



# **Development of professionalism vignettes for the continuum of learners within a medical and nursing community of practice**

## **Élaboration de scénarios sur le professionnalisme pour le continuum éducatif des apprenants au sein d'une communauté de pratique médicale et infirmière**

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Résumé de l'article

**Contexte :** Il est difficile de concevoir des programmes d'enseignement sur le professionnalisme pour l'ensemble des membres d'une communauté de pratique médicale. Nous avons recueilli et préparé des scénarios pour un programme interactif sur le professionnalisme, fondé sur les normes de notre établissement en la matière, selon une approche socioconstructiviste de l'apprentissage.

**Méthodes :** Des étudiants en médecine, des résidents, des médecins, des infirmières et des membres de l'équipe de recherche ont proposé des scénarios de situations de la vie réelle sur le sujet du professionnalisme. Nous avons recueilli des témoignages sur le professionnalisme s'inscrivant dans les catégories du code de conduite de notre faculté, à savoir l'honnêteté, la confidentialité, le respect, la responsabilité et l'excellence, auxquelles s'ajoute l'altruisme, tiré du Code de déontologie des soins infirmiers. Deux comités d'experts ont examiné la valeur éducative et le degré de non-professionnalisme décrit, et ils ont évalué de façon anonyme les scénarios. L'équipe de recherche a fait la sélection finale de scénarios par consensus.

**Résultats :** Parmi les 80 cas soumis, 22 provenaient d'une autre étude, 20 ont été proposés par des apprenants et des infirmières, 30 par des médecins et huit par des membres de l'équipe de recherche. Deux comités d'experts ont examiné 53 et 42 scénarios, respectivement. Les 18 scénarios retenus ont été choisis pour leur valeur éducative, la diversité des évaluations du professionnalisme et leur représentativité des diverses catégories de professionnalisme.

**Conclusion :** Des scénarios réalistes et pertinents sur le sujet du professionnalisme peuvent être systématiquement recueillis auprès de communautés de pratique. Des experts peuvent déterminer, avec un degré élevé de consensus, la valeur éducative des scénarios, le niveau du comportement professionnel qu'ils décrivent et dans quelle mesure ils reflètent les normes de l'établissement concerné.



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### Abstract

**Background:** It is challenging to develop professionalism curricula for all members of a medical community of practice. We collected and developed professionalism vignettes for an interactive professionalism curriculum around our institutional professionalism norms following social constructivist learning theory principles.

**Methods:** Medical students, residents, physicians, nurses and research team members provided real-life professionalism vignettes. We collected stories about professionalism framed within the categories of our Faculty's code of conduct: honesty; confidentiality; respect; responsibility; and excellence. Altruism was from the Nursing Code of Ethics. Two expert committees anonymously rated and then discussed vignettes on their educational value and degree of unprofessional behaviour. Through consensus, the research team finalized vignette selection.

**Results:** Eighty cases were submitted: 22 from another study; 20 from learners and nurses; and 30 from physicians; and eight from research team members. Two expert committees reviewed 53 and 42 vignettes, respectively. The final 18 were selected based upon: educational value; diversity in professionalism ratings; and representation of the professionalism categories.

**Conclusion:** Realistic and relevant professionalism vignettes can be systematically gathered from a community of practice and their representation of an institutional norm, educational value, and level of professional behaviour can be judged by experts with a high level of consensus.

### Résumé

**Contexte :** Il est difficile de concevoir des programmes d'enseignement sur le professionnalisme pour l'ensemble des membres d'une communauté de pratique médicale. Nous avons recueilli et préparé des scénarios pour un programme interactif sur le professionnalisme, fondé sur les normes de notre établissement en la matière, selon une approche socioconstructiviste de l'apprentissage.

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## Introduction

Medical educators emphasize the need for opportunities for learners to reflect on realistic situations to socialize into a community of practice and its “norms” to build professional identity, i.e., the training and development of learners into physicians.<sup>1–3</sup> To ensure a common understanding, faculty development should occur in parallel.<sup>1,4,5</sup> Professionalism curricula should include all levels of learners across the health professions in order to integrate viewpoints across multiple stages of professional identity formation.<sup>6,7</sup>

Many studies use vignettes they created to teach professionalism.<sup>8–15</sup> Leicher and Mulder outline how to develop vignettes for professional development, as triggers for reflection, leading to revision of beliefs, and experimentation with new ideas.<sup>16</sup> This study was conceptualized using social constructivist theory<sup>17,18</sup> and situated learning theory where learners within social groups construct meaning through individual and group reflection.<sup>3,19,20</sup> The study questions were: (1) Can we develop a series of “gray” or borderline professionalism vignettes where committee members agree that the cases would be good teaching cases?; (2) Can consensus be attained in review of vignettes by a group of professionalism experts in which they indicate if a behaviour was professional, marginally professional or unprofessional?; and (3) Can these both be done within the professionalism framework of our institution?

We built upon the method used by the Association of American Medical Colleges, (AAMC) Organization of Student Representatives where vignettes were rated along a gradient of unprofessional vs professional behaviours.<sup>21</sup> We felt that highlighting uncertain professional behaviours could be more consistent with common everyday professionalism dilemmas. Gaiser emphasized the importance of uncertainty in the process of reflection,<sup>22</sup> aiding in addressing the gap between learners’ perceptions of professionalism versus the actual institutional professionalism framework.<sup>23</sup>

The goal for the first phase of our larger study was to develop vignettes based on our faculty’s code of conduct, i.e., within our institutional norms: honesty; confidentiality; respect for others; responsible behavior; and excellence.<sup>24</sup> We included altruism as a sixth concept; a “Professional” pillar of the CanMEDS framework,<sup>25</sup> and part of the 2008 Code of Ethics for Nurses in Canada.<sup>26</sup> The goal of the three-phase study was to develop a workshop,

based on the professionalism vignettes developed in this first phase, to deliver across the educational continuum throughout and beyond our institution. Later work, with the results from the professionalism workshop, will be presented separately.

## Methods

### Creation of vignettes.

The goal was to develop high quality educational vignettes using the criteria outlined by Leicher and Mulder: high-quality, relevant, realistic, encouraging independent thinking, and engendering unique response.<sup>16</sup> To this goal, we asked: medical and nursing students; residents; and faculty nurses and physicians to provide “borderline” professionalism vignettes. They were asked to base their vignettes upon the pillars of our code of conduct with respect to the question, “Can you remember any time in your career where you had questions about your professional behavior or wondered about the behavior of others?” They were asked to submit their vignettes via email (see Appendix A). Further vignettes were obtained by snowball sampling with participants inviting colleagues to submit professionalism vignettes. Nurses provided their vignettes to a local nursing professionalism expert who submitted them. In addition, members of the research team, who had been a patient or had a family member who was, contributed vignettes from the perspective of the patient; some were also submitted by the faculty physician member of the team. An external source gave permission for vignettes from the AAMC, “Draw the Line II: Professionalism” project<sup>21</sup> to be included.

Other vignettes were collected through eight semi-structured interviews of physicians in different specialties, conducted by one of the authors (PS). The same prompt given above was asked within the context of the six categories in the code of conduct (see Appendix A).

Vignettes were initially reviewed, clarified and anonymized by the research team, who then coded the vignettes into the code of conduct categories. By consensus, the team cut 27 cases due to: redundancy; vignettes inconsistent with professionalism; and unambiguous scenarios (see Figure 1).

### Expert Committee Shortlisting of Vignettes.

Two expert committees reviewed the vignettes. The Case Selection Committee (CSC) (seven education experts from nursing and medicine, medical students and residents), anonymously rated vignettes using the Turning Point

(V5.3.1) audience response system (ARS).<sup>27</sup> Below each case description, the prompt, “This is a good teaching case,” appeared with the response categories 1=strongly disagree to 4=strongly agree. The results of the scoring guided the moderated discussion on the vignettes where there was disagreement, so that vignettes were shortlisted by consensus based on the vignette’s educational quality.<sup>16</sup>

The Case Review Committee (CRC) consisted of eight members: medical ethicists; medical students; residents; and nurse and physician professionalism experts. Members anonymously rated the vignettes from the CSC using the same ARS. Below each vignette, the prompt, “The X’s (e.g., resident’s) behavior is”: (1) professional (P); (2) marginally professional (MP); or (3) unprofessional (UP).<sup>21</sup> After the members scored the vignettes, they were shown the results and a moderated discussion ensued, followed by another anonymous rating with discussion. All committee sessions were digitally audio recorded and then transcribed.

Our study was approved by the Ethics Board at the University of Alberta (Pro00027273).

## Results

Eighty cases were submitted: twenty submitted by email from medical students, residents and nurses; twenty-two from a previous AAMC study;<sup>21</sup> thirty from physician interviews; and eight submitted by members of the research team representing their patient or faculty physician role (see Figure 1). Cases were written from the perspective of the writer’s role, e.g., the perspective of a resident. This meant that most of the cases were written from the perspective of the healthcare professional or trainee, while most of the research team’s vignettes were written from the patients’ viewpoint.

Fifty-three cases were submitted to the CSC over two sessions. CSC members anonymously rated each vignette’s educational quality, with those with the lowest educational value removed. The shortlisted 42 vignettes were presented to the CRC. A list of the 42 vignettes presented to the CRC and final eighteen are available as supplemental material in Appendix B (includes vignette source).

The CRC met twice, anonymously rating degree of unprofessional behaviour in case vignettes, followed by group discussion. The members then voted on the vignettes again after the discussion to see if consensus could be reached. Results are in the Table 1.

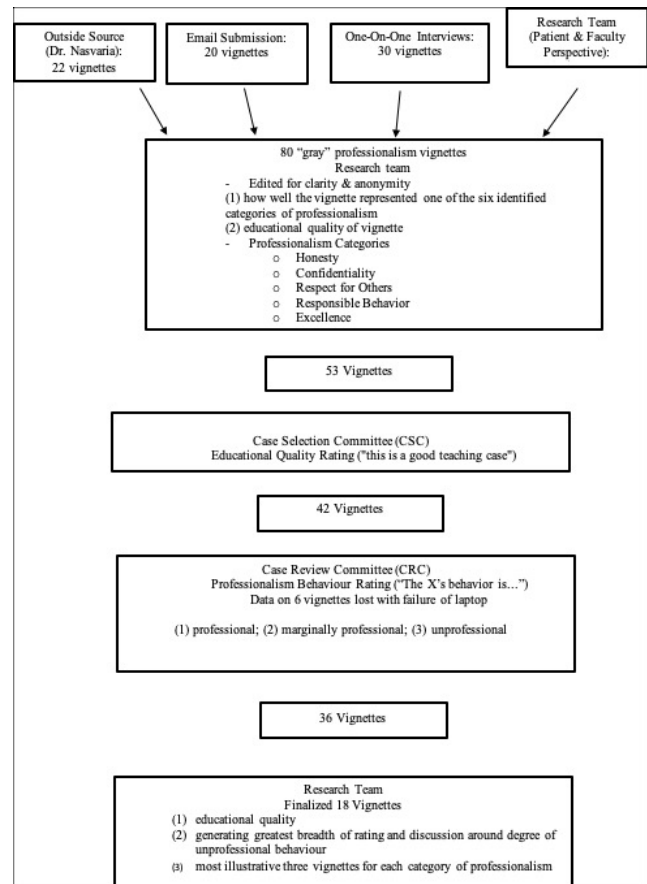


Figure 1. Schematic of vignette generation & short-listing

Given that we did not know if there would be 100 percent consensus between committee members in terms of the three professionalism categories (i.e., P, M, and UP), we decided that consensus between raters would be defined as 75% or greater agreement. Before discussion, the initial ratings were often dispersed across all three categories, but some were also heavily weighted in one direction, e.g., most or all members rated a vignette as unprofessional. For example, from the committee transcript, the moderator said, “So, 83% said unprofessional, 17% said marginally professional. Pretty, um clear on, 83% I’m feeling we got a pretty good consensus on that.”

Members sometimes rated a vignette post-discussion as marginally professional when they previously had rated it as professional (see Table 1). This feeling was exemplified by one CRC member, who said, “maybe it isn’t as clear as I thought.” This was apparent from the discussion that there was often consensus that the vignette was clearly not professional, with members voting unprofessional and others, even after discussion, choosing marginally professional. From the transcript, one CRC member said, “You gotta approach it from that point of view that this isn’t as black and white...Because I think for some people they

want it to be very black and white, unprofessional behaviour, professional behaviour, and it's just never quite like that." During the second meeting of the CRC, after discussion, members achieved consensus within our agreed upon parameters on 16 of the 18 (89%) vignettes (See Table 1). Results were similar for the other 24 cases.

The final short-list of 18 vignettes was determined through research team consensus, selecting the vignettes with: the highest educational quality; those generating greatest diversity in response; and the three most illustrative cases in each category (see Figure 1).

*Table 1. Change in number scoring a particular category (professional=P, marginally professional=MP; or unprofessional=UP) during the second Case Review Committee meeting scoring vignettes 25-42 before and after group discussion after rating the vignette*

Case #	Pre-discussion			N	Post-discussion			Mean Post	Change
	P*	MP*	UP*		P*	MP*	UP*		
25	3	3	2	1.88	1	1	6	2.62	.75
26	2	1	5	2.38	0	4	4	2.50	.13
27	1	2	5	2.50	1	2	5	2.50	0.00
28	1	2	5	2.50	0	3	5	2.62	.13
29	0	1	7	2.88	0	1	7	2.88	0.00
30	0	1	7	2.88	0	1	7	2.88	0.00
31	1	4	3	2.25	1	5	2	2.12	-.13
32	2	3	3	2.13	1	5	2	2.12	0.00
33	4	4	0	1.50	2	6	0	1.75	.25
34	1	2	5	2.50	1	2	5	2.50	0.00
35	0	4	4	2.50	0	4	4	2.5	0.00
36	0	4	4	2.50	0	2	6	2.75	.25
37	0	4	4	2.50	0	4	4	2.50	0.00
38	0	2	6	2.75	0	1	7	2.88	.13
39	0	3	5	2.63	0	3	5	2.63	0.00
40	4	4	0	1.50	3	5	0	1.62	.13
41	0	0	8	3.00	0	0	8	3.00	0.00
42	0	2	6	2.75	0	2	6	2.75	0.00

- Scoring was: P=Professional =1; MP=Marginally Professional = 2; UP=Unprofessional=3.
- Higher change scores indicate a more unprofessional score. Change scores > 0 indicate a change toward Unprofessional (UP) behaviour, but a score ≤ 0 indicate no change or a change toward Professional (P) behaviour.
- Shading in the table cells indicates consensus, e.g., when no one (0) voted for "P."
- Any vignette that no one (0) voted either "P" or "UP" was considered having consensus, i.e., it was not "P" or it was not "UP."
- Consensus was also achieved if 75% or more of the members voted in one direction, i.e., "P"/"MP" or "MP"/"UP."

## Discussion

Learning professional values is heavily influenced by role modeling.<sup>1,3,22</sup> It has been suggested that the teaching of professionalism will fail unless the role modeling that faculty provide, and trainees observe in the hospital setting, is changed.<sup>5,28</sup> For this type of change to occur, faculty development programs must be implemented along with educational programs for trainees.<sup>22,28,29</sup> These studies suggest that to create change within institutions, there must be time for personal reflection to develop a true understanding of professional behavior among all institutional members.

This study uses the concepts from Archer et al.,<sup>5</sup> which suggests that institutional medical professional values should be explored to aid in successfully adopting a professionalism curriculum. Recognizing the importance of this concept, participants provided professionalism vignettes based on their own experiences and within the context of our code of conduct. This explicitly links our teaching to institutional norms for professionalism. We chose our own code to highlight our community of

practice, i.e., the people who work and learn within our institution's cultural norms. This is within the concept of situated learning to build a sense of belonging. We hope these vignettes generate group reflection, to socialize common understandings about community of practice norms, as outlined within social constructivist learning theory.<sup>17</sup> These vignettes fulfil the criteria as set out by Leicher & Mulder: high-quality, relevant, realistic, promoting independent thinking, and unique response,<sup>16</sup> of high educational value and illustrating day-to-day professionalism dilemmas.

Situational learning theory can be combined with reflective learning to provide a cognitive base for learning professionalism.<sup>3</sup> Some describe this process as "situational problem-solving,"<sup>30</sup> recognizing that the framework to understand knowledge, skills and values is "situated" within the work environment.<sup>3</sup> This philosophy acknowledges that physician professionalism does not lie in the classroom, but primarily in choices made by practicing doctors under system and internal stresses while delivering patient care.<sup>31</sup> There is development of a professional identity over time, formed by the workplace

culture.<sup>32,33</sup> When Cruess & Cruess speak about building learner professional identity, they emphasize vignette discussions and socializing to the norms of the community of practice.<sup>1,2</sup>

The vignettes considered by the CRC attained consensus by professionalism experts; primarily after discussion and when considering broader categories, e.g., professional vs. unprofessional behaviour. The highest level of consensus was for vignettes in which it was clear to the CRC members that the behaviour described was not professional (i.e., no committee members rated the behavior as “professional”); these were usually rated as either “marginally professional” or “unprofessional.” Our vignettes were designed and chosen for being “gray,” one of the committee members even described a vignette as *not* being “black and white,” therefore, many were seen as “marginally professional.”

## Conclusion

We methodically generated professionalism vignettes, anchored upon our institutional values. We deliberately obtained “gray” vignettes to enhance group discussion and individual reflections, following social constructivist learning theory. Vignettes were vetted by medical education and professionalism experts and there was consensus (89%) on whether the vignette was professional or unprofessional. In our later work, we examine how use of these vignettes encourage individual reflections in building professionalism understandings around behaviours within our educational workplace.

Limiting our study was basing our vignettes upon categories within our code of conduct.<sup>24,26</sup> Although common categories, the vignettes may not be generalizable to other organizational cultures. Categorizing vignettes into one category might be too restrictive. We tried to address that limitation through confirming vignette categories through our expert committees and review by the research team. Not as many nursing professionalism vignettes were obtained; having a nursing professionalism expert continue as a member of the research team may have ensured better buy-in.

In summary, we hope that generating professionalism vignettes in such a structured and inclusive manner will be relevant to educators who teach professionalism to members of a community of practice at various stages along their professional identity journey.

**Conflicts of Interest:** There is no conflict of interest for any of the authors in regards to this study.

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## References

1. Cruess SR, Cruess RL, Steinert Y. Supporting the development of a professional identity: general principles. *Med Teach*. 2019 Jun;41(6):641-9. <https://doi.org/10.1080/0142159X.2018.1536260>
2. Cruess RL, Cruess SR, Steinert Y, editors. Teaching medical professionalism: supporting the development of a professional identity. Second edition. Cambridge, United Kingdom ; New York: Cambridge University Press; 2016. 297 p. <https://doi.org/10.1017/CBO9781316178485>
3. Kenny NP, Mann KV, MacLeod H. Role modeling in physicians' professional formation: reconsidering an essential but untapped educational strategy. *Acad Med J Assoc Am Med Coll*. 2003 Dec;78(12):1203-10. <https://doi.org/10.1097/00001888-200312000-00002>
4. Al-Eraky MM. Twelve tips for teaching medical professionalism at all levels of medical education. *Med Teach*. 2015;37(11):1018-25. <https://doi.org/10.3109/0142159X.2015.1020288>
5. Archer R, Elder W, Hustedde C, Milam A, Joyce J. The theory of planned behaviour in medical education: a model for integrating professionalism training. *Med Educ*. 2008 Aug;42(8):771-7. <https://doi.org/10.1111/j.1365-2923.2008.03130.x>
6. Landis TT, Severtsen BM, Shaw MR, Holliday CE. Professional identity and hospital-based registered nurses: a phenomenological study. *Nurs Forum (Auckl)*. 2020 Jul;55(3):389-94. <https://doi.org/10.1111/nuf.12440>
7. Apker J, Propp KM, Zabava Ford WS, Hofmeister N. Collaboration, credibility, compassion, and coordination: professional nurse communication skill sets in health care team interactions. *J Prof Nurs Off J Am Assoc Coll Nurs*. 2006 Jun;22(3):180-9. <https://doi.org/10.1016/j.profnurs.2006.03.002>
8. Ginsburg S, Bernabeo E, Ross KM, Holmboe ES. "It depends": results of a qualitative study investigating how practicing internists approach professional dilemmas. *Acad Med J Assoc Am Med Coll*. 2012 Dec;87(12):1685-93. <https://doi.org/10.1097/ACM.0b013e3182736dfc>
9. Ginsburg S, Lingard L. "Is that normal?" Pre-clerkship students' approaches to professional dilemmas. *Med Educ*. 2011 Apr;45(4):362-71. <https://doi.org/10.1111/j.1365-2923.2010.03903.x>



10. Shevell AH, Thomas A, Fuks A. Teaching professionalism to first year medical students using video clips. *Med Teach*. 2015;37(10):935-42. <https://doi.org/10.3109/0142159X.2014.970620>
11. Bernabeo EC, Reddy SG, Ginsburg S, Holmboe ES. Professionalism and maintenance of certification: using vignettes describing interpersonal dilemmas to stimulate reflection and learning. *J Contin Educ Health Prof*. 2014;34(2):112-22. <https://doi.org/10.1002/chp.21228>
12. Bernabeo EC, Holmboe ES, Ross K, Chesluk B, Ginsburg S. The utility of vignettes to stimulate reflection on professionalism: theory and practice. *Adv Health Sci Educ Theory Pract*. 2013 Aug;18(3):463-84. <https://doi.org/10.1007/s10459-012-9384-x>
13. Tsai T-C, Harasym PH, Coderre S, McLaughlin K, Donnon T. Assessing ethical problem solving by reasoning rather than decision making. *Med Educ*. 2009 Dec;43(12):1188-97. <https://doi.org/10.1111/j.1365-2923.2009.03516.x>
14. Chiapponi C, Dimitriadis K, Özgül G, Siebeck RG, Siebeck M. Awareness of ethical issues in medical education: an interactive teach-the-teacher course. *GMS J Med Educ*. 2016;33(3):Doc45.
15. Spandorfer J, editor. Professionalism in medicine: a case-based guide for medical students. Cambridge ; New York: Cambridge University Press; 2010. 464 p. (Cambridge medicine).
16. Leicher V, Mulder RH. Development of vignettes for learning and professional development. *Gerontol Geriatr Educ*. 2018 Dec;39(4):464-80. <https://doi.org/10.1080/02701960.2016.1247065>
17. Torre DM, Daley BJ, Sebastian JL, Elnicki DM. Overview of current learning theories for medical educators. *Am J Med*. 2006 Oct;119(10):903-7. <https://doi.org/10.1016/j.amjmed.2006.06.037>
18. Hein GE. Constructivist Learning Theory. In: The museum and the needs of the people. Jerusalem; 1991.
19. Lave J, Wenger E. Situated learning: legitimate peripheral participation. Cambridge [England] ; New York: Cambridge University Press; 1991. 138 p. (Learning in doing). <https://doi.org/10.1017/CBO9780511815355>
20. Wenger E. Communities of practice: learning, meaning, and identity. Cambridge: Cambridge Univ. Press; 2008. 318 p. (Learning in doing : social, cognitive, and computational perspectives).
21. Nasvaria D. Draw the Line on Mistreatment. Interactive Program at AAMC Conference. 1998 at <http://www.navsaria.com/home/document-library/dtl-ii-report.pdf>. [Accessed on 06/02/2021].
22. Gaiser RR. The teaching of professionalism during residency: why it is failing and a suggestion to improve its success. *Anesth Analg*. 2009 Mar;108(3):948-54. <https://doi.org/10.1213/ane.0b013e3181935ac1>
23. Ginsburg S, Regehr G, Stern D, Lingard L. The anatomy of the professional lapse: bridging the gap between traditional frameworks and students' perceptions. *Acad Med J Assoc Am Med Coll*. 2002 Jun;77(6):516-22. <https://doi.org/10.1097/00001888-200206000-00007>
24. FoMD Code of Conduct Policy [Internet]. 2013 Available from: <https://www.ualberta.ca/medicine/media-library/aboutus/governance/policies/fomd-code-of-conduct.pdf> [Accessed on Jan 20, 2021].
25. CanMEDS Role: Professional: The Royal College of Physicians and Surgeons of Canada [Internet]. Available from: <https://www.royalcollege.ca/rcsite/canmeds/framework/canmeds-role-professional-e> [Accessed on May 10, 2021].
26. Code of Ethics for Registered Nurses. :60.
27. Kay RH, LeSage A. A strategic assessment of audience response systems used in higher education. *Australas J Educ Technol* 2009 May 13; 25(2). <https://doi.org/10.14742/ajet.1152>
28. Brainard AH, Brislen HC. Viewpoint: learning professionalism: a view from the trenches. *Acad Med J Assoc Am Med Coll*. 2007 Nov;82(11):1010-4. <https://doi.org/10.1097/01.ACM.0000285343.95826.94>
29. Leo T, Eagen K. Professionalism education: the medical student response. *Perspect Biol Med*. 2008;51(4):508-16. <https://doi.org/10.1353/pbm.0.0058>
30. Archer R, Elder W, Hustedde C, Milam A, Joyce J. The theory of planned behaviour in medical education: a model for integrating professionalism training. *Med Educ*. 2008 Aug;42(8):771-7. <https://doi.org/10.1111/j.1365-2923.2008.03130.x>
31. Birden H, Glass N, Wilson I, Harrison M, Usherwood T, Nass D. Defining professionalism in medical education: a systematic review. *Med Teach*. 2014 Jan;36(1):47-61. <https://doi.org/10.3109/0142159X.2014.850154>
32. Ginsburg S, Regehr G, Lingard L. To be and not to be: the paradox of the emerging professional stance. *Med Educ*. 2003 Apr;37(4):350-7. <https://doi.org/10.1046/j.1365-2923.2003.01326.x>
33. Holden M, Buck E, Clark M, Szauter K, Trumble J. Professional identity formation in medical education: the convergence of multiple domains. *HEC Forum Interdiscip J Hosp Ethical Leg Issues*. 2012 Dec;24(4):245-55. <https://doi.org/10.1007/s10730-012-9197-6>

## Appendix A: Interview & email guide

Thank you for meeting with me today. We are gathering cases from medical and nursing students, residents, and faculty nurses and physicians around professionalism to use in medical education around professionalism. These cases will be delivered to learners at multiple levels, right from student through faculty in professionalism teaching workshops.

We are looking for “gray” professionalism scenarios – that are not clearly unprofessional or professional. You know, the kinds of experiences that made you wonder after, whether you were professional or not, or whether another person’s behaviour was professional or not. We wish to find these kinds of case vignettes to encourage discussion amongst groups during the teaching workshops, and because we feel that these kinds of borderline professionalism scenarios are more commonly experienced in real-life settings.

To make sure that we cover various aspects in professionalism, we are loosely basing vignettes upon the pillars of the code of conduct for the Faculty of Medicine & Dentistry: **(1) honesty; (2) confidentiality; (3) respect for others; (4) responsible behaviour; and (5) excellence, and additionally (6) altruism**, a kind of a controversial topic from my point of view in medicine these days.

Does that make sense?

Great! Let’s get started.

Can you remember any time in your career where you had questions about your professional behaviour or wondered about the behaviour of others?

Let’s start with professional behaviours that were questionable around **(1) Honesty**...

These are great! Now, let’s move onto the topic of **(2) Confidentiality**. Can you remember any times in your career where you had questions about your professional behaviour or wondered about the behaviour of others in relation to confidentiality?

And, now let’s move onto **(3) Respect** for others? Any borderline professionalism scenarios you encountered in relation to respect for others?

Now for **(4), Responsible Behaviour**. Any times in your life where you experienced questionable behaviours, either in yourself or in others in relation to responsible behaviour?

And, for **(5), Excellence**. Can you remember any time in your career where you had questions about your professional performance in excellence, or wondered about excellence in others?

And finally, **(6), altruism**, such a fascinating concept. Were there any times or experiences in your career where you felt dilemmas in altruism (care for others) versus care for yourself, where you felt that your behaviour was questionable, or that another person’s behaviour was borderline?

Thanks very much. These are some rich stories and vignettes that we can anonymize and shape into case vignettes for professionalism teaching.

### Email guide

We are gathering cases from medical and nursing students, residents, and faculty nurses and physicians around professionalism to use in medical education around professionalism. These cases will be delivered to learners at multiple levels, right from student through faculty in professionalism teaching workshops.

We are looking for “gray” professionalism scenarios – that are not clearly unprofessional or professional. You know, the kinds of experiences that made you wonder after, whether you were professional or not, or whether another person’s behaviour was professional or not. We wish to find these kinds of case vignettes to encourage discussion amongst groups during the



teaching workshops, and because we feel that these kinds of borderline professionalism scenarios are more commonly experienced in real-life settings.

To make sure that we cover various aspects in professionalism, we are loosely basing vignettes upon the pillars of the code of conduct for the Faculty of Medicine & Dentistry: **honesty; confidentiality; respect for others; responsible behaviour; and excellence, in addition to altruism**, kind of a controversial topic from my point of view in medicine these days. It can be something you experienced at any point in your career, or from someone you know, and have talked about in the past. You just have to quickly write them down, and we can work on removing personal identifiers afterward. If you want, send me a couple to go through, just so that you can be sure that you get the idea down.

We wish to see the situations from both points of view. Even more ambiguous situations would be good: where you don't think it is professional behaviour exhibited, but the other person may think their behaviour is totally reasonable.

## Appendix B.

Below are the 42 vignettes given to the Case Review Committee (CRC) for ranking the level of professionalism. The first table contains the final 18 vignettes in the study. The second table has the remaining 24 vignettes.

Note: each vignette ends with “The subject’s behaviour is...” The Case Review Committee then anonymously voted with the Turning Point audience response system as to whether they feel the behaviour was: (1) Professional; (2) Marginally Professional; or (3) Unprofessional. The committee members were then showed the anonymous voting results for the vignette. Committee members were then asked to share (if they felt comfortable doing so), how they voted and why. The committee members then entered into a facilitated discussion around their views on the professional to unprofessional behaviours exhibited in the vignettes.

### Final 18 Professionalism Vignettes

Professionalism Category	Final 18 Vignettes	Source
1. Honesty	A fourth-year medical student is on an aircraft returning from a trip to Europe when she becomes aware of a slight commotion a few rows ahead of her. There is a gentleman who appears to be pale and in some amount of distress. A minute or two later, the flight crew asks if there are any doctors on board. Since she is not a physician, the student remains seated; two people respond, but the student thinks she overhears that they are medical office assistants. Still unsure, she remains seated. <b>The 4<sup>th</sup> year medical student’s behavior is....</b>	Dr. Nasvaria AAMC study
2. Honesty	A resident was busy in emergency. The nurse paged the resident to have some orders signed for diet so the patient could eat. The resident explained that he did not have time to come to the ward at that time. The nurse paged the resident 10 minutes later stating a patient was having chest pain and needed to be urgently assessed. When the resident came to see the patient, the patient was sleeping. When awoken, the patient did not report having any pain. When the resident went to the desk to ask what happened, the nurse stated that the patient was fine now and asked the resident to sign the orders the nurse had paged about earlier. <b>The nurse’s behavior is....</b>	Resident Email
3. Honesty	A primary care physician (PCP) has a lesbian couple as patients. One of the couple wants to try to get pregnant, but she’s 40 years old and wants to be tested regarding potential fertility issues. The PCP knows that since she is part of a same-sex couple that she will have to pay out-of-pocket for the tests. The PCP puts in a request for the tests with the following description. “patient is in a committed long-term relationship has had unprotected sex for more than a year and has not become pregnant, I request a hysterosalpingogram...” <b>The PCP’s behavior is....</b>	Research Team from the Patient Perspective
4. Responsible Behaviour	A physician is aware that a colleague is a “minimally competent” physician. He does not seem to participate in continuing medical education activities, or to keep up with his reading. His care of patients appears to be borderline adequate. The concerned physician is worried that there will be a significant medical error in the future. Despite his concern, he decides against confronting the colleague. There will need to be an ongoing, collegial relationship with this physician over time and the concerned physician is not in an administrative position where he can intervene with this individual. <b>The physician’s behavior is...</b>	Physician Interview
5. Responsible Behaviour	An 8-year-old special needs patient arrives at the pediatric clinic on time for an 8:30 AM appointment. The parents, the patient, and 2-year-old sister wait for 50 minutes in the exam room. A resident and student enter the room and the resident introduces both of them, neither apologize for being late. The student is carrying a full cup of coffee and proceeds to drink the coffee as he reclines against the exam table in his white coat and periodically asks a question. <b>The resident’s behavior is....</b>	Research Team from the Patient Perspective

Professionalism Category		Final 18 Vignettes	Source
6.	Responsible Behaviour	A resident makes an error during the procedure of putting a central line into a patient in the ICU. A piece of plastic broke off, migrated to the heart and the patient has a stroke before any intervention could be done. The resident wishes to speak to the family personally. The staff physician decides against this, speaks to the family himself and discourages contact between the family and resident. The resident phones the family, without the staff physician knowing of the phone call. <b>The resident's behavior is....</b>	Faculty Physician Interview
7.	Confidentiality	A patient with a rare medical condition is visiting her specialist. During the course of the visit, she asks the specialist how her friend is doing. Her friend has the same rare medical condition, is treated by the same specialist, and they know each other through regular support group meetings. The specialist says "She is doing just fine at the moment." <b>The specialist's behavior is....</b>	Research Team as Faculty Physician
8.	Confidentiality	A medical student uses Facebook to communicate to his friends, most of whom are also medical students. He met a patient with a complicated medical condition, and learned a lot from this patient. To share his experience with his friends, he wrote details about the patient's medical condition, with personal identifiers removed, on Facebook. The medical student's behavior is....	Medical Student Email
9.	Excellence	Working in emergency, a medical student was sent to assess a patient then reported the plan to the preceptor. The medical student was allowed to order all tests he thought were required including X-rays and CTs. The preceptor saw the patient after all test results were back. The preceptor's behavior is....	Medical Student Email
10.	Excellence	In seeing her assignment for the OR list the next day, the anesthesia resident asked her chief resident to be reassigned. She said she had already done a case like this just last week and didn't see the point in doing another one so soon afterward. <b>The resident's behavior is....</b>	Resident Email
11.	Excellence	A medical student walks into a patient's room, where a family member is present, only to be told by the nurse that the IV has run dry. The student feels his stomach sink, because he had a very hard time placing the IV in this patient previously; it took him an hour. The nurse sees the look on the student's face and says, "I know you can do it, plus I'm really busy." <b>The nurse's behavior is....</b>	Medical Student Email
12.	Altruism	A medical student with average exam scores, but a poor attendance record at afternoon lectures defends himself by stating he can save 2 hours by occasionally not going to his required small group. He says that any extra time with his children is particularly important for him as a single parent. <b>The medical student's behavior is....</b>	Medical Student Email
13.	Altruism	A resident is called by the program director and told that she needs to come in and cover for a sick resident. She explains that she can't come in because she will be unable to get a baby-sitter for her own children. The director reminds her that the residency guidelines state that residents will be responsible for covering for each other. She says it's impossible to keep a baby-sitter on alert for the whole rotation in case she gets called in. She tells the director to call in somebody else and that she will cover next time provided she has ample warning. <b>The resident's behavior is....</b>	Resident Email
14.	Altruism	A rural family doctor is overbooked and is running more than an hour behind. He knows that if he doesn't speed up he will end up working late, but he also realizes that his patients have waited a long time and expect more than a 5-minute appointment. The doctor decides to continue the way he has been working all day, skips lunch, and sees each patient for as long as needed. His last appointment finishes more than an hour after the scheduled closing time. <b>The family doctor's behavior is...</b>	Faculty Physician Interview
15.	Respect for Others	An obese patient has just been anesthetized for surgery. As soon as it is clear the patient is asleep, the surgery resident says out loud – "Well, Mrs. Smith wouldn't need this operation if she stopped eating so much and got a little exercise." <b>The surgery resident's behavior is....</b>	Resident Email
16.	Respect for Others	On the day of his surgery, a patient asks his surgeon how much sleep the surgeon had the night before. The surgeon replies "That is a very personal question. I don't ask you what	Faculty Physician Interview

Professionalism Category	Final 18 Vignettes	Source
17. Respect for Others	<p>TV show you watched last night". The surgeon has 3 young children who don't sleep well. <b>The surgeon's behavior is...</b></p> <p>Two emergency physicians were sitting at the physician work space in their department. It was quiet in Emergency and there was only one patient remaining to be seen – both physicians found the patient's symptoms interesting. The emergency physicians do a quiet round of 'rock-paper-scissors' to decide who gets the case. The 'winner' takes the and sees the patient promptly providing excellent patient care. <b>The emergency physicians' behavior is...</b></p>	Faculty Physician Interview
18. Respect for Others	<p>A nurse is counselling a patient about the patient's chronic disease and talking about coping strategies. The nurse is a spiritual person, and recommends a book on spiritual healing to the patient without asking the patient's religious affiliations. <b>The nurse's behavior is...</b></p>	Faculty Physician Interview

The remaining 24 vignettes of the 42 Short-Listed Vignettes Presented to the Case Review Committee (CRC)

Category of Professionalism	Remaining 24 Vignettes	Source
19. Honesty	<p>Members of a medical school class are required to attend a certain number of seminars during the course of a particular clerkship. One day, a well-liked member of the class comes up to another student and asks him to sign him in for that day's seminar even though he won't be present. When the second student seems uncertain, the first student explains, "I'm getting killed by my team! They've just given me two new admissions. I can read about today's seminar topic later. You know we need the credit to pass." Having been in "overload" situations before, the second student agrees to sign him in. <b>The second medical student's behaviour is...</b></p>	Medical Student Email
20. Honesty	<p>On an obstetrics/gynecology rotation, a medical student accompanies an attending to a patient with a routine vaginal delivery. The student is introduced to the patient, who tells the attending that she "doesn't want her child being brought into the world by a student." The attending reassures her that he'll be the one doing the delivery. However, when the time comes, the attending has the student stand next to him and motions that the student should be doing the "catching;" the student doesn't have time to think and so she complies, delivering the child without a problem. The patient has her eyes closed and doesn't notice what happened. <b>The attending's behaviour is...</b></p>	Medical Student Email
21. Honesty	<p>A family doctor wishes for his patient to be seen by a specialist. The patient is very anxious, and is really concerned that she may have a serious medical disease. The stress is affecting her daily functioning. The family doctor knows that if he outlines the referral to the specialist, there will be a long waiting list. So, the family doctor alters the history of the illness, knowing that the referral will be triaged as more urgent with the exaggeration of some of her symptoms. The patient will then be seen earlier by the specialist, and the patient will have closure to settle her anxiety. <b>The family doctor's behaviour is...</b></p>	Faculty Physician Interview
22. Honesty	<p>A resident was busy in emergency. The ward nurses paged the resident to have some orders co-signed. The resident explained that he did not have time to come to the ward at that time. The ward nurses paged the resident 10 minutes later stating a patient was having chest pain and needed to be urgently assessed. When the resident came to see the patient, the patient was sleeping and did not report having any pain. When the resident went to the desk to ask what happened, the nurses stated that the patient was fine now and asked the resident to cosign the orders the nurses had paged about earlier. <b>The nurses' behaviour is...</b></p>	Resident Email
23. Honesty	<p>On rounds, the staff physician asked the two medical students and resident on her team about the patient's lab data and test results. When asked about Mr. Jones' potassium level, the resident, who forgot to order the test the day before and had seen no change in this patient's potassium since admission, replied "I'm pretty sure it's normal." <b>The resident's behaviour is...</b></p>	Faculty Physician Interview

Category of Professionalism	Remaining 24 Vignettes	Source
24. Honesty	Over the summer a medical student does laboratory research at a hospital. After a couple of months of hard work, she collates her data and writes a draft paper for the lab director to revise before submitting it for publication. After reviewing her draft and making many comments, the student sees that the director has included the name of one of the other researchers as an author, although he didn't have anything to do with this work. Afraid of angering the director, the student doesn't say anything. However, a few weeks later, she discovers that her name has been added to a paper the other researcher has written which she was not involved with. Figuring that this is the "payback" and that both researchers benefit, she says nothing. <b>The lab director's behaviour is...</b>	Medical Student Email
25. Responsible Behaviour	A medical student is on an outpatient rotation in a community physician's office. The physician prescribes a medication for migraine headaches to one of the patients, but he doesn't advise the family of the risks and benefits. The student asks: "Shouldn't you mention the possibility of liver disease or other complications?" The physician replies, "That's just statistics." The student feels this is a disservice to the patient, so she catches the patient as she is leaving and says the physician sent her to make sure the patient understood. The student then discusses the risks and benefits with the patient. <b>The medical student's behaviour is...</b>	Medical Student Email
26. Responsible Behaviour	During teaching rounds, a male attending approaches a female fourth-year student, places his arm around her waist and thanks her for the terrific job she did making one of his patients feel comfortable during a recent hospitalization. She feels very uncomfortable, but she's been hoping for a recommendation letter from this attending and so she decides not to say anything. Later, she hears that other women in her class have had similar experiences with him. Still concerned about the impact on a possible recommendation letter, she remains silent. <b>The female fourth-year student's behaviour is...</b>	Medical Student Email
27. Responsible Behaviour	A medical student is on a clerkship at a hospital where she works directly with attending physicians, without residents. On morning rounds one day, the student thinks that she detects alcohol on her attending's breath. The attending's thoughts appear clear, so the student decides not to say anything to the attending or anyone else, even though the attending is caring for critically ill patients and performing minor procedures that day. <b>The medical student's behaviour is...</b>	Medical Student Email
28. Responsible Behaviour	During a nursing student's last year of nursing school, she gradually observes that one of her classmates has become less responsible in her patient care duties and attends lectures less often. The student wonders if she should do anything but isn't sure if she should pry. She decides to leave it alone. <b>The nursing student's behaviour is...</b>	Nursing Faculty Email
29. Responsible Behaviour	A physician has been providing care to a family with a 6-month-old and an 18-month-old; both children have a genetic condition. The 18-month-old has recently died of this condition, and the family has asked the physician to attend the funeral. The physician is aware that she will be providing care for this family again in the future. The physician attends the funeral. <b>The physician's behaviour is...</b>	Faculty Physician Interview
30. Responsible Behaviour	A resident was on her way home at the end of the day. As she was leaving the patient care unit, a nurse approached her and pleaded with her to start an IV on a patient before she left. Another resident had already tried earlier to start the IV and failed. The resident noted the time, said she had to pick up her daughter at daycare right away, suggested she call someone else and left the unit. <b>The resident's behaviour is...</b>	Resident Email
31. Responsible Behaviour	A 4th-year student has done a good job during an encounter with a 15-year-old girl in the Emergency Department. He gained the teenager's trust and the adolescent disclosed that she may be pregnant. After confirming an early pregnancy, the student discusses the case with the attending including the patient's options for prenatal care. The attending asks whether the patient has considered abortion. The student states that for religious reasons, he adamantly refuses to present abortion as an option to the patient. <b>The 4th-year student's behaviour is...</b>	Resident Email

	Category of Professionalism	Remaining 24 Vignettes	Source
32.	Confidentiality	The mother of a resident underwent surgical removal of a suspicious lesion on her leg. The resident accessed her mother's record on Netcare 6 times over the next three days looking for the pathology report. <b>The resident's behaviour is...</b>	Resident Email
33.	Confidentiality	A physician does her own billing. She pays her husband a salary to submit her billings for her, as part of the incorporation. Her husband submits billings to the health care system. He has never taken a privacy course, which is usually required for office employees who work for the Department of Medicine or the health care system. <b>The physician's behaviour is...</b>	Research Team as Faculty Physician
34.	Confidentiality	A patient that the team needed to round on was reading a magazine out in the courtyard. The team approached the patient and said, "Hello sir! How are you feeling today?" Rounding on the patient proceeded in the courtyard. The patient's name was not used. The patient's condition was not mentioned. <b>The team's behaviour is...</b>	Faculty Physician Interview
35.	Confidentiality	A rural nurse practitioner (NP) has a 13-year-old male patient, who is the son of the local pastor. The young man has signs of a sexually transmitted infection. The NP treats the young man without telling the pastor. <b>The nurse practitioner's behaviour is...</b>	Nursing Faculty Email
36.	Confidentiality	An issue is brought to the Department Chair's attention regarding possible intimidating behavior demonstrated by a Faculty physician during a group teaching encounter. There is not a clear policy on this, but the Chair decides to contact a couple of other people who were present at the teaching encounter to collect views on the situation before contacting the involved Faculty physician. <b>The Chair's behaviour is...</b>	Faculty Physician Interview
37.	Excellence	A resident is up most of the night, seeing sick patients. He is called to Emergency to see a patient that was communicated by the Emergency Doctor as being seriously ill. The resident decides that the patient is fine, not that ill, and could probably go home. It is so late at night, that he quickly does a brief consult note, and admits the patient to discuss with the attending in the morning. <b>The resident's behaviour is...</b>	Faculty Physician Interview
38.	Excellence	An oncologist is meeting with a patient for a regular check-up on her progress after a bone marrow transplant 3 years prior. According to the chart, she is doing very well and he does not have any concerns. When he meets with the patient, she has some questions for the doctor about symptoms she has been having. The doctor has a waiting room full of patients and doesn't feel that the concerns are valid. The oncologist tells her about her current condition, assuring that everything is fine (according to her charts) and leaves the room. The doctor spends about 5 minutes with the patient who is left with unanswered questions and concerns. <b>The oncologist's behaviour is...</b>	Faculty Physician Interview
39.	Altruism	A medical student in an outpatient clinic is helping to care for a 15-year-old boy with a malignancy. The student developed a close relationship with the patient during his time there. After some time, the boy is terminal and has begun to talk openly with the student about dying. The student has assured him that he will be there as a support for the patient whenever needed. The patient is admitted to the hospital conscious but close to death and asks the staff to call the student at home and ask him to come in. The student is not on call and is just on his way out the door, as his spouse is scheduled to graduate from her doctoral program that afternoon. After a moment of thought, the student tells the staff that he is unavailable and proceeds to the graduation ceremony. <b>The medical student's behaviour is...</b>	Medical Student Email
40.	Respect for Others	A resident is on his way to see an urgent consult. He is asked by a food services staff person to not enter the elevator as it was during the time when the meal deliveries were happening for the patients. There was an argument between them. The food services staff person pointed out the sign on the elevator stating that food deliveries happen during certain hours during which only food staff are allowed to use the elevators. <b>The resident's behaviour is...</b>	Resident Email
41.	Respect for Others	The residents are at a teaching session. Bob has difficulty answering a question. He always has difficulty answering questions in the group setting and tends to get flustered. A second resident quickly confronts Bob, correcting him in front of the group so that the	Resident Email



Category of Professionalism	Remaining 24 Vignettes	Source
42. Respect for Others	<p>group gets the right answer and is able to move on with the learning session. <b>The second senior resident's behaviour is...</b></p> <p>The lab scientist does not understand the lab request from the physician to have a particular lab test performed. She asks the physician to call her to clarify the order. When she speaks to the physician, she asks details of the patient's clinical presentation. The physician states "This is my clinical suspicion. Just do the lab test". <b>The physician's behaviour is...</b></p>	Faculty Physician Interview