

Let's Talk Informatics
Point of Care Testing: NSHA Interfacing
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Sept. 27th, 2018

Bethune Ballroom, Halifax, Nova Scotia

Please be advised that we are currently in a controlled vendor environment for the One Person One Record project.

Please refrain from questions or discussion related to the One Person One Record project.

Informatics...

utilizes health information and health care technology to enable patients to receive best treatment and best outcome possible.

Clinical Informatics...

is the application of informatics and information technology to deliver health care.

AMIA. (2017, January 13). Retrieved from <https://www.amia.org/applications-infomatics/clinical-informatics>

Let's Talk Informatics Objectives

At the conclusion of this activity, participants will be able to...

- Identify what knowledge and skills health care providers will need to use information now and in the future.
- Prepare health care providers by introducing them to concepts and local experiences in Informatics.
- Acquire knowledge to remain current with new trends, terminology, studies, data and breaking news.
- Cooperate with a network of colleagues establishing connections and leaders that will provide assistance and advice for business issues, as well as for best-practice and knowledge sharing.

Presentation Objectives

- Provide education on the NSHA Point of Care Testing Program (POCT).
- Provide education and updates on the current NSHA project of POCT Interfacing.
- At the end of the session participants should be aware of the POC program, as well as the devices and technology that support POC testing across the province.

Conflict of Interest Declaration

- I do not have an affiliation (financial or otherwise) with a pharmaceutical, medical device, health care informatics organization, or other for-profit funder of this program.
- I have/had an affiliation (financial or otherwise) with a pharmaceutical, medical device, or communications organization, or other for-profit funder of this program.

What is Point of Care Testing (POCT)?

Point of care testing refers to diagnostic testing that is performed at or near the patient. It is often performed by non-laboratory health care professionals and provides convenient diagnostic testing outside of the clinical laboratory, in the hospital, clinic or emergency department.

POCT Oversight & Administrative Structure

- The provincial program of Pathology and Laboratory Medicine's (PLM) Senior Medical Director and Senior Director are accountable for the quality of the program.
- The POCT Provincial and Zonal Interdisciplinary Committees provide guidance, support and operational oversight of POCT while ensuring the needs of clinical service are being met.
- The POCT Coordinator ensures a coordinated and standardized approach to the use of POCT across Nova Scotia that ensures the delivery of safe, high quality diagnostic results.

Each Zone/IWK has a team of POCT specialists to support the initiative.

Devices	Tests Available
Glucose meter	Glucose
Abbott i-Stat	<u>Chem8+ cartridge</u> - Na, K, CL, TCO ₂ , Anion gap, Ionized Ca, BUN, CRE, Hct, Hgb <u>cTni cartridge</u> - Trop I <u>CG4+ cartridge</u> - Lactate and Blood Gas (pH, pCO ₂ , pO ₂ , TCO ₂ , HCO ₃ , BE and sO ₂ <u>INR cartridge</u> - INR <u>ACTk/c cartridge</u> - ACT testing
Abaxis Piccolo	<u>Liver panel</u> - ALB, ALP, ALT, AMY, AST, GGT, TBIL, TP
Sysmex Poch 100i	CBC
Siemens Clinitek Status+	Urinalysis, qualitative hCG pregnancy testing
Roche H232 Cardiac	Troponin T
IL Gem4000	Blood gases
Alere Triage	Urine drug screen, Trop I
Roche Coagucheck XS	INR
HemoCue	Hemoglobin
ROTEM	Blood management
Manual testing	Urine drug screen, pregnancy testing, urinalysis

POCT Devices



Nova Scotia Health Authority Hospitals and Health Centres



This map includes hospitals and health centres only and does not reflect all buildings in which NSHA services are provided. MCO28-02-16

Potential Advantages of POCT

- POCT maintains our ability to support urgent/emergency services at rural clinical sites without an onsite laboratory, having access to diagnostic tests that require a quick turnaround time.
- POCT allows for an efficient work flow and provides health care providers with quicker access to test results with no transport of specimens or waiting for the laboratory to process the specimen.
- The on-site POCT device performs the analysis and rapidly produces results to assist with immediate clinical management and leads to improved patient outcomes.

How is quality assured for POCT?

- Accreditation Canada
- POCT Standards
- POCT Policies and procedures
- Quality Control
- Training and Competence
- Selection and Validation
- Error and Safety Management
- Monitoring: audits and indicators
- Inventory Management

Potential Challenges of POCT

- POCT users are often RNs and LPNs with patient care responsibilities and limited laboratory technical background.
- Appropriate oversight to meet accreditation requirements and clinical service needs:
 - Training and competency assessment*
 - Device and operator support*
 - Inventory (standardization/centralization)*
 - Testing Results*
 - Cost*
 - Sensitivity*
- Interfacing of test result and storage of information.

POCT Interfacing

- A Provincial AegisPOC system allows NSHA to standardize POCT, for both glucose and non-glucose devices, using a common POCT middleware that can interface to both the Cerner Millennium and MEDITECH Lab Information Systems (LIS).
- Results will transfer automatically from the LIS to the patient's electronic medical record (EMR), clinical portals or Health Records where they will be available with other lab results.
- Increased automation will eliminate manual processes, lower the risk of errors and reduce clinical workloads.

Objectives of the Project

- Standardize POCT to be consistent across all Zones.
- Establish consistent processes for POCT regardless of destination system (Cerner or MEDITECH).
- Reduce risk of duplicate patient testing within and across Zones.
- Improve infrastructure to accommodate a provincial solution/capacity.
- Deliver a sustainable solution that can be supported by vendor and ICTS/NSHA IMIT.
- Improve ability to audit and trace results (accountability).

Current Status of the Project

- All POCT devices used in 14 EDs across Nova Scotia have already been interfaced with the EMR.
- Glucose meters in Central Zone have already been interfaced with the EMR. Western and Northern Zone will implement and interface glucose meters in October/November. Eastern Zone will interface in March 2019.
- Clinitek Status+ in some clinical areas have been interfaced to the EMR.

The goal is to have all POCT devices connected to the EMR by the end of 2018.

Let's Talk Informatics has been certified for continuing education credits by:

- College of Family Physicians of Canada and the Nova Scotia Chapter for 1 Mainpro+ credit.
- Digital Health Canada for 1CE hour for each presentation attended. Attendees can track their continuing education hours through the HIMSS online tracking certification application, which is linked to their HIMSS account.

Thank you for attending this event.