

SURUTILISATION DES EXAMENS DE LABORATOIRE EN MÉDECINE : PARVENIR À EXPLOITER LES RESSOURCES DE MANIÈRE INTELLIGENTE GRÂCE À LA COLLABORATION

Auteurs : Michelle Sholzberg, MDCM, M. Sc., FRCPC¹ et Lisa K. Hicks, M.D., M. Sc., FRCPC²

Affiliations : ¹Département de médecine, Division d'hématologie et d'oncologie; Département de médecine de laboratoire et de pathobiologie; Li Ka Shing Knowledge Institute; Université de Toronto; Hôpital St. Michael, Toronto, Ontario, Canada

²Département de médecine, Division d'hématologie et d'oncologie; Li Ka Shing Knowledge Institute; Université de Toronto; Hôpital St. Michael, Toronto, Ontario, Canada

Conflits d'intérêts : La Dre Lisa Hicks est la médecin responsable de la campagne Choisir avec soin [Choosing Wisely] à l'hôpital St. Michael, rôle qu'elle joue également auprès de l'American Society of Hematology. Elle et sa collègue Michelle Sholzberg ont coprésidé en novembre 2017 le Laboratory Utilization Symposium, un événement soutenu par l'initiative Choisir avec soin.

RÉSUMÉ

Une grande proportion des examens de laboratoire réalisés en médecine est inutile. Cette surabondance représente à la fois un défi colossal et une occasion formidable pour les équipes des laboratoires cliniques. La tension entre la surutilisation et la mise au point de nouveaux tests donne lieu à une limitation des ressources qui complique la tâche des laboratoires au moment de répondre aux besoins cliniques. Par conséquent, s'attaquer au problème que posent les analyses excessives ou inutiles est une façon pour les laboratoires de remédier à la limitation grandissante des ressources. Pour parer efficacement à la surutilisation des examens, des initiatives de collaboration véritable entre les médecins soignants et les cliniciens qui travaillent en laboratoire doivent être mises en œuvre. Si le temps et les ressources dont vous disposez pour changer les choses sont limités, focalisez sur les secteurs où la surutilisation est courante et où le changement est le plus réalisable.

KEYWORDS:

laboratory utilization, blood tests, overutilization

OVERUTILIZATION OF LAB TESTS IN MEDICINE: ACHIEVING SMART TESTING THROUGH COLLABORATION

Authors: Michelle Sholzberg¹ MDCM, MSc, FRCPC, and Lisa K. Hicks² MD, MSc, FRCPC.

Affiliations: ¹Department Medicine, Division of Hematology/Oncology; Department of Laboratory Medicine and Pathobiology; Li Ka Shing Knowledge Institute; University of Toronto; St. Michael's Hospital, Toronto, ON, Canada.

²Department Medicine, Division of Hematology/Oncology; Li Ka Shing Knowledge Institute; University of Toronto; St. Michael's Hospital, Toronto, ON, Canada.

Conflict of Interests: Dr. Lisa Hicks is the Choosing Wisely Lead at St. Michael's Hospital and Lead of the Choosing Wisely campaign for the American Society of Hematology. Dr. Lisa Hicks and Dr. Michelle Sholzberg were Chairs of the November, 2017 Laboratory Utilization Symposium, an event supported by Choosing Wisely.

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ABSTRACT

A large proportion of laboratory testing in medicine is unnecessary. This represents both a tremendous challenge and opportunity for clinical laboratory teams. The tension between overutilization and new test development result in resource constraints that make it difficult for labs to meet clinical demands. Therefore, addressing excessive, unnecessary testing is one way for labs to address increasing resource supply limitations. To successfully tackle overutilization in this area, initiatives must meaningfully involve collaboration between bedside and laboratory clinicians. If you have limited time and resources to make a change, focus on the "true low-hanging fruit" - where overuse is common, and where change is most feasible.

OVERUTILIZATION OF LAB TESTS (cont.)

It has been suggested that almost fifty percent of clinical laboratory testing may not be necessary.¹ Unnecessary tests are those which are unlikely to influence patient care or counselling due to redundancy, lack of clinical relevance, and the use of non-evidence-based testing patterns.¹⁻⁶ By definition, unnecessary tests do not result in patient benefit; worse, sometimes they can lead to harm by providing misleading information, or by triggering a cascade of tests which may be associated with a risk of downstream adverse events.⁷ Fifty percent is a staggering estimate of unnecessary laboratory testing – and if accurate, represents both a huge challenge and an opportunity for the clinical laboratory community.

While there is increasing recognition that a substantial amount of lab testing is unhelpful, laboratory utilization continues to grow and new, often expensive laboratory tests are being rapidly developed. In the United States for example, laboratory testing is the facet of healthcare experiencing the most rapid growth in expenditure.⁸ In Canada, a retrospective cohort study of staff physicians found that the mean yearly lab test expenditure per physician was \$27,945 CDN from 2013 to 2014. Primary care physicians accounted for 58% of total expenditures, while hematologists had the largest per capita test-related expenditures.⁹ The twin pressures of increasing utilization and new test development, mean that clinical laboratories are often faced with financial, time and human resource constraints making it difficult to meet clinical demands. Addressing the problem of unnecessary laboratory tests may be one way for labs to liberate time and money for use in other areas.

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But how exactly can a clinical laboratory tackle overutilization and unnecessary testing? The field has been struggling with this problem for several years. Guidelines outlining what constitutes inappropriate testing,¹⁰⁻¹² and resources on how to curb testing are available.^{8,11} However, to effectively address over-testing we need to understand the drivers. In a landmark paper in 2008, Emanuel and Fuchs laid out six factors contributing to what they described as a “perfect storm of overutilization”: medical culture (a need to exhaustively investigate), patient culture, financial incentives, the rapid pace of medical science, direct to consumer marketing, and the market system of healthcare. The market system of healthcare is unique since services are ordered by physicians, who are unaffected by the cost, and received by patients who bear few or none of the lab test-related costs.¹³ The extent to which each of these factors drives lab testing varies, but it is important to recognize that most of these drivers are outside of the control of the clinical lab. Thus, in our view, to successfully address overutilization in labs, initiatives must be multidisciplinary involving meaningful consultation and collaboration with lab staff, clinicians and in some cases with, patients.

One very helpful resource in addressing overutilization in labs is the Choosing Wisely campaign. This initiative began in 2012, and challenges professional medical societies to identify unnecessary tests and treatments in their fields. Choosing Wisely started in the United States and rapidly expanded to Canada. As of writing, Choosing Wisely Canada (CWC) has generated 232 recommendations from 39 different professional societies and other groups.¹⁴ In fact, CWC has gone well beyond making recommendations, and has created a wealth of patient education resources and toolkits to help professionals address overutilization. Importantly, of the 232 CWC recommendations, twenty percent address overutilization of laboratory tests.

OVERUTILIZATION OF LAB TESTS (cont.)

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When the Choosing Wisely campaign began, it was described as an effort to address “low-hanging fruit” in medicine. “Low-hanging fruit” was defined as tests or treatments where there was existing evidence demonstrating a lack clinical utility.¹⁵ This definition addresses the rationale for making a change in practice, but it does not address the ease with which one might implement a change. We propose additional criteria for “low-hanging fruit”. If you have limited time and resources to make a change, focus on areas where overuse is common, and where change is most feasible. Multifaceted change strategies that require complex behavior changes are difficult, time-consuming, and often less successful. Strategies that are less complex such as order-set changes, gate-keeping, nudging practice (for instance by changing how test menus are displayed), and hard stops on redundant or “never” tests are much more likely to be successful.¹⁶⁻¹⁷

In our opinion, overutilization in laboratory testing represents a “true low-hanging fruit” as there is ample evidence that many lab tests are not meaningfully contributing to patient care, labs overutilization is common, and many of the change strategies that have been, and can be, employed in this domain are achievable.¹⁶⁻¹⁷

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