

Is there a role for a learner education handover as part of the Medical Council of Canada assessment and licensing process? Y a-t-il une place pour le transfert d'information sur les apprenants dans le cadre du processus d'évaluation et d'octroi de licences par le Conseil médical du Canada?

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Abstract

- The transition from undergraduate medical education (UGME) to postgraduate medical education (PGME) is a time of vulnerability for medical schools, postgraduate residency programs, and most importantly, trainees
- There is a disconnect between the UGME and PGME experience. Student information shared by UGME is primarily summative of knowledge and skills; PGME programs are unaware of specific learner accommodation requirements, tailored supervisory needs, or potential professionalism concerns identified during UGME
- This lack of integration between UGME and PGME increases potential risk to learners, postgrad programs and patients
- Better linkages and communication along the education continuum could optimize learning and reduce inefficiency and risk
- The Medical Council of Canada (MCC) has asked if there is a role for a learner handover (LH) within their licensing processes; however the intended purpose of an LH must first be determined
- A Canadian-based LH referred to as a Learner Education Handover (LEH) model including disclosure of student learning/disability accommodation needs, general health concerns, EDI/religious requirements, professionalism concerns, and recommendations for special focus in residency of specific areas of medical knowledge/skill is described.
- Findings from beta and pilot testing support the value and feasibility of the LEH model. Fundamental principles are outlined:
 - LEH occurs post-residency match
 - LEH should be forward facing; focused on ongoing or recurring learner issues and needs
 - Learners must be included in the process
 - Implementation would require participation by all Canadian medical schools and all learners

Résumé

- La transition de la formation médicale prédoctorale (FMPrD) vers la formation médicale postdoctorale (FMPoD) est une période de vulnérabilité pour les facultés de médecine, les programmes de résidence et, surtout, les apprenants.
- Un gouffre sépare l'expérience de la FMPrD et celle de la FMPoD. L'information sur les étudiants partagée par les programmes de FMPrD consiste principalement en une évaluation sommative de leurs connaissances et habiletés; les programmes de FMPoD ne sont pas renseignés sur les besoins d'accommodement spécifiques et les besoins de supervision sur mesure des apprenants ou sur d'éventuelles préoccupations en lien avec la conduite professionnelle relevés pendant la formation de premier cycle.
- Ce manque d'intégration entre la FMPrC et la FMPoD augmente les risques pour les apprenants, les programmes de formation postdoctorale et les patients.
- Des liens plus solides et une meilleure communication tout au long du continuum éducatif pourraient optimiser l'apprentissage et réduire l'inefficacité et les risques.
- Le Conseil médical du Canada (CMC) a posé la question à savoir s'il y aurait une place pour le transfert d'information sur les apprenants dans le cadre de ses processus d'octroi de licences; toutefois, il faut d'abord déterminer l'objectif visé par le transfert d'information.
- Nous décrivons un modèle canadien de transfert d'information sur les apprenants, appelé modèle de transfert pour la formation des apprenants (TFA), qui comprend la divulgation des besoins de formation des apprenants et les mesures d'accommodement nécessaires selon leurs difficultés, des préoccupations générales en matière de santé, des exigences en matière d'équité/diversité/inclusion et de religion, des préoccupations en matière de professionnalisme et des recommandations concernant l'accent à mettre sur des domaines spécifiques des connaissances et d'habiletés pendant la résidence.
- Les résultats des tests bêta et des essais pilotes confirment la valeur et la faisabilité du modèle TFA.
- Le modèle est fondé sur les principes fondamentaux suivants :
 - Le transfert d'information sur les apprenants a lieu après le jumelage de résidence
 - Le TFA doit être orienté vers l'avenir; il est axé sur les problèmes et les besoins permanents ou récurrents des apprenants
 - Les apprenants doivent participer au processus
 - La mise en œuvre du modèle exigerait la participation de toutes les facultés de médecine et de tous les apprenants au Canada

- Implementation challenges include:
 - Ensuring learner safety following information disclosure
 - Engaging UGME Deans
 - Protection of information ensuring a ‘need-to-know’ status is maintained
- Incorporating the LEH into the licensing activity could enable the MCC to support a system that proactively responds to learner needs, optimizes physician performance and promotes safe, high quality patient care

- La mise en œuvre comprend les défis suivants :
 - Assurer la sécurité des apprenants après la divulgation de l’information
 - Mobiliser les vice-deans des programmes de FMPrC
 - Assurer la protection de l’information en respectant le principe du besoin de savoir
- L’intégration du transfert d’information sur les apprenants à l’activité d’octroi de licences pourrait permettre au CMC de soutenir un système qui répond de manière proactive aux besoins des apprenants, optimise le rendement des médecins et favorise la sécurité et la qualité des soins aux patients.

Introduction

The Medical Council of Canada (MCC) is seeking informed opinions regarding *what* it should be assessing, *how*, *when*, and *why*. In the context of this initiative, the MCC has solicited our advice regarding the benefits and risks of embedding a learner handover (LH) process within the broader MCC licensing activity. This white paper thus addresses the question, ‘Should a learner handover, i.e.: the relaying of trainee information derived from the undergraduate medical training experience to the postgraduate training program, be incorporated as part of the licensing process and, if so, how?’

To answer this question, the MCC must first have clarity about the intended purpose that a LH process would serve relative to other sources of information available. Defining the purpose for a learner handover will, in turn, determine the content, format and approach of how such information would be shared. In this paper we provide the necessary background to understand the current thinking about LH, describe evidence-based support for an ongoing Canadian learner education handover (LEH) process outline the challenges and opportunities, and conclude with our recommendations to the MCC, for future directions related to a LH.

Background

A LH is the sharing of information about medical trainees among relevant individuals who oversee the trainees’ learning.¹ The merits and risks of LHs in medical training, has been the subject of ongoing debate. What information should be shared, to whom, by whom and when in the education continuum are all key elements that are determined by the intent of the information sharing, and merits/risks are directly impacted/determined by these elements.

Medical education literature describes numerous approaches, pros and cons, and theoretical models of LHs. Models promoting information sharing about individual students are generally focused on prior performance, and

information is typically shared between supervisors, to the exclusion of the learner. While this activity, often colloquially referred to as ‘forward feeding’,^{2,3} may enable targeted training and supervision to address real or perceived learner deficiencies, it also carries a risk of stigmatization of the learner, leading to future evaluator biases. “Knowledge of prior performance appears likely to influence ratings of current performance, and an assimilation effect is seen with prior performance information.”⁴ Not only can information sharing impact future trainee evaluations, it may result in implicit and explicit biases that could potentially impact future career paths for the trainee.⁵⁻⁷ Other initiatives, such as ‘boot camps’, or ‘transition to residency courses’ are offered in a group format focusing on medical knowledge and skills as opposed to intrinsic competencies, and are not individualized. They are typically offered prior to the start of residency and after Medical Doctor (MD) graduation and tend to involve top-down teaching sessions designed to address commonly identified deficiencies. They are more directed at pushing information toward trainees, rather than from trainees,⁸ they are generally not mandated and most have not been evaluated.⁹ Typically trainees do not have the opportunity to identify areas that they would like extra help with as they enter residency and undergraduate medical education (UGME) does not share possible trainee deficiencies with postgraduate medical education (PGME).

There are generally two broad viewpoints about the purpose of a LH. One is related to graded responsibility, with the goal of ensuring appropriate monitoring of trainee function in the interests of patient safety; essentially to identify and support those individuals who are anticipated to need enhanced or customized supervision.^{1,10-12} The other is learner-centered, focusing on enabling the trainee to optimize their performance assisted by efficient and targeted evolution of teaching and thereby, ultimately optimizing patient care.^{9,13-15}

An effective LH builds on the notion of the ‘minimally acceptable candidate,’ that is, one that has met minimum criteria to graduate, and thus enter residency training in

two important ways. First, it allows the PGME program to be aware of any special interventions or strategies that were employed for a specific learner to enable them to reach graduation and that should (or should not, in the case of failed interventions or resolved issues) be continued in PGME. Second, it provides a perspective on the relative strengths that students have across the CanMEDS roles, where they are likely to struggle in the future, and what learning/teaching styles have been found to work best for a given learner. A third, separate, benefit is postulated to be the instillation of a higher level of vigilance or oversight of specific trainees who have been identified to be at high risk for recidivism of certain behaviours.

While the merits and weaknesses of LHs^{4,7,9,12-15} will continue to be debated, there is greater agreement about the vulnerability of transitions throughout a medical education trajectory.^{16,17}

In 2014, the Future of Medical Education in Canada Post Graduate project (FMEC-PG) report identified 10 key recommendations, including recommendation #5: 'Ensure Effective Integration and Transitions along the Educational Continuum.'^{18,19} The report specified that

...entry to residency and the final year of residency training need to be better structured to maximize learning and readiness to practice. The different phases of training also need to be better integrated.

This report led to a call for the Canadian medical education community to "develop smoother and more effective transitions from medical school to residency, review and redesign the entry-into-residency process and link the individual learner competencies developed in MD training with the educational objectives set for the resident."¹⁹

In response to these recommendations, one initiative emerged that focused on the development of a LH with the aim to facilitate communication between UGME and PGME, and ease the medical student transition to residency, across Canada. The Association of Faculties of Medicine of Canada (AFMC), as part of the FMEC process, endorsed the exploration and creation of what became the 'Learner Education Handover' (LEH) project. The LEH has since undergone an extensive process of development, review, and iterative revisions with key stakeholder engagement.¹⁴ The following section outlines the evolution, the findings and the current status of the Canadian-based LEH.

Evidence

The current system of trainee information sharing between Canadian undergraduate and postgraduate medical programs occurs formally, prior to the residency match. This communication consists of standardized documentation, including the medical school (MD) transcript and the Medical Student Performance Record (MSPR), also known as the Dean's letter. These documents provide limited utility to postgraduate programs;²⁰ it is challenging to identify any distinguishing features of trainees or identify any unique trainee needs. This information is largely summative and provides little help to those who subsequently are called upon as teachers and program directors to rediscover learning needs, redevelop tailored educational approaches for each learner and, most importantly, re-identify risks related to supervisory needs. In brief, the current system is good at informing programs where students are at but says nothing about what it took to get them there, or what might be helpful to optimize their progression in training.

Furthermore, this information is primarily provided for the purposes of residency selection, a distinctly different activity than tailoring educational programming for a trainee once they have been accepted to a residency program. MD schools seek to enable all students to match to a residency program and orient their information to this purpose. PGME programs strive to identify and secure the best candidates for their program, often feeling the need to take a 'rule out' or 'red flag' approach due to the lack of useful discriminators in application files. Accordingly, this creates a situation wherein both UGME and PGME communities are wary of any information that could be considered negatively affecting a candidate, potentially to the detriment of the learners, based on the authors' experience with the match process. Following the current residency matching process, no further learner information is systematically provided to PGME programs by UGME.

Unintentionally, this system contributes to the vulnerability of this transition period for trainees. It was, and still is, the philosophical position of the LEH working group that improved communication between UGME and PGME could help to ease the transition from medical school to residency, setting all stakeholders up for optimal success. Thus ensued a robust process to determine what this communication should look like; and how and when it should occur.

Following an extensive scoping review of the literature⁹ pan-Canadian focus groups were conducted with 60 representatives across key stakeholder groups including medical students, residents, residency program directors, medical regulatory authorities, as well as undergraduate, student affairs and postgraduate deans. The results supported a national LEH and identified key themes to guide the design.¹⁴ These themes led to three guiding principles that would inform the development and subsequent pilot test of the LEH.

1. The information exchange must occur post residency match – the LEH is not intended to be a selection tool, but rather to enable the development of individualized learning plans at the beginning of their residency training. Placing the communication pre-match risks undermining the goal of including candid useful information for the reasons stated above.
2. The LEH must be learner centered and adaptive. The goal is to enable learners' success, support program efficiency and effectiveness and lead to optimal patient care. It is not intended to be judgmental or punitive.
3. In order to avoid creating unintended stigma for select individuals and to ensure the process becomes normalized during transitions to residency, the LEH should be implemented for all learners across the country.

The stakeholders were clear that the LEH must include the learner in the process. Trainee information related to disability, learning accommodations and mental health should be included. The LEH must be distinct from the MSPR. The design should be aligned with the CanMEDS Framework. Guidelines for when, what and how information should be shared would be developed internally, utilizing existing infrastructure such as resident wellness offices. While there was concern about potential biases resulting from an LEH and misuse of the information, the stakeholders also recognized that an LEH could support patient safety, resident well-being and enhance trainee/physician professionalism. Learners would have individualized educational plans, programs would be better prepared for learner needs and known issues could be dealt with pro-actively rather than re-identifying ongoing issues late into a trainee's residency.¹⁴

Based on the focus group results, and with a number of design iterations, we developed the LEH protocol that

included sections for the student to complete and separate sections for UGME, in alignment with the CanMeds roles.

The student component includes a section entitled Physician Health (an element of the Professional CanMeds role) where students are asked to share personal information about previous approved accommodations in medical school, general health and mental health concerns, EDI, religious and cultural requirements, and personal coping readiness. Professionalism and Medical Expert/Communicator sections ask students to identify concerns they believe require ongoing support. The UGME component includes sections on Professionalism, Medical Expert, Communicator, and Collaborator to be completed separate from the students, indicating areas that the student could benefit from extra attention by PGME. Both student and UGME have a section to comment on student strengths and special interests. Each UGME program can determine who is best able to complete each of their sections, given knowledge of the student and previous/unresolved performance issues.

The information shared should be forward facing, not simply a report of past performance, issues or needs. The information should focus on issues and needs that are expected to be ongoing, or possibly re-occurring for all domains: professionalism, skill/knowledge acquisition, and health/learning challenges.

We conducted a beta test to evaluate the feasibility, utility and potential impact of the LEH,¹³ with University of Toronto and University of Calgary REB approval.

All six of the Ontario medical schools and Laval University MD program participated in the beta test. The protocol was provided in both official languages, English and French.

The beta test involved three phases of data collection. First, 52 voluntary medical students from the seven medical schools anonymously completed the student section of the LEH. Second, UGME Deans received a random selection of 20 completed LEH student sections with no school or student identifiers. The seven UGME faculty, including Deans, faculty leaders, Student Affairs Deans then completed the UGME section, based on their experience with similar students. Six PGME Deans received the compiled, 'fictitious' completed LEH forms. Participants were surveyed to evaluate the content and process of the LEH protocol. A total of 65 surveys were completed.

The small majority of students (58%) and all of the postgraduate deans rated the LEH protocol as feasible.

Only forty-three percent of undergraduate deans agreed it was feasible while 57% were neutral, as were 38% of students. The UGME deans were concerned that the process could be time consuming. All of both undergraduate and postgraduate deans agreed there was utility and value to the LEH. Less than half (36%) of students rated the process as useful/valuable, while 56% remained neutral. The majority of students and postgraduate deans agreed that the LEH protocol allows respondents to answer honestly (60% and 83% respectively); undergraduate deans were less confident, with 14% in agreement and 86% remaining neutral.

Key themes that emerged from the beta test analysis included the following. Students were unclear about the purpose of the LEH and wanted more opportunity to share strengths. Students did not identify privacy issues as a key concern. Undergraduate deans expressed a need for detailed guidance for how to complete the form and they were concerned about the level of student self-insight. Postgraduate deans suggested that the LEH process would serve to start a conversation with trainees, thus enabling a smoother transition into residency.

Following the beta test, further independent feedback was received from AFMC Undergraduate, Postgraduate and Student Affairs Deans, the AFMC Standing Education Committee and from the learner organizations including Canadian Federation of Medical Students (CFMS), La Fédération Médicale Étudiante du Québec (FMEQ), Resident Doctors of Canada (RDoC) and Fédération des médecins résidents du Québec (FMRQ). Two additional items were added to the personal student section, enabling them to identify concerns re: situations related to equity and/or diversity, and personal religious and/or cultural requirements. A revised version of the LEH was presented at the 2018 Canadian Conference on Medical Education (CCME) Education Innovation Symposium, and the resulting finalized version of the LEH was presented to the undergraduate deans, seeking their endorsement to move forward with implementation. However, the majority of the undergraduate deans were not in favour of this next step, citing concerns related to time and capacity.

Currently, a pilot of the LEH supported by a Medical Education Research Grant from the Royal College of Physicians and Surgeons of Canada (RCPSC) is underway, using only the student section, completed by incoming first year residents (R1s) with no input from UGME. Five medical schools over four provinces participated in the first year. Given the pandemic challenges, the pilot has been

extended. Three schools are currently participating. The information that has been most commonly shared by trainees has related to personal coping readiness for residency, the need for academic/personal accommodations and managing finances. Preliminary results indicate that the process is feasible for postgraduate central departments, using the existing infrastructure of their wellness offices. Postgraduate offices have found that the LEH assists them in reaching out to incoming residents. Residents report the LEH as useful, particularly in locating and accessing resources early, and being more proactive rather than reactive about their learning needs. However, fears of how such information might be used, and the stigma of reporting mental health issues remains a concern for some resident respondents. One limitation is the trainees voluntarily participated in both the beta test and the pilot and may represent early LEH adopters; their responses may not be reflective of all trainees. The purpose and intended use of the LEH must be made very clear to trainees, and it will require ongoing efforts to create a safer culture for resident disclosure in the medical education environment.

Challenges and opportunities

Engaging the learners in the information exchange process is unique to our LEH model and we consider it a key component. As stated by Kassam et al, "If learners are expected to become independent and reflective life-long learners, who are able to function in a complex educational and professional system, it is essential that programs are learner-centered with learners positioned as key stakeholders in their training."¹⁴

If the MCC aspires to contribute to solutions that ease the transition from undergraduate to postgraduate training, then the LEH is a viable tool that could be incorporated into the advancement of our medical trainees along the education continuum. If the MCC wants to contribute to an integrated, learner-centered process of moving trainees toward licensure, including seeking evidence of learner self-assessment and reflection then the LEH could be an appropriate and valuable addition.

If, however, the MCC is seeking primarily to augment the evaluation of trainee competencies or to identify 'problem' trainees, then this LEH model may not be an appropriate option. Focusing solely on evaluation/problem identification would likely serve to maintain the status quo and would be in conflict with what we heard from the participants of our Canadian stakeholder groups.

It is our opinion that to adopt such a limited course of action would be a lost opportunity for the MCC and for medical education in Canada. By introducing the LEH model into the educational continuum, the MCC has an opportunity to contribute to the broader wellbeing and career path for Canada's future physicians.

Implementation of the LEH, or even potentially another variation of a generic LH, will not be without challenges. The trainee information being shared is sensitive and in some cases, what is being asked to be shared is groundbreaking. Our medical education environment is complex. However, we have the benefit of knowing what our stakeholder groups want and we all share the common goal to help our developing physicians to become the best they can be, to provide the safest and highest quality care possible to patients.

There are several notable specific challenges should the MCC chose to incorporate a LH component in their licensing process. Our UGME deans have demonstrated reluctance to implement an LEH, citing time constraints and lack of capacity to provide this level of trainee information. Although the LEH does not duplicate nor replace the MSPR, the undergraduate deans have been focusing on this document, pre-resident match, as their primary method of exchanging information with their PGME colleagues. To maximize the utility of the LEH, the inclusion of the undergraduate MD program section of the protocol would be necessary. To date, we have only been able to pilot the student section of the LEH; it would be advisable to pilot the whole LEH protocol, with both the student and UGME sections, prior to a broader implementation.

There is a potential dis-alignment with regulatory authorities – physician disclosure is perceived to lead to intrusive, more punitive-type responses from some provincial colleges. A culture of safety for honest self-assessment and identification is essential; at a minimum, the medical education community would need agreement from regulatory colleges that they would only have access to this information on a well-defined, need to know basis, with the knowledge (+/- their consent) of the trainee. Patient safety concerns must always take priority, but clear guidelines would need to be developed to ensure that trainee control over disclosure of their information to the provincial college is respected whenever possible, save for instances in which obligatory reporting exists.

More positively, at a time when trainee and physician wellness is receiving increased attention and recognized importance, the MCC could be a leader in incorporating a handover system that supports and enables the learner, addressing competencies beyond medical knowledge; proactively addressing learning accommodation, professionalism and health needs to optimize physician performance, and promote safe, high quality patient care.

Although beyond the scope of this paper, the notion of students and UGME offices recording student information relevant to the LEH form throughout their UGME training, such as an ongoing portfolio format, could be a possible means to enhance student self-insight, and reduce the workload for UGME programs in completing their portion of the LEH. Reflective narrative is increasingly integrated into UGME education programs; incorporating LEH preparation into this exercise might help to normalize the process of information sharing and contribute to the quality of information shared. This could be a potential way to engage UGME Deans in the future.

Recommendations

If the MCC is seriously considering incorporating a learner information handover as part of the licensure activity, they must first identify and articulate clearly *what* purpose the handover would be intended to serve. Engagement with all key constituent groups would be essential, including trainees. Building on the existing work of the LEH would be an option, if the LEH guiding principles were followed and the goals of the LEH and the MCC were aligned. Such a direction will call upon the MCC to expand their scope and role within the medical education environment—and would provide the MCC with an opportunity to promote a safer, inclusive and more tolerant medical community.

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Appendix A. List of acronyms

AFMC: Association of Faculties of Medicine of Canada

CanMEDS: Canadian Medical Education Directives for Specialists (competency framework)

CCME: Canadian Conference on Medical Education

CFMS: Canadian Federation of Medical Students

EPAs: Entrustable Professional Activities

FMEC: Future of Medical Education in Canada

FMEQ: La Fédération Médicale Étudiante du Québec

FMRQ: Fédération des médecins résidents du Québec

LEH: Learner Education Handover (version of a learner handover created by the working group based on evidence)

LH: Learner handover or learner information handover (in a general sense)

MD: Medical Doctor as it pertains to the completion of undergraduate medical training

MSPR: Medical Student Performance Record

PGME: Postgraduate Medical Education

R1: First year resident

RCPSC: Royal College of the Physicians and Surgeons of Canada

RDoC: Resident Doctors of Canada

UGME: Undergraduate Medical Education