| Criteria for Application and Discontinuation of Cardiac Monitoring Via Telemetry | | | |
|---|---|---|---|
| Signing Authority: | Chief Nursing Executive | | |
| Approval Date: | 26-11-2018 | Effective Date: | 26-11-2018 |
| Revised for CARE4 – September 14, 2021 | | | |

## SCOPE:

This policy applies to all nurses who care for patients requiring telemetry monitoring at the Royal Victoria Regional Health Centre (RVH).

## POLICY STATEMENT:

It is the policy of RVH that:

1. Telemetry beds shall be used appropriately and that telemetry beds are available when needed.
2. Eligibility for telemetry monitoring shall be based on the classification system outlined in the American Heart Association (AHA) guidelines.
3. A Most Responsible Provider (MRP) order shall be required to initiate, hold, and/or continue monitoring beyond the initial recommended monitoring period or discontinue telemetry monitoring.
4. The MRP or appropriate consult service shall review and document the need for telemetry monitoring every 24 hours until telemetry monitoring has been discontinued.
5. Cardiology consultation is recommended if telemetry is required for greater than 48 hours where appropriate. The cardiologist shall be notified by the MRP.
6. The surgical patient who requires telemetry monitoring shall be placed on the inpatient unit that is best able to meet the patient's medical and surgical needs.
7. A Consent for Short Term Absence form (RVH #0102B) and the Record of Short Term Absence form (RVH #0102) shall be signed by the patient/substitute decision maker if the patient insists on leaving the inpatient unit or knowingly removes the telemetry monitoring pack. MRP shall be notified and documentation regarding discontinuation of telemetry by a patient shall occur in the patients' health record.
8. All nursing staff shall adhere to the principles outlined in this policy.

## DEFINITIONS:

**Telemetry Monitoring**: The monitoring of the patient's cardiac rhythm through the transmission of signals or data via radio waves while utilizing a device that provides real-time measurement of the patient's cardiac rhythm. Telemetry monitoring uses five cardiac leads that connect to five electrodes which are placed on the patient's torso (Figure 1).

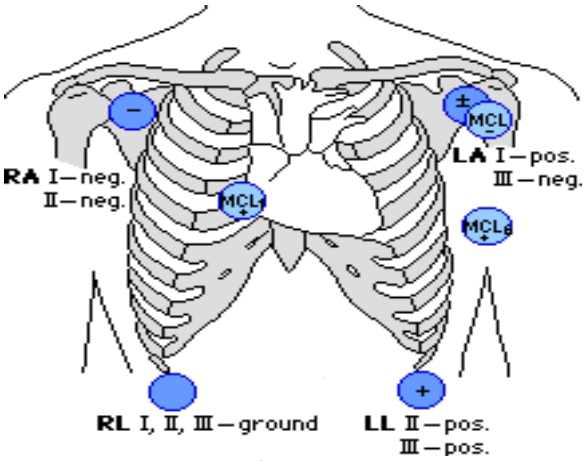


**Figure 1**

**Central Telemetry Surveillance:** Transmission of signals or data via radio waves while utilizing a device that provides real-time measurement of the patient's cardiac rhythm to a proximate monitoring system.

**Remote Telemetry Surveillance:** Transmission of signals or data via radio waves while utilizing a device that provides real-time measurement of the patient's cardiac rhythm to a remote monitoring location.

## PROCEDURE:

1. Telemetry cardiac monitoring shall be utilized for patients who do not meet the admission criteria for critical care areas such as the Intensive care Unit (ICU), Cardiac Care Unit (CCU) or Cardiac Interventional Unit (CIU), but who require cardiac monitoring as indicated in *Appendix I: American Heart Association Practice Standards for Electrocardiographic Monitoring.*
2. An MRP order is required to initiate, hold and continue monitoring beyond the initial recommended monitoring period of 24 hours and to discontinue telemetry monitoring.
3. In addition to the AHA guidelines, telemetry monitoring is strongly indicated in the following:
    a. Sick Sinus Syndrome with bradycardia. To be reassessed every 24 hours by the MRP.
    b. overdose with a potentially cardiotoxic medication. To be reassessed every 24 hours by the MRP.

4. Post-operative patients with suspected intra-operative cardiac ischemia. To be reassessed every 24 hours by the MRP.
5. Telemetry monitoring may be indicated in cases of severe electrolyte or metabolic abnormalities. It may be continued until the electrolyte or metabolic issues have been addressed and is reassessed by the MRP every 24 hours.
6. Telemetry monitoring may not be indicated:
    a. when death is imminent and/or the patient has a resuscitation order to allow natural death **AND** no changes in treatment are anticipated based on telemetry;
    b. when a chest pain work-up is without objective evidence of ischemia;
    c. when a patient with diagnosis of stroke does not meet above monitoring criteria, and where inpatient Holter monitoring with serial ECGs are sufficient to assess for arrhythmia.
7. Any MRP may request a telemetry bed for patients who meet the criteria. The above lists may not exhaust all other conditions or circumstances that may warrant telemetry. In all cases, patient safety is of the utmost importance in decision making and this warrants flexibility in the application of this policy.
8. The MRP for patients admitted with telemetry monitoring is responsible for the ongoing assessment and treatment related to the telemetry monitoring unless otherwise designated.
9. For surgical patients requiring telemetry monitoring on a remote telemetry surveillance unit (e.g. Inpatient Surgery 2) either pre-operatively or post-operatively, Anesthesia or MRP shall consult the Cardiologist.
10. The MRP or the most appropriate consult service shall review the need for continued telemetry monitoring every 24 hours thereafter and document the review in the patients' health record.
11. The nurse shall collaborate daily with the MRP or appropriate consult service to reassess the need for continued telemetry monitoring. The following criteria for discontinuation of telemetry monitoring shall be considered:
    - the patient denies chest pain
    - myocardial infarction has been ruled out
    - there are no acute ECG changes and the patient has had no further significant cardiac enzyme elevation
    - no clinically significant arrhythmias within 48 hours for an asymptomatic patient
    - no pre-syncope, syncope, or hypotension
    - not currently on loading antiarrhythmic therapy
    - post-ablation with no complications

- post-pacemaker and defibrillator insertion that have been checked and are functioning normally
- post-cardiac resynchronization therapy (CRT) device implantation that is functioning normally
- post-cardiovascular (CV) surgery with no complications
- post-CV surgery with temporarily wires removed and with no complications
- the patient has a resuscitation order to allow natural death AND no changes in treatment are anticipated based on telemetry;
- patient is awaiting alternate level of care and no longer needs acute level of care
- electrolyte imbalance corrected

## CROSS REFERENCES:

Royal Victoria Regional Health Centre (2017) Corporate Clinical Policy and Procedure *Care of the patient who requires telemetry monitoring.*

Royal Victoria Regional Health Centre (2017) Corporate Clinical Policy and Procedure *Holter monitoring.*

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## Appendix I: American Heart Association Practice Standards for Electrocardiographic Monitoring

| CLASS I<br>Cardiac Monitoring is indicated in most, if not all, patients in this group | Recommended Initial Monitoring Period |
|---|---|
| 1. Patients in the Early Phase of Acute Coronary Syndromes (Non- STEMI, Unstable Angina "Rule-out" MI) | Minimum 24 hours, until 24 hours after complications resolve |
| 2. Patients with Unstable Coronary Syndromes and newly diagnosed high-risk coronary lesions e.g. left main coronary artery disease | Until intervention |
| 3. Patients who have undergone non-urgent Percutaneous Coronary Intervention (PCI) with complications. | 24 hours |
| 4. Patients with hemodynamically unstable arrhythmias (e.g., ventricular tachycardia, uncontrolled supraventricular tachycardia, uncontrolled or new onset atrial fibrillation). | No hemodynamically significant arrhythmias for at least 24 hours |
| 5. Patients who have undergone implantation of a Cardioverter/Defibrillator Lead (ICD) or a Pacemaker Lead and are considered to be pacemaker dependent. | 12 – 24 hours post implantation |
| 6. Patients with high-grade conduction delays [AV Block – second degree Type II, third degree, advanced (2:1 or higher) second degree, or new-onset bundle branch block In the setting of acute MI | Until the block resolves or until a definitive therapy is implemented. |
| 7. Patients with arrhythmias complicating Wolff-Parkinson-White (WPW) syndrome with rapid antegrade conduction over an accessory pathway. | Until a definitive therapy is established. |
| 8. Patients with Long-QT Syndrome with associated ventricular arrhythmias. | Until definitive therapy is established. |
| 9. Acute Heart Failure/Pulmonary Edema (moderate to severe). | Until signs and symptoms of acute failure have resolved and there are no hemodynamically significant arrhythmias for at least 24 hrs. |
| 10. Patients administered an antiarrhythmic drug known to cause Torsades de Pointes. | 48 – 72 hours |
| **CLASS II**<br>**Cardiac monitoring may be of benefit to some patients but not considered essential for all patients.** | **Recommended Initial Monitoring Period** |
| 1. Patients who have undergone uncomplicated coronary angioplasty without stenting. | 12 – 24 hours |
| 2. Syncope of truly unknown origins. | 24 hours |
| 3. Syncope of suspicious arrhythmic cause or in patients with primary electrophysiological disorders. | 24 – 48 hours |
| 4. Post permanent pacemaker lead implantation, not pacemaker dependent. | 12 – 24 hours post procedure. |