

Original Publication

OPEN ACCESS

Professional Competencies ToolKit: Using Flash Cards to Teach Reflective Practice to Medical Students in Clinical Clerkship

Patricia Seymour, MD, CCFP*, Maggie Watt, MD, CCFP, FCFP, Mark MacKenzie, MD, CCFP, Michael Gallea, MD

*Corresponding author: pfseymour@aim.com

Citation: Seymour P, Watt M, MacKenzie M, Gallea M. Professional Competencies ToolKit: using flash cards to teach reflective practice to medical students in clinical clerkship. *MedEdPORTAL*. 2018;14:10750. https://doi.org/10.15766/mep_2374-8265.10750

Copyright: © 2018 Seymour et al. This is an open-access article distributed under the terms of the Creative Commons Attribution-NonCommercial-No Derivatives license.

Abstract

Introduction: Early clinical experiences can be overwhelming to medical students. The Professional Competencies ToolKit (ProComp ToolKit) gives medical students a framework on which to build these early experiences and reflect on issues related to professionalism as each patient encounter unfolds.

Methods: The ProComp ToolKit is a set of 28 flash cards, grouped within six domains of professional competency. Each flash card is a tool for learning, defining a topic in a catchy title and laying out a specific set of skills to be acquired within the clinical setting. Tasks and tips on each flash card guide students through the process of clinical observation, self-observation, and patient interactions. Students meet in small groups with facilitators every 2 weeks throughout the year to discuss these experiences. At the end of the year, students write a narrative based on the flash card that was most meaningful to their professional identity development. **Results:** We demonstrated how the student narratives that emerged from using the flash cards, exchanged in a small-group setting, led to group problem solving and validation of students' experiences and values. In the narratives, students discussed the origin of negative behaviors and attitudes that can become normalized in patient care while asserting the primacy of patient-centered care and devising self-awareness strategies. **Discussion:** Our experience using the ProComp ToolKit shows that teaching reflective practice can successfully be integrated into students' clinical experiences. Professionalism skills can be reflected upon such that they become habitual and integral to students' developing professional identities.

Keywords

Professionalism, Narrative, Reflective Practice, Flash Card

Appendices

- A. Professional Competencies ToolKit.pdf
- B. Professional Competencies ToolKit Evaluation Form .docx

All appendices are peer reviewed as integral parts of the Original Publication.

Educational Objectives

By using the Professional Competencies ToolKit, learners will be able to:

1. Identify good and bad behaviors and attitudes relating to patient care and interactions by reflecting on their clinical experiences as they unfold.
2. Identify core principles of ethics (confidentiality, consent, and autonomy) as they apply to patient care.
3. Describe clinical experiences that had an impact on their professional behaviors and attitudes related to patient care and communications.
4. Devise self-awareness strategies around relaxation techniques, work-life balance, feeling comfort with uncertainty, cognitive dissonance, and recognizing personal values that interfere with patient care.

Introduction

Early clinical experiences can be overwhelming to the medical student learner. During their training, students may observe or be involved in a clinical situation that makes them ill at ease or feel that their values are in conflict with the teaching in progress. Without opportunities to discuss these intense experiences as they arise, learners are left to decide for themselves how the experiences should inform their developing professional identities. These negative behaviors are then handed down to the next generation of doctors, and the cycle continues.¹

This process of initiation, through which medical students are exposed to poor models of communication and unethical behaviors in medical school, has been widely documented. It has been described as the hidden curriculum of medical training,^{2,3} whereby students are indoctrinated into physicianhood through negative lessons learned in the hallways of hospitals and doctor's lounges. The process has also been referred to as "traumatic deidealization"⁴ and "ethical erosion."^{1,3,5-7}

There has been increasing recognition on the part of medical educators of the need to teach professionalism in medical schools as a means of addressing the hidden curriculum and preventing ethical erosion.^{8,9} How to integrate the teaching of professionalism into medical training programs has proven challenging and is a matter of evolving theory. Birden and colleagues presented a comprehensive systematic review of the best available evidence, published between 1999 and 2009, on how to teach professionalism in medical schools.¹⁰ The most evident themes in the literature, they reported, are that role modeling and personal reflections, ideally guided by faculty, are the most effective techniques for developing professionalism. Branch stated that

key features of the educational programs that effectively influenced learners' skills, values, attitudes, and behaviors include: (a) longitudinal learning in small groups, (b) creating a supportive group process, (c) prominent inclusion of reflective learning, and (d) experiential learning of skills.¹¹

The Professional Competencies ToolKit (ProComp ToolKit) was created for medical educators to teach professionalism to medical students. The four key features described by Branch above as being the most effective in the formation of a positive professional identity are integral to the ToolKit approach.

The ToolKit is a set of 28 flash cards, each of which is designed to prompt medical students to reflect on a specific aspect of their clinical experiences as they unfold in the clinical setting.

The idea for the ProComp ToolKit was first conceived in 2006, when one of the authors was facilitating a group of 10 first-year medical students at McMaster Medical School in Hamilton, Ontario, Canada, as part of a course designed to teach professionalism through reflection. The curriculum spanned a broad range of topics that were first presented to the entire class of medical students as a lecture. Then, small groups of 10-12 students met once a week for further discussion and reflection, with two facilitators to guide discussion.

Several months into the course, challenges related to teaching reflective practice to students in their preclinical stage of training began to emerge. With few clinical opportunities at this early stage of training, there were relatively few experiences on which students could reflect and on which to base discussions. Discussions were more general, and the students' reflections lacked clinical specificity such that at times, students seemed disengaged from the process. Reflection has been aptly described as "the expertise-enhancing, metacognitive, tacit process whereby personal experience informs practice."¹² Without this personal experience, there was little opportunity for students to reflect on and internalize these lessons as part of their professional identity development. Also, the course spanned such an enormity of material that the students faced challenges distilling big abstract concepts into clinically relevant and applicable skills.

The idea for the ProComp ToolKit emerged in response to these challenges. The ToolKit flash cards are designed to give students a structure on which to base their clinical experiences and observations and to help them interpret and reflect on these challenging scenarios as they unfold. Thus, broad, complex topics of professionalism are reduced to bite-sized lessons, outlined on each card, thereby helping the student focus and reflect on just one or two issues at a time in the clinical setting.

The ToolKit attempts to address the question of how to teach professionalism to medical students using their reflections and observations from their clinical encounters to guide small-group discussions so that lessons can be derived, learned, applied, and practiced in subsequent clinical encounters. What makes this teaching tool unique is that it integrates the teaching of lessons and skills in professionalism into the

day-to-day clinical experiences of medical students, thus making these important lessons clinically relevant and applicable.

The use of narratives to guide the process of reflection and initiate small-group discussions is an important part of this teaching process. Teaching by narrative makes abstract concepts more concrete and immediate and contextualizes information by creating the framework on which students can build new knowledge, thus improving retention and understanding of these concepts.¹³ There is a large body of literature describing how narrative-based learning leads to greater empathy in medical students and to a more patient-centered approach.¹⁴⁻¹⁷

The ProComp ToolKit is now being used as a pilot reflective practice module for third-year medical students enrolled in the University of British Columbia's rural longitudinal integrated clerkship (LIC). The beginning of clinical clerkship, often the third year of medical school, is the ideal time to engage students in reflecting on the unfolding medical realities and tragedies of people's lives. Studies have shown that third-year clerkship is the time in a medical student's development when erosion of ethics and values is the most pronounced.^{3,7,18,19} Ofri has written about the third year of training as "the darkest year of medical school."²⁰

Teaching professionalism using flash cards to prompt medical students to reflect on their clinical encounters is a unique teaching approach. A MEDLINE literature search of the past 10 years for studies related to teaching professionalism using reflection did not uncover any formal teaching methods or tools that integrated the teaching of professionalism into students' day-to-day clinical practice. In the last 10 or so years, there has been an increased focus on teaching professionalism through guided reflection, and there are many papers, too numerous to cite here, that highlight the importance of reflection in the development of professionalism skills. A search of *MedEdPORTAL* produced only two publications that used reflection to teach professionalism. One of these described a reflective writing exercise for medical residents that promoted self-directed learning through reflection and reconsideration of events and perspectives.²¹ The other used narrative reflection in a family medicine clerkship to teach cultural competence.²²

Methods

The ProComp ToolKit (Appendix A) is a set of 28 flash cards, grouped into six domains of professional competencies: Communications, Ethics, Professionalism, Self-Care, Self-Awareness, and Lifelong Learning. ProComp ToolKit instructions are also included at the beginning of Appendix A. The ToolKit is a stand-alone teaching tool. No resources or tools are needed other than the flash cards.

The target learners were third-year medical students entering a rural LIC in British Columbia, Canada. Students met as a small group with one or two facilitators every 2 weeks for 60-90 minutes throughout their clerkship year. There were only two self-appointed facilitators who were involved with this project: one the creator of the ProComp ToolKit and one the LIC programme site director. As such, there was no formal facilitator training.

At each meeting, students were each given the same card to be used during the 2-week period following the meeting. The ToolKit cards were numbered only to indicate which ones would be more appropriate for early use, but the choice of card or card sequence was at the facilitator's discretion. The flash card topics were reviewed by the group. The tasks and tips on the reverse side of the card were briefly discussed at each meeting before sending the students off to their next 2 weeks of clinic.

Students were prompted by text several times through the 2-week period to look at their cards and then watch out for examples of the defined issues while doing their rounds. They were also encouraged to bring narratives back to the group for the following meeting.

After 2 weeks in clinic or on the wards, the group reviewed the designated flash card with the facilitator(s), who encouraged students to share their stories and reflections, discuss their experiences and challenges, and problem-solve with their colleagues. Flash cards were sometimes reused later in the year to review and reiterate professionalism skills.

The following is a brief list of example questions that were used by the facilitator(s) to promote discussion, with intended outcomes/skills/processes noted in parentheses:

- “What do you think you could have done to make this patient feel less invisible? What would others do? What will you try to do next time?” (Group problem solving, acquiring skills for practice in subsequent clinical encounters.)
- “Do you think the patient fully understood what Dr. X was explaining to them? What were the barriers to communication here? How could these have been addressed? How would you explain this issue to the patient?” (Helping students adopt good habits of patient interaction while recognizing and rejecting poor models of communication, practicing skills for next time.)
- “Has anyone else felt powerless in that kind of situation?” (Validation of students’ experiences.)
- “Why did that feel wrong to you?” (Validation of students’ values and ethics.)
- “Why do you think Dr. X found themselves doing that? How might you talk to Dr. X about their approach?” (Discussion of the origin and nature of negative behaviors and attitudes that can become normalized in patient care, acquiring skills in communicating with preceptors.)
- “Was your patient informed enough to make a real decision? How could the patient have been included?” (Asserting the primacy of patient-centered care and patient autonomy.)
- At the end of the clerkship year, the students were asked to do a course evaluation (Appendix B) in which they identified one or two cards that had been most instrumental to their learning and their professional identity development and wrote a short narrative highlighting the lessons learned. Students were given the choice to write about a past experience from their LIC year or to wait until they had started their fourth-year electives and write about a standout experience related to one or more of the flash cards.

Results

A total of 18 students completed the ProComp course over a period of five LIC cycles from 2013 to 2017. Fifteen students completed the evaluation. Some students wrote narratives based on only one card while others wrote narratives based on four or five cards that they felt were most impactful to their learning, acquisition of skills, and professional identity development. As explained above, some of these students did not complete the evaluation until well into their fourth years. All students consented to the publication of their narratives. The narratives that follow have been reproduced in part or in whole from these student responses and have been altered slightly to maintain confidentiality of students and patients. Fourth-year medical student narratives are followed by the notation MS4.

A selection of student commentaries about the value of the ProComp program has also been included below. These commentaries are grouped under the fourth theme, which relates to self-awareness, as they concern students finding a voice and devising coping strategies based on flash card–prompted discussions. These commentaries, along with others not included here, express clearly the value to students of having a safe or protected space and time to discuss and process the complex ethical and emotional issues confronted daily in the practice of medicine.

The following narratives and student commentaries represent about one-third of the collected writing pieces. They were selected as the best examples of how the Educational Objectives were achieved using the ProComp ToolKit flash cards and are organized into the four broad themes outlined in the objectives.

- Theme: Identify good and bad behaviors and attitudes relating to patient care and interactions by reflecting on clinical experiences as they unfold.
 - Card 1: The Invisible Patient (Professionalism): “This was a card that we fortunately were exposed to quite early and came up numerous times in both patient encounters and conversations with other health professionals. I can remember one such occasion where I was working with a specialist performing an inpatient consult. He wanted me to evaluate the lung fields for a positive finding. When I finished (I was on the patient’s right, he on the left) he asked me to tell him the findings. He then started to state the differential we would look at which included cancer, pneumonia, CHF etc. I could tell the patient was looking extremely worried and stressed seeing us speak over him in medical terms and using phrases like cancer. It would have been so simple for the physician to begin by explaining to the patient that he did not have any of these things and this was a teaching moment, or just wait until we were away from the patient to discuss those things.”
 - Cards 2 and 13: Out With the Bad and Lingo Check (Communications): “Overall, I think I have been paying attention to interactions between my peers, colleagues and mentors and their interactions with patients, and asking myself the question: what is the patient taking away from this interaction? Is the information being communicated effectively? How could it be better? I think this has been really helpful in improving my communication with patients or troubleshooting when patients are frustrated with the interaction” (MS4).
- Theme: Identify core principles of ethics (confidentiality, consent, and autonomy) as they apply to patient care.
 - Card 5: Mum’s the Word (Ethics—Confidentiality): “This is another great card that really influenced my approach to patients. It would have been easy to develop bad habits around patient confidentiality and start doing things that I’ve seen many physicians do which break patient confidentiality. Things like:
 - “Examining patients in the ER on a stretcher in the hall: Because of this card I refuse to do this. . . . I have the courage to stand up for the patient’s confidentiality. . . .
 - “Not checking that it is okay to share freely around a patient’s family: because of this card, it is the first thing that I ask when I enter a room and a patient has family there, after introducing myself.
 - “Sharing information with family when gaining collateral: before this card I would just call family members, tell them about the patient and ask for collateral history. Now I call, ask for some information and ask the patient how much I can share” (MS4).
 - Card 22: You’re Not the Boss (Ethics—Autonomy): “This card really stood out for me. In the routine of what doctors do in treating and managing their patients, it is easy to forget that the patient has any choice in the matter . . . I had an experience with a patient last year. . . . a woman who we had recently diagnosed with terminal gastric cancer. Her family and she were quite anxious about the next steps. We explained that there was very little we could do. . . . We talked a little about the possibility of palliative chemotherapy . . . but also the effect on quality of life. . . . We didn’t recommend one treatment over the other, but instead asked her how she wanted to live the last days of her life. We also reassured her that she was allowed to change her mind at any point. At this point there was a tangible release of tension in the room. The family really appreciated that we brought all options to the table and communicated that they felt heard. . . . Illness can take away the sense of control that someone has over their life. Giving space for a patient to state their preferences and giving them a list of options I think really helps restore some sense of control. . . . I learned the value of accepting a patient’s choice as their own and relinquishing the paternalistic ideal that they accept all of your advice as the word of God. It helped me sort through a lot of the stress and frustration I feel when dealing with certain types of patients.”
- Theme: Describe clinical experiences that had an impact on professional behaviors and attitudes related to patient care and communication:

- Card 11: All in the Family (Professionalism): “I had a particular patient where it was difficult to get any history from so I called family for collateral. As a result we had a great conversation about the patient and her care. One of the things that concern the family was that they felt that they weren’t getting any answers even though the son was designated as the power of attorney (there was written consent filed in the chart). He had called multiple times to the nursing station but was refused any information. Because of this I became sort of a middleman to try to get them some of the information they were looking for. Although I wasn’t able to provide them with all the information that they had wanted, they expressed their appreciation of being acknowledged and were grateful that somebody had attempted to help. This just reminded me and reemphasized how important it is to ask family if they have any questions and to address their concerns.”
- Card 13: Lingo Check (Communications): “Recently, I was working in the emergency room during a fourth year elective rotation and my preceptor and I had to deliver some devastating news to a patient . . . who was approximately 8 weeks pregnant, and was having some heavy spotting and abdominal cramping. . . . She and her partner had been trying very hard to conceive for a very long time, and that she was so—so—happy to finally be pregnant and was clearly concerned about her current symptoms. After blood work and an ultrasound were done, it was clear—unfortunately, she was miscarrying, and we had to deliver the news. I asked my preceptor if I could be the one to deliver the news, but if I could also practice speaking the conversation with her before I discussed it with the patient. She agreed, and as I started to speak, I could almost instantly hear myself over-complicating the conversation. ‘Unfortunately, Mrs. X, based on the blood work and ultrasound it looks like you’re having a spontaneous abortion. We can’t see any evidence of a gestational sac, but we have ruled out ectopic pregnancy. . . .’ I stopped myself right in my own tracks. Spontaneous abortion? Gestational sac? Ectopic pregnancy? These certainly weren’t words that I was familiar with before medical school, and these certainly weren’t words that I could expect someone else to know, too. I had medicalized the conversation because I was so uncomfortable (for better and for worse) delivering the news to this woman, and I couldn’t help but think that maybe this is why medical education is so drawn to replacing common-speak with medical lingo—to the detriment of the patient” (MS4).
- Theme: Devise self-awareness strategies around relaxation techniques, work-life balance, feeling comfort with uncertainty, cognitive dissonance, and recognizing personal values that interfere with patient care.
 - Card 18: Cloak of Confidence (Professionalism): “This card really shook me because in 3rd year in particular, I felt like a big fat fraud. I felt that I was putting a mask of calm and confidence over a lot of inner doubt and restlessness. Having that card prompted a discussion around these issues which didn’t alleviate my anxiety or self-doubt completely, but did allow me to realize that others experienced a similar feeling. As time goes on, I feel less like I am putting something on and more like things come from within. But there was a time when that cognitive dissonance between what I felt (sheer terror) and what I felt I had to portray (some semblance of calm) was in and of itself distressing. Having this card opened the door to that conversation that I wouldn’t have otherwise had” (MS4).
 - Card 18: Cloak of Confidence (Professionalism): “I was struck by the response on the week that we did the ‘Cloak of Confidence’ card. The emotion I saw from my colleagues was eye-opening. I was (am) definitely feeling some of the same emotions that they expressed—feeling incompetent, unsure, less than confident (in many aspects of life, not just medicine). We had of course expressed doubts to each other in private, joked about failing this or that test but I don’t think we’d ever all opened up about how scared we felt a lot of the time. . . . In some ways it was heartening not to feel alone in that, and yet some part of me questioned why the three of us, all bright, reliable, conscientious people would be made to feel this way. It also made me think about the expectations placed on us from our preceptors, and how those differed among each

of them. The card started a narrative that I haven't fully arrived at the end of yet, and I'm not sure that I ever will."

○ Student commentaries:

- "The mass volume of information being learned throughout medical school is daunting, and it is often easy to become so focused on it that you forget you are dealing with human beings, who have their own stories and experiences and are, frankly, terrified to be in their own shoes. I found ProComp to be a great way to stay in touch with my more 'human' side. It made me aware of, and even look for, opportunities where I could interact with patients at their level, helping manage their uncertainties and concerns. It cultivated my sense of decency in what can be a fairly dehumanizing environment."
- "The ProComp program was a valuable part of my medical education. . . . I can honestly look back on that year and recognize the moments in my training where I was actively being pulled towards the group mentality (negative models). I recognize multiple moments where we discussed these uncomfortable situations as they arose, allowing me to recognize them for what they were and make the active decision not to let myself think or behave in this certain way. I think that a lot of the lessons learned through the program have become second nature to me."
- "I value the reflection and shared stories that expanded my thinking during my first year of clinical medicine exposure. . . . It was protected time to focus on improving our approach and thoughts around patient care—the whole reason we got into medicine in the first place. It was also a place where our experiences were normalized and where we were reminded that if you see something that feels/looks off, that doesn't have to be our goal or our target."

Discussion

At our site, the ProComp ToolKit gave medical students a framework to reflect on their clinical encounters as they unfolded, acquiring numerous skills essential to their professional development aided by a process of facilitated group discussion.

The student narratives and commentaries above reveal a depth of reflection and learning that is rich and meaningful, demonstrating how students can be encouraged to access their inner thoughts, emotions, reactions, and values and bring them to a conscious place for discussion. The narratives also reveal how the flash cards enabled the students to focus on one issue at a time in the clinical setting and helped guide reflection on the issue at hand. Students themselves attributed the lessons learned and skills acquired in this course directly to the use of the flash cards. Even more importantly, these lessons are being carried forward into subsequent years of training, as demonstrated by the narratives and commentaries written by those students who had moved on to fourth year.

The student commentaries and narratives also demonstrate how students can and do remain engaged with their values and how they feel more confident asserting these values in their work environments. In these written pieces, we see clearly that the hidden curriculum discussed in the Introduction is alive and well, even in a small community such as ours. It is worrisome to note how one student described being "pulled towards the group mentality" but rewarding to see that this student was and is able to make active decisions not to let themselves be drawn in. This is one of the most important outcomes that we seek to achieve in this reflective exercise: increasing students' awareness of this hidden curriculum and providing them with skills to resist its pull and develop positive communication and coping strategies.

Other Lessons Learned

Group size and dynamics are important considerations with respect to the depth and detail of the discussions. Sharing experiences in a small group of peers with a facilitator is an important part of the process of learning, practicing, and retaining skills. Our LIC site has three or four medical students each

year, so the group tends to be tight-knit and discussions flow well. Students are encouraged to contribute equally although there are often one or two in each group who are avid contributors and help get the conversation going. When determining ideal group size, there are a number of factors to consider, including the students' sense of safety and confidentiality, the amount of time designated for the session, the dynamics that may be created in a larger group, and facilitator availability.

Facilitator skill is essential to the small-group discussion process. At our site, over the years, we have learned the importance of asking questions, gently probing students for their opinions and observations, and actively listening to their responses—avoiding the need to comment at length on any issue. Engaging students to reflect on their experiences and to explore different ways of knowing or understanding human interactions is what Merizow called “transformative learning.”⁹ He stated that transformative learning “aims to empower students to resist the negative effects of the hidden curriculum by promoting critical thinking.”⁹ This process can be risky and intellectually and emotionally challenging for facilitators and students. It requires a philosophical commitment from the facilitator—what we have called buy-in at our site. If the facilitator is skilled and believes in this approach, the students are more likely to believe in the process and participate in transformative learning.

At our site, only two facilitators have been involved since the inception of this project.

We have not yet started the process of expanding our search for more facilitators, as the project is still in a pilot phase. Thus, we have not yet needed any formal facilitator training. A discussion of how to train facilitators is beyond the scope of this publication. However, there are a number of facilitator training modules that can be accessed in *MedEdPORTAL* if needed.²³⁻²⁵

A meeting frequency of every 2 weeks works well at our site. This interval allows students ample time to look for card-based learning opportunities in the clinical setting. A meeting interval of more than 2 weeks seems to result in a loss of momentum and student initiative to continue to be alert to clinical scenarios that would make for interesting discussion. A meeting interval of less than 2 weeks is difficult from the point of view of scheduling and facilitator time. Meetings at our LIC site are scheduled for 60-90 minutes, which gives us sufficient time to discuss narratives and develop skills without encroaching too much on busy student and facilitator schedules. Providing food and drinks helps to create a more relaxed setting.

Prompting students to look at their cards every 2-3 days has been helpful from the student perspective. We have found that as the year progresses and students get more and more swamped with clerkship duties and responsibilities, flash cards can get forgotten. We have posted a big copy of the designated card in various key locations in the hospital, in full view of students, nurses, physicians, and health care staff. Students are also encouraged to share the card topic with their preceptors and other mentors.

Transferability, Challenges, Limitations, and Future Implementation

The ProComp ToolKit has so far been used only with third-year LIC students in this pilot phase of implementation at the University of British Columbia. However, the approach used at our site can be easily transferred to teaching students at any stage of their clinical learning. The ToolKit is now available electronically such that each flash card is a separate file that can be shared with as many group members as needed. The method of distributing the flash cards can be modified depending on teaching objectives or student needs—whether in numeric sequence one at a time, as groups of cards, or as the entire deck of 28 cards. The lessons in professionalism embedded in the ProComp ToolKit are also generalizable to all stages of clinical learning and practice. The implementation of these cards can be modified if teaching residents or if engaging staff physicians to be more reflective about their patient interactions and more effective as role models and teachers.

A significant challenge in terms of expanding the use of this teaching tool to other sites or promoting its use in a traditional block-rotation clerkship program with large numbers of students is how to recruit and train facilitators to engage students in meaningful discussion. As noted above, in order to engage students

in a transformative learning experience, facilitators also have to be engaged and committed to the process.

We understand that our course evaluation method is limited as it is based on the students' self-reporting of the impact of the intervention; it therefore does not provide an objective measure of professional competency skills acquisition in these students. Also, as this evaluation was done at a single point in time in students' medical education, it does not necessarily provide us with an understanding as to whether these lessons and skills will be retained into the more distant future. This would be an interesting area of future study as greater numbers of students enroll and graduate from this educational program.

We believe that this teaching method is most needed in these large block-rotation clerkships. Establishing a number of small ProComp groups for these medical students would give them a much-needed anchor or home base where they could disentangle themselves from the chaos and conflict of their clinical experiences and begin to develop their own authentic professional identities as ethical, compassionate, and patient-centered doctors.

Patricia Seymour, MD, CCFP: Clinical Instructor, Department of Family Medicine, University of British Columbia Faculty of Medicine

Maggie Watt, MD, CCFP, FCFP: Program Director, Integrated Community Clerkship, University of British Columbia Faculty of Medicine

Mark MacKenzie, MD, CCFP: Clinical Associate Professor, Department of Family Practice, University of British Columbia Faculty of Medicine; Program Director, Family Practice Residency Program, University of British Columbia Faculty of Medicine

Michael Gallea, MD: First-Year Resident, Department of Family Medicine, McMaster University Michael G. DeGroote School of Medicine

Disclosures:

None to report.

Funding/Support:

None to report.

Prior Presentations:

Watt M, Seymour P. Innovation in reflective practice teaching: a hands-on session with the ProComp Flashcards. Workshop presented at: CLIC in Carolina Conference; October 2015; Asheville, NC.

Watt M, Seymour P. Innovation in reflective practice teaching: a hands-on session with the ProComp Flashcards. Workshop presented at: CLIC 2016 Conference; October 2016; Toronto, Ontario, Canada.

Seymour P, Gallea M. Innovation in reflective practice teaching: a hands-on session with the ProComp Flashcards. Workshop presented at: Family Medicine Forum 2017; October 2017; Montreal, Quebec, Canada.

Watt M, Larsen C. Innovation in reflective practice teaching: a hands-on session with the ProComp Flashcards. Presented at: CLIC 2017 Conference; October 2017; Singapore.

Ethical Approval:

Reported as not applicable.

References

1. Yamey G, Roach J. Witnessing unethical conduct: the effects. *West J Med.* 2001;174(5):355-356.
2. Mahood SC. Medical education: beware the hidden curriculum. *Can Fam Physician.* 2011;57(9):983-985.
3. Hirsh D. Longitudinal integrated clerkships: embracing the hidden curriculum, stemming ethical erosion, and transforming medical education. In: Hafferty FW, O'Donnell JF, eds. *The Hidden Curriculum in Health Professions Education.* Hanover, NH: Dartmouth College Press; 2014:193-202.
4. Kay J. Traumatic deidealization and the future of medicine. *JAMA.* 1990;263(4):572-573. <https://doi.org/10.1001/jama.1990.03440040111039>

5. Feudtner C, Christakis DA, Christakis NA. Do clinical clerks suffer ethical erosion? Students' perceptions of their ethical environment and personal development. *Acad Med*. 1994;69(8):670-679.
6. Neumann M, Edelhäuser F, Tauschel D, et al. Empathy decline and its reasons: a systematic review of studies with medical students and residents. *Acad Med*. 2011;86(8):996-1009. <https://doi.org/10.1097/ACM.0b013e318221e615>
7. Newton BW, Barber L, Clardy J, Cleveland E, O'Sullivan P. Is there hardening of the heart during medical school? *Acad Med*. 2008;83(3):244-249. <https://doi.org/10.1097/ACM.0b013e3181637837>
8. Langendyk V, Mason G, Wang S. How do medical educators design a curriculum that facilitates student learning about professionalism? *Int J Med Educ*. 2016;7:32-43. <https://doi.org/10.5116/ijme.5683.c2e0>
9. Mezirow J. *Fostering Critical Reflection in Adulthood: A Guide to Transformative and Emancipatory Learning* San Francisco, CA: Jossey-Bass; 1990.
10. Birden H, Glass N, Wilson I, Harrison M, Usherwood T, Nass D. Teaching professionalism in medical education: a Best Evidence Medical Education (BEME) systematic review. BEME Guide No. 25. *Med Teach*. 2013;35(7):e1252-e1266. <https://doi.org/10.3109/0142159X.2013.789132>
11. Branch WT Jr. The road to professionalism: reflective practice and reflective learning. *Patient Educ Couns*. 2010;80(3):327-332. <https://doi.org/10.1016/j.pec.2010.04.022>
12. Wald HS, Borkan JM, Taylor JS, Anthony D, Reis SP. Fostering and evaluating reflective capacity in medical education: developing the REFLECT rubric for assessing reflective writing. *Acad Med*. 2012;87(1):41-50. <https://doi.org/10.1097/ACM.0b013e31823b55fa>
13. Szurmak J, Thuna M. Tell me a story: the use of narrative as a tool for instruction. Presented at: Association of College and Research Libraries Conference; April 10-13, 2013; Indianapolis, IN.
14. Arntfield SL, Slesar K, Dickson J, Charon R. Narrative medicine as a means of training medical students toward residency competencies. *Patient Educ Couns*. 2013;91(3):280-286. <https://doi.org/10.1016/j.pec.2013.01.014>
15. Cake SA, Solomon L, McLay G, O'Sullivan K, Schumacher CR. Narrative as a tool for critical reflective practice in the creative industries. *Reflective Pract*. 2015;16(4):472-486. <https://doi.org/10.1016/j.pec.2013.01.014>
16. Charon R. Narrative medicine: a model for empathy, reflection, profession, and trust. *JAMA*. 2001;286(15):1897-1902. <https://doi.org/10.1001/jama.286.15.1897>
17. Rees CE, Monrouxe LV, McDonald LA. Narrative, emotion and action: analysing "most memorable" professionalism dilemmas. *Med Educ*. 2013;47(1):80-96. <https://doi.org/10.1111/j.1365-2923.2012.04302.x>
18. Hojat M, Vergare MJ, Maxwell K, et al. The devil is in the third year: a longitudinal study of erosion of empathy in medical school. *Acad Med*. 2009;84(9):1182-1191. <https://doi.org/10.1097/ACM.0b013e3181b17e55>
19. Treadway K, Chatterjee N. Into the water—the clinical clerkships. *N Engl J Med*. 2011;364(13):1190-1193. <https://doi.org/10.1056/NEJMp1100674>
20. Ofri D. *What Doctors Feel: How Emotions Affect the Practice of Medicine*. Boston, MA: Beacon Press; 2013.
21. Wagner L, Roth L. Reflective narrative exercise. *MedEdPORTAL*. 2015;11:10238. https://doi.org/10.15766/mep_2374-8265.10238
22. Elliott D, Schaff P, Woehrlé T, Walsh A, Trial J. Narrative reflection in family medicine clerkship - cultural competence in the third year required clerkships. *MedEdPORTAL*. 2010;6:1153. https://doi.org/10.15766/mep_2374-8265.1153
23. Fulton T, Burke C, Hyland K, Kruidering-Hall M, Masters S. Workshop in a box: visual demonstration of small group facilitation techniques for faculty development. *MedEdPORTAL*. 2010;6:5103. https://doi.org/10.15766/mep_2374-8265.5103
24. Fishman L, Newman L. Dr. Novel and Dr. Sage: developing expertise in leading small group discussions. *MedEdPORTAL*. 2014;10:9838. https://doi.org/10.15766/mep_2374-8265.9838
25. Li L, Brieger K, Markovitz A, et al. Facilitating facilitation: how to promote active learning. *MedEdPORTAL*. 2014;10:9782. https://doi.org/10.15766/mep_2374-8265.9782

Received: February 14, 2018 | Accepted: August 14, 2018 | Published: September 15, 2018