

1 Minute Survey – Ordering of Testing

Snapshot of Findings

Project Type:

Preliminary Insight Gathering Initiative (May-June 2016)

Background:

At the Canadian Society for Medical Laboratory Science (CSMLS) we often hear from our members that many laboratory tests are ordered incorrectly, but as of yet we don't understand the depth of this concern. Programs such as Choosing Wisely have a "goal of advancing a national dialogue on avoiding wasteful or unnecessary medical tests, treatments and procedures," (www.choosingwisely.org). Since medical laboratory professionals conduct many of these tests, it may be important to understand how CSMLS members are affected.

Purpose:

To obtain preliminary insight into CSMLS members' perspective of laboratory testing being ordered incorrectly (unnecessarily or over ordered).

Responses:

The survey was announced via eNEWS and the CSMLS website to recruit members for participation (2 week period). Participants were able to log into the survey anonymously and as many times as desired to describe each test they identify as being ordered incorrectly. A total of 101 responses were provided and four were excluded from analysis due to lack of information (n=97).

Results:

Data collected was reviewed, coded (updated naming conventions) and analyzed for test purpose and reason for nomination. A total of 40 individual tests or combination tests were identified and were categorized into 32 groups describing the reason the test is conducted.

1. Overwhelmingly, tests associated with detecting inflammation and/or to identify damage to the body were ranked as the number one incorrectly ordered test (n=32). The results highlight C-reactive protein (CRP), Creatine Kinase (CK) and Erythrocyte Sedimentation Rate (ESR), with the last test receiving the majority of votes. The majority stated that the tests were both over ordered and unnecessarily ordered (n=16).
2. Detection and monitoring of diabetes or glucose, was identified as the second most incorrectly ordered test (less than 10 votes). Hemoglobin A1c (HbA1c) and Glucose 2hr PC were noted. With a similar number of votes, blood clotting related tests were acknowledged with the majority referring the unique or combined tests of Activated partial thromboplastin time (aPTT), Prothrombin time (PT) and International Normalized Ratio (INR). The majority felt that these groups of tests were over ordered.

3. In a three-way tie (less than 5 votes), tests associated with detection of infection (urine cultures, skin and wound cultures), kidney function test (Creatinine), and cardiac enzymes (Troponin) were recognized. The majority felt that these tests were over ordered.
4. The remaining tests branded as being incorrectly ordered, may highlight regional differences in ordering and offers an area for additional inquiry.

Of all the tests ordered (grouped for testing purpose and equally weighted), 49% (24/49) were considered both over ordered and unnecessarily ordered, 35% (17/49) were over ordered only, and 16% (8/49) were unnecessarily ordered.

Conclusion:

The preliminary results highlight specific diagnostic and monitoring areas where laboratory tests are being over ordered and/or unnecessarily ordered. Further investigation and expert collaboration are warranted to determine the extent and breadth of this concept using a large scale laboratory data set.

Next Steps:

Consultation with specialized researchers, associations and Choosing Wisely.