Challenging learning situations in medical education

*Innovative and structured tools for assessment, educational diagnosis, and intervention. Part 1: history or data gathering**

Miriam Lacasse MD MSc CCFP **Johanne Théorêt** MD MA CCFP FCFP **Patrick Skalenda** MD CCFP **Shirley Lee** MD MHSc CCFP(EM) FCFP

Medical school and residency training are demanding programs. Most learners will complete their training without considerable difficulties. However, up to 1 in 10 learners will experience a problem during their program. During the past 15 years, there has been increased attention devoted to the "resident in difficulty," with publications on a variety of topics, including classification systems of learners' difficulties, assessment frameworks, and intervention plans.

We recently published a book with the goal of summarizing the current literature regarding learners facing challenges. The results of the literature review were presented in 3 separate chapters: chapter 1 reviewed the symptoms and signs that indicated potential problems; chapter 2 summarized the literature on educational diagnosis and aimed to help teachers expand their "differential" in various challenging learning situations; and chapter 3 reviewed the management of challenging learning situations.[1]

This article presents the content of chapter 4, which combines the findings of the first 3 chapters in an effort to develop innovative and structured educational tools and models to aid supervisors and clinical teachers in the diagnosis and management of learners facing challenges. Part 1 details the data-gathering phase. Part 2 will discuss objective examination of learners in difficulty, educational diagnosis, and management of challenging learning situations.

Background

Difficulties that arise during training are sometimes identified by learners themselves, who might individually seek help from their clinical teachers or from other services. However, in most cases, problems are identified by the learners' clinical preceptors who might either note a change from previous performance or identify a learner with a lower level of performance compared with his or her peers. These often subjective "impressions" require further critical assessment to better characterize the actual underlying behaviour of concern to develop a constructive plan to help learners with difficulties.

Many frameworks have been proposed in the educational literature and are summarized in the book.[1] Each framework starts with a data-gathering (history) phase followed by a diagnosis and management phase. However, despite the numerous frameworks available that outline the evaluation and management of learners facing challenges, most provide only a rather vague "road map" without links to specific tools or comprehensive classification models to help facilitate the diagnosis and management of learners facing challenges.

Based on a thorough literature review, we propose an integrated approach to *assessment*, *educational diagnosis*, and *management* of challenging learning situations derived from the available frameworks but which also adds some specific assessment tools. To provide structure to the assessment of learners facing challenges, this model is based on the analogy of a medical history and physical examination.

The Educational Consultation Note is an assessment tool summarizing this approach (available from **CFPlus**†). This tool is intended to help teachers gather data and facilitate their analysis when challenging learning situations occur.

Assessment

As with clinical assessment, educational assessment should be focused. The teacher should have particular differential diagnoses in mind when questioning and observing the learner. Similar to the process of conducting a clinical assessment, an educational assessment might include the following steps:

- identification or personal situation;
- past "educational" history;
- habits;
- history of the present difficulties;
- review of systems (environment, teacher, learner); and
- objective examination.

Chief complaint

Similar to a medical encounter, these steps are not

*This article is adapted from *Educational Diagnosis and Management of Challenging Learning Situations in Medical Education*[1] with permission from Université Laval.

†The Educational Consultation Note and the Directory of Symptoms and Signs in Medical Education are available at **www.cfp.ca**. Go to the full text of this article online, then click on **CFPlus** in the menu at the top right-hand side of the page.

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meant to be followed in a strict order, but rather to be used as guidelines to allow flexibility in the approach to assessing the learner.

In medicine, patients usually come to the office owing to a specific symptom for which they seek assessment, diagnosis, and treatment; however, sometimes they are asked to come owing to specific observations by their physicians. In medical education, chief complaints sometimes come from learners. However, they often arise through observation by clinical teachers because learners might not perceive their own shortcomings, particularly when related to attitude problems. Too often, teachers will notice a learner having difficulty individually, and will either avoid the problem or neglect to share their concerns with the learner early in the course of training, to the detriment of the learner, who is often unaware of the concerns about their performance.

Chief complaints retrieved from our literature review were classified under the 7 CanMEDS–Family Medicine roles and are summarized in the Directory of Symptoms and Signs in Medical Education available from **CFPlus**.† This tool will help teachers in identifying problematic behaviour and will provide them with appropriate terminology to describe such behaviour and discuss it with the learner.

Identification or personal situation

Medical school, particularly residency training, is a time of personal transitions (geographic relocation for training, and deferring of important relationships, committed relationships, childbearing, child rearing, etc). Informal discussions with learners might serve to raise teachers' awareness of important elements of learners' personal lives. Personal, familial, and social issues that might affect training often become apparent before formal assessment takes place. Additional relevant information will more likely be uncovered by adopting a nonjudgmental attitude, ensuring confidentiality, and leaving the door open to discussion.

Issues that might affect learner functioning include the following.

- Personal issues:
  -health;
  -family (eg, pregnancy, marital problems, death of a family member);
  -financial;
  -social (eg, isolation [relocation away from family and friends], limited free time to relax or develop new support systems, dense social agenda); and
  -cultural (eg, minority and cultural issues, which are particularly important for international medical graduates).
- Training-related issues:
  -situational
  —adjustment to the medical school environment,
  —conditions for learning that are less than optimal (eg, inordinate hours, sleep deprivation, excessive workload, overbearing clerical and administrative responsibilities),
  —inadequate support from allied health professionals,
  —exposure to death and human suffering,
  —ethical conflicts, or
  —student abuse; and
  -professional
  —responsibility for patient care,
  —difficult patients and challenging health problems,
  —supervision of more-junior residents and students,
  —information overload, and
  —career planning.

Many teachers do not feel comfortable assessing these issues, either because they do not believe this responsibility is related to their teaching role or they do not feel comfortable delving into the private lives of their students. However, as the patient-centred clinical method improves patient care, many educators believe that the adoption of a learner-centred method will improve teaching and learning. However, "for both ethical and training reasons, it is inappropriate for a faculty member to develop a sustained and deeply intimate personal or counselling relationship with a resident."[2] Therefore, it is important to not become the learner's physician or therapist, and to refer the resident to the appropriate professionals if and when a personal problem is identified.

Past educational history

A history of educational difficulties and the location of previous training (eg, in the case of international medical graduates) might shed light on current learning challenges. Difficulty with standardized tests, good verbal skills but poor reading comprehension, performance drop under time pressures, difficulty with time management, or a history of attention deficit disorder might flag a learning disability.[3] International medical graduates experience unique circumstances, such as difficulties with language, differences in medical education and practice styles, experience since graduation from medical school or last clinical experience, different life stages (eg, family and financial obligations), traumatic experiences (eg, persecuted minorities, refugees, new immigrants), and cultural differences (eg, approaches to and beliefs about communication, authority, gender roles, interpersonal relationships, and the role or status of physicians).[4]

It is crucial to obtain information about previous rotations and educational experiences when appropriate,[5] either directly from the learner or from current and past program directors.

Habits

Substance use and abuse is a recognized problem among medical trainees[6,7] and clearly should not be

overlooked. For learners with addictions, deterioration in workplace performance often comes late in the problem evolution, with the familial and social spheres being affected first.[8]

Study habits should also be assessed.[9] A discussion with learners regarding their study habits can help clarify the origin of knowledge deficits or help to understand deficits in their clinical reasoning.

History of the present difficulties

This section of the assessment is aimed at validating the chief complaints with the learner and then further elucidating the specific characteristics of the difficulties in question.

- What kinds of difficulties are being experienced? What tends to improve the situation or make it worse?
- When did the difficulties start, and what was the course of their evolution over time?
- Where do the difficulties happen? (Setting, courses, rotations)
- Why do these difficulties occur? (Onset)
- How severe are the difficulties? (Severity, effects)

To best deal with the problematic situation, a learner-centred approach should also include discussion of possible causes identified by the learner, stress brought on by the academic difficulties, current or expected effects of the problem, and what the expectations of the learner are.

Finally, it is important to consider that discussing the problems identified by the teacher provides a good opportunity to appraise and promote self-assessment skills in the learner. "Students in difficulty are often not aware of their difficulties. Self reflection is considered an attribute necessary to practising medicine."[10] Learners are more likely to change their behaviour if they identify it themselves and accept feedback.

Review of systems

Environment (also called* system*). The learner should be asked if the academic environment provides a high-quality educational experience. Evaluation of the conditions (or environment) for learning is important and includes workload, sleep deprivation, clerical and administrative responsibilities, information management, and available support. Finally, discussion of patient care issues should be encouraged. Difficult or complex patients and problems, exposure to patients with serious illness or suffering for the first time, ethical conflicts, responsibility for patient care, responsibility for supervision of more-junior trainees, biologic hazards of the profession, and fear of making mistakes are all common difficulties encountered by students and residents that can impair academic performance.

Teacher. The Educational Consultation Note lists the following characteristics[11,12] as being crucial elements of effective teaching:

- enthusiasm;
- role modeling;
- good interpersonal skills;
- good teaching and supervisory skills;
- organization and clarity; and
- clinical knowledge and competence.

Many clinicians are encouraged to become preceptors for medical students and residents, but specific training and experience in medical education is often lacking. To identify the elements that need to be worked on, supervisors might ask for feedback from their trainees. However, many learners will understandably be hesitant to provide constructive feedback to their supervisors out of concern for potentially invoking negative evaluations from these teachers. Inviting and encouraging learners to discuss any teaching concerns with their academic advisor or program director is often a more effective way to assess this aspect of the learning environment. Another approach is to institute a system of regular teacher evaluations coordinated by the program office.

Because preceptor-related issues can profoundly affect the quality of clinical learning, teachers should reflect upon such issues as those listed above and be cognizant of the possibility that personal or professional events affect their availability to teach or their perception of learners' performance.

Learner. Discussion with the trainee, other teachers, and staff will help identify other difficulties in competencies under the CanMEDS–Family Medicine roles.

This article provided a detailed overview of how to use the first page of the Educational Consultation Note for data gathering. An overview of how to use the second page will be presented in an upcoming issue, where strategies for objective examination, educational diagnosis, and management will be summarized.

Dr Lacasse is Assistant Professor and **Dr Théorêt** is Professor and Director of Faculty Development, both in Département de médecine familiale et de médecine d'urgence at Université Laval in Quebec, Que. **Dr Skalenda** is Assistant Professor and **Dr Lee** is Associate Professor, both in the Department of Family and Community Medicine at the University of Toronto in Ontario.

Competing interests
None declared

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TEACHING TIPS

• Difficulties that arise during medical school are sometimes identified by learners themselves, who might individually seek help from their clinical teachers or other services. However, in most cases, problems are identified by the learners' clinical preceptors.

• Using an analogy of a medical history and physical examination lends structure to an integrated approach to assessment, educational diagnosis, and management of challenging learning situations. Specific assessment tools, such as the Educational Consultation Note and the Directory of Symptoms and Signs in Medical Education, can help facilitate the diagnosis and management of learners in difficulty.

• Many teachers do not feel comfortable assessing issues that might affect learner functioning, either because they do not believe this responsibility is related to their teaching role or they do not feel comfortable delving into the private lives of their students. However, as the patient-centred clinical method improves patient care, many educators believe that the adoption of a learner-centred method will improve teaching and learning.

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