Assessing students and residents

Five research-based strategies

Eric Dionne PhD

In a previous issue of *Canadian Family Physician,* Desrosiers mentioned that "in the process of becoming physicians, we also become teachers."[1] One might add that in becoming teachers, we also become evaluators! In fact, learning assessment is at the core of the learning process. There are few pedagogic research results that garner as much consensus as the importance of assessment in the learning context.[2-4] In this article, I present 5 learning assessment strategies that physician teachers and evaluators could leverage in their teaching, be it in a preclerkship, clerkship, or residency setting.

How to render the invisible visible?

The concern with the assessment process is that learning is, alas, invisible. We could never accurately visualize student and resident learning. Therefore, the challenge is to implement a system that renders learning visible, allowing us to measure or observe it to ensure the validity and fidelity of the inferences. Laurier et al[5] place assessment within a dynamic of change; learning represents the result located between a final situation and an initial situation. Within a competency-based framework, it is possible to implement a number of strategies that allow us to infer the competency being assessed based on a set of performances. The key is to strategically choose performances, such as answering questions on an examination, discussing case studies, or conducting physical examinations, that would allow evaluators to make informed decisions on the quality of the progression of learning.

Keep the assessment contract in mind

The concept of the assessment contract is borrowed from the didactic contract developed by Brousseau.[6] Generally speaking, learners and teachers negotiate, more or less explicitly, the elements of the assessment. This can be illustrated by the propensity of some learners, knowing they are undergoing a summative assessment, to adopt behaviour that emphasizes the best aspect of their competencies while masking the less favourable aspects. Another classic example is the fact that learners will study and primarily focus on learning that is assessed, to the detriment of learning that is not. All learning is important, but that which is assessed and could impact their progression is considered more important!

Assessing means respecting a rigorous process

For many people, assessments are reduced to a mark (eg, 90%) or a grade (eg, pass). These aspects are important because they are effectively a part of the assessment approach and represent the most visible component of it. Yet, to arrive at a decision, assessing physicians must implement an approach that is formal or informal, instrumented or not, and planned or not. In all cases, the assessment will consist of the following dimensions: planning, information gathering, the judgment and the decision, and finally, communication of the result. If the approach is formal, instrumented, and planned, as is often the case in preclerkships, the dimensions will be easily observable. Learners will be informed of the examination sessions (planning). Following the administration of the examination, teachers will grade the examination, or it will be graded automatically (information gathering). Once information is revealed through the grading process, a judgment will be made followed by a decision (eg, learners who have not passed the threshold score must retake the examination). Finally, there is the communication of the decision (eg, communicating the grade to the learner or informing them of the need to retake the examination).

The situation I have just described is characteristic of a summative approach. Yet, it is also possible to identify these dimensions when an assessment is informal and not instrumented or planned, as is often the case with formative assessments. A teacher responding to a question from a learner may use these same dimensions but in a quasi-simultaneous manner. Planning would therefore be minimal, even if competent and experienced teachers would tell us that the questions are often predictable. Teachers would collect data from the answers while judging the value of the question. They would exercise their expert judgment and make a decision (respond with another question, connect the answer with a previously taught concept, etc), and, finally, communicate it to the learner. We could compare these 2 methods to type 1 and type 2 clinical reasoning.[7] Type 1 reasoning (rapid and intuitive) relates to the formative context, while type 2 reasoning (logic and analysis) relates to the summative context.

Accept that assessments will never be completely objective

An assessment, whether formative or summative, is first and foremost what we saw in the preceding point: a judgment. By definition, a judgment inherently possesses a subjective component. One might incorrectly think that multiple-choice questions are objective. However, making most of the questions about a small fraction of the material taught is enough to render the

examination biased and not reflective of learners' true progress. The grading process is the only aspect of multiple-choice questions that is objective; the questions are not. In other contexts where observation is required, as in objective structured clinical examinations, several researchers have become interested in conditions that legitimately reduce subjectivity.[8] We must accept the fact that assessments are an imperfect human activity. That said, we must also work tirelessly to eliminate obstacles potentially affecting the validity of assessments.

To measure or to observe, that is the question

While assessing learning, we can rely on 2 types of information: measurement and observation. Measurement most frequently refers to marks obtained, for example, on multiple-choice questions. The number of "correct responses" serves as a "measurement": the higher the number of correct responses, the better the learning. This correlation is not always true, but it is the essence of measuring learning. In preclerkships, learning progress is generally *measured*. During clerkships and residencies, *observations* are more heavily relied upon, which requires recording tools such as field notes and criteria grids based on the CanMEDS framework.[9] The nature of the information collected, therefore, depends on its context. It is advisable to identify attributes of this context that allow one to develop or rely upon tools adapted to a specific situation.

Conclusion

It is now well documented that formative assessment has a positive impact on learning.[2-4] Learning assessment training should be a part of professional development for physicians working in pedagogy.

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Teaching tips

- The learning assessment is an approach that aims to produce the best possible decisions, both in pedagogic and administrative contexts.
- Learning assessment is a discipline in and of itself, with a considerable body of knowledge both on medical education as well as other pedagogic disciplines.
- Training on learning assessment should be a part of professional development for physicians working in pedagogy.

Teaching Moment is a quarterly series in *Canadian Family Physician*, coordinated by the Section of Teachers of the College of Family Physicians of Canada. The focus is on practical topics for all teachers in family medicine, with an emphasis on evidence and best practice. Please send any ideas, requests, or submissions to **Dr Viola Antao,** Teaching Moment Coordinator, at **viola.antao@utoronto.ca.**

Family medicine teaching strategy for managing patients with comorbidity

Collect, cluster, and coordinate

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Cynthia, a 53-year-old woman, presents to clinic complaining of hot flashes. Her blood pressure at her previous visit 6 months earlier was 156/87 mm Hg. Her kidney function was normal. Her most recent Papanicolaou test was done in 2018. Her medical history includes hypertension, rheumatoid arthritis, diabetes, class II obesity (body mass index 35.0 to 39.9 kg/m^2), depression, and chronic obstructive pulmonary disease. Her medications include 1 tablet of 8 mg of perindopril and 2.5 mg indapamide daily, 10 mg of escitalopram daily, 875 mg of metformin twice daily, 10 mg of empagliflozin daily, and 500 mg of naproxen as needed. She also uses a tiotropium inhaler (2 puffs once daily) and a salbutamol rescue inhaler as needed. She has no known drug allergies. Cynthia works in retail and is married. Her husband is retired. She has smoked half a pack of cigarettes daily for the past 35 years. She drinks approximately 10 units of alcohol per week. She does not use cannabis or other drugs. How might you approach her visit with a learner?

Background

Comorbidity refers to the co-occurrence of 2 or more chronic conditions in an individual patient.[1] Approximately half of patients seen in primary care have comorbidity,[2] and rates of comorbidity are rising, which is not merely a reflection of an aging population; one Scottish study found the absolute number of patients with comorbidity was higher among those younger than 65 years versus those 65 and older.[3]

Patients with comorbidity are more likely to have poorer functional status and health outcomes and are higher users of health care services than patients without comorbidity.[3] They are more likely to experience fragmentation of care, have coexistent mental health issues, and experience medical errors.[3] Patients living in areas with the highest levels of socioeconomic deprivation tend to experience onset of comorbidity 10 to 15 years earlier than those living in the most affluent areas.[3] Continuity of care is associated with improved outcomes for patients with comorbidity.[4] As generalists, family physicians have the expertise to provide holistic, coordinated care to patients with comorbidity, and the ability to manage comorbidity is included in numerous priority topics of assessment objectives for Certification in the College of Family Physicians of Canada.[5]

Evidence base

Despite the importance of comorbidity, most medical education across the continuum of undergraduate, postgraduate, and continuing professional development focuses on single diseases. Clinical guidelines largely address single diseases, and structured approaches to managing multiple illnesses or conditions are scarce.[3] Doctors need to be educated in managing comorbidity,[3] and physicians have identified numerous challenges related to providing care to patients with comorbidity that need to be addressed, such as lack of decision-making tools, managing multiple problems in time-constrained consultations, and assessing polypharmacy.[6] A systematic review found only 2 studies describing comorbidity education for physicians; 1 study reported on a half-day workshop for qualified medical staff as part of continuing professional development, and the other described pre- and postworkshop evaluations by general practice residents.[6]

In this article we present the heuristic of *collect, cluster, and coordinate* to help family physicians teach undergraduate and resident learners about comorbidity in the family medicine clinic setting.

Teaching tips

Raise the topic. Learners may find managing comorbidity to be daunting; faced with a large patient file and a complex list of medications, learners may feel overwhelmed when asked to address Cynthia's care in a brief consultation. For example, although learners may be aware of diabetes as a chronic disease and recognize its symptoms, risk factors, and complications, they are less likely to have been taught a systematic approach to managing diabetes that also takes her other chronic conditions into account. This can be compounded by lack of familiarity with health services available locally for Cynthia. Preceptors can help learners by flagging the topic of managing comorbidity as a specific learning objective.

Collect. Reassure learners that they do not have to *do it all* in a single visit. Where time is limited during a single visit, follow-up appointments can be scheduled. A key strength of family medicine is that problems are visited and revisited, forming the basis of continuity of care.

Collaborative goal setting is important; this includes clarifying the agenda for the visit as well as understanding the patient's perspective and what matters to them.[7] Generally, patients have an average of 3 concerns per

visit,[8] and they will often state them in the first 60 seconds of the consultation if given the opportunity. However, patients are often interrupted after stating their first concerns. Studies suggest physicians' questions tend to be more effective when asked early in the consultation and linguistically formatted to ask about *concerns*; eg, "Do you have some other concerns?" in contrast to, "Do you have any questions?"[9,10] Apart from eliciting Cynthia's concerns, learners can also benefit from asking what matters most to her—eg, quality of life, functionality, longevity—to clarify goals of care. However, goals may change over time and revisiting them periodically is also important.

Shared decision making can be used for the visit to set an agenda that reflects patient and physician issues[11] and to outline a plan, if needed, for addressing issues that may not feasibly be attended to in the immediate consultation. At this visit, the learner will want to check Cynthia's blood pressure; they may or may not know that Cynthia's agenda includes hot flashes until after she is in the consultation room. While we often think learners are familiar with basic communication strategies, direct observation of learners (even for this part of the visit) can help identify ways they can hone skills in agenda setting with patients who have multiple health issues.

Increasingly, family physicians work in teams, and demonstrating to learners how team members work to *collect* different aspects of a patient's care can help learners recognize the benefits of the Patient's Medical Home approach. This can be achieved by asking who else could be involved with Cynthia's care and by encouraging learners to attend visits with different team members to better understand how they work together.

Cluster. Preceptors can help learners see patient problems as a set of clustered diseases in the same person rather than as a random assortment of individual conditions to be managed separately. Several strategies can help learners cluster issues. In Cynthia's case, illnesses sharing common pathology, such as metabolic disorders and autoimmune disorders, could be clustered together. Medications can be clustered according to therapeutic group or mechanism of action to help learners think about drug-drug interactions or to identify polypharmacy, which could lead to conducting risk-benefit analyses for ongoing medication use and to optimizing or potentially deprescribing medication.

Using complementary approaches such as the biopsychosocial model or listing problems as immediate, active, or inactive can help learners group issues together and develop an approach to managing multiple issues. At this visit with Cynthia, hypertension and hot flashes may be the more immediate problems, while chronic obstructive pulmonary disease, diabetes, depression, and rheumatoid arthritis will be less active if currently well controlled.

Coordinate. Patients with comorbidity often access care in numerous settings. From Cynthia's perspective, attending appointments with multiple services can be exhausting and stressful, such as if she were to have 2 appointments in different hospitals on the same day. Practicalities such as transportation, getting time off work, or having an accompanying companion can be logistically challenging. Where available, a Patient's Medical Home team may allow Cynthia access to services in the local community with the added advantage of shared communication among team members. For Cynthia, involving other team members, such as a chronic disease management nurse or pharmacist, could help with disease monitoring and medication management. Learners can also explore with Cynthia and her circle of support how they participate in self-managed care. Team members could help coach Cynthia to become more active in her health care by knowing more about her health conditions or by keeping track of her information accurately in a binder or app.

Family physicians are often responsible for care coordination and have administrative systems in place to support ongoing monitoring of patient care. Making this hidden work explicit helps learners appreciate how important effective organizational structures are to patient care. For example, when a learner writes a referral letter, they may not know what happens to it; communicate the importance of receiving acknowledgment of referral, documenting and communicating appointment times, advocating for earlier appointments when needed, waiting for correspondence, and organizing next stages of follow-up. Having a learner spend time with a medical office assistant can illuminate the complex communication required to coordinate care. Additional system-level coordination may include giving longer appointments to patients, scheduling regular visits with the same practitioner, documenting follow-up tasks in the electronic medical record, or coordinating care with other members of the primary care team, such as a chronic disease nurse or a pharmacist for an annual medication review. Having frank discussions with learners about billing for appointments involving comorbidity is also important. Learners can participate in daily huddles with office staff where communication about coordination takes place and follow Cynthia through visits with other team members. It can also be helpful to discuss with learners how coordination of care for Cynthia may look in practices without electronic medical records or in rural and remote communities with fewer local resources.

An outline of how preceptors could help learners adopt a collect, cluster, and coordinate approach is provided in **Table 1**, using Cynthia's presentation as an example.

Conclusion

Family physicians are experts in managing comorbidity. Helping learners understand various challenges related

Table 1. Cynthia's visit: *Illustration of the collect, cluster, and coordinate approach.*

	TIMING OF ACTION RELATIVE TO PATIENT VISIT		
ACTION	**BEFORE**	**DURING**	**AFTER**
Collect	Prepare by reviewing patient file: • When last seen • History of hypertension • History of COPD • Investigations and laboratory tests • Screening history • Medications • BP measurement at last visit Identify your agenda: • Hypertension management • Medication compliance and side-effects • Papanicolaou test Think about time management; is an additional visit needed (eg, for Pap test)?	Identify the patient's agenda (eg, how to manage hot flashes, questions about menopause) Use shared decision making to set the agenda: • Explore hot flashes and menopause • Consider alternative explanations for hot flashes (eg, thyroid disease, constitutional symptoms) • Manage hypertension and CVD risk assessment Be flexible in terms of revising or even setting aside your own agenda	Establish a flexible management plan for next visits Can another team member support an aspect of this patient's care (eg, nurse, pharmacist)?
Cluster	Group problems that share similar roots: • CVD risk (hypertension, obesity, diabetes, tobacco use) Group medications: • Diabetes (metformin, empagliflozin) • Respiratory (tiotropium, salbutamol) • BP (perindopril-indapamide) Use biopsychosocial approach Identify active and inactive issues	Pharmacologic and nonpharmacologic management: • Are there any potential drug-drug interactions? • What is the risk-benefit of medications? • Can medications be optimized (eg, naproxen and BP medications; should a statin be added)? Is there a role for acetylsalicylic acid? Are there opportunities for additional support (eg, explore mobility)?	List active issues: • Hot flashes • BP List inactive issues Consider preventive care: • Mammogram • Pap test • Fecal immunochemical test • FRAX score Anticipate issues
Coordinate	Are any investigations or referrals outstanding? • Update CVD risk profile • HbA_{1c} • ECG Review prevention • Pap test	Can another member of the patient's medical home team (eg, dietitian, pharmacist, chronic disease management nurse) help?	What monitoring is required? • Weight • Renal function • HbA_{1c} • Exercise Set up task in EMR to check when monitoring has been done Do goals of care need updating? • Have referral letters been sent? How will I know if my patient has an appointment? • Set up "check status" task for medical office assistant to follow Schedule next appointment: • Will the patient require support to attend? • Does it need to be in person?

BP—blood pressure, COPD—chronic obstructive pulmonary disease, CVD—cardiovascular disease, ECG—electrocardiogram, EMR—electronic medical record, FRAX—Fracture Risk Assessment Tool, HbA_{1c}—hemoglobin A_{1c}.

to managing comorbidity, as well as solutions, explicitly showcases core components of generalist practice, such as managing complexity and the importance of continuity of care. The collect, cluster, and coordinate approach provides a useful strategy for teaching family medicine learners about managing patients with comorbidity.

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Additional resources

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Muth C, van den Akker M, Blom JW, Mallen CD, Rochon J, Schellevis FG, et al. The Ariadne principles: how to handle multimorbidity in primary care consultations. *BMC Med* 2014;12:223.

Teaching tips

- "Collecting" aspects of a patient's care—using an established agenda for a visit and identifying which team members should be involved—can make appointments more productive and efficient. Encourage learners to attend visits with different team members so they can better understand how they work together.
- "Clustering" medical issues based on common pathology or pharmacologic management considerations can help learners identify ways to optimize care, rather than addressing individual conditions separately as a random assortment of concerns.
- Making the hidden work of care coordination explicit helps learners understand how these tasks and effective organizational structures support patient care. Have learners participate in daily huddles with office staff where communication about care coordination takes place.

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Driving and occupational safety assessment in the context of substance use

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Consider this scenario: a patient presents to your clinic with a letter from the provincial driving safety body requesting a medical assessment. They are distraught, telling you that their licence had been revoked a few days ago, and now they cannot get to work or drive their children to school. They are hoping you can convince the authorities to reinstate their licence as soon as possible. As they explain how they had had a few alcoholic beverages at a party before getting behind the wheel, you ask yourself: what do I need to do to support this patient with their health needs, and what are the steps I need to take?

This is a scenario that may well be encountered in family practice settings in Canada. Amid current workplace policies and provincial, territorial, and federal road safety regulations, family physicians are frequently involved in assessing individuals for driving and occupational safety in the context of substance use, with the intent to balance public safety and individual autonomy. Patients may approach their family physicians with requests from employers or provincial driving safety bodies for assessments of substance use patterns and subsequent impairment. In addition, physicians are often asked to make recommendations regarding patients' safety or readiness to return to driving or employment after some time away due to substance use. As such, having knowledge of and being able to assess the impacts of substances on functioning are important and nuanced parts of family practice, and learners must develop these skills, often without formal training. Here we present an approach to teaching some of these skills in the clinical context.

Background

Impaired driving is the largest contributing factor to serious motor vehicle collisions in Canada.[1] In 2015 approximately 30% of all motor vehicle fatalities in Canada were due to alcohol-related crashes, and 30.9% of fatally injured drivers had positive test results for alcohol.[2] After alcohol, cannabis is the most common substance implicated in impaired driving in Canada[3]; data from the National Cannabis Survey (administered after cannabis became legal) indicated 14.7% of respondents had driven within 2 hours of consuming cannabis.[4] Before the legalization of cannabis, cocaine was the second most commonly detected unregulated substance after cannabis,[5] and 27.2% of fatally injured drivers had positive test results for central nervous system stimulants such as cocaine and methamphetamine.[2] While opioids are a less prevalent contributing substance to impaired driving, 3.1% of drivers surveyed in Ontario between 2011 and 2016 reported having driven under the influence of prescription opioids.[6]

Regarding substance use and occupational safety, there are limited studies on the prevalence and impact of substance use in the workplace.[7] The National Cannabis Survey found that 13.4% of individuals who reported cannabis use said they consumed cannabis before or at work, with this behaviour more likely among those reporting daily or almost daily use versus individuals with less frequent use.[8] However, a low prevalence of substance use at work has been reported, with data from a US workforce survey published in 2006 showing only 3.1% of workers who used substances did so in the workplace.[9]

Evidence from literature and best practices for assessments

Studies suggest that acute intoxication from substance use affects executive functioning. Both alcohol and cannabis intoxication slow down reaction time and motor coordination, although next-day driving is not affected.[10] Opioids may induce sedation, slow reaction times, impair coordination, and blur vision, while stimulants may increase alertness, energy, and attention but also impair executive decision making, impulse control, movement perception, and working memory, as well as lead to increased risk taking. During the withdrawal phase, stimulants may also cause inattention, fatigue, and sleepiness.[11] Outside of instances of acute impairment, it is also important to understand the potential for impaired functioning when an individual is not acutely intoxicated, as this can influence how assessments for occupational and driving safety are made. More evidence is needed to better understand substance use and post-intoxication impairment.

The Canadian Centre on Substance Use and Addiction and the Canadian Medical Association have published resources and guidelines around determining medical fitness to drive and return to work,[11,12] highlighting that every physician who examines a patient for this purpose must always consider both the interests of the patient and the safety of the public who will be exposed to the patient's driving or occupational work. During the examination, the physician should look for physical disabilities and assess the patient's mental and emotional fitness to drive or work safely. A single major impairment or multiple minor functional defects may make it unsafe for the person to work or drive. Likewise, physicians should be aware of the circumstances in which patients are likely to function or work, paying special attention to safety-sensitive situations,[12] as well as

physicians' responsibility or legislated requirement to report patients to regulatory bodies.

How does a learner develop assessment skills?

Skills are often consolidated with the use of tools, flow charts, or algorithms, with driving and occupational safety being no exception. The first step in the evaluation of safety involves both a self-assessment by the provider and a fulsome assessment of the patient. In self-assessment there are many factors to consider (**Box 1**),[13] such as one's relationship with the patient and one's ability to gather information, as well as the impact of an assessment on the therapeutic relationship. In many instances, it may be more appropriate to refer a patient for an independent medical assessment (ensuring no conflicts of interest exist and no non–evidence-based practices would be employed) and act only as a family physician in supporting the patient's return to work and mental health optimization.

The next step in the evaluation of safety in the context of substance use is the assessment, which starts with a fulsome medical history that includes any history of substance use, after which a detailed functional inquiry, screening test panel, and careful physical examination may be conducted (**Table 1**).[13] Overall, the physician's role in the assessment is to report objective findings to a regulatory body to aid in the regulatory body's decision regarding licensing or return to work, although some physicians may also choose to share diagnoses or assessments based on their training or expertise.

An algorithmic approach (**Figure 1**)[13] to assessments may be helpful, particularly for learners as they decide the best approach when a patient is using substances. In addition, a sample letter to regulatory bodies is provided in **Figure 2** to illustrate how to report information while refraining from offering opinions outside of one's medical provider expertise.[13]

Box 1. Self-assessment and reflection questions

Self-assessment and reflection questions

- How well do I know this patient?
- How long have I known the patient?
- What is the degree of trust held with the patient?
- How well am I able to identify stability in the patient's life?
- How well am I able to gain collateral information on the patient?
- Is there potential for my conducting of an assessment on the patient to affect the therapeutic relationship or the patient's engagement with treatment? Will the assessment and its results affect my therapeutic relationship with the patient?
- How well am I able to identify my own biases?
- Am I able to continually assess levels of risk for the patient, particularly in circumstances where the patient is not abstinent?
- What are the safety-sensitive elements associated with driving or with the patient's work, and am I able to assess the levels of risk for each element?

Consider whether you are the right person to be conducting an assessment on the patient by reflecting on your therapeutic relationship with the patient, the circumstances under which the assessment is required, how well you know the patient, and any biases that you may hold.

Other questions to consider

Who is asking for the assessment? Is it the employer? Insurance company? Regulatory body?

- Requests from each may have differing implications, consequences for the outcome, and requirements for information and follow-up.

Do I have the capacity to respond to follow-up?

- Do I know or can I find out if there will there be follow-up questions and requests for further evidence from the requisitioning party following a succinct recommendation?

What, if any, are the oppressive structures in place, and how can I be aware of them?

How can I continue to regularly assess risk, especially if the patient continues to use substances?

- Can I include driving or occupational safety in my motivational interviewing to build insight and change behaviour?

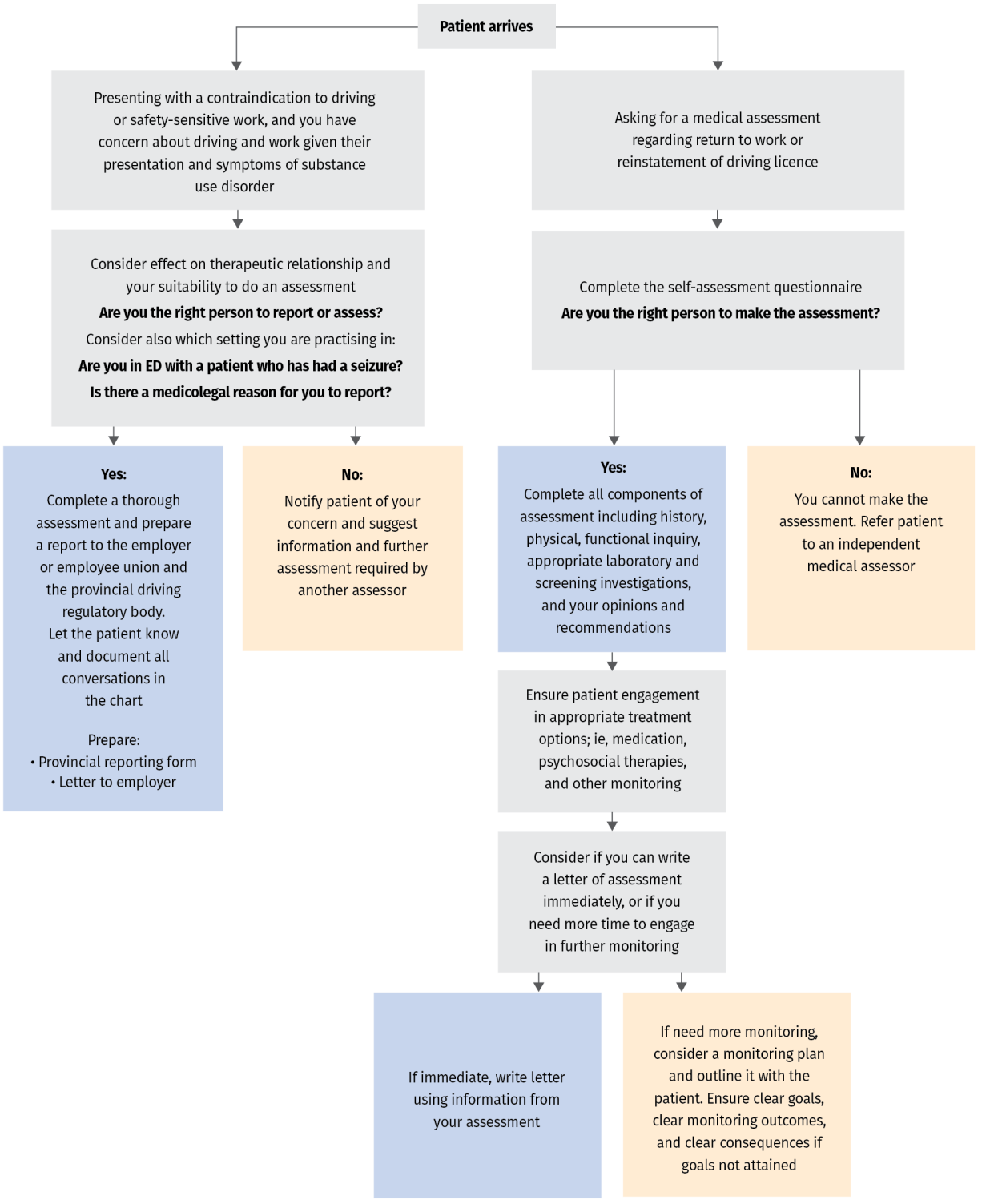
Reproduced with permission from the Fraser Health Authority Department of Addiction Medicine and Substance Use Services.[13]

Table 1. Functional inquiry, physical examination, and investigations for safety in the context of substance use

PARTS OF ASSESSMENT	DETAILS
Functional inquiry	• Review of systems, ADLs, IADLs • Assessment of functions needed for their occupation or driving • Assessment of role of driving in life—are they the primary driver in their family? Do they have other transportation options? Does their livelihood depend on driving? Are driving and employment one and the same?
Physical examination	• Focus on detailing cognitive, neurological, and mental health signs, especially in relation to duties at occupation and functions needed for driving, as above
Laboratory investigations	• Include on-site biological testing if necessary, such as point-of-care urine drug tests
Screening tests	• Include tools that screen for potential substance use disorders—eg, AUDIT, DAST-20, PHQ-9
Opinions and recommendations	• A narrative rather than a single diagnosis may be warranted • Consider recommendations carefully, stating only facts that are necessary to report to decision-making authorities at the workplace

ADLs—activities of daily living, AUDIT—Alcohol Use Disorders Identification Test, DAST-20—20-item Drug Abuse Screening Test, IADLs—instrumental activities of daily living, PHQ-9—Patient Health Questionnaire-9.
Reproduced with permission from the Fraser Health Authority Department of Addiction Medicine and Substance Use Services.[13]

Figure 1. Algorithmic approach to assessment of substance use and driving or occupational safety



ED—emergency department.

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Figure 2. Sample letter to licensing authority

To whom it may concern,

I am writing to you regarding Patient Name. I am a physician working at Medical Clinic. Patient has been seen in my care for X months. Patient has been diagnosed with an alcohol use disorder. His driving was reported to Regulatory Body six months ago, following a witnessed alcohol withdrawal seizure experienced in the hospital Emergency Department. At that time, his licence was cancelled.

Since his visit to the Emergency Department, Patient has been engaged in outpatient care at Medical Clinic. He has only sporadically taken his medication to treat his alcohol use disorder. He reports no alcohol use in the past six months, yet random urine ethyl glucuronide tests, which test for a breakdown product of ethanol, have been positive in our office twice, and he has presented to the Emergency Department once more for acute intoxication. He has not had any repeat alcohol withdrawal seizures. Patient has been seen by a neurologist who reports no concern of further seizure activity if he continues to manage his alcohol use.

Patient requires several cognitive functions for driving. In a recent neurological assessment in the office, there was no concern of neurological or cognitive deficits. He does not have any physical impairments that would be of concern for driving. His vision is normal on office-based acuity testing.

In addition to testing and medication for alcohol use, the patient has attended 10 group therapy sessions. That said, he has not clearly demonstrated any insight around the chronic nature of his alcohol use disorder and the risks of driving while intoxicated with alcohol. Prior to his licence cancellation, the patient was the main driver in his household, and drove himself and his family members to various appointments and commitments. He also relies on the use of a vehicle to attend his workplace, five days a week.

Thank you for your consideration regarding Patient's licence. We will continue to support the patient in the outpatient setting. Should you have any further questions, please do not hesitate to contact me.

Yours sincerely,

Dr X.Y.Z.
Medical Clinic

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Practical tools and resources

For more information on driving and occupational safety assessments, please refer to the following resources:

- Canadian Medical Association. *CMA driver's guide: determining medical fitness to operate vehicles.* 9.1 ed. Ottawa, ON: Joule; 2019. Available from: **https://joulecma.ca/publications/drivers-guide**. Accessed 2023 Aug 30.
- Chapter 15: drugs, alcohol and driving. In: *National safety code. Standard 6: determining driver fitness in Canada. Part 2: CCMTA medical standards for drivers.* Ottawa, ON: Canadian Council of Motor Transport Administrators; 2021. Available from: **https://www.ccmta.ca/en/national-safety-code**. Accessed 2023 Aug 30.
- *Canadian Centre on Substance Use and Addiction* [website]. Ottawa, ON: Canadian Centre on Substance Use and Addiction. Available from: **https://www.ccsa.ca**. Accessed 2023 Aug 30.
  - Of note, this website contains compiled and digestible information on policies and regulations, summaries on research, and resource lists for employers (eg, *Substance Use and the Workplace. Tools and Resources:* **https://www.ccsa.ca/sites/default/files/2019-08/CCSA-Substance-Use-in-the-Workplace-Resources-2019-en.pdf**).

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Competing interests
None declared

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8. *National cannabis survey. Table 8. Number and percentage of current cannabis users reporting cannabis use at or before work in the past three months by selected characteristics, working household population aged 15 years or older, combined fourth quarter 2018 and first quarter 2019.* Ottawa, ON: Statistics Canada; 2019. Available from: **https://www150.statcan.gc.ca/n1/daily-quotidien/190502/t008a-eng.htm**. Accessed 2023 Sep 1.
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La traduction en français de cet article se trouve à **https://www.cfp.ca** dans la table des matières du numéro **d'octobre 2023** à la **page e211**.

Teaching tips

- Effective driving and occupational assessment teaching begins with encouraging a provider to engage in self-assessment and contextual understanding of the patient and system.
- Learners should have the opportunity to take a fulsome history of substance use, intoxication, withdrawal, and functional status, including a thorough understanding of the role of driving in the patient's life, as well as specifics around the patient's duties and tasks at work.
- Driving and occupational safety issues present in all clinical situations that family physicians encounter; using an algorithmic approach to assessment and evaluation will enhance a learner's ability to appreciate nuance and context while making assessments in line with patient and public safety.

Teaching Moment is a quarterly series in *Canadian Family Physician*, coordinated by the Section of Teachers of the College of Family Physicians of Canada. The focus is on practical topics for all teachers in family medicine, with an emphasis on evidence and best practice. Please send any ideas, requests, or submissions to **Dr Viola Antao,** Teaching Moment Coordinator, at **viola.antao@utoronto.ca.**