

Name: \_\_\_\_\_

RALS ☐ \_\_\_\_\_

DB ☐ \_\_\_\_\_

M#: \_\_\_\_\_ Operator ID #: \_\_\_\_\_

HS ☐ \_\_\_\_\_

## BASSETT HEALTHCARE NETWORK i-STAT Training/Competency Checklist

Trainer  
Initials

1. Identifies the components of the i-STAT system – wireless versus non-wireless; rechargeable versus 9V lithium batteries. The written procedure can be found on the Lab web page (b\*Net>Laboratory Manual>Point of Care>Point of Care Document Center Procedures). \_\_\_\_\_
2. Order process – Beaker order codes RT85 arterial line, RT43 arterial puncture, POC215 other. \_\_\_\_\_
3. Sample collection (non-anticoagulated, anticoagulated, fingerstick) and heparinized sample stability is 30 minutes room temperature/no ice. Mix well before testing. \_\_\_\_\_
4. Moderately Complex sample-Heparinized or non-Heparinized for EG7+ [CORD, ART, VEN, CAP, Mixed Venous] & Blood Gas only CG4+ [ART&VEN only], PT/ACT-Unheparinized. Creatinine Waived for VENOUS whole blood only collected in Lithium heparinized vacutainer only and transferred with pipet or syringe. \_\_\_\_\_
5. Properly fills, closes the cartridge and inserts cartridge into analyzer. Cartridge must be used immediately after opening package. Do not use beyond RT or Mfg outdate. Do not re-refrigerate. \_\_\_\_\_
6. Entry of REQUIRED data: operator ID, patient CSN number (wristband – blue with white MIB; other colors with white – affiliates), test selection and sample type. \_\_\_\_\_
7. Entry of OPTIONAL data for blood gas only - patient temperature in degrees Celsius only and patient FIO<sub>2</sub>. \_\_\_\_\_
8. Analysis time. Analyzer on a vibration free surface. Review results. Electrolytes, hematocrit shown in values and tick marks. ↑↓ - critical value. Errors in sampling or misidentified patients are corrected in the LIS by the POC Staff X 6728. \_\_\_\_\_
9. Limitations: Creatinine interference – Hydroxyurea. Absurd values will not cross to patient's chart (Na <110 mmol/L and >175 mmol/L, K <2.0 mmol/L and >7.0 mmol/L). \_\_\_\_\_
10. Critical value comment code "1" documentation. Document C.V. communication in the EMR. \_\_\_\_\_
11. Scroll to #1 Test Options to view "**Remove Cartridge**" icon. Enter #1 to remove cartridge. \_\_\_\_\_
12. Review starout (\*\*\*) results – repeat entire test selection. Results with greater than (>) or less than(<) test results will go into EPIC. \_\_\_\_\_
13. Describe liquid QC and proficiency procedure. Describe internal simulator QC. Describe external simulator QC. \_\_\_\_\_
14. Demonstrate data transferring data through docking in the downloader. Demonstrate printing results. \_\_\_\_\_
15. Supply handling & storage and room temperature outdates. \_\_\_\_\_
16. Care of the system. Clean after each patient with Clorox Germicidal Wipes. Troubleshooting (refer to procedure manual) or obtain a loaner iSTAT. \_\_\_\_\_
17. Safety and universal precautions. \_\_\_\_\_
18. Operator must be competency assessed at the time of training, at the 6 month mark and at the one year mark. Additional competency requirements are required annually on the anniversary of training. Competency is satisfied by passing a Healthstream exam (> or = 80%) and a direct observation. \_\_\_\_\_

Trainer Signature, Title

Testing Location

Employee Signature, Title

Date

"I have read the above competency assessment. I understand that by signing this statement I agree that I have been trained in the areas noted in this assessment and I am approved to perform the tests/procedures independently. I also feel competent to perform this list of tests/procedures/processes independently as indicated by the above assessment."

**BASSETT HEALTHCARE NETWORK**  
**i-STAT Competency Exam**

Name/Title: \_\_\_\_\_

Score \_\_\_\_\_

**True/False** (for i-STAT1 analyzer and system components)

- \_\_\_\_\_ 1. Universal Precautions must be used when collecting blood samples, testing and disposing.
- \_\_\_\_\_ 2. Cartridges stored at room temp beyond the room temp outdate may be used for testing or returned to the refrigerator.
- \_\_\_\_\_ 3. The cartridge may not be removed until the prompt #1 "TEST OPTIONS" is displayed. Enter #1 to view "**REMOVE CARTRIDGE**" and discard cartridge in red bucket.
- \_\_\_\_\_ 4. The i-STAT 1 analyzer tests venous, arterial, cord blood, capillary samples and mixed venous for EG7+. The CG4+ is only approved for arterial and venous blood only.
- \_\_\_\_\_ 5. When testing at the bedside, it is still necessary to check for a test order and the patient's ID # before performing a test.
- \_\_\_\_\_ 6. The chamber in the cartridge should be filled to the fill mark without spilling over the sample well.
- \_\_\_\_\_ 7. Sample collected in heparin for blood gas may be held at room temperature for up to 30 minutes. Mix well before testing.
- \_\_\_\_\_ 8. A specimen result is a starout (\*\*\*) and should be redrawn (If necessary) and repeated on the i-STAT for all tests.
- \_\_\_\_\_ 9. When entering the patient temperature, only enter if testing a blood gas and enter the patient temperature in Celsius only.
- \_\_\_\_\_ 10. Urines and body fluids may be run on the i-STAT for Point of Care testing.
- \_\_\_\_\_ 11. When a critical value is obtained: no repeats are required. The comment code "1" is entered into the i-STAT analyzer and the critical value is reported to the provider within 30 minutes. Document communication of critical value in the patient's EMR.
- \_\_\_\_\_ 12. The cartridge room temperature outdate is dependent on the type of cartridge. The expiration Information is displayed on each box and each individual package.
- \_\_\_\_\_ 13. During analysis, the i-STAT must remain on a solid surface free from vibration until the testing is complete.
- \_\_\_\_\_ 14. Once the i-STAT cartridge package is opened, you must use the cartridge immediately.
- \_\_\_\_\_ 15. Samples for all i-STAT ACT must be drawn in a non-heparinized syringe. Samples for PT/INR are collected by direct fingerstick or non-heparinized syringe. Samples for the CG4+ are an ARTERIAL or VENOUS sample only and samples for EG7+ are ART, VEN, CORD, Capillary, Mixed Venous. CG4+ and EG7+ both may be collected in non-heparinized or heparinized syringe or green vacutainer. (Heparinized is preferred)
- \_\_\_\_\_ 16. The Quality Controls are completed before each lot is distributed for use and monthly while in use. Istat Operators must run a QC or proficiency sample initially, at 6 months and annually to maintain competency.
- \_\_\_\_\_ 17. The patient ID for the i-STAT is the CSN number which can be scanned from the blue and white wristband or manually entered with the 9 digit CSN.
- \_\_\_\_\_ 18. Fill the cartridge holding the syringe at a 45° angle slowly and steadily avoiding bubbles. Close the cartridge door by grasping the side of the cartridge before placing the cartridge in the analyzer. Do not overfill or underfill.
- \_\_\_\_\_ 19. Cleaning the exterior of the i-STAT is not recommended.
- \_\_\_\_\_ 20. The i-STAT will analyze any sample. However, the interface will prevent results from a diluted sample from going to the patient's chart. An example of an absurd value is a potassium < 2.0 mmol/L.