Nova StatStrip Glucose Meter Training

Point of Care

Purpose of This Training

- In December, 2017, Samaritan Health Services replaced blood glucose meters with the StatStrip Glucose Meter by NOVA Biomedical.

- This module serves as an introduction to the NOVA meter and its features.

- Assignment of this training has been approved by Lab Council and Nursing Leadership.

- Address any questions to the Point of Care Trainer in your area.

Introduction

Product Features

- Touch screen.
- Results in 6 seconds.
- Uses only 1.2 µl of whole blood.
- Reportable range: 10-600 mg/dL.
- Strip enters the bottom of the device.
- Positive patient ID.
- Corrects for high or low hematocrit.
- Eliminates interference from acetaminophen, ascorbic acid, maltose, xylose and lactose.

Introduction

Parts of the Meter

Touch screen...no power button!

Check the Screen Title bar for required information on each screen.

Laser Barcode Scanner

Screen Title

Touch Screen

On-screen Keypad

Forward or Right Soft Key

OK, Scan, Accept, etc. Soft Key

Back or Left Soft Key

Strip Port with GLU Strip

Introduction

Battery

- Uses NOVA-specific rechargeable lithium battery.
- Life of a fully charged battery is about 8 hours or 40 tests (when not docked).
- Keep the device docked when not in use.

- A second battery may reside behind the glucose meter within a charging slot.
- Amber light means the battery is charging.
- Green light means the battery is ready for use.
- Keep the battery label facing towards the front.

Introduction

Docking Stations (Downloaders)

- In the hospital, the docking station will order, chart, and transmit results to the EMR. Clinics must order the test in EPIC, then the docking station will chart and transmit results.

- The docking station will upload operator and patient information.

- Always return the meter to the dock when not in use. This will transmit results as well as charge the battery.

Single docking station

Double docking station

Question 1

The purpose of the docking station is to:

a. Charge the battery and the meter

b. Charge the spare battery

c. Download results

d. Upload new operator and patient information

e. All of the above

Question 1

The purpose of the docking station is to:

e. All of the above

Glucose Test Strips

- Strips are stored in 25-count vials.

- Remove strip from the vial immediately prior to testing.

- DO NOT CONTAMINATE REMAINING STRIPS IN VIAL WHEN RETRIEVING A STRIP FOR USE.

- Place the gold end into the meter, ensuring the name Nova faces upward. The white end will receive the blood sample.

NOTES:

Upon opening, strip vials must be labelled for either a 180-day expiration or manufacturer's expiration date (whichever comes first) using the dating fields on the label. Use a permanent marker and cover the date with tape to preserve the labeling.

Strips vials must remain tightly closed to exclude humidity. Do not store strips outside of the vial.

Question 2

What is the use life of the test strips after they have been opened?

a. 180 days or the manufacturer's expiration date on the vial, whichever comes first.

b. 90 days or the manufacturer's expiration date on the vial, whichever comes first.

c. 60 days or the manufacturer's expiration date on the vial, whichever comes first.

Question 2

What is the use life of the test strips after they have been opened?

a. 180 days or the manufacturer's expiration date on the vial, whichever comes first.

Using the StatStrip Meter

Samples

- Capillary finger stick or heel stick (neonate) whole blood
  - Only fingerstick or heel stick locations are approved sites for testing. Select "Nonintensive Therapy" on the meter if a finger stick or heel stick is to be performed.
  - Do not use capillary specimens for patients fitting the Point of Care Critically Ill definition. Select "Intensive Therapy" on the meter, then Venous or Arterial, for these patients.
- Venous / Arterial whole blood (including neonate)
  - Freshly drawn venous or arterial whole blood samples must be tested immediately.
  - Green top tubes must be lithium heparin only and tested within 30 minutes.
- Sample size 1.2 µL

Testing Environment

- 59°F to 104°F
  - Keep meter and supplies away from hot/cold spaces such as heaters and windows.

Using the StatStrip Meter

Meter Sleep Mode

- Meter will enter sleep mode after 90 seconds of inactivity or when docked.
- To wake up the meter when it is in sleep mode and display the last screen, touch the screen.
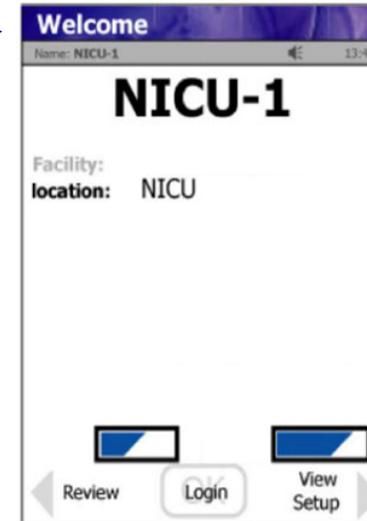
Meter Docking

- If accepted patient results are showing on the screen, the results are auto-saved.
- If the instrument screen is showing a setup screen or an unconfirmed patient result or a menu selection, these will be discarded upon docking.
- <u>Always remember to press the Accept or Reject key for a patient result before docking the meter.</u>
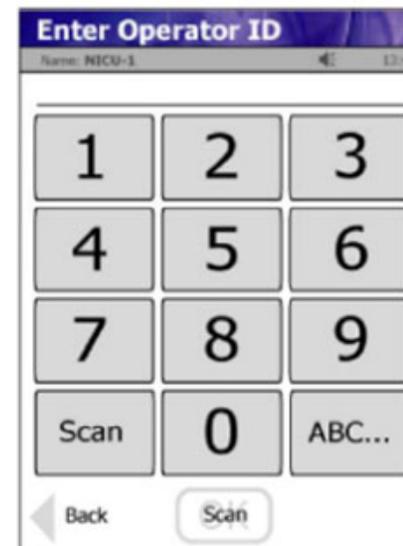
Using the StatStrip Meter

Step #1 Meter Wake-up

Remove the meter from the dock or touch the meter's screen to initiate testing. "Welcome" will appear in the Screen Title bar.
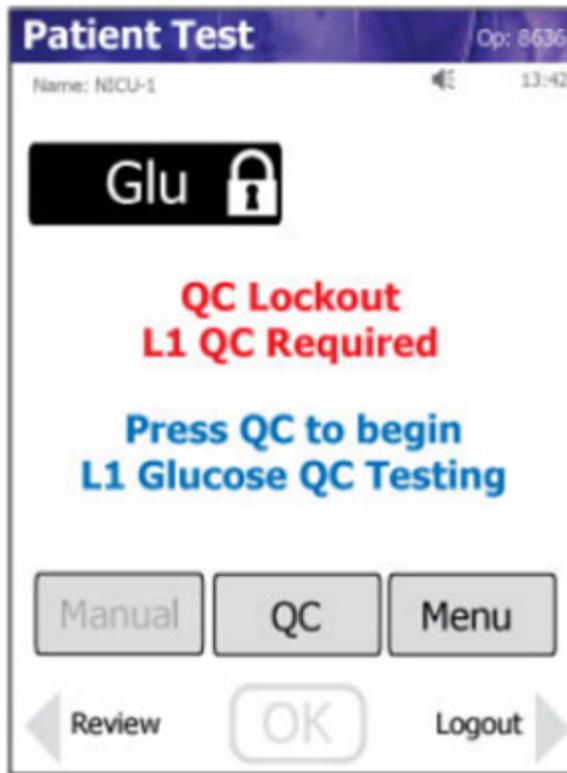
Step #2 Login

Press the Login button to display "Enter Operator ID" in the Screen Title bar. Press and release "Scan", scan your bar code and press "Accept".

Using the StatStrip Meter

**Step #3
Choose Test**

Perform QC if required
(QC Lockout)

Or

press "Accept" to
perform a patient test.

Patient Test — Op: 8636
Name: NICU-1 — 13:42

Glu 🔒

**QC Lockout
L1 QC Required**

**Press QC to begin
L1 Glucose QC Testing**

Manual | QC | Menu

◄ Review | OK | Logout ►

This meter is locked out.
QC must be performed
before patient testing
can be done.

Patient Test — Op: 8636
Name: NICU-1 — 13:42

Glu

Manual | QC | MENU

◄ Review | Accept | Logout ►

This meter is ready to perform
patient and QC testing.

Question 3

A padlock symbol next to the Glu box indicates:

a. The meter is locked out because QC is due; perform QC testing or perform patient testing on an alternate meter.

b. The meter requires QC to be run before allowing patient samples.
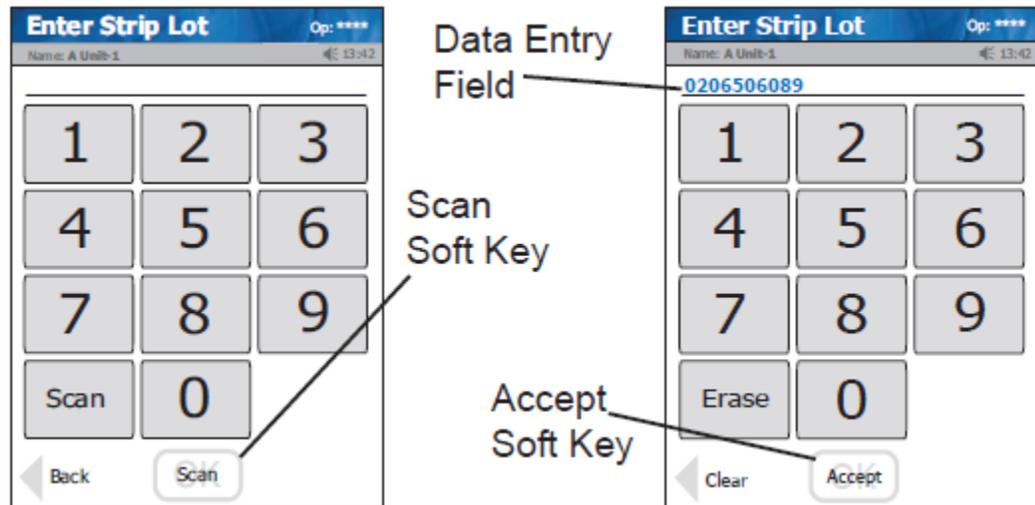
c. Both of the above

Question 3

A padlock symbol next to the Glu box indicates:

c.   Both of the above
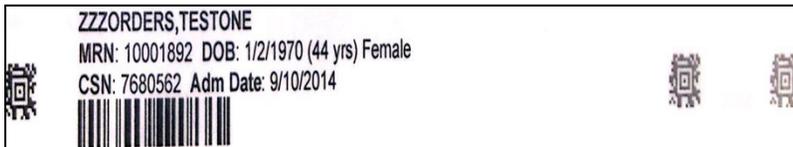
Using the StatStrip Meter

Step #4
Scan Strip Lot

Press and release "Scan", scan the vial's lot number and press "Accept".
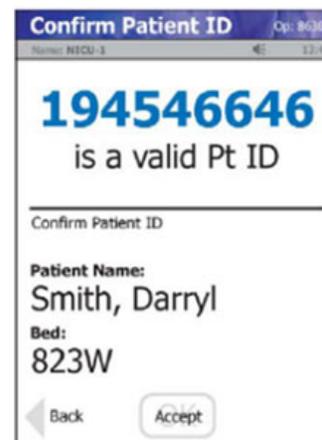
Using the StatStrip Meter

Step #5 Scan Patient ID

Press and release "Scan", scan the patient's ID bar code and press "Accept".

ZZZORDERS,TESTONE
MRN: 10001892 DOB: 1/2/1970 (44 yrs) Female
CSN: 7680562 Adm Date: 9/10/2014

Enter Patient ID Op: 8606
Name: NICU-1 13:42
628341065

1	2	3
4	5	6
7	8	9
Erase	0	ABC...

Clear   Accept   List

Positive Patient ID

Verify that the correct patient has been identified on the screen. Press "Accept" or press "Back" to re-scan the bar code.

Confirm Patient ID Op: 8606
Name: NICU-1 13:42

194546646
is a valid Pt ID

Confirm Patient ID

Patient Name:
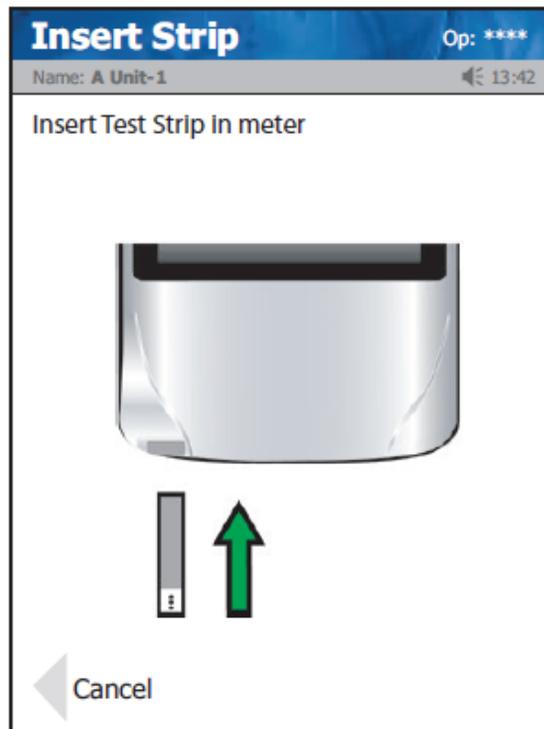Smith, Darryl
Bed:
823W

Back   Accept

If the patient ID has not yet loaded in the meter, a screen will indicate "Invalid Patient ID." If the ID is correct, press "Downtime Override" to continue testing.

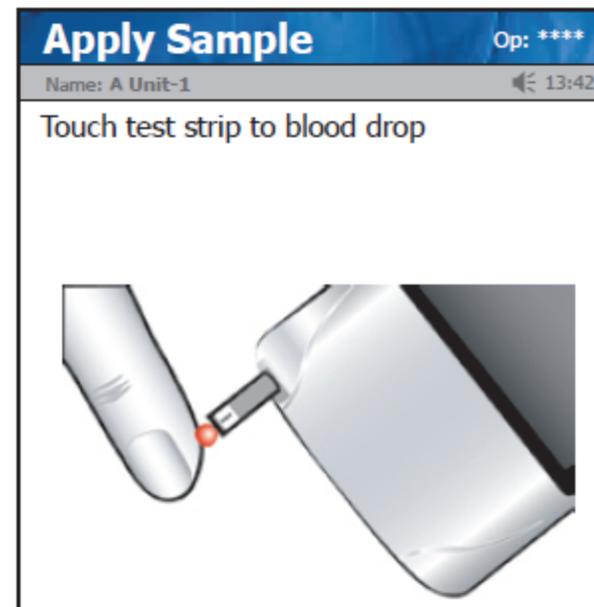# Using the StatStrip Meter

Step #6 Insert the strip

Place the gold end of the strip into the meter, ensuring the name Nova faces upward. The white end will receive the blood sample.

Step #7 Apply sample

- Cleanse the finger and perform the fingerstick.
- <u>Wipe away the first drop of blood.</u>
- Keeping the meter level, touch the end of the strip to the blood on the patient's finger.
- The strip area must completely fill. <u>Don't pull away from the blood until the meter beeps.</u>
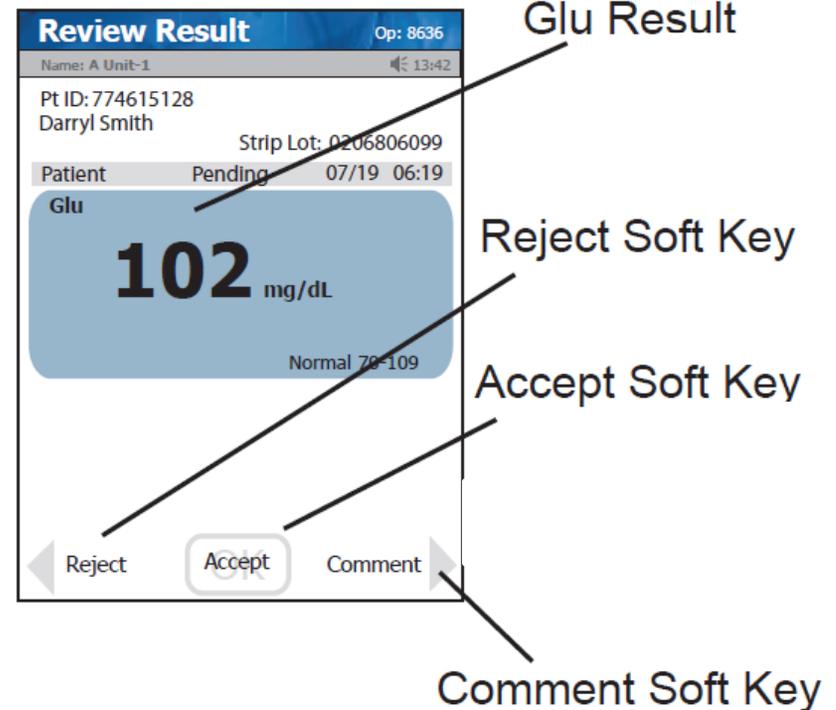
Using the StatStrip Meter

Step #8 Review results

Press "Accept" if results are acceptable.

Patient results should be rejected if they do not agree with the patient's history or condition. Press "Reject" and retest.

If a comment code is required, press "Comment" and choose from the list or use the free text option followed by "Accept." Follow-up may include ordering a lab confirmation.

Remove and dispose of the strip.

Question 4

If the patient id has not yet been loaded into the meter, it is not possible to perform the patient's testing.

a. True
b. False

Question 4

If the patient id has not yet been loaded into the meter, it is not possible to perform the patient's testing.

b. False

Using the StatStrip Meter

Identifying a critical result:

The Nova meter can reliably measure values between 10-600 mg/dL.

Any non-critical abnormal result will display a single arrow beside the result pointing up for high results or pointing down for low results. Critical results will have 2 arrows pointing up or down.

NOTE: The operator must enter a comment code indicating the manner in which the critical result will be addressed. Free text fields are available or a scanned comment code may be chosen from the list.

Patient Result   Op: 8636

Meter Name: MED4   13:42

Pt ID: 194546646
Darryl Smith
                    Strip Lot: 0206806099

Glu 426 mg/dL   ⬆⬆
CRITICAL HIGH   >400
                     Normal 70-109

◀ Reject   Accept   Comment ▶

Using the StatStrip Meter

Reviewing Previous Results

From the "Welcome" screen, choose "Accept" to continue to the "Patient Test" screen. Choose "Review" and follow prompts. Results can be sorted as desired.

Question 5

Critical results are highlighted and marked with:

a. One up or down arrow.

b. Two up or down arrows.

c. Three up or down arrows.

Question 5

Critical results are highlighted and marked with:

b.   Two up or down arrows.

Cleaning the StatStrip Meter

Cleaning and Disinfecting procedures

- Clean the meter after each patient using a Super Sani-Cloth PDI.

- For patients in enteric or enhanced isolation precautions, follow the SHS Infection Prevention protocol. Using the SaniWipe Bleach wipe, scrub the meter at least 3 times vertically and 3 times horizontally, avoiding the scanner and electrical connector. The meter must remain wet at least 1 minute and be allowed to dry for another full minute. Any residue may be removed with a paper towel.

    Note: Meters may be placed in a biohazard bag before entering an isolation patient's room. The scanner and the touchscreen still work through the biohazard bag.

- Do not spray the meter with cleaners or use regular water.

- Docking stations should be kept clean. Do not allow "dirty" meters to be docked.

Question 6

When should the meter be cleaned?

a. When visibly soiled
b. After use on an isolation patient
c. After every patient
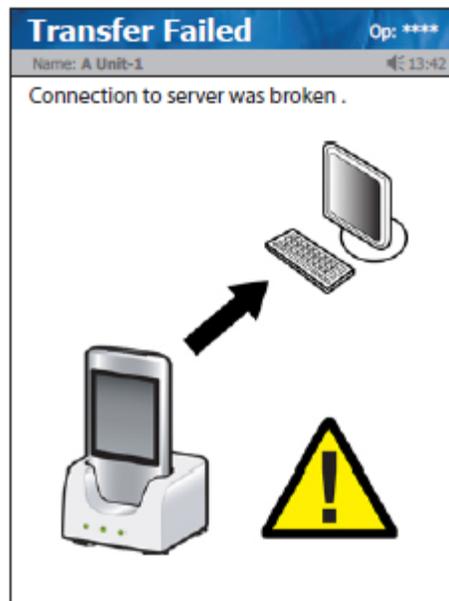d. All of the above

Question 6

When should the meter be cleaned?

d.   All of the above

Docking (Charging) Station

Transmitting Results

- Accepted results are automatically transmitted when the meter is placed in the Docking Station.

- The middle green light will flash when data is transmitting.

- All patient and operator data is updated every 15 minutes.

- An error screen will display if the meter was removed before the data transfer completes. Continue normal testing procedure. Data will complete transferring when the meter is docked.

Question 7

If data transfer was incomplete before the meter was removed from the docking station, it is still OK to use the meter.
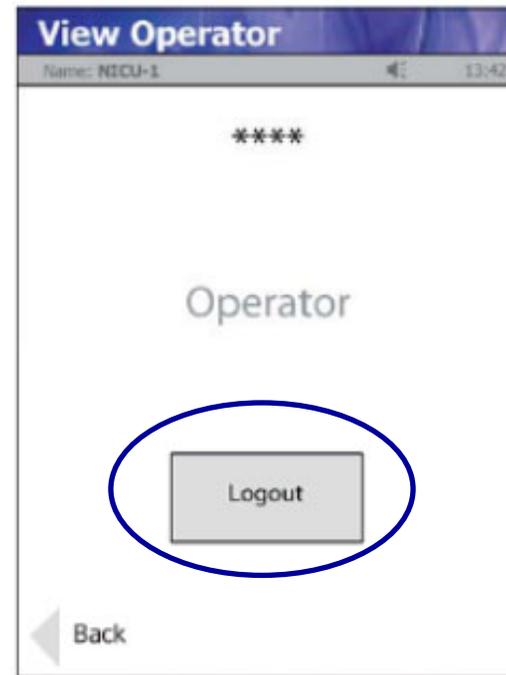

a. True
b. False

Question 7

If data transfer was incomplete before the meter was removed from the docking station, it is still OK to use the meter.
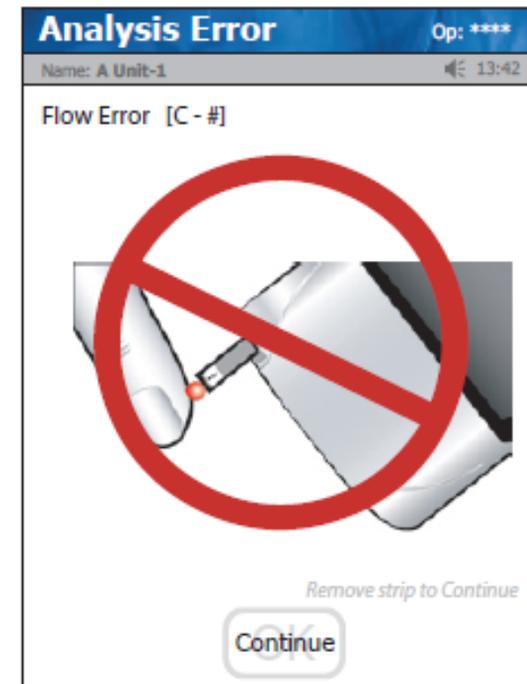
a. True

Operator Log Out

Always log out after using the meter!
- From the "Patient Test" screen, press "Logout."
- When the "View Operator" screen displays, choose "Logout."
- Meter will automatically logout when docked or when entering sleep mode.

Errors

- Insufficient sample
- Sample applied incorrectly
- Do not pull the test strip away until the countdown begins.

Troubleshooting Transmission Issues

Examine lights on the docking station to determine if the interface is connecting. If not, reboot the docking station by:

- Removing the meter from the docking station.
- Removing the power cord from the docking station.
- Wait 10 seconds.
- Replace the power cord.
- Redock the meter.

Call #4911 for help if needed.

Charging Light for Spare Battery

The Ethernet <•••> connection is at the back of the station

Green light on when connected to the network (Ethernet)

Green light on when data is flowing

Charging Light:
Amber = Charging
Green = Fully Charged

Quality Control

- Control levels 1 and 3 must be run daily.

- QC bottles are good for 90 days once opened or the manufacturer's expiration date, whichever comes first. Write this date on the QC bottles using a permanent marker.

- Store controls at room temperature.

To run QC:
- From the "Patient Test" screen, choose QC.
- Enter the strip lot number by scanning the vial, press "Accept".
- Enter the QC lot number by scanning the bottle, press "Accept".

Question 8

What is the expiration date for the quality control material once it is opened?

a. 30 days or the manufacturer's expiration date on the vial, whichever comes first.

b. 60 days or the manufacturer's expiration date on the vial, whichever comes first.

c. 90 days or the manufacturer's expiration date on the vial, whichever comes first.

Question 8

What is the expiration date for the quality control material once it is opened?

c.   90 days or the manufacturer's expiration date on the vial, whichever comes first.
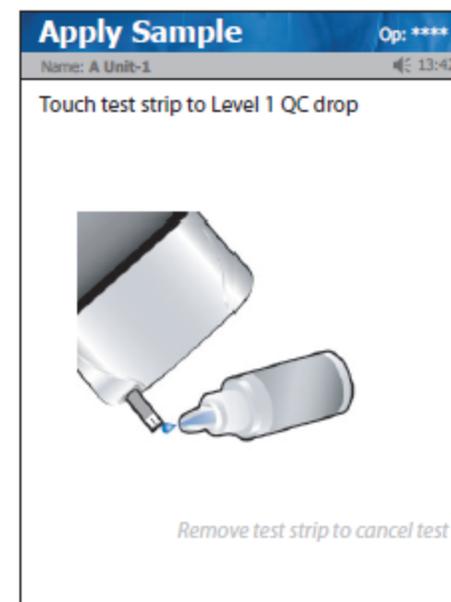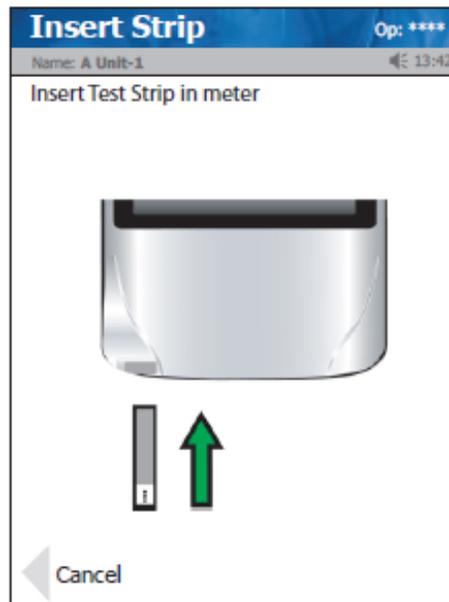
Quality Control

- Place the gold end of the strip into the meter, ensuring the name Nova faces upward. The white end will receive the QC sample.
- Introduce the QC sample to the end of the test strip by allowing the drop to flow into the strip in one application.

Insert Strip   Op: ****
Name: A Unit-1   13:42
Insert Test Strip in meter

Cancel

Apply Sample   Op: ****
Name: A Unit-1   13:42
Touch test strip to Level 1 QC drop

Remove test strip to cancel test

QC Result   Op: ****
Name: A Unit-1   13:42
QC Lot: 0213806081
Level: 1
Strip Lot: 0206806090
QC   Pending   07/19 06:19
Glu

PASS

80 mg/dL

Range 72-86

Accept   Comment

Glucose Result

Comment Soft Key

Accept Soft Key

- Press "Accept" when QC passes.
- Follow the Comment Code procedure when QC fails and repeat testing. It may be necessary to use new QC bottles or a new vial of strips, discarding the unsuccessful bottles or strips.

Note: Patient testing cannot proceed until both levels of QC run successfully.

Question 9

The QC sample must be applied to the end of the strip and must fill the strip completely. If it does not fill completely, you may touch the strip to the QC drop a second time until the countdown begins.

a. True
b. False

Question 9

The QC sample must be applied to the end of the strip and must fill the strip completely. If it does not fill completely, you may touch the strip to the QC drop a second time until the countdown begins.

b. False

Questions?

Contact Laboratory Point of Care
541-768-6216
labpointofcare@samhealth.org

Thank You!

References

- StatStrip Glucose Instructions for Use Manual

- StatStrip Glucose Package Insert

- StatStrip Quick Operating Guide

- StatStrip Quick QC Guide