

NORTHERN ARIZONA HEALTHCARE

ACCU-CHEK Competency

2010



Northern Arizona Healthcare

Sponsored by the Education Department

DIRECTIONS FOR COMPLETING THE 2010 ACCU-CHEK Competency

There is one module for all sites. This module contains the ACCU-CHEK policy for VVMC and FMC. Please be sure to read the policy for the facility where you will be completing your clinicals. You are responsible for understanding the information for your site.

1. Review the information presented in the policy for the facility where you will be completing your clinicals.
2. Complete the **Post-Test** and use the **Answer Sheet** provided to record your responses to the Post-Test. Print out the answer sheet and sign the statement showing that you have read the Guidelines of Practice for Point-of-Care ACCU-CHEK Inform Blood Glucose Monitoring System Policy. You should give this answer sheet to your instructor. A minimum score of 84% must be attained for successful completion of the module.
3. You should also print out the Hands-On Competency check-list. This will be completed with your instructor and handed in to the hospital.





POINT OF CARE ACCU-CHEK BLOOD GLUCOSE MONITORING SYSTEM

POLICY

Bedside whole blood glucose testing is done at VVMC as part of the Point of Care Testing (POCT) program. It is used to monitor and treat abnormal glucose levels. This test is definitive for glucose levels but requires laboratory verification of any result outside of the meter's reportable range as outlined in the procedure below. Only certified or licensed personnel that have successfully completed training on the meter at VVMC can perform this test. Point of care glucose monitoring must be done on Verde Valley Medical Center's Accu-Chek meters.

PROCEDURE

1. Normal Ranges
 - a. 12 years and up: 70- 110 mg/dl
 - b. 6 months to 12 years pediatric range: 60-115 mg/dL
 - c. 0 to 6 months: 40-125 mg/dL
 - d. Pregnancy: 60-110 mg/dL
2. Critical Ranges
 - a. 6 months to adults: <60 mg/dL and >500 mg/dL
 - b. 0-6 months: <40 mg/dL and >200 mg/dL
3. Reportable ranges (Above this range needs a laboratory verification sample)
 - a. 6 months to adult reportable range: 30-500 mg/dL
 - b. 0-6 months reportable range: 30-500 mg/dL
4. Specimen Collection and Handling
 - a. Capillary, venous, neonatal (including cord blood) and arterial whole blood may be tested.
 - b. Capillary sample must be tested immediately after collection.
 - c. Venous and Arterial (heparin or EDTA) samples should be tested within 30 minutes of specimen collection, samples must be thoroughly mixed.
 - d. Iodoacetate or fluoride/oxalate should not be used as a preservative.
 - e. Caution should be taken to clear arterial lines before blood is drawn and dosed on the strip
 - f. Sufficient sample size is required to ensure accurate results.
 - g. Chilled specimens should be brought to room temperature before testing.
5. Safety and Maintenance
 - a. The ACCU-Chek meter needs to be cleaned prior to patient testing and at least each day of use.
 - b. Gloves should always be worn when handling glucose testing equipment.
 - c. It is important to keep the meters clean and disinfected with a germicidal disposable cloth. Follow by buffing dry with a soft towel (paper or cloth).
 - d. Care should be taken not to get any liquid into the ports at the bottom and top of the meter as this can damage the meter.

Warning: Do not use cleaners containing the chemicals polyhexanide, phenol or prepared solutions or wipes containing a mixture of bleach and detergent on the ACCU-Chek meter. Use of cleaners containing these chemicals could result in damage to the meter.

6. Quality Control Testing

- a. Two levels of quality control material (Low and High) with known values must be performed every use day.
- b. If a facility is closed, such as during a weekend, quality control needs to be done when the facility opens, prior to testing of the first patient.
- c. Results of both levels of quality control must be within the acceptable ranges before patient testing is done.
- d. Failure to successfully run quality control within the 24 hour window will result in the ACCU-Chek locking out all patients testing.
- e. Quality control must also be performed in the following circumstances:
 - i. When a new vial of test strips is opened.
 - ii. If the cap has been left off a vial of test strips.
 - iii. If the meter has been dropped.
 - iv. When questioning patient results or the performance of the meter.

7. Procedure for Quality Control Testing

- a. Turn the meter on by pressing the ON/OFF button located below the center of the touch screen.
- b. Scan your operator barcode or enter your Lawson ID. (Cerner ID numbers only). This will cause your name to be displayed in the Operator ID field of the screen.
- c. Press the large ► button to get to the Main Menu.
- d. Press Control Test.
- e. Press the button for the first glucose control level required for testing.
- f. Scan glucose control solution vial barcode.
- g. Verify the current glucose control solution lot number by comparing the numbers on the side of the control solution vial and the control lot displayed on the screen. If correct press YES. If incorrect press NO and follow the on-screen instructions to add a new lot number.
- h. Scan the test strip vial barcode.
- i. Verify the current strip lot number by pressing YES or NO.
- j. The Insert Strip screen will appear. Gently insert the new strip into the meter with the silver colored bar facing up and toward the test strip port.
- k. The Apply Control screen will appear. A flashing drop will prompt the application of the appropriate level of control to the edge of the yellow window on the test strip.
- l. An hourglass is displayed while the meter completes the test. Once completed the Control Result screen is displayed. If the result is within acceptable range press ► to get to the main menu and perform the second level of QC as above. If the result is out of range, the words "Out of Range" will flash under the result. The control should be repeated and no patient testing will be allowed. If control results continue out of range contact the laboratory to arrange for a replacement meter.
- m. When quality control is done press ► to get back to the Main Menu or power the meter off.
- n. The QC results are stored in the meter and retrieved by the laboratory during monthly review.

8. Procedure for Patient Testing

- a. Assemble the finger-stick equipment, the meter, and the test strips at the patient bedside.
- b. Identify the patient by armband and explain the procedure.
- c. Wash and dry patient's hands/heel before obtaining a capillary blood sample. Alcohol wipes are not recommended for use. However, if testing circumstances dictate their use, be sure the finger is completely dry before proceeding.
- d. Turn on the meter.
- e. Press ► to get to the Main Menu.
- f. Press Patient Test.
- g. Scan your operator barcode or enter your 4-6 Lawson number (Cerner ID numbers only). If your ID is not on record in the laboratory you will be locked out of the instrument.
- h. Enter the patient's financial number for the patient ID.
- i. Scan the Test Strip barcode.
- j. Insert strip into the meter.
- k. Perform the finger stick with the Safe-T-Pro Plus lancet.
 - i. Twist off the purple sterility cap.
 - ii. Set lancet depth at 1.3, 1.8 or 2.3 by turning depth adjuster.
 - iii. Hold lancet against the side of fingertip or heel and activate by pressing the purple trigger button on the lancet.
 - iv. Wipe away first drop of blood.
- l. A venous or arterial sample may also be used for testing.
 - i. Use fresh sample from the end of the syringe.
 - ii. If the blood is collected in a heparinized or EDTA tube, testing must be completed within 30 minutes of being drawn.
- m. Touch a drop of blood to the edge of the yellow window.
 - i. The sample is pulled into the strip by capillary action.
 - ii. Make sure the entire window is filled. If some of the window remains yellow, additional blood may be added within 15 seconds.
 - iii. If added after 15 seconds the results may be inaccurate so the test needs to be repeated with a new strip.
 - iv. The test will start automatically when the strip senses the proper amount of blood.
- n. The patient result will appear on the screen.
 - i. If the glucose value is out of the normal low range <70 mg/dL (adult) or <40 mg/dl (0-6 months) treat per the hypoglycemia guideline of care.
 - ii. If the glucose value is >180 mg/dL treat per physician orders.
 - iii. If the value falls outside of critical range (<60 or >500) or (<40 or >200 in the NICU) the meter will prompt an action comment requiring the operator to contact the patient care provider and document in the computer the date, time, name of person contacted and that the result was read back to the provider.
 - iv. If the glucose is outside of the reportable range (<30 or >500), the result is flagged with *RR LO* or *RR HI*.
 - 1) The meter will prompt for an action comment requiring the operator follow the protocol for treatment, contact the patient care provider, and document the date, time, name of person contact and that the result was read back to the provider.

- 2) In addition, the operator should send a specimen to the laboratory for further quantification.
 - v. The operator should always follow the protocol for hypoglycemia or hyperglycemia that is in place for the patient type. The operator should not wait for the lab confirmation before starting treatment.
 - o. Discard the strip in the normal waste and discard the lancet in a sharps container.
 - p. The meter should always be placed in the docking station when not in use. This will serve to charge the battery and transmit the data to the MAS computer.
9. Documentation
 - a. A physician must order all patient testing.
 - b. Glucose results are documented in Powerchart via task lists (frequency or as needed) or ad hoc charting.
 - c. If patients choose to recheck results with their own glucose meter, these results cannot be used for diagnostic purposes or be documented in the patient's medical record.
 - d. If a patient is on an insulin pump, it may be used by the patient if the physician writes an order for the pump to be used.
 - e. Once results are verified the test will automatically charge in computer.
 - f. If the value is outside for the reportable range (<30 or >500), the value entered in computer will be <30 or >500 with a comment added to indicate the actions taken.
 - g. The glucose value of the patient will be stored in the meter and may be retrieved at a later date.
 - h. Whenever the patient result obtained by the ACCU-Chek does not appear to fit the clinical picture repeat the QC and patient specimen.
 - i. For labor and postpartum patients: Accu-chek results must be charted under "Maternal Vital Signs."
 - j. For well newborns in QS: Accu-chek results must be charted on the newborn flow sheet under "glucose."
10. Patients in Isolation
 - a. The meter can be placed in a plastic bag.
 - b. A small hole can be punctured in the bag.
 - c. The strip can be placed in the meter through the hole and the meter programmed as usual.
 - d. After the testing is done the plastic bag is discarded and the meter will be wiped down.
11. Limitations of the Method
 - a. Warning: Patients receiving peritoneal dialysis using solutions containing icodextrin (e.g., EXTRANEAL, Icodial) should not use the ACCU-CHEK Comfort Curve test strip.
 - b. Infusion therapy solutions that contain maltose (such as some human immunoglobulin solutions) and peritoneal dialysis solutions containing icodextrin (e.g., EXTRANEAL*) cause overestimation of glucose results.

- c. Hematocrit—the acceptable range for the ACCU-CHEK Comfort Curve test strips and ACCU-CHEK Advantage test strips is 20-65% for values below 200 mg/dL and 20-55% for values above 200 mg/dL.

12. Troubleshooting

- a. Troubleshooting and technical assistance with the ACCU-Chek is handled by the Point of Care Coordinator, the Education office, the CRC superuser, or the superuser on the unit that is responsible for point-of-care glucose testing.
- b. Document the problem on the instrument log sheet found attached to the case of the meter.
- c. Loaner meters are available.
- d. Help with corrective action is available from the laboratory, in the ACCU-Check Inform manual, and within the meter using the "Comment Codes".

13. Storage of Testing Materials

- a. Test strips should be stored at room temperature from 65-86°F.
- b. Unopened test strips are good until the expiration date printed on the label.
- c. When you take a test strip out of the container, put the cap back on tightly immediately.
- d. Strips need to be used within 3 minutes of removal from the container or discarded and a new strip used.
- e. Control material is good 90 days after opened if kept at 39-86°F (4-30°C).

14. Supplies

- a. Strips and lancets are stocked in Materials Management and stored in the OMNICELL.
- b. Controls will be kept in the Laboratory and replaced every three months by the point of care coordinator.
- c. Batteries are supplied from Materials Management.

15. Training and Proficiency

- a. Operators performing glucose testing using the ACCU-Chek Inform need to show proficiency once a year. This will be incorporated within the annual nursing competency review.
- b. Glucose proficiency testing, a CAP requirement, will be performed according to the scheduled distribution.
- c. The testing material, directions and data sheets will be provided by the laboratory.
- d. The use of another person's ID in the ACCU-chek meter is considered falsification of a document and may be subject to disciplinary action.

16. Notes

- a. In any situation where a patient has not been registered, the number 911911 should be used as the patient identification number.
- b. The use of this emergency number will be documented in the nursing notes so that the patient may be charged for the pre-glucose testing.
- c. The emergency number will also be documented on the instrument log sheet attached to the case of the meter.

- d. The financial number must be used for patient identification of results when it is available. Abuse of this number will be monitored and will be reported to the director of the unit.

REFERENCES:

ACCU-chek Inform Operator's Manual, 2004.

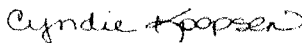

Clinical Laboratory Improvement Act of 1988 (CLIA'88) Standards.

College of American Pathologists (CAP) Point-of-Care testing checklist. (March 21, 2005).

McClatchey, Kenneth, ed. (2002) *Clinical Laboratory Medicine Second Edition*, Philadelphia: Lippincott, Williams, & Wilkins

ATTACHMENTS:

Attachment A: Emergency Log Sheet

<p><u>Prepared by/Title/Date:</u> D. Danielson, MT (ASCP)</p> <p><u>Approved by/Title/Date:</u>  Cyndie Koopsen, CNO/VP Nursing Services 10/07</p> <p> Jim Sinek, President 10/07</p>	<p><u>Committee</u> <u>Approval/Date:</u> Policy & Procedure: 10/06, 5/18/07</p>	<p><u>Dates</u> <u>Reviewed/Revised:</u> 12/99, 11/00, 12/01, 10/03, 12/05, 10/06, 5/07, 10/07</p>
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Flagstaff Medical Center
Northern Arizona Healthcare

HOSPITAL
GUIDELINES OF PRACTICE

NUMBER: HP 300-121
Page 1 of 4

EFFECTIVE DATE:
June 12, 1991

TITLE:
POINT OF CARE ACCU-CHEK INFORM BLOOD GLUCOSE MONITORING SYSTEM

PURPOSE

The ACCU-Chek glucose meters are portable, battery-operated units which are intended for use in the quantitative determination of glucose levels in whole blood samples. These meters are designed for bedside testing in nursing units. Results are used to monitor patient care. The ACCU-Chek Inform System standardizes and stores patient and quality control results. This guideline provides instructions for the collection and handling of blood specimens used for Point of Care glucose testing.

PRINCIPLE

Amperometry: Glucose dehydrogenase in the strip converts the glucose in the blood sample to gluconolactone. This reaction liberates two electrons that react with a coenzyme (PQQ) electron acceptor. The complete reaction creates a harmless electrical current that the meter interprets as blood sugar.

NORMAL RANGES

12 years and up: 70-110 mg/dL
6 months to 12 years pediatric range: 60-115 mg/dL
0 to 6 months: 40-125 mg/dL
Pregnancy: 60-110 mg/dL

CRITICAL RANGES

6 months to adults: <60 mg/dL and >500 mg/dL
0-6 months: <40 mg/dL and >200 mg/dL

REPORTABLE RANGES (BELOW THIS RANGE A LAB BACKUP SAMPLE IS NEEDED)

6 months to adult reportable range: 30-500 mg/dL
0-6 months reportable range: 30-500 mg/dL

SPECIMEN COLLECTION AND HANDLING

1. Capillary, venous, neonatal (including cord blood) and arterial whole blood may be tested.
2. Capillary sample must be tested immediately after collection.
3. Venous and Arterial (heparin or EDTA) samples should be tested within 30 minutes of specimen collection, samples must be thoroughly mixed.
4. Iodoacetate or fluoride/oxalate should not be used as a preservative.
5. Caution should be taken to clear arterial lines before blood is drawn and dosed on the strip.
6. Sufficient sample size is required to ensure accurate results.
7. Chilled specimens should be brought to room temperature before testing.

MAINTENANCE

1. The ACCU-Chek meter needs to be cleaned prior to patient testing and at least each use day. Gloves should always be worn when handling glucose testing equipment. It is important to keep the meters clean and disinfected with Asepti-Wipe II germicidal disposable cloth. Followed by buffing dry with a soft towel (paper or cloth). Care should be taken not to get any liquid into the ports at the bottom and top of the meter as this can damage the meter.
 - a. **Warning:** Do not use cleaners containing the chemicals polyhexanide, phenol or prepared solutions or wipes containing a mixture of bleach and detergent on the ACCU-Chek meter. Use of cleaners containing these chemicals could result in damage to the meter.

APPROVED BY/TITLE:

William T. Brule

DATE REVIEWED:

11/10/09

DATE REVISED:

OPENING A NEW VIAL OF TEST STRIPS

1. Each vial will have a code chip that identifies the lot number of strips and control solutions.
2. The code chip will be changed each time a new vial is opened.
3. The old code chip will be discarded.

QUALITY CONTROL TESTING

1. Two levels of quality control material (Low and High) with known values must be performed every use day. If a facility is closed, such as during a weekend, quality control needs to be done when the facility opens, prior to testing of the first patient. Results of both levels of quality control must be within the acceptable ranges before patient testing is done. Failure to successfully run quality control within the 24 hour window will result in the ACCU-Chek locking out all patient testing.
2. Quality control must also be performed in the following circumstances:
 - a. When a new vial of test strips is opened.
 - b. If the cap has been left off a vial of test strips.
 - c. If the meter has been dropped.
 - d. When questioning patient results or the performance of the meter.
3. When opening a new bottle of quality control material you must date the bottle with the open and expiration date. Quality control is good for 3 months from the open date or until the expiration date on the bottle, whichever comes first.

PROCEDURE FOR QUALITY CONTROL TESTING

1. Turn the meter on by pressing the ON/OFF button located below the center of the touch screen.
2. Enter your 4-6 digit Lawson number (Cerner ID numbers only). This will cause your name to be displayed in the Operator ID field of the screen.
3. Press the large ► button to get to the Main Menu.
4. Press **Control Test**.
5. Press the button for the first glucose control level required for testing.
6. Scan glucose control solution vial barcode.
7. Scan the test strip vial barcode.
8. The Insert Strip screen will appear. Gently insert the new strip into the meter with the silver colored bar facing up and toward the test strip port.
9. The Apply Control screen will appear. A flashing drop will prompt the application of the appropriate level of control to the edge of the yellow window on the test strip.
10. An hourglass is displayed while the meter completes the test. Once completed the Control Result screen is displayed. If the result is within acceptable range press ► to get to the main menu and perform the second level of QC as above. If the result is out of range the words "Out of Range" will flash under the result. The control should be repeated and no patient testing will be allowed. If control results continue out of range contact the laboratory to arrange for a replacement meter.
11. When quality control is done press ► to get back to the Main Menu or power the meter off.
12. The QC results are stored in the meter and retrieved by the laboratory during monthly review.

PROCEDURE FOR PATIENT TESTING

1. Assemble the finger-stick equipment, the meter, and the test strips at the patient bedside.
2. Identify the patient by asking the patient to repeat their name and date of birth or by verifying name and date of birth from the armband and explain the procedure.
3. Cleanse the finger with alcohol. Be sure the finger is completely dry before proceeding.
4. Turn on the meter.
5. Press ► to get to the Main Menu.
6. Press Patient Test.
7. Enter your 4-6 Lawson number (Cerner ID numbers only). If your ID is not on record in the laboratory you will be locked out of the instrument.
8. Enter the patient's financial number for the patient ID.
9. The patient encounter will prompt on the meter and ask you if you want to continue testing on that patient. If the meter does not recognize the financial number double check that it was entered correctly and select proceed with test.
10. Scan the Test Strip barcode.
11. Insert strip into the meter.
12. Perform the finger stick with the Safe-T-Pro Plus lancet.
 - a. Twist off the purple sterility cap.
 - b. Set lancet depth at 1.3, 1.8 or 2.3 by turning depth adjuster.
 - c. Hold lancet against the side of fingertip or heel and activate by pressing the purple trigger button

- on the lancet.
- d. Wipe away first drop of blood.
13. A venous or arterial sample may also be used for testing. Use fresh sample from the end of the syringe.
 - a. Or if the blood is collected in a heparinized or EDTA collection tube.
 - b. If collected in a tube testing must be completed within 30 minutes of being drawn.
 14. Touch a drop of blood to the edge of the yellow window.
 - a. The sample is pulled into the strip by capillary action.
 - b. Make sure the entire window is filled. If some of the window remains yellow additional blood may be added within 15 seconds.
 - c. If added after 15 seconds the results may be inaccurate so the test needs to be repeated with a new strip.
 - d. The test will start automatically when the strip senses the proper amount of blood.
 15. The patient result will appear on the screen.
 - a. If the glucose value is out of the normal low range <70 mg/dL access the patient and treat per the hypoglycemia guideline of care.
 - b. If the glucose value is >180 mg/dL treat per physician orders.
 - c. If the value falls outside of critical range (<60 or >500) or (<40 or >200 in the NICU) the meter will prompt an action comment requiring the operator to contact the patient care provider and document in the computer the date, time, name of person contacted and that the result was read back to the computer.
 - d. If the glucose is outside of the reportable range (<30 or >500) or (<30 or >200 in the NICU) the result is flagged with *RR LO* or *RR HI*.
 - 1) The meter will prompt for an action comment requiring the operator follow the protocol for treatment, contact the patient care provider, and document the date, time, name of person contact and that the result was read back to the operator.
 - 2) In addition, the operator should send a specimen to the laboratory for further quantification.
 - e. The operator should always follow the protocol for hypoglycemia or hyperglycemia that is in place for the patient type. The operator should not wait for the lab confirmation before starting treatment.
 16. Discard the strip in the normal waste and discard the lancet in a sharps container.
 17. The meter should always be placed in the docking station when not in use. This will serve to charge the battery and transmit the data to the MAS computer.

DOCUMENTATION

1. Once the meter is docked the results will post in PowerChart.
2. If the value is outside for the reportable range (<30 or >500) the value entered in computer will be <30 or >500 with comments added from the glucometer indicating the actions taken.
3. Whenever the patient result obtained by the ACCU-Chek does not appear to fit the clinical picture repeat the QC and patient specimen.

PATIENTS IN ISOLATION

1. The meter can be placed in a plastic bag.
2. A small hole can be punctured in the bag.
3. The strip can be placed in the meter through the hole and the meter programmed as usual.
4. After the testing is done the plastic bag is discarded.

SAFETY ALERT – INTERFERING SUBSTANCES

Patients at risk for falsely elevated glucose levels include those using one of the following substances:

1. Undergoing peritoneal dialysis with solutions containing icodextrin (i.e. EXTRANEAL) that is metabolized to maltose, or
2. receiving certain types of intravenous immunoglobulin therapies (i.e. Octagam) or other drugs that contain maltose, or
3. Receiving D-xylose for evaluation of Malabsorption syndromes, or
4. Receiving intravenous solutions containing maltose as a substitute for glucose or as a means for patient hydration.

TROUBLESHOOTING

1. Troubleshooting and technical assistance with the ACCU-Chek is handled by the laboratory technologist or superuser on the unit that is responsible for point-of-care glucose testing.

2. Loaner meters are available.
3. Help with corrective action is available from the laboratory, in the ACCU-Chek Inform manual and within the meter using the "Comment Codes".

STORAGE OF TESTING MATERIALS

1. Test strips should be stored at room temperature from 65-86°F. Never place on a heated surface such as a warm piece of equipment.
2. Unopened test strips are good until the expiration date printed on the label.
3. When you take a test strip out of the container put the cap back on tightly right away.
4. Strips need to be used within 3 minutes of removal from the container or discarded and a new strip used.
5. Control material is good 90 days after opened if kept at 39-86°F (4-30°C). When opening a new vial date the control as expiring 90 days from opening. The actual expiration date is either the manufacturer's outdate on the control label or 90 days from first opening, whichever is first.

SUPPLIES

1. Strips and controls are stocked in medication PYXIS and stored in the Pharmacy.
2. Batteries (2 AAs) are supplied from Stores.

TRAINING AND PROFICIENCY

1. Operators performing glucose testing using the ACCU-Chek Inform needs to show proficiency initially, at six months, one year from the initial training, and yearly from then out.
2. Glucose proficiency testing, a CAP requirement, will be performed according to the scheduled distribution.
3. The testing material, directions and data sheets will be provided by the laboratory.

NOTES

1. In any situation where a patient has not been registered the number 911911 should be used as the patient identification number.
2. The use of this emergency number should be documented in the nursing notes so that the patient may be charged for the pre-glucose testing.
3. The financial number must be used for patient identification of results when it is available. Abuse of this number will be monitored and will be reported to the director of the unit.

ATTACHMENTS

N/A

REFERENCES

ACCU-Chek Inform Operator's Manual, 2004.

Pediatrics, Volume 105, Number 5, May 2000. Copyright 2000, American Academy of Pediatrics, Special Articles, Controversies Operational Thresholds, Marvin Cornblath, MD.

Diabetes Management Therapies, A CORE Curriculum for Diabetes Education, 5th Edition, 2003.

Hypoglycemia in Diabetes, Philip E. Cryer, M.D., Stephen N. Davis, M.D., Harry Shamoon, M.D., 2003.



Northern Arizona
Healthcare

ANNUAL ACCU-CHEK Competency

Please read the Guidelines of Practice for Point of Care ACCU-CHEK Inform Blood Glucose Monitoring System and answer the following questions:

Questions:

1. When does a specimen need to be sent to the lab for verification?
 - A) When the meter reads RRHI
 - B) When the meter reads RRLO
 - C) When the results are questionable
 - D) All of the above
 - E) None of the above
2. A serum lab draw and treatment according to the serum glucose is required when patients are on certain medications which affect the meters ability to provide accurate glucose measurements.
 - A) True
 - B) False
3. Where can you find the Policy and Procedure for the ACCU-CHEK?
 - A) 411
 - B) Glucose carrying case
 - C) Cerner
 - D) Unit Binder
4. What is the acceptable cleaning agent for the meter?
 - A) Cavi-Wipes
 - B) Asepti-Wipes
 - C) Bleach
 - D) Alcohol
 - E) None of the above
5. What needs to be done when opening a new vial of strips?
 - A) The meter needs to be reset
 - B) The docking station needs to be unplugged
 - C) The meter needs to be cleaned
 - D) The code chip needs to be replaced
 - E) Quality Controls need to be completed
 - F) D & E only

6. What number is used as the patient identifier?
 - A) The patient's Social Security number
 - B) The patient's medical record number
 - C) The patient's financial number
 - D) The operator's Lawson ID number
 - E) All of the above

7. If the strip is not properly dosed, how many seconds do you have to add more blood/control?
 - A) 0 seconds
 - B) 5 seconds
 - C) 15 seconds
 - D) 30 seconds
 - E) 45 seconds

8. In what situation is it appropriate to use 911911 as the patient identifier?
 - A) The patient comes in as a trauma or is not registered yet
 - B) You are a diabetic and wish to test yourself
 - C) You are having a busy night
 - D) A & B Only
 - E) None of the above

9. How long is the control solution good for after opening?
 - A) 15 days
 - B) 30 days
 - C) 45 days
 - D) 90 days

10. If the meter is not working properly you should
 - A) Try to reset the meter by unplugging the dock system
 - B) Borrow a meter from another unit
 - C) Call the lab
 - D) Send the meter to the lab in the tube system
 - E) A and C

11. If the meter reads patient results as *Critical* you must
 - A) Document a comment in the meter that tells what intervention is being done
 - B) Tell the care provider when they arrive on the floor
 - C) Do nothing; patients get critical glucoses all the time
 - D) Test the patient 5 more times to be sure
 - E) None of the above

12. How long can the test strip remain out of the vial before it can not be used for accurate testing?
 - A) 30 seconds
 - B) 45 seconds
 - C) 2 minutes
 - D) 3 minutes
 - E) 5 minutes

13. The meter should be cleaned when:

- A) The meter is visibly soiled
- B) Daily, when the QC is run
- C) After running a test on an isolation patient
- D) After each patient use
- E) all of the above

14. You do not need to worry about covering the meter with a plastic bag if the patient is in isolations because you can use Asepti-Wipes to clean the meter after you use it.

- A) True
- B) False

15. What does it mean when an operator's ID number is no longer accepted by the meter?

- A) Competency has expired
- B) Need to be retested for competency
- C) Not allowed to use the meter until competency tested
- D) All of the above

Answer Sheet for ACCU-CHEK Competency

Name _____ Lawson ID # _____

Date _____

School/Facility Name _____ Score _____

Directions: Circle the best answer.

1. a b c d e

2. a b

3. a b c d

4. a b c d e

5. a b c d e f

6. a b c d e

7. a b c d e

8. a b c d e

9. a b c d

10. a b c d e

11. a b c d e

12. a b c d e

13. a b c d e

14. a b

15. a b c d

The undersigned certifies as follows:

I have read the Guidelines of Practice for Point-of-Care ACCU-CHEK Inform Blood Glucose Monitoring System Policy. I understand this test in of itself does not test competency. This test in conjunction with a "hands on" demonstration is needed to certify competency and allowing the use of the ACCU-CHEK system.

Student Signature

Date

Instructor's Name: _____

Critical Elements	Yes	No	Comment
<p>1. Coding (Calibrating)</p> <ul style="list-style-type: none"> <input type="checkbox"/> States when coding is necessary (when new vial of strips is opened or code displayed on ACCU-CHEK Inform System display does not match code on strip vial in use) <input type="checkbox"/> States how to code (calibrate) the glucose meter (Insert correct code key before turning on the Inform meter) 			
<p>2. Quality Control</p> <ul style="list-style-type: none"> <input type="checkbox"/> States when controls are routinely run (once every 24 hrs—or every use day) <input type="checkbox"/> States when to discard control solution (at exp. date or 90 days after opening) <input type="checkbox"/> States what to do when control result fails to fall within the acceptable range (repeat the test and document remedial action with a comment) 			
<p>3. Patient Testing</p> <ul style="list-style-type: none"> <input type="checkbox"/> Put on gloves, turn on meter, input operator ID (Lawson#) and select patient test <input type="checkbox"/> Clean with alcohol (FMC); soap and water (VVMC). Allow to completely dry (or it interferes with test result) <input type="checkbox"/> Perform finger puncture using single-use Safe-T-Pro Plus Lancet. Wipe away 1st drop of blood. <i>Do not squeeze/milk finger after puncture has been made. Prepare hand prior to testing by warming, dependent dangling, massaging blood to fingertips.</i> <input type="checkbox"/> Apply blood drop to yellow window. Must be filled completely for accurate result. (Can add additional blood within 15 seconds.) <input type="checkbox"/> After test result appears, enter comments if necessary <input type="checkbox"/> Dispose of Safe-T-Pro Plus Lancet in sharps disposal <input type="checkbox"/> Discard strip in biohazard receptacle (VVMC); normal trash (FMC) <input type="checkbox"/> Verbalize situations when it you must use an alternate method (Lab Draw) – 1)patients with extreme hematocrits; 2);in situations of decreased peripheral blood flow; 3) patients receiving maltose – related therapy (Peritoneal dialysis); or 4)patients receiving D-xylose for diagnosing malabsorption syndromes. 			
<p>4. Hospital Critical Limits, Documentation and Follow-up</p> <ul style="list-style-type: none"> <input type="checkbox"/> State critical values (<60 or >500 mg/dL; notify provider of critical results) <input type="checkbox"/> 0-6 months (<40 or >200 mg/dL; notify provider of critical results) <input type="checkbox"/> State when venous sample is sent to central laboratory for confirmation (<30 or >500 mg/dL 6 months to Adult) (<30 or>500mg/dL 0-6months) <input type="checkbox"/> Understands that meter should be docked as soon as possible after test is run. <input type="checkbox"/> States emergency ID # when patient is unidentified (911911). Verbalizes how to enter a custom comment (patient's name) 			
<p>5. Cleaning</p> <ul style="list-style-type: none"> <input type="checkbox"/> State cleaning procedure (wearing gloves, wipe ACCU-CHEK Inform Meter with Asepti-WipesII) -Do NOT use Dispatch. Cleaning meter between each patient <input type="checkbox"/> State cleaning frequency (after each patient use, at time of quality control, once every 24 hours) 			

Employee: I feel competent to perform above skills. I understand that the use of another person's ID or a false patient identification in the ACCU-CHEK meter is considered falsification of a document and may result in disciplinary action.

Signature: _____

Print Name: _____

Trainer: The above skills have been successfully demonstrated.

Signature: _____