The RN should document the following: ordered opioid, PCA pump program settings, loading doses, bolus doses, and patient assessments that monitor patient response to analgesia in the PCA Flowsheet.

B. PCA PUMP KEYS
See Controlled Substances Patient Care Policy: PC 109

C. PATIENT CONTROLLED ANALGESIA MANAGEMENT

1. Once pain has been identified, immediate treatment (pharmacological and/or non-pharmacological) is initiated, and follow-up evaluation of patient response to treatment occurs. If necessary, the pain management plan of care is changed.

2. When patient controlled analgesia is identified as the intervention to manage a patient's pain, the managing service/Acute Pain Service/Palliative Care Service should explain the purpose, benefits/risks of PCA analgesia to the patient, and to the parent/legal guardian, obtaining a consent per policy.

3. Patient and Family Education:
   a. Patients and parents/legal guardians of patients who are utilizing a PCA need to have documentation of education, a pain care plan, and identification of pain goal score.
   b. Before therapy is initiated, the nurse will instruct the patient on the use of the pump. The patient and parent/legal guardian should be provided with printed instructions regarding PCA use as a supplement to verbal instructions. Document patient and parent/legal guardian teaching and their level of comprehension in the patient's medical record. Reinforce teaching as needed.

4. After PCA is ordered, the nurse must check order for drug, PCA mode, dosage, lockout time, possible loading dose(s), and ordered anti-emetic and antihistamine.

5. Nurses will follow the medication administration process as outlined in PC 139 Medication

Administration.

6. The following equipment must be available for all patients receiving PCA infusions:
    a. Oxygen and suction at bedside.
    b. Emergency resuscitation cart available on/near the nursing unit.
    c. Access to cardio-respiratory and pulse oximetry monitoring, per medical order.
    d. Naloxone (Narcan) for acute reversal of opioid-induced respiratory depression.

7. PCA Pump Setup and Initiation of Treatment (Analgesia):
   Two RN's must simultaneously:
   i. Check PCA order(s) against the profiled entry on the PCA flow sheet against the actual pump program.
   ii. Check new PCA cartridge (e.g. right drug, concentration). The double-check process is documented by entering the name of the second RN on the PCA flow sheet.
   iii. If PCA is initiated in the recovery room, the initial and exit assessment of the patient and amount of drug used must be entered on the PCA flow sheet. Assessment data between the initial setup times will be reflected on the recovery room flow sheet.
   iv. Attach and lock the PCA cartridge to the PCA pump and program the PCA pump per order. If ordered, administer a loading dose(s); one of the two RNs stays with the patient during this time period and assesses the patient for any untoward response.
   v. Document loading doses, bolus doses, and continuous infusion rate (with 2nd RN verification) on the eMAR

D. PATIENT ASSESSMENT:

a. Prior to initiating PCA analgesia, record baseline respiratory rate, pain score, and sedation score. (Refer to Appendix A: Suggested Pain and Sedation Scales for Patient Populations) On initiation of PCA analgesia, assess and document the following on the PCA flow sheet: Respiratory rate, pain score, and sedation score q. 15 minutes x 4, then q. l hr x 4, then q. 2 hrs x 4, then q. 4 hrs. and PRN.

b. If the patient has a respiratory rate = 10 (adult) or lower or = 2/3 the normal age-related rate or lower (pediatrics) and is somnolent, stop PCA infusion and notify the managing service.

c. Pain score should be assess using a 0-10 numeric scale, Faces Pain Scale Revised (FPS-R), or developmentally appropriate pain assessment scale. (Refer to Appendix A: Suggested Pain and Sedation Scales for Patient Populations). When a patient reports unacceptable pain control (repeated pain scores greater than the patient's pain goal score):
    - Check to ensure that the IV is patent and the PCA pump is functioning.
    - If the IV site is patent and pump is functional, re-educate the patient on the use of the PCA.
    - Check the orders for dose adjustments, and
    - Notify the managing service to re-evaluate the patient.

d. Persistent altered sedation can signal potential approaching respiratory depression, and should initiate vigilant nursing observation and physician/APN/PA alert.

e. Monitor the patient for potential side effects (e.g. nausea, vomiting, pruritus) within the first 2 hours of PCA loading dose(s) or startup or dosage change, then every 8 hours. Any side effects other than the typical effects noted above should be scored "4" on the PCA flow sheet and described in detail in the patient's medical record.

f. With an increase in PCA dose, decrease in lockout time, or addition of a continuous rate, nurses are to assess: respiratory rate, pain score, sedation level, side effects q. 1 hr. x 2, then return to routine assessment.

g. When a loading dose is given, assess respiratory rate, pain score, sedation level, side effects at 15 and 30 minutes after dose, then return to routine assessment.

h. Two registered nurses must check the PCA pump programming against the latest PCA provider order at each change of shift and document on the PCA Infusion Flowsheet.

i. If patient on strict I & O, record PCA opiate volume infused per shift in the medical record. Also record accompanying maintenance IV fluids connected to PCA "Y" site.

j. The cumulative total of opiate used should be recorded on the PCA Flowsheet.

i. Prior to program change or loading dose.

ii. At the end of shift (q. 8-12 hrs.) – tally shift use at this time also.

iii. Prior to unplugging pump for prolonged periods (e.g. diagnostic tests, whirlpool treatments, Dialysis) when patient will be off the unit.

iv. At the time PCA is being discontinued.

h. Every shift, 2 RNs will clear the PCA volume, note the volume/dose of controlled substance infused, and document this volume on the PCA Flowsheet. The remaining reservoir volume level is also documented on the PCA Flowsheet.

E. PAIN ASSESSMENTS DURING SLEEP

Pain assessments should be coordinated with other cares, when possible to maximize patient sleep.

Non-intubated sleeping patients who are receiving opioids, should have their respiratory rate, pattern (regularity), and chest excursion (effort) assessed. Patients found to have signs of respiratory depression or "over-sedation" (paradoxical rhythm, poor chest expansion/respiratory effort, snoring/noisy respirations, or desaturation) should be immediately aroused. Instruct the patient to take deep breaths, reposition as needed, contact the patient's provider, and continue to monitor.[6, 8] Be prepared for reversal with naloxone.

F. DOCUMENTATION

The primary service documents: details of pain management and changes to pain management on a daily basis in their progress notes.

The nurse documents for all patients:

- Pain medications administered in the MAR, including any changes to the PCA infusion rate or concentration.
- Any assessments and reassessment related to pain management in the EMR on the appropriate flowsheets
- The patient's response (pain assessment/reassessment, Pasero-Opioid Induced Sedation Scale, potential side effects) to all PCA bolus doses and infusion rate changes
- A pain specific care plan in the Care Plan tab of the EMR

Patient education is provided to patients and family members/significant others to enhance understanding of the pain management plan and the use of the PCA infusion and multimodal approach to pain management. Documentation of this education will occur on the education tab of the EMR. This education tab will be reviewed once a shift and updated as changes occur.

G. PCA DISCONTINUATION

a. If the APS is maintained as consult service for pain management, they will order the post-PCA analgesia. Otherwise, the managing (primary) service is responsible for ordering post-PCA analgesia. The patient's managing service or the APS may discontinue PCA analgesia.

b. The patient should be transitioned to alternative modes of analgesia, as needed, prior to discontinuing the PCA therapy.

c. PCA pumps must be cleaned of obvious blood or other body fluid contamination and returned to the nursing unit's dirty utility room when discontinued.

d. When the PCA infusion is discontinued, the following shall occur:

- The volume of the remaining infusion aspirated from the cartridge and calculated by two registered nurses.
- The remaining infusion is immediately discarded in a manner that cannot be recovered, wasted via the MDC return function, Anywhere RN, or Controlled Substance Inventory Record (depending on where the medication was retrieved from) and visually witnessed by the second registered nurse.
- Both registered nurses must document the volume of controlled substance wasted on the PCA Flowsheet.
- The empty cartridge and empty tubing is immediately discarded in a black bio-hazard container and visually witnessed by the second registered nurse.

INTERPRETATION, IMPLEMENTATION AND REVISION:

Department of Nursing, Physician Services, and Department of Pharmaceutical Services are responsible for the review and revision of this policy. Medical staff and nursing personnel are responsible for the implementation of this policy.

ATTACHMENTS:

Appendix A: Suggested Pain and Sedation Scales for Patient Populations

REFERENCES:

1. American Pain Society. (2008). *Principles of Analgesic Use in the Treatment of Acute Pain and Cancer Pain* (6th ed). Glenville, IL: Author.

2. American Society of Anesthesiologists. (2010, April). Practice Guidelines for chronic pain management: An updated report by the American Society of Anesthesiologists task force on chronic pain management and the American Society of Regional Anesthesia and Pain Medicine. *Anesthesiology, 112*(4), 810-833.

3. American Society for Pain Management Nursing. (2011, July). *Pain assessment in the patient unable to self-report*. Retrieved September 12, 2011 from http://www.aspmn.org/Organization/position_papers.htm.

4. American Society for Pain Management Nursing. (2011, June). Procedural Pain Management: A position statement with clinical practice recommendations. *Pain Management Nursing, 12*(2), 95-111.

5. American Society for Pain Management Nursing, Emergency Nurses Association, American College of Emergency Physicians & American Pain Society. *Joint position statement: Optimizing the treatment of pain in patients with acute presentations.* Retrieved November 22, 2011 from http://www.aspmn.org/Organization/position_papers.htm.

6. Pasero, C. & McCaffery, M. (2011). *Pain Assessment and Pharmacologic Management.* St. Louis, Elsevier.

7. American Society for Pain Management Nursing. (2011, September). American Society for Pain Management Nursing guidelines on monitoring for opioid-induced sedation and respiratory depression. *Pain Management Nursing, 12*(3), 118-145.

8. Pasero, C. (2009). Assessment of sedation during opioid administration for pain management. Journal of Perianesthesia Nursing, 24(3), 186-190.

9. Pediatric Advanced Life Support (PALS) Provider Manual

10. Advanced Cardiac Life Support Manual

11. (720 ILCS 570/) Illinois Controlled Substances Act.

12. (225ILCS 651/) Illinois Nurse Practice Act

Elsevier Skills:
Medication Administration: Patient-Controlled Analgesia (Pediatric)
Medication Administration: Patient-Controlled Analgesia-CE

CROSS REFERENCES:

1. PC 125 Medical Orders

2. PC230 Central Vascular Access Devices

3. PC231 Peripheral Vascular Access Device

4. PC 143 High Alert Medication Safety

5. PC 109 Controlled Substances

6. PC 151 Pain – Assessment, Documentation and Education

7. PC139 Medication Administration

Appendix A: Suggested Pain and Sedation Scales for Patient Populations

Patient Population	Pain Scale *	Sedation Scale
Adult	0-10 Numeric Pain Scale, Faces Pain Scale Revised (FPS-R), Non-Verbal Pain Scale (NVPS), Pain Assessment in Advanced Dementia (PAINAD)	**Intentional sedation:** Richmond Agitation Sedation Scale (RASS) **Assessment of sedation as a side-effect in patients receiving opioids:** Pasero Opioid-Induced Sedation Scale (POSS)
Pediatric	0-10 Numeric Pain Scale, Faces Pain Scale Revised (FPS-R), Revised Faces Legs, Activity, Cry, Consolability (r-FLACC)	**Intentional sedation:** State Behavioral Scale (SBS) **Assessment of sedation as a side effect in patients receiving opioids:** Pasero Opioid-Induced Sedation Scale (POSS)
NICU	Neonatal Pain Agitation Sedation Scale (NPASS)	Neonatal Pain Agitation Sedation Scale (NPASS)

*see PC 151 Pain Assessment, Documentation and Education for descriptions of pain scales

UNIVERSITY OF CHICAGO MEDICAL CENTER

POLICY NAME: Preoperative Assessment
POLICY NUMBER: P/PACU PC-02
ISSUE DATE: September, 2018
REVISED DATE: November, 2018; November, 2021, February, 2022

PURPOSE:

To assess the nursing care needed by the procedural patient according to his /her individual needs.

POLICY:

1. A focused, patient-specific, nursing care assessment will be performed preoperatively for each surgical patient. Nursing care will be individualized to each patient utilizing the nursing process.

2. Patients will be assigned both a bay and a primary RN on the Epic Status Board upon arrival to Pre- op by the RN assigned to the patient, or designee. The assigned RN, or designee, will maintain the patient event log through the course of the Pre-op phase to include SENT FOR, In-Pre, and Delay codes (as indicated) at the appropriate time in the patient's care. The Pre-Op Charge RN, or designee, will notify Nursing management of inability to accept any patient.

3. Inpatient transfers to the preoperative care area require the following prior to transfer:

    - Hand-off from the inpatient RN to preoperative RN.
    - Completion of the preoperative checklist flowsheet by the inpatient RN.
    - Reconciliation of inpatient orders completed.
    - Preoperative orders in place.
    - Removal of jewelry, personal items which include clothing, electronic devices (e.g. phone).

4. **SANDPO**
   On the Status Board, "SANDPO" followed by a green light indicates that the patient can be moved from the Pre-op area to the OR. SANDPO is an acronym representing the Surgeon, Anesthesiologist, Nurse (Preoperative), Documentation, Patient, and Operating Room. The respective letter on the status board indicates that all of these components are ready for the patient to be moved.

5. Refer to Appendix A: Preoperative Admission and patient care.

REFERENCES:

1. ASPAN (2020). 2021-2022. Perianesthesia Nursing: Standards, Practice Recommendations and Interpretive Statements. *American Society of PeriAnesthesia Nurses (ASPAN). Cherry Hill, NJ: ASPAN.org.*

CROSS-REFERENCES:

1. University of Chicago Medical Center (2018). Documentation of Clinical Care. *University of Chicago Medical Center Policy and Procedure Manual,* PC 128.
2. University of Chicago Medical Center (2020). History and Physical Exam. *University of Chicago Medical Center Policy and Procedure Manual,* PC 92.
3. University of Chicago Medical Center (2018). Informed Consent for Procedures and Treatment. *University of Chicago Medical Center Policy and Procedure Manual,* PC 13.
4. University of Chicago Medical Center (2021). Patient Identification. *University of Chicago Medical Center Policy and Procedure Manual,* A08-19.
5. University of Chicago Medical Center (2020). Universal Protocol. *University of Chicago Medical Center Policy and Procedure Manual,* PC 38.

Approved by Perioperative Leadership and Perioperative Medical Director.

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APPENDIX A: Admission and Patient Care

A. Same Day Admission, 23 hour or Outpatients

A Pre-operative nurse will initiate and complete a preoperative checklist for each patient (Exception: As noted, regarding an emergency procedure in the History and Physical Examination PC 92) which will include, but not be limited to:

a. Verification of patient identification (using 2 patient identifiers) and subsequent placement of ID bands.

b. Verification that the operative schedule, consent and patient agree.

c. Verification and documentation in EHR of allergies.

d. Verification and documentation in EHR of isolation history and current isolation status.

e. Verifications as per Universal Protocol PC 38 and Informed Consent PC 13.

f. Verification of NPO status.

g. Documentation of patient medication history, using Prior to Admission (PTA) Medications activity in EHR.

h. Documentation of personal property and disposition.

i. The primary preoperative RN will validate the patient's personal property is placed in the designated location.

i. Documentation of vital signs, pain score, height, weight, pulse oximetry, and skin assessment.

j. An ECG rhythm strip shall be recorded and placed in the patient's record for all patients scheduled to receive intraoperative and/or procedural care, upon admission and for any significant clinical change. Either hard copy or rhythm strips integrated from the bedside monitoring system into the EHR are acceptable. Epic ECG rhythm strips should be recorded and placed in the patient's chart minimally every 4 hours while in the Pre-op setting. All rhythm strips should be analyzed and include patient's name, date, time, heart rate, rhythm, PR interval, QRS duration and QT interval, and name and initials of individual interpreting the strip.

k. Initiate VTE prophylaxis (chemical and/or mechanical), per Pre-op Order Set.

l. Completion of WALDO documentation in the EHR.

m. Documentation of POCT hCG results, as applicable.

n. Verification of ABO status, as applicable.

o. Documentation of POCT blood glucose monitoring, as ordered.

p. Follow up or repeat glucose monitoring as indicated in patient's order.

q. Verification of Responsible Adult Escort for discharge, if applicable.

B. Inpatients

The preoperative nurse will review, verify and update, if necessary, the floor generated preoperative checklist and will document:

1) Verification of patient identification (using 2 patient identifiers)/placement of ID bands, if needed.

2) Verification that the operative schedule, consent and patient responses match.

3) Verification and documentation in EHR of allergies.

4) Verification and documentation in EHR of isolation history and current isolation status.

5) Verifications as per Universal Protocol PC 38 and Informed Consent PC 13.

6) Verification of NPO status.

7) Documentation of vital signs, pain score, pulse oximetry, and skin assessment.

8) Initiate/maintain VTE prophylaxis (chemical and/or mechanical), per Pre-op Order Set.

9) ECG monitoring per inpatient orders. An ECG rhythm strip shall be recorded and placed in the patient's record for all patients scheduled to receive intraoperative and/or procedural care, upon admission and for any significant clinical change. Either hard copy or rhythm strips integrated from the bedside monitoring system into the EHR are acceptable. ECG rhythm strips should be recorded and placed in the patient's chart every 4 hours while in the Pre-op setting. All rhythm strips should be analyzed and include patient's name, date, time, heart rate, rhythm, PR interval, ORS duration and QT interval, and name and initials of individual interpreting the strip.

10) Documentation of POCT hCG results, as applicable.

11) Refer to Appendix B for Hypoglycemic in Epic electronic medical record (EMR) and documentation of POCT blood glucose monitoring, as ordered.

12) Verification of ABO status, as applicable.

Appendix B: Hypoglycemic Orders in the Epic EMR

Hypoglycemic Treatment: If Blood Glucose is 50-69 mg/dl and Patient is Alert and Eating
SPECIFIED Discontinue

Question	Answer	Comment
Instruction 1:	Treat hypoglycemia with 15 gms of carbohydrates, (4 oz of juice/non-diet soda or 8 oz milk).	
Instruction 2:	Notify MD.	
Instruction 3:	Recheck blood glucose every 15 minutes until blood glucose is greater than 70 mg/dl.	
Instruction 4:	Retreat hypoglycemia with 15 gms of carbohydrates until blood glucose is greater than 70 mg/dl.	
Instruction 5:	Provide a snack or meal within 1 hour after correction of hypoglycemia.	
Instruction 6:	Recheck blood glucose 1 hour after glucose is greater than 70 mg/dl and if still greater than 70 mg/dl, recheck blood glucose again in 1 hour, then resume previous glucose monitoring scheduling (qac and qhs - Patient is Eating).	

Hypoglycemic Treatment: If Blood Glucose is Less Than 50 mg/dl and Patient is Alert and Eating
[129973799] UNTIL SPECIFIED Discontinue

Question	Answer	Comment
Instruction 1:	Treat hypoglycemia with 30 gms of carbohydrates, (8 oz of juice/non-diet soda or 16 oz milk).	
Instruction 2:	Notify MD.	
Instruction 3:	Recheck blood glucose every 15 minutes until blood glucose is greater than 70 mg/dl.	
Instruction 4:	Retreat hypoglycemia with 30 gms of carbohydrates until blood glucose is greater than 70 mg/dl.	
Instruction 5:	Provide a snack or meal within 1 hour after correction of hypoglycemia.	
Instruction 6:	Recheck blood glucose 1 hour after glucose is greater than 70 mg/dl and if still greater than 70 mg/dl, recheck blood glucose again in 1 hour, then resume previous glucose monitoring scheduling (qac and qhs - Patient is Eating).	

Hypoglycemic Treatment: If Blood Glucose is less than 70 mg/dl and Patient is NPO or Not Alert
[129973800] UNTIL SPECIFIED Discontinue

Question	Answer	Comment
Instruction 1:	Treat hypoglycemia with 25 grams (1 amp) of 50% Dextrose IV.	
Instruction 2:	Notify MD.	
Instruction 3:	Recheck blood glucose every 15 minutes until blood glucose is greater than 70 mg/dl.	
Instruction 4:	Retreat hypoglycemia with 25 grams of 50% Dextrose IV until blood glucose is greater than 70 mg/dl.	
Instruction 5:	Recheck blood glucose 1 hour after glucose is greater than 70 mg/dl and if still greater than 70 mg/dl, recheck blood glucose again in 1 hour, then resume previous q 4 hour or q 6 hour monitoring.	

Nurses

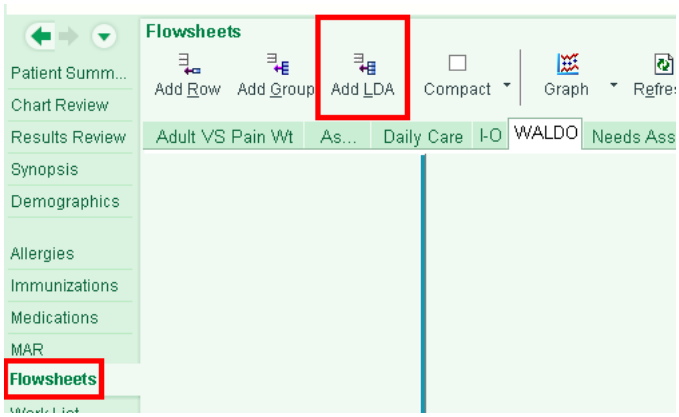
Surgical Incision LDA

Summary

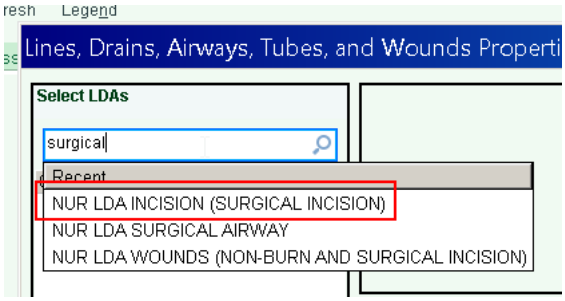
WALDO stands for wound, airway, line, drain and ostomy and it is a way to classify the type of wound or tube in Epic. Documenting the WALDO is necessary for tracking the care and assessment and it also allows for data collection on certain WALDO's. The surgical incision LDA (abbreviated name for WALDO) allows nursing to document strictly surgical type incisions, as well puncture and biopsy sites.

Step-by-Step

1. In the Flowsheet activity, find the WALDO flowsheet template. Click on **Add LDA**.



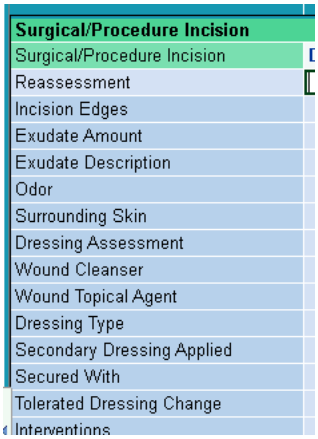
2. In the window that appears search for **"surgical or puncture or biopsy".** Select the **Surgical Incision LDA.**



3. As with all LDA's, enter in the properties that define this patient's LDA such as the laterality and location. Complete documentation on the assessment rows.

Document Version 2
Produced by: Chicago Biomedical Information Services
Revised: 07/27/2016

Surgical Incision LDA



4. Remember to resolve any WALDO's that may no longer be active on the patient.

The University of Chicago Medical Center
Policy and Procedure Manual

Policy Name: Universal Protocol/Time Out
Policy: PC 38
Issued: 1998
Revised: June 2020

Policy

University of Chicago Medicine assures patient safety by employing the Universal Protocol to prevent the wrong site, the wrong procedure and the wrong patient. The Universal Protocol applies to all surgical and non-surgical invasive procedures that expose the patient to more than minimal risk. This includes procedures performed in settings other than the operating room and procedure areas (e.g. at clinics and the bedside) (Attachment A).

Prior to initiation of a surgical or nonsurgical invasive procedure, each of the components of the Universal Protocol must be followed and documented as appropriate.

Certain routine and minor procedures (e.g., placing a peripheral intravenous catheter or naso-gastric tube placement) are not within the scope of this protocol. In such cases, the proceduralist will determine whether the Universal Protocol is applicable.

Non-neuraxial regional anesthesia must perform a Time Out for each subsequent site (in the case of multiple peripheral nerve blocks) in a pre-procedural area (i.e. preoperative holding) and/or operating room and include the attending physician.

Definitions

1.Pre-procedure Verification: An ongoing process of information gathering and verification beginning with the decision to perform a procedure and continuing through all encounters in the pre-procedural preparation of the patient up to and including the time-out just before the start of the procedure.

2.Time-Out: A final assessment conducted immediately before starting a a surgical or non-surgical invasive procedure verifying that the correct patient, site and procedure have been identified. During the time out, activities are suspended to the extent possible so that team members can focus on active confirmation of the patient, site and procedure.

3.Non-neuraxial Regional Anesthesia: The administration of regional anesthesia other than subarachnoid or epidural nerve block.

4.Invasive Procedure: Generally involves a break in the skin and/or entry into tissues, body cavities, or vascular space except for insertion of peripheral intravenous catheters (PIVs).

5.Debrief: An interactive form of communication involving the immediate members

(attending physicians, fellows, residents, nurse, and anesthesia team (i.e. attending, resident or certified registered nurse anesthetist) of the procedural team which is completed at the end of an operating room case.

Required Elements of the Universal Protocol

I. Pre-procedure Verification Process

A. The purpose of the pre-procedure verification process is to ensure that all relevant documents and related information or equipment are:

1. Available prior to the start of the procedure
2. Correctly identified, labeled, and matched to the patient's identifiers
3. Reviewed and consistent with the patient's expectations and with the team's understanding of the intended patient, procedure, and site.

B. Verification and Time Out documentation of the proper patient, procedure, and site (the site includes but is not limited to laterality, digit and/or level) prior to the patient entering the-procedure/ surgical room:

1. At the time the procedure is scheduled
2. At the time of preadmission assessment
3. At the time of admission into the pre-procedure area
4. Any time the responsibility for care of the patient is transferred to another member of the procedural care team at the time of, and during, the procedure.
5. At the time of regional anesthesia administration

This step should include ensuring that the medical procedure ordered is the correct medical procedure scheduled and consented.

C. Prior to moving to the procedure room or operating suite a checklist will be utilized to confirm that the following are available, complete and accurately correspond to the patient and the procedure:

1. Relevant documentation (e.g., current history and physical examination, pre-procedure note, nursing assessment, pre-anesthesia assessment, screen for retained foreign object preventions).
2. Accurately completed and signed procedure consent form.
   Note: The consent form must include laterality, digit, level, etc.
3. Correct and properly labeled diagnostic results
   Example: Radiology images, scans, or pathology and/or biopsy reports.
4. Any required blood products, implants, devices, and/or special or critical equipment for the procedure
5. Correct prophylactic medications (if applicable for procedures)

For patients undergoing a procedure in areas that have a pre-op area, this will be done by the circulating RN at the time of arrival to the procedural suite/room.

Medications:

Antibiotics:

1. For those procedures requiring IV antibiotic administration within one hour (two hours for Vancomycin) prior to skin incision, the RN in the preoperative setting will confirm with the procedure team that an antibiotic has been started or will be started at the appropriate time if indicated.
2. Documentation of the pre-surgical antibiotic is recorded by marking the check box on the preoperative checklist. The RN in the preoperative setting should check this box only in those procedures where such administration of an antibiotic is required.

D. If information is missing or discrepancies are found, they must be reconciled with the Attending Surgeon or Proceduralist before transporting the patient to the procedure room.

E. For those patients directly admitted to the Operating Room (e.g., emergency, isolation or ICU patients), the pre-procedure verification process may be completed in the operating room.

II. Site marking

A. Site marking is required where there is more than one possible location for the procedure or when performing the procedure in a different location would compromise patient safety. For spinal procedures, in addition to preoperative skin marking of the general spinal region, special intraoperative imagining should be considered when locating and marking the exact vertebrae.

B. The procedural site must be verified and marked by the attending surgeon or proceduralist, his or her resident-designee or a licensed independent practitioner privileged to perform the intended surgical or invasive procedure.

C. Pre-procedure site marking should involve the patient when possible and should occur in the pre-procedure holding area before the patient is moved to the location where the procedure will be performed. The person marking the procedure site will mark the site with his/her initials.

D. Site marking has the following characteristics:

1. It is made at or near the procedure site or the incision site. Other site(s) should not be marked unless necessary for some other aspect of care.
2. It is made using a marker that is sufficiently permanent to remain visible after completion of the skin preparation and sterile draping. Adhesive site markers may not be used as the sole means of marking the site.
3. It must be visible after the patient has been prepped and draped and is in the final procedural position.
4. For spinal procedures, in addition to preoperative skin marking, special intraoperative radiographic techniques must be used to identify the exact vertebral level.

E. Non-neuraxial Regional Anesthesia

If the patient is to receive non-neuraxial regional anesthesia for the surgery/procedure, the

attendinganesthesiologist or his/her designee must also verify and mark the operative/regional anesthesia site with his/her initials. The nerve block may not be performed until both the anesthesiologist/designee and the proceduralist/designee have verified and marked the patient.

F. Surgical and Non-surgical Invasive Procedures Refusal:
In the event the patient refuses to have his/her surgical/procedural site marked a blue band will be initialed and placed on the wrist or ankle (on the side on which the procedure will be performed, if possible). If a patient refuses both methods, such refusal must be documented in the medical record.

G. Surgical and Non-surgical Invasive Procedures Lacking Laterality:

If the site were the procedure is to be performed does not lend itself to marking/initialing, (e.g., mucosal surfaces, premature infants, genitalia, perineum, anus, tonsils, burns), a blue band will be initialed and placed on the wrist or ankle (on the side on which the procedure will be performed, if possible).

For procedures involving teeth, a blue band will be initialed and placed and the operative tooth name(s) and/or number will be marked on the dental radiographs or dental diagram. The documentation, images, and/or diagrams must be in the procedure room before the start of the procedure.

For certain interventional procedure cases (cardiac catheterization) in which the procedure is predetermined yet the point of entry cannot definitively be determined prior to the start of the procedure or an alternate site may be utilized due to the patient's anatomy or condition, the site or point of entry is not marked. At the conclusion of the procedure the site or point of entry is documented in the medical record by the proceduralist.

For procedures involving mucosal cavities where there is only one possible location for the procedure, correct procedural site will be documented at the time of the final verification. Site marking is not required and a blue band does not need to be placed on the patient.

Due to the risk of permanently tattooing premature infants a blue band is used in lieu of marking the site.

H. Invasive Procedure Site Marking Exceptions

Site marking is not required when the individual doing the procedure is continuously with the patient from the time of the decision to do the procedure through to the performance of the procedure. However, the requirement for final time-out verification still applies. If the person performing the procedure is not in continuous attendance, site marking must occur for all procedures involving right/left distinction, multiple structures such as fingers and toes, or level(s) as in spinal procedures.

Site marking may be waived in emergency situations at the discretion of the attending physician, but this must be documented in the medical record.

III. Patient Check-In

For patients receiving procedures in the DCAM Operating Rooms, Comer Operating Rooms or CCD Operating Rooms, a patient check in/sign in will be completed by the operating room team. This will occur before the patient is transferred from patient cart/bed to the operating room table.

IV. Time Out

A time-out is conducted immediately before the start of a surgical or non-surgical invasive procedure including non-neuraxial regional anesthesia. A designated member of the surgical or procedural team is responsible for leading the Time-Out with the team. The attending surgeon/proceduralist must be present during the time-out process.

Exception: Advanced practice providers with credentials/privileges to perform procedure independently.

Resident/Fellows performing a procedure which has been identified by their training program as a procedure that they may perform independently.

The time-out will involve the immediate members of the procedure team including the proceduralist(s), the anesthesia providers (if applicable), procedural designee, the nurse(s), and other active participants as appropriate for the procedure who will be participating in the procedure at its inception. Please see Attachment A: List of Procedures performed outside of the operating rooms/procedural areas requiring the use of the Universal Protocol/Time Out documentation.

The time-out addresses the following:

- Accurate Procedural Consent
- Correct Patient
- Correct Procedure
- Correct Site- Including visual identification of site marking conducted
- Correct patient position
- Relevant images and results are properly labeled and appropriately displayed
- Availability of correct implants and any critical equipment
- Risk of retained foreign object.
- Safety precautions based on the patient history and medication use
- The need to administer antibiotic/s or fluids for irrigation purposes
- Agreement on the procedure(s) to be done

All discrepancies identified thorough the Time-Out process shall be resolved prior to initiation of the procedure.

B. The Time Out must always be conducted unless it will result in greater risk than benefit. The decision and rationale to proceed without doing so must be documented in the medical record.

C. When two or more procedures are being performed on the same patient by different surgical or procedural teams, a time-out is performed to confirm each subsequent procedure before it is initiated.

D. The site marking of the operative/procedural site should be performed prior to the patient being taken to the procedure room. If the final verification reveals that the site was not marked in the pre-procedural area, the attending surgeon/proceduralist or his/her designee must mark the site in the operating/procedural room prior to skin incision. This should only happen when the patient bypasses the pre-procedure area and goes directly to the procedure room (e.g., isolation or emergency patients).

E. The Attending Anesthesiologist, resident, and nurse must participate in the preoperative verification of the surgical site for non-neuraxial regional anesthesia.

V. Debrief

It is recommended that a surgical debriefing be completed before exiting the operating/procedural room and include the attending surgeon or proceduralist and immediate members of the procedural team (attending physicians, fellows, residents, nurse, and anesthesia team (i.e. attending, resident or certified registered nurse anesthetist).

VI. Documentation Summary

A. It is the responsibility of the physician who will perform the surgical or non-surgical invasive procedure to ensure that the informed consent is appropriately documented, including the site (laterality, digit and/or level).

B. The person scheduling the case must enter "right", "left", "bilateral", "level", "midline" or "not applicable" onto the OR schedule

C. For cases involving non-neuraxial regional anesthesia, the anesthesiologist must document verification of the site.

D. Any inconsistencies discovered during the final verification process must be reconciled and documented in the patient's medical record by the attending proceduralist before starting the procedure.

E. The nurse caring for the patient prior to the surgery will document and verify the completion of the pre-surgical verification process in the electronic medical record (EMR). Just prior to accepting the patient to the procedural or operating room the circulating nurse will review and verify relevant documentation, diagnostic results, supplies and equipment are in place. This may include but not limited to the following:

1. Accurately completed consent form
2. Site Marking
3. Implants devices or special equipment
4. Blood products, diagnostic and/or radiology results required for the procedure are

available.

F. A member of the procedural team should document the time out in the electronic medical record.

G. For those invasive procedures performed at the bedside, a member of the procedural team will facilitate and conduct the time-out. The Time-Out should be documented in the EMR by the RN or a member of the procedural team.

Attachments:

A: List of Procedures performed outside of the operating rooms/procedural areas requiring the use of the Universal Protocol.

Cross-References:

1. PC 80 Sponge, sharp, instrument, and miscellaneous item count.
2. PC 13 Informed Consent
3. A08-19 Patient Identification

Interpretation, Implementation and Revision

The interpretation, implementation and revision of this policy is the responsibility of Peri-operative Services.

ATTACHMENT A:

Procedures performed outside of the operating rooms/procedural areas requiring the use of the Universal Protocol/Time Out documentation includes but is not limited to the following:

Procedure List

- Ablation
- Cardiac Catheterization
- Cardioversion
- Central Venous Line Insertion/PICC Line Insertion
- Chest Tube Insertion
- Circumcision
- Defibrillator Insertions
- Electrophysiology Study
- EVD/ICP
- Invasive Fertility Procedure
- Interventional Radiology Procedure
- Lumbar Puncture
- Needle Localizations in Mammography
- Pacemaker Insertion
- Paracentesis
- PEG Placement
- Peritoneal Lavage
- Therapeutic or Regional Nerve Block
- Thoracentesis
- Tracheostomy

- Transesophageal Echo
- Any procedure in which requires the following:
  - Moderate Sedation
  - Deep Sedation
  - General Anesthesia
  - Regional Anesthesia
- Biopsy including but not limited to the following:
  - CT/Ultrasound Guided
  - Bone/Bone-Marrow Biopsy
  - Liver/Kidney Biopsy
  - Breast/Prostate biopsy
  - Surgical biopsy requiring sedation or anesthesia
- Endoscopy including but not limited to the following:
  - Bronchoscopy
  - Upper GI/Lower GI

The University of Chicago Medical Center
Policy and Procedure Manual

Visitors in the Procedural Suites, Operating Rooms and Post Anesthesia Recovery Unit

Policy: A02-24
Issued: January 2001
Revised: March 2016
Reviewed: March 2019, June 2022

Policy:

Access to the Surgical and Procedural Suites is limited to Authorized Personnel. Access to such areas may be granted to a Visitor who has been evaluated and approved pursuant to this policy. Without completion of the approval procedures defined below, a Visitor will be denied access to the Surgical and Procedural Suites. All University of Chicago Medical Center (UCMC) and Biological Sciences Division (BSD) personnel working in these patient care units have responsibility for enforcing this policy.

Definitions:

Authorized Personnel: Includes members of the medical staff, persons employed or engaged by the UCMC/BSD and assigned to work in the Surgical or Procedural Suites or assisting with healthcare operations (e.g., Patient Safety), or persons participating in an applicable residency, medical education, clinical training or allied health educational program approved by the UCMC and assigned to participate in the Surgical or Procedural Suites.

Visitor: Includes all non-Authorized Personnel who fall under one of the following categories:

- Vendor Representatives
- Physicians and other health care professionals who are not participating in a UCMC approved educational program or who have been approved as a Clinical Observer (See Patient Care Policy 52: Clinical Observers)
- Lay Visitors 18 years or older (e.g., Media Representative) whose presence has been requested by the patient's physician

Individuals falling under a Visitor Category described above must be sponsored by an Attending Physician.

A Visitor does not include:

- Parent/Guardian of patients 12 years or younger permitted in the OR or procedure room during induction of anesthesia (See Procedure, Section II).

- Parent/Guardian/Patient Representative permitted in the Post Anesthesia Care Unit (PACU) (See Procedure, Section III).

Procedure:

I. Visitor Approval Process

A. Sponsorship and Supervision

a. Visitors must be sponsored by an Attending Physician who will be responsible for ensuring compliance with the UCMC policies and procedures. Each Visitor to the Procedural Suite/OR must be approved through the following procedures:

i. Request for visitation must be submitted via email by the Sponsoring Attending Physician **5 business days** in advance of the visit to his or her Chairman's Office or designee whereupon a UCMC/BSD Staff person will be assigned. The physician performing the procedure, if different from the sponsoring physician, must also grant approval.

b. The Visitor Validation Packet will be completed by the Sponsoring Attending Physician and UCMC/BSD Staff person, including:

i. Email notification to the Department of Anesthesia and Critical Care (DACC) Vice Chair for Clinical Affairs or designee, and the Perioperative Services Clinical Director, Surgical Director and Medical Director or designees.

ii. Patient Consent Forms: the patient shall be contacted prior to the procedure by the Sponsoring Attending Physician or the UCMC/BSD Staff person and consented to having a visitor in the OR/procedural suite. This must be documented on the OR/Procedural Suite Visitor Consent Form and signed by the patient prior to the Visitor entering the OR/Procedural Suite. The consent conversations may be conducted on the day of the procedure.

1. Visitor Competency Packet & Agreement: The Sponsoring Attending Physician and/or UCMC/BSD Staff person must provide appropriate documentation of orientation for the Visitor including education regarding this policy, the medical procedure, basic infection control practices (safeguards against the introduction of infection, hazards, dress code, traffic patterns, hand washing, basic infection control practices expected of the person, and an explanation of the specifics regarding procedure and recovery and what can be expected), patients' rights and confidentiality, appropriate conduct in the OR/procedural suite environment, aseptic principles and techniques, and fire, electrical and other safety protocols. This orientation shall be conducted prior to entry into the OR/procedural suite and the Visitor must sign the Visitor Agreement prior to entering the OR. (Visitor Agreements should be filed with the Privacy Office.)

c. Medical Record Documentation – the Sponsoring Attending Physician shall record the Visitor's presence and reason for the visit in the patient's medical record.

i. Documentation by the circulating nurse in the patient's intraoperative/intraprocedural record must reflect the presence of the Visitors, identifying the individual by name, institution/employer, if applicable, and the times entering and exiting the operating room suite.

ii. If the Visitor is to verbally assist a proceduralist on the use of equipment, the Sponsoring Attending Proceduralist shall document this in the medical record.

d. While in the surgical or procedural suite, the Visitor must be supervised by the Sponsoring Attending Physician or the UCMC/BSD Staff person at all times to ensure compliance with the UCMC policies and procedures.

B. Patient Care - A Visitor classified as a Vendor Representative or Lay Person shall not participate in any patient care activities, including coming in contact with equipment in the OR, entering the sterile field or touching the patient. A separate agreement, in one or more form(s) approved by the relevant Department (Surgery, OB/GYN, Anesthesia and Critical Care or other) and the Office of Legal Affairs, must be executed in advance with any Visitor who participates in the procedure. Such Visitors must also be approved by the Medical Staff Office and be granted temporary privileges.
   a. If the Visitor is classified as a Clinical Observer, then the Visitor must comply with the Clinical Observers Policy, PC 52, which includes having a signed Clinical Observer Agreement.

C. Visitors whose presence in the OR is necessary for a category of procedures may be evaluated once and approval granted for repeat visits (e.g. a technician from XYZ Corporation may be present during all hip replacement surgeries involving XYZ Corporation's hardware for the purpose of helping the surgeon identify the appropriate implant devices).

D. Visitors classified as Vendor Representatives must be screened pursuant to Administrative Policy A05-08: Vendor Relations prior to being permitted into UCMC and the Clinical Care Unit(s). The Vendor Representative or his/her company must have a Business Associate Agreement on file with the Purchasing Department, unless the requirement is waived by the Office of Legal Affairs.

E. The Visitor shall leave the OR/procedural suite whenever requested to do so by the Attending Surgeon, Attending Anesthesiologist, UCMC/BSD Staff person or other OR/procedural personnel.

F. Patient Privacy: The Visitor shall be provided with only that patient information that is essential to the Visitor's purpose, and he/she shall maintain the privacy and confidentiality of all patient information accessed. A visitor may not photograph, audiotape, videotape, or otherwise record any aspect of the surgical procedure unless permitted by hospital policy. A *Consent to Photograph/Media Consent Form* must be signed by the patient prior to photographs or videotapes being taken.

G. If at any time a staff member determines that the Visitor poses a threat to the safety of the patient or staff, he/she may require the visitor to leave.

H. All Visitors shall be required to wear nametag identification during their visit to the OR/procedural suite and to enter only those areas for which permission has been granted.

II. Parent/Guardians in the Procedural Suite/Operating Room and PACU: With respect to patients 12 years or younger, the Procedural Suite/Operating Rooms and Post Anesthesia Care Unit (PACU) generally shall be limited to Authorized Personnel and parents and guardians of patients 12 years or younger:

a. Procedures for Parents and Guardians in the Procedural Suite/OR: For patients 12 years of age or younger, the patient's parent, guardian, or other individual selected by the child's parent or guardian may be allowed into the procedural suite/OR during the induction of anesthesia if the following procedures are followed:
    i. Written consent shall be obtained from the parent, guardian, or other designated individual, and the attending anesthesiologist and attending physician performing the procedure. Under such consent, the parent, guardian, or other visitor agrees to follow all hospital policies and procedures, agrees to not operate any medical equipment, agrees to remain in the designated areas and agrees to leave) when requested by a member of the OR/procedure team or after the induction of anesthesia is completed.
    ii. The child's medical record shall include documentation in the nursing flow sheet of the additional person in the procedural suite/OR and their relationship to the child.
    iii. At least one additional medical or service staff person (not the circulating nurse) shall be assigned to oversee, supervise, and assist the parent, guardian or other designated individual for the period of time such person is present in the procedural suite/OR. This staff person should have no other designated responsibilities during the time that the parent, guardian, or other visitor is in the procedural suite/OR.
    iv. If at any point during the induction of anesthesia a staff member determines that the parent, guardian or other visitor poses a threat to the safety of the patient or staff, he/she may require the parent, guardian or other visitor to leave.
    v. Parents, guardians, or other visitors granted permission to enter the procedural suite/OR under this policy should be provided a nametag, identifying their name and reason for being there.
b. Procedures for Parents and Guardians in the PACU: For patients 12 years of age or younger, the patient's parent, guardian, or other individual selected by the child's parent or guardian, may be allowed into the PACU (Phase 1 & 2) during the child's recovery from a surgery or procedure if the following procedures are followed:
    i. Written consent shall be obtained from the parent, guardian, or other designated individual, and the attending physician performing the surgery/procedure. Under such consent, the parent, guardian, or other visitor must agree to follow all hospital policies and procedures, agree not to operate any medical equipment, agree to remain in designated areas, agree to leave when requested by a member of the PACU team, and agree to respect the privacy of other patients in the PACU.
    ii. The child's medical record shall include documentation in the nursing flow sheet of the additional person in the PACU and their relationship to the child.
    iii. If at any point during the recovery of the minor patient a staff member determines that the parent, guardian or other visitor poses a threat to the safety of the patient or staff, he/she may require the parent, guardian or other visitor to leave.
    iv. Parents, guardians, or other visitors granted permission to enter the PACU under this policy shall be provided a Perioperative nametag, identifying their name and visitor status.
    v. The PACU personnel shall ensure the privacy of other patients who may be recovering from surgical procedures in the PACU when a parent, guardian, or other visitor is present. This may include use of screens or other types of

separation for recovery of children who have a parent, guardian or other visitor in the PACU.

III. Patient Representative in the PACU: Patient Representatives shall be permitted in the UCMC PACU while the patient is recovering.

a. Written consent should be obtained from the adult patient, the parent, guardian, or legal representative of a minor or a mentally disabled adult, or the physician performing the surgery/procedure. Under such consent, the parent, guardian, or patient representative must agree to follow all hospital policies and procedures, agree not to operate any medical equipment, agree to remain in designated areas, agree to leave when requested by a member of the PACU team, and agree to respect the privacy of other patients in the PACU.
b. The patient's medical record shall include documentation in the nursing flow sheet of the patient representative in the PACU.
c. If at any time during the recovery period a staff member determines that the visitor poses a threat to the safety of the patient, other patients or staff, he/she may require the parent, guardian or other visitor to leave.
d. Patient representatives granted permission to enter the PACU under this policy shall be provided with a name tag, identifying their name and visitor status.
e. The PACU personnel shall ensure the privacy of other patients who may be recovering from surgical procedures in the PACU when a patient representative is present. This may include use of screens or other types of separation for recovery of patients who have a patient representative in the PACU.

IV. Safeguards Against Infection and Other Hazards: In addition to the above procedures, steps shall be taken to minimize the introduction of infection or other hazards in the procedural suites, ORs, and PACU by a Visitor, Parent, Guardian or Patient Representative. All individuals must be free of transmissible infections. Visitors, Parents/Guardians and Patient Representatives shall receive information related to safeguards against the introduction of infection, hazards, dress code, traffic patterns, hand washing, basic infection control practices expected of the person, and an explanation of the specifics regarding procedure and recovery and what can be expected.

Interpretation, Implementation and Revision

The Department of Surgery, the Department of Anesthesia & Critical Care, the Department of Obstetrics and Gynecology and Perioperative Services in collaboration with the Department of Risk Management and Patient Safety are responsible for the interpretation and revision of this policy. The procedural suite/OR personnel are responsible for the implementation of this policy.

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Thomas Jackiewicz
President