

April 2014

## Obtaining Blood Glucose Samples

### Tips and Tricks

Recent safety learning reports (SLRs) have identified problems when operating glucometers and incorrect practices when obtaining a Point of Care Test (POCT) for glucose. Please review these reminders to help obtain samples.

#### **The glucometer will not work or I am receiving an error message. What do I do?**

- Be sure both levels of quality control (QC) have been completed. Both must be completed daily or the machine will not perform a patient test. Each unit should have a process for QC completion.
- The first drop of blood should be wiped away and not used.
- Be sure you have a good drop of blood before touching the strip to the blood so that the blood can "wick" fully on the strip the first time.
- See attached manufacturer references to troubleshoot error messages.

#### **Can I obtain a sample from somewhere other than the fingers or heels in infants?**

- Samples obtained from other sites may give a blood glucose result that differs or "lags behind" the results obtained from the fingers. To make treatment decisions we need accurate and consistent readings.
- The sites approved by Children's for obtaining glucose POCTs are the **heel** for infants not yet walking, or a **fingertip** for children >12 months of age.
- Use the palmer surface of the index, middle or ring finger.
- Care must be taken particularly when drawing blood from infants as the distance from skin surface to bone is quite small and the bone can easily be injured.



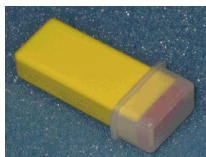
### What lancet device do I use for fingersticks?

- Two finger glucose lancets are available –
- **Pink** (21G, 1.8mm) and **Purple** (30G, 1.5mm)



### What lancet device do I use for heelsticks?

- NICU heel glucose lancet

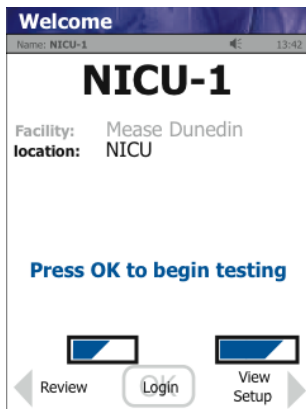


### What can help me to get a better sample?

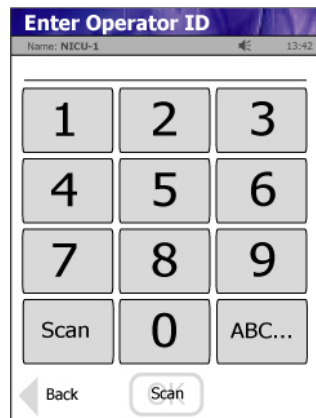
- Warming the site prior to obtaining the sample can help.
- Hold the sample site below the level of the heart, if possible.



## Glucose Monitoring System Quick Operating Guide



1 From Home screen, press **Login**.



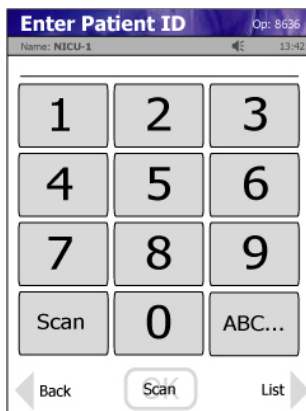
2 **SCAN** Operator ID and press **Accept**.



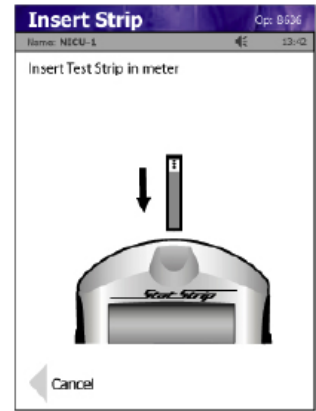
3 From Patient Test screen, press **Accept**.



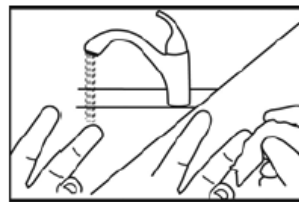
4 **SCAN** Strip lot number and press **Accept**.



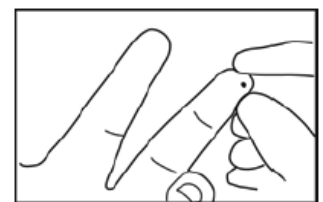
5 **SCAN** Patient ID - the one that looks like ||| || |||| | - and press **Accept**.



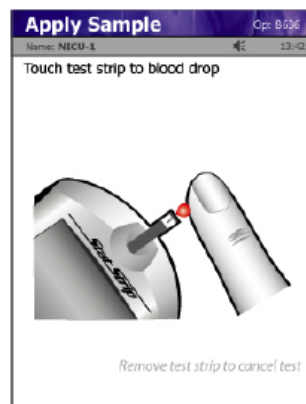
6 Insert Test Strip into Meter.



7 Wash patient's hand thoroughly and massage finger to stimulate blood flow.



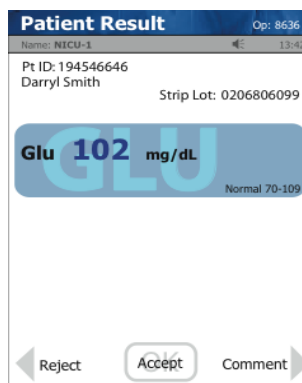
8 Use safety lancet to puncture finger. Squeeze finger to form blood drop.



9 Touch strip to blood drop. Result will appear within 6 seconds.

### 10 **Warning!**

*The test strip must fill completely upon touching the blood droplet. **If the test strip does not fill completely, do not touch the blood droplet a second time.** Discard the test strip and repeat the test with a new test strip.*



11 To accept a result press **Accept**. **<50 or >300 ALWAYS requires a comment!** Touch **Comment** & select appropriate comment. Touch **Accept TWICE** to save comment & send with result to patient chart.

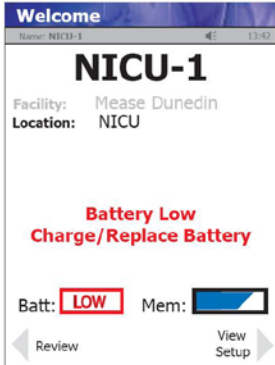


12 To review other results, Press **Review** from Patient Test screen.



## Glucose Monitoring System Quick Troubleshooting Guide

### 1 Low Battery



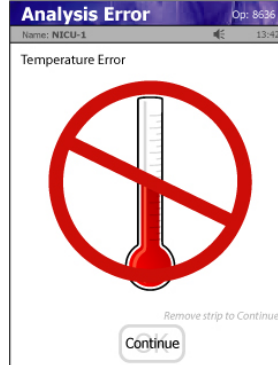
Battery Low. Place meter into charging/docking station.

### 2 Test Strip Removed



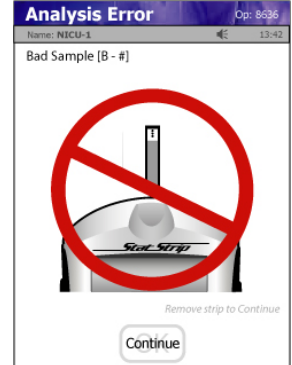
Test has been cancelled.

### 3 Temperature



Meter will only work in a temperature range of 59°-104°F (15°-40°C).

### 4 Bad Sample



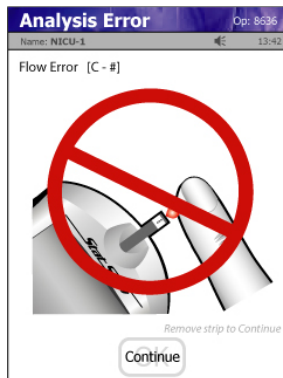
Insert new strip and repeat test.

### 5 Strip Rejected



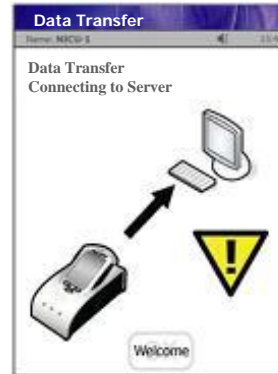
Occurs after test strip insertion or during analysis. Insert another strip and repeat the test.

### 6 Flow Error



Either insufficient sample or the sample was applied incorrectly. Repeat test with a new strip.

### 7 Transfer Failed



Meter is unable to connect to the transfer computer. Contact your Point of Care Coordinator for assistance.

### 8 Transfer Failed



Meter was removed before data transfer was complete. Re-dock the meter.