San Francisco General Hospital and Trauma Center
Emergency Department

Emergency Department
Registered Nurse

Standardized Procedures
and Protocols
San Francisco General Hospital and Trauma Center
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Emergency Department Registered Nurse
Standardized Procedures and Protocols Manual

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Distribution List:
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Copy 2: CIDP committee
Master copy with disk: Clinical Nurse Specialist
San Francisco General Hospital and Trauma Center
Emergency Department

Standardized Procedures:
Emergency Department Registered Nurse

Introduction

The following protocols are the policies and guidelines for the care provided to patients at San Francisco General Hospital and Trauma Center (SFGH) Emergency Department (ED) by the Registered Nurse (RN). Since it is impossible to anticipate every clinical situation or presenting chief complaint that may arise, it is expected that Attending Physician consultation may be warranted. The RN will consult the Attending Physician by using their nursing clinical judgment. In general, the RN shall function within the scope of practice as specified in the State of California Nurse Practice Act.

The Standardized Procedures were developed with assistance from the following:

1. Implementation of Standardized Procedures. Position Statement of the California Nurse Association
2. Standardized Procedure Work Sheet, State of California Board of Registered Nursing, Department of Consumer Affairs.
STANDARDIZED PROCEDURE ~ REGISTERED NURSE

Title: Registered Nurse in the Emergency Department

I. Policy Statement

A. It is the policy of San Francisco General Hospital and Trauma Center that all standardized procedures are developed collaboratively and approved by the Committee on Interdisciplinary Practice (CIDP) whose membership consists of Nurse Practitioners, Physician Assistants, Nurse Midwives, Registered Nurses, Physicians, Administrators and other Affiliated Staff and conform to all 11 steps of the standardized procedure guidelines as specified in Title 16, CCR Section 1474.

B. A copy of the signed procedures will be kept in an operational manual in the Emergency Department, and in the Medical Staff Office.

II. Functions to be performed

The Registered Nurse, as outlined in the Nurse Practice Act, Business and Professions Code Section 2725, is authorized to implement appropriate standardized procedures or changes in treatment regimen after observing signs and symptoms of illness, reactions to treatment, general behavior, or general physical condition, and determining that these exhibit abnormal characteristics.

The RN provides interdependent functions that overlap the practice of medicine. These overlapping functions require standardized procedures. These standardized procedures include guidelines stating specific conditions requiring the RN to seek physician consultation.

III. Circumstances Under Which RN May Perform Function

A. Setting

The Registered Nurse may perform the following standardized procedure functions in the Emergency Department consistent with their experience and training.
B. Scope of Supervision Required
   1. The RN is responsible and accountable to the Emergency Department Nurse Managers and Medical Director or physician designee.
   2. Overlapping functions are to be performed in areas, which allow for a consulting physician to be available to the RN, by phone or in person, including but not limited to the clinical area.
   3. Physician consultation is to be obtained as specified in the protocols and under the following circumstances:
      a. Emergency conditions requiring prompt medical intervention
      b. Upon the request of the patient, registered nurse, or physician

IV. Requirements for the Registered Nurse

A. Experience and Education
   1. Active California Registered Nurse license
   2. Current Basic Life Support certification
   3. Current Advanced Cardiac Life Support certification from an approved American Association provider.

B. Special Training
   1. Enrollment in the Emergency Department orientation program by the Emergency Department Nurse Manager
   2. Successful completion of the orientation program, including protocol specific training, requirements described by the Guidelines for Emergency Nursing Practice

C. Evaluation of the Registered Nurse competence in performance of standardized procedures
   1. Initial: at the conclusion of the standardized procedure training the Nurse Manager or designee will assess the RN’s ability to perform the procedures.
      a. Successful completion of the RN orientation program
      b. Successful completion of a review of accuracy and completeness of documentation for actual patient cases (minimum of ten).
   2. Annual: Nurse Manager or designee will evaluate the RN’s competence through an annual performance appraisal and skills competency review along with feedback from colleagues, physicians, direct observation and/or chart review.
   3. Follow-up: Areas requiring increased proficiency as determined by the initial or annual evaluation will be re-evaluated by the Nurse Manager, or designee at appropriate intervals until acceptable skill level is achieved. This evaluation may include chart reviews.
V. Development and Approval of Standardized Procedure

A. Method of Development
Standardized procedures are developed collaboratively by the registered nurses, nurse managers, physicians, and administrators and must conform to the eleven steps of the standardized procedure guidelines as specified in Title 16, CCR Section 1474.

B. Approval
The CIDP, and Credentials, Medical Executive, and Joint Conference Committees must approve all standardized procedures prior to the implementation.

C. Review Schedule
The standardized procedures will be reviewed every three years by the registered nurses, nurse managers, and medical director and as practice changes.

D. Revisions
All changes or additions to the standardized procedures are to be approved by the CIDP accompanied by the dated and signed approval sheet.
Protocol #1
Assessment and Management of Chest Pain

Protocol: Chest Pain

A. Definition: This protocol covers the initial assessment and management of patients with suspected ischemic chest discomfort seen by Registered Nurses (RN) in the Emergency Department (ED).

Indications
- Suspected ischemic chest discomfort

Exclusions
- Acute chest trauma or suspected musculoskeletal pain
- Fever > 38 ° C (100.4 ° F)

B. Data Base

1. Subjective Data
   - Review history and signs and symptoms suggestive of ischemia
     - Retrosternal chest discomfort
     - Pain spreading to shoulders, neck, arms, or jaw, or pain in back
     - Associated lightheadedness, fainting, diaphoresis, or nausea
     - Shortness of breath
     - Global feeling of distress, anxiety, or impending doom
   - Pertinent past medical history, current medications and allergies
   - Characteristics of pain (PQRST); location, quality, and intensity (1-10)
   - Any treatments used prior to arrival

2. Objective Data
   - Perform focused physical exam relevant to chest pain/cardiac disease
   - Level of consciousness (may use Glasgow Coma Scale)
   - Measure vital signs every 30 minutes x2
   - Attach cardiac monitor, assess rhythm, and monitor for dysrhythmias
   - Place on pulse oximetry and measure SpO₂
   - Skin signs: color, temperature, moisture, and capillary refill
   - Laboratory and imaging evaluation:
     - Stat 12-lead ECG, show to Attending MD when completed
     - Portable CXR

C. Diagnosis
   a. Consistent with subjective and objective findings
   b. Assessment of status of disease process
D. Plan

1. Administer oxygen via nasal cannula at 2 liters/minute. Titrate to maintain $\text{SpO}_2 > 94\%$

2. Start saline lock IV (18-gauge or larger). Draw full tubes. Send CBC and basic metabolic panel. If fibrinolytic therapy is anticipated, start a second saline lock IV or use Twin-cath™.

3. Administer Aspirin 162 or 325 mg chewed (if no contraindications)

4. Patient education and counseling appropriate to disease process

5. Consultation with physician as needed, or:
   - HR > 120
   - SBP < 90
   - RR > 28
   - $\text{SpO}_2 < 92\%$
Protocol #2
Assessment and Management of Gastrointestinal Bleeding

Protocol: Gastrointestinal Bleeding

A. Definition: This protocol covers the initial assessment and management of patients with gastrointestinal (GI) bleeding seen by Registered Nurses (RN) in the Emergency Department (ED).

Indications
- Subjective history of:
  1. Blood or coffee-ground emesis, or
  2. Melena, or
  3. Rectal bleeding (more than spotting on tissue), and
- Vital sign abnormality suggesting hemodynamic instability (HR >100 or SBP < 110)

B. Data Base

1. Subjective Data
   - Review history and signs and symptoms suggestive of GI bleeding
     - As noted above
     - Amount, type, and frequency of blood in emesis or stools and other associated symptoms (abdominal pain, fatigue, syncope)
     - Pertinent past medical history, including history of ulcer, coagulopathies, esophageal varices, CHF or renal failure; current medications and allergies
     - Characteristics of any pain (PQRST); location, quality, and intensity (1-10)
     - Any treatments used prior to arrival

2. Objective Data
   - Perform focused physical exam relevant to gastrointestinal disorders
   - Level of consciousness (may use Glasgow Coma Scale)
   - Measure vital signs every 30 minutes x2
   - Attach cardiac monitor, assess rhythm, and monitor for dysrhythmias
   - Place on pulse oximetry and measure SpO₂
   - Skin signs: color, temperature, moisture, and capillary refill; petechiae, purpura, or ecchymosis
C. Diagnosis
   a. Consistent with subjective and objective findings
   b. Assessment of status of disease process

D. Plan

1. Initiate oxygen via nasal cannula at 4 liters/minute if hypotensive or anemic

2. Start IV NS (18-gauge or larger). Draw full tubes. Send CBC with platelet, basic metabolic panel, liver function tests, PT/PTT, Type and Screen. Administer 500 ml NS IV bolus (if no history of CHF or renal failure).

3. Start 2\textsuperscript{nd} IV NS (18-gauge or larger) if HR >110, SBP <120, conjunctiva pale, or history of esophageal variceal bleeding

4. Patient education and counseling appropriate to disease process

5. Consultation with physician as needed, or:
   - HR >120
   - SBP <90
   - RR >28
   - SpO\textsubscript{2} <92%
   - Massive hematemesis bleeding (with potential airway compromise)
   - Altered mental status with GCS <14
   - History of CHF or renal failure
Protocol #3
Assessment and Management of Shortness of Breath with Wheezes (Asthma/COPD)

Protocol: Shortness of Breath with Wheezes

A. Definition: This protocol covers the initial assessment and management of patients with shortness of breath with wheezes seen by Registered Nurses (RN) in the Emergency Department (ED).

Indications
- Shortness of breath with confirmed wheezing and history of asthma/COPD

B. Data Base

1. Subjective Data
   - Review history and signs and symptoms of asthma/COPD
   - Pertinent past medical history, current medications and allergies
   - Characteristics of shortness of breath (PQRST) and associated symptoms (cough, fever, chills)
   - Any treatments used prior to arrival

2. Objective Data
   - Perform focused physical exam relevant to respiratory disease
     - Auscultate lung sounds bilaterally
     - Note respiratory rate, depth, and work of breathing
     - Stridor or audible wheezing
   - If age > 50 years, attach cardiac monitor, assess rhythm, and monitor for dysrhythmias
   - Measure vital signs every 30 minutes x2
   - Measure peak flow before and after 1st nebulized treatment
   - Place on pulse oximetry and measure SpO₂
   - Skin signs: color, temperature, moisture, and capillary refill
   - Laboratory and imaging evaluation:
     - If age > 50 years, 12-lead ECG. Show to Attending MD when completed
     - Obtain CXR If fever > 38 °C (100.4 °F)

C. Diagnosis
   a. Consistent with subjective and objective findings
   b. Assessment of status of disease process
D. Plan

1. Initiate oxygen via nasal cannula at 2 liters/minute. Titrate to maintain SpO₂ >94%

2. Start saline lock IV (18-gauge or larger) and draw full tubes if:
   - RR >40
   - Peak flow <150
   - SpO₂ <94%

3. Administer nebulized albuterol sulfate 2.5 mg/3 ml saline and ipratropium bromide 0.5 mg x2 doses, then albuterol sulfate 2.5 mg/3 ml saline x1 dose (over one hour).

4. Patient education and counseling appropriate to disease process

5. Consultation with physician as needed, or:
   - HR >120
   - SBP <90
   - RR >28
   - SpO₂ <92%
Protocol #4
Assessment and Management of Shortness of Breath Without Wheezes

Protocol: Shortness of Breath with Wheezes

A. Definition: This protocol covers the initial assessment and management of patients with shortness of breath without wheezes seen by Registered Nurses (RN) in the Emergency Department (ED).

Indications
- Chief complaint of shortness of breath
- Absence of wheezes, and
- RR >24, or
- RA SpO₂ <94%

B. Data Base

1. Subjective Data
- Review history and signs and symptoms of shortness of breath
- Pertinent past medical history, hospitalizations for respiratory disease, current medications and allergies
- Characteristics of shortness of breath (PQRST) and associated symptoms (cough, fever, chills, chest pain, ankle edema)
- Any treatments used prior to arrival

2. Objective Data
- Perform focused physical exam relevant to respiratory disease
  - Auscultate lung sounds bilaterally
  - Note respiratory rate, depth, and work of breathing
- If age > 35 years, attach cardiac monitor, assess rhythm, and monitor for dysrhythmias
- Measure vital signs every 30 minutes x2
- Attach cardiac monitor, assess rhythm, and monitor for dysrhythmias
- Place on pulse oximetry and measure SpO₂
- Skin signs: color, temperature, moisture, and capillary refill
- Laboratory and imaging evaluation:
  - If age > 35 years, 12-lead ECG. Show to Attending when completed
  - Obtain portable CXR or send for PA and lateral CXR if:
    - SpO₂ >94% on oxygen
    - RR <24
    - ECG cleared by physician
    - Patient is alert and cooperative
C. Diagnosis
   a. Consistent with subjective and objective findings
   b. Assessment of status of disease process

D. Plan

1. Initiate oxygen via nasal cannula at 2 liters/minute. Titrate to maintain
   SpO₂ >94%

2. Start saline lock IV (20-gauge or larger). Draw full tubes, including BNP,
   and hold.

3. Draw and hold first set of blood cultures if fever > 38 ° C (100.4 ° F)

4. Patient education and counseling appropriate to disease process

5. Consultation with physician as needed, or:
   - HR >120
   - SBP <90
   - RR >28
   - SpO₂ <92%
Protocol #5
Assessment and Management of Syncope
(Abrupt and Transient Loss of Consciousness)

Protocol: Syncope

A. Definition: This protocol covers the initial assessment and management of patients with syncope seen by Registered Nurses (RN) in the Emergency Department (ED).

Indications
- Reliable history of syncope or near-syncope

B. Data Base

1. Subjective Data
   - Review history and signs and symptoms related to loss of consciousness
     - Sequence of preceding events
     - Duration of episode
     - Actions that relieve symptoms
     - Observe for signs of injury, needle marks, and characteristic breath odor
   - Pertinent past medical history, current medications and allergies
   - Characteristics of any pain (PQRST); location, quality, and intensity (1-10) and associated symptoms (headache, dizziness, chest pain, palpitations)
   - Any treatments used prior to arrival

2. Objective Data
   - Perform focused physical exam relevant to syncope
   - Level of consciousness (may use Glasgow Coma Scale)
   - Measure vital signs every 30 minutes x2. Include orthostatic vitals signs unless HR >100 or SBP <90
   - Attach cardiac monitor, assess rhythm, and monitor for dysrhythmias
   - Place on pulse oximetry and measure SpO₂
   - Skin signs: color, temperature, moisture, and capillary refill
   - Laboratory and imaging evaluation:
     - Stat 12-lead ECG, show to Attending MD when completed
     - Portable CXR
C. Diagnosis
   a. Consistent with subjective and objective findings
   b. Assessment of status of disease process

D. Plan

1. Administer oxygen via nasal cannula at 2 liters/minute. Titrate to maintain SpO$_2$ >94%

2. Start saline lock IV (18-gauge or larger). Draw full tubes. Send CBC and basic metabolic panel. Administer 500 ml NS IV bolus if HR >100 or SBP <120 (if no history of CHF or renal failure).

3. Obtain stat Accu-chek glucose. Send urine pregnancy for women < 50 years.

4. Patient education and counseling appropriate to disease process

5. Consultation with physician as needed, or:
   - HR >120 or <50
   - SBP <90
   - RR >28
   - SpO$_2$ <92%
   - New onset focal neurological symptoms
Protocol #6
Assessment and Management of Vaginal Bleeding

Protocol: Syncope

A. Definition: This protocol covers the initial assessment and management of patients with vaginal bleeding seen by Registered Nurses (RN) in the Emergency Department (ED).

Indications
- Vaginal bleeding, and
- Known or suspected pregnancy, and
- Age < 50 years

B. Data Base

1. Subjective Data
   - Review history and signs and symptoms related to gynecological emergency
     - Gravida, para, abortions
     - Date of last menstrual period; duration and amount of flow, length of time for pad/tampon saturation, presence of clots or tissue
     - Pregnancy suspected or confirmed. If confirmed, expected date of confinement (EDC)
     - If patient is postpartum: date of delivery, complications
     - Pertinent past medical history, current medications and allergies
     - Characteristics of any pain (PQRST); location, quality, and intensity (1-10) and associated symptoms (abdominal cramping, fever, chills)
     - Any treatments used prior to arrival

2. Objective Data

   - Perform focused physical exam relevant to vaginal bleeding
   - Measure vital signs every 30 minutes x2. Include orthostatic vitals signs unless HR >100 or SBP <90
   - Skin signs: color, temperature, moisture, and capillary refill
   - Laboratory and imaging evaluation:
     - Stat urine B-HCG
C. Diagnosis
   a. Consistent with subjective and objective findings
   b. Assessment of status of disease process

D. Plan

1. Prepare patient for pelvic exam. Patient should empty bladder prior to exam.

2. If urine B-HCG is positive OR known to be pregnant: Start IV NS (18-gauge or larger). Draw full tubes. Send CBC, Type and Screen, serum B-HCG, and urinalysis (by quick-cath if more than spotting). Administer 500 ml NS IV bolus if HR >100 or SBP <120 (if no history of CHF or renal failure).

3. Start a second IV NS if SBP <90.

4. Patient education and counseling appropriate to disease process

5. Consultation with physician as needed, or:
   - HR >120
   - SBP <90
   - RR >28
   - SpO₂ <92%
   - Fever > 39 °C (102.2 °F)
   - Pad soaked more than one per hour
Protocol #7
Assessment and Management of Vomiting and Diarrhea

Protocol: Vomiting and diarrhea

A. Definition: This protocol covers the initial assessment and management of patients with vomiting and diarrhea seen by Registered Nurses (RN) in the Emergency Department (ED).

Indications

- Vomiting more than two times today, or
- Diarrhea/loose stool more than four times today, and
- Vital signs suggesting hemodynamic instability (HR >100 or SBP <110), or
- Orthostatic vital signs or dizzy when standing

B. Data Base

1. Subjective Data
   - Review history and signs and symptoms suggestive of volume loss
     - Frequency, amount, and color of emesis
     - Frequency, amount, and color of stool
   - Pertinent past medical history, CHF or renal failure; current medications and allergies
   - Characteristics of any pain (PQRST); location, quality, and intensity (1-10) and associated symptoms (abdominal pain, fever, chills)
   - Any treatments used prior to arrival

2. Objective Data
   - Perform focused physical exam relevant to gastrointestinal disorders
   - Measure vital signs every 30 minutes x2. Include orthostatic vitals signs unless HR >100 or SBP <90
   - Attach cardiac monitor, assess rhythm, and monitor for dysrhythmias
   - Place on pulse oximetry and measure SpO2
   - Skin signs: color, temperature, moisture, and capillary refill

C. Diagnosis
   a. Consistent with subjective and objective findings
   b. Assessment of status of disease process
D. Plan

1. Ask physician for anti-emetic medication

2. If HR >100 or SBP <100 or orthostatic, start IV NS (18-gauge or larger). Draw full tubes. Administer 500 ml NS IV bolus (if no history of CHF or renal failure).

3. Save stool sample if diarrhea

4. Patient education and counseling appropriate to disease process

5. Consultation with physician as needed, or:
   - HR >120
   - SBP <90
   - RR >28
   - SpO₂ <92%
   - Fever > 39 °C (102.2 °F)
   - Altered mental status with GCS <13
   - History of CHF or renal failure
   - Vomiting more than two times in ED prior to being seen by provider
PROTOCOL #8

TRAUMA PANEL LABORATORY TESTS

PROCEDURE: Trauma Panel Laboratory Tests

A. DEFINITION: This protocol covers the initial laboratory tests for trauma patients seen by Registered Nurses (RN) in the Emergency Department (ED). On the arrival of an injured patient, who is \( \geq \) 11 years of age and meets Trauma Team Activation (TTA) criteria, the RN caring for the patient will draw blood and obtain the urine samples as defined by the specific TTA “Trauma Panel”. The pediatric lab panel (patients < 11 years of age) will be determined by the Trauma Team with consultation from the pediatric service.

For the 900 TTA Trauma Lab Panel the following samples will be obtained and sent to the laboratory for processing:

- Type and Screen
- CBC
- Basic metabolic panel
- Coags (PT, PTT, INR)
- Ethanol
- Routine urinalysis
- Urine drugs of abuse screen
- POCT Urine pregnancy (females)
- POCT VBG w/Hct, K+, lactic acid

1. Performance of procedure:

   **Indications:** Injured patients with 900 Trauma Team Activation (TTA)

   **Exclusions:** Patients deemed by the Resuscitation Team (Trauma Attending, Emergency Medicine Attending, Anesthesia Attending) to be stable and not requiring lab panel processing

2. **Precautions:**
   - Utilize standard precautions for specimen collection and handling

3. **Contraindications:**
   - None
For the **911 TTA Trauma Lab Panel** the following samples will be obtained and sent to the laboratory for processing

- CBC
- Basic metabolic panel
- Coags (PT, PTT, INR)
- Ethanol
- Routine urinalysis
- Urine drug of abuse screen
- POCT Urine pregnancy (females)

1. **Performance of procedure:**

   **Indications:** Injured patients with a 911 Trauma Team Activation (TTA)

   **Exclusions:** Patients deemed by the Emergency Physician/Resuscitation Team to be stable and not requiring lab panel processing

2. **Precautions:**

   - Utilize standard precautions for specimen collection and handling

3. **Contraindications:**

   - None

B. **DATA BASE/DOCUMENTATION OF PROCEDURE**

   Documentation of the Trauma Lab panel procurement or physician’s decision not to obtain lab samples will be recorded in the ED medical record and LCR as appropriate.

C. **SUMMARY OF PREREQUISITIES, PROCTORING AND REAPPOINTMENT COMPETENCY**

   The prerequisites and proctoring are the same as RN’s approved to care for trauma patients in the ED.