

Collaboration of the Health IT Policy and Standards Committees

Public Health Task Force
February 8, 2017, 9:30 a.m. – 4:45 p.m. ET
Marriott Wardman Park, Washington, DC

Panel 2: Labs and Standards - Julie Luepke and Stephen Julien, Mayo Clinic

1. Identify best practices for sharing pregnancy status from the provider to both commercial labs and public health entities.

- When ordering a laboratory test, add the pregnancy status by AOE question.
 - a. The ordering system should be able to send that status to the LIS and in such a manner that it will be readily available to downstream systems for reporting back to the client, provider or public health department.
 - For ordering from the EHR, have the pregnancy status available when ordering any test, such as laboratory, x-ray or procedure.
 - a. This information is sent to the LIS or other systems to be available on the final reports.
- a. How are data flowing currently?
- External Practice: Client provides pregnancy status when ordering tests, by AOE.
 - The ordering system currently stores and sends this status to the LIS.
 - If not answered, it will not be in the LIS which cannot pass it to other applications such as Reportable Disease Application.
 - Unanswered questions delay completion and release of results.
 - Internal Practice: Pregnancy status can be entered and stored in the EHR.
 - Pregnancy status is not currently available to the ordering system.
 - Pregnancy status is not passed discretely to the LIS.
 - Ordering clinician must answer AOE questions for tests that require pregnancy status to ensure this is provided to the lab and LIS.
 - Mayo currently has multiple EHR software solutions. One of which does not provide a true orders cycle for CPOE for laboratory orders
 - As such AOE question answers must be manually transferred to the LIS from the order messages by phlebotomists and technicians in the lab adding time to order processing.
- b. Are there short term, medium term and long term solutions that could be implemented to support and improve this data sharing?

Short term

- We currently have added a new specific test for HBV that should be ordered on pregnant women (HBNTP).
- Other new tests could be added but would need to be added to the workload, which has limited resources.
- Also pregnancy status should be available on a case report provided by physicians.

Medium Term

- Add a specific AOE question when ordering a test which asks for pregnancy status.
 - This information is sent as a result (OBX) as a question and answer,
 - Example: Is the patient pregnant? Answer: Yes, No, Unknown.

Long Term

- Update EHR and LIS systems to have a special place for pregnancy status that can be electronically sent, stored, updated and sent to the ordering and downstream systems for availability on reports.
- This would be for internal and external laboratory ordering of tests.

2. Should standards be developed to address pregnancy status? If so, what would they need to address?

- Yes, it would be important for pregnancy status to be available on reports in order to provide treatment and services if needed in regard to laboratory results on specific tests, such as HIV and Hepatitis.
- In order for compliance to standards, stakeholders need to address the limitations of LIS and EHR's to be able to store and pass this information to other systems.
- Also there would need to way to update this status in real time so accurate status is available.
 - (i.e. gestation, term, estimated/actual delivery date)

3. Is ask on order entry a good short term solution for sharing pregnancy status with labs and public health?

- Currently Mayo Medical Laboratories uses AOE questions for all Zika tests.
- These are AOE questions where the questions are asked when ordering these Zika tests.
 - The answers are reported as results back to the provider and also to public health.
 - This process is not fully automated all of the time.
 - Some manual intervention is required for some results, clients and LIS/EHR integrations.
- We currently use LOINC and SNOMED codes for these questions and answers.
 - This adds to the test code implementation time and for our internal practice these answers have to be manually entered into the LIS for reporting.

Mayo Clinic as a hospital, clinic, research facility and reference laboratory has a unique perspective on the value of providing patient information in a timely and meaningful way. This information can be extremely important in the treatment as well as management of a patient's health. The ability to share and exchange information is a vital benefit to public health and other public agencies for surveillance and management of diseases and illness. Mayo Clinic's ultimate goal is the needs of the patient come first. We look forward to working with the Public Health to achieve this goal.