Nova STATSTRIP® Glucose Hospital Meter System

PHSA-Specific Supplemental Training Resource

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Training Objectives:

- At the end of this presentation, the learner will be able to:

1. Identify the main differences between the current Roche glucometers vs. the new Nova glucometers
2. Describe the training and annual re-certification requirements
3. Know when to perform QC and what to do if it fails
4. Identify the new glucose reference ranges
5. Recognize and handle critical glucose results properly
6. Describe battery limitations
7. Clean and disinfect the meter properly
8. Troubleshoot common meter problems
9. Seek help for further meter assistance

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Comparison between Glucometers

Roche Accu-Chek Inform II

- 0.6 uL blood sample required
- Capillary action is fast:
  - Do not smear blood onto strip
  - Do not milk finger/heel
- Meter and test strip size larger
- Requires USB/Ethernet cable to communicate to server
- There is a reset button.
- Dock meter when not in use.
- Dead battery is removed and replaced by POC Lab

Nova StatStrip

- 1.2 uL blood sample required (twice as much as Roche meter)
- Capillary action is slower:
  - Do not smear blood onto strip
  - Do not milk finger/heel
- Meter and test strip size smaller
- Meter communicates to server via Wi-Fi
- There is no on/off button. To reset the meter, remove the battery and put it back on again.
- Wi-Fi decreases battery life. Dock meter when not in use.
- Extra batteries can be ordered by ward. Operators can remove and replace battery themselves. Do not send to lab.

Training & Annual Re-Cert Requirements

- For NEW users or those who have been off work for an extended period, such as maternity leave; complete all five items below:

1. Online Learning Module through LearningHub (Course Code: 22130)
2. Nova Blood Glucose Quiz on LearningHub: passing grade of 90% or higher
3. 3 patient tests and/or simulated (fake blood) tests
4. 1 set of high/low Quality Control (QC) tests
5. Submit a Glucose Meter Access Request Form (available through the LearningHub course)

- For annual competency, only complete items 2, 3 and 4.

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Quality Control

- QC materials are ordered by wards/sites directly from Supply Stores, similar to glucose test strips.
- Failing one level of QC requires that both low and high levels be repeated.
- QC must be performed:
  1. Immediately before patient testing if not yet done in last 24 hours
  2. When opening new vial of test strips and/or QC material
  3. When the meter is dropped and/or troubleshooting
  4. When there is a concern for inaccurate results

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What to do if QC fails?

- If QC fails for any level:
    1. Troubleshoot
        a. Does the tested QC level match to what was scanned?
        b. Are the strips in date?
        c. Is the QC material in date?
        d. Was the first QC drop discarded?
        e. Was the QC vial mixed well?
    2. Repeat the QC test.
- If the QC fails repeatedly:
    1. Do NOT use the meter.
    2. Deliver problematic meter to the POCT Lab by Porter.

       Do NOT use Pneumatic tube.

       Refer to Further Meter Assistance at the end of this presentation.

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Running Patient Samples

- Detailed step-by-step procedure is available on BC Cancer, Laboratory Services Website. http://www.bccancer.bc.ca/health-professionals/clinical-resources/laboratory-services

- At this time, PHSA does not require Patient ID (or MRN) to be entered. This remains the same as current practice.

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Glucose Reference Ranges for **CW & Affiliates**

- Critical results are indicated by either a double arrow up or down on the meter result screen.

	NORMAL RANGE	CRITICAL RESULTS
Neonate (<28 days)	2.6 to 7.0 mmol/L	<2.0 mmol/L >20.0 mmol/L
Non-Neonate (≥28 days)	4.0 to 7.0 mmol/L	<2.6 mmol/L >25.0 mmol/L

WARNING!!!

- The meters are configured specifically to certain patient population, please do not swap the meters in between wards and/or sites.

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Glucose Reference Ranges for **BC Cancer Agency (Vancouver)** and **Burnaby Centre for Mental Health & Addictions** only

- Critical results are indicated by either a double arrow up or down on the meter result screen.

	NORMAL RANGE	CRITICAL RESULTS
Adult (>17 years old)	4.0 to 11.0 mmol/L	<2.6 mmol/L >25.0 mmol/L

WARNING!!!

- The meters are configured specifically to certain patient population, please do not swap the meters in between wards and/or sites.

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Critical Glucose Result Handling

- Verify good sample quality and correct sample application.
- Confirm critical result by repeating the test using a new test strip
- Relay the result to the physician
- If indicated, order a lab-drawn glucose testing
- Document result and any actions taken in the patient's medical record

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Meter Battery

- Rechargeable 3.7V lithium polymer
- Typical life of fully charged battery is 8 hours (40 tests)
- Wireless connectivity depletes battery charge quicker when the meter is not docked, cutting life to approximately 3 hours
- Batteries have expiration date and are expected to last for 2 years
- Batteries can be ordered by wards/sites directly from Supply Stores.

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Meter Cleaning and Disinfection

- Clean and disinfect after EVERY patient test
- Use Accelerated Hydrogen Peroxide (AHP) wipes (e.g. Accel Intervention) or CaviWipes
- Clean meter external surface thoroughly with fresh AHP wipe
- Disinfect meter with a 2nd fresh AHP wipe: leave surface wet for 1 minute and allow to air dry for an additional 1 minute

- WARNING!!!

  Do NOT immerse/hold the meter under running water.

  Do NOT spray the disinfectant solution directly onto the meter.

  Do NOT allow liquid to enter any open ports on the meter.

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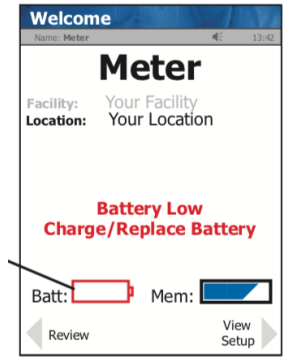
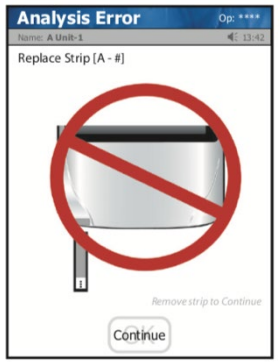
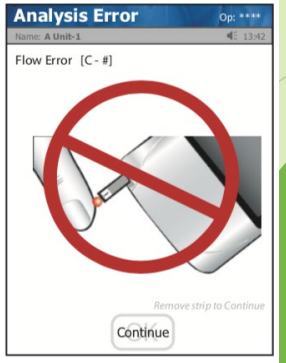
Common Troubleshooting Measures

METER SCREEN ALERT	ACTION
Battery Low	Change the battery or place the meter onto the Docking/Charging station.
Analysis Cancelled Bad Sample Replace Strip Flow Error	Insert another strip & repeat the test. If error code persists, repeat the test using a different or new test strip bottle.

- Refer to BC Cancer, Laboratory Services website for additional troubleshooting measures.







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Further Meter Assistance

- Contact the Point Of Care Testing Lab if unable to resolve any meter issues:

  Email: POCTLabBCCA@bccancer.bc.ca

  For support: Call POCT Lab at 604 877-6000 x 2482

  On weekends or after hours contact C&W POCT 604 875-2345 ext. 7850

A loaner meter will be provided for ward use while the POCT Lab troubleshoots the problematic meter.

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