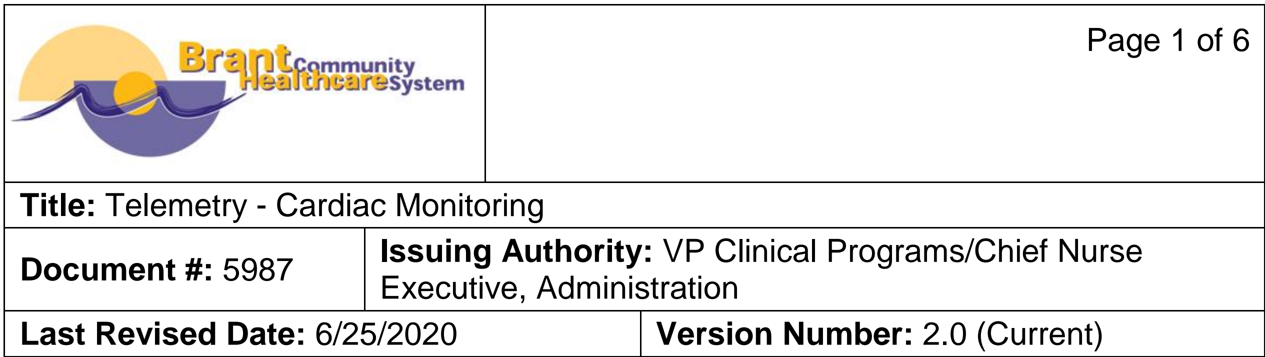

Title: Telemetry - Cardiac Monitoring	
Document #: 5987	**Issuing Authority:** VP Clinical Programs/Chief Nurse Executive, Administration
Last Revised Date: 6/25/2020	**Version Number:** 2.0 (Current)

PURPOSE:

This document provides guidance for the care of admitted adult patients who require continuous telemetry monitoring outside of the Critical Care Unit (CCU) at Brant Community Healthcare System (BCHS). This policy identifies the roles and responsibilities of the Registered Nurse (RN) and the Registered Practical Nurse (RPN) regarding telemetry and rhythm interpretation.

POLICY STATEMENT:

It is an expectation of BCHS that a patient will be assigned to the right bed, at the right time, for the right duration of time. This includes the responsibility to ensure that care is provided to the patient by the correct medical service.

Telemetry cardiac monitoring shall be utilized for patients who do not meet the admission criteria for CCU but who require cardiac monitoring. The surgical patient who requires telemetry monitoring shall be placed on the inpatient unit that can best meet the patient's medical and surgical needs.

Functional intravenous access (i.e. saline lock) shall be maintained at all times during telemetry cardiac monitoring.

DEFINITION (S):

Alarm Notification Device:
A mobile application that allows the nurse to receive actionable alerts and/or alarms from the central monitoring station to a handheld device.

Telemetry:
A non-invasive observation tool that allows continuous cardiac monitoring while the patient remains active without the restriction of being attached to a bedside cardiac monitor. The electronic telemetry device allows for the transmission of cardiac signals (electric or pressure derived) to a receiving location where they are displayed for real-time measurement and monitoring.

PROCESS:

<u>Ordering of Telemetry Monitoring</u>

1. At the BCHS, telemetry will be initiated by an Internal Medicine Physician (Internist) who will remain either as the most responsible physician (MRP) or a consulting physician for the duration of the telemetry monitoring.
2. An order from an Internist (or MRP delegate) is required to:
    a. Initiate telemetry (including duration of monitoring required);
    b. Continue telemetry (including duration of monitoring required);

DISCLAIMER: This is a CONTROLLED document. The most current version is in electronic format on the BCHS intranet site. Any documents appearing in paper form are NOT controlled.

c. Suspend telemetry monitoring to perform personal hygiene (i.e. shower);
d. Discontinue telemetry.
e. An order is not required for the temporary interruption of telemetry monitoring in order to facilitate a patient receiving a scheduled test or procedure, unless otherwise indicated by the Internist.

3. The Internist shall review and document the need for telemetry monitoring every 24 hours until telemetry monitoring has been discontinued.
4. The Hospital Based Internist (HBI) is responsible for reassessing telemetry during the day, while the on-call internist is responsible for any telemetry issues occurring after hours.
5. In the event that there are no available telemetry monitoring devices, the Internist will be consulted for further direction.

.

Application of Telemetry:

1. The nurse will review the Internist order for telemetry and gather the appropriate equipment:
   a. Telemetry transmitter pack with leads
   b. Five electrodes
   c. Batteries
   d. Alcohol swab for site cleansing
   e. Wash cloth for site preparation.
2. The nurse will perform a risk assessment, perform hand hygiene, and don appropriate personal protective equipment (PPE).
3. Identify patient utilizing two patient identifiers.
4. Prior to application of the telemetry monitor, the nurse will provide health teaching to patient and/or substitute decision maker (SDM) to ensure adequate understanding of the telemetry monitoring device. Health teaching will include, but is not limited to:
   a. The utilization of the nurse call bell at the bedside and/or call button located on the telemetry monitoring device when experiencing any chest pain and/or discomfort, palpitations, or dizziness.
   b. Care of the telemetry monitoring device.
5. Prepare the patient's skin for electrode placement.
6. Apply telemetry electrodes and cardiac leads to the patient as per manufacturer's guidelines.
7. Insert battery power supply in the telemetry pack and ensure that it is functioning. Ensure electrodes are properly applied.
8. Ensure that the call bell is within reach.

Initiation of Telemetry on the Alarm Notification Device (C5 Medical Cardiology only)

1. The nurse shall ensure that the patient is entered into the alarm notification device.

DISCLAIMER: This is a CONTROLLED document. The most current version is in electronic format on the BCHS intranet site. Any documents appearing in paper form are NOT controlled.

2. The primary nurse, buddy nurse, or charge nurse will respond to all alarms by assessing the patient according to the alarm received.
3. All red alarm require immediate patient assessment.

<u>Nursing Responsibilities for Telemetry Monitoring</u>

1. The nurse on the remote telemetry unit (e.g. B5 Surgical Unit) shall notify the unit providing central monitoring (e.g. C5 Cardiology Unit) via telephone of the initiation of telemetry immediately following lead application.
2. The following information will be provided to the unit providing central monitoring (C5):
    a. Patient demographics (name, age)
    b. Internist who ordered the telemetry
    c. Diagnosis
    d. Reason for telemetry monitoring
    e. Relevant history
    f. Code Status
    g. Patient’s location (room number)
3. Following application of the telemetry leads, it is the responsibility of the nurse on the central monitoring unit to:
    a. Input the information provided into the central monitoring station.
    b. Ensure there is an adequate tracing of cardiac rhythm on the central monitor with no artifact.
    c. Verify monitor alarm parameters are appropriate and safe for the patient.
    d. Obtain, print, and analyze the cardiac rhythm.
4. The role of Telemetry Support nurse(s) (C5 only) will be assigned daily to provide monitoring support and rhythm analysis for patients on remote telemetry monitoring and/or patients assigned to nurses without the knowledge, skill, and judgment to respond to alarms and complete rhythm analysis.
    a. Determination of need for one or two nurses will be at the discretion of the shift lead based on telemetry device census and rhythm analysis capacity of scheduled staff.
5. It is the responsibility of the nurse in the designated Telemetry Support role to provide a verbal telemetry report (transfer of accountability) every shift to the oncoming nurse in the designated Telemetry Support role.
6. It is the responsibility of the nurse providing care to the patient to notify the central monitoring unit of any change in patient status including, but not limited to:
    a. Patient’s heart rate or rhythm
    b. Patient’s cardiac medications
    c. Patient’s code status
    d. Patient’s physical location (i.e. room change)

DISCLAIMER: This is a CONTROLLED document. The most current version is in electronic format on the BCHS intranet site. Any documents appearing in paper form are NOT controlled.

   e. Suspending of telemetry monitoring (i.e. patient placed on stand-by for personal care or off-unit testing)
   f. Discontinuation of telemetry monitoring
7. If the unit providing central monitoring notifies the nurse providing patient care of any urgent changes in the patient's cardiac rhythm, as assessment of the patient, including vital signs, will be completed.
8. The nurse on the central monitoring unit will analyze, interpret and document cardiac rhythm at a minimum of every four (4) hours or as required by the patient's status (e.g. rhythm change, chest pain, vertigo, shortness of breath).
   a. The rhythm strip will be printed and placed on the telemetry mounting paper
   b. Rhythm strips will be picked up by the nursing unit providing patient care prior to the end of each shift, to be placed in the patient's medical record.
9. The nurse on the central monitoring unit will review, interpret, and document all alarms immediately as they occur:
   a. The RN or RPN providing patient care will be notified.
   b. An update of patient's status (i.e. vital signs and any symptoms experienced) will be requested (if applicable).
   c. An update will be provided to the HBI or the Internist on-call by the most responsible nurse, as required, and the plan of care will be reviewed with and communicated to the unit providing central monitoring.
   d. All communication will be documented in accordance with BCHS policy and College of Nurses of Ontario (CNO) Standards, including the name of the receiving nurse and/or physician.
10. If a patient becomes unstable while on telemetry monitoring, the nurse will contact the MRP, Critical Care Response Team (CCRT) or initiate a Code Blue as required by patient's status.
11. The telemetry monitoring device will be placed on stand-by when the patient leaves the unit (for diagnostic test or procedure). Telemetry monitoring will be resumed as soon as patient returns to the unit.

Patient Assessment

1. Vital signs will be completed at a minimum:
   a. Every four (4) hours for the first 24 hours
   b. Every six (6) hours for the next 24 hours
   c. Every twelve (12) hours when stable
   d. Additional assessments may be required based on patient's status and any concerns noted by the RN, RPN, or MRP.
2. Rhythm analysis will be completed every four (4) hours, or as required by the patient's status, by the RN or RPN who demonstrates the knowledge, skill, and judgement for rhythm interpretation.

DISCLAIMER: This is a CONTROLLED document. The most current version is in electronic format on the BCHS intranet site. Any documents appearing in paper form are NOT controlled.

3. The nurse providing patient care will complete a cardiovascular and respiratory assessment at the time of telemetry monitoring initiation.
    a. Additional assessments may be required based on patient's status and any concerns noted by the RN, RPN, or MRP.
4. The nurse providing patient care will check the site of application of the electrodes for redness, itchiness, skin reactions and loss of adherence at a minimum of once per shift.
    a. Change electrode sites as needed, at a minimum of once every 24 hours.

<u>Documentation</u>
1. All communication between the central monitoring unit and the remote telemetry monitoring unit will be documented in the patient's medical record.
2. Documentation will be in accordance with BCHS policy and College of Nurses of Ontario (CNO) Standards.

<u>Maintenance of Telemetry Monitoring Device</u>
1. The telemetry monitoring device must be securely attached to the patient when in use.
2. Assess the battery power in the telemetry monitoring device with each physical assessment. Batteries are to be changed as needed and removed from the device when not in use.
3. The telemetry monitoring device is not to be immersed in water.
4. If telemetry monitoring device is soiled with body fluids, Clinical Engineering (Biomed) will be contacted for thorough cleaning.
5. Electrodes will be inspected at a minimum of every shift when attached to the patient and will be changed by the nurse providing patient care as required.
6. Lead wires will be inspected on a regular basis to ensure that there is no corrosion or damage. Lead wires are to remain connected to the telemetry monitoring device.

<u>Discontinuation of Telemetry Monitoring</u>
1. An Internist's order is required for the discontinuation of telemetry monitoring.
2. Rhythm interpretation is required prior to discontinuation of telemetry monitoring.
    a. A final rhythm strip will be printed by the central monitoring nurse.
3. Remove the batteries from the telemetry monitoring device prior to storing.
4. Clean the telemetry monitoring device and leads with disinfectant wipe(s) approved for use on electronic devices prior to storing. Do not immerse in water.

RELATED PRACTICES AND / OR LEGISLATIONS:

BCHS Policy: Code Blue
BCHS Policy: Critical Care Response Team (CCRT) Activation Guidelines

DISCLAIMER: This is a CONTROLLED document. The most current version is in electronic format on the BCHS intranet site. Any documents appearing in paper form are NOT controlled.

REFERENCES:

Halton Healthcare (2018). Telemetry monitoring for non-ICU/COU admitted adult patients policy.

Royal Victoria Regional Health Centre (2019). Care of the patient requiring telemetry monitoring.

Philips Electronics (2012). IntelliVue Mx40 manual.

Philips Electronics (2015). IntelliVue information centre iX (PIIC iX) manual.

APPENDICES:
N/A

DISCLAIMER: This is a CONTROLLED document. The most current version is in electronic format on the BCHS intranet site. Any documents appearing in paper form are NOT controlled.