Team Name: Critical Care and Medicine Team	Reference Number: CLI.4510.SG.007
Team Lead: Director – Acute Community Hospitals	Program Area: Across Hospital Units
Approved by: Regional Lead – Acute Care & Chief Nursing Officer	Policy Section: General
Issue Date: August 28, 2023 Review Date: Revision Date:	Subject: Inpatient Telemetry

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STANDARD GUIDELINE SUBJECT:
Inpatient Telemetry

PURPOSE:
- To allow for cardiac monitoring of patients on inpatient units via the central monitor in either the Special Care Unit (SCU) or the Emergency Department (ED).
- To monitor patient's cardiac rhythm continuously and record it at set intervals.
- To detect and treat arrhythmias.

PROCEDURE:
Initiation of Telemetry:
1. The patient care provider will:
   - Complete the Inpatient Telemetry Standard Orders (CLI.4510.SG.007.FORM.01) for patients who have been identified to require telemetry based on clinical presentations.
   - Transfer orders are written when the patient is admitted or transferred to the inpatient unit on telemetry.
   - The need for telemetry is reviewed on a daily basis.
2. The nurse will:
   - Review the Inpatient Telemetry Standard Orders (CLI.4510.SG.007.FORM.01) and seek clarification as needed.
   - Gather the required equipment and supplies: Telemetry Unit, electrodes, two AA batteries and supplies to prep the skin (alcohol pads, clippers-if hair present, and gauze pads).
   - Set up the equipment and place the batteries in the unit. When the battery is inserted into the transmitter, the lights on the device will flash to indicate the battery has sufficient power for monitoring.

- Admit the patient to the assigned telemetry bed in the appropriate telemetry waveform zone at the central station. Refer to the equipment specific Operators Manual for specific monitoring device.
- Explain the procedure to the patient.
- Prepare the patient's skin for electrode placement.
  - Wash skin with soap and water. Rinse well to remove the soap residue.
  - Wipe skin with alcohol swab if skin is oily or diaphoretic (if skin integrity is compromised, do not use alcohol and consider a skin barrier i.e. No Sting Skin Prep).
  - Gently abrade the skin with a gauze pad.
  - If the patient has hair on the chest, it may require clipping.
- Accurate lead placement and good skin preparation will reduce false readings. Skin that is clean and dry allows for better adherence of electrodes and a more accurate ECG.
- Attach the electrodes to the lead wire, as illustrated on the telemetry pack or refer to diagram provided in Electrode Placement Inpatient Telemetry (CLI.4510.SG.007.SD.01).
  - Avoid placing RA, LA, RL, LL electrodes over bony prominences, find a fleshy area (i.e., under clavicles, below ribs, above hip bones)
  - Ensure the RA/LA and RL/LL electrodes are placed mirrored to each other
  - Choose one of the V lead positions (V1-V6) for your 5th electrode
    - V3 for patients with cardiac chest pain.
    - V1 for all other patients
    - V6 as alternate if patient has surgical sites or wounds obstructing V1 and V3 placement
- Adjust the ECG wave(s) and alarm limits in the patient window.
- Obtain an initial rhythm strip, analyze and mount the Cardiac Rhythm Strip Record (CLI.4510.PR.002.FORM.03)
- Instruct the patient on how and when to use the transmitter button (i.e. chest pain, dizziness) and to notify the nurse.
- All patients on telemetry have at minimum a peripheral intravenous (IV) lock.
- The following documents are required on the Patient Telemetry clipboard:
  - Addressograph
  - Telemetry Flowsheet
  - Physician admission history
  - Kardex with current medication list
  - EKG and Lab results
  - Nursing Assessment Record
  - Inpatient Telemetry Standard Orders – Copy

Critical Care Staff: General Instructions for Patients Requiring Telemetry:
1. At the beginning of each shift, check patient alarm limits and ensure they are on and set appropriately.
2. Document patient heart rate and rhythm every 4hrs and prn or as ordered by a prescriber. Document on the Telemetry Flowsheet (CLI.4510.SG.007.FORM.02).
3. Describe any ectopic beats (ie. Premature ventricular contractions) on the Telemetry Flowsheet (CLI.4510.SG.007.FORM.02) under the rhythm analysis column.

4. Obtain, analyze, print and mount the cardiac rhythm onto the Cardiac Rhythm Strip Record (CLI.4510.PR.002.FORM.03) at the beginning of each shift, on initiation of telemetry, when a change in rhythm occurs, or a new arrhythmia is observed.
5. Update the Telemetry Kardex (CLI.4510.SG.007.FORM.03) as needed throughout the shift.
6. The staff on the unit where the patient is admitted call the SCU (or the Emergency Department if SCU has no patients) at the end of each 8-hr shift (i.e. 0600, 1400 and 2200 hours) with a patient report. Document this call along with the patient status on the Telemetry Flowsheet (CLI.4510.SG.007.FORM.02) under "shift report". Documentation may include: symptoms, vital signs or medication changes for example.
7. In the event of a serious or potentially serious rhythm disturbance, the SCU nurse notifies the nurse or designate responsible for the patient and directs them to assess the patient immediately.
   ➢ Correlate changes in rhythm analysis with patient symptoms and notify patient care provider if warranted.
   ➢ It may be necessary for the unit staff to call the patient care provider responsible for the patient, or call a "Code 25" as per policy (CLI.4510.PL.003) or per site or "Code Blue" per policy (CLI.4510.PL.002).

Unit Staff: General Instructions for Patient Requiring Telemetry:
1. Each shift, staff are to assess the patient as per the Patient Assessment Flowsheet (CLI.4510.PR.002.FORM.07). If there are any patient or staff concerns, the staff are to communicate with the Critical Care staff. This call is documented in the Integrated Progress notes (IPN) (CLI.4510.PR.002.FORM.01).
2. The staff call the SCU (or the Emergency Department if SCU has no patients) at the end of each shift (i.e. 0600, 1400 and 2200 hours) with a report of the patient status and document in the IPN. Report may include: patient's symptoms, vital signs (ensure that manual pulse assessments are performed. If the pulse is irregular an apical pulse check is indicated), and medication changes for example.
3. If the patient suddenly becomes unstable while on telemetry:
   ➢ Perform vital signs and patient assessment
   ➢ Page overhead "Code 25" as per policy (CLI.4510.PL.003) or per site or "Code Blue" per policy (CLI.4510.PL.002).
4. Electrodes are changed daily (every 24 hours), removing them gently so not to cause skin stripping.
   ➢ Daily assessment of skin is important in preventing skin excoriation and/or pressure injury at the site of electrodes.
   ➢ Notify the staff in the SCU if the patient is moved to another care area or Lab and Imaging while on telemetry as this causes a sudden loss of patient information on the cardiac monitor. Inform the patient that the signal is not captured if they leave the building.

Discharging a Patient from Telemetry
1. Critical Care staff will:
   ➢ Ensure patient care provider submits order for telemetry discontinuation.
   ➢ Discharge patient from central monitor based on the Inpatient Telemetry Standard Orders (CLI.4510.SG.007.FORM.01) or in consultation with the patient care provider.

- ➢ Document discontinuation on the Telemetry Flow Sheet Record.
- ➢ Ensure any documentation completed in the SCU or ED is placed with the patient chart.

2. Patient Unit staff will:
   - ➢ Explain procedure to patient.
   - ➢ Remove telemetry unit and electrodes from patient.
   - ➢ Remove batteries from telemetry unit, and clean as per operator's guidelines of the device.
   - ➢ Return the telemetry unit to the SCU.
   - ➢ Document that telemetry has been discontinued on the Patient Assessment Flowsheet (CLI.4510.PR.002.FORM.07) and IPN (CLI.4510.PR.002.FORM.01)

SUPPORTING DOCUMENTS:

CLI.4510.SG.007.FORM.01	Inpatient Telemetry Standard Orders
CLI.4510.SG.007.FORM.02	Telemetry Flowsheet
CLI.4510.SG.007.FORM.03	Telemetry Kardex
CLI.4510.SG.007.SD.01	Electrode Placement Inpatient Telemetry
CLI.4510.SG.007.SD.02	Telemetry Flowsheet – Directions for Use
CLI.4510.SG.007.SD.03	Telemetry Kardex Directions – Directions for Use
CLI.4510.PR.002.FORM.07	Patient Assessment Flowsheet
CLI.4510.PR.002.FORM.03	Cardiac Rhythm Strip Record
CLI.4510.PL.003	Code 25
CLI.4510.PL.002	Code Blue
CLI.4510.PR.002.FORM.01	Integrated Progress Notes (IPN)

REFERENCES:

Elsevier Clinical Skills. Cardiac Monitor setup and lead placement. Skills: Cardiac Monitor Setup and Lead Placement – CE (elsevierperformancemanager.com) Accessed on March 14, 2023.

GE Healthcare ApexPro Telemetry System Operator's Manual Software version 4 2007,2008