# Case Scenario: The Impact of Social Determinants of Health on LGBTQIA + Patients

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**Context:** There is a prominent need to include high-quality educational content within professional athletic training programs relevant to the unique needs of lesbian, gay, bisexual, transgender, intersex, and asexual (LGBTQIA+) patients. Although the Commission on Accreditation of Athletic Training Standards for Professional Programs details the requirement for diversity, equity, inclusion, and social justice education (DEI 1 and 2), there is no specific requirement to include LGBTQIA+ content within the curriculum.

**Objective:** To detail a cased-based learning strategy to implement LGBTQIA + content related to the social determinants of health within the curriculum.

**Background:** Athletic trainers and other healthcare professions have reported a lack in educational opportunities that would prepare them to competently provide care to LGBTQIA + patients.

**Description:** This case scenario, and associated discussion and debrief questions, explores the intersection of minority stress and social determinants of health that negatively affect the health and well-being of an LGBTQIA + patient, particularly in the secondary school setting.

**Educational Advantages:** Integrating active learning strategies allows students to engage in active thinking, group discussion, and clinical decision-making that prepare them better for clinical practice than passive learning strategies.

**Conclusion:** Intentional inclusion of LGBTQIA + content within the curriculum will better prepare students to provide culturally competent care to LGBTQIA + patients while fostering cultural humility.

Key Words: Case-based learning, patient-centered care, inclusion, health disparities

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#### **KEY POINTS**

- The current literature demonstrates that there is a prominent need for curricular content in medical and professional healthcare programs that focuses on preparing students to provide patient-centered and culturally competent care to LGBTQIA + patients.
- To address the health and healthcare disparities impacting LGBTQIA + patients, students must understand the intersectionality of minority stress and the social determinants of health.
- To encourage students to engage in active thinking and clinical decision-making, educators should intersperse active learning techniques, such as simulations and case-based learning, throughout the curriculum.

#### INTRODUCTION

Inadequate inclusion of lesbian, gay, bisexual, transgender, intersex, and asexual (LGBTQIA +) healthcare content exists in medical education curricula<sup>1-3</sup> to prepare clinicians to address the numerous health and healthcare disparities<sup>4-6</sup> that impact the LGBTQIA + patient population. Regarding the medical school curriculum, researchers have demonstrated that medical students were exposed to an estimated average of 5 hours (United States and Canada) and 11 hours (United Kingdom) of LGBTQIA + -specific content during their entire professional education.<sup>3</sup> Specific data regarding the amount of time spent covering LGBTQIA + content within athletic training professional education do not exist at this time.

Integrating LGBTQIA + content into the curriculum of professional healthcare programs is essential for preparing clinicians to deliver quality care while engaging with diverse populations in a way that honors their identities, beliefs, customs, and values in line with the principles of cultural humility.<sup>7,8</sup> Cultural humility involves an approach to patient care that emphasizes self-reflection and assessment, valuing patients' knowledge of their own social and cultural backgrounds, openness to creating balanced power dynamics in the patient-provider relationship, and a lifelong commitment to learning.9 It includes recognizing the limits of one's own knowledge and being open to learning from patients about their experiences while maintaining an awareness of one's own cultural influences and biases.<sup>9</sup> In athletic training education, particularly when teaching about equitable care for LGBTQIA + patients, educators should focus on empowering students with respectful curiosity and affirming communication skills to enhance patient-centered care through an emphasis on cultural humility rather than solely improving knowledge and competence.<sup>8-10</sup> However, without Commission on Accreditation of Athletic Training standards requiring the specific inclusion of LGBTOIA + content within professional programs, many athletic trainers (ATs) may enter the workforce without the essential education and cultural humility training needed to care for this population.<sup>11</sup>

Without formal and informal educational experiences facilitated through professional programs, it is no surprise that many ATs reported in a recent study that their education relevant to transgender patient care primarily came through media outlets (32%) or personal experiences with family, friends, or themselves (33.7%).<sup>12</sup> In the same study, only about half of the respondents (48.1%) agreed that they felt competent in caring for transgender patients, with less than half (45.6%) reporting feeling competent using appropriate terminology while communicating with transgender patients.<sup>12</sup> Similarly, in medical education, most medical students felt not competent or somewhat not competent providing care to gender minority patients (76.7%) and patients with a difference of sex development (81%).<sup>13</sup>

The absence of sufficient LGBTQIA + -specific content in the curricula of professional healthcare programs contributes to a lack of clinicians prepared to meet the healthcare needs of this population.<sup>1,4,13</sup> Without access to adequately trained clinicians, LGBTQIA + patients, including those in athletic populations, experience higher rates of chronic illness, behavioral health concerns, substance abuse disorders, and suicidal ideation.<sup>14–16</sup> Additionally, due to a lack of providers with adequate training, many LGBTQIA+ patients have reported negative healthcare experiences, including lack of access to preventative care,<sup>17</sup> denial of care from healthcare providers,<sup>18</sup> and experiences of stigma, bias, and microaggressions.<sup>19,20</sup> Although the solution to these disparities is multifaceted, comprehensive inclusion of LGBTQIA + topics and their intersection with the social determinants of health (SDOH) within professional healthcare curricula can better prepare providers to address the needs of the LGBTQIA + patient population.

Understanding the influence of SDOH on the health and well-being of LGBTQIA + patients and how they contribute to the inequities that exist is vital in being able to provide more comprehensive care for this patient population. As the first point of contact for many patients, ATs must understand the relationship between SDOH, health, and healthcare disparities and how they ultimately impact the health and well-being of the LGBTQIA + population. Therefore, this educational technique provides athletic training educators with a case scenario to implement in professional education. This case scenario directly aligns with Commission on Accreditation of Athletic Training standards 57, DEI 1, and DEI 2 that focus on analyzing and developing strategies that minimize the impact of clinician-based bias, prejudice, and privilege on patient interactions.<sup>21</sup>

This educational technique, featuring a case scenario with discussion and debriefing questions, integrates the principles of cultural humility by presenting a realistic case for students to navigate. It creates opportunities for students to apply clinical reasoning in a way that centers the patient's needs while also focusing on SDOH and exploring how ATs can improve health outcomes and access to healthcare for the LGBTQIA + population.

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#### Table 1. Educational Technique Learning Objectives

At the conclusion of this case study and guided discussion, students will be able to:

- (1) Recognize the impact of social determinants of health on patient care to determine appropriate healthcare strategies
- (2) Create specific policies and procedures to identify patients with behavioral health conditions
- (3) Develop and implement patient-centered interventions for LGBTQIA + patients
- (4) Identify and support patients with behavioral health conditions and how to recognize and refer patients in crisis
- (5) Summarize the impact of clinician-based bias, prejudice, and privilege on patient interactions and outcomes
- (6) Examine state and federal legislation and its effects on the health and well-being of the LGBTQIA + population

Abbreviation: LGBTQIA+, lesbian, gay, bisexual, transgender, queer, intersex, asexual.

#### DESCRIPTION OF EDUCATIONAL TECHNIQUE

To accomplish the learning objectives (Table 1), a case scenario has been designed for use by athletic training educators to expose students to the intersection of SDOH and the health and healthcare disparities experienced by LGBTQIA + individuals. The case scenario (Table 2) details the experience of a secondary school patient who encounters harassment, discrimination, and parental abandonment as the result of having his sexual orientation involuntarily disclosed in a process the role an AT has in providing care, support, resources, and referrals after the fallout many LGBTQIA + individuals experience when having their sexual orientation and/or gender identity involuntarily disclosed. To ensure time for adequate discussion, educators should anticipate 75 to 90 minutes to complete this educational technique.

To facilitate this educational technique, athletic training educators should first split students up into small groups of 3 to 5 individuals. The students will stay together in these groups for the entirety of the case scenario and will regularly engage in guided small group discussions. After being divided into small groups, the educator should establish the rules of engagement for the upcoming discussions. Example rules of engagement that focus on establishing a space meant for learning and personal growth can be found Table 3. It is strongly recommended that the educator(s) be prepared to engage in difficult conversations and intervene should classroom discussion shift away from constructive dialogue.

Once the students have agreed to adhere to and uphold the rules of engagement, the educator(s) can provide the students with the first section of the case scenario, which involves economic stability. Students should be given time to read the section before being presented with the discussion prompt. After being presented with the discussion prompt, each group should be given the small group discussion questions, located at the end of each section, and provided 10 to 15 minutes to converse. After completion of the student discussion, the educator(s) should facilitate any class discussion that arises and assess student preparedness to move on to subsequent sections of the case scenario. The educator(s) should follow the same process for sections 2 through 5 of the case scenario, which discuss neighborhood and built environment, access to quality education, social and community context, and access to quality education, respectively. It is recommended that the educator sequence the presentation of this material using a PowerPoint or other modality so as not to allow the students to jump ahead in the case scenario. At the case scenario's end, the educator(s) should use the remaining time to facilitate a

whole class discussion and debrief (Table 2). During these class discussions, the educator(s) should be prepared to guide students through these difficult, but applicable, conversations.

To achieve the learning objectives of this educational technique, athletic training students should be provided with foundational information regarding SDOH and their link to overall health and well-being of patients. Additionally, it is recommended that athletic training students complete Safe Space/Safe Zone/Ally Training (or your institution's equivalent) to be able to engage with this case scenario with the appropriate level of understanding, respect, and confidence to discuss sensitive and potentially traumatic topics involving the LGBTQIA + patient population.<sup>22</sup>

#### ADVANTAGES

A greater understanding of health conditions from a patientcentered perspective requires the recognition of underlying causes, including the SDOH, because of their impact on overall health and well-being.<sup>23</sup> Often defined as the living, school, and work environment of people and surrounding forces or circumstances that influence daily life, these determinants stem from an unequal allocation of power and resources.<sup>23</sup> Failure to evaluate the social determinants and their importance in healthcare interactions are missed opportunities for ATs to provide culturally competent patient-centered care and promote patient health and well-being.<sup>23</sup> Unfortunately, a lower socioeconomic status of the school system correlates to fewer visits to the athletic training facility<sup>24</sup> and injury nondisclosure.<sup>25</sup> Thus, it is important for ATs to understand how SDOH impact the patients that they serve.

There is growing evidence that the methods used to teach clinical skills today are inadequate.<sup>26,27</sup> Today's students have expressed deep frustration with passive approaches to learning<sup>26,28,29</sup> and instead prefer learning methods that encourage active participation, critical thinking, clinical decision-making, and opportunities to obtain feedback on their performance.<sup>30,31</sup> Learning is contextual,<sup>32</sup> so students need experiences in the classroom where they make clinical decisions similar to those made in autonomous practice.<sup>26</sup> It is imperative that teaching methods used during professional education parallel patient care. Success in solving one kind of patient care problem is a poor predictor of success when faced with other clinical situations.<sup>32</sup> Previous researchers<sup>27,33,34</sup> suggested that providing learning experiences in a context that mimics patient care, such as patient case studies or simulation, facilitated retrieval of relevant knowledge during practice. Thus, students must be exposed to learning experiences that they will encounter during patient care.<sup>35</sup>

#### Table 2. Case Scenario: Impact of Social Determinants of Health on LGBTQIA + Patients<sup>a</sup>

#### **Case Study Overview**

Adrian Cooper, a 17-year-old senior at Boulder Junction High School, juggles a busy life that includes family commitments, playing tennis, and a part-time job after school. Assigned male at birth, he identifies as a gay man. Comfortable with his identity, Adrian nonetheless harbors a justified fear of rejection and abandonment from friends and family if his sexual orientation were to be revealed. This concern, coupled with other factors, has led Adrian to keep his sexual orientation private.

#### Section 1: Economic Stability

- Boulder Junction is a small mountain town with a population of roughly 50,000 individuals and is situated about 2 hours from the nearest metropolitan area. The town faces economic challenges, with nearly 45% of its residents living at or below the poverty line, including Adrian's family.
- Adrian is intimately familiar with poverty and food scarcity. He relies heavily on the free and reduced-cost lunch program at his school for his daily meals, much like 80% of the student body. Additionally, to make ends meet, his family regularly visits the local food bank. Living in a multigenerational home with limited space and privacy, Adrian also faces challenges including lack of reliable internet access and minimal personal space.
- Dealing with these challenges, Adrian spends as much time as possible at school, participating in both before- and after-school programs. Although he often feels uneasy around his peers, worried about potential rejection if they discover his sexual orientation, he sees school as an escape from his challenging home life. Adrian views education as a pathway to change his circumstances and harbors the dream of being the first in his family to attend college. To support this goal, he works 15 to 20 hours a week at a local pizzeria, saving money to turn his college aspirations into reality.

#### Small Group Discussion:

#### Prompt:

 Last week, the challenges for Adrian's family intensified. His father lost his job at a construction company due to a downturn in available work. This development caused Adrian to increase his hours at the pizzeria during weekends and evenings, following school and tennis practice. Despite already feeling overwhelmed with his commitments, Adrian's deep sense of obligation to his family drives him to do everything he can to support them.

#### **Discussion questions:**

- How might food scarcity and the reliance on local food banks within the community impact the health and performance of your patient population?
- What impacts can you anticipate that working a part-time job may have on your student-athletes? Reflect on how balancing school, sports, and work might affect their physical and mental health, time for rest and recovery, and injury risk.
- Discuss the role of an athletic trainer in identifying and addressing these issues and the potential strategies for supporting athletes facing these challenges.

#### Section 2: Neighborhood and Built Environment

- Despite its high poverty rate, Boulder Junction is a tight-knit community known for its strong sense of faith. Being a relatively small town, it experiences few violent crimes. However, there is a notable history of hate speech and hate crimes in the area.
- Adrian has grown up, and still resides in, a multigenerational household in Boulder Junction. He values the closeness with his family but faces the challenge of living in a cramped 3-bedroom, 1-bathroom house with his parents, grandmother, and 2 younger siblings. As the eldest child, Adrian shares a bedroom with his younger brothers. Seeking some semblance of privacy, he often opts to sleep on the couch in the family room each night. Adrian lacks access to consistent transportation and often relies on Boulder Junction's patchwork public transportation system for his school commute. When the bus service is not an option, he resorts to walking, sometimes covering distances of 5 to 10 miles each day.

### Small Group Discussion:

#### Prompt:

 One evening while Adrian was sitting at dinner with his family, a news story on the television announces an update on a recent "Don't Say Gay" bill in the state legislature. This bill, which bans teachers, school administrators, and counselors from discussing sexual orientation and gender identity with students, has recently sparked much conversation and debate in the community. The newscaster reports that the bill has been passed and signed and will soon become law. Adrian, not fully grasping the full implications for himself, feels a wave of dread wash over him. He often confides in his high school guidance counselor, the only person with whom he has felt safe sharing his sexual orientation. Now, Adrian is worried about how this new law will affect his ability to communicate openly with his counselor to get support.

#### **Discussion questions:**

- How can you turn your athletic training facility into a welcoming and inclusive environment that serves as a refuge and safe space for your patients, particularly for those who may not have such spaces at home or within their community?
- As an athletic trainer in a secondary school setting, how would legislation at the state level affect the care and support you provide to your LGBTQIA + patients?

- How might the passing of the "Don't Say Gay" bill and the history of hate speech and hate crimes in Adrian's community contribute to minority stress? Discuss how these external factors could affect Adrian's mental well-being and his ability to seek support from his trusted high school guidance counselor.
- What resources or referrals might you need to offer to support students who may face increased behavioral health issues, such as anxiety and depression, in response to new legislation targeting the LGBTQIA + community?

#### Section 3: Access to Quality Education

- In the state where Boulder Junction is located, the average educational expenditure per high school student is approximately \$10,139. However, due to inadequate zoning laws and unsuccessful efforts to pass local bond measures or levies, the Boulder Junction School District spends only \$7,019 per pupil, which is 33% lower than the state average. This significant disparity has resulted in a high dropout rate, insufficient student support services, and subpar job, technical school, and college placement rates.
- Despite these resource limitations, Adrian has a strong affinity for school and sees education as a pathway to social mobility. Although he feels unable to fully express his true self around others, he has managed to develop a circle of friends, many of whom are also part of the after-school tennis team. Adrian enjoys the physical activity and the sense of belonging that comes with being involved in sports, making it a vital aspect of his life and an important part of his support network.

#### Small Group Discussion:

#### Prompt:

 With the recent hardships at home with his father's job loss, increased work hours for himself, and the enactment of the "Don't Say Gay" bill, Adrian finds himself nearing a breaking point. Needing someone to talk to about the mounting pressures in his life, and now fearful of discussing these issues with his guidance counselor due to the new law, Adrian turns to his longest-standing friend and tennis team member Alex. One afternoon following tennis practice, Adrian confides in Alex, sharing everything including his sexual orientation. Alex initially responds with silence and eventually expresses disgust, criticizing Adrian's "lifestyle choice." In a desperate attempt at damage control and to further explain his situation, Adrian tries to engage in conversation with Alex, but it is too late. Alex walks away, leaving Adrian to grapple with the fallout.

#### Discussion questions:

- What risks might Adrian face if he decides to "come out" about his sexual orientation to his family and/or peers?
   Consider the potential social, emotional, and physical implications within his family dynamics and peer group.
- How would you address comments or behaviors in the athletic training facility that refer to sexual orientation or gender identity as a "lifestyle choice?" Discuss why this term is inappropriate, offensive, and derogatory and the importance of fostering a respectful and inclusive environment.

#### Section 4: Social and Community Context

- In Boulder Junction, a significant majority of the population, including Adrian's family, adheres strongly to their religious beliefs. This deep religious conviction is woven into the town's social and communal fabric, influencing attitudes and perspectives on various issues, including sexual orientation. The prevailing view in the community is that homosexuality is sinful, leading to a perception of those who are homosexual as leading an "immoral and alternative lifestyle."
- Adrian shares a close bond with his family and holds love for them. However, he holds a legitimate fear of rejection from his parents, grandparents, and possibly even his siblings if he were to reveal his sexual orientation. This fear has resulted in a profound sense of isolation for Adrian, as he struggles with the inability to forge authentic connections, even within his own family.

#### Small Group Discussion:

#### Prompt:

After his difficult conversation with Alex, Adrian embarked on the long walk home from tennis practice. After his arrival, he was met by his father, waiting in the doorway. In the living room behind him, his mother was in tears. His father, with a stern expression, handed Adrian a bag of clothes and curtly said, "You are no longer welcome here," before firmly slamming the door. It became apparent that the news about his conversation with Alex had already reached his family, and this harsh dismissal left 17-year-old Adrian suddenly homeless.

#### **Discussion questions:**

- Considering Adrian's recent eviction from his home, what kind of mental health support might he need? What referrals could you make and to which professionals or types of organizations?
- As a mandatory reporter, what is your obligation in reporting Adrian's current situation of homelessness? Where can
  you find the specific policies that guide your actions in such scenarios? Do you feel the need to report child
  abandonment, and, if so, to whom would you report it to?

#### Section 5: Access to Quality Healthcare

After his parents abandoned him, Adrian sank into a deep depression. He no longer had a safe place to sleep and often did not know where his next meal would come from. Having had his sexual orientation involuntarily disclosed, news spread rapidly throughout the school and the wider community, as gossip tends to do in small towns. This nonconsensual disclosure resulted in serious consequences. Adrian lost his part-time job and was removed from the tennis team, with both his coach and boss citing his behavior as immoral and "sinful."

#### Table 2. Continued

Adrian's school, once a place of opportunity, quickly transformed into an environment filled with bullying and harassment. His teachers frequently ignored instances of harassment targeted at Adrian regarding his sexual orientation and rarely intervened. Shockingly, 1 teacher even suggested to Adrian that he should consider conversion therapy.

Without family or community support, lacking a safe place to sleep, struggling with food scarcity, and enduring constant harassment at school, Adrian finds himself in an immensely challenging situation with no one to talk to and no viable support system(s) to rely on. He begins to contemplate self-harm.

#### Small Group Discussion:

#### Prompt:

 With nowhere else to turn, Adrian enters the Athletic Training facility seeking your assistance as the athletic trainer for Boulder Junction High School. He has visited you in the past for various injuries, and you have built a trusting patientprovider relationship. As he walks in with a solemn expression, Adrian requests a private conversation with you, conveying a sense of urgency and sadness. Although you provide athletic training services to the high school, you are employed through a hospital group located in a different town. Due to this, you remain unaware of the current challenges that Adrian is facing. Despite this, you agree to talk with Adrian, initiating the conversation within your office adjacent to the athletic training facility to ensure confidentiality.

#### Discussion questions:

- As an athletic trainer, how do you view your role in offering mental health support to Adrian, especially when you become aware of his contemplation of self-harm?
- To better understand Adrian's situation and the severity of his thoughts regarding self-harm, what specific questions do you believe are necessary to ask him? How would you approach asking those questions?
- If you determine through your conversation that Adrian is at high-risk for self-harm, what are the immediate steps you should take to ensure his safety? After referring Adrian for immediate mental health services, who else could be part of the interprofessional care team, and what specific roles would these healthcare providers have in supporting Adrian's needs?
- Imagine you are providing care to Adrian in your own local area. To ensure the best possible care for him, you decide to
  use the Human Rights Campaign's Healthcare Equality Index Tool (https://www.hrc.org/resources/healthcare-facilities)
  to identify inclusive and competent providers/provider groups nearby. What are the results of your search, and how do
  you intend to collaborate with these local providers or groups to enhance Adrian's care?

#### **Debriefing Questions**

- At the end of this case scenario, it is recommended that educators conduct a debriefing session to assist students in reflecting on the activity and applying lessons learned to their future clinical practice. The following questions can be used to guide conversations:
- 1. Reflect on your initial thoughts and feelings when you learned about Adrian's situation. How did your personal beliefs or experiences influence your reaction? How can this awareness inform your approach to patient care?
- 2. Consider how you would navigate a conversation with a patient like Adrian, who may fear judgment or rejection due to their sexual orientation or in other scenarios their gender identity. What communication strategies would you use to ensure that they feel safe and supported?
- 3. Adrian's case involved concerns about legislation affecting LGBTQIA + individuals. How important is it for healthcare professionals to be aware of such laws and their implications on patient care? What are some strategies to stay informed on active legislation and advocate for the needs of your patients in such situations.
- 4. Consider your current knowledge, skills, and experiences in providing care to a patient like Adrian, who faces a mix of social, economic, and personal challenges. Do you feel ready to meet his specific needs effectively? Identify any areas where you might need more training or knowledge to offer the best care possible to LGBTQIA + patients in similar situations.
- 5. If you identified any knowledge gaps in the previous question, what steps can you take to fill these gaps and improve your ability to support LGBTQIA + patients?

Abbreviation: LGBTQIA+, lesbian, gay, transgender, queer, intersex, asexual.

<sup>a</sup> Inspired by the Stars Activity from Poynter KJ. Safe Zone Fundamentals Workshop: Basic Awareness & Knowledge Acquisition. In: *Safe Zones: Training Allies of LGBTQIA* + *Young Adults*. 2016:25.

Case-based learning is an instructional method that integrates knowledge discovery, information processing, and active engagement throughout the clinical decision-making process.<sup>36</sup> Unlike passive learning strategies, such as traditional lecture, case-based learning provides opportunities for students to engage in clinical problem-solving<sup>37</sup> and critical thinking<sup>27</sup> within the context of a specific patient (similar to what will be encountered during clinical practice). As an instructional strategy, case-based learning allows students to safely integrate knowledge and clinical skills within a patient care environment

before providing care.<sup>38–40</sup> Previous researchers<sup>41</sup> have classified case-based learning as a best practice for healthcare education because of enhanced learning through the application of knowledge to practice.<sup>41</sup>

The method by which case-based learning is delivered varies.<sup>36,37,41,42</sup> Common types of case-based learning activities used in healthcare education include case scenarios or patient cases. Regardless of the type of case-based techniques presented, a patient scenario serves as the mechanism for

#### Table 3. Example Rules of Engagement for Discussions and Debriefing<sup>a</sup>

- 1. This is a learning environment for discussion dialogue. As such, engaging in difficult discussions is important.
- 2. Everyone wants to succeed, and everyone included in the discussion shares a common goal.
- 3. It is OK to make mistakes, and everyone is here to learn from mistakes that are made.
- 4. Respect each other, do not interrupt one another, and acknowledge that sometimes we will disagree and that is OK.
- 5. Although disagreements may occur, they should never target the identity or characteristics of an individual or group of individuals.
- 6. Maintain confidentiality and privacy of everyone included in this discussion.
- 7. Feel free to step away from the discussion should you need time and space to preserve your mental health and well-being.

<sup>a</sup> Adapted from West JJ, Kraus KL, Armstrong KJ. Preceptor facilitated debriefing improves athletic training student's clinical performance and work efficacy. J Sports Med Allied Health Sci: Official Journal of the Ohio Athletic Trainers Association. 2018;4(2):5.

students to review, analyze, and respond to questions or prompts about what steps they would provide during a plan of care.<sup>42</sup> As an active learning strategy, case-based learning emphasizes clinical problem solving and clinical decision-making skills by providing a progressive patient scenario that students navigate through.<sup>43</sup> Despite the type and delivery mode, casebased learning allows students to apply knowledge and skill within the context of patient care in a safe learning environment.

As a result of case-based learning activities, students reported increased confidence in their clinical skills<sup>37,44</sup> and high satisfaction with the learning activity.<sup>37,44,45</sup> Previous researchers also noted that other types of simulations and active learning strategies have improved confidence,<sup>46–48</sup> ability to self-reflect,<sup>48</sup> and psychosocial intervention and referral skills.<sup>49,50</sup> As an educator, it is also important to consider what you can glean from students' participation in case-based learning activities to impact your teaching pedagogy and continuous program improvement.<sup>51</sup>

The debrief following the implementation of the case-based learning activity must not be neglected. Debrief is an essential component in healthcare education that follows an education activity and allows students to analyze their actions,<sup>52–54</sup> reflect on their thought process,<sup>54</sup> and assimilate improved behaviors into clinical practice.<sup>55</sup> The goal of the debrief is to ask questions that require the student(s) to critically think about what happened, allowing students to self-identify areas where improvements are needed, identify steps for improving skill, and reflect on their communication skills.<sup>56</sup>

#### DISADVANTAGES

Despite the body of professional literature that supports active and engaged instructional strategies supporting the use of casebased learning and other types of simulations, several barriers exist that preclude AT educator use. The most frequently reported barrier preventing the use of simulations and casebased learning has been time investment.<sup>57,58</sup> Educators spend an exorbitant amount of time in developing and revising patient cases.<sup>58</sup> Previous researchers have noted logistical constraints<sup>58</sup> (eg, scheduling and need for specialized space), cost<sup>53</sup> (eg, patient simulators), financial and human resources,<sup>57,58</sup> and lack of familiarity in using simulation and case-based learning.<sup>57–59</sup>

#### CONCLUSIONS

Inclusion of LGBTQIA + content within AT professional education is a valuable way to provide students with content-

specific knowledge and ultimately improve the health outcomes of their LGBTQIA + patients. Although students may have foundational knowledge on SDOH, application and interventions are population specific. As such, AT students must be provided with exposure and opportunities to apply their knowledge and skills safely within the context of LGBTQIA + patient care. Providing students with a broader understanding of SDOH, and their impact on the LGBTQIA + community, allows for the development of critical thinking and clinical problem-solving skills. Thus, AT educators must use active and engaging learning strategies that allow students to apply, integrate, and synthesize learning to optimize patient-centered care and health outcomes.

While being understanding of the sensitive nature of the content included in this case scenario, the authors encourage educators to take this case and modify its length, specifically the number of discussion and debriefing questions, to meet the learning objectives of their course and class session in a timeefficient manner. Additionally, to further alleviate time constraints associated with a detailed case scenario like this, educators may also consider unfolding this scenario section by section over the span of multiple class sessions. Adapting the length and depth of discussion can also provide flexibility in tailoring the educational technique to the curriculum's specific needs, goals, and objectives.

#### Future Recommendations

When teaching content that includes themes related to SDOH, sexual orientation, gender identity, minority stress, and health disparities, it is crucial for educators to provide students with foundational prerequisite information before using more advanced educational techniques. After foundational information is provided, students should be given the opportunity to apply this knowledge in a meaningful way through active learning techniques like this case scenario. Through the combination of providing foundational knowledge, using evidence-based teaching techniques, and incorporating active learning techniques, educators can better prepare students to understand and address SDOH, especially as they relate to LGBTQIA + individuals.

We also recommend that educators engage in self-reflection, taking inventory of their own knowledge and potential biases before teaching this material. This practice of cultural humility can help ensure that the content is delivered with sensitivity and accuracy, fostering a more inclusive and equitable learning environment for students.<sup>8,10</sup> Moreover, when students observe

cultural humility being practiced by their educators, it may inspire them to cultivate similar values in their own lives and future clinical practice.<sup>8</sup>

#### REFERENCES

- 1. van Heesewijk J, Kent A, van de Grift TC, Harleman A, Muntinga M. Transgender health content in medical education: a theory-guided systematic review of current training practices and implementation barriers & facilitators. *Adv Health Sci Educ Theory Pract.* 2022;27(3):817–846. doi:10.1007/s10459-022-10112-y
- Arthur S, Jamieson A, Cross H, Nambiar K, Llewellyn CD. Medical students' awareness of health issues, attitudes, and confidence about caring for lesbian, gay, bisexual and transgender patients: a cross-sectional survey. *BMC Med Educ*. 2021;21(1):56. doi:10.1186/s12909-020-02409-6
- 3. Tollemache N, Shrewsbury D, Llewellyn C. Que(e) rying undergraduate medical curricula: a cross-sectional online survey of lesbian, gay, bisexual, transgender, and queer content inclusion in UK undergraduate medical education. *BMC Med Educ.* 2021;21:100. doi:10.1186/s12909-021-02532-y
- Lund EM, Burgess CM. Sexual and gender minority health care disparities: barriers to care and strategies to bridge the gap. *Prim Care*. 2021;48(2):179–189. doi:10.1016/j.pop.2021.02.007
- Munson EE, Ensign KA. Transgender athletes' experiences with health care in the athletic training setting. J Athl Train. 2021;56(1):101–111. doi:10.4085/1062-6050-0562.19
- Fulginiti A, Rhoades H, Mamey MR, et al. Sexual minority stress, mental health symptoms, and suicidality among LGBTQ youth accessing crisis services. *J Youth Adolesc*. 2021;50(5):893–905. doi:10.1007/s10964-020-01354-3
- Stubbe DE. Practicing cultural competence and cultural humility in the care of diverse patients. *Focus (Am Psychiatr Publ)*. 2020;18(1):49–51. doi:10.1176/appi.focus.20190041
- Farrelly D, Kaplin D, Hernandez D. A transformational approach to developing cultural humility in the classroom. *Teach Psychol.* 2022;49(2):185–190. doi:10.1177/0098628321990366
- Lekas H-M, Pahl K, Fuller Lewis C. Rethinking cultural competence: shifting to cultural humility. *Health Serv Insights*. 2020;13:1178632920970580. doi:10.1177/1178632920970580
- Solchanyk D, Ekeh O, Saffran L, Burnett-Zeigler IE, Doobay-Persaud A. Integrating cultural humility into the medical education curriculum: strategies for educators. *Teach Learn Med.* 2021;33(5):554–560. doi:10.1080/10401334.2021.1877711
- Eberman LE, Rogers SM, Walen DR, et al. Student educational experiences relative to issues impacting LGBTQPIA + patient care. *Athl Train Educ J.* 2023;18(2):93–100. doi:10.4085/1947-380X-22-084
- Walen DR, Nye EA, Rogers SM, et al. Athletic trainers' competence, education, and perceptions regarding transgender student-athlete patient care. J Athl Train. 2020;55(11):1142–1152. doi:10.4085/1062-6050-147-19
- Zelin NS, Hastings C, Beaulieu-Jones BR, et al. Sexual and gender minority health in medical curricula in New England: a pilot study of medical student comfort, competence and perception of curricula. *Med Educ Online*. 2018;23(1):1461513. doi:10.1080/10872981.2018.1461513
- Clark CM, Kosciw JG. Engaged or excluded: LGBTQ youth's participation in school sports and their relationship to psychological well-being. *Psychol Sch.* 2022;59(1):95–114. doi:10.1002/pits.22500

- DeFoor MT, Stepleman LM, Mann PC. Improving wellness for LGB collegiate student-athletes through sports medicine: a narrative review. *Sports Med Open*. 2018;4:48. doi:10.1186/s40798-018-0163-y
- Hafeez H, Zeshan M, Tahir MA, Jahan N, Naveed S. Health care disparities among lesbian, gay, bisexual, and transgender youth: a literature review. *Cureus*. 2017;9(4):e1184. doi:10.7759/ cureus.1184
- Zajac C, Godshall KC. Empowerment through accessibility: community needs assessment data for LGBTQ communities. *Soc Work Public Health*. 2020;35(6):483–493. doi:10.1080/19371918. 2020.1798322
- Mirza SA, Rooney C. Discrimination prevents LGBTQ people from accessing health care. Center for American Progress. Published January 18, 2018. Accessed December 15, 2022. https:// www.americanprogress.org/article/discrimination-prevents-lgbtqpeople-accessing-health-care/
- Quinn GP, Sutton SK, Winfield B, et al. Lesbian, gay, bisexual, transgender, queer/questioning (LGBTQ) perceptions and health care experiences. J Gay Lesbian Soc Serv. 2015;27(2):246–261. doi:10.1080/10538720.2015.1022273
- Greene ZI, Aronson PA, Bradney DA, Canida RL, Bowman TG. Racial microaggressions during clinical education experiences of professional Master's athletic training students. *Athl Train Educ* J. 2022;17(4):329–338. doi:10.4085/1947-380X-21-051
- Professional program standards. Commision on Accreditation of Athletic Training Education. Accessed December 15, 2022. https:// caate.net/Programs/Professional/Professional-Program-Standards
- Aronson PA, Cartwright LA, Lopez RM. Integrating safe space ally training into the athletic training curriculum. *Athl Train Educ J.* 2021;16(4):270–277. doi:10.4085/1947-380X-20-078
- Picha KJ, Welch Bacon CE, Normore C, Snyder Valier AR. Social determinants of health: considerations for athletic health care. J Athl Train. 2022;57(6):521–531. doi:10.4085/1062-6050-0010.21
- Robison HJ, Simon JE, Nelson EJ, Morris SN, Wasserman EB, Docherty CL. Secondary school socioeconomic status and athletic training practice characteristics. *J Athl Train*. 2022;57(4):418–424. doi:10.4085/1062-6050-0726.20
- Wallace J, Beidler E, Register-Mihalik JK, et al. Examining concussion nondisclosure in collegiate athletes using a health disparities framework and consideration of social determinants of health. J Athl Train. 2022;57(1):16–24. doi:10.4085/1062-6050-0054.21
- 26. Sanson-Fisher RW, Rolfe IE, Williams N. Competency based teaching: the need for a new approach to teaching clinical skills in the undergraduate medical education course. *Med Teach*. 2005;27(1):29–36. doi:10.1080/01421590400019500
- O'Dunn-Orto A, Hartling L, Campbell S, Oswald AE. Teaching musculoskeletal clinical skills to medical trainees and physicians: a Best Evidence in Medical Education systematic review of strategies and their effectiveness: BEME Guide No. 18. *Med Teach*. 2012;34(2):93–102. doi:10.3109/0142159X.2011.613961
- Remmen R, Denekens J, Scherpbier A, et al. An evaluation study of the didactic quality of clerkships. *Med Educ*. 2000;34(6):460–464. doi:10.1046/j.1365-2923.2000.00570.x
- Seabrook MA, Woodfield SJ, Papagrigoriadis S, Rennie JA, Atherton A, Lawson M. Consistency of teaching in parallel surgical firms: an audit of student experience at one medical school. *Med Educ.* 2000;34(4):292–298. doi:10.1046/j.1365-2923. 2000.00513.x

- Rolfe IE, Sanson-Fisher RW. Translating learning principles into practice: a new strategy for learning clinical skills. *Med Educ*. 2002;36(4):345–352. doi:10.1046/j.1365-2923.2002.01170.x
- O'Sullivan M, Martin J, Murray E. Students' perceptions of the relative advantages and disadvantages of community-based and hospital-based teaching: a qualitative study. *Med Educ*. 2000;34(8):648–655. doi:10.1046/j.1365-2923.2000.00623.x
- Modi JN, Anshu, Gupta P, Singh T. Teaching and assessing clinical reasoning skills. *Indian Pediatr*. 2015;52(9):787–794. doi:10. 1007/s13312-015-0718-7
- Ashley EA. Medical education-beyond tomorrow? The new doctor-Asclepiad or Logiatros? *Med Educ*. 2000;34(6):455–459. doi:10.1046/j.1365-2923.2000.00563.x
- Giesbrecht EM, Wener PF, Pereira GM. A mixed methods study of student perceptions of using standardized patients for learning and evaluation. *Adv Med Educ Pract*. 2014;5:241–255. doi:10.2147/ AMEP.S62446
- Nestel D, Cecchini M, Calandrini M, et al. Real patient involvement in role development: evaluating patient focused resources for clinical procedural skills. *Med Teach.* 2008;30(5):534– 536. doi:10.1080/01421590802047232
- Kantar LD. Demystifying instructional innovation: the case of teaching with case studies. J Scholarsh Teach Learn. 2013;13(2):101–115.
- Bi M, Zhao Z, Yang J, Wang Y. Comparison of case-based learning and traditional method in teaching postgraduate students of medical oncology. *Med Teach*. 2019;41(10):1124–1128. doi:10. 1080/0142159X.2019.1617414
- Stroud L, Cavalcanti RB. Hybrid simulation for knee arthrocentesis: improving fidelity in procedures training. J Gen Intern Med. 2013;28(5):723–727. doi:10.1007/s11606-012-2314-z
- Yardley S, Irvine AW, Lefroy J. Minding the gap between communication skills simulation and authentic experience. *Med Educ.* 2013;47(5):495–510. doi:10.1111/medu.12146
- Tun JK, Granados A, Mavroveli S, et al. Simulating various levels of clinical challenge in the assessment of clinical procedure competence. *Ann Emerg Med.* 2012;60(1):112–120. doi:10.1016/j. annemergmed.2012.01.036
- 41. McFarlane DA. Guidelines for using case studies in the teaching-learning process. *College Quarterly*. 2015;18(1):1–6.
- Case types & methods. National Center for Case Study Teaching in Science (NCCSTS). Accessed June 30, 2021. https://sciencecases.lib. buffalo.edu/collection/types.html
- Case method teaching and learning. Columbia University Center for Teaching and Learning. Accessed January 15, 2023. https://ctl. columbia.edu/resources-and-technology/resources/case-method/
- Moore J, Montejo L. Case-based learning: facilitating nurse practitioner clinical learning with virtual patient cases. J Am Assoc Nurse Pract. 2021;34(1):129–134. doi:10.1097/JXX. 000000000000560
- 45. Nicklen P, Keating JL, Paynter S, Storr M, Maloney S. Remoteonline case-based learning: a comparison of remote-online and face-to-face, case-based learning-a randomized controlled trial.

*Educ Health (Abingdon)*. 2016;29(3):195–202. doi:10.4103/1357-6283.204213

- Armstrong KJ, Jarriel AJ. Standardized patient encounters improved athletic training students' confidence in clinical evaluations. *Athl Train Educ J*. 2015;10(2):113–121. doi:10.4085/ 1002113
- Armstrong KJ, Jarriel AJ, Hardin BM. The longitudinal impact of standardized patient encounters during professional education on athletic training professional practice. *Athl Train Educ J*. 2021;16(3):169–177. doi:10.4085/1947-380X-20-001
- Walker S, Weidner T, Armstrong KJ. Standardized patient encounters and individual case-based simulations improve students' confidence and promote reflection: a preliminary study. *Athl Train Educ J.* 2015;10(2):130–137. doi:10.4085/1002130
- Walker SE, Weidner TG, Thrasher AB. Small-group standardized patient encounter improves athletic training students' psychosocial intervention and referral skills. *Athl Train Educ J*. 2016;11(1):38–44. doi:10.4085/110138
- Walker SE, Thrasher AB. A small group standardized patient encounter improved athletic training students' psychosocial intervention and referral skills. *J Athl Train.* 2013;48(Suppl 3): S72. doi:10.4085/1062-6050-48.3.s1
- Frye JL, Armstrong KJ. Standardized patient encounters and facilitated debrief impact teaching pedagogy and programmatic improvements. *Athl Train Educ J.* 2022;17(2):162–173. doi:10. 4085/1947-380X-21-087
- Kessler DO, Cheng A, Mullan PC. Debriefing in the emergency department after clinical events: a practical guide. *Ann Emerg Med.* 2015;65(6)690–698.
- Roh YS, Kelly M, Ha EH. Comparison of instructor-led versus peer-led debriefing in nursing students. *Nurs Health Sci.* 2016;18(2):238–245. doi:10.1111/nhs.12259.
- 54. Palaganas JC, Fey M, Simon R. Structured debriefing in simulationbased education. *AACN Adv Crit Care*. 2016;27(1):78–85.
- 55. Dreifuerst KT. Using Debriefing for meaningful learning to foster development of clinical reasoning in simulation. J Nurs Educ. 2012;51(6): 326–333.
- West JJ, Kraus KL, Armstrong KJ. Preceptor facilitated debrief improves athletic training student's clinical performance and work efficacy. *J Sports Med and Allied Health Sci.* 2018:4(2):1–5. doi: 10.25035/jsmahs.04.02.05.
- Giuliani M, Gillan C, Wong O, et al. Evaluation of high-fidelity simulation training in radiation oncology using an outcomes logic model. *Radiat Oncol.* 2014;9:189. doi:10.1186/1748-717X-9-189
- Vyas D, Bray BS, Wilson MN. Use of simulation-based teaching methodologies in US colleges and schools of pharmacy. Am J Pharm Educ. 2013;77(3):53. doi:10.5688/ajpe77353
- Bokken L, Linssen T, Scherpbier A, van der Vleuten C, Rethans J-J. The longitudinal simulated patient program: evaluations by teachers and students and feasibility. *Med Teach*. 2009;31(7):613– 620. doi:10.1080/01421590802334283