

# Transcript: NE0083 POC Acute Abbott FreeStyle Precision Pro (FSPP) Meter for Glucose and Ketone Testing

A transcript for the online course, NE0083 POC Acute Abbott

FreeStyle Precision Pro (FSPP) Meter for Glucose and Ketone

Testing

Date: January 2, 2024

## Welcome

Narrator: Welcome to the Abbott FreeStyle Precision Pro Meter Glucose and Ketone Point of Care testing for acute settings education. Version 2.0. Training duration: 30 minutes. Click START COURSE to begin.

## Main Menu

Click on a topic below to learn more. You must visit all topics to complete the course.

Topics are:

- Components
- Power Meter On
- Control Test
- Patient Test
- Sample Collection

- Interpret Results
- Troubleshooting
- More Info

## FSPP Meter Components

This video will review the components and demonstrate the use of the Freestyle Precision Pro Meter. Let's review the components. This is the display screen. This is the port protector.

This is the battery compartment, although several different types of batteries can be used. At Novant Health we will use two AA batteries, the batteries that should be changed when a low battery indicator appears on the meter screen. The data port is used to transmit results when the wireless system is down. The keypad is located on the front of the meter.

Some of the keys you will interact with are the on and off button and the backlight button. You can press and hold the backlight button for three seconds to turn on the backlight. You can toggle the backlight on and off. The clear key is used to clear a barcode. If you scan an incorrect barcode, this key is also used to back up 1 space and return to the previous menu.

Press menu for data review or to transmit results wirelessly. This is the barcode scanner you will press and hold the scan button to scan barcodes. This glucometer transmits data wirelessly. There are three ways data is transmitted. First, when the meter is turned on with the on and Off button.

A wireless transfer is automatically initiated. This is represented by the wireless transmission symbol on the meter. When this symbol is observed, allow the meter to complete the transmission before pushing any buttons. Doing so may interrupt the transmission. The symbol will disappear once transmission is complete. When the meter is turned on, you will briefly see the Abbott logo.

## Turning on the Meter

When the meter is turned on, you will briefly see the Abbott logo. This Abbottt logo will disappear, and you will see two choices: One for patient test, and two for control test. You will also notice some symbols at the bottom of the screen related to wireless connectivity. We have already discussed that the bidirectional arrows indicate that the meter is actively transmitting, and testing cannot begin until these arrows disappear. Take a moment to review what other icons displayed mean.

## Performing a Control Test

To perform a control test, press 2 on the keypad at the operator prompt on the display screen. Scan the bar code on the back of your ID badge by pressing and holding the Scan button.

In Facilities where this is enabled, you may also enter your employee ID number located on the back of your badge using the keypad at the operator prompt. If you do not wish to scan your badge. Manual entry of the Operator ID is not enabled at all facilities.

If your badge number is not found, you must contact your manager or the Point of care department at your facility to resolve this issue. Sharing an employee ID badge number is strictly prohibited and is grounds for dismissal. After you enter your ID number, you will be prompted to scan the Low Level of Control Solution lot number. The lot number is located on the side of the control file Vial.

Next You will be prompted to scan the barcode on the back of the test strip. Open the Foil Test strip when the insert strip prompt appears on the screen to open the test strip, turn the foil package to the blue side with the notch to your right. Tear down and diagonally to open the Test Strip package.

With the contact bars facing up, insert the test strip into the test strip port until it stops and the meter displays. Apply control solution. Gently invert the control bottle three to four times to mix. Prior to sampling, apply the control solution directly from the bottle with the meter horizontally. You must always apply a sample with the meter horizontally and not vertically if a sample was applied vertically.

The control solution may run down the strip and enter the strip port which can damage the meter. You will hear an audible beat when enough solution is applied. The meter will then count down from 5 seconds and display control results. If the control is acceptable, the meter will display pass and will prompt to continue to the next level of control. If the control fails, the meter will display fail. Repeat the failed control.

If the second attempt fails, contact your point of care office. Once the low control solution test passes, you would need to repeat the process with the high control

solution. The FSPP Glucose meters are configured to require QC every 24 hours. If QC is not performed or QC fails, the meter will not allow patient testing.

Store control solution bottles at room temperature.

Control solutions expire in exactly 90 days, not three months after being opened or on the manufacturer's expiration date on the bottle, whichever comes first.

Discard expired controls or controls that are open and do not have the correct labeling or new expiration date on the bottle.

Control bottles are used for both glucose and ketone strips, where appropriate.

If ketone strips enabled, repeat QC process.

Write the open date and new expiration date on the custom label and place on control bottles when opening. Custom labels can be obtained from the point of care office. Do not cover up the barcode on the bottle with the expiration label.

Store strips at room temperature. Use the test strip immediately after opening the foil packet. Use the test strip only once, then discard. Do not use the test strips beyond the expiration date printed on the barcode label. Do not use the test strip if the foil packet has a puncture or tear.

## Performing a Patient Test

To perform a patient test, select one for Patient test from the main menu. When the Operator ID prompt appears, scan or enter your employee badge number. When the meter prompts to enter the patient ID, scan the 2D Square barcode on the patient's armband. The meter will display the patient's name and date of birth.

Verify the patient ID and confirm the ID in the meter by entering the last two digits of the patient's date of birth. If the patient data not found appears on the screen, patient registration may not be complete. Verify that the numbers on the meter screen match the CSN numbers on the patient's armband.

If the patient ID displayed on the meter does not match the patient's armband, the patient's armband may be damaged or the scanner window may be dirty. Clean the scanner window with a dampen gauze and rescan the patient's armband. If the numbers still do not match, replace the patient's armband and rescan.

If the numbers do match, press 2 to continue. Next you will be prompted to scan the barcode on the front of the test strip. After scanning the test strip barcode, open the strip and insert into the meter. A prompt will appear on the bottom of the screen saying apply capillary blood to the strip. It is acceptable to use venous, capillary and arterial blood with this meter and test strips.

Venous and arterial blood collected in a syringe without anticoagulant needs to be tested immediately. Venous and arterial blood collected with lithium or sodium heparin or EDTA can be used within 30 minutes. Fluoride and oxalate collection tubes cannot be used. It is very important that good finger stick technique is used when collecting a patient sample.

## Collecting a Sample

It is very important that good finger stick technique is used when collecting a patient sample. To collect the patient sample, clean the patient's fingertip with soap and water

or an alcohol wipe. Allow the finger to air dry completely or thoroughly dry with a sterile gauze or cotton ball prior to the stick. Failure to allow the site to dry completely may cause inaccurate results. Single use lancets should be used to obtain specimens.

Please review the acceptable finger stick and heel stick sites.

Alternate sites such as the forearm or earlobe are not FDA approved with this glucometer and cannot be used for the stick. Wipe the first drop of blood from the finger with a clean cotton ball or sterile gauze and apply the second drop of blood from the patient's finger to the test strip target area. When a sufficient sample has been applied, the meter beeps and will start a 5 second countdown.

The test result will then appear. Observe the test for a critical result. Critical results are indicated by either an arrow pointing upward, which indicates a critically high result, or an arrow pointing downward, which indicates a critically low result. Comment codes are required when patient results are critical, when results are outside of the meters reportable range.

Select 1 to display the comment list.

Select the appropriate comment code from the list displayed by choosing the number associated with the comment.

Appropriate comment codes for critical patient results are 1 repeat test, 2 RN or MD notified, 3 lab confirmation, 4 procedure error, or 5 standing order implemented.

When testing is complete, remove the strip and proceed with the next test or if complete, turn off the meter. Clean the meter after each patient with hospital approved bleach wipes. Results are automatically transmitted when the meter is turned off using

the On off button. The meter will turn itself off automatically when transmission is complete.

Finally, the meter can transmit a patient test result at any time after the result is complete by exiting the patient result screen. This is done by pressing the Menu key. Once transmission is complete, Menu must be pressed again to return to the patient results screen and request another patient test.

Please follow the manufacturer's instructions for cleaning the meter. Once cleaning is complete, remove and dispose of gloves and wipes in a biohazard container and wash hands thoroughly before proceeding to the next patient.

## Interpreting Results

Fasting glucose reference ranges for adults and pediatric patients are 70 to 99 milligrams per deciliter.

For neonate patients with less than six months of age, fasting glucose reference ranges are 40 to 100 milligrams per deciliter.

The meter reports values from 20 to 500 milligrams per deciliter. Results that are below 20 milligrams per deciliter will read less than 20 on the meter. Results that are above 500 milligrams per deciliter will read more than 500 on the meter screen.

The meter will not give you an exact number because it can only measure down to 20 milligrams per deciliter and up to 500 milligrams per deciliter.

The critical results for adults and Pediatrics are less than 60 milligrams per deciliter and greater than 400 milligrams per deciliter.

The critical results for neonates less than six months of age are less than 40 milligrams per deciliter and greater than 150 milligrams per deciliter.

Ketone reference ranges is less than 0.3 millimoles per liter. A result of greater than 8.0 millimoles per liter means the meter cannot give an exact number because the result is outside of the reportable range.

There are no critical results for Ketones.

Certain patient conditions can cause results from capillary whole blood or finger stick samples to be erroneously low due to poor peripheral circulation. These conditions are severe dehydration, severe hypotension, shock, the hyperglycemic-hyperosmolar state (with or without ketosis). In these situations, capillary whole blood or finger stick samples cannot be used for testing.

Glucose testing must then be performed using an approved acceptable method which are: collect samples and send to the laboratory for testing or perform testing on the Freestyle Precision Pro meter using a venous or arterial sample.

Results may be higher when hematocrit is less than 15% or when serum or plasma is used instead of whole blood.

Results may be lower when hematocrit is greater than 65%, the patient is in a hyperglycemic-hyperosmolar state with or without ketosis, the patient is severely dehydrated, hypotensive or in shock. Results may also be low when water or alcohol is left on the puncture site or when venous or arterial blood samples are not used within 30 minutes of collection.

Ketone Results May Be Higher Than Expected if Hematocrit is lower than the acceptable limit for the test strips, as indicated on test strip package insert, or when Serum or plasma samples were used instead of whole blood.

Results may be lower than expected if Hematocrit is higher than the acceptable limit for the test strips, as indicated on test strip package insert, or when water or alcohol remaining on the puncture site.

If test results appear higher or lower than expected for reasons not described above, please repeat the test using a new test strip. If the results still appear higher or lower than expected, contact the Point of Care office.

## Special Circumstances

Occasionally, a patient needs glucose testing but registration is not yet complete causing the patient to not have an arm band. In this case, a nine-one-one form can be used for testing. You will need to scan the square 2D bar code for glucose testing.

Once the rest of the patient information is obtained, the form must be completed and faxed to the Point of Care office. This should be 24 hours of testing. The nine-one-one form can be printed from the Novant Health Document Manager.

If wireless transmission fails, results can be transmitted via wired docking station or cables which are attached to a computer system. The computer must be turned on for transmission to occur. Wired docking stations are located throughout Novant Health Acute Care facilities units where glucose testing is performed. They can usually be found near the nursing station's desk.

## Additional Information

Thank you for your attention during this video. Before we conclude, let's review some important things to remember about glucose testing with the Freestyle Precision Pro glucose meter.

Allow the meter to complete transmission before testing is begun. The symbol will disappear once transmission is complete.

Do not allow liquid to get into the port. It will damage the meter.

If the display is stuck on insert strip, the port has gotten wet and needs to be replaced.

Contact Point of Care.

Entering a comment code of "4 Proc Error" will stop the result from posting to the chart.

Comment codes are required for critical results and results outside reportable range.

Point of Care glucose testing is authorized only with a physician's order for patient care.

If a glucose test is repeated using the same meter within five minutes of the initial test, only the second result will post to the patient's chart.

Only use hospital approved bleach wipes to clean the meter.

The glucose meter uses AA batteries.

## Resources

Thank you for your time and attention. If you have additional questions, reach out to the Point of Care Team at your facility or email us at [pointofcareacutenhls@novanthealth.org](mailto:pointofcareacutenhls@novanthealth.org)

You can access the Novant Health Abbott FreeStyle Precision Pro policy via the document manager. Please reference policy NH - PC - LB - 1090.

## Instructions to Complete Training

Please follow the instructions for receiving full credit for this course and the POC Acute Abbott FreeStyle Precision Pro (FSPP) Meter Glucose and Ketone Testing Training.

1. To receive a “Complete” for this course, you must achieve a passing score of 80% or higher of the knowledge check.
2. You will need to Download the Abbott FreeStyle Precision Pro (FSPP) BLOOD Glucose & Ketone Monitoring System Learning Assessment (Written Test). You can access the assessment via the document manager. Please reference NH – PC – LB – 1090 - Form1.

Once complete, you can submit the assessment via email at [pointofcareacutenhls@novanthealth.org](mailto:pointofcareacutenhls@novanthealth.org) or by fax to 704-316-9128.

## Knowledge Check

Now it's your turn! Following is a brief Knowledge Check reinforcing concepts reviewed in this course. You must pass the Knowledge Check with a score of 80% or more to complete the course. Click START below to access the Knowledge Check.

### QUESTION 1 of 9

To transmit test result(s) from the FreeStyle Precision Pro glucose meter after patient testing:

- A. Press the ON/OFF key
- B. Press the MENU key
- C. Place the meter in a docking station or attach to a docking cable
- D. All of the above

### QUESTION 2 of 9

A bottle of control solution is opened today. When does this control solution expire?

- A. The expiration date on the bottle
- B. 90 days after the bottle is opened
- C. 90 days after the bottle is opened or the manufacturer expiration date, whichever comes first
- D. The expiration date established by the laboratory

### QUESTION 3 of 9

**True or False?** When collecting a specimen, the patient finger or heel can be cleaned with either soap and water or an alcohol wipe.

### QUESTION 4 of 9

Approved cleaning solution(s) for the FreeStyle Precision Pro glucose meter between each patient encounter is/are:

- A. Hospital approved bleach based cleaner
- B. Hospital approved alcohol or ammonia based cleaner
- C. Soap and water

### QUESTION 5 of 9

How often must control testing be performed on the FSPP Meter?

- A. Every 8 hours
- B. Every 12 hours
- C. Every 24 hours
- D. Every shift

### QUESTION 6 of 9

What step(s) should you take if a glucose result is outside of the Critical Range?

- A. Repeat the test
- B. Confirm by a clinical lab method, if warranted
- C. Select a comment code
- D. All of the above

### QUESTION 7 of 9

Sample collection for FreeStyle Precision Pro Point-of-Care testing is authorized under the following conditions:

- A. Physician order for patient care
- B. Medical needs of staff or family member
- C. Testing on a patient's home use meter during their stay
- D. All of the above

### QUESTION 8 of 9

Immediately following a test result, selection of a comment code is required when:

- A. Result is a critical value
- B. (Action Range [up or high] ) or (Action Range [down or low] ) displays on the meter

C. All of the above

## QUESTION 9 of 9

**True or False?** When collecting a specimen, it is not necessary to allow the finger to dry prior to obtaining the specimen.

## Acknowledgement and Completion

Congratulations, on your completion of this education!

Course Compliance Statement

By selecting the button below, I am confirming that I have reviewed this course and will appropriately apply the information to my job duties. If I have questions, I will ask my leader for further clarification.

[Click here to complete this course.](#)

You may now close the browser window displaying this course to move it to your completed transcript.