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## **Medical Students using Theatre to Engage the Elderly in Long-Term Care Facilities: Fostering Empathy through a Humanities Pilot Project**

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### **Abstract**

The implementation of humanities, and particularly theatre, into the medical curriculum is a nascent but promising field. The Theatre in Community Health Project (TCHP) is an initiative devised by University of Ottawa medical students. It focuses on the use of theatre arts as a performance and interactive activity with residents in a long-term care facility. This article provides information about the TCHP, and the qualitative research carried out to assess progress. Two cohorts of first year medical students at the University of Ottawa participated in the TCHP at Villa Marconi Long Term Care Facility (LTC) over two consecutive years. Medical student participants subsequently each completed a critical reflection of their experience and these were used as the basis of our thematic analysis. Using an inductive thematic analysis, 17 themes and the frequency of statements pertaining to each theme were identified. The analysis of the students' reflections showed two overarching themes: insight into communicating with geriatric populations and improved insights into long term facilities. Our study of the TCHP program shows a relationship between medical students' experiences with audience-oriented theatre performance and increased capacity for empathy and communication toward the targeted audience. The mechanisms by which this increased capacity takes place may be twofold: first, enhanced awareness of the behavioral components of empathy and communication; and second, deeper appreciation for how each patient's individual context

shapes the clinical encounter. We also describe the impact on medical students' developing communication skills and empathy after they complete the TCHP.

## **Introduction**

There has been a recent push to integrate humanities-based learning into undergraduate medical curricula to improve medical students' empathy and communication skills, often through the exploration of artistic practices (Supe, 2012; De la Croix et al., 2011; Evans & Greaves, 2010).

Theatre is a practice that can be modified to explore empathy and to gain an understanding of patient experiences. Studies show that these theatre-based educational interventions are likely to improve empathy and communication skills (Sawyer et al., 2017; Shapiro & Cho, 2011; Deloney & Graham, 2003). Most studies that examine the implementation of theatre into medical education either require students to watch a performance about the experience of illness or to take part in exercises with pre-selected scenarios on patients, the experience of illness, and care delivery (Sawyer et al., 2017; Middlewick et al., 2012; Watson, 2011; Matharu et al., 2010; Savitt, 2010). However, few studies explore the experiences of medical students in exercises that use theatre arts to engage a target audience, in this case patients; the exception is hospital clowning. Clowning, by traditional definition, is a deeply interactive medium of performance rooted in improvisation and predicated on the performer's ability to engage effectively with the audience through the utilization of communication skills. The academic literature on the use of clowning in undergraduate medical training is limited (Dionigi & Canestrari, 2016; Kontos et al., 2016; Finlay et al., 2014).

Our study examines the impact of theatre arts on medical students' capacity for empathy and communication skills through the creation and participation in a performance for a pre-selected target-audience. The University of Ottawa medical students created the Theatre for Community Health Program (TCHP), a novel theatre program that involved the creation of a play, inspired by various theatre ideologies and themes, rehearsal, and a performance for the geriatric community at the Villa Marconi long-term care center (LTC).

## **Methods**

Our study focuses on the first two consecutive years of the Theatre for Community Health Program. Each year, students were asked to: 1) research and compile common issues relevant to geriatric populations; 2) write and rehearse scripts based on the results of this research, and 3) perform the scripts for staff and residents within the LTC. The performances used a diversity of approaches ranging from a dialogue-based and health-education production to slapstick romantic comedy via use of *commedia dell'arte* to a choral sing-along. Both before and after their performances, students were required to reflect on their experiences (a free-form, written submission). The experiences of the first cohort of students were shared with the second cohort prior to the commencement of their involvement in the TCHP to allow for anticipation of barriers and improve program quality, thus allowing for a developmental evaluation of the TCHP program. Reflections from both cohorts were evaluated to identify recurring themes and patterns reported by student participants.

## ***Ethics Exemption***

This project obtained a Research Ethics Board (REB) exemption as “it falls within the context of quality initiative, quality improvement, quality assurance, and/or program evaluation.”

### ***Participants***

Participants were consenting first-year medical students completing their mandatory Community Service Learning (CSL) curricular requirement at the University of Ottawa, Faculty of Medicine. As a CSL program, TCHP had a key goal of developing communicative and empathic skills among the medical students.

This study was conducted with two different first-year cohorts, with 11 and 5 students participating in the 2016-2017 and 2017-2018 cohorts, respectively. Participants of male and female genders took part in this study, with their ages ranging from 20 to 27. Opportunity sampling was used in this study as participants were students who chose to participate in this CSL project.

### ***Villa Marconi LTC Facility (our Audience)***

Students were introduced to Villa Marconi LTC via a tour of the facility prior to any theatrical performances, which included an opportunity to interact with the LTC’s staff and residents on-site. A majority of residents were between ages 55-100, and lived with common multi-morbidities, such as diabetes and dementia. The TCHP team incorporated geriatric health care learning objectives within their creative development of the play.

### ***Theatre Rehearsals***

Students in both cohorts held 6-8 meetings to brainstorm and research pertinent issues related to the geriatric population to inspire the performances. The first cohort conducted a literature review on the health issues pertinent to the elderly population, such as diabetes, falls, emotional state of being, lifestyle, and diet. They also researched elements of the Italian culture as a majority of the residents at Villa Marconi identified as Italian. The first cohort ultimately chose diabetes, emotions and mood, and culture to include within two scripts.

The first cohort encountered language barriers (non-english speaking residents) and issues associated with the cognition of the residents as obstacles to audience engagement. As a result, the second cohort modified their script writing approach while carefully assessing the cognitive capabilities and topics of interest of the residents. They interviewed the residents and discussed topics such as the residents’ upbringing, memorable life events, and hobbies. The second cohort focused primarily on audience engagement via alternate forms of communication and developed culturally relevant themes within their script. They were inspired by Commedia dell’arte, a well-known Italian theatre performance style and used it to try to find cultural connections with the LTC residents.

Both cohorts received feedback on their communication skills, character development, and text analysis by attending an artists’ workshop offered by the Great Canadian Theatre Company, an independent theatre and artistic programming venue in Ottawa, Canada. As a result of this three-hour training, students were able to go further with their character analyses

and learned new methods to relate to and connect to their characters. Students were able to go beyond a narrow focus on their scripts and to embrace more improvisational techniques, such as listening to their colleagues and interacting with the audience. The GCTC company assisted the students in finding the significant elements within the text, so that they could attach intention and action. In addition, students were able to learn and practice many components of theatrical performance, including voice projection, body movement, and getting into character.

### ***The Performances***

The performances took place at the Villa Marconi long-term care (LTC) facility, a Ministry-designated LTC in Ottawa, which provides services to 128 elderly individuals.

The first cohort (2016/2017) created comedy scripts focusing on diabetes management and monitoring. They had scheduled multiple performances to accommodate the larger number of residents within the LTC who were interested in watching the performance. After analysis of the first cohort self-reflections and resident interviews, the second cohort (2017/2018) shifted their focus towards improving audience engagement by involving them into the performance (immersive theatre). The second cohort also incorporated topics discussed during resident interviews with students from the first cohort (e.g., residents' cultural backgrounds). They were largely inspired by Commedia dell'arte, a well-known Italian theatre performance style, given a majority of LTC residents were Italian. The second cohort utilized components of Commedia dell'arte in character and story development. They also attempted to connect performances to residents' lives in LTC (i.e., involving the staff). The second cohort encouraged audience participation during songs (e.g., sing-along, clapping along to the music, invite them to dance), inviting LTC residents to participate during storytelling (e.g., answering questions from students), and incorporating aspects of residents' lives in LTC within the script (i.e., involving staff).

### ***Data Collection and Analysis***

Embedded case design was the methodology used in this study. This methodology comprises both qualitative and quantitative analysis of multiple units participating in a single case study (Scholz & Tietje, 2002). As it relates to the present study, each unit corresponds to a different cohort of students, and both units are part of the TCHP as a whole. Gathering both qualitative and quantitative data allows for a quantitative appreciation of how frequently certain themes resurfaced in student reflections, in order to appropriately highlight which learning points and character development domains held the greatest meaning for them. The methodology also fits the long duration of the project (taking place over 2 years) (Bass et al., 2002). Confirmability of the data is one of the benefits of this research design too. This was evident in the study as participants from different cohorts reflected on similar ideas (linked to the same themes), hence enhancing the overall confirmability of the derived themes (Bass et al., 2002).

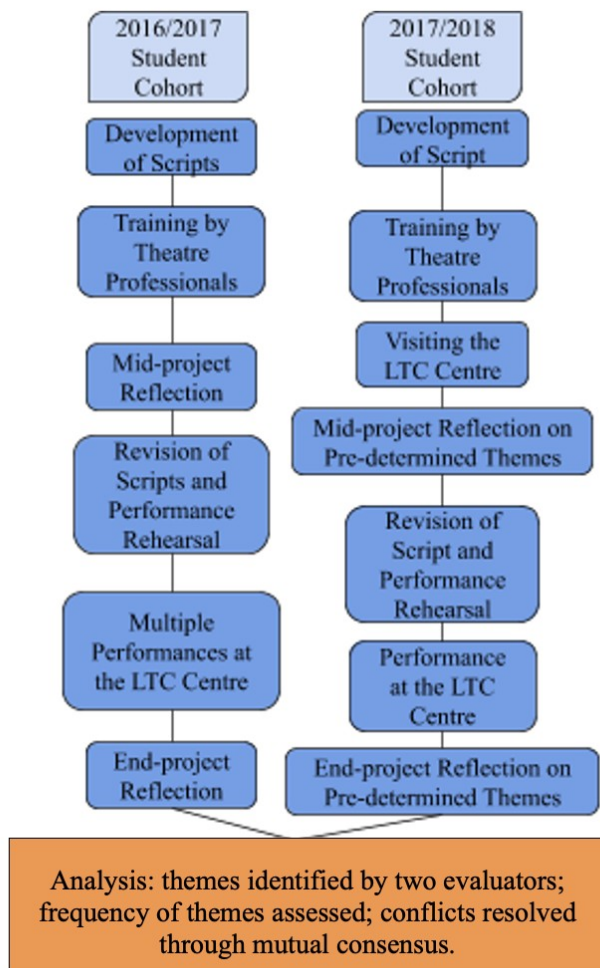
Thematic analysis, as proposed by Braun and Clarke (2006), was used for the qualitative data analysis. An inductive thematic analysis approach was used, which involved coding qualitative data without attempting to categorize the data into pre-identified themes. In the present study, codes were identified by reading and re-reading student reflections, without

paying attention to the themes that previous research may have identified. The data analysis process began by first familiarizing oneself with data through immersive reading and noting the preliminary patterns that emerged from the student reflections. Initial codes were then generated by organizing data into meaningful groups. Coding was done manually by giving equal attention to each data item and highlighting reflection points that might form the basis of repeating patterns across the data set. The codes were then sorted into potential themes and all the relevant coded data extracts were collated within the identified themes. The themes were then named and reviewed to ensure the data within the themes cohered meaningfully, and that clear distinctions were present between themes.

Students from both cohorts reflected on their experiences by completing written anonymous reflections at the mid-point and the end of the project. For the first cohort, a general statement was used to prompt reflective writing: "Please describe how you found your experience during your participation in the TCHP." The first cohort was able to comment on the script development, rehearsal and/or performances. For the second cohort, the same statement was used alongside pre-determined themes derived from the reflections of the first cohort. These reflections were analyzed independently by two evaluators (MJ and LF) for common themes. The assessors then met and agreed upon a common set of themes and looked at the frequency of their appearance (see results). The evaluators initially identified twenty-five themes, which were later coalesced into eighteen. This reduction in themes was performed based on similarities and to eliminate those themes which were of lower relevance. For example, a theme identified as "improving students' theatrical skills" was not included within the final themes, because it was not directly related to the goal of the TCHP, despite being an interesting take-away about the participants' experience. When discrepancies occurred between the two assessors, in terms of which identified theme was being expressed within a particular reflection, the two assessors met to resolve conflict and arrive at a consensus. The resulting first cohort final list of themes was then provided to the second cohort as an example of potential themes for their reflections. As a result, the second cohort was encouraged to use the pre-identified themes as inspiration and/or prompts for their reflective writing.

**Figure 1**

*Comparison Timeline Between First (2016/2017) and Second (2017/2018) Student Cohorts*



1  
**Results**

**Table 1**

*Description and examples of themes identified in student reflections*

Themes	Explanation of Theme	Example from Student Reflection
Insight into healthcare	Student reflected on their impression of healthcare, regardless of whether it was a positive or negative impression	“It made me wonder how much the Ministry of Health and Long-Term Care and other decision-makers care about these senior citizens, many of whom have medical comorbidities and other social concerns”
Reflection regarding audience response	Student reflected on how the audience responded to their performance, regardless of positive or negative response	“After performing, we realized that it really was the simple things that made the residents laugh and enjoy the performance, like the fake moustaches we wore or the costume changes”
Appreciation of the subtleties of acting	Student reflected on the different components of acting and performance	“This has really helped me to understand myself and to become more aware of my body, voice and actions on stage”
Perception of ways that would enhance the mood of the geriatric population	Student reflected on how the project may have affected the mood of the residents	“Because of [the performance’s] potential to incite a range of emotions, I have been thrilled to work on this project to bring some laughter and excitement into the lives of the residents”
Reflecting on characteristics of the geriatric population (i.e., cognition)	Student demonstrated that they reflected on their perception of the “personality” of the geriatric population, regardless of if it was an appropriate perception or not.	“The personality of the residents was very friendly... however, the elderly were also very introverted.”



Reflection on the medical aspect of seniors' lives	Student reflected on how medicine and illness have an impact on the lives of the elderly residents	"The majority of the residents there have some form of dementia and Alzheimer's, and many have other physical and mental impairments as well."
Positive feeling about self for making a difference in seniors' lives	Student commented on feelings of positivity through their involvement in the project	"I am looking forward to performing the skits that me and my fellow classmates have prepared, so that we can bring some joy to the residents and workers there"
Improving medical student wellness	Student reflected on increased sense of wellness through involvement in the project	"Overall, I really appreciated and enjoyed doing this project"
Promoting self-awareness (e.g., identifying strengths/weaknesses)	Student reflected on their own strengths and weaknesses and demonstrated self-awareness	"It has helped me understand my strengths and weaknesses when acting and has helped me grow to become a better communicator"
Insight into long-term care facilities	Student reflected on their impression of long-term care facilities, regardless of whether they were positive or negative impressions.	"It was my first insight into the high level of effort and resources that go into providing long-term care center patients with recreational activities on a daily basis"
Appreciation of residents' body language	Student reflected on non-verbal communication styles	"I became more aware of the impact of communication styles, body language, and perspective-taking on connecting with others"
Modification of script (e.g., to improve audience engagement)	Student reflected on their scripts/performance and suggested modifications	"Although we tried placing a larger emphasis on actions instead of speech, I think that going forward with this project, I would definitely make changes to

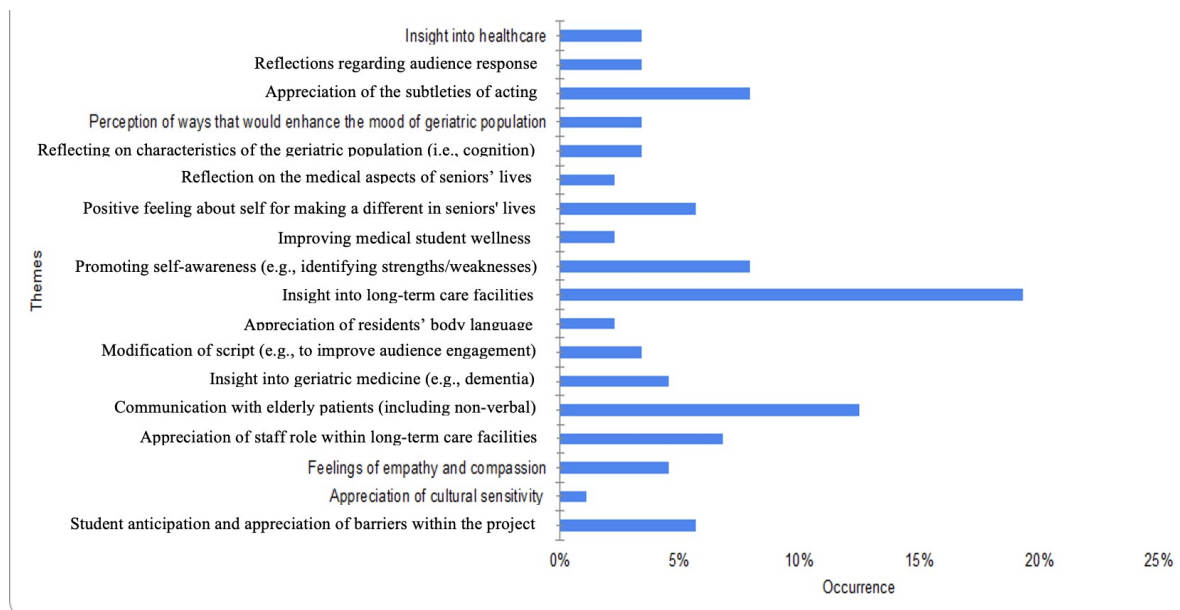
		incorporate even more action-based acting and especially integrative activities”
Insight into geriatric medicine (e.g., dementia)	Student reflected on mental illness and the impact it can have on patients and family members	“I had the chance to speak with many of the elderly there, many of whom have dementia. Although I had previously studied dementia in a class, it was a different experience seeing and experiencing it. I spoke with the families who were visiting and I learned of the personal struggles that they’ve experienced because of the illness”
Communication with elderly patients (including non-verbal)	Student reflected on communicating with the elderly and some of the barriers that may exist.	“Doing activities helped break down the barriers with the residents, especially barriers to communication. For example, we found common ground with one resident who really enjoyed soccer”
Appreciation of staff role in long-term care facilities	Student reflected on the role of staff members at long term care facilities	“Witnessing the way staff interacted with the residents assured me that residents were being provided with a warm, vibrant, and welcoming living arrangement that strived to meet their needs”
Feelings of empathy and compassion	Student demonstrated taking the perspective of another individual, such as the residents and their families	“I really felt and understood their suffering as caring family members since it made me reflect on my own family members”
Appreciation of cultural sensitivity	Student reflected on the importance of appreciating the culture of the residents	“We reflected on the likely circumstances and experiences of the residents that we could

		incorporate into the plays. I think going with an Italian theme will keep the audience engaged because it is highly relevant to them”
Student anticipation and appreciation of barriers within the project	Student reflected on difficulties they may encounter during the completion of their CSL project	“Hearing feedback from last year’s CSL group really helped us understand the communication barriers that they faced, so we acted on their advice and decided to keep the script simple and place more emphasis on actions”

Table 1 provides themes extracted from student reflections and identified by the reviewers. The themes are not meant to exemplify the content of the students’ reflection. For example, the theme “reflection regarding audience response” was counted if the student commented on how the audience responded to their performance, regardless of whether it was a positive or negative response.

**Figure 2**

*Occurrence rates of themes generated from students’ reflections in cohort 2016-2017*



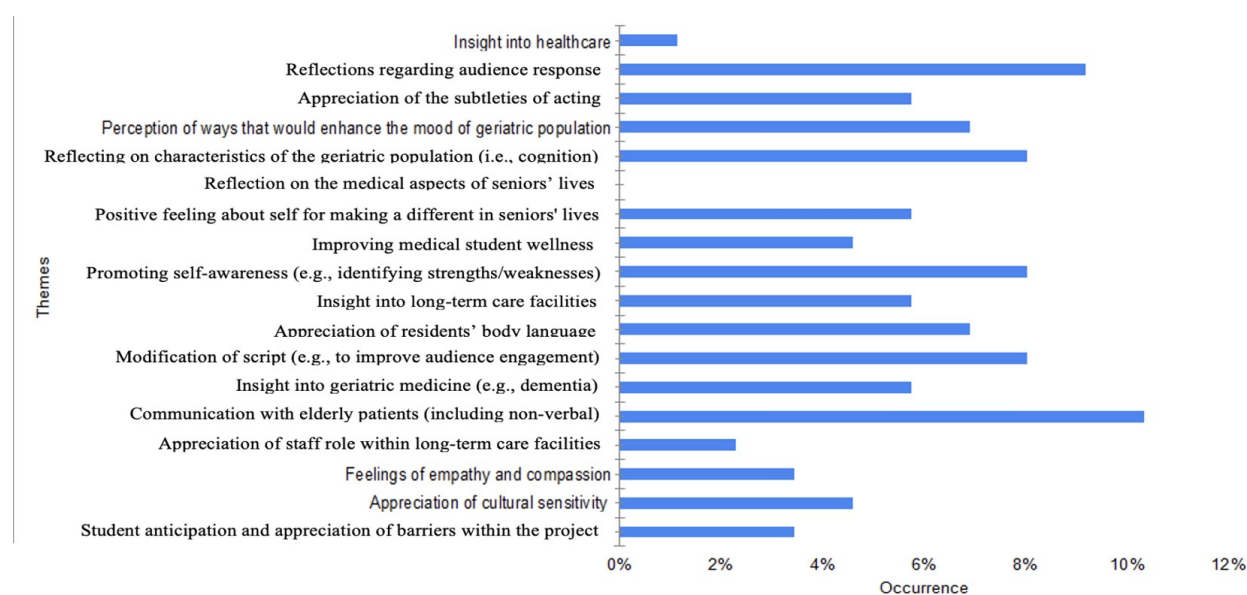
*Note.* The above themes were extracted from mid- and final reflections collected from cohort 2016/17.

Figure 2 illustrates the themes from the first cohort from 2016-2017 (n=11) as occurrence rates, which is defined as the frequency a specific theme is cited amongst the reflections (%). The theme that emerged the most frequently was “insight into long-term care facilities,” which was cited a total of 17 times amongst the 11 students (19%). The second most cited theme was “communication with elderly patients (including non-verbal),” which was cited a total of 11 times (13%). The third most cited theme was student “appreciation of staff role in long-term care facilities,” which was cited 8 times within the reflections (9%) (figure 2).

The fourth most cited theme was student “appreciation of the subtleties of acting” (8%), followed by “promoting self-awareness (identifying strengths/weaknesses)” (figure 2).

### Figure 3

*Occurrence rates of themes generated from students’ reflections in cohort 2017-2018*

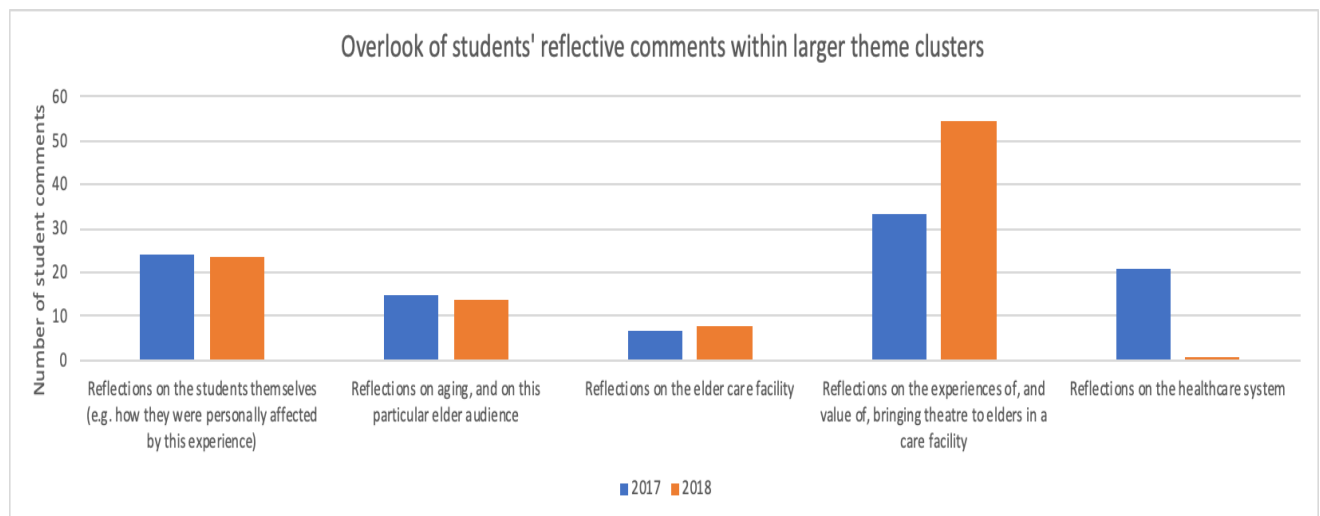


*Note.* The above themes were extracted from mid- and final reflections collected from cohort 2017/18.

Figure 3 illustrates the themes from the second cohort (n=5) in occurrence rates, which is defined as the frequency a specific theme is cited amongst the reflections (%). The most cited theme was “communication with elderly patients (including non-verbal),” which was recorded a total of nine times amongst the five students (10%). The second most common theme for the second cohort was student “reflections regarding audience response,” cited a total of 8 times (9%). The next three common themes, cited 7 times amongst the 5 students (8%), included: “reflecting on characteristics of the geriatric population (e.g., cognition),” “promoting self-awareness (e.g., identifying strengths/weaknesses),” and “modification of script (e.g., to improve audience engagement).

**Figure 4**

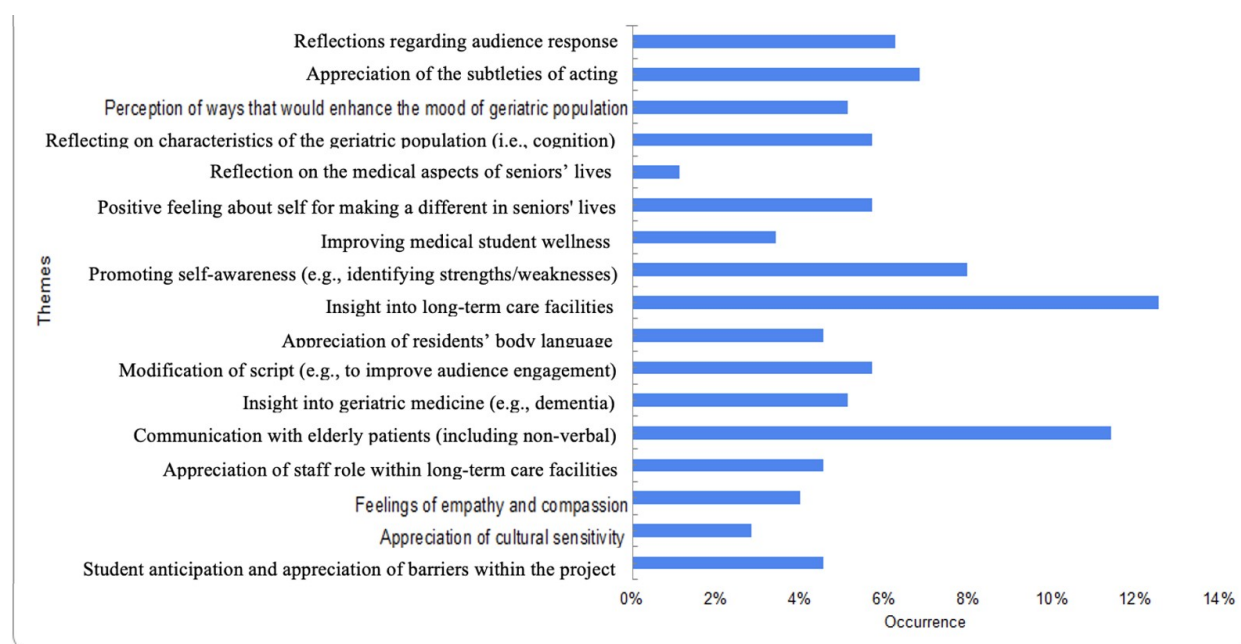
*Overlook of both cohorts' reflections within larger clusters (2016/17 and 2017/18)*



The themes extracted from student reflections from cohorts 2016-2017 and 2017-2018 were further organized into five larger clusters: reflections on the students themselves (e.g., how they were personally affected by this experience), reflections on aging and on this elder audience, reflections on the elder care facility, reflections on the experiences of and value of bringing theatre to elders in a care facility, and reflections on the healthcare system. The occurrence rate of “reflections on the experiences of, and value of, bringing theatre to elders in a care facility” increased from 33% to 54%, despite there being a decreased number of total participants in cohort 2 (figure 4). In addition, the occurrence rate of “reflections on the healthcare system” decreased from 21% in cohort 1 to 1% in cohort 2, which may speak to adaptations that were made in the methodology and creative process in cohort 2 (figure 4).

**Figure 5**

*Compilation of themes from both student cohorts (2016/17 and 2017/18)*



*Note.* Figure 5 combines cited themes amongst both student cohorts.

Over the two-year span, three prominent themes emerged. In increasing order, these were: “promoting self-awareness (e.g., identifying strengths/weaknesses),” “communication with elderly patients (including non-verbal),” and “insight into long-term care facilities” (figure 5).

## **Discussion**

Using theatre arts can provide medical learners with a unique and valuable opportunity to learn and engage with vulnerable patient populations. Through the development of performances that are adapted to the specific population, medical learners may also develop key competencies by learning about clinical concepts and systemic considerations for patients.

This study provides an overview of themes, extracted from student reflections, and provides readers with some perspective on the educational and experiential value of this community learning opportunity.

Most student reflections from both cohorts involved the following recurring themes: “communication with elderly patients (including non-verbal),” “insight into long-term care facilities” within the creative process/performance, and interactions with residents at the Villa Marconi (figure 5). This was significant as students had to adopt varying techniques to relay messages to their audience members, many of whom had pre-existing cognitive decline or a diagnosed major neurocognitive disorder.

Students were more likely to report developing a higher understanding of audience response through observation of residents’ facial expressions and body language during the performance. This allowed them to tailor their performance and adjust the creative process from the 2016-2017 cohort to the 2017-2018 cohort and included: emphasis on non-verbal cues, more eye contact from the performers, slowing down speech, and using body language to communicate with audience members. The implication is that actively applying communication strategies can help overcome barriers related to factors such as cognitive delay. Students were also more likely to report a greater understanding of long-term care facilities due to their interactions with staff and the amount of time spent within Villa Marconi. However, there was less reporting of increased learning of clinical concepts related to geriatric medicine or increased self-awareness through participation in the theatre arts. We attribute this to more focus being placed on engaging the audience members at Villa Marconi, as opposed to meeting the learning objectives of geriatric care. Through the experiences offered by TCHP, medical students learned how to communicate effectively through the arts with the geriatric population at Villa Marconi. As future healthcare providers, one’s ability to communicate and establish rapport with patients relates directly to better quality of patient care.

In addition, the theme “promoting self-awareness (e.g., identifying strengths/weaknesses,” was also widely cited amongst both cohorts (figure 5). Self-awareness is vital to being present with the patient, while also being attentive to one’s biases, weaknesses, and approach to care. In the TCHP, both cohorts reflected on their individual experiences with the elderly population, including skills that they wanted to build upon throughout their medical training.

The CanMEDS competencies, introduced by the Royal College of Physicians and Surgeons of Canada, are a list of qualities and skills encouraged for learners to implement and apply within their careers as healthcare providers. The TCHP empowered medical students through the application of skills relevant to CanMEDS competencies: collaborator, communicator, and person. This was a student-initiative learning experience, where students worked with one another throughout the entire creative process. The second cohort learned key take-aways from the 2016-2017 cohort extending their work to further to engage and communicate effectively with the residents at Villa Marconi. Hence, the second cohort adjusted their methodology, with the support of students from the first cohort, to create performances that were more interactive and physically engaging for the audience. One other item to note is that there was an increase in themes pertaining to “...value of bringing theatre to elders in a care facility” in cohort 2 (54%) versus cohort 1 (33%), despite there being fewer total participants in cohort 2 (figure 4).

Students also had to work alongside Villa Marconi LTC staff and collaborate with their coordinators to make time for the TCHP. This meant learning about the day-to-day schedules at LTC and what the roles and responsibilities of staff are at Villa Marconi.

The “person” role within the CanMEDS framework discusses the importance of identifying strategies and resources to promote the health and well-being of physicians (University of Ottawa, n.d.). Students within TCHP were encouraged to document their reflections throughout the program, which allowed for self-awareness and personal development. Themes such as “promoting self-awareness,” “improving medical student wellness,” and “positive feeling about self for making a difference in the elderly’s lives” were reported within both cohorts. In addition, students were able to explore the arts, which offer a distinct and unique view of the humanities.

Despite the time devoted to research and learning around geriatric medical comorbidities, students were less likely to use this program as a learning tool for clinical concepts. Analysis of student reflections found two themes that had the lowest occurrence rates: “insight into healthcare” (2%) and “reflection on the medical aspects of the elderly life” (1%) (figure 5). Themes that relate more to the everyday life of the elderly, their environment and personalities, interactions and self-growth appear more widely reported than themes that relate directly to clinical objectives. This can be attributed to more focus being placed on engaging with the residents through performance, as opposed to learning about the residents’ medical conditions and approaches to management and care. As TCHP has since been incorporated within the CSL curriculum in the University of Ottawa, students are encouraged to dedicate time to the appreciation and observation of the complexities of care and the medical management of the geriatric population within long-term care facilities.

## **Conclusion**

Theatre arts were shown to be a creative, flexible, and powerful tool for the students at the University of Ottawa; a means to developing empathy and successfully communicating with the geriatric patient population at the Villa Marconi LTC facility. In terms of limitations, the slight difference in the goals of the cohorts made comparison somewhat difficult. The 2016/2017 cohort had a greater focus on delivering educational messages to the LTC residents, whereas the 2017/2018 cohort chose to focus their performance on audience response without integrating any educational elements. Although the goal of effective communication was still strongly preserved across both cohorts, some more specific themes could not be compared. Another limitation of our methodology was the overall small sample size and the unequal sample sizes between the two cohorts. Furthermore, in contrast to the first cohort, the second cohort wrote reflections based on themes derived from reflections of the first cohort. Although this design helped with creating a more consistent design, it may have limited or biased their views based on the pre-determined themes. In addition, we did not collect responses from the audience or LTC faculty, thus lack information about how they perceived this experience. Lastly, the omission of certain sections of the reflections (because they did not fit under a particular category) during the process of identifying specific themes was another limitation of our study.



In terms of next steps, given the geriatric population creates a large proportion of the patients with whom physicians can interact, teaching ways to successfully communicate with the elderly through similar projects in clerkship and certain residency programs can be a valuable next step. In addition, a suggestion for future projects of similar design would be to have participants submit reflections more frequently, such as after each encounter with the target population, to allow for more reflection opportunities. Future studies might also attempt to expand this approach to other settings in the community, such as middle schools and homeless shelters. In terms of asking for feedback, future studies should more formally seek feedback from the elderly to diversify the perspectives and better understand the benefits of such a program. Finally, as alluded to in methods, the two common approaches in thematic analysis are inductive processes for informing our themes based on existing research. It would be interesting to see how these results may differ if the coding process was informed by prior research in the Medical Education literature.

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