

Blood Glucose Meter

* READ POLICY PRIOR TO STARTING TUTORIAL



Before Testing a Patient

- Orient yourself to your working area
 - Locate the testing meter and docking station.
 - Locate testing supplies:
 - Accu-Chek Inform II Glucose Controls
 - Accu-Chek Inform II Test Strips
 - Lancets
 - Disposable Gloves
 - Alcohol Swabs
 - Gauze
 - IDA page for your nursing unit





Qualified Personnel

- ❖ Testing personnel are required to take the Initial Orientation and Training, Competency Exam, and a second Competency Exam within the first year of certification for this POCT.
- Competency exams are then required annually thereafter.

Operator Barcodes

❖ Upon completion of the Initial Orientation and Training and Competency Exam, staff will be issued a barcode ID to be able to use the Accu-Chek Inform II meters.

♦ This barcode in embedded with unique identifiers specific to each staff member.

♦ NEVER share your Barcode ID!

Accu-Chek Inform II

♦ Using the Accu-Chek Inform II meter is considered <u>Waived</u> in complexity by the FDA.

Purpose: used to obtain rapid assessment of blood glucose concentrations at the point of care.



♦ Accu-Chek Inform II Glucose Meter

♦ Accu-Chek Inform II Base Unit (docking and charging station)



- ♦ Accu-Chek Inform II Glucose Controls:
 - Quality Control solutions should be stored at room temperature (15-30°C) – record temperature daily.
 - Opened control solutions are good for 3 months from the date first opened, and should be labeled with the open date and expiration date.
 - POCT Services distribute a new supply every 3 months.



- ♦ Accu-Chek Inform II Test Strips:
 - Store test strips at room temperature (15-30°C) – record temperature daily.
 - When stored properly, strips are stable until expiration date printed on the vial.
 - Do not use test strips beyond expiration date.
 - Quality Control tests must be performed on new vials of test strips when first opened.
 - Keep vial sealed tightly.

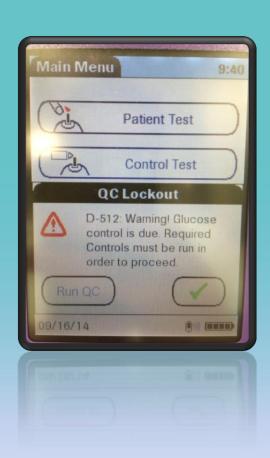






Quality Control Testing

- Quality Control Tests should be performed every day <u>PRIOR</u> to patient testing.
- Operators will be locked out of patient testing if QC has not been performed by 0300 each day.



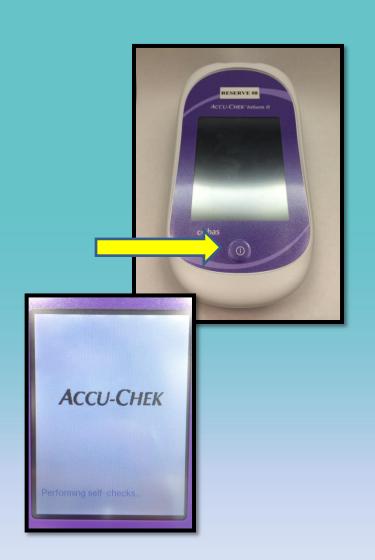


- ♦ The message "QC Due Immediately" will also appear when the meter is powered on if QC has not been performed.
- ♦ The meter must pass both levels of QC (Level 1 & Level 2) before patient testing can occur.



♦ To begin QC testing, press the power button to turn on the meter.

♦ The Meter will perform self checks.



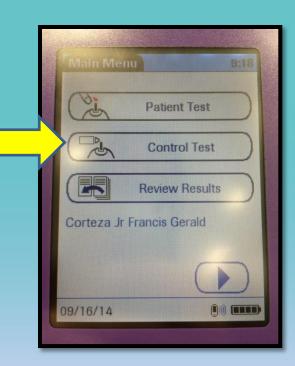
♦ Hold the scanner <u>a few inches</u> <u>away</u> from your barcode and press the barcode icon to scan your barcode.





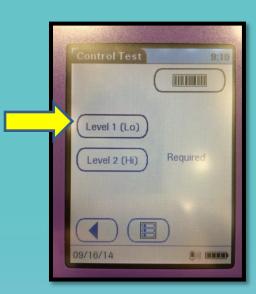


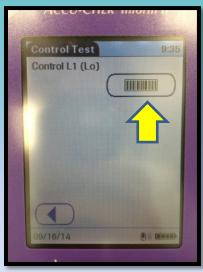
♦ Once in the Main Menu, select control test.



♦ Start with the Level 1 (Lo) Controls by pressing the corresponding icon.

Press the Barcode Icon to scan the barcode of the Level 1 Liquid Control Vial.

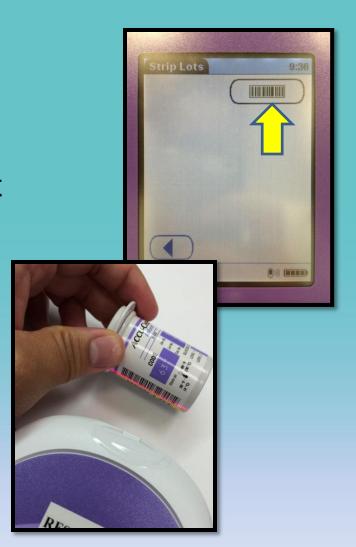




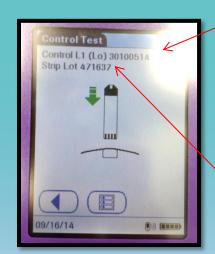
♦ Scan the barcode on the side of the vial.



Press the barcode icon to scan the barcode of the test strip vial.



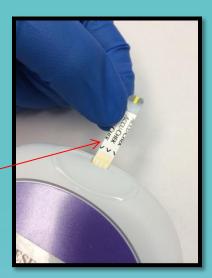
♦ Be sure to confirm the lot numbers of the liquid controls and strips shown on the screen, against the lot numbers on the vials.

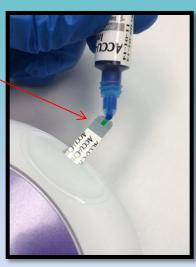






- ♦ Insert the test strip with the Accu-Chek words **facing up**.
- ♦ Apply a drop of liquid control to the <u>edge</u> of the test strip.





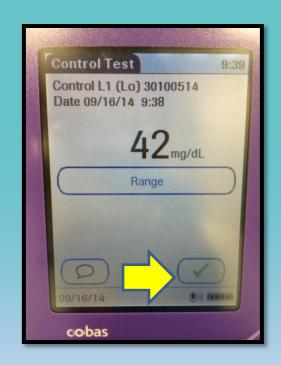


- Once a sufficient amount of solution fills the test strip, the meter will automatically begin its analysis.
- ♦ Results take about 5 seconds to appear.
- If the results are within range, the LQC has passed.



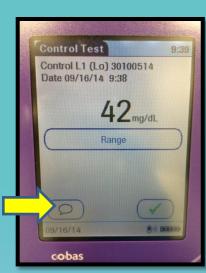


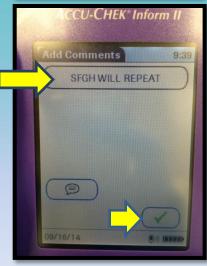
- Press the checkmark icon at the bottom right hand side of the screen to accept the results.
- ♦ Follow the same steps for Level 2 (Hi).





- ♦ If the QC results are out of range, a comment is required.
 - Press the comment bubble icon to leave a comment with the results.
 - Choose "SFGH Will Repeat".
 - Press the checkmark icon to accept results.



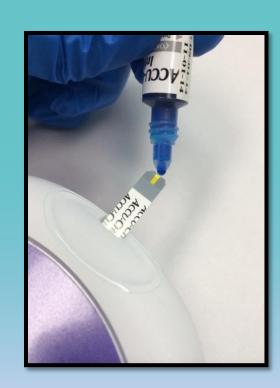


- Any failed QC test must be repeated.
- ♦ Ensure that the liquid QC or the test strips are not expired.
- Check the lot numbers against the what is displayed on the meter.





- When repeating QC use the same solution and test strips.
- ♦ If this still results in failure, use a new vial of solution.
- ♦ If results still fail, use a new vial of test strips.





♦ If the QC still fails, notify POCT Services.

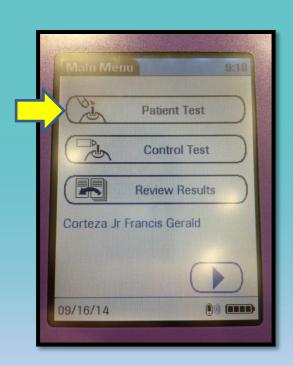




- ❖ To perform patient testing, first verify the correct patient using two forms of identification (full name and date of birth).
- ♦ Explain the procedure to the patient and/or family.
- ♦ Observe universal precautions and wear gloves and other PPE as needed.



♦ From the Main Menu, select patient test.



Scan the patient's ID band barcode by pressing the barcode icon, or manually enter the patient's MRN.



Area for Manual Entry



- ♦ The meter will require the test strips to be scanned.
- ♦ Scan the barcode of the test strip vial by pressing the barcode icon at the top right hand side of the screen.



- ♦ There is a <u>time out</u> for the operator to confirm the patient's ID and the strip lot number is correct.
- Press the checkmark icon to accept.



❖ Remove a test strip from the vial and insert in into the test strip port with the Accu-Chek letters facing up.

♦ Be sure to tightly seal the vial after using.

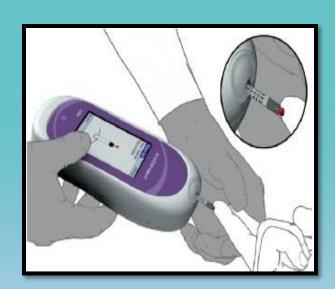


- ♦ Obtain a patient sample by:
 - Cleaning the finger stick site with a alcohol swab and allowing it to air dry.
 - Puncturing the site with a single use lancet.
 - Wiping the first drop of blood with gauze and using the second drop as a sample.
 - Patient specimens must be tested immediately.
 - Discard the used lancet in the sharps container.



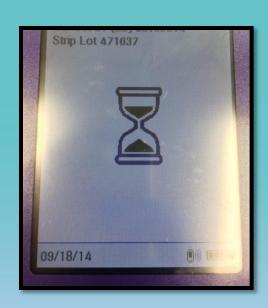


♦ Apply a free flowing drop of blood to the edge of the test strip.





♦ The meter will beep and a hourglass is shown on the screen if an adequate sample is applied.

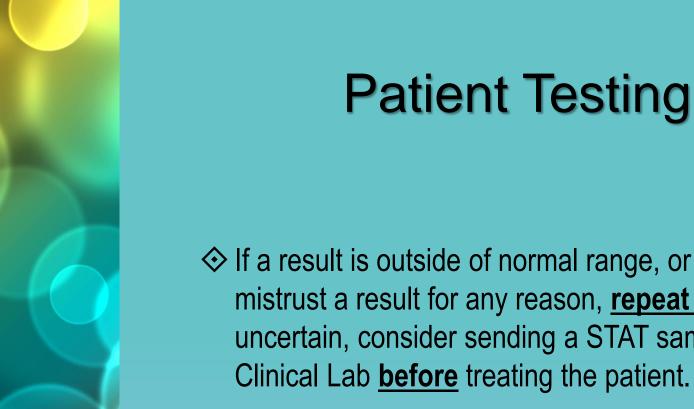


- ♦ The meter will beep a second time once the test is complete, and the result will show on the screen.
- Discard used test strips in the biohazard container.





- ♦ If the result is in the critical range, a comment <u>must</u> be entered.
- Pressing the text bubble icon will provide a list of preprogrammed responses:
 - SFGH WILL REPEAT
 - SFGH NOTIFY MD
 - SFGH REFER TO CHART
- Click on a comment. Once a comment is entered, press the checkmark icon to accept the results.

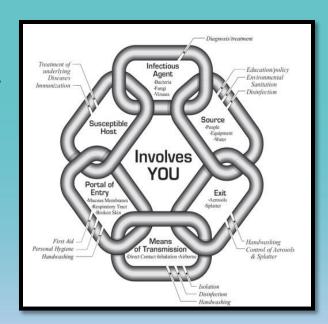


- ♦ If a result is outside of normal range, or if you ever mistrust a result for any reason, repeat test. If still uncertain, consider sending a STAT sample to the Clinical Lab **before** treating the patient.
- ♦ Document **all** patient results.

Cleaning and Preventative Maintenance

♦ The Accu-Chek Inform II meter should be cleaned and disinfected between every patient use and/or whenever the meter is soiled.

Breaking the chain of infection begins with YOU!



Cleaning and Preventative Maintenance

- Super Sani-Cloth® Germicidal Disposable Wipes or Clorox® Germicidal Wipes can be used as long as the towelettes are only slightly damp – never dripping wet (wring it out).
- ♦ Never drench the meter with cleaning solution.
- Using solutions other than the manufacturer approved products can result in damage to the system components.



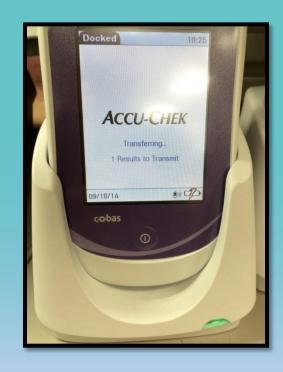
Docking the Meter ♦ After testing and maintenance is completed, ensure that the meter is docked at it's base unit.

Note: The display brightness can be adjusted by clicking n the "Contrast" button on the initial power up.





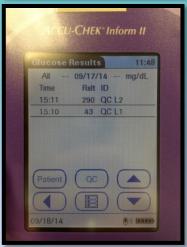
- Docking the meter not only charges it but allows testing results to be downloaded into the system.
- ♦ It also allows the Clinical Lab to upload new data into the meters.



Retrieving Test Results

- ♦ When on the Main Menu, select Review Results.
- ♦ Test results are shown by the date they were taken and can be sorted by either patient tests only, QC results only, or both patient and QC results.

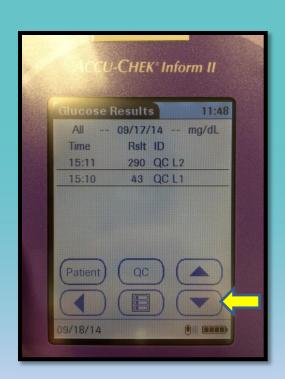






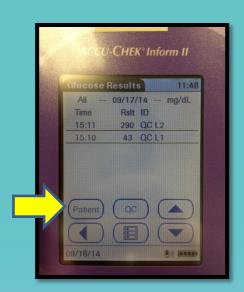
Retrieving Test Results

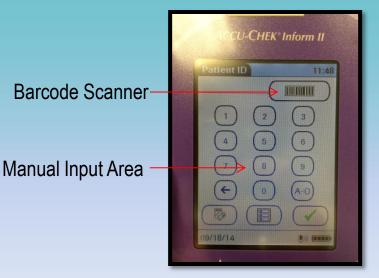
♦ To view results from past dates, press the down arrow.



Retrieving Test Results

- ❖ To review patient results the operator must input the patient ID.
- Press the patient icon and either manually enter the patient ID or scan it in.







- ♦ If the meter displays an error code, refer to the Troubleshooting Guide located in the policy, or notify the Point of Care Testing Services in the Clinical Laboratory.
- ♦ The Accu-Chek Inform II requires fresh capillary, venous, arterial or neonatal whole blood. Cord blood samples cannot be used.
- ♦ Hematocrit should be 10-65% (dehydrated patients may produce falsely elevated results)
- ♦ Lipemic samples in excess of 1800 mg/dL may produce elevated results.



Limitations

- ♦ Blood concentrations of galactose (>15 ml/dL) will cause overestimation of blood glucose results.
- ♦ IV administration of ascorbic acid which results in concentrations of ascorbic acid >3 mg/dL will cause overestimation of blood glucose results.
- ❖ If peripheral circulation is impaired, collection of capillary blood from the approved sample sites is not advised as the results may not be a true reflection of the physiological blood glucose level.

MSDS – Located on the SFGH-POCT.org website under "Glucose".

For Further Questions or Information Contact POCT Services

SFGH-POCT.org