Patient references in the 2005 and 2015 CanMEDS frameworks

Références aux patients dans les référentiels de compétences CanMEDS 2005 et 2015

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Abstract

Background: Patient involvement in postgraduate medical education (PGME) can help residents improve their communication, professionalism, and collaboration. The CanMEDS Framework defines such competencies for physicians and informs teaching and assessment activities in PGME. However, it is unclear how patients are referenced in the CanMEDS Framework and if these references encourage the active involvement of patients in PGME. To inform how patients are referenced in the revisions of the CanMEDS Framework, scheduled for publication in 2025, our aim was to determine how patients are referenced in each the 2005 and 2015 CanMEDS Frameworks.

Methods: We used document analysis to examine how the term 'patient(s)' is referenced in the 2005 and 2015 CanMEDS Frameworks.

Results: Several 2005 and 2015 CanMEDS Roles include patients in the descriptions but do not reference them in the competencies. Others do not reference patients in the descriptions or competencies, potentially detracting from the importance of involving patients. As it stands, the 2015 Health Advocate is the only Role that describes and references patients working *with* physicians as partners in care, facilitating potential opportunities for patient involvement in PGME.

Conclusion: There are inconsistencies in how patients are described and referenced as potential partners in PGME throughout past and present CanMEDS Frameworks. Understanding these inconsistencies can inform the revision of CanMEDS that is scheduled for publication in 2025.

Résumé

Contexte: La participation des patients dans la formation médicale postdoctorale (FMPD) peut aider les résidents à améliorer leur professionnalisme et leurs compétences en matière de communication et de collaboration. Le référentiel CanMEDS définit les compétences des médecins et oriente les activités d'enseignement et d'évaluation dans la formation médicale postdoctorale. Cependant, la manière dont les patients sont décrits dans le référentiel CanMEDS n'est pas claire et il n'est pas certain que cette description encourage la participation active des patients dans la FMPD. Pour éclairer la description des patients dans les révisions du référentiel CanMEDS, dont la publication est prévue en 2025, notre objectif était d'examiner comment ils sont présentés dans les référentiels CanMEDS de 2005 et 2015.

Méthodes : Nous avons utilisé l'analyse de documents pour examiner les références au terme « patient(s) » dans les référentiels CanMEDS 2005 et 2015.

Résultats: Dans les référentiels CanMEDS de 2005 et 2015, les patients sont mentionnés dans la description de certains rôles, mais ils ne le sont pas dans la description des compétences qui y sont associées. Dans d'autres cas, ni la description du rôle ni celle des compétences correspondantes ne font référence aux patients, ce qui peut minimiser l'importance de la participation de ces derniers. Actuellement, le rôle de promoteur de la santé dans le référentiel de 2015 est le seul qui comprend une description et une référence aux patients comme travaillant avec le médecin à titre de partenaires de soins, et qui favorise ainsi la possibilité de faire participer les patients dans la FMPD.

Conclusion: Les référentiels CanMEDS passés et présents contiennent des incohérences quant à la description des patients comme partenaires potentiels dans la FMPD. La compréhension de ces incohérences peut éclairer la révision de CanMEDS, dont la publication est prévue en 2025.

Introduction

There are increasing societal expectations for the active involvement of patients, including service users, clients, consumers, carers, parents, and family members, in medical education.¹ Such involvement allows for patients to engage in, for example, "teaching, assessment or curriculum development because of their expertise and experiences of health, illness or disability."2 Patient involvement in postgraduate medical education (PGME) can help residents improve their communication, professionalism, and collaboration as well as allow them to reflect on (and subsequently modify) their behaviours and attitudes to address patients' needs.3-5 It can also help residents better understand patients' perspectives,⁶ improve their empathy,7 and advance patient- and familycentred care. Moreover, it can increase residents' confidence and reduce their anxiety in interactions with patients.8 If done in an ethical and meaningful way, active patient involvement can empower patients to improve the quality of care that they and others receive. 9,10 Patients have reported that they enjoy such involvement, experience increased self-confidence, and view their educative roles as therapeutic.^{8,10,11}

However, active patient involvement in PGME, especially within the Canadian context, is not widespread. Reviews of the literature, ^{12,13} from 1975-2021, on active patient involvement in health professions education noted twentyone studies ^{14–34} that focused on involvement in PGME, and merely four of these ^{24,25,32,34} occurred within the Canadian context. This lack of patient involvement may be attributable to deficiencies in infrastructure for supporting active patient involvement. ³⁵ Nevertheless, The Royal College of Physicians and Surgeons of Canada (RCPSC) recommends that patients be involved in teaching and assessment activities in PGME. ³⁶ In addition, the medical education Charter, described by Carraccio et al., ³⁷ suggests that patients' perspectives are critical in defining physicians' competencies.

The CanMEDS Framework defines competencies for physicians and informs teaching and assessment activities in PGME. Although past and present CanMEDS Frameworks have been developed "with patients in mind" and have considered societal views about what physicians should know and do when providing care, patient involvement in their development is limited and passive. The 2005 CanMEDS Framework indicates that patient surveys and research on patient needs informed the Framework.

Whereas the 2015 CanMEDS Framework only states that it was "derived from societal need." ^{39,p.8} It also remains unclear whether patients are referenced in the 2005 and 2015 CanMEDS Frameworks in ways that allowed/allow them to be actively involved in PGME. To inform how patients are referenced in the revisions of the CanMEDS Framework, scheduled for publication in 2025, the aim of the present study was to determine how patients are referenced in each the 2005 and 2015 CanMEDS Frameworks. This study did not require REB approval

Method

Positionality

We approached the study within a constructivist lens. We assume that interpretations of phenomena are a form of knowledge, unique to individuals' perspectives and based on experiences.⁴⁰ In the context of the present study, we acknowledged that we each have experiences with the topic of patient involvement in medical education that influence our interpretations of how patients are referenced in the CanMEDS Frameworks. Namely, the first author (HA) is a registered nurse, long-term patient, and PhD candidate in health professions education. Her research focuses on patient involvement in the teaching and assessment of residents. The second (KE) and third (KM) authors are Professors in Health Professions Education who have published on active patient involvement in medical education. While our backgrounds provide us with insights into patient involvement in PGME, we considered ourselves outsiders on the topic of the present study because we are not physicians and have no experience creating, teaching, or assessing CanMEDS competencies.41 We also do not have inside knowledge about CanMEDS creators' intentions when referencing patients in the CanMEDS Frameworks. 41 Thus, our outsider perspectives allowed us to exclusively focus on the language used to reference patients in the CanMEDs Frameworks. We acknowledge that our perspectives may differ from those of others, and we welcome further discussion and exploration of the topic from others.

Data collection

Our study did not require ethics approval. We examined how patients are referenced in the 2005 and 2015 CanMEDS Frameworks. The first author began the process of document analysis by extracting every 'Key and Enabling Competency' (herein referred to as a competency(ies)) in each CanMEDS Role that referenced the term 'patient(s).'42 This extraction helped us identify words and phrases in the

2005 and 2015 CanMEDS Frameworks that described/describe patients in relation to physicians as well as patient involvement in PGME.

Data analysis

To focus on words and exact phrases that referenced 'patient(s)' in the 2005 and 2015 CanMEDS Frameworks, we used conventional content analysis.⁴³ First, we highlighted the term 'patient(s)' among the competencies of each Role and counted the number of times it was/is referenced among them. Second, we read the highlighted phrases several times to get a sense of how patients are referenced in the competencies for each Role. Third, we compared the highlighted phrases used in the competencies for each Role to reference patients in the corresponding Role descriptions. This comparison allowed for the identification of alignments and misalignments for references to patients between the competencies and the Role descriptions. We then constructed summaries, which included examples, of these references, alignments, and misalignments. To increase the credibility and confirmability of our findings, we each analyzed the data independently and met several times throughout the analysis to review our findings and resolve discrepancies through discussion. We also kept an audit trail of our decision-making processes.

Results

Medical expert

In each the 2005 and 2015 CanMEDS Frameworks, the Medical Expert Role description emphasizes physicians' provision of patient-centred care (PCC). To do this, physicians are expected to respond appropriately to patients' preferences and contexts, work with patients as partners in care,³⁸ and improve patient safety measures at the bedside. 39,44 Of the 16 Medical Expert competencies that referenced 'patient(s)' in the 2005 CanMEDS Framework, there are two (12.5%) that mention physicians' exploration or elicitation of patients' preferences. In the 2015 CanMEDS Framework, there are no references to patients' preferences. Of the 2005 and 2015 Medical Expert competencies that reference 'patient(s)', 14/16 (87.5%) and 8/9 (88.9%), respectively, imply that physicians are to do something to or for a patient, not with a patient in partnership. For instance, competencies are consistently written such that physicians "perform a complete...assessment of a patient;³⁸ contribute ...to patient safety;39 demonstrate ...care of their patients; and respond...to patient safety incidents."39 One out of 16 (6%) and 3/9 (33.3%) patient references from each the 2005 and 2015 CanMEDS competencies on patient safety do so in the context of physicians "recognizing ...patient safety incidents and promoting or contributing to patient safety.^{38,39}

Communicator

The 2005 and 2015 Communicator Role descriptions focus on physicians' effective communication and interactions with patients, specifically during shared decision-making processes, as well as in the delivery of patient-centred³⁸ and culturally safe care.39 In the 2005 CanMEDS 7/18 (39%)the Framework, of Communicator competencies that reference 'patient(s)' represent physician-patient reciprocation, for example, through developing rapport and therapeutic relationships with patients or engaging with them in "shared decision-making to develop a plan of care."38 The other 11/18 (61%) portray physicians' one-way actions, rather than interactions with patients. For example, their elicitation of patient perspectives, conveyance of information, and gathering of patients' beliefs. In the 2015 CanMEDS Framework, 7/25 (28%) Communicator competencies that reference 'patient(s)' suggest that physicians will engage and reciprocate with patients, for example, through facilitating discussions, helping patients, engaging patients, and sharing information. The remaining 18/25 (72%) portray physicians' actions as doing something to or for patients, rather than with them. There is also 1/25 (4%) that mentions culturally safe care, where physicians "facilitate discussions with patients...in a way that is culturally safe."39 There is no mention of shared decision-making with patients in the development of care plans in the 2015 Communicator Role.

Collaborator

The 2005 Collaborator Role description emphasizes physicians' abilities to work with interprofessional team members, including patients, during care.³⁸ The 2015 Collaborator Role description places increased emphasis on physicians collaborating with other healthcare professionals, rather than patients, conducting safe and effective patient-handovers, and engaging in shared decision-making processes to improve safety and quality of care.³⁹ In the 2005 CanMEDS Framework, 2/2 (100%) of the Collaborator competencies that reference 'patient(s)' note physicians' 'working with *others* to...provide care *for* patients.' Patients are not explicitly referred to as 'others' nor are they portrayed as having any collaborative power *with* the physician in care. In the 2015 CanMEDS

Framework, 3/3 (100%) Collaborator competencies that reference 'patient(s)' discuss patients in the context of handing patients over to another healthcare provider.

Manager/Leader

The 2005 Manager Role description focuses on physicians' administrative decisions, such as prioritization and execution of tasks and allocation of resources, that affect patient care at a systems level.³⁸ The 2015 Leader Role adds to the 2005 description by emphasizing that physicians engage with and teach others, to improve the healthcare system and promote a culture of patient safety in care. 39,44 Patients are referenced in terms of the effects that the healthcare system and culture may have on patient safety. In the 2005 CanMEDS Framework, 3/4 (75%) of the Manager competencies that reference 'patient(s)' do so in terms of patient care being affected by physicians' balancing of resources and employment of information.³⁸ The remaining one (25%) refers to patient safety initiatives, and physicians' participation in them. In the 2015 CanMEDS Framework, 3/6 (50%) of the competencies that reference 'patient(s)' do so in terms of physicians' promotion or optimization of patient safety and analysis of patient safety incidents. The remaining 3/6 (50%) refer to enhancing patient care, by improving systems of healthcare, using science and health informatics, and allocating resources.³⁹

Health advocate

The 2005 and 2015 Health Advocate Role descriptions emphasize the importance of physicians using their medical expertise, public influence, as well as building patient-partnerships in advocacy roles. 38,39 In the 2005 CanMEDS Framework, 9/9 (100%) of the Health Advocate competencies that reference 'patient(s)' either refer to physicians' response to patients, identification or promotion of patients' health needs, or advocacy for a patient. 38 In the 2015 CanMEDS Framework, 5/5 (100%) competencies that reference 'patient(s)' refer to physicians working or collaborating with patients to, for example, address determinants of health, adopt health behaviours, and incorporate strategies of health promotion into their lives.

Scholar

The 2005 Scholar Role description emphasizes physicians' commitment to facilitating the learning *of* patients.³⁸ The 2015 Scholar Role emphasizes that physicians seek feedback to improve quality of care and patient safety.³⁹ In the 2005 CanMEDS Framework, 2/2 (100%) of the Scholar competencies that reference 'patient(s)' do so in the

context of patients learning *from* physicians, as portrayed in the competency of "facilitating the learning *of* patients, ... as appropriate." In the 2015 CanMEDS Framework, 2/2 (100%) of the competencies that reference 'patient(s)' note *patient safety* in the [physician's] learning environment or the communication of research findings *to* patients. None of the four Scholar competencies that reference 'patient(s)' within the 2005 and 2015 CanMEDS Frameworks portray opportunities for physicians to seek feedback *from* patients or to collaborate *with* patients on topics related to assigned scholarly projects.

Professional

The 2005 Professional Role description emphasizes physicians maintenance of their own wellbeing, 38 and the 2015 Professional Role expands on this by adding focus to physicians' commitment to patients' health and wellbeing by practicing ethically, maintaining high personal and professional standards, and being socially accountable.³⁹ In the 2005 and 2015 CanMEDS Frameworks, 6/6 (100%) and 4/4 (100%) of the Professional competencies that reference 'patient(s)', respectively, align with the Role description of physicians' commitment accountability to patients and their wellbeing. Of these competencies, 9/10 (90%) refer to physicians applying and demonstrating best practices, ethical standards, and professional-led regulations to maintain the wellbeing of patients. 38,39 The remaining competency (10%), included in the 2015 CanMEDS Framework, refers to the importance of physicians responding to societal expectations when considering the health and wellbeing of patients.³⁹

Discussion

Our analysis suggests that references to 'patient(s)' in both the 2005 and 2015 CanMEDS Frameworks do little to facilitate patient involvement in PGME. The references to 'patient(s)' in the competencies are sporadic or missing. Moreover, there are misalignments between the references to 'patient(s)' in the Role competencies and descriptions. For example, both the 2005 and 2015 Medical Expert Role descriptions emphasize physicians' provision of PCC and their abilities to forge partnerships with patients, which suggests that patients may be provided opportunities in PGME to assess whether physicians consider patient needs in care (i.e., when providing PCC) or to teach physicians how to build therapeutic relationships and foster partnerships with them. However, given that the 2005 and 2015 Medical Expert competencies focus on physicians doing something to a patient, rather than with

them in partnership, this wording could detract from the importance of involving patients and potentially lead to missed involvement opportunities in PGME

Similarly, the 2005 and 2015 Communicator Roles describe patients as having opportunities to interact (i.e., reciprocate at equal levels)45 with physicians during decision-making processes, which suggests potential avenues in PGME for patients to teach physicians about their expectations and needs in care, and assess whether physicians appropriately meet them. However, the 2005 and 2015 Communicator competencies focus on whether physicians' respond to a patient, manage conversations, seek and gather information from patients, and disclose information to a patient. 38,39 Thus, these Communicator competencies may not facilitate meaningful interactions between physicians and patients in PGME. Instead, they read that physicians may be one-sidedly controlling patient conversations and that they are collecting information from them. The 2005 Collaborator Role also describes patients as interprofessional team members, but nowhere in the associated competencies are patients referenced in terms of collaborating with physicians on these teams.

Beyond these misalignments between patient references in CanMEDS Roles and competencies, the 2015 Collaborator and 2005 and 2015 Manager/Leader, Scholar, and Professional Roles do not describe or reference patients in ways that would support physicians to actively involve patients in PGME. Namely, patients are described and referenced in the 2015 Collaborator Role as those to be handed over to other healthcare professionals, which portrays patients as objects under the responsibility of physicians. Such language may not facilitate, for example, patients' opportunities to provide feedback to physicians about whether they believe that their transfer of care was done well. In the 2005 and 2015 Manager/Leader Roles, patients are described and referenced in terms of being affected by physicians' decisions about the allocation of resources at system levels. However, there is no mention of how physicians can, for example, consult patients to determine ways to optimize the allocation of resources or to obtain their feedback on how the allocation of resources affects them and their care. Moreover, in the 2005 and 2015 Scholar Role, patients are described and referenced in terms of those who learn from physicians, rather than those who can teach them or learn with them. And, in the 2005 and 2015 Professional Role, patients are described and referenced as responsibilities of physicians, such that

physicians are expected to *ensure* patient wellbeing, rather than collaborate with patients in their wellbeing.

As it stands, the 2015 Health Advocate Role is the only CanMEDS Role to both describe and reference patients in terms that facilitate their active involvement in PGME. In this Role, patients are referenced as partners, who with in their collaborate physicians advocacy responsibilities in PGME. We recommend that how patients are referenced in this Role be considered and extended to the other CanMEDS Roles in the revisions of the CanMEDS Framework, scheduled for publication in 2025. Such references will increase recognition among educators and residents that patients can (and should) be actively involved in PGME. 5,14,46,47

Our study supports the need for consistent references in the CanMEDS framework to patients, especially as partners. Such references may facilitate active patient involvement in PGME as well as improve PCC. While we acknowledge that not every competency in the CanMEDS Framework will be well-suited to actively include patients, we argue that there are avenues for patients to teach and assess aspects of every CanMEDS Role. As mentioned, our intent with this study was not to prescribe these avenues. Instead, our goal was to spark further discussion on this topic. Thus, we advocate for those involved in the revisions of the CanMEDS Framework to collaborate with patients to ensure that they are consistently and appropriately referenced in the 2025 version. However, to support patients in the revision process, they need training in CanMEDS to work as equal contributors. 46,47 They should also be compensated for their time and expertise.⁴⁹

Our study suggests areas for further research. To improve how patients are referenced in the eventual 2025 CanMEDS Framework, additional empirical research is needed on educators', residents', and patients' perceptions of how patients should be referenced in CanMEDS. Further areas of alignment and misalignment between Role definitions, descriptions, key concepts, and competencies in regard to the term 'patient(s)' is also important to investigate. Finally, it would be interesting to explore how references to patients in the CanMEDS Framework influence the PCC that residents provide. That is, if language that is conducive to PCC is missing in the CanMEDS framework, does it impact the provision of PCC in healthcare settings?

Limitations

There are two limitations of this study. First, only competencies that explicitly mentioned patients were included in the analysis. Thus, we may have missed competencies that indirectly imply that patients interact and/or collaborate with physicians. Second, our suggestions for improvement are based solely on the present analysis, which may not reflect others' views or practices in the topic area.

Conclusion

Understanding how past and current CanMEDS Frameworks reference 'patient(s)' can inform discussions about how to improve references to patients in the revisions of the CanMEDS Framework that is scheduled for publication in 2025. Our analysis revealed that patients are inconsistently referenced as potential partners throughout CanMEDS. Such references need to change if patient involvement in PGME is truly important and valued.

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References

- Soon YE, Murray CM, Aguilar A, Boshoff K. Consumer involvement in university education programs in the nursing, midwifery, and allied health professions: a systematic scoping review. *Int J Nurs Stud*. 2020;109:103619. https://doi.org/10.1016/j.ijnurstu.2020.103619
- Towle A, Bainbridge L, Godolphin W, et al. Active patient involvement in the education of health professionals. *Med Educ*. 2010;44(1):64–74. https://doi.org/10.1111/j.1365-2923.2009.03530.x
- Khalife R, Gupta M, Gonsalves C, et al. Patient involvement in assessment of postgraduate medical learners: a scoping review. Med Educ. 2022. https://doi.org/10.1111/medu.14726
- Eady K, Moreau KA. Using parent feedback: a qualitative study of residents' and physician-educators' perspectives. *Perspect Med Educ*. 2018;7(1):33–9. https://doi.org/10.1007/s40037-017-0393-6
- Thangarasu S, Renganathan G, Natarajan P. empathy can be taught, and patients teach it best. J Med Educ Curric Dev. 2021;8:23821205211000344. https://doi.org/10.1177/23821205211000346

- Sinclair W, Camps L, Bibi F. Looking after children and young people: Ensuring their voices are heard in the pre-registration nursing curriculum. *Nurse Educ Pract*. 2012;12(4):227–31. https://doi.org/10.1016/j.nepr.2012.03.001
- 7. Heidke P, Howie V, Ferdous T. Use of healthcare consumer voices to increase empathy in nursing students. *Nurse Educ Pract*. 2018;29:30–4.
 - https://doi.org/10.1016/j.nepr.2017.11.007
- Wykurz G, Kelly D. Developing the role of patients as teachers: literature review. BMJ. 2002;325(7368):818–21. https://doi.org/10.1136/bmj.325.7368.818
- Muir D, Laxton JC. Experts by experience; the views of service user educators providing feedback on medical students' work based assessments. *Nurse Educ Today*. 2012;32(2):146–50. https://doi.org/10.1016/j.nedt.2011.08.015
- Ahuja AS, Williams R. Involving patients and their carers in educating and training practitioners. *Curr Opin Psychiatry*. 2005;18(4):374–80. https://doi.org/10.1097/01.yco.0000172054.25284.bb
- Stacy R, Spencer J. Patients as teachers: a qualitative study of patients' views on their role in a community-based undergraduate project. *Med Educ*. 1999;33(9):688–94. https://doi.org/10.1046/j.1365-2923.1999.00454.x
- Towle A & Godolphin W. Patient involvement in health professional education: a bibliography 1975-November 2016.
 (2016). Retrieved from https://pcpe.health.ubc.ca/node/207
- 13. De Rubeis C. Patient and Family Involvement in The Education of Health Professionals Working in Palliative Care: A Scoping Review [Unpublished master's thesis]. University of Ottawa; 2021.
- 14. Abadel FT, Hattab AS. Patients' assessment of professionalism and communication skills of medical graduates. *BMC Med Educ*. 2014;14(1). https://doi.org/10.1186/1472-6920-14-28
- Greco M, Brownlea A, McGovern J, Cavanagh M. Consumers as educators: implementation of patient feedback in general practice training. *Health Commun*. 2000;12(2):173–93. https://doi.org/10.1207/S15327027HC1202 4
- Ikkos G. Engaging patients as teachers of clinical interview skills. The Psychiatrist. 2003; 27(8):312–15. https://doi.org/10.1192/pb.27.8.312.
- Thomson AN. Reliability of consumer assessment of communication skills in a postgraduate family practice examination. *Med Educ*. 1994;28(2):146–50. https://doi.org/10.1111/j.1365-2923.1994.tb02535.x
- Branch VK, Graves G, Hanczyc M, Lipsky PE. The utility of trained arthritis patient educators in the evaluation and improvement of musculoskeletal examination skills of physicians in training. *Arthritis Care Res.* 1999;12(1):61–9. https://doi.org/10.1002/1529-0131(199902)12:1<61::AID-ART10>3.0.CO;2-G
- Dugoff L, Everett MR, Vontver L, Barley GE. Evaluation of pelvic and breast examination skills of interns in obstetrics and gynecology and internal medicine. *Am J Obstet Gynecol*. 2003;189(3):655–8. https://doi.org/10.1067/S0002-9378(03)00892-5
- 20. Hamburger S, Guthrie D, Smith PG, Shaffer K. Teaching the pelvic examination in an internal medicine residency program. *West J Med.* 1981;134(6):547–8.

 Fornari A, Anderson M, Simon S, Korin E, Swiderski D, Strelnick AH. Learning social medicine in the Bronx: an orientation for primary care residents. *Teach Learn Med*. 2011 Jan 12;23(1):85–9.

https://doi.org/10.1080/10401334.2011.536898

- Appel DJ, Hoffman MW, Speller NB, Weiner PL, Meryash DL.
 Parents as teachers: an integral component of a developmental
 and behavioral pediatrics curriculum. *J Dev Behav Pediatr*.
 1996;17(2):105–6. https://doi.org/10.1097/00004703-199604000-00008
- Blasco PA, Kohen H, Shapland C. Parents-as-teachers: design and establishment of a training programme for paediatric residents. *Med Educ*. 1999;33(9):695–701. https://doi.org/10.1046/j.1365-2923.1999.00334.x
- Moreau KA, Eady K, Frank JR, et al. A qualitative exploration of which resident skills parents in pediatric emergency departments can assess. *Med Teach*. 2016;38(11):1118–24. https://doi.org/10.3109/0142159X.2016.1170783
- Agrawal S, Capponi P, López J, et al. From surviving to advising: a novel course pairing mental health and addictions service users as advisors to senior psychiatry residents. *Acad Psychiatry*. 2016 Jun 1;40(3):475–80. https://doi.org/10.1007/s40596-016-0533-z
- Babu KS, Law-Min R, Adlam T, Banks V. Involving service users and carers in psychiatric education: what do trainees think? Psychiatr Bull. 2008;32(1):28–31. https://doi.org/10.1192/pb.bp.107.015354
- Donaghy F, Boylan O, Loughrey C. Using expert patients to deliver teaching in general practice. *Br J Gen Pract*. 2010;60(571):136–9. https://doi.org/10.3399/bjgp10X483346
- Colbert CY, Mirkes C, Cable CT, Sibbitt SJB, VanZyl GO, Ogden
 PE. The patient panel conference experience: what patients can
 teach our residents about competency issues: Acad Med.
 2009;84(12):1833–9.
 - https://doi.org/10.1097/ACM.0b013e3181bf27db
- Hobson WL, Avant-Mier R, Cochella S, et al. Caring for the underserved: using patient and physician focus groups to inform curriculum development. *Ambul Pediatr*. 2005;5(2):90– 5. https://doi.org/10.1367/A04-076R.1
- Fadden G, Shooter M, Holsgrove G. Involving carers and service users in the training of psychiatrists. *Psychiatr Bull*. 2005;29(7):270–4. https://doi.org/10.1192/pb.29.7.270
- Snaman JM, Kaye EC, Cunningham MJ, et al. Going straight to the source: a pilot study of bereaved parent-facilitated communication training for pediatric subspecialty fellows. *Pediatr Blood Cancer*. 2017;64(1):156–62. https://doi.org/10.1002/pbc.26089
- 32. Moreau KA, Eady K, Tang K, et al. The development of the PARENTS: a tool for parents to assess residents' non-technical skills in pediatric emergency departments. *BMC Med Educ*. 2017;17(1):1–10. https://doi.org/10.1186/s12909-017-1042-9
- Parham D, Reed D, Olicker A, et al. Families as educators: a family-centered approach to teaching communication skills to neonatology fellows. *J Perinatol*. 2019 Oct;39(10):1392–8. https://doi.org/10.1038/s41372-019-0441-7
- 34. Moreau KA, Eady K, Jabbour M. Exploring residents' reactions to and use of parent feedback in a pediatric emergency department: A grounded theory study. *Med Teach*.

- 2019;41(2):207–14. https://doi.org/10.1080/0142159X.2018.1460658
- Naylor S, Harcus J, Elkington M. An exploration of service user involvement in the assessment of students. *Radiography*. 2015;21(3):269–72. https://doi.org/10.1016/j.radi.2015.01.004
- Takahashi S, Abbott C, Oswald A & Frank, JR. (Eds.). CanMEDS teaching and assessment tools guide. [Internet]. 2015;
 Available from https://cmfdlibrary.librarika.com/search/detail/4900390. [Accessed on Feb 19, 2022]
- Carraccio C, Englander R, Van Melle E, et al. Advancing competency-based medical education: a charter for clinician– educators. *Acad Med*. 2016;91(5):645–9. https://doi.org/10.1097/ACM.0000000000001048
- Frank JR. (Ed). The CanMEDS 2005 physician competency framework. Better standards. Better physicians. Better care. Ottawa: The Royal College of Physicians and Surgeons of Canada: 2005
- Frank JR, Snell L, Sherbino J, editors. CanMEDS 2015 Physician Competency Framework. Ottawa: Royal College of Physicians and Surgeons of Canada; 2015.
- 40. Glasersfeld E von. Radical constructivism: a way of knowing and learning. London: *Routledge Falmer*. 2002.
- Savvides N, Al-Youssef J, Colin M, Garrido C. Journeys into inner/outer space: reflections on the methodological challenges of negotiating insider/outsider status in international educational research. *Res Comp Int Educ*. 2014; 1;9(4):412–25
- Bowen GA, Document analysis as a qualitative research method. *Qual Res J.* 2009; 9(2): 27-40. https://doi.org/10.3316/QRJ0902027
- Hsieh H-F, Shannon SE. Three approaches to qualitative content analysis. Qual Health Res. 2005;15(9):1277–88. https://doi.org/10.1177/1049732305276687
- 44. The Royal College of Physicians and Surgeons of Canada. CanMEDS // Framework. [Internet]. Available from: https://canmeds.royalcollege.ca/en/framework [Accessed on Feb 7, 2022].
- Merriam-Webster Dictionary. Interaction. [Internet]. 2022. https://www.merriam-webster.com/dictionary/interaction [Accessed Feb 12, 2022]
- El-Haddad C, Hegazi I, Hu W. A patient expectations questionnaire for determining criteria for entrustment decisions. *Med Teach*. 2021;43(9):1031–8. https://doi.org/10.1080/0142159X.2021.1907324
- Moreau K, Eady K, Jabbour M. Patient involvement in resident assessment within the Competence by Design context: a mixed-methods study. *Can Med Educ J*. 2019;10(1):e84–102. https://doi.org/10.36834/cmej.56881
- 48. Jha V, Quinton ND, Bekker HL, Roberts TE. Strategies and interventions for the involvement of real patients in medical education: a systematic review. *Med Educ*. 2009;43(1):10–20. https://doi.org/10.1111/j.1365-2923.2008.03244.x
- Adam HL, Giroux CM, Eady K, Moreau KA. A qualitative study of patients' and caregivers' perspectives on educating healthcare providers. *Can Med Educ J*. 2021;12(4):7–16. https://doi.org/10.36834/cmej.71541