

Healthcare Providers' Perspectives on Medical Students' Access to Healthcare at an Academic Multispecialty Clinic: A Qualitative Cross-Sectional Study

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Abstract

Background:

Medical students' access to healthcare is shaped by structural, institutional, and interpersonal factors within academic medical systems. While barriers to healthcare access among medical students are increasingly recognized, prior research has focused predominantly on student-reported barriers and mental health help-seeking behaviors. Less is known about healthcare providers' perspectives and broader factors influencing access to general healthcare resources within academic medical training environments.

Methods:

This qualitative, cross-sectional study utilized a phenomenological framework to explore provider perspectives at a single academic medical center. Healthcare providers (n = 10) were recruited from Midwestern University's Arizona College of Osteopathic Medicine academic medical system using purposeful sampling to target the audience who would yield the most insight into medical-student access to care at AZCOM. Participants completed an online survey including demographic items and open-ended questions. Qualitative data were analyzed using thematic analysis with independent coding by multiple researchers, investigator triangulation, and consensus-based theme development. Descriptive statistics were also included to contextualize participant characteristics.

Results:

Providers described healthcare access as shaped by five interrelated domains: time constraints related to medical training, financial barriers, clinic availability and institutional policies, student understanding of healthcare systems, and personal and systemic biases. Time constraints and scheduling conflicts were the most frequently cited barriers, often compounded by limited appointment availability and institutional restrictions. Financial concerns and gaps in system navigation further contributed to delayed or forgone care. Providers also identified a "student-as-patient" tension, in which expectations surrounding professionalism, vulnerability, and role identity may influence care-seeking behaviors and clinical interactions. At the same time, facilitators included telehealth, flexible communication, protected time, extended clinic hours, and student-specific accommodations as strategies to barriers.

Conclusions:

These findings suggest that healthcare access for medical students is shaped less by individual help-seeking behavior and more by the intersection of training demands, institutional structures, and provider perspectives. Efforts to improve access may benefit from approaches that better align healthcare

delivery with the realities of medical training. Addressing these challenges may require evaluation not only of existing interventions, but also how these approaches function operationally and whether they meaningfully address the barriers faced by students within academic healthcare systems.

BACKGROUND

Medical school is a period of significant psychological, physical, and academic stress during which students experience high rates of burnout, anxiety, depression, and emotional distress.¹⁻³ Despite increased medical knowledge and close proximity to healthcare systems, medical students frequently delay or avoid seeking formal healthcare services.^{4,5} Delayed healthcare utilization during medical training may contribute to worsening health outcomes, impaired well-being, and reduced academic and professional performance. Although barriers to healthcare access among medical students are increasingly recognized, prior research has focused predominantly on student-reported experiences and mental health help-seeking behavior. Comparatively less attention has been given to broader perceptions of access to general healthcare resources or healthcare providers' perspectives regarding barriers to healthcare access within academic medical training environments.

Medical students occupy a unique position within healthcare systems as both trainees and patients. This dual-role dynamic may influence healthcare-seeking behaviors, perceptions of vulnerability, and interactions with healthcare providers. Medical students frequently receive healthcare within institution-affiliated clinical systems embedded in academic medical training environments, where healthcare providers may simultaneously serve as faculty members, evaluators, supervisors, or mentors. These overlapping educational and clinical relationships may complicate how students navigate healthcare within institutional systems, particularly when concerns regarding confidentiality, professionalism, and academic evaluation are present. Roberts et al. described perceptions of "academic vulnerability," wherein medical students expressed concern that disclosure of personal illness could negatively influence how they were perceived within academic training environments.⁷ More recent studies have additionally identified persistent barriers related to scheduling demands, healthcare system navigation, confidentiality concerns, and institutional culture within academic medical training environments.

Because medical students frequently receive care within institution-affiliated healthcare systems, institutional policies surrounding confidentiality, wellness, and evaluator relationships are important guardrails which also play an important role in shaping healthcare accessibility. These concerns have prompted increased institutional attention to healthcare accessibility and confidentiality protections within medical education. Accreditation standards established by the Liaison Committee on Medical Education (LCME) emphasize timely access to healthcare services and separation between healthcare providers and academic evaluators. Specifically, LCME Element 12.4 requires timely access to diagnostic, preventive, and therapeutic healthcare services, while Element 12.5 requires that healthcare professionals providing care to medical students have no involvement in academic assessment or promotion decisions and maintain confidentiality of student health records.⁸ Despite these institutional protections, medical students continue to report substantial barriers to accessing healthcare within

academic training environments, suggesting that structural, interpersonal, and organizational factors continue to shape healthcare utilization and care-seeking behaviors.^{4,9}

Existing literature suggests that barriers to healthcare access among medical students are multifactorial and often interrelated. In a 2024 study examining healthcare use before and during medical school, Pazzi et al. observed substantial reductions in annual primary care, dental, and vision visits after matriculation.⁵ Time constraints, scheduling conflicts, financial limitations, and confidentiality concerns were identified as major contributors to delayed or forgone care. Similarly, El-Khawaga et al. reported that medical students frequently cited lack of time, long appointment wait times, and academic obligations as barriers to accessing healthcare services.¹⁰ Collectively, these findings suggest that healthcare access challenges among medical students reflect both the structural demands of medical training and broader organizational characteristics of academic healthcare systems.

Time constraints related to rigorous medical school schedules are among the most consistently identified obstacles to care. Students often experience difficulty attending appointments during standard clinic hours because of academic obligations such as mandatory coursework, examinations, and clinical rotations.^{4,5,10} In addition to academic responsibilities, operational limitations within institution-affiliated clinics, including long appointment wait times and institutional attendance expectations, may further complicate timely access to care.¹⁰ Estabrook et al. demonstrated that concerns regarding obtaining time off for appointments were highly prevalent, with 61% of students reporting avoidance or postponement of healthcare because of concerns about taking time away from academic obligations. The same study further found that many students believed greater understanding and flexibility from attending physicians and supervisors regarding time off for medical appointments would improve care-seeking behaviors.² These findings suggest that rigid academic schedules, appointment accessibility, and difficulty obtaining time away from training responsibilities may substantially contribute to delayed or postponed healthcare utilization among medical students.

In addition to structural and scheduling barriers, financial considerations remain important contributors to healthcare access challenges among medical students, even among insured individuals. Prior studies have described concerns related to inadequate insurance coverage, cost uncertainty, out-of-pocket expenses, and difficulty accessing providers who accept student insurance plans.⁵ Menon et al. additionally identified cost as a reported barrier to healthcare utilization, particularly for physical healthcare services.¹ Despite close proximity to healthcare systems and institutional resources, financial barriers continue to contribute to delayed, fragmented, or deferred healthcare access among medical students.

Another factor that has been found to influence healthcare access among medical students is students' understanding of the healthcare system and awareness of available resources. Although medical students are immersed in healthcare environments, familiarity with medicine does not necessarily translate into effective healthcare navigation as patients. Prior literature suggests that students may experience uncertainty regarding available institutional services, insurance terminology, referral

processes, and how to appropriately access preventive or longitudinal care.^{4,5} Uncertainty regarding where to seek help has also been a commonly reported barrier to healthcare utilization, and recommendations such as orientation to available health services to improve healthcare accessibility among medical students have been made.¹ Confusion surrounding deductibles, copays, coverage limitations, and referral requirements may further contribute to delays in healthcare utilization.⁵ Beyond limitations in healthcare system awareness and navigation, assumptions that medical students possess greater medical knowledge than typical patients may influence provider communication and expectations during clinical encounters.^{4,7}

Beyond logistical and healthcare system navigation barriers, interpersonal and identity-related factors may also shape healthcare-seeking behaviors among medical students. A prior literature review suggested that stigma within medical education is often framed as an individual barrier to treatment-seeking, rather than as a broader product of institutional culture and interpersonal dynamics.¹¹ Menon et al. similarly identified stigma, confidentiality concerns, and fear of negative academic consequences as important deterrents to healthcare utilization among medical students, particularly in the context of mental healthcare services.¹ The same study additionally found that concerns regarding excessive or unwanted intervention and potential negative implications for future academic opportunities contributed to avoidance of healthcare utilization more broadly. Similarly, it has been found that up to 35% of medical students reported avoiding or postponing healthcare because of embarrassment regarding their health concerns. Students with a history of mental illness additionally reported greater concerns regarding confidentiality and greater avoidance of care because of fears that peers or attending physicians might discover their health conditions.² More recent qualitative literature has further suggested that professional identity formation within medical training environments may shape healthcare-seeking behaviors, as some medical students perceive illness, vulnerability, and help-seeking as conflicting with internalized expectations associated with becoming a physician.¹² Together, these findings suggest that the dual role of trainee and patient may shape healthcare experiences through concerns related to stigma, professionalism, vulnerability, and identity within academic medical training environments.

Despite the recognition of barriers to healthcare access among medical students, comparatively little research has examined these issues from the perspective of healthcare providers. Existing literature has predominantly characterized healthcare access through student-reported experiences, with substantially less attention given to how providers perceive and interpret barriers to care within academic medical training environments. As healthcare providers operate within institution-affiliated systems and interact with medical students occupying the dual roles of trainee and patient, their perspectives may provide additional insight into how institutional, interpersonal, and organizational factors influence healthcare access within academic medical training environments. Accordingly, this study focused on exploring healthcare providers' perspectives on barriers and facilitators to medical student healthcare access within an academic multispecialty clinic using a phenomenological qualitative approach.

METHODS

Study Design

This study employed a cross-sectional design, integrating qualitative thematic analysis and descriptive statistics within a phenomenological framework to explore healthcare providers' perspectives on healthcare access among medical students. The cross-sectional design enabled data collection at a single time point, while the phenomenological approach facilitated understanding of how healthcare providers interpret healthcare-seeking experiences within this population. Descriptive statistics were also included to contextualize participant characteristics.

Participants and Sampling Strategy

Participants were recruited from Midwestern University Multispecialty Clinic in Glendale, Arizona between October 2-October 19, 2025. Eligible participants included healthcare providers practicing at the clinic, including those who may also serve as faculty for the Arizona College of Osteopathic Medicine (AZCOM).

Purposeful sampling was used to target the audience who would yield the most insight into medical-student access to care at AZCOM. Recruitment was conducted through coordination with clinic leadership. Email invitations were distributed to eligible participants, with follow-up emails sent as needed to support adequate participation. Participation was voluntary, and no compensation was provided.

Data Collection

Data were collected through an online survey administered via Google Forms. The survey included both multiple-choice demographic items and open-ended questions designed to assess healthcare providers' perspectives on medical students' access to healthcare, perceived barriers, and factors influencing care-seeking behaviors. The survey questionnaire was developed specifically for this study and is provided as Supplementary File 1. The survey required approximately 10–15 minutes to complete.

Participants were presented with a study information sheet outlining the study procedures, risks, and confidentiality protections prior to participation. Consent was implied through voluntary completion of the survey. Responses were de-identified prior to analysis and were not linked to participants' identities in reports or publications. Limited identifying information (e.g., name and email) was collected for potential follow-up, and this information was stored separately from survey responses. Although participants had the opportunity to indicate willingness to participate in follow-up interviews, no interviews were conducted.

Survey and study information sheets can be found in Appendix A and B, respectively.

Phenomenological Framework

A phenomenological framework guided the study to examine healthcare providers' perspectives on medical students' access to healthcare within institutional and social contexts. This approach supported exploration of how providers interpret the lived experiences of medical students seeking healthcare. Narrative responses were examined to identify shared meanings, common experiences, and variations in perspectives among providers.

Qualitative Data Analysis

Qualitative data from open-ended survey responses were analyzed using thematic analysis. Responses were independently coded by four researchers to identify recurrent themes related to healthcare access, identity-related experiences, and perceptions of institutional practices. Investigator triangulation was employed through comparison of coding decisions and thematic interpretations.

Final themes were refined through iterative discussion until consensus was reached. The analysis focused on identifying common perspectives among healthcare providers regarding perceived barriers to student healthcare access, as well as areas of alignment and divergence across responses. When relevant, responses were further characterized by overall sentiment (e.g., positive or negative) to support theme development. Representative quotes were selected to illustrate key themes.

Researcher Positionality and Reflexivity

The qualitative coding team consisted of four medical students from Midwestern University, Arizona College of Osteopathic Medicine (AZCOM). All members of the broader research team shared a similar educational and institutional context. To minimize bias, researchers engaged in reflexivity throughout the analytic process, considering how their perspectives may influence coding and theme development. Credibility and trustworthiness were enhanced through independent coding, investigator triangulation, and iterative discussion of themes.

Demographic Data Analysis

Participant demographics were collected through multiple-choice survey items assessing medical degree, sex, and gender identity. These data were analyzed using descriptive statistics to summarize response distributions and to provide contextual information to complement qualitative findings.

Ethical Approval

This study was reviewed and approved by the Midwestern University Institutional Review Board for research involving healthcare provider participants. Participants were provided with a study information

sheet prior to participation, and consent was implied through voluntary completion of the survey. Data were de-identified prior to analysis to protect participant confidentiality.

RESULTS

Themes derived from analysis of providers’ perspectives are presented using the study’s positive/negative framing and mirror the dataset labels. The themes include: Time and training-related constraints; Financial aspects; Clinic availability/medical-school policies; Understanding/knowledge of the healthcare system; and Personal/systemic biases. Negative accounts emphasized scheduling conflicts, limited appointment availability, and financial or insurance-related barriers, whereas positive accounts highlighted student-dedicated clinics, institutional accommodations, and providers’ efforts to maintain equitable care.

Participant characteristics

Ten healthcare providers participated in the study and contributed open-ended responses. Eight participants identified as female (80%), 20% identified as male, 0% identifying as nonbinary, and 0% identifying as transgender. Six participants held a DO degree (60%), followed by PA (20%), MD (10%) and NP (10%). Participant characteristics are summarized in Table 1.

Table 1: Provider Participant Characteristics

Characteristic	Category	n (%)
Sex (assigned at birth)	Female	8 (80%)
	Male	2 (20%)
Gender identity	Female	8 (80%)
	Male	2 (20%)
	Transgender	0 (0%)
	Nonbinary	0 (0%)
Medical degree	DO	6 (60%)
	PA	2 (20%)
	MD	1 (10%)
	NP	1 (10%)

Theme #1: Time and training-related constraints

This theme captures provider perspectives describing how the structure and demands of medical training influence students’ ability to access healthcare. Responses categorized under this theme

discussed scheduling conflicts, competing educational obligations, and time-related barriers directly associated with participation in medical training. Positive responses included accommodations intended to reduce scheduling friction and improve flexibility in care delivery. While some overlap existed with Theme #3: Clinic availability/Medical school policies, responses were excluded from this theme when the primary issue reflected clinic capacity, provider availability, institutional operations, or staffing limitations rather than students' educational responsibilities or scheduling constraints.

Negative subtheme: *schedule collision and opportunity costs*. Seven of ten providers (70%) described medical students' care-seeking as constrained by structural conflicts between training obligations and clinic operations. One provider summarized this as a "lack of time available to schedule and keep doctor visits" (P8), linking time scarcity to multiple downstream barriers. Others described direct scheduling mismatch, noting that students "cannot get into the clinic at a time that fits into their schedule" because of their "time restrictions," "busy schedule" and "other obligations" (P2, P4, P5, P7, P10). Delayed care was also attributed to competing responsibilities, with one provider stating, "I have only seen students delaying care because of their other obligations" (P7).

Positive subtheme: *time-protective accommodations that reduce friction*. Two of ten providers (20%) also highlighted practices intended to reduce time-related barriers. For example, one provider emphasized flexibility in communication and visit modalities: "Student's at times will delay care due to their schedule, however I always offer to communicate via MyChart or have telehealth visits if that suits their schedule better" (P10). Another described structural accommodations implemented by the university: "Accommodations to student schedules have been made to improve access to care...Time has been given to students through a program to reduce educational hours...and time allowed for care during the OMS III year" (P8).

Theme #2: Financial aspects

This theme captures provider sentiments related to financial barriers influencing medical students' access to healthcare, including insurance limitations, out-of-pocket costs, cost uncertainty, and deferred specialty care due to financial concerns. Responses categorized under this theme focused specifically on economic and insurance-related obstacles to obtaining care. While some overlap existed with Theme #4: Understanding and knowledge of the healthcare system, particularly regarding confusion surrounding insurance terminology and coverage navigation, responses were included under Theme #4 when the primary issue reflected healthcare literacy or systems navigation rather than direct financial burden. No positive sentiments related to financial aspects were identified; however, this theme was retained to reflect the analytic framework and the consistent identification of finances as a barrier to care.

Negative subtheme: *coverage limitations, cost uncertainty, and deferred specialty care*. Financial barriers were described in terms of both insurance coverage limitations and cost uncertainty; these barriers were described by four of ten (40%) providers. Providers identified "poor insurance coverage" and "lack of insurance to cover needs...and cost of care" as direct obstacles (P2; P3). Insurance restrictions were

also noted to delay specialty care: “Sometimes... If their (students) needs include specialty care, they put off the care because their insurance does not cover them” (P7). Cost-sharing considerations, such as “copay responsibility,” were also described as influencing follow-through with recommended care (P1).

Positive subtheme: *not identified*.

There were no positive sentiments related to financial aspects; however, this domain was retained to reflect the analytic framework.

Theme #3: Clinic availability/Medical school policies

This theme captures provider sentiments related to clinic availability, institutional structure, and medical school policies that influence medical students’ access to healthcare. Responses categorized under this theme focused on operational and systems-level factors, including provider availability, appointment access, faculty role restrictions, accreditation-related policies, and institutional workflow adaptations intended to improve access to care. While some overlap existed with Theme #1: Time and training-related constraints, responses were included under this theme when the primary issue reflected institutional operations, clinic capacity, or organizational policy rather than students’ personal scheduling conflicts or competing educational obligations. Overall, this theme reflects how institutional structures and policy-level decisions may both restrict and facilitate healthcare access for medical students.

Negative subtheme: *restricted provider pool and appointment scarcity*. Of the sampled providers, six of ten (60%) noted barriers related to clinic availability and institutional policies. One provider highlighted conflict-of-interest protections: “AZCOM students are only able to schedule with non-grading faculty” (P3). Two providers noted accreditation-related limitations: “COCA standards require DO faculty to recuse themselves in grading, which makes availability limited because our faculty are also our medical staff” and “I have to make sure that I do not test them in OMM or during their SPE” (P7, P4). Similarly, another provider noted “only certain providers in the University Clinic are allowed to see AZCOM students, which reduces the number of available providers and appointment times” (P8). Capacity constraints, including limited appointment availability and long wait times, were also frequently cited (P1, P2, P4).

Positive subtheme: *student-specific accommodations and operational redesign*. In contrast, four of ten (40%) providers described institutional innovations designed to improve access. One noted: “Midwestern Specialty Clinic has created a branch specifically for students in 2025, offering same-day appointments,” and another identified that students are “offered appointments in a quicker timeframe than other patients” (P9, P7). Another described a more comprehensive structural change: “Mid 2025, Midwestern Multispecialty Clinic started a Student Health Clinic solely dedicated to students...We have extended hours...and usually can accommodate visits within 24 hours of request,” as well as an implemented “OMS III Wellness day to give students a free day every other month to seek care” (P10, P8).

Theme #4: Understanding and knowledge of the healthcare system.

This theme captures provider sentiments related to medical students' understanding, awareness, and navigation of the healthcare system, including knowledge of available services, insurance concepts, institutional resources, and preventive healthcare utilization. Responses categorized under this theme focused on healthcare literacy, systems navigation, and the expectations placed on student-patients within medical environments. Some conceptual overlap existed with Theme #2: Financial aspects, particularly regarding insurance deductibles, copays, and coverage understanding; however, responses were included under this theme when the primary issue reflected gaps in knowledge, awareness, or healthcare navigation rather than direct financial burden. Additionally, limited overlap existed with Theme #5: Personal/Systemic biases when providers discussed assumptions surrounding student knowledge; however, those responses were categorized under Theme #5 only when they reflected altered interpersonal expectations, identity-related perceptions, or role-tension within the clinical encounter. Overall, this theme reflects both barriers and facilitators related to healthcare awareness and navigation among medical students.

Negative subtheme: *navigation gaps and information barriers*. Four of ten (40%) providers described gaps in student knowledge related to where or how to seek care and how to interpret policies as barriers. One provider named students' "lack of knowledge of available options" (P2), while another noted "lack of awareness of services provided" (P6). Another provider noted that students "do not understand deductibles and copays," contributing to their inability to appropriately navigate medical care (P1). Providers also suggested that student-patients may be treated with higher knowledge expectations than laypersons, which can create communication mismatches: "As a former student seeking care I felt treated differently in that I was expected to understand more complex discussions than other patients" (P3).

Positive subtheme: *awareness and preventive orientation*. Four of ten (40%) providers also described knowledge-based facilitators when students are aware of available options and value preventive care. For example, when asked about the likelihood of students seeking care based on their student status: "yes, because they are aware of the services that are available to them" (P6). Another provider framed students as more willing to seek care because "they know the value of preventive care" (P8). Finally, one provider suggested that clinicians may modify communication with student-patients in supportive ways so that the students are not treated differently when seeking care, noting that students are granted "a bit more grace" because clinicians "understand that you know just enough to get yourself into trouble" and "providers have been in their situation before" (P2, P5).

Theme #5: Personal/Systemic biases

This theme captures provider sentiments related to personal and systemic biases that may influence healthcare interactions between medical students and healthcare providers within an academic medical environment. Unlike prior themes that focused on structural or logistical barriers (e.g., time constraints, clinic availability, financial limitations, or healthcare system navigation), this theme centers on interpersonal dynamics, perceived stigma, professionalism expectations, vulnerability, and identity-

related perceptions that may shape the clinical encounter. While some overlap exists conceptually with Theme #4: Understanding and knowledge of the healthcare system, particularly regarding assumptions made about student-patients, responses were categorized under this theme when they reflected bias, role-tension, identity perception, or altered interpersonal expectations rather than deficits in healthcare literacy or navigation. Unlike Themes #1–#3, which focused primarily on structural and operational barriers, this theme centered on interpersonal and identity-related dynamics within the clinical encounter.

Negative subtheme: *stigma, vulnerability, and role-tension*. Providers indicated that “student status” may alter the clinical encounter in ways that can be protective but also potentially burdensome or stigmatizing. The survey data revealed that four of ten (40%) providers recognized some negative impacts of bias on students. One provider explicitly flagged the “potential risk of bias for stigmatized care needs” (P3). Others described expectations surrounding professionalism: “coming to their institution, there is a standard of respect and professionalism expected” (P9), and “I do have a standard that students maintain professionalism as they are seeking care at the institution they are going to school at” (P10). Another provider stated that “most students avoid care...because...some seem to feel they can’t show the vulnerability required of a healthcare appointment” (P2).

Positive subtheme: *introspection and empathic equity practices*. Providers also described efforts to mitigate bias through awareness and intentional care practices. One noted: “I know I have intrinsic biases... but... my identity definitely doesn’t change my QUALITY of care” (P2). Another described identity as a source of clinical strength: “I believe the aspects of my identity have strengthened my ability to care for diverse patients with empathy and ability to address social determinants of health” (P3). Of note, eight of ten providers indicated “no” when asked whether any aspect of their identity affected the care they provide (P1, P4, P5, P6, P7, P8, P9, P10).

DISCUSSION

This study extends the existing literature on medical student healthcare access by examining barriers from the perspective of healthcare providers, an underexplored dimension of access within academic medicine. Rather than describing healthcare utilization as the result of isolated patient-level barriers, providers consistently characterized access as a product of interacting structural, organizational, interpersonal, and professional factors embedded within academic training environments. Challenges related to scheduling, institutional policies, financial constraints, healthcare navigation, and professional identity frequently overlapped, while participants also identified institutional accommodations, including telehealth, flexible communication, extended clinic hours, protected time, and student-specific clinical pathways designed to improve access. Collectively, these findings suggest that healthcare access among medical students is best understood as a systems-level phenomenon shaped by the interaction between educational demands, healthcare delivery systems, and institutional responses.

Time and training-related constraints were consistently identified as a dominant barrier. Rather than describing isolated scheduling difficulties, providers portrayed a broader mismatch between the

organization of healthcare delivery systems and the realities of medical training. Students were described as navigating various educational obstacles and responsibilities that frequently conflicted with standard clinic hours and appointment availability. These findings closely align with prior student-focused literature identifying lack of time, long wait times, and limited scheduling flexibility as major contributors to delayed healthcare utilization among medical students.^{4,5} These perspectives reinforce that delayed care may emerge less from individual reluctance to seek healthcare and more from healthcare systems that are insufficiently adapted to the demands of medical training environments.

Institutional policies and operational structures also emerged as major determinants of healthcare accessibility. Providers described how conflict-of-interest protections and accreditation-related restrictions unintentionally reduced the available provider pool for medical students seeking care. These findings highlight a tension within academic medical systems: policies designed to protect confidentiality and reduce evaluative conflicts may simultaneously create additional operational barriers to timely care access. This is particularly relevant given LCME and COCA requirements emphasizing separation between student healthcare and academic evaluation, suggesting that implementation of these protections may influence healthcare accessibility in unintended ways. Although prior literature has emphasized confidentiality concerns and academic vulnerability from the student perspective, the present findings further demonstrate how institutional implementation of these protections shape healthcare accessibility at the systems level.^{1,4} Institutional protections should be evaluated not only by their intended purpose, but also by how they function operationally within academic healthcare systems.

Financial barriers were also frequently cited. Providers described insurance limitations, uncertainty surrounding healthcare costs, and delayed specialty care due to inadequate coverage or anticipated financial burden. These findings reinforce prior literature suggesting that access to healthcare among medical students is influenced not only by physical availability of services, but also by affordability and perceived financial risk.^{1,5} Notably, providers identified relatively few institutional interventions that directly addressed financial barriers compared with other domains such as scheduling flexibility or clinic accessibility. This may suggest that financial barriers are more difficult to mitigate within existing healthcare structures and may require broader policy-level solutions.

Although medical students exist within healthcare environments, providers in this study emphasized that familiarity with medicine does not necessarily translate into effective healthcare navigation as patients. Participants described gaps in students' understanding of insurance systems and available services, while also acknowledging that student-patients are sometimes expected to possess greater medical knowledge than non-medical patients. This dynamic may create communication mismatches in which important explanations or guidance are unintentionally abbreviated. At the same time, providers noted that students who understood available services and valued preventive healthcare appeared more likely to engage with care earlier. These provider perspectives suggest that medical knowledge may function simultaneously as both a facilitator and a source of altered expectations within healthcare interactions.

Themes related to professional identity, role tension, and stigma further illustrated the complexity of healthcare access within academic medicine. Providers described a “student-as-patient” dynamic in which medical students simultaneously occupy the roles of trainee and patient within the same institutional environment. Participants suggested that expectations surrounding professionalism and vulnerability for stigmatized care needs may shape both healthcare-seeking behaviors and clinical interactions. These findings align with prior literature identifying stigma, academic vulnerability, and fear of professional consequences as deterrents to healthcare utilization among medical students.^{1,2,11} Several providers also demonstrated awareness of their own potential biases and described efforts to mitigate inequities through introspection, empathy, and individualized care practices. These findings suggest that provider self-awareness and intentional communication may help foster more equitable and supportive healthcare interactions for medical students navigating care within academic environments.

Overall, the findings of this study suggest that healthcare access among medical students is best understood as a systems-level issue shaped by the interaction between educational demands, institutional structures, provider practices, and professional identity within academic medicine. Importantly, providers identified institutional accommodations and operational strategies already in place that are intentionally structured around student needs and designed to improve accessibility. The continued recognition of persistent barriers despite these accommodations, however, suggests that implementation alone may not be sufficient, reinforcing the importance of examining how healthcare systems are structured and experienced within academic medical environments.

Recommendations for Academic Medical Training Environments

The findings of this study suggest that improving healthcare access among medical students may require systems-level approaches that better align healthcare delivery with the realities of medical training while preserving the institutional safeguards designed to protect students. Future institutional efforts should evaluate not only whether supportive interventions exist, but also whether they are operationally accessible, maintain confidentiality, preserve appropriate separation between clinical care and academic evaluation, and meaningfully reduce barriers to healthcare utilization. Institutional policies should strive to balance essential protections, including conflict-of-interest safeguards, confidentiality, and professional boundaries, with practical accessibility, recognizing that policies intended to protect students may also create unintended operational barriers if not carefully implemented. Ensuring that healthcare systems remain both protective and accessible may better support timely, confidential, and student-centered healthcare within academic medical environments.

Participants identified several institutional accommodations that may help address barriers to healthcare access, including student-dedicated clinics, protected time for healthcare appointments, telehealth services, flexible communication methods, extended clinic hours, and organizational separation between clinic care and academic evaluations. Collectively, these strategies illustrate that many academic medical institutions have already begun adapting healthcare delivery to better

accommodate the unique needs of medical students rather than relying solely on students to navigate existing healthcare systems. Notably, these accommodations targeted many of the barriers identified throughout this study, including scheduling conflicts, confidentiality concerns, and competing educational responsibilities, suggesting that institutions increasingly recognize healthcare access as a shared organizational responsibility rather than solely an individual obligation. However, providers continued to describe persistent barriers despite the presence of these interventions, indicating that the availability of institutional support alone may be insufficient to ensure equitable access. Differences in awareness, implementation, utilization, or consistency across institutions may influence their effectiveness. Future research should therefore evaluate not only whether these institutional strategies exist, but also how they are implemented, perceived by students, and whether they meaningfully improve timely, confidential, and equitable healthcare utilization while maintaining the educational and ethical safeguards necessary within academic medicine.

Strengths and Limitations

A strength of this study is its focus on the provider perspective, an underexplored area within existing literature on medical student healthcare access. Whereas prior research has largely centered on student-reported experiences and mental health–related barriers, this study contributes additional insight into how healthcare providers interpret factors influencing healthcare access within academic medical training environments. Additionally, rather than focusing on specific health conditions or perceptions surrounding mental healthcare resources alone, this study explored broader perceptions of access to general healthcare resources and healthcare utilization among medical students.

The phenomenological qualitative design allowed for deeper exploration of provider experiences and perceptions beyond what may be captured through quantitative approaches alone. The research team's familiarity with the institutional and clinical environment allowed for the facilitation of rich contextual interpretation of participant responses and experiences. At the same time, consistent with qualitative methodology, researcher positionality was recognized as an important consideration in the interpretive process. Therefore, the use of multiple independent coders, investigator triangulation, reflexive discussion, and consensus-based thematic analysis were incorporated to strengthen credibility and promote thoughtful interpretation beyond any single perspective.

Several limitations should also be considered. The study included a relatively small sample from a single academic institution, which may limit transferability of findings to other medical schools, healthcare systems, and institutional or cultural contexts, as healthcare experiences and barriers may differ across academic settings.

While the study sample included a range of healthcare professionals, including physicians (DO and MD), nurse practitioners (NP), and physician assistants (PA), participants likely had varying levels of experience caring for medical students. Differences in professional roles and familiarity with student healthcare experiences may have influenced the breadth and depth of responses provided.

Additionally, the cross-sectional design of this study captured perspectives at a single point in time and may not reflect evolving practices or changes in perceptions over time. Data were also collected through open-ended survey responses without follow-up interviews, limiting opportunities for clarification, and deeper exploration of participant responses. Furthermore, because this study examined healthcare access from the provider's perspective, findings may not fully reflect the lived experiences or perceptions of medical students themselves.

Future Directions

Future analyses will compare healthcare provider perspectives identified in this study with medical student-reported experiences collected as part of a broader mixed-methods project. Examining areas of agreement and divergence between these groups may provide a more comprehensive understanding of perceived barriers to care and the role of institutional factors in shaping healthcare accessibility.

Future research should also evaluate whether institutional strategies identified in this study are associated with meaningful improvements in healthcare access, continuity, and healthcare utilization outcomes. Additional qualitative studies using semi-structured interviews and multi-institutional samples may further characterize how institutional policies, provider decision-making, and perceptions of medical students influence healthcare delivery within academic medical training environments.

CONCLUSION

Despite proximity to healthcare systems, medical students experience barriers that may contribute to delayed healthcare utilization, reduced well-being, and impaired academic and professional functioning. Existing literature has largely focused on student-reported experiences and mental health help-seeking behaviors, with comparatively less attention given to broader healthcare access and provider perspectives. To address this gap, this phenomenological qualitative study explored healthcare providers' perceptions of barriers and facilitators influencing medical student healthcare access within an academic multispecialty clinic.

Findings from this study suggest that healthcare access among medical students is shaped by multiple interacting factors rather than individual behaviors alone. Participant-providers described barriers as cumulative and interdependent, identifying themes related to time and training-related constraints, financial considerations, clinic accessibility and institutional policies, healthcare system awareness and navigation, and interpersonal or identity-related influences. Participants additionally identified institutional accommodations aimed at reducing barriers to care, including student-dedicated clinics, protected time for healthcare appointments, telehealth availability, flexible communication methods, extended clinic hours, and separation between clinical care and academic evaluation. Collectively, these findings suggest that improving healthcare accessibility among medical students may require organizational approaches that better align healthcare delivery systems with the realities of medical training. Expanding student-centered healthcare services, increasing scheduling flexibility, and

maintaining separation between healthcare provision and academic evaluation may represent actionable approaches to improving healthcare accessibility within academic medical environments.

Although several study limitations should be considered, including the single-institution design and provider-centered perspective, future research should incorporate multi-institutional samples and both provider and student perspectives to further examine how institutional structures and healthcare delivery practices influence healthcare access among medical students.

Abbreviations

AZCOM

Arizona College of Osteopathic Medicine

COCA

Commission on Osteopathic College Accreditation

DO

Doctor of Osteopathic Medicine

IRB

Institutional Review Board

LCME

Liaison Committee on Medical Education

MD

Doctor of Medicine

NP

Nurse Practitioner

OMM

Osteopathic Manipulative Medicine

OMS

Osteopathic Medical Student

PA

Physician Assistant

SPE

Standardized Patient Encounter

Declarations

Ethics approval and consent to participate

This study was reviewed and approved by the Midwestern University Institutional Review Board (reference number: IRB-25-0171). All procedures were conducted in accordance with applicable institutional guidelines and ethical standards for research involving human participants. Before participation, individuals received an electronic study information sheet describing the study's purpose,

procedures, potential risks, confidentiality protections, and voluntary nature. Informed consent to participate was indicated through voluntary completion and submission of the survey. Survey responses were de-identified before analysis.

Consent for publication

Not applicable. The manuscript does not contain identifiable personal information. All participant quotations are presented anonymously using participant identification numbers.

Availability of data and materials

The datasets generated and analyzed during the current study are not publicly available because they contain qualitative responses from a small, single-institution sample, and public disclosure could compromise participant confidentiality. De-identified data may be available from the corresponding author upon reasonable request and subject to approval by the Midwestern University Institutional Review Board and applicable institutional requirements.

Competing interests

The authors declare that they have no competing interests.

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Authors' contributions

KC and AH contributed equally to the conceptualization and coordination of the study, data analysis and interpretation, and preparation of the original manuscript. LO, DG, TB, AR, SG, RR, and JBS contributed to data analysis, interpretation of the findings, and critical revision of the manuscript. DL supervised the study, contributed to its methodology, and provided critical review and revision of the manuscript. All authors read and approved the final manuscript.

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Supplementary Files

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