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Subfolder:	GLUCOSE METER	Effective on:	2023-03-24

ORDERING & REPORTING PATIENT POCT: GLUCOSE METER RESULTS

CAPT_GLU_0900

PURPOSE:

The purpose of this procedure is how patient results, normal and critical glucose values, are reported by staff completing point of care testing with Nova StatStrip Glucose Meters.

PROCEDURE:

1. Ordering POC tests:

   Detailed Order Management Policy can be found @
   http://shop.healthcarebc.ca/CST_Documents/CSTOrdersManagementPolicy.pdf

   CAPT_LIS_0400 CST Orders Management Policy

   a. PET/CT: An order is not required. It is part of standard PET/CT scan procedures for all patients coming to the department for a FDG injection to have their glucose levels measured before the procedure.

   b. Cerner:

      i. Point of care glucose meter testing must have a care provider's order, included on the order set or ordered as per clinical area protocols and standard of practice.

      ii. For glucose meter, a doctor's order is obtained. This would be part of the care plan/order on the in patient unit on admission or a change of situation.

         For ad hoc or emergency situations, would be a doctor's order.

      iii. Complete the following steps to view order details:

         1. With a patient chart open, select the Orders chart view.
         2. Select the order for which you want to view details.
         3. Right-click the order and select **Order Information**. The Order Information dialog box is displayed.
         4. Click the **Details** tab to view the order details.
         5. To return to the previous window, click **Exit**.

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2. Follow procedure for obtaining glucose results on patients. Refer to:

    i. CAPT_GLU_0100 Nova StatStrip Manual

    ii. CAPT_GLU_0200 Nova StatStrip Train The Trainer Training Guide

    iii. CAPT_GLU_0300 PHSA Specific Supplemental Training Resource

    iv. CAPT_GLU_0500 Blood Glucose Collection For Glucose meter

    http://www.bccancer.bc.ca/health-professionals/clinical-resources/laboratory-services/point-of-care-testing

3. Glucose value will be displayed on the screen of the Nova StatStrip meter:

    a. **Normal Values:** Adult: 4.0 – 11.0 mmol/L

    b. **Action Values:** Adult: 2.6 – 3.9 & 11.1 – 25.0 mmol/L

    c. **Critical Values:** Adult: <2.6 & >25.0 mmol/L

    d. **Outside Reportable Range:** <0.6mmol/L & >33.3mmol/L

    Reference: CAPT_GLU_0600JA1 Glucose Meter Ranges - Quality Controls and Adult Ranges

4. Reporting Results: Every examination requested needs to be recorded in the patient chart. POCT results are recorded as a POCT result and incorporated into the patient's permanent medical record (Cerner).

    a. Normal Results:

        i. PET/CT:

            1. Blood glucose value written on PET/CT Technical Data sheet

            2. Sheet is scanned into iSite/PACS in the patient's file with the corresponding PET/CT images.

            3. Blood glucose value is also entered in PET/CT Patient Exam database.

            4. Attending MD dictates blood glucose value in PET/CT scan report.

        ii. Cerner:

            1. Select the Glucose Point of Care Testing section in iVeiw

2. Enter the patient result(s) and additional supporting information.

3. Save ✔

4. Depending on the scenario and what interventions were taken (see SHOP for Hypoglycemia Decision Support Tool, Nurse Independent Activities / Nurse Initiated Protocols on Learning Hub, ERT management) a DARP may also be required.

b. CST Cerner Viewing Results Using IView

You can perform various actions and view information about a result in Interactive View. Select a command from the context, Options, or Documentation menus. Some of the common actions you might perform on a result include the following actions:

- View details about the result.

- Add or view comments associated with a result.

- View the history of the result.

- View information about an order.

- View the Interactive View legend to find out what it means when a specific indicator or icon is displayed in a result cell.
- Add, modify, or unchart a result.

If there are multiple results in a cell, a number is displayed in brackets ([]) next to the result value. This number represents the number of results documented for this date and time or date and time interval. The result displayed in the cell is determined by your site's preference setting. For example, it may be the most recently documented result or the first result documented.

If an indicator is associated with a specific result, and that is not the result displayed in the cell, the indicator is still displayed in the cell. For example, the patient may have a critical result within that time frame. In this case, the result displayed in the cell, though, may be within the normal range. The Critical indicator is still displayed in the cell, notifying you this patient has a critical result during this time frame.

c. Corrected Results

    i. All documentation in Cerner can be corrected, or "uncharted" if result entered was incorrect.

       Refer to CST Help Topics:
            Unchart in Interactive View and I&O (IView).pdf
            Modify a Value in Interactive View and I&O (IView).pdf

       All changes are visible in an audit trail.

    ii. The small delta symbol indicates that it is a Corrected Report.

      iii. When viewing the result, one can see the Current and Original Result, and who made the correction.

d. **Uncharting documentation in IVIEW**

Uncharting is used when information has been documented in error and needs to be removed from the patient's record

1. Navigate to the documentation field you need to modify and **right-click** on it.

2. Select **Unchart** from the action menu.
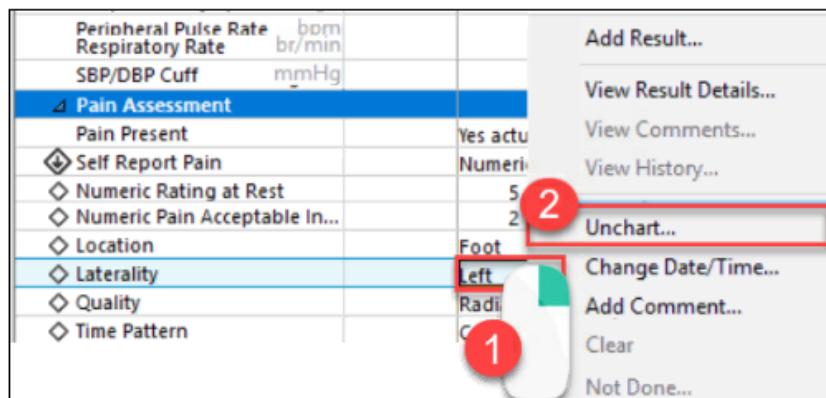
- The unchart window opens.

3. Click the drop down icon in the **Reason** field to select a reason for uncharting.

4. Click **Sign.**
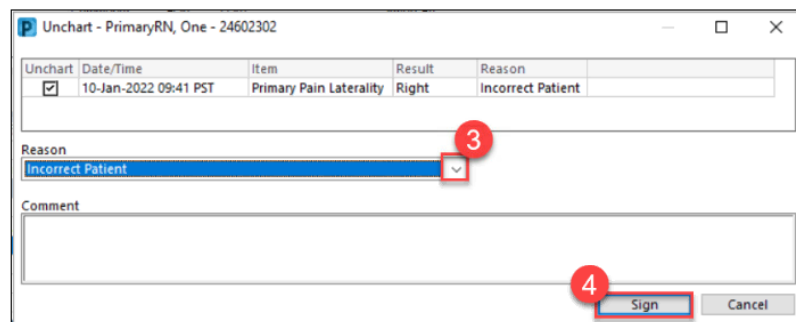
In Error will display in the documentation field with an annotation icon in the top right corner of the field.

⊿ Pain Assessment		
Pain Present		Yes actual ...
⊕ Question Ability to Self Rep...		
⊕ Unable to Self Report Pain		
⊕ Self Report Pain		Numeric r...
◇ Numeric Rating at Rest		5
◇ Numeric Rating With Activity		9
◇ Numeric Pain Acceptable In...		2
◇ Location		Foot
◇ Laterality		In Error
◇ Quality		Radiating

e. **Action Values:**

    i. Patients (Paper) Chart: Enter in medication administration record (MAR), chart nurse note; data, action, response, plan (DARP) and contact most responsible physician.

    ii. Electronic Record:

        1. PET/CT:

            a. Re-check blood glucose level

            b. Discuss value with patient to determine fasting state and administration of diabetic medications, and assess symptoms.

            c. Attending MD is informed of blood glucose level and information gathered from patient before proceeding further.

            d. Patients with blood glucose levels >11.1 mmol/L may be rescheduled due to higher blood glucose level interference with PET FDG (sugar analog) tracer uptake administered for imaging.

                i. Patients are encouraged to discuss high blood sugar level with GP or endocrinologist.

            e. Patients with values <3.9 mmol/L will have symptoms assessed.

                i. If patients are symptomatic, they may be given apple juice and blood glucose will continue to be monitored while in PET/CT department.

            f. Patients will not be released until blood glucose at a safe level and they are no longer symptomatic.

g. Blood glucose values and actions performed are written on PET/CT Technical Data sheet;

   i. Sheet is scanned into iSite/PACS in with the PET/CT images.

   ii. Blood glucose values and actions performed are also entered in PET/CT Patient Exam database comment section.

   iii. Attending MD dictates blood glucose value in PET/CT scan report.

f. Critical Values:

   i. Cerner

   ii. PET/CT:

      a. Re-check blood glucose level and assess patient for symptoms.

b. Attending MD is informed of blood glucose level and symptoms before proceeding further.

c. Action taken will be determined by MD. If MD unavailable, PET/CT staff will call ERT for assessment and response.

d. Dextrose 50% inj PFS, glucose 4g tablets, and glucagon 1mg/kit are available in the crash cart located in the PET/CT department for critical low values.

e. Patients will continue to be monitored and not be released until blood glucose at a safe level and they are no longer symptomatic.

f. If necessary, patient may be sent to local emergency department.

g. Blood glucose values and actions performed are written on PET/CT Technical Data sheet

h. Sheet is scanned into iSite/PACS in with the PET/CT images.

i. Blood glucose values and actions performed are also entered in PET/CT Patient Exam database comment section.

j. Attending MD dictates blood glucose value in PET/CT scan report.

g. Outside Reportable Range; Outside Upper Limits or Less than Lower Limit:

Perform QC on glucose meter. Re-check blood glucose level on same glucose meter and another glucose meter to check if values correct/match. Critical values will be reported to attending medical physician.

Blood glucose values and actions performed are written on PET/CT Technical Data sheet; this sheet is scanned into iSite/PACS in with the PET images. Blood glucose values and actions performed are also entered in PET/CT Patient Exam database comment section. Attending MD dictates blood glucose value in PET/CT scan report.

5. Follow up for results:

a. When critical glucose meter POCT values are obtained:

i. Patients will continue to be monitored and not be released until blood glucose at a safe level and they are no longer symptomatic. If necessary, patient may be sent to local emergency department.

ii. It is important that POCT critical results are evaluated with clinical information.

b. That fall outside the reportable range for glucose meters that do not correlate with the patients clinical presentation:

    i. Perform Glucose meter quality control and re-check glucose as well as check glucose on other glucose meter from other area. If glucose meter determined to be faulty, contact POCT representative @ POCTLabBCCA@bccancer.bc.ca

c. Blood sample collection can be requested to be sent to Vancouver General Hospital for whole blood glucose analysis.

d. Any action taken as a result of POCT is noted in the patient's medical record.