CSMLS SCSLM

Canadian Society for Medical Laboratory Science
Société canadienne de science de laboratoire médical

Position Statement

Appropriate Utilization of Medical Laboratory Resources

The Canadian Society for Medical Laboratory Science (CSMLS) believes medical laboratory professionals (MLPs) are vitally placed in the health care system to support appropriate utilization management strategies for laboratory tests.

MLPs and the administration overseeing clinical laboratories have an expanding principled role to safeguard the appropriate utilization of laboratory tests. Inappropriate laboratory tests serve no medical value and result in increased costs and potential harm to patients and the health care system. Evidence suggests that unsustainable utilization practices are likely increasing and the change cannot be attributed solely to inflation or population characteristics. [i,ii,iii,iv]

- A 2017 study conducted by the Canadian Institute for Health Information found that as many as 30% of all medical tests, treatments and procedures in Canada may be unnecessary.[v]
- Other studies have estimated that 20-50% of all testing is inappropriately ordered (an incorrect test, a redundant test or a correct test ordered at the wrong time).[iv]
- Canadian data suggests that almost $6 billion is spent annually on laboratory testing by provincial and territorial governments, and about 10% of that is unnecessary ($600 million).[vi]

Therefore, changes in laboratory testing practices have a fundamental impact, potentially positive or negative, on health care costs and the fulfillment of providing optimal patient care.[vii]

In recent years, significant national and international efforts have focused on improving health care value through appropriate utilization management of laboratory tests. Research has shown that the reasons behind inappropriate testing are numerous, spanning physician factors, patient factors, social factors and system factors. However, a research review examined published interventions to reduce laboratory test ordering by family physicians and was able to demonstrate the impact clinical laboratories teams can have. Ten studies were able to achieve an average testing reduction of 35% within 19 targeted tests. Of these, seven changed laboratory forms (the two largest involved 5.2 million and 3.2 million tests), one negotiated a protocol with family physicians, two required laboratory approval and one used a feedback model. [viii]

Traditionally, ordering practices have been left to the discretion of individual health care professionals. Although these groups have contributed significantly to improving the value of laboratories tests and patient care, opportunities for novel approaches to improve the resource

stewardship still exist. However, in recognition of their efforts and roles, utilization management strategies must balance effectiveness with maintaining the autonomy of health care professionals and patients in choosing care pathways.

As the individuals receiving test orders, obtaining patient specimens and processing laboratory tests, MLPs represent a pivotal stopgap in the test utilization pathway that can interrupt traditional and common-place practices. CSMLS encourages advocacy and participatory roles of MLPs and clinical laboratory administration to investigate, validate and help sustain appropriate utilization practices. Such a responsibility should not rely solely on physicians or clinical management. In fact, it is the duty of the MLPs to recognize risk-prone situations in order to minimize harm to patients as well as to utilize professional and institutional mechanisms to intervene when a witness to unsafe or unethical practices (as per the CSMLS Code of Ethics).

CSMLS acknowledges the expertise MLPs can provide as knowledge agents in health care teams and organizational discussions, disseminating information for management strategies and supporting adherence to best-practice ordering. To achieve this, MLPs should maintain up-to-date utilization knowledge through sources such as peer-reviewed literature and organizations (e.g., Choosing Wisely Canada). As well, MLPs need to recognize the changing need of the profession to speak-up in a time of automatic laboratory ordering systems and electronic health records, which can inhibit cross-discipline discussions regarding tests and ordering practices when not using as two-way communication pathways.

It is the responsibility of clinical laboratory administration in all regions across Canada to identify opportunities for appropriate utilization management strategies and contribute to the national evidence-based movement. Clinical laboratories have the unique prospect to examine internal test utilization data and should support MLPs in fostering national change through increased policy and practice conversations. Such analysis and process changes should be published to support awareness and facilitate a national discussion around laboratory utilization.

References:

[i] McGrail KM, Evans RG, Barer ML, Kerluke KJ, & McKendry R. (2011). Diagnosing senescence: Contributions to physician expenditure increases in British Columbia, 1996/97 to 2005/06. *Healthcare Policy, 7*, 41–54.

[ii] Sivananthan SN, Peterson S, Lavergne R, Braer ML, & McGrail KM. (2012). Designation, diligence and drift: understanding laboratory expenditure increases in British Columbia, 1996/97 to 2005/06. *BMC Health Serv Res*, *12*, 472.

[iii] Sweetman A. (2015). LABCON lunch plenary (Canadian Society for Medical Laboratory Science, CSMLS, Montreal), "Exploring the predicted increase in lab testing and the impending shortage of lab professionals".

[iv] Naugler C. (2014). A perspective on laboratory utilization management from Canada. *Clin Chim Acta*, *427*, 142–4.

[v] Canadian Institute for Health Information (2017). *Unnecessary Care in Canada: Infographic Last Retrieved* April 10 2019 from https://www.cihi.ca/en/unnecessary-care-in-canada-infographic

[vi] Naughler C, & Wyonch R. (2019). Commentary No. 533: What the Doctor Ordered: Improving the Use and Value of Laboratory Testing. C.D. Howe Institute.

[vii] Morgen EK, & Naugler C. (2015). Inappropriate repeats of six common tests in a Canadian city: A population cohort study within a laboratory informatics framework. *American Journal of Clinical Pathology, 144*(5), 704–12.

[viii] Thomas RE, Vaska M, Naughler C, & Turin TC. (2015). Interventions at the laboratory level to reduce laboratory test ordering by family physicians: Systematic review. *Clinical Biochemestry, 48*(18), 1358-65.