Surgeons are frequently perceived by medical students to be uncompassionate, resolute and individualistic. Surgical education often prioritizes teaching and learning approaches that perpetuate these perceptions. In other specialties, engaging patients in education has shown promise in refocusing attention from the technical and procedural aspects of care toward the humanistic and social aspects. Despite proven favourable outcomes for both patients and students in many clinical areas, a “patient as teacher” approach to surgical education has yet to be adopted widely in Canada. A patient as teacher program was developed for surgical clerks at the University of Toronto with the goal of emphasizing the humanity of the patient, the psychosocial impact of a surgical diagnosis of breast cancer on patients and their families, and the social and humanistic roles for surgeons in providing patient-centred care. We report on the program’s development process and pilot session.

**Summary**

Surgeons are frequently perceived by medical students to be uncompassionate, resolute and individualistic. Surgical education often prioritizes teaching and learning approaches that perpetuate these perceptions. In other specialties, engaging patients in education has shown promise in refocusing attention from the technical and procedural aspects of care toward the humanistic and social aspects. Despite proven favourable outcomes for both patients and students in many clinical areas, a “patient as teacher” approach to surgical education has yet to be adopted widely in Canada. A patient as teacher program was developed for surgical clerks at the University of Toronto with the goal of emphasizing the humanity of the patient, the psychosocial impact of a surgical diagnosis of breast cancer on patients and their families, and the social and humanistic roles for surgeons in providing patient-centred care. We report on the program’s development process and pilot session.

**Theoretical framework**

At the centre of the patients as teachers initiative are the patient volunteers who share their stories with students. By listening to the patients’ experiences with breast cancer and their journey through the health care system, medical students are exposed to a side of the illness experience and its effects that is otherwise omitted by traditional surgical education. Discussions between patient volunteers and medical students can foster a more humanistic sensibility in medicine, and stories can allow students to understand and respond to others’ distress, developing empathy. The physical presence of and interactions with the patient storyteller may further foster these effects. By listening to patient-teachers’ stories, students may start viewing their own medical practice in a more humanistic way.
**Program Design and Implementation**

Our program design strategy was based on co-creation and integrated knowledge translation approaches as we engaged multiple stakeholders in the development of the initiative. Feedback from learners and patient-teachers in the pilot and input from collaborators and senior advisors helped us develop the presented implementation plan for surgical clerkship integration.

**Program Development and Piloting**

Three patients with breast cancer were purposefully selected from the hospital’s patient advisory program and the first author’s breast surgical practice and invited to be patient-teachers in a pilot patient as teacher session with 7 medical students. Before the session, the patient-teachers met with a social worker and, together, they agreed on and developed a list of learning points for the students. No physicians were present during the session to avoid competing interests and to foster a safer dialogue between patients and students.

The patient-teachers were encouraged to share both positive and negative health care system experiences during their breast cancer treatment. The pilot session was facilitated by the same social worker who provided orientation. A medical anthropologist evaluated the pilot session through semistructured interviews with patient-teachers and a focus group with the students.

Based on the successful pilot session and encouraging results (Box 1), stakeholders and program advisors decided that a patient-teacher program would benefit both surgical clerks and patient-teachers and should be integrated into the surgical clerkship for all medical students.

Based on pilot feedback, a program website (www.patientastateacher.com) was developed to orient patient-teachers and students to program goals and resources, provide an online platform for those interested in becoming a patient-teacher, provide online assistance in program implementation at other universities nationally, share students’ art, acknowledge the program sponsors and recruit future donors.

**Box 1. Results from pilot patient as teacher program**

**Student feedback**
- Gained a better appreciation for the surgeon’s role in longitudinal care
- Appreciate the importance of a strong therapeutic alliance between a surgeon and patient, including shared decision-making
- The session was an important reminder to treat the “whole patient” rather than just focus on the technical aspect of surgery

**Patient-teacher feedback**
- Patient-teachers found the session to be therapeutic and empowering
- Patient-teachers agreed on the message they wished to articulate: treat the patient as an individual and not “a body on the table,” and understand the importance of the patient’s support system and how they relate to it
- All 3 patient-teachers were willing to participate again in the program

**Patient as Teacher Program Description**

**Context**

The University of Toronto (UofT) MD program is made up of 4 distinct academies and comprises groups of UofT’s affiliated hospitals and health care sites. There are approximately 10–12 students at any given time on the surgical clerkship at each academy. The program timeline vis-à-vis the structure of the 8-week surgical clerkship is illustrated in Figure 1.

**Curriculum: 3 workshops**

The patient as teacher program consists of 3 workshops over the 8-week surgical clerkship. The first 2 are patient-teacher-driven sessions in which 2 breast cancer survivors discuss how breast cancer and the associated surgery has affected their lives and reflect on their encounters with surgeons.

Each academy has a designated group facilitator with experience in patient engagement. The facilitator’s role is to highlight learning opportunities for students, summarize key messages brought up by patient-teachers and ensure patient-teachers feel comfortable and safe. Facilitators maintain a limited role, as it is of utmost importance that the session is driven by what patient-teachers feel is important.

The third workshop is with a surgical faculty for which students produce an arts-based reflection piece, in any chosen medium, to juxtapose what they learned from patient-teachers with a personal surgical clerkship experience. The purpose of this assignment is twofold: including the arts in surgical and medical education can provide a useful forum for reflection and empathy development while also providing a window to the students’ learning experience.

Each academy has a designated surgical oncologist faculty lead with an academic interest in surgical education. They lead the third session in which students present their art-based reflection piece (e.g., poems, graphic art, songs). This is followed by a group discussion highlighting the humanistic and ethical considerations that were raised. An example of a student-generated arts-based reflection piece can be seen in Figure 2.

**Conclusion**

We have developed a program that addresses a significant gap in surgical education. Patient as teacher programs offer a more humanistic approach to medical education while engaging patients in the education process. Patient-teachers’ stories coupled with guided reflection sessions may enhance students’ learning and support their understanding of medicine as a human, social and
| Week of Surgery Rotation | Events |
|-------------------------|--------|
| 1                       | Prelude to Surgery |
|                          | A week-long orientation and introduction to important surgical topics. Each day consists of a faculty member leading a session on a particular aspect of surgery, residents leading didactic learning based on their sub-specialty, and a skills session in which residents demonstrate the basic skills of their sub-specialty. The week concludes with a Trauma Evaluation and Management course. |
| 2 - 4                   | Patient as Teacher Workshop #1 |
|                         | A 60-75 minute session in which students learn from previous patients who share their lived experiences and surgical journeys. This first workshop takes place during the prelude to surgery week. |
| 5 - 7                   | Surgery Sub-Rotation #1 |
|                         | A 3-week surgery sub-rotation in either general surgery or one of the following sub-specialties: Cardiovascular surgery, Neurosurgery, Orthopedic surgery, Plastic and reconstructive surgery, Urology, Vascular surgery. |
| 8                       | Patient as Teacher Workshop #2 |
|                         | A 60-75 minute session in which students learn from previous patients who share their lived experiences and surgical journeys. This second workshop takes place towards the end of the first surgery sub-rotation or early during the second sub-rotation. |
|                         | Surgery Sub-Rotation #2 |
|                         | A 3-week surgery sub-rotation in either general surgery or one sub-specialty (whichever the student did not participate in during the first sub-rotation). |
|                         | Rotation Wrap-Up and Exams |
|                         | The final week consists of students attending Central Seminars, debriefing, and preparing for exams. The oral and written OSCEs will take place towards the end of the week. |
|                         | Patient as Teacher Workshop #3 |
|                         | This third workshop facilitated by a faculty member is a session in which students reflect on hearing from patient teachers and how the program has tied in with their surgery clerkship rotation. Students will prepare a creative reflection piece beforehand. |

Fig. 1. Patient as teacher program timeline vis-à-vis the structure of the 8-week surgical clerkship.
moral activity. Next steps include aligned evaluation of process and outcome as well as research into the multiple meanings of the patient as teacher experience.

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