NORTH COAST EMERGENCY MEDICAL SERVICES
3340 Glenwood Street, Eureka, CA 95501 (707) 445-2081 (800) 282-0088 FAX (707) 445-0443

MEMORANDUM:

DATE: September 18, 2017

TO: Joint Powers Governing Board Members
County Health Officers
Lake County Administrative Officer
Prehospital Care Medical Directors
Prehospital Care Nurse Coordinators
Fire Chiefs' Associations/EMS Liaisons
EMCC Chairpersons
Interested Others

FROM: Emily Johnson, Administrative Assistant

RE: E-Informational Mailing

1. For Your Information:
   a. Draft- Policy #2217
   b. Draft Policy #6043
   c. Draft Policy #6044
   d. Draft Policy #6511.1
   e. Draft Policy #7000

Subject: Provider
BLS Narcan® Nasal Spray (Naloxone) (~~Narcan~~)

Associated Policies:

I. Authority and Reference (incorporated herein by references)
   A. Division 2.5 of Health and Safety Code
   B. California code of Regulations, Title 22
   C. North Coast EMS Policies and Procedures

II. Purpose
   A. To describe the provider approval process and use of Narcan® (Naloxone) Nasal Spray intranasal naloxone for their BLS providers.

III. Policy
   A. Only North Coast EMS EMS agencies who are an approved optional skills provider may carry and employ intranasal (IN) administration of Narcan® (Naloxone) Nasal Spray ~~naloxone~~.
   B. BLS personnel must be authorized, trained and on duty to administer IN Narcan® (Naloxone) Nasal Spray ~~naloxone~~ to patients.
   C. Prior to receiving North Coast EMS optional skills approval, the EMS agency must document that they staff has received the required training.
   D. Agencies receiving optional skills approval are required to ensure that their personnel are ~~adequately~~ trained to competency and receive periodic review.
   E. Agencies receiving optional skill approval with ensure that personnel that have not received the training will not administer Narcan® (Naloxone) Nasal Spray ~~naloxone~~ for any reason.

IV. Minimum Course Content for Optional Skills for the BLS Agency
   A. General Principles
      1. Scene size up and scene safety.
      2. Ensure appropriate EMS units have been requested.
      3. Identify possible opioid use
         a. Look for syringes or admissions from bystanders.
   B. Cardiopulmonary Resuscitation
      1. Identify cardiopulmonary arrest
      2. Identify respiratory arrest.
      3. Review airway and ventilation adjuncts.
   C. Medication Administration
      1. Understanding the 5 Rights of medication administration.
      2. Review ~~atomizer use and principles~~ device use and principles
      3. Review naloxone drug formulary
      4. Naloxone administration and side effects.
      5. Understand the potential for patient to respond violently to sudden opioid withdrawal.

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Subject: Provider
BLS Narcan® Nasal Spray (Naloxone) (~~Narcan~~)

Associated Policies:

D. Patient Management after naloxone use.
E. Documentation and Reporting.

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Subject: Treatment Guidelines - BLS
Narcan® Nasal Spray (naloxone)~~Naloxone (Narcan)~~

Associated Policies:

I. Class
   A. Narcotic antagonist.

II. Indications
   A. Environment is suspicious for use of opioids.
   B. Victim is unconscious/poorly responsive and respiratory rate appears slow (<12) or shallow/inadequate; or victim is unconscious and not breathing.

III. Therapeutic Effect/Mechanism of Action:
   A. Naloxone is chemically similar to narcotics; however, it has only antagonistic properties. Naloxone competes for opiate receptors in the brain and displaces narcotic molecules from opiate receptors. It can reverse respiratory depression from narcotic overdose.

IV. Contraindications
   A. Absolute:
      1. Known hypersensitivity.
      2. An advanced airway is in place and patient is being adequately ventilated.
      3. Infants < 30 days or newly born

V. Precautions
   A. Narcan® (Naloxone) Nasal Spray ~~Naloxone~~ should be administered cautiously to patients who are known or are suspected to be physically dependent on narcotics. Abrupt and complete reversal by naloxone can cause withdrawal type effects.

VI. Side Effects:
   A. Hypotension
   B. Nausea and vomiting.
   ~~C. Hypertension.~~
   ~~D. Ventricular arrhythmias.~~
   E. ~~Diarrhea~~.

VII. Administration and Dosage-
Route for BLS Providers will only include Intranasal(IN) Narcan® (Naloxone) Nasal Spray .

Subject: Treatment Guidelines – BLS
Naloxone (Narcan)

Associated Policies:

A. Adult: 4mg intranasal via auto device. May be repeated every 2-3 minutes if no improvement.

~~B. Adult: 2mg Intranasal(IN)- maximum single dose 2 mg. May be repeated every 2-3 minutes if no improvement to a total of 6mg total.~~

C. Pediatric: (>30 days of age) 4mg intranasal via auto device. May be repeated every 2-3 minutes if no improvement.

~~D. Pediatric: 0.1mg/kg Intranasal(IN) maximum single dose of 2mg. May be repeated every 2-3 minutes if no improvement to a total of 0.3mg/kg.~~

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Subject: Treatment Guidelines-BLS Personnel
Suspected Opioid Overdose

Associated Policies:

I. Priorities:
- A. Scene safety
- B. ABCs
- C. Manage airway and assist ventilations
- D. Ensure appropriate EMS units have been requested.

II. Suspected Opioid Overdose
- A. Identify intranasal naloxone indications
  1. Environment is suspicious for use of opioids
  2. Victim is unconscious/poorly responsive and respiratory (breathing) rate appears slow (<12) or shallow/inadequate; or victim is unconscious and not breathing.
- B. Ensure that appropriate EMS units have been requested. (BLS/ALS)
- C. Utilize personal protective equipment.
- D. Stimulate victim to determine if the person with awaken.
- E. If no pulse, begin chest compressions.
- F. Assess respiratory status, manage airway and assist ventilations with appropriate BLS maneuvers.
- G. Provide high flow oxygen using appropriate delivery devices (if available).
- H. If no response to stimulation and continued poor/absent breathing, administer Narcan® (Naloxone) Nasal Spray ~~naloxone~~.
- ~~I. Assemble 2mg/2cc intranasal naloxone preload or utilize naloxone spray.~~
- ~~J. When using the 2mg/2cc intranasal naloxone, administer 1mg cc to each nostril.~~
- K. Remove Narcan® (Naloxone) Nasal Spray from the box, ~~When using naloxone spray~~, follow the manufactures instructions.
- L. If patient does not respond, or responds briefly but then relapses, administer a second dose 2-3 minutes after the first dose.
- M. Whether or not Narcan® (Naloxone) Nasal Spray has been administered observe for improved breathing and consciousness; continue to assist ventilations until patient regains consciousness.
- N. If respirations return but patient remains unresponsive, place patient on their left side to prevent aspiration.
- ~~O. Use naloxone with caution in patients with significant trauma who have not been adequately immobilized- consider the concurrent need for appropriate immobilization/spinal motion restriction.~~
- P. If improved response to Narcan® (Naloxone) Nasal Spray ~~naloxone~~, be alert for sudden agitation behavior, violence or symptoms of opioid withdrawal, such as vomiting, abdominal cramps or sweating.

Approved:_____ Date:_____

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Subject: Treatment Guidelines-BLS Personnel
Suspected Opioid Overdose

Associated Policies:

Q. Report administration of Narcan® (Naloxone) Nasal Spray ~~naloxone~~ to appropriate EMS personnel.

R. Complete Narcan® (Naloxone) Nasal Spray ~~naloxone~~ utilization report and submit a copy to North Coast EMS.

Approved:_____ Date:_____

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Subject: Treatment Guidelines - ALS Personnel
12 Lead Electrocardiography

Associated Policies: Purpose:

To identify guidelines for the acquisition and interpretation of a 12 lead ECG in the pre-hospital setting to facilitate early identification and prompt transportation of patients with a suspected STEMI~~I~~ to a STEMI~~I~~ Receiving Center (SRC) or facility that promptly transfers a STEMI~~I~~ patient to a SRC.

Policy:

1. Only North Coast EMS approved 12 Lead provider agencies ~~may~~ ~~should~~ may carry and employ 12 Lead technologies.
2. ALS providers desiring to utilize and employ 12 Lead must do so according to North Coast EMS ~~Draft~~ policy 6554 "Approval of New ALS Interventions"
3. It is the responsibility of the ALS Provider to ensure and document that all Paramedics receive the required training prior to employing the 12 Lead ECG in the field.

Indications:

I. ~~Any and all patients whose~~ Mmedical history and/or a description of the signs and symptoms indicating that the patient ~~is/was~~ is suffering from Acute Coronary Syndrome (ACS) including but not limited to:

a) Chest or upper abdominal discomfort~~0 i~~ suggestive of acute coronary syndrome.

New onset cardiac dysrhythmias (including cardiac arrest if return of spontaneous circulation).

b) Discomfort or tightness radiating to the jaw, left shoulder or arm and may have one of the following:

Nausea Diaphoresis
Dyspnea
Unexplained syncope/dizziness (elderly)

~~c) Known treatment for ACS~~

~~d)~~c) May be considered in patients with stable tachycardia for diagnostic purposes.

2. Significant vital signs and physical findings.

Relative Contraindications:

1. Trauma

~~1. 2Trauma~~

~~2.~~ 2. Uncooperative patient

~~3.~~ 3.~~3~~Cardiac Arrest (unless return of spontaneous circulation)

~~Relative Contraindications:~~

~~Trauma~~

Procedure:

I. Complete initial assessment and stabilizing treatment.

2. Obtain the EKG as soon as possible and prior to departing the scene when possible.

3. Place precordial leads and acquire tracing as per manufacturer's directions.

4. Transmit ECG and/or notify the SRC (in Humboldt to SRC, in Del Norte County to Base Hospital and in Lake County to hospital that receives patient) of the ECG's interpretation that the patient meets or indicates ST elevation criteria. as soon as possible ~~that the patient of meets or indicates ST elevation criteria. ***ACUTE MI*** or ***STEMI MI***.~~

5. Make Base contact early in situations where the medic suspects a positive STEMI that is not supported by the EKG interpretation.

6. If defibrillation or synchronized cardioversion is necessary, remove the precordial leads.

Documentation:

1~~I~~. Complete Patient Care Report (ePCR), attaching copies all ECG's performed.

2. Document in the narrative that an ECG was obtained and the findings.

~~2. Turn in all original prehospital 12-lead ECG(s) to the receiving hospital by handing it/them to the receiving medical personnel assuming care of the patient.~~

3. Provide original or copy of 12 lead ECG to receiving hospital.

~~3.~~ 4. If air transport is requested,

a) the time of the request,

b) the ETA provided by the air transport,

c) the arrival time of the air transport,

d) the "lift off' time of the air transport.

e) Provide copy of ECG

f) Use reasonable caution in delaying transport while waiting for air transport. Refer to policy # 2206.4 regarding transport delay.

Approved:_____

Approved as to Form:_____

Subject: Patient Care – Trauma System
Trauma Triage Determination and Transport Destination Policy

DRAFT 4-21-17

I. Authority and Reference:
   A. Title 22, Division 9, Chapter 7
   B. Division 2.5, Health and Safety Code
   C. North Coast EMS Policies
   D. Coastal Valley's EMS Policies

II. Purpose:
   A. To rapidly triage trauma patients and transport them to optimal care.

III. Policy:

   A. The goal of trauma triage determination in the North Coast EMS region is to rapidly identify the trauma patient based on physiologic changes, mechanism/anatomic injury, and concurrent/special conditions.

   B. After rapid trauma triage has occurred, the goal is to transport the trauma patient to the closest, most appropriate trauma center. This is further defined by the regions of Del Norte, Humboldt, and Lake Counties, with patient destination decisions delineated in policies 7000A, 7000B, and 7000C.

   C. Trauma Alert: Field personnel should provide the earliest possible notification, including expected ETA, to the base or receiving hospital that they are transporting a patient meeting trauma triage criteria to that facility.

   D. Patient Destination Exceptions for All Counties:

      1. A trauma patient may, at the option of the Base Hospital Physician, be brought to the closest appropriate medical facility, when the patient has a life-threatening condition which overrides the need for expedient surgery. This would include conditions such as obstructed airway, tension pneumothorax, etc, which cannot be relieved or stabilized in the field.

      2. In the case of a Mass Casualty Incident (MCI), patients are triaged according to the North Coast EMS MCI Policy #6542, "MCI Criteria - Operational Guidelines".

      3. Patients who have trauma with burns may, at the option of the Base Hospital Medical Control, be transported directly to a trauma center with burn specialization capabilities.

Subject: Patient Care – Trauma System
Trauma Triage Determination and Transport Destination Policy – **Del Norte County**

Authority and Reference:

A. Title 22, Division 9, Chapter 7
B. Division 2.5, Health and Safety Code
C. North Coast EMS Policies

Purpose:

A. To rapidly triage trauma patients and transport them to optimal care.

Policy:

A. The goal of trauma triage determination in the North Coast EMS region is to rapidly identify the trauma patient based on physiologic changes, mechanism/anatomic injury, and concurrent/special conditions.
B. After rapid trauma triage has occurred, the goal is to transport the trauma patient to the closest, most appropriate trauma center.

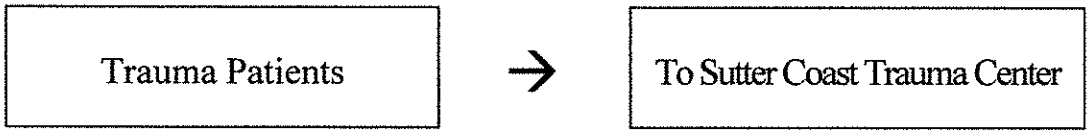
Patient Destination Decision:

Del Norte County

From Scene to Hospital
All trauma patients should be taken directly to the Level IV trauma center at Sutter Coast Hospital in Crescent City, CA.

- Consider air transport to a higher-level trauma center outside the NCEMS region when possible.

From Hospital to Higher Level of Trauma Care
All trauma patients taken to Sutter Coast will be evaluated for their seriousness of injury and the hospital's ability to provide the necessary resources. Following the Sutter Coast "Trauma Activation" policy, the physician in charge of patient care determines if the patient will be transferred. This decision should be communicated immediately to the receiving physician and to transport personnel, per EMTALA requirements.



Subject: Patient Care – Trauma System
Trauma Triage Determination and Transport Destination Policy – **Humboldt County**

Authority and Reference:

A. Title 22, Division 9, Chapter 7
B. Division 2.5, Health and Safety Code
C. North Coast EMS Policies

Purpose:

A. To rapidly triage trauma patients and transport them to optimal care.

Policy:

A. The goal of trauma triage determination in the North Coast EMS region is to rapidly identify the trauma patient based on physiologic changes, mechanism/anatomic injury, and concurrent/special conditions using the *ACS 2011 Guidelines for Field Triage of Injured Patients*, attached to this policy.
B. After rapid trauma triage has occurred, the goal is to transport the trauma patient to the closest, most appropriate trauma center.

Humboldt County

There are two designated trauma centers in Humboldt County: St. Joseph Hospital Eureka (SJE) and Mad River Community Hospital (MRCH).

Trauma Patient Destination Criteria:

1. Eureka and Southern Humboldt: The City Ambulance of Eureka (CAE) trauma catchment area will be defined as the Humboldt County Zones 3 and 4 and CAE covered areas outside of Humboldt County as determined with another LEMSA. All trauma patients in the CAE catchment area meeting the *ACS 2011 Guidelines for Field Triage of Injured Patients* shall be transported directly from the field to SJE, except that, patients who are in extremis as determined by the base hospital physician and in consultation with the transporting paramedic will be transported to the closest facility for stabilization and re-triage to SJE or a higher-level trauma center.

2. North and Eastern County: The Arcata Mad River Ambulance and Hoopa (K'ima:w) Ambulance trauma catchment areas will include Humboldt County Zones 1 and 2 and other covered areas outside of Humboldt County as determined by North Coast EMS or another LEMSA. All trauma patients meeting the *ACS 2011 Guidelines for Field Triage of Injured Patients* will be transported to the closest designated trauma center in the county capable of meeting the needs of the patient, as determined by the base hospital and in consultation with the transporting paramedic.

3. Aero Medical: Trauma patients meeting the *ACS 2011 Guidelines for Field Triage of Injured Patients* who are transported by an aero medical resource from the scene will

be transported to the closest appropriately designated trauma center. Additionally, see North Coast EMS Policy #2206.3, "EMS Aircraft Services, Patient Care and Destination" for additional considerations.

Trauma Patient Tracking Mechanism: A quality improvement tracking and review process shall be established by each designated trauma center in Humboldt County that includes a written process to document the reason(s) for bypassing or receiving trauma patients that meet critical trauma criteria. NCEMS Policy #7005, "Trauma Quality Improvement: EMS System Process for Providing Trauma Quality Improvement" will be used, by each designated trauma center in Humboldt County, to monitor and evaluate the medical care of patients with traumatic injuries and to provide and educational forum for the improvement of trauma care.

ED Call Schedule Notification: MRCH and SJE hospitals shall establish, implement, and keep records of a written process to formally notify each ED, CAE dispatch, and North Coast EMS of each day's relevant trauma patient capabilities and on-call specialty coverage schedule. This process shall include providing applicable updates as relevant capabilities change throughout each day. This information will be reviewed, at minimum, during the quarterly Trauma Advisory Committee (TAC) meetings.

2011 Guidelines for Field Triage of Injured Patients

Measure vital sign and level of consciousness

Subject: Patient Care – Trauma System
Trauma Triage Determination and Transport Destination Policy – **Humboldt County**

1

Glasgow Coma Scale	≤ 13
Systolic Blood Pressure (mmHg)	< 90 mmHg
Respiratory rate	< 10 or >29 breaths per minute or need for ventilatory support (20 in infant aged < 1)

NO

2

Assess anatomy of injury

- All penetrating injuries to head, neck, torso, and extremities proximal to elbow or knee
- Chest wall instability or deformity (e.g. flail chest)
- Two or more long-bone fractures
- Crushed, degloved, mangled, or pulseless extremity
- Amputation proximal to wrist or ankle
- Pelvic fractures
- Open or depressed skull fracture
- Paralysis

YES → **Transport to a Trauma Center**
Steps 1 and 2 attempt to identify the most seriously injured patients. These patients should be transported according to trauma patient destination criteria as shown herein.

NO

3

Assess mechanism of injury/evidence of high-energy impact

- **Falls**
  -- Adults: > 20 feet (one story is equal to 10 feet)
  -- Children: >10 feet 2-3 times the height of the child
- **High-risk auto crash**
  -- Intrusion, incl. roof: > 12 in. occupant site; > 18 in. any site
  -- Ejection (partial or complete) from automobile
  -- Death in the same passenger compartment
  -- Vehicle telemetry data consistent with a high risk of injury
- **Auto vs. pedestrian/bicyclist thrown, run over, or with significant (>20 mph) impact**
- **Motorcycle crash > 20 mph**

YES → **Transport to a Trauma Center**
Which, depending upon the defined trauma system, need not be the highest level trauma center.

NO

4

Assess special patient or system consideration

- **Older Adults**
  -- ~~Risk of injury/death increases after~~≥ 55 years AND
  ~~-- SBP < 110 may represent shock after age 65 years~~
  -- ~~Low-impact mechanisms (GLF) may result in severe injury~~Ground Level Fall (GLF) with obvious head injury (absrasion, laceration, contusion) AND
  -- taking an anticoagulant (warfarin, plavix, pradaxa, xarelto, eliquis, ~~aspirin~~, etc.)
- **Children**
  -- Should be triaged and transported according to trauma patient destination criteria
- ~~**Anticoagulants and bleeding disorders**~~
  ~~-- Patients with head injury at high risk for rapid deteri~~
- **Pregnancy > 20 weeks**
- **EMS Provider judgment**

YES → **Transport to a Trauma Center**
Or a hospital capable of timely and thorough evaluation and initial management of potentially serious injuries. Consider consultation with medical control.

NO

Transport according to protocol

When in doubt, transfer to a Trauma Center
https://www.cdc.gov/mmwr/preview/mmwrhtml/rr6101a1.htm

Subject: Patient Care – Trauma System
Trauma Triage Determination and Transport Destination Policy – **Lake County**

Authority and Reference:

A. Title 22, Division 9, Chapter 7
B. Division 2.5, Health and Safety Code
C. North Coast EMS Policies
D. Coastal Valley's EMS Policies

Purpose:

A. To rapidly triage trauma patients and transport them to optimal care.

Policy:

A. The goal of trauma triage determination in the North Coast EMS region is to rapidly identify the trauma patient based on physiologic changes, mechanism/anatomic injury, and concurrent/special conditions.
B. After rapid trauma triage has occurred, the goal is to transport the trauma patient to the closest, most appropriate trauma center.

Patient Destination Decision:

Lake County

Trauma Patient Medical Control – base hospital medical control for all trauma (injured) patients located within 25-minutes of the designated trauma center in Lake County will be assigned to the closest Lake County based trauma center, except for air ambulances, which will be the responsibility of the appropriate base hospital located outside of the North Coast EMS region.

Trauma Triage and Transport Decision Scheme
In order to coordinate with Coastal Valley's EMS Trauma System, Pediatric Trauma Patient age is less than 15 years old.

Trauma Patients are to be transported to the closest available facility according to the following Trauma Triage & Transport Determination Scheme. Generally, this will be to the highest level trauma center available. Transport within Lake County, according to Trauma Patient Medical Control, only when unable to transport the patient by aero medical ambulance to a higher level trauma center located outside Lake County.

TRAUMA TRIAGE & TRANSPORT DETERMINATION FOR LAKE COUNTY

Subject: Patient Care – Trauma System
Trauma Triage Determination and Transport Destination Policy – **Lake County**

STEP 1 – Major Physiologic Factors:

Adult Patient (age 15 and older)	Pediatric Patient (age less than 15yrs)
GCS of thirteen (13) or Less Systolic BP < 90 mm Hg	GCS of thirteen (13) or Less Systolic BP < 80 mm Hg – age 7 – 15 Systolic BP < 70 mm Hg – age < 7

YES / **NO**

Transport to Highest Level Trauma Center Available | **Assess Anatomic Factors**

STEP 2 – Major Anatomic Factors:

1. Penetrating injury to head, neck, chest, abdomen, pelvis, groin, or extremities proximal to elbow or knee
2. Combination of Trauma and Burns of greater than or equal to 15%, or Burns to Face or Airway
3. Two or more proximal long-bone fractures
4. Open or Depressed Skull Fracture
5. Flail Chest
6. Pelvic Fracture
7. Amputation proximal to wrist or ankle
8. Traumatic Paralysis
9. Any patient <5 yrs old who has suffered major trauma & it is not possible to determine physiologic age

YES / **NO**

Transport to Highest Level Trauma Center Available | **Assess Mechanism of Injury Factors**

STEP 3 – Mechanism of Injury Factors:

1. Ejected from vehicle, e.g., auto, jet ski, or motorcycle traveling > 20 mph
2. Death in the same passenger compartment
3. Extrication time > 20 minutes
4. Rollover without seatbelt
5. Fall > 20 feet
6. Auto-pedestrian or auto-bicycle accident with speed > 40 mph and/or major auto deformity
7. High speed MVC with speed >40 mph, or major auto deformity >20 in., or passenger space intrusion >12 in.
8. Significant blunt injury to head, neck, chest, abdomen, or pelvis without co-existing Anatomic or Physiologic Factors

YES / **NO**

Assess Additional Factors | **Re-evaluate, Assess Additional Factors, Consider consultation with Base Hospital**

STEP 4 – Additional Factors:

Physiologic & Anatomic Factors
1. Torso, abdomen, or pelvic complaint
2. Constant respiratory difficulty, tachycardia, or vasoconstriction
3. Extremity ischemia, demonstrated by absent pulses and pallor

Age & Co-Morbid Factors
1. Age < 5yrs & difficult to evaluate or age > 55yrs
2. Pregnancy
3. Cardiac/Resp Disease, IDDM, Cirrhosis, Obesity
5. Immuno suppressed patients
6. Bleeding Disorders / Anticoagulants
7. Inability to communicate

YES

Transport to Highest Level Trauma Center Available

NO

Consult with Base Hospital for Transport to Non-Trauma Facility

Subject: Patient Care – Trauma System
Trauma Triage Determination and Transport Destination Policy

1. Authority and Reference:
   A. Policy 7000
   B. Policy 7000.1
   C. Policy 7000.2
   D. Policy 7000.3

Approved: _____ Date: _____

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