Labrador - Grenfell Health

Nursing Corporate Orientation

Blood Glucose Monitoring

March 2018

Outline

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Definition

- Blood glucose monitors allow health care workers to obtain a capillary blood sample from the patient and test blood glucose levels right at the bedside
  - Called Point of Care Testing (POCT)
- Advantages of POCT of blood glucose levels (BGLs) are:
  - Immediate results that clinicians can use to guide treatment
  - More convenient for the patient
  - Less painful than the alternative which is venipuncture

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Accu-Chek Inform II Glucose Meter

- LGH uses this meter throughout the region
- Capable of analyzing the following whole blood samples:
  - Capillary
  - Venous
  - Arterial
  - Neonatal
- System includes:
  - **Meter**
  - **Base unit**
  - **Test strips vial**
  - **QC solutions (2 vials)**
  - **Isolation sleeves (optional)**
  - **Accessory case**

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Accu-Chek Inform II Glucose Meter

- Glucometer and associated supplies are stocked on all units that complete blood glucose testing
- Meters should always be docked which allows it to charge and update (sync) with the system
- If a patient is registered (in ER for example) and the meter is off the base, the patient's ID band will scan as invalid until you dock the unit
- Updating can take several seconds to minutes so how do you do an urgent BGL?

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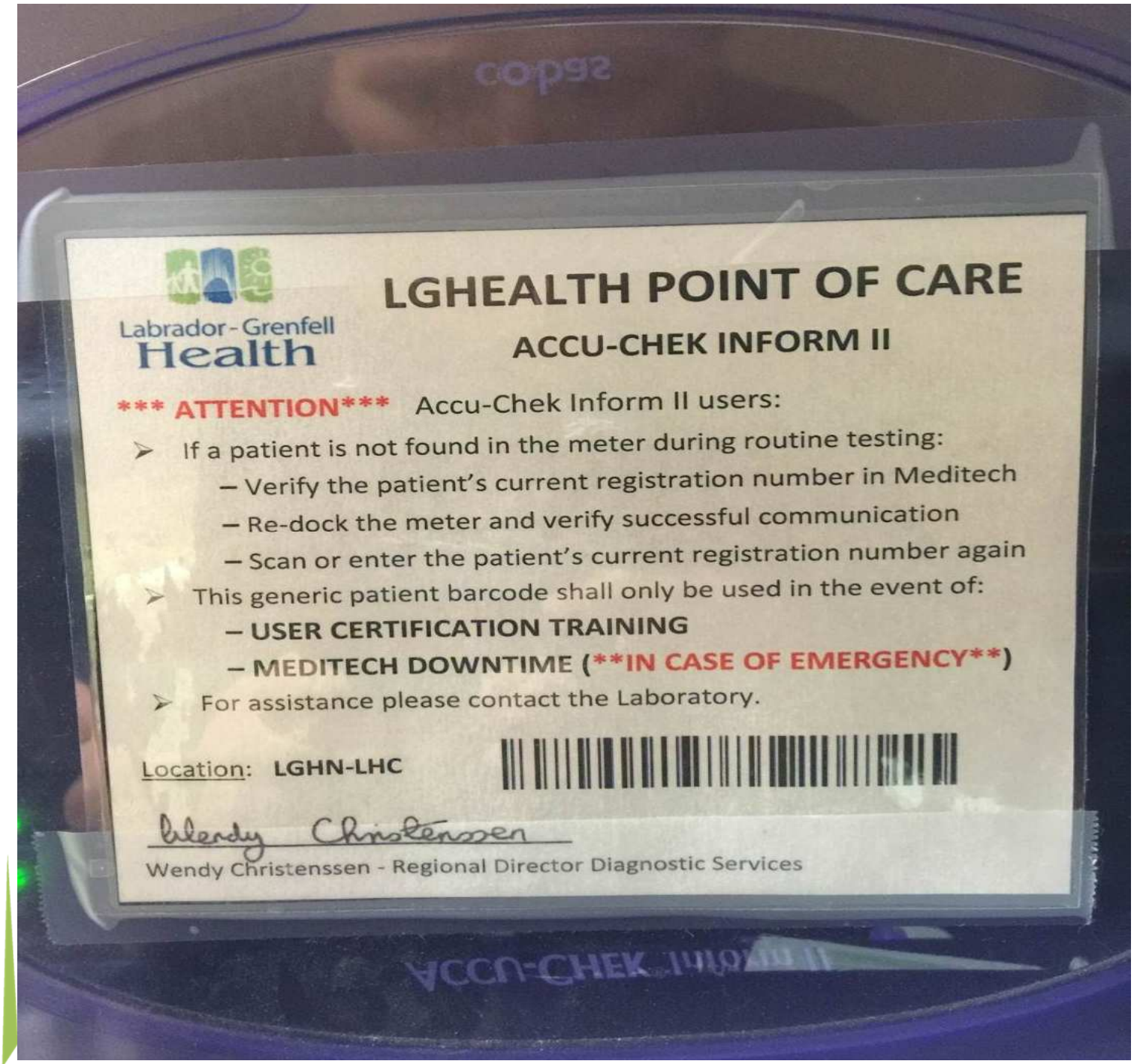
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LGHEALTH POINT OF CARE
ACCU-CHEK INFORM II
*** ATTENTION*** Accu-Chek Inform II users:
If a patient is not found in the meter during routine testing:
– Verify the patient's current registration number in Meditech
– Re-dock the meter and verify successful communication
– Scan or enter the patient's current registration number again
This generic patient barcode shall only be used in the event of:
– USER CERTIFICATION TRAINING
– MEDITECH DOWNTIME (**IN CASE OF EMERGENCY**)
For assistance please contact the Laboratory.
Location: LGHN-LHC
Wendy Christenssen - Regional Director Diagnostic Services

Accu-Chek Inform II Glucose Meter

- Every user has a unique login and password to access the glucometers and this should never be shared!

- Certification will be covered at the end of this presentation

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Patient Testing

- Scan bar code on your **hospital ID card**
  (or enter your user name which is your employee #)

- Enter your **password**
- Scan bar code on **patients wrist band (LHC/CSCMH) or triage/admission sheet (LWHC)** – name and DOB will appear on the screen and you must ***verify it's correct!***
- Scan bar code on **bottle of strips**

- Perform test
- Press the power button to log off and place meter in standby
- Dock the meter to download results, update and synchronize with the system

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Daily Quality Control

- Accu-chek Inform II meters require daily QC
  - Both levels need to be checked every 24 hours
  - Completed on night shift as part of nursing duties
  - Follow the same steps used to do a patient test

- ***Can't do a patient test until QC's completed!***

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Parameters

- **Normal** random glucose ranges
  - Adult: **3.5 - 7.8** mmol/L
  - Neonate: **2.5 - 5.5** mmol/L

- Critical random glucose ranges
  - Adult: **< 2.5 or > 25** mmol/L
  - Neonate: **<2.5 or > 17** mmol/L

- If you get a “LO” result then BGL is **< 0.6** mmol/L

- If you get a “HI” result then BGL is **> 33.3** mmol/L

- Repeat the test and confirm with a **STAT** lab test!

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Special Situations

- If a reading is outside of the normal ranges you may have to add a mandatory comment → you can choose one of the preset comments or enter your own free text

- The following conditions are associated with a risk of incorrect glucose results:
  - Severe dehydration
  - Shock
  - Hypotension
  - Vascular disease
  - Diabetic keto acidosis
  - Hypertension
  - Peripheral shutdown

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Important Points to Remember

- Broken/malfunctioning meters go to **LAB** not Biomed → or if located in St. Anthony you can take the meter to the POC coordinator: **Joetta Adams (709 - 454 - 0510)**
- The POC coordinator is also the ONLY person who can reset a forgotten password (email: **joetta.adams@lghealth.ca**)
- QC solutions are obtained from LAB (no rec required) but test strips come from stores (must be ordered with unit stock)
- QC solutions have to be dated once opened and are only good for 90 days (negating the expiry date on the bottle)

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Certification

- Certification has **2 components**:
  1. Online training session with online exam
  2. Practical component:
     - QC test
     - Patient test

- Required **YEARLY** or access to the meter is lost

- Receive notification of expiring certification **60 days** prior

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Certification – Online Training

1. Open the intranet (LGH home page)
2. Under Department Pages select **Laboratory**
3. On the Laboratory page - select **cobas® academy**
4. Enter your *Employee number* on the left
5. Do not enter a *Password* (first login only)
6. Click on Login
7. Omit the *Enter old password* field (if displayed)
8. In the *Enter New Password* field, enter your 4 digit numerical password (e.g. 1234)

   this is the password you will use on the glucometer as well as cobas academy
9. In the *Confirm New Password* field, confirm your password (e.g. 1234)
10. Click on Save

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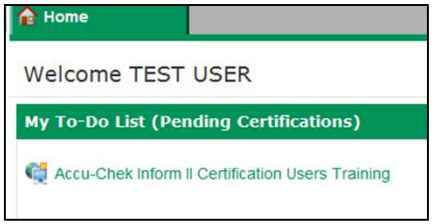
Certification - Online Training

11. You will see your name but no content will be available – you need to ***Log out*** (top right) and then log back in using your newly created password
12. Under My To-Do List, click on the training course



13. Highlight the training course when it comes up again and click on the little blue triangle to start ( )

***if necessary, click to allow pop-ups and repeat steps 12 and 13**

14. Click on Start
15. Click on *Intended Use*, then *Listing of topics*, then *Intended Use* again, and fi Launch
16. After you have read through each section, click the green next arrow on the top right to load the next page

***be patient – the pages can be slow to load!**

(note that the training course can be stopped/resumed as many times as required)

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Certification - Online Exam

- Only after you have completed all three modules can you complete the online exam
- ***you do not actually need to print your certificate***
- Close out the window with the training course and highlight *Certification Exam* on the original page, allowing you to click the little blue triangle to start ()
- Click 

- Then click 

- You must complete the exam once you start or you risk losing your work
- Once you have answered all 20 questions you can submit your answers for evaluation
- You are required to get **18/20 correct (90%) to pass**
- You have **3 attempts to pass the exam**
- If you are not successful after 3 attempts, you will need to contact your CNE or the POC coordinator to discuss

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Certification - Practical component

- Once you have successfully completed the online training (modules 1, 2 and 3) you can move on to the practical
  1. Find someone to act as your observer:
     - *RN*
     - *Lab tech*
     - *CNE*
     - *POC coordinator*
  2. Log onto the glucometer and do both a high and low *Control Test* (in any order)
  3. Next select *Patient Test* and then ***Observer Login***
  4. Give the meter to the observer to login, then take it back and perform a patient test
  5. Hand the meter back to the observer so they can answer the two questions (verifying that the test was performed correctly)
  6. Press the power button to log off
  7. Dock the meter

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Recertification

- Remember:
  - ✓ **Required yearly** or access to the meter is lost
  - ✓ Receive notification of expiring certification **60 days** prior
- The steps are the same as for initial certification → complete the online component first, then the practical

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Questions?

"Change is the end result of all true learning" - **Leo Buscaglia**

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References

- Cobas Academy

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