

Get To the Point

Fundamentals of Point of Care Testing (POCT)



Wheaton Franciscan Healthcare

What's the Point?

Learning Objectives:

At the end of this session, the learner will be able to

- Define terms related to Point of Care Testing (POCT)
- Perform Quality Control testing as required
- Demonstrate accurate documentation of results using POCT laboratory report form
- Use various test kits and equipment
- Correctly store kits and reagents
- Identify expiration dates and understand their importance



Definitions

- **POCT:** (Point of Care Testing): A lab test performed at clinic to obtain immediate results
- **CLIA:** Federal law that regulates all POCT
- **Waived Testing:** simple lab test that is approved to be performed in clinic
- **QC** (Quality Control): material with a known value that is used to assure accuracy of test
- **Reagents:** material used to perform POCT
- **Critical Values:** results that affect quality of life; must be communicated to physician immediately



What is the value of POCT?

- Lab test results are available immediately
- Results are interpreted along with patient's clinical symptoms
- Helps physician with future treatment decisions



Stay safe while performing POCT

Always use Standard Precautions:

Treat everything as infectious

- Always use PPE (Personal Protective Equipment): **gloves are always required** when performing POCT and QC or when carrying specimens
- Only perform POCT in a “dirty” area; never prepare immunizations in same area as POCT; never eat or drink in same area; never pour urine in same sink as hands are washed
- Clean the work area and equipment in between patient testing
- Dispose of all reagents and specimens as per protocol in clinic



Quality Control

QC is performed by EVERYONE who does POCT testing;
EVERYONE must take a turn doing QC

How often do I perform QC?

- Depends on test, laboratory requirements or kit requirements
- Check requirements for each test

Where do I find out how often to perform QC?

- This can be found on the QC logs, on the product insert; in the procedure; you can also ask co-worker

Where do I record QC results?

- Enter results in QC log that is kept at the clinic



Types of QC

There 2 kinds of QC for POCT. Each test may have one or the other or both

- **Internal Control**: this is automatically part of the test; you do not have to do anything extra to perform internal QC
 - Control is run at same time as patient specimen
 - Control result always appears with every test result
- **External Control**: this is separate material that must be tested exactly like a patient
 - You must know correct material to use for each test type
 - This must be treated and tested exactly same as patient specimen
 - Control result must be recorded
 - Control answer should fall in range found on QC log



The QC result is not in range found on QC log or did not work at all! What Do I do Now?

Follow these steps

Internal QC	External QC
1. Patient result invalid; <u>do not</u> report patient result	1. Check expiration dates of reagents, controls, test kit. Open new kit if past date
2. Check expiration dates of test kit. Open new kit if past expiration date	2. Rerun control using new kit or reagents if they were expired. Clean equipment and rerun control.
3. Rerun patient with new kit	3. If QC now OK, run patient
4. Record <u>all</u> results and write explanation on QC log. Report second patient result	4. Record <u>all</u> results and write explanation on QC log. Report second patient result

Alternate option:
If controls do not work, you can always send specimens to the lab for testing



POCT Laboratory Report Form

The POCT Laboratory Report Form will be displayed by the instructor during class

Every form **must** include the following:

1. Patient name and DOB (use label if available)
2. Date of service
3. Provider name
4. Diagnosis code or verbiage
5. Test results
6. Test performed by: use computer ID (for example: H0001)
7. QC : Internal QC OK? Circle Yes, if QC ok



Urinalysis Macroscopic Using Dipstick or Instrument

- **Reagent Storage:** Room Temperature
- **Specimen Type:**
 - ✓ Urine: Midstream, Void, or Cath Specimen
- **Storage:**
 - ✓ Refrigerate urine if not tested immediately
- **QC frequency:** Every day of patient testing BEFORE patients are tested
- **Documentation:** Write QC and Patient results on result form
- **Specimen interference:**
 - ✓ If a urine is highly colored (brown, orange, green) or is grossly bloody, DO NOT test. Send specimen to lab for testing



Rapid Strep Test

- **Reagent Storage:** Room Temperature
- **Specimen Type:** Throat swab only
- **Specimen Storage:** Room Temperature
- **QC frequency:** Once per kit when the kit is opened
- **Documentation:** Write QC and Patient results on result form



Pregnancy Test - Urine

- **Reagent Storage:** Room Temperature
- **Specimen Type:**
 - ✓ Urine: Midstream, Void, or Cath Urine
- **Specimen Storage:** Refrigerate urine if not tested immediately
- **QC frequency:** When new kit is opened or at least once per month
- **Documentation:** Write QC and Patient results on result form



Fingerstick Glucose using glucose meter

- **Reagent Storage:** Room Temperature
- **Specimen Type:** fresh capillary whole blood only
 - ✓ Fingerstick – clean finger with alcohol; air dry; wipe away first drop of blood with gauze; use single drop to test
- **QC frequency:** Each day patients are tested
- **Documentation:** Write QC and Patient results on result form



Fingerstick INR using instrument

- **Reagent Storage:** Room Temperature
- **Specimen Type:** fresh capillary whole blood only
 - ✓ Fingerstick – clean finger with alcohol; air dry;
DO NOT wipe away first drop;
use first drop to test
- **QC frequency:** Internal QC is run with every test automatically
- **Documentation:** Write results and strip code on result form. If internal QC out of range, no patient result will be displayed



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