Independent Student Analysis

Cumming School of Medicine
University of Calgary

November 15, 2023

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Executive Summary

The Independent Student Analysis (ISA) survey, designed and disseminated by the Cumming School of Medicine's (CSM) Committee on Accreditation of Canadian Medical Schools (CACMS), was conducted from January to March 2023. The survey was distributed to three classes: the Classes of 2023, 2024, and 2025. The response rates were as follows: 75.83% for the Class of 2023, 68.78% for the Class of 2024, and 87.13% for the Class of 2025, with an average faculty response rate of 80%.

The ISA report provides an analysis of the perspectives of these three classes, acknowledging the inherent diversity of views within a large sample size. The working group has made a concerted effort to objectively and critically evaluate the data, ensuring that the opinions expressed in this document are a reflection of the student body. It is important to note that special circumstances may influence student responses, which will be considered when interpreting the results.

Programmatic Strengths

Clinical Exposure. The CSM provides students with early and broad clinical exposure, which has been identified as a significant strength. This early exposure allows students to apply their theoretical knowledge in real-world settings from the initial stages of their medical education. The breadth of clinical exposure ensures that students gain experience in a wide range of medical specialties, enhancing their understanding of different fields. Furthermore, the school facilitates early career exploration, enabling students to make informed decisions when choosing their desired specialty.

Student Wellness. The school's commitment to student wellness is evident in its positive culture. The Student Advising and Wellness (SAW) Hub plays a crucial role in promoting student well-being and providing resources and support for students throughout their medical education journey. The supportive staff and faculty contribute to the nurturing environment, ensuring students feel valued and supported.

Learning Experience. The CSM offers diverse learning modalities, accommodating a variety of learning styles and formats. This flexibility allows students to choose the learning methods that best suit their needs, enhancing their educational experience. The Master Teacher Program is another strength of the school, as it promotes excellence in teaching. This program ensures that students receive high-quality instruction from educators committed to their success.

Areas of Improvement

Curriculum. While the curriculum at the CSM has many strengths, there are areas that require attention. The ISA data indicates that the anatomy and physiology content could be enhanced to provide more open lab time with cadavers and more in-depth lectures. Additionally, some learning resources are outdated and require updates to reflect current medical knowledge and practices. There is also a perceived lack of focus on family medicine, which could be addressed to ensure a balanced curriculum. Furthermore, students have expressed that insufficient time is

allocated for extra-curricular activities, such as research and shadowing, which are crucial for a well-rounded medical education. During clerkship, many students expressed a desire to place elective rotations later in clerkship to gain fundamental skills necessary to excel during their clinical electives. Many students feel disadvantaged compared to other schools that place core rotations before electives.

School Policies and Accommodations. Feedback suggests that the school's policies and accommodations could be more flexible, particularly in terms of scheduling. The strict pass-fail policies have also been a cause for concern among students, especially with the delay between exam and result release. Importantly, there is a reported discomfort among students (190/380 students) in reporting mistreatment due to fear of retaliation. These issues need to be addressed to ensure a safe and supportive learning environment for all students.

Lack of Diversity Among Faculty Leadership. There is a perceived lack of diversity among faculty leadership, which could be addressed to ensure a more inclusive and representative leadership team.

Facilities and Infrastructure. The school's facilities and infrastructure also have room for improvement. Students have reported inadequate hospital locker space and on-call rooms, which could be expanded to better accommodate their needs. Furthermore, the high cost of parking has been identified as a barrier for students, suggesting that more accessible parking options should be considered.

Critical Recommendations

Teaching and Curriculum. The anatomy curriculum could benefit from a revamp, including more open lab time with cadavers and improved quality of recordings. There is also a need for more medical simulation practice, incorporating a more diverse variety of standardized patients to prepare students for real-world scenarios. Additionally, the school should provide more opportunities and funding for student research and shadowing, enhancing their learning experience and career prospects.

General Wellbeing and Support. The SAW Hub plays a crucial role in supporting medical students. Increasing funding to this hub can help alleviate the pressures, burnout, and emotional challenges that medical students often face, eliminating the barriers to a waitlist for various counseling services provided by SAW.

Policies. The school should revamp the mistreatment reporting policy to increase clarity and ensure students see action taken on their reports, thereby promoting transparency. Furthermore, increased communication surrounding the reporting of mistreatment should be provided to students. More accommodating pass-fail policies and attendance policies should also be implemented. Additionally, the school should offer more flexibility for students requesting sick days, mental health day absences, and flex days, ensuring their well-being is prioritized.

Structural Needs. The school should consider a dedicated student lounge space for medical students to relax, study, and socialize. Furthermore, dedicated parking spots and student parking passes should be provided to alleviate the current parking challenges.

Special Considerations

Impact of COVID-19. The COVID-19 pandemic has significantly impacted the Classes of 2023 and 2024. The Class of 2023 experienced their entire preclerkship education online, while the Class of 2024 had half of their preclerkship online. The Class of 2025 marks a return to the previous "normal." These unique circumstances should be taken into account when interpreting the survey results, as they may have influenced student experiences and responses.

Implementation of the Re-Imagining Medical Education (RIME) Curriculum. RIME is a new curriculum implemented beginning with the Class of 2026 onwards. This curriculum focuses on the spiral delivery of patient-centered clinical presentations rooted in generalism. It also provides opportunities for creativity, self-regulated learning, and professional identity development through active learning. Given the ISA was delivered before the Class of 2026, ongoing data collection will be necessary to properly assess the impact and effectiveness of this new curriculum. A second student survey is planned for Spring 2024 to assess the RIME curriculum.

Use of Large Language Models and Machine Learning Algorithms in the ISA. To the best of our knowledge, this is the first accreditation report for medical schools that incorporates large language models, such as GPT-4, and machine learning algorithms into the analysis of the ISA data. This approach offers a novel approach to how data is analyzed, potentially enhancing the cost and efficiency of the accreditation process. However, it also presents new challenges and considerations that need to be addressed.

Limitations. During survey administration, Questions 3.1-1B, 7.4-3B, and 7.6-2E (**Appendix 2**) were inadvertently removed when distributed by the AFMC. The following quote is verbatim from an email correspondence with a representative from CACMS regarding the omission of the aforementioned questions:

> *We agree that for different reasons uCalgary students did not have an opportunity to respond to the following 16 questions:*
>
> - *Q1/DCI Table 3.1-1 B*
> - *Q54-59/DCI Table 7.2-2 B*
> - *Q1/DCI Table 3.1-1 B and Q60-68/DCI Tables 7.4-3 B and 7.6-2 E*
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> *In addition, the 2023-2024 ISA did not include the question "I am aware of the medical school procedures for the collection, storage, disclosure, disposal, and retrieval of my academic record." Table 11.5-2 C of the 2024-2025 DCI.*

As previously agreed, University of Calgary can delete the relevant tables from its submission and use narrative responses only. University of Calgary can note that it was removed as the ISA did not include the related question (so it is clear to the visiting team why the information is missing). In addition, school-reported data could be collected by University of Calgary and added to your submission. If you wish you can also print this latest e-mail response and add it to your submission.

Andrea Segal
CACMS Accreditation Engagement and Analytical Specialist / Spécialiste de l'engagement et de l'analyse de l'agrément, CAFMC

As suggested by the representative, the missing questions were supplemented using the narrative comments supplied by students in the ISA survey.

Contributors to the ISA Process

This report was prepared by the ISA Subcommittee in partnership with the Calgary Medical Students' Association (CMSA).

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Introduction

The Cumming School of Medicine (CSM) initiated the process for the 2024 Committee on Accreditation of Canadian Medical Schools (CACMS) accreditation in 2022. A student accreditation committee was formed, student representatives were appointed to Faculty subcommittees and working groups, and the 2023, 2024, and 2025 Class Presidents were appointed as student co-leads of accreditation. The Independent Student Analysis (ISA) survey was distributed to all three classes from January to March 2023. This survey was created by CACMS and distributed by the AFMC.

The ISA is a key component of the accreditation process that serves as an independent evaluation of the medical education program from the student's perspective. The ISA is intended to provide a comprehensive and candid assessment of the strengths and weaknesses of the program, including areas of non-compliance or partial compliance with CACMS standards. The findings and recommendations of the ISA are used to inform the accreditation process and guide improvements in the medical education program.

This report represents the opinions and perspectives of medical students across three years. The ISA subcommittee, led by the Presidents of the Class of 2023, 2024, and 2025, included representatives from all classes. The representatives were selected from those who demonstrated interest in joining the ISA subcommittee from an application form (all interested students were offered an opportunity to contribute). This group was responsible for ISA report analysis and writing. The group held two in-person meetings and online discussions to examine items pertaining to the ISA report.

To gather these data, the ISA student team employed various tools (described in greater detail in the Methods section). Data were collected through the ISA survey. The data were analyzed with statistical support from an independent organization, W21C health systems research group, with financial support provided through the Undergraduate Medical Education (UME) office. The UME had no involvement with the development of this report.

The findings of our process, as outlined in this report, demonstrate that the CSM maintains a comparable MD program to other Canadian Faculties of Medicine. The mandate of the student accreditation working group was four-fold:

1. To elucidate strengths and weaknesses in our program;
2. To assess compliance with CACMS standards;
3. To evaluate student and societal needs and assess the success of the program in addressing them; and
4. To provide recommendations for implementing strategies to address deficits, improvements, and innovations, all within the lens of the CSM MD program founding goals and the CSM strategic plan.

We would like to confirm that CSM faculty in positions of UME leadership were given the opportunity to review the ISA report and provide comments on its factual accuracy. While their insights were valuable, it is important to note that they did not directly edit or revise the report. Furthermore, no pressure was exerted on students to alter the report's content, conclusions, or recommendations. The integrity of the student-led process was upheld, ensuring that the report remains an accurate and independent representation of the student perspective.

On behalf of the student accreditation team, we thank you in advance for your thorough and critical assessment of our program. We look forward to meeting with you during the accreditation site visit.

Sincerely,

Eddie Guo

MD Student, Class of 2025
President, Calgary Medical Students' Association
ISA Accreditation Report Lead

Methodology

Survey Administration

The ISA questionnaire was administered by the Association of Faculties of Medicine of Canada (AFMC) with a standard set of 92 questions (**Appendix 1**) to all CSM students in the MD program throughout January 2023 to March 2023. The survey was delivered via a link unique to the emails of all Calgary MD students. The dates for the three cohorts (Class of 2023, 2024, and 2025) were scheduled during a lunch hour between mandatory classes. Students were incentivized to complete the survey with the following:

1. A pizza lunch for those who completed the survey during a designated lunch hour between mandatory classes.
2. A $25/person reimbursement for students purchasing student-organized merchandise for CSM MD students. These incentives were provided to all students in classes that reached ≥75% response rate on the ISA survey.

During survey administration, Questions 3.1-1B, 7.4-3B, and 7.6-2E (**Appendix 2**) were inadvertently removed when distributed by the AFMC. The following quote is verbatim from an email correspondence with a representative from CACMS regarding the omission of the aforementioned questions:

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> *Andrea Segal*
> *CACMS Accreditation Engagement and Analytical Specialist / Spécialiste de l'engagement et de l'analyse de l'agrément, CAFMC*

As suggested by the representative, the missing questions were supplemented using the narrative comments supplied by students in the ISA survey. All abbreviations in this report can be found in **Appendix 3**.

Descriptive Statistics, Reporting and Analysis of Yes/No Questions, and Incorporation of Open-Ended Questions

Data preprocessing involved sorting the data and segregating the votes for each yes/no question by class (i.e., Class of 2023, 2024, and 2025). A Python script was created to complete this task. The cleaned dataset was used to populate the tables found in Appendix A. Furthermore, the cleaned dataset was passed to RATH, AI-driven open-source software from Kanaries, to review the data distribution on all yes/no questions, as well as detect notable patterns within the data. Once areas of interest were identified, a formal analysis was performed.

The formal analysis looked for:

1. Questions and topics with large or bimodal distributions, loosely defined around >90% "yes" and >30% "no" responses;
2. Areas of interest by the student body;
3. Areas of interest by the CSM faculty; and
4. Areas of concern in previous ISA reports.

After identifying the questions of interest, the ISA team correlated the student body's experience and comments provided in the ISA to provide context and inform recommendations for the CSM Faculty. Direct student body input was obtained via word-of-mouth and an anonymous survey asking students to rank areas of improvement by order of importance for items identified by initial analysis of the ISA data.

Thematic Analysis Using a Large Language Model

Thematic analysis was performed on the comments regarding strengths and areas of improvement of the CSM MD program. Firstly, all comments were converted to embedding vectors using OpenAI's embedding model, text-embedding-ada-002. The optimal number of clusters of embeddings was identified using the elbow method using the Yellowbrick Python 3 library for machine learning visualization. Next, K-means clustering was performed, and each comment was assigned to a cluster. The comments within each cluster were concatenated, and each cluster was passed to the OpenAI GPT-4 API, with a prompt of:

```
"What do the following comments have in common?
Comments: {comments}
Theme:"
```

Where {comments} are the concatenated comments. The themes for each cluster were recorded. The results were visualized in **Fig. 1** and **Fig. 2** using a t-SNE plot with two components, a perplexity of the square root of the number of comments, a random state of 42,

an init of PCA, and a learning rate of 200. Word clouds for each cluster were created using the WordCloud Python 3 library with stopwords excluded (e.g., "the", "an").

Independent Review of the ISA Survey

A separate thematic analysis of the comments from the ISA survey was independently conducted by W21C, a healthcare systems research and innovation initiative based at the University of Calgary's O'Brien Institute for Public Health and the Calgary Zone of Alberta Health Services. The goal of the analysis was to generate insights from an independent organization. Their findings are incorporated into this report.

The data used in this study was carefully de-identified (including removing faculty identifiers, e.g., names, positions) prior to being provided to W21C to ensure the privacy and confidentiality of the respondents. The de-identified data was then transferred securely to W21C for analysis. W21C was given explicit instructions to maintain the de-identified status of the data throughout the analysis process and in the final report. This was to ensure that no identifying data would be included in the report, thereby preserving the anonymity of the respondents and named faculty members. The team at W21C then conducted a thematic analysis of the de-identified comments to identify patterns and themes that could provide valuable insights for the ISA report. The CSM faculty provided funding to hire W21C.

To perform the thematic analysis, the W21C imported the de-identified data from the open-ended ISA questions to NVivo12, software designed to collect, organize, analyze, and visualize unstructured or semi-structured data. The data analysis followed a form of thematic analysis (template analysis), as outlined by Brooks, McCluskey, Turley, and King (2015).[1] The initial coding process consisted of reviewing 10% of the dataset and developing a codebook of themes and codes by inductively identifying patterns across the dataset by a Research Associate at W21C. Following the development of the coding book, the Research Associate and two Research Assistants coded the complete dataset. Through the coding process, new codes that did not fit into the themes present in the initial codebook became salient, and these emergent codes were added to the codebook. All data analysts on the team met bi-weekly to discuss the codes and themes identified by the coders and any assumptions or biases.

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[1]Brooks J., McCluskey S., Turley E., King N. (2015). The utility of template analysis in qualitative psychology research. *Qualitative Research in Psychology*, 12(2), 202–222. Crossref

Results/Discussion

This section systematically reviews responses to the yes/no and long-answer questions from the ISA survey. Each subsection is organized into Standards as defined by CACMS. Within each Standard, salient groupings of themes and questions are presented with contextual information, the corresponding ISA result, and key recommendations to improve the student experience.

Standard 3: Academic and Learning Environments

Medical Student Participation in Research/Scholarly Activities

There were over 30 student comments regarding research as an aspect to improve upon and as their most important recommendation to see on the ISA report. The following themes arose from the comments:

1. There is insufficient time in the curriculum dedicated to self-directed research compared to students who attend four-year MD programs. As such, they are "less competitive" when applying through CaRMS.
2. There is a lack of funding for research, e.g., student grants and limited conference funding ($1,000 per student requesting funding in the MD program; can only be used once during the MD program). Students expressed disappointment that their research contributions are unpaid.
3. There is a request for additional support for accessing research opportunities, especially those from non-traditional backgrounds (e.g., non-health science).

The CSM MD Program's current research block is called Applied Evidence-Based Medicine (AEBM) II. AEBM II is a hybrid model for Year 2 medical students, where students select whether they (a) wish to pursue self-directed research with the guidance of a preceptor or (b) have a clinical experience where they write a case report on cases they see. The majority of students select option (b), as they endorse that it provides additional time to shadow and network with physicians in an extended career exploration fashion. This block's timing is flexible and does not prescribe a set time when research or clinical experiences occur, i.e., the student schedules their time accordingly.

In Year 1, medical students are introduced to basic epidemiology, statistics, and research methodology in AEBM I. Given the wide-ranging research background of the class and that AEBM classes were often scheduled directly before exams, the course was not well-attended.

Table 3.2-2 C | Medical Student Participation in Research/Scholarly Activities   Source: ISA

Campus	Survey Question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	The medical education program provided me with sufficient opportunities for participation in research and other scholarly activities.	85/149 (57.05%)	41/119 (34.45%)	70/113 (61.95%)	196/381 (51.44%)

	The medical education program encouraged my participation in research and other scholarly activities.	104/149 (69.80%)	47/119 (39.50%)	64/113 (56.64%)	215/381 (56.43%)

Recommendations:

1. **Provide an extended, dedicated research block for students.** Change AEBM I such that it becomes a flexible block where pre-recorded lectures are available to students but provide dedicated time to pursue research and other scholarly activities.
2. **Increase funding opportunities for medical students.** For example, remove the limit of one $1,000 conference grant per student or provide a student grant for pursuing research.
3. **Provide a portal where preceptors can post research projects and medical students can view these opportunities.** See the University of Alberta's portal Finding Research Opportunities | Faculty of Engineering for an implementation example.

Reporting Mistreatment
Mistreatment reporting was identified as an area of weakness by students in the previous ISA report conducted in 2016, but it was eventually deemed satisfactory by CACMS due to evidence that the UME made efforts to make changes. In this analysis, we find that previously identified problems persisted. The survey results indicate that a significant portion of students (190/380, 50%) feel uncertain about reporting mistreatment without the fear of retaliation. A similar question in 2016 found that only 12-16% of students felt that investigation of violations of the code of conduct may result in retaliation/repercussions.

Some students reported that they "feel unsafe" and/or "fearful" with the current reporting system (See "Fostering an Environment of Respect" for further elaboration). Other students expressed that they chose not to report, or wait until graduation to report mistreatment, presumably due to fears this may have on timely graduation and matching to the student's desired program for residency. Furthermore, some students endorse that certain UME policies appear to be applied on an unequal basis, with one student stating "[t]he school should not be able to hold meetings with students…who did NOTHING wrong according to…policy." Students believe that it is worth investigating whether a policy "reflects equitable treatment of students or…unfairly discriminates," as this would suggest that "the school may be falling short on their commitment to [equity, diversity, and inclusion]."

In September 2022, Southern Butler Price conducted an external review focused on the university's Protected Disclosure process, as requested by CSM leadership. We endorse many of the recommendations put forward in the report, including making the process more transparent, include a tracking system, and increase awareness of mistreatment reporting. While it is evident that the CSM is working to further understand the state of mistreatment reporting, students' perceptions of the culture around mistreatment, as well as their sense of safety, must be considered for any new or re-written policies to be effective.

We recommend **that the CSM engage in a process of shared decision making with students by including students throughout the entire process of revising the mistreatment policies and procedures**. As there is "growing diversity of medical student populations" that may not be reflected in UME leadership, student involvement in the process is essential to address concerns that may not be readily apparent, thus avoiding the risk of unintended yet devastating harm and discrimination. We strongly recommend that this issue is monitored closely until data on delivery and impact is available and can be assessed within a reasonable predetermined timeframe.

The table below provides the yes/no responses from our students.
Question 11
Table 3.6-6 C | Reporting Mistreatment (Core Appendix)   Source: ISA

Campus	Survey Question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	I feel that I can report mistreatment without the fear of retaliation	75/148 (50.68%)	54/119 (45.38%)	61/113 (53.98%)	190/380 (50.00%)

Recommendations:

1. **Include students as active participants in the re-working of the mistreatment policies and procedures**: The student body is comprised of individuals with different life experiences and diversity that is not adequately reflected in UME leadership. Therefore, students should be actively involved in policy changes to avoid the real risk of unintentionally discriminating against certain groups of students.
2. **Consider an established third party external to the UME, that is safe and can adequately address mistreatment complaints:** By having a party outside of the UME this may help achieve greater anonymity, thus decreasing student fears regarding retaliation.
3. **Address recommendations put forward by the Southern Butler Price external review and recommendations of the Procedure for Protected Disclosure:** This includes a transparent reporting process, implementing a tracking system, and increasing student awareness.

Fostering an Environment of Respect
The survey results indicate that a majority of students feel that both the medical school and the hospitals where they were assigned foster environments where people are treated with respect. However, there is a noticeable decrease in the percentage of students who feel this way from Year 1 to Year 2 in the medical school setting. This may suggest that some students' perceptions of the environment change as they progress through their medical education.

Notably, there were numerous comments about UME leadership and/or UME policies. While there were a number of positive comments endorsing a supportive culture at the medical

school, many more comments suggested the UME did not create a respectful environment for students. Within the comments, the UME has been described as hostile, paternalistic, punitive, defensive, adversarial, patronizing, not supportive, and deceitful. Many comments strongly suggest a culture of fear in the current system.

An example provided by a student was communication that was perceived threatening made via the "admissions blog" by the Admissions Office, in which privacy concerns were raised. The Admissions Office has endorsed tracking IP addresses of prospective applicants who post anonymously on online forums (e.g. "Although you may post anonymously [to this and other blogs], we can see your IP address." Posted on July 1, 2020). The student notes how this communication resulted in "fear [that] carried through … in UME," where students do not trust that their privacy will be respected. While we agree, in this specific example, that it is the responsibility of the admissions team to screen applicants for red flag behaviours incompatible with the practice of medicine, privacy concerns may greatly impact students' sense of safety in reporting mistreatment via anonymous online forms. This fear from the IP tracking from the Admissions Office carries over to anonymous online surveys administered by the UME by medical students, despite the two being separate entities. We believe that the Admissions Office's online investigations into prospective and current medical students is limited to this specific context and in good faith, however additional transparency in communication with the students would further increase our confidence that privacy concerns are considered carefully. We suggest at minimum that the Admissions Office publishes the information potentially gathered on individuals prospectively in their admissions manual, detailing the extent to which student's online behaviours will be monitored (the CaRMS program descriptions "Information gathered outside of CaRMS application" and UME's Application Access Monitoring Policy are both good examples). The current Admissions manual statement states: "Areas of concern (AOC) may arise at any point in the application process. Concerns may be brought forward by members of the Admissions Office staff based on interactions with applicants, file reviewers, MMI assessors, references, or external sources." We suggest specifically mentioning examples of the external sources, such as social media, anonymous emails, etc. for clarity.

In the hospital setting, the percentage of students who feel they are treated with respect remains consistently high. This suggests that the hospitals are generally successful in fostering a respectful environment for medical students.

Table 3.4-2 B | Fostering an environment of respect   Source: ISA

Campus	Survey Question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	I feel that the medical school fosters an environment in which people are treated with respect.	142/149 (95.30%)	97/119 (81.51%)	101/113 (89.38%)	340/381 (89.24%)

		Year 1	Year 2	Year 3	Total
	I feel that the hospitals where I was assigned fostered environments where people were treated with respect. *Note: Students who were never assigned to a hospital as part of a medical education program should select "Not applicable."*	127/130 (97.69%)	99/105 (94.29%)	100/110 (90.91%)	326/345 (94.49%)

Recommendations:

1. **Encourage open and transparent communication channels** between students and UME leadership to address concerns and foster a more positive environment. Specifically, we recommend the UME increases transparency in responding to student concerns around issues such as mistreatment policies and upholding student privacy.
2. **Promote awareness among faculty and staff** about the impact of their actions on students' perception of the environment, emphasizing the importance of respectful interactions.
3. **Establish a system for regular evaluations of UME leadership performance**, with input from students and faculty, to ensure accountability and continuous improvement. It would be particularly important for input to be completely anonymized without possibility to identify specific individuals to minimize fear with voicing concerns.

Standard 5: Educational Resources and Infrastructure

Sufficiency of Instructional Facilities at Each Major Hospital or Clinical Facility Used or Clinical Learning Experiences by Curriculum Year

The main instructional facilities during preclerkship are located in the Health Sciences Building of the Foothills Campus and include three main lecture theatres, an anatomy lab, clinical skills facilities, and a simulation area. During clerkship, each major teaching hospital or clinic in Calgary (e.g., Alberta Children's Hospital, South Health Family Medicine Clinic) contains facilities for group discussion and running simulations.

Based on the results of the survey, students from both preclerkship and clerkship feel that the instructional resources and spaces in hospitals and clinical settings are sufficient for their learning needs.

Table 5.6-2 B | Sufficiency of Instructional Facilities at Each Major Hospital or Clinical Facility Used or Clinical Learning Experiences by Curriculum Year   Source: ISA

Campus	Survey Question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	I consider that the instructional facilities are sufficient for my learning needs while I am at hospitals/clinical facilities used for required clinical learning experiences.	132/137 (96.35%)	101/108 (93.52%)	105/113 (92.92%)	338/358 (94.41%)

Recommendations: None.

Safety and Security by Curriculum Year

At Foothills Campus, security and protection services are available in-person during daytime hours and can be reached overnight when needed. Additionally, the facilities are automatically locked in the evening hours and require a student card to access. There is also a Safewalk program for students, freely available 24/7. At clinical teaching sites, security services vary by hospital/clinic. Some hospitals have security services for certain wards.

Overall, students feel safe on campus at the medical school during all hours. The Class of 2024 and 2025 felt safe at clinical teaching sites. However, a smaller proportion of students from the Class of 2023 felt the same way. It is possible that this is a reflection of the longer time spent in a variety of clinical settings that the Class of 2023 had experienced at the time of the ISA survey compared to the two other classes of students.

Table 5.7-1 B | Safety and Security by Curriculum Year   Source: ISA

Campus	Survey Question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	At my campus during regular classroom hours, I consider that the security systems in place are adequate to ensure my safety.	143/149 (95.97%)	117/119 (98.32%)	112/113 (99.12%)	372/381 (97.64%)
	At my campus outside of regular classroom hours, I consider that the security systems in place are adequate to ensure my safety.	140/149 (93.96%)	108/119 (90.76%)	109/113 (96.46%)	357/381 (93.70%)
	At clinical teaching sites where I was assigned for required clinical learning experiences, I consider that the security systems in place are adequate to ensure my safety. *Note: Student who have not yet been assigned to a clinical teaching site should select "Not applicable"*	134/137 (97.81%)	108/112 (96.43%)	100/113 (88.50%)	342/362 (94.48%)

Recommendations: None.

Access to Library Resources by Curriculum Year

The Health Sciences Library is located within the Foothills Campus and is the main library for library services for medical students. Students may also access the library at the main campus of the University of Calgary. Accessibility, breadth, and availability of library holdings and technology resources are well-rated by students across all years.

Table 5.8-1-B | Access to Library Resources by Curriculum Year   Source: ISA

Campus	Survey question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	I consider that library holdings are readily accessible.	124/129 (96.12%)	83/92 (90.22%)	91/96 (94.79%)	298/317 (94.01%)

I consider that the breadth of library holdings is sufficient for my educational needs.	142/149 (95.30%)	107/119 (89.92%)	107/112 (95.54%)	356/380 (93.68%)
I consider that technology resources of the library are readily accessible.	132/141 (93.62%)	92/103 (89.32%)	98/102 (96.08%)	322/346 (93.06%)
I consider that technology resources of the library are sufficient for my educational needs.	142/149 (95.30%)	109/119 (91.60%)	108/112 (96.43%)	359/380 (94.47%)

Recommendations: None.

Access to Information Technology Resources by Curriculum Year

Overall, students across the years believe that access to information technology resources is adequate to support their learning goals. A few comments in the survey indicate that students would benefit from access to external resources through institutional subscriptions from the University.

Table 5.9-1 B | Access to Information Technology Resources by Curriculum Year   Source: ISA

Campus	Survey question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	I consider that my medical school provides me with sufficient access to electronic learning materials.	142/149 (95.30%)	107/119 (89.92%)	100/113 (88.50%)	349/381 (91.60%)
	I consider that information technology (IT) resources are accessible while I am on-campus.	138/144 (95.83%)	109/112 (97.32%)	106/108 (98.15%)	353/364 (96.98%)
	I consider that information technology (IT) resources are accessible while I am off-campus at teaching facilities required by my program.	121/130 (93.08%)	100/106 (94.34%)	106/111 (95.50%)	327/347 (94.24%)
	I consider that Information technology (IT) resources are sufficient in scope to support my educational needs while I am on-campus.	145/149 (97.32%)	114/118 (96.61%)	111/113 (98.23%)	370/380 (97.37%)
	I consider that information technology (IT) resources are sufficient in scope to support my educational needs while I am off-campus at teaching facilities required by my program.	140/149 (93.96%)	112/119 (94.12%)	109/113 (96.46%)	361/381 (94.75%)

Recommendation: **Identify external resources students are currently leveraging and explore institutional subscriptions to these platforms**, e.g., AMBOSS, Osmosis, UWorld, Complete Anatomy, Sketchy.

Adequacy of Study Space

During preclerkship, students are predominantly at the FMC Health Sciences building, which includes a library, small group rooms, and a shared lounge. Small group rooms are often booked for educational events for other years or programs, and the shared lounge may be

overcrowded and loud. The library room booking is adequate for individual studying; however, students often like to discuss with peers or attend interactive Zoom meetings. As these study rooms are meant to be quiet, this collaborative way of studying is not feasible.

The survey results reflect this inadequacy of study space on campus, with only 67.19% of students agreeing that it is adequate. More alarming is that only 56.499% of students believe that the hospital they were assigned was adequate in this realm. As students spend a considerable amount of time on campus and in hospitals for their educational endeavours, it is imperative that proper study places are implemented. Comments from students in the survey regarding study spaces are often in conjunction with strong grievances regarding a lack of a space/lounge exclusively for medical students.

Table 5.11-1 B | Adequacy of Study Space   Source: ISA

Campus	Survey question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	The study space on my campus was adequate for my needs.	96/149 (64.43%)	70/119 (58.82%)	90/113 (79.65%)	256/381 (67.19%)
	At all hospitals where I was assigned, the study spaces were adequate for my needs. *Note: Students who were never assigned to a hospital as part of a medical education program should select "Not applicable"*	47/85 (55.29%)	38/68 (55.88%)	63/109 (57.80%)	148/262 (56.49%)

Recommendations:

1. **Explore areas to serve as study spaces in hospitals students are assigned in.**
2. Identify key sites that are especially deficient in student study spaces.
3. **Have medical student-specific study places** that may be leveraged for solo and group study.

Adequacy of Lounge Areas

There is differential reporting of whether lounge spaces are adequate between medical school class years, and we believe this likely reflects the different levels of access to lounge spaces among the different classes. The Class of 2023 had access to lounge spaces during their preclerkship years. At the time of the survey, the medical school lounge finished a renovation but was locked to everyone. The renovation cost $284,600 and the ordered furniture cost $300,000, totaling $584,600. Additions to the lounge include a lactation room and nap room.

At the time of this report, the lounge had been opened to all CSM learners (e.g., BHSc, MD, graduate students). The decision was made after months-long discussions between CSM leadership and the medical students, with students advocating that it be opened and serve as a medical student exclusive space. Despite extensive advocacy from students, the space has since

opened to all CSM learners. The communication regarding these changes has been perceived as opaque, leaving students questioning the rationale behind opening up the lounge to the broader community. Thus, without understanding the reasons for the decisions made, it is not surprising that over 100 survey comments expressed disappointment in the lack of a medical student specific lounge.

Comments reported not only a reduction in amenities—such as limited seating—but also the loss of exclusivity that once allowed medical students a private space for study and relaxation. It is a great privilege to become a physician and serve the public, and indeed we take the role very seriously. We keep discussions of our experiences, some of which are completely new to us, to ourselves. This includes discussion of student's experiences with witnessing illness and death. Having the space accessible to all learners has led to concerns about privacy and a lack of community where we can be vulnerable with our peers. It is our impression that most, if not all, medical schools in Canada have lounges exclusively formedical students.

To address these concerns, we recommend that a dedicated space for medical students be reinstated. It may also be constructive to propose an annual budget allocated specifically for the lounge. This budget would empower each class to customize the lounge according to their needs, ensuring resources are available for maintenance and updates as desired by the medical student body.

Table 5.11-2 B | Adequacy of Lounge Areas   Source: ISA

Campus	Survey question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	The lounge space on my campus was adequate for my needs.	49/149 (32.89%)	21/119 (17.65%)	83/113 (73.45%)	153/381 (40.16%)
	At all hospitals where I was assigned, the lounge areas were adequate for my needs. *Note: Students who were never assigned to a hospital as part of a medical education program should select "Not applicable"*	60/86 (69.77%)	41/74 (55.41%)	66/109 (60.55%)	167/269 (62.08%)

Recommendations:

1. **Create a space exclusively for medical students.**
2. **Create a budget for students to use toward the student lounge**, allowing each class to customize the lounge to suit their unique contextual needs.

Standard 6: Competencies, Curricular Objectives, and Curricular Design

Learning Objectives
Consistently high (>90%) student awareness of medical education program objectives and learning objectives of each required learning experience across years.

Question 41

Table 6.1-5 B | Student Awareness of Learning Objectives for Each Required Learning Experience
(Core Appendix)   Source: ISA

Campus	Survey Question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	So far this academic year, I was made aware of the learning objectives for each required learning experience that I completed.	143/149 (95.97%)	112/119 (94.12%)	106/113 (93.81%)	361/381 (94.75%)

Recommendations: None.

Clinical Experiences for Medical Students

The MD program currently has a family medicine clinical experience during the first and second years (FMCE 330 & 430). Each student is assigned one preceptor they work with for four clinic half-days in the first year and a different preceptor for three clinic half-days in the second year. Courses 1 to 7 also have a mandatory clinical exposure component in that specialty.

The survey results indicate consistently high (94-100%) endorsement of outpatient and inpatient clinical experiences in the medical school curriculum (a strong point for UofC: early and frequent opportunities for patient contact and engagement). When looking at results of exposure/experience specifically in generalist care, including comprehensive family medicine, there seems to be a consistently high endorsement of being given the opportunity to experience generalist care (91-100%) and comprehensive family medicine (89-99%) but the mixed response on whether or not that exposure was "broad" for both generalist care (80-97%) and comprehensive family medicine (81-96%). The broadness of exposure can also be related to the setting; only 59% of first-year students had clinical experience in more than one setting, while 74% of second-year students and 96% of third-year students did.

Table 6.4.1-1 B | Exposure to and Experience in Generalist Care Including Comprehensive Family
Medicine (Core Appendix)   Source: ISA

Campus	Survey Question	Number (%)			
		Class of 2023	Class of 2024	Class of 2025	Total
Foothills	I had broad exposure to generalist care.	110/113 (97.35%)	96/119 (80.67%)	134/149 (89.93%)	340/381 (89.24%)
	I had experience in generalist care.	113/113 (100.00%)	110/119 (92.44%)	137/149 (91.95%)	360/381 (94.49%)

	I had broad exposure to comprehensive family medicine.	109/113 (96.46%)	97/119 (81.51%)	138/149 (92.62%)	344/381 (90.29%)
	I had experience in comprehensive family medicine.	112/113 (99.12%)	106/119 (89.08%)	140/149 (93.96%)	358/381 (93.96%)

Recommendation: Instead of working with only one family physician each year, students should be exposed to the practice of a couple of different family physicians (in different settings) in the first and second year to gain broad exposure. Time can be allocated from FMCE 330 and 430 orientation and small group to clinical to accommodate this.

Elective/Selective Opportunities
There are three weeks of preclerkship electives spread out between the first and second year for students to explore different specialties. These used to be scheduled independently by students, but since 2022, they have been scheduled centrally to decrease the impacts of social capital in gaining access to early exposure to competitive specialties. Students generally felt like they were given enough opportunity to supplement learning (89-97%) and gain exposure to medical specialties (91-95%) with these electives. Fewer students (82-92%) felt that they could pursue individual academic interests during these electives, particularly first (82%) and second (83%) year students.

Table 6.5-1 C | Elective/Selective Opportunities   Source: ISA

Campus	Survey Question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	I had the opportunity to supplement required learning experiences with elective (or as appropriate, selective) experiences.	134/149 (89.93%)	112/118 (94.92%)	109/112 (97.32%)	355/379 (93.67%)
	I had the opportunity to gain exposure to medical specialties in my elective (or as appropriate, selective) experiences.	137/149 (91.95%)	107/118 (90.68%)	107/113 (94.69%)	351/380 (92.37%)
	I had the opportunity to pursue my individual academic interests in my elective (or as appropriate, selective) experiences.	123/149 (82.55%)	98/118 (83.05%)	104/113 (92.04%)	325/380 (85.53%)

Recommendations: None.

Service Learning
Service learning is a structured learning experience that combines community service with preparation and reflection. At the CSM, there is a community-engaged learning (CEL) course incorporated into the year 1 and 3 curriculum. Students can rank community partners they would like to work with and are paired to work with community partners for about three days.

The rest of the course consists of small group sessions and lectures. Due to the COVID-19 pandemic, some of the community partner sessions were not in person but through Zoom. Overall, there is a moderate endorsement of encouragement (79-88%) and opportunity (75-89%) to participate in service learning.

Questions 52 & 53

Table 6.6-1 F | Opportunities and encouragement for medical student participation in service-learning   Source: ISA

Campus	Survey Question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	I had an opportunity to participate in a service-learning activity.	111/149 (74.50%)	107/118 (90.68%)	100/113 (88.50%)	318/380 (83.68%)
	I was encouraged to participate in a service-learning activity.	117/149 (78.52%)	103/117 (88.03%)	97/113 (85.84%)	317/379 (83.64%)

Recommendation: Allocate time from CEL small group activities and didactic sessions to time spent actively engaging with the community partners on site.

Standard 7: Curricular Content

Enhancement of Medical Student Skills
Unfortunately, the questions regarding curricular content were not sent by CACMS/AFMC in the ISA survey sent to students. However, several comments were made related to the questions asked in the survey and were used in this analysis. Over 30 students commented on issues with the curriculum in providing students with practical knowledge and skills that translate to the clinical environment. Common themes included:

1. Too much specialist focus and insufficient teaching at a generalist level.
2. There is a need for more simulations, case-based teaching, and integrated teaching sessions between communications and physical exam that build students' clinical skills for creating differential diagnoses and case presentations. Physical exam sessions were often too short and didn't have enough clinical context.
3. Some lectures were often old recordings, sometimes with outdated information.
4. Insufficient learning opportunities with prosection-based anatomy.
5. Insufficient foundational knowledge to understand the reasons behind certain clinical practices.
6. Better support for rural electives and required content for working in those communities.
7. There were inconsistent preceptors for certain small group sessions. Sometimes, there are insufficient preceptors for the small groups, leading to students without a preceptor or combining groups.

There were a few comments on the AEBM course and how it is insufficient in providing students with appropriate critical appraisal skills. The current AEBM I course provides lectures on appraising research critically and requires students to pick a clinical topic and write a report that appraises related articles.

Recommendations:

1. **Redesign preclerkship courses to be taught at a generalist level**, including rural components, with more generalists/family physicians being involved in content creation and delivery so sub-specialty level knowledge is not overemphasized. Substitute the time spent on subspecialized pathophysiology with integrated case-based or simulation-based learning.
2. **Addition of more simulations in preclerkship that integrate communications and physical exams** to bridge the gap between the classroom and clinical medicine and prepare students for clerkship and residency.
3. **More time spent on physical exam skills** to understand the nuances of exam findings relating to various clinical presentations. Increased exposure in the hospital in preclerkship will help students practice these skills.
4. **Better integration of evidence-based medicine skills throughout preclerkship.** This could be done in small groups through case-based discussions or a critical appraisal assignment for each preclerkship course to get students to practice these skills.
5. **Ensure all lectures are up to date with the most recent evidence-based information** being taught to students.
6. Ensure lecture content **teaches foundational elements** to understand how symptoms and diagnoses are made and provide key summary points for lectures.
7. **Increase shadowing opportunities and hands-on teaching** to see clinical-based decision-making in real time.
8. **Provide opportunities for self-directed learning** as will be done in clinical settings and clear expectations for exams.
9. **Ensure that there is consistency and current practice** across the platforms of course content (lecture, cards, SG, anatomy, etc.).
10. **Ensure that there are enough small group preceptors for every session.**

Preparation in Cultural Competence and Health Care Disparities
Unfortunately, the questions regarding Cultural Competence and Health Care Disparities were not sent by the AFMC in the ISA survey sent to students. However, several comments were made related to the questions asked in the survey and were used in this analysis.

Many students responded to the themes incorporated within these questions. There were many comments about the continued efforts to promote cultural competency, but some believed it was lacking in certain areas (e.g., gender identity, neurodiversity, religious minorities, parents). Some of the programs specifically targeted to promote cultural competency were felt by those impacted as even more othering. There were also quite a few comments that felt a lot of the teaching was targeting people in the class, promoting advocacy without opportunity for dialogue or differences of opinion, and taking away from the skills-based teaching of medicine. All parties reported agree there is a gap in the mistreatment policy by which to report feedback effectively and potentially anonymously from preceptors, colleagues, or others involved in our education.

Recommendations:

1. Incorporate these principles into the lectures not as separate components but with case-based presentations to discuss.
2. There is a **big push for respect** and a **clear and effective mistreatment policy** to deal with harassment.
3. **Increase understanding of cultural and racialized immigrant health**; do not categorize everyone under "Indigenous health," which does not represent teaching about lived experiences and patient-centered care in those settings.
4. **Standardized patients that represent the diversity of the population we will see in clinical practice.**
5. The **community-engaged learning designed during clerkship could be placed during preclerkship** and more longitudinal interprofessional elements to better understand cultural competency and disparities.
6. **Manage scheduling and mandatory sessions more flexibly** to better accommodate diverse needs, including religious and/or parental obligations.

Standard 8: Curricular Management, Evaluation, and Enhancement

Processes for Medical Student Evaluations of Program Quality
Unfortunately, many comments around curricular management, evaluation, and enhancement were not directly related to the questions asked. Therefore, the themes can be subdivided into the questions asked. Regarding the questions asked, there was a >98% response rate to suggest that evaluations of program quality were available. Feedback forms were available for each lesson, preceptor, and activity. However, there were concerns over the following in particular:

1. It was unclear what was done with feedback, and transparency of the school was lacking regarding how feedback was incorporated.

2. Specifically, there were concerns over the content as it pertained to anatomy being prosection-based and lack of consistency with preceptors. Although this feedback was given throughout the years, it did not seem that all staff were adequately prepared to teach the various systems.
3. Some exams had marks and exam viewing delayed more than two weeks, leading to insufficient time for students to revise areas of improvement for the next exam.
4. The two-exam fail policy triggering a year repeat caused quite a bit of stress over the years, and students felt that the feedback given was not adequately addressed.
5. Feedback on the elective selection process, in particular electives being the first rotation for clerks, was seemingly not appreciated or adjusted.

These concerns were relayed to the UME exam team. The grading policy was since modified so that final results for courses (i.e., not midterm exams) are released at exactly 14 business days after the exam. The midterm exams often have exam viewing before exam grades are released. Students report that a similar policy for midterm exams could be adopted (with shorter follow-up due to preparation for final exams).

All UME policies can be found here: UME | Policies | Cumming School of Medicine | University of Calgary.

Recommendations:

1. **Create transparency of feedback** received and what was acted on by the UME to address concerns of students as it pertains to content.
2. **Ensure exams and evaluations are connected to course material.**
3. **Provide feedback/results sooner** so students can learn from the content on which they have just been evaluated.
4. **Discussion about the best way to maintain high standards of medical students while also appreciating the concerns with the current evaluation process and MPL system** (e.g., two exam policies failing a year).
5. **Enable a clear and transparent appeal process of evaluations** that do not require students to memorize questions and answers from sitting with no access to devices.
6. **Place elective rotations further back in clerkship.**
7. **Ensure all preceptors go through similar training protocols** to ensure the standard of teaching.

Table 8.5-1 F | Processes for Medical Student Evaluations of Program Quality   Source: ISA

		Number (%)

Campus	Survey Question	Class of 2023	Class of 2024	Class of 2025	Total
Foothills	The medical school provided me with opportunities to evaluate my required learning experiences (e.g., courses, clerkship rotations, longitudinal integrated clerkships).	112 (99.12%)	115 (98.29%)	145 (97.32%)	372 (98.15%)
	The medical school provided me with opportunities to evaluate my teachers.	112 (99.12%)	116 (98.31%)	149 (100%)	377 (99.21%)

Amount of Time Students Spend in Required Activities

With regards to time spent in required activities, >80% of the class felt that time commitments were clearly indicated to them. However, close to 30% of the class felt disappointed that preceptors might keep them longer than the documented expectation from the course guide suggested. There was an understanding that clinical needs may require extra time but that the preclerk and clerk time was not respected, given the tacit expectation to always be available over time. The official Clerkship Work Hours policy can be found here: UME | Policies | Cumming School of Medicine | University of Calgary.

The comments that clearly reflect these ideas are boiled down into a few themes regarding time requirements:

1. The expected amount of time in clinical rotations was not clearly indicated, specifically heavy rotations like surgery. This is also not clear when it comes to calls in terms of what is expected when staying after 11 PM.
    a. From the Clerkship Work Hours policy: "*On-call hours refer to those times the Clerks carries clinical responsibilities beyond the regular daytime hours. This typically includes evenings, overnight and weekends. When no call room is available, students should be dismissed no later than 2300h and are expected to attend the following day. Dismissal prior to 2300h is acceptable, at discretion of the rotation or preceptor.*"
2. After-hour content review and information sessions, i.e., in the evening, were consistently held, making it difficult for students to be present for the required time and additional optional sessions. Asking people to commit their nights to those sessions is an issue, especially for those with families.
3. Given the constraints of the 3-year program, the required amount of time and expectations, and the condensed nature, the school was incredibly strict on scheduling of flex days, too far in advance, and limited their amount.
4. Lecturers or clinical core teaching would often run long, especially towards the end of the day. This includes recorded podcasts scheduled for an hour, longer than the time provided.

Recommendations:

1. **Clerks could have more academic half days** (some rotations do) to reset and engage with lessons such as information for CaRMS and other review sessions.
2. **Support for students to take adequate time off/rest and not worry about having their evaluation be impacted**, especially in rotations that are heavy for hours and service.
3. **Host content review sessions during the day.**
4. **Ensure preceptors or those teaching are aware of the time allotted to them** and schedule to minimize issues with going over time.

Table 8.8-1 G | Amount of Time Students Spend in Required Activities (Core Appendix)   Source: ISA

Campus	Survey Question	Number (%)			
		Class of 2023	Class of 2024	Class of 2025	Total
Foothills	I am informed of the amount of time that the medical education program expects me to spend in required activities.	92 (82.42%)	90 (76.27%)	133 (89.26%)	315 (82.89%)
	I am disappointed by the number of times I was required by a supervisor/teacher to spend more time in required activities than expected by the medical education program.	36 (31.86%)	39 (33.33%)	30 (20.13%)	105 (27.70%)

Standard 9: Teaching, Supervision, Assessment, and Student and Patient Safety

Clinical supervision during clinical learning situation
This section was evident where, in most sections, people felt they were appropriately supervised and ensured the safety of those involved. The main issue of contention was the 20% of people felt the school would be unable to address their concerns with supervision. This theme was prevalent throughout the comments and boiled down to transparency and lack of clarity in the mistreatment policy. Student comments:

1. Ensuring preceptor consistency and commitment of preceptors who are taking on students.
2. Preceptor evaluation had little impact on their selection for student activities.
3. Do not feel safe reporting on preceptor activities or actions.
4. Inconsistency in the number of preceptors per rotation.
   a. E.g., Scheduling five groups for five preceptors and only having two preceptors present, necessitating larger groups, which leads to less individualized teaching.
5. Students fear and distrust leadership due to what feels like the administration's focus on weeding out rather than supporting struggling students.

a. The learning framework in place emphasizes a regimented schedule, including compulsory lectures, which seems at odds with the typical expectations of adult education that favor independent learning. There is room for improvement in communicating these policies more effectively to the student community to cultivate an educational atmosphere where students are encouraged to learn from their errors in a constructive and non-punitive manner.

6. Inconsistent preceptor training in professionalism, physician health, ethics, and physical exam.

Recommendations:

1. **A clear and robust mistreatment policy**, including anonymous feedback whereby students have an understanding of what happens to their concerns/complaints and if any changes arise from those concerns.
2. **Clear expectations provided to preceptors** of the current level of learning of students and what is expected of them in that learning environment.
3. **Standard Operating Procedure for selecting supervisors and ensuring adequate, consistent training.**
4. **Ensure preceptors match group size and backup options in place in case of cancellation** of preceptor that does not include always just merging groups.
5. **Hiring specifically devoted teacher streams** rather than mass-emailing clinicians, especially those trained and interested in teaching in new and interactive ways.

Table 9.3-1 C | Clinical supervision during clinical learning situations (Core Appendix)   Source: ISA

Campus	Survey Question	Number (%)			
		Class of 2023	Class of 2024	Class of 2025	Total
Foothills	I consider that I was appropriately supervised at all times in clinical learning situations involving patient care.	104 (92.04%)	110 (95.65%	141 (96.58%)	355 (94.92%)
	The level of supervision I received in clinical learning situations ensured my safety.	108 (95.58%)	112 (97.39%)	144 (98.63%)	364 (97.33%)
	I consider that the level of supervision I received in clinical learning situations ensured patient safety.	106 (93.81%)	111 (96.52%)	143 (97.95%)	360 (96.26%)
	I consider that the level of responsibility delegated to me in clinical learning situations was appropriate for my level of training.	107 (95.54%)	109 (94.78%)	137 (94.48%)	353 (94.89%)

	I am confident that any concerns I have about my supervision during clinical learning situations can be discussed and addressed by the medical school.	89 (80.18%)	77 (74.76%)	117 (81.82%)	283 (79.27%)

Standard 11: Medical Student Academic Support, Career Advising, and Academic Records

Awareness of Academic and Career Advising Services

The vast majority of students (>94%) reported they were aware of the ability to obtain academic and career advising services. These are well-communicated via the weekly student newsletter, announcements in class, and incorporation into the clerkship orientation course.

Table 11.1-1 C | Academic Advising by Curriculum Year (Core Appendix)   Source: ISA

Campus	Survey Question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	I am aware that I can obtain academic advising through the medical school.	147/149 (98.66%)	114/118 (96.61%)	112/113 (99.12%)	373/380 (98.16%)

Table 11.2-1 D | Awareness of Confidential Career Advising (Core Appendix)   Source: ISA

Campus	Survey Question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	I am aware that confidential career advising opportunities are available to me.	145/149 (97.32%)	115/118 (97.46%)	107/113 (94.69%)	367/380 (96.58%)

Table 11.2-2 D | Career Advising: Choosing Electives, Evaluating Career Options and Applying to Residency Programs (Core Appendix)   Source: ISA

Campus	Survey Question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	I am aware that I can obtain assistance in choosing elective courses.	137/149 (91.95%)	109/118 (92.37%)	111/113 (98.23%)	357/380 (93.95%)
	I am aware that I can obtain assistance in evaluating career options.	145/149 (97.32%)	114/117 (97.44%)	109/113 (96.46%)	368/379 (97.10%)
	I am aware that I can obtain assistance in applying to residency programs.	139/149 (93.29%)	110/118 (93.22%)	110/113 (97.35%)	359/380 (94.47%)

Recommendations: None.

Student Awareness to Review and Challenge Academic Records

Around 75% of students were aware of the ability to review and challenge academic records. Notably, whereas medical students in years 1 and 2 reported awareness of around 62-76%, students in year 3 had a much higher awareness ranging from 83% to 95%. This may be partly due to the increasing emphasis on the MSPR in preparation for the CaRMS match.

Table 11.6-1 C | Student Awareness to Review and Challenge Academic Records (Core Appendix)   Source: ISA

Campus	Survey Question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	I am aware that I am permitted to review my academic records.	113/149 (75.84%)	85/118 (72.03%)	94/113 (83.19%)	292/380 (76.84%)

	I am aware that I am permitted to challenge my academic records if I consider the information to be inaccurate, misleading, or inappropriate.	107/149 (71.81%)	80/118 (67.80%)	95/112 (84.82%)	282/379 (74.41%)
	I am aware that I am permitted to review my medical student performance record (MSPR).	98/149 (65.77%)	86/117 (73.50%)	111/113 (98.23%)	295/379 (77.84%)
	I am aware that I am permitted to challenge my medical student performance record (MSPR) if I consider the information to be inaccurate, misleading, or inappropriate.	93/149 (62.42%)	83/118 (70.34%)	106/112 (94.64%)	282/379 (74.41%)

Recommendation: Incorporate more information surrounding the MSPR, academic records, and the ability to challenge those records earlier in preclerkship.

Standard 12: Medical Student Health Services, Personal Counselling, and Financial Aid Services

The majority of students are aware of these services. These resources are in the students' weekly emails, and financial support is emailed to all students when they arise.

Table 12.8-2 B | Student Knowledge of Post-Exposure Treatment (Core Appendix)   Source: ISA

Campus	Survey Question	Year 1	Year 2	Year 3	Total
Foothills	I received instruction on steps to take following exposure to infectious or environmental hazards before undertaking any educational activities that would place me at risk.	131/149 (87.92%)	105/117 (89.74%)	104/113 (92.04%)	340/379 (89.71%)

Recommendations: None.

Large Language Model Thematic Analysis Results
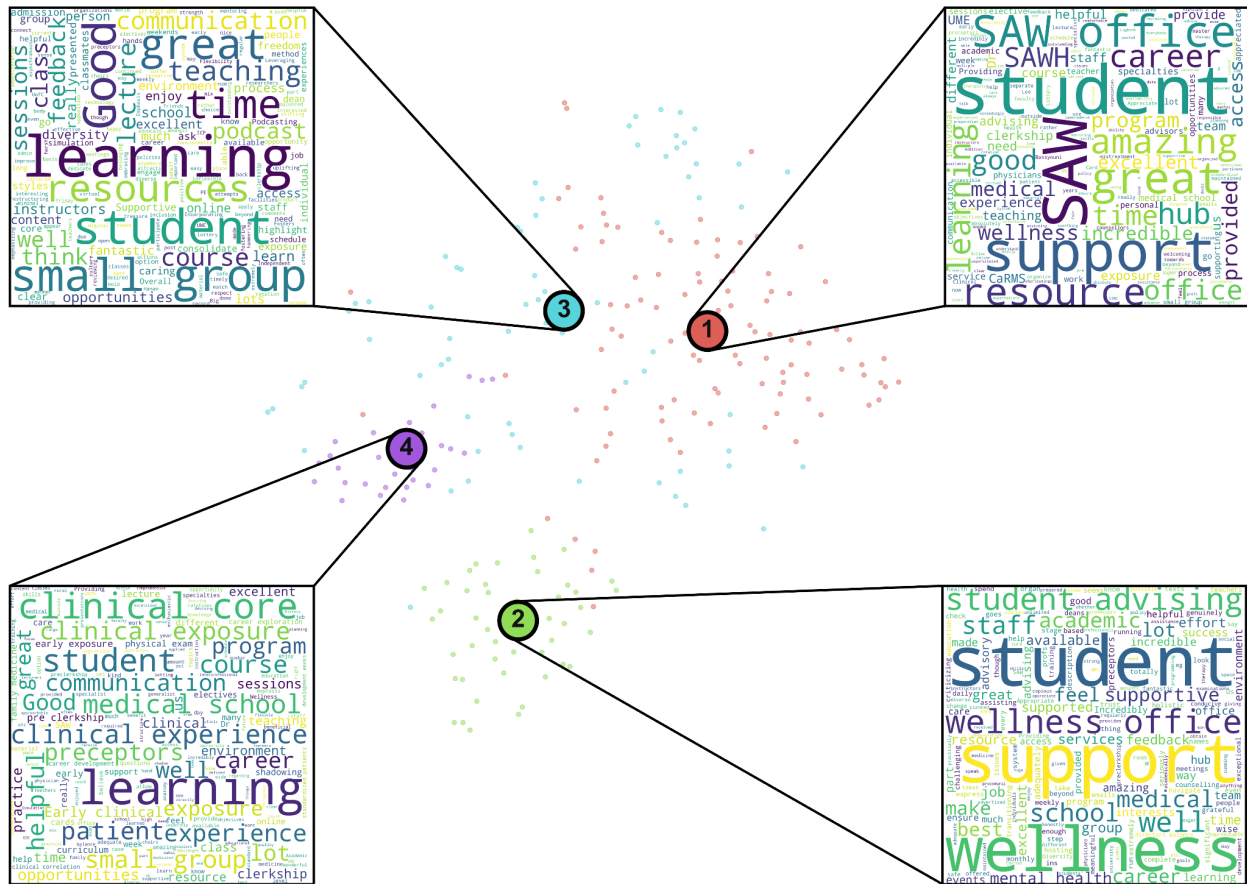
Figure 1. t-SNE plots of comments from the ISA survey regarding the strengths of the CSM MD program. **Cluster 1:** Positive experiences and aspects of a medical school program, with a focus on clinical exposure, supportive faculty, diverse learning opportunities, and student resources. **Cluster 2:** Support and appreciation for the SAW (Student Advising and Wellness) office and its resources. **Cluster 3:** Positive feedback and appreciation for various aspects of an educational institution or program. **Cluster 4:** Student wellness and support services in the medical school/program.
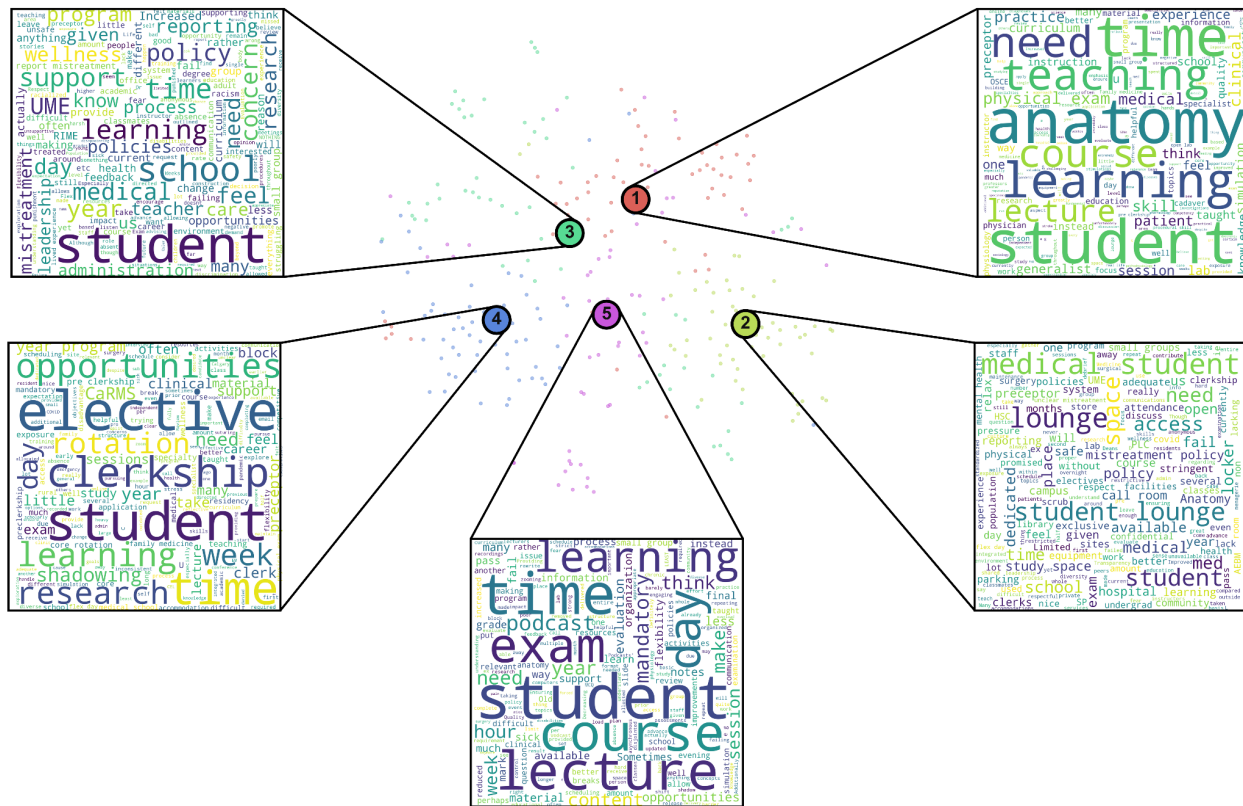
Figure 2. t-SNE plots of comments from the ISA survey regarding areas of improvement for the CSM MD program. **Cluster 1:** The need for improvements in the areas of student support, safety, and well-being within the educational institution, specifically focusing on anti-racism, mistreatment policies, transparency, accessibility, and mental health. **Cluster 2:** Improving the educational experience and support for students. **Cluster 3:** Improving medical education and student support. **Cluster 4:** The need for a dedicated medical student lounge or private space for medical students to study, relax, and debrief with their peers. Other related concerns include access to parking, improvement in policies, and better facilities for students. **Cluster 5:** Feedback and suggestions for improvement in an academic or educational program, specifically focusing on issues such as scheduling, course content, evaluations, teaching methods, and student support.

Limitations/Considerations

The ISA gathered data from the Classes of 2023, 2024, and 2025. It is important to recognize the natural heterogeneity in experiences and, thus, data collected due to COVID-19's influence on medical school. Specifically, the Class of 2023 was fully online for preclerkship, while the Class of 2024 was online for half of their preclerkship experience. Only the Class of 2025 started with and continues to have in-person education; however, the survey for the ISA was distributed in the early months of 2023. The consequence is the data not capturing any class that has had a continuous and complete in-person preclerkship education. Interpretation of the data should keep this in mind by emphasizing class year-specific averages and potential disparities among them.

In addition, the UME at the University of Calgary is facing a significant restructuring with the introduction of the RIME curriculum for the Class of 2026. The ISA does not capture any survey data from students in the RIME curriculum. Further, it is often conveyed by faculty that various issues faced by current students will be alleviated with this new program. This may cause many students not to voice concerns that were specified to be addressed in RIME.

As noted in the Methodology section, aggregate quantitative data is missing for questions 3.1-1B, 7.4-3B, and 7.6-2E. Although qualitative data was incorporated to address this gap, there is notably less data from the comments than there would have been with the quantitative survey data. Hence, results and interpretations for these questions are driven by comments from the long answer questions on the ISA.

As with many voluntary surveys, there will be a sampling bias as those with stronger sentiments (either positive or negative) are more likely to complete the survey and provide in-depth written feedback than those more moderate. The questions asked in the survey also cause a loss in nuance as it synthesizes complex issues in simple nominal responses. Although written comments may alleviate such loss, many students would likely not feel comfortable with sharing in-depth experiences, which may compromise their identity. This is further corroborated as in the survey, it was revealed that 50% (190/380) of students felt uncertain about reporting mistreatment without retaliation. Such fear is likely to be pervasive when completing the ISA survey, potentially masking key concerns throughout the ISA data.

Finally, the ISA is composed of student representatives who aim to highlight key concerns of students. Although measures were taken to ensure a diverse representation, ISA contributors are still a small subgroup of the diverse class population, potentially causing unrepresentative interpretations and recommendations. Nonetheless, all medical students across the Classes of 2024 to 2026 had an opportunity to review the ISA report before it was finalized.

Summary/Recommendations

This summary will highlight each standard, the high-level comments, and recommendations from the analysis.

Regarding **Standard 3**, *medical student participation in research/scholarly activities*, almost half the class felt insufficient time, funding, opportunities, or encouragement for research activities. When competing with schools with four-year options, there was significant concern over students' competitiveness for residency positions. The recommendations included making the current Applied Evidence-Based Medicine course more flexible, making recorded lectures available, and more dedicated time to pursue research. Additionally, there is an opportunity for the school to supply more funding for conferences and a portal for preceptors to post research projects specifically for research students.

Mistreatment as an issue arose in 3.6.6, where 50% of people felt they could not safely report mistreatment in Standard 7 and Standard 8. The importance of a transparent process, tracking of complaints, and increasing awareness of this process was a clear recommendation. However, numerous positive comments and overall affirmative responses concerning a respectful environment existed. However, many students' comments perceive UME as unsupportive and even adversarial. A transparent communication process would support this element and the abovementioned mistreatment.

Based on the responses for **Standard 5,** *Educational Resources and Infrastructure,* there was a vast majority of satisfaction regarding facilities, safety, and access to library resources; therefore, no recommendations were necessary. Regarding technology resources, although there was >90% support for the material currently provided, additional institutional resources could be investigated. The main concern within this standard was the lack of student-specific study space. In medical school, where almost 1 in 3 students filled out the survey, and at other hospital sites (>40% of participants), students thought there was a lack of medical student-specific space. At hospital sites, the suggestion was to investigate areas where students can work and identify critical deficiencies at specific hospitals. The school's recommendations included creating and highlighting exclusive space for medical students for group or solo study, funding the existing amenities, and improving with additional chairs, tables, and other infrastructure.

Standard 6, *Competencies, Curricular Objectives, and Curricular Design,* demonstrated that students were aware of the learning objectives. Although they were exposed to general medicine in family medicine rotation in preclerkship, it could be enhanced with more

opportunities and variety. There were also opportunities to engage with the community and get exposed to electives. Sometimes, didactic sessions and small groups could be allocated to more hands-on experiences with community partners.

Within **Standard 7,** *Curricular content,* the questions were not sent to students, so the report's recommendations were based on the long-answer responses in the ISA survey. The recommendations centered around ensuring hands-on teaching in simulations, shadowing, and physical exams, specifically from the generalist perspective. There is an opportunity for updating material and ensuring it is current with new evidence, consistent with current practice, not just previously recorded lectures, and simultaneously providing an opportunity for self-directed learning. Although there was a big push for respect and cultural competency, some felt groups were left out, and others felt like people were targeted specifically without an opportunity for dialogue. All parties agreed on a gap in the mistreatment policy. Opportunities exist for scheduling more effectively, such as longitudinally placed community-engaged learning during preclerkship and managing scheduling flexibility for diverse needs. One option regarding cultural competency is more case-based, presenting with various represented groups. Most importantly, a transparent feedback policy might incorporate honest dialogue from all perspectives.

Standard 8, *Curricular Management, Evaluation, and Enhancement*, overwhelmingly supported the opportunity to evaluate courses and preceptors. There was concern over how those evaluations were being used. Multiple times, students felt that the feedback provided, e.g., surrounding inclusive language, was not adequately incorporated and that there was a lack of transparency in how the feedback was used. There needed to be a clear demonstration of how feedback was incorporated, whether it be about exams matching course material, results from exams being provided far too delayed from actual evaluation, or even ensuring electives are placed back further in the clerkship rotation. Many times, students felt like the same feedback was being provided with no change or explanation of the reasonings for the decision.

Regarding the other element under this standard of time spent in required activities, the main feedback was that close to 30% of the class felt disappointed that preceptors might keep them longer than the allotted time. There were recommendations to ensure preceptors would keep this in mind for scheduling and going over time. Also, for burnout purposes, there were comments about enabling more academic half days or adequate time off without concerns for evaluation or repercussions.

Standard 9, *Teaching, Supervision, Assessment, and Student and Patient Safety,* was overwhelmingly positive. However, 20% of people felt the school would be unable to address

concerns when they did arise with supervision. This concern was alleviated by the recommendations on the opportunity for supervisory standards and the hope for clear expectations to be given to preceptors. Finally, once again, a clear mistreatment policy was recommended.

Standard 11, *Medical Student Academic Support, Career Advising, and Academic Records,* most of the feedback was >90% affirmative and positive, with no recommendations pertaining to academic or career advising recommendations. Only 75% were aware of their ability to view and challenge academic records, especially in preclerkship (1 and 2). Therefore, students should be made aware earlier and more often about policies surrounding the MSPR, academic records, and the ability to challenge them.

Standard 12, *Medical Student Health Services, Personal Counselling, and Financial Aid Services.* 90% of people were aware of these services with positive comments; no recommendations were provided.

Overall, in the yes/no responses, there were gaps in the questions that the comments tried to fill. One central element across many standards was a lack of transparency between the administration and the student population. This lack of transparency was across communication, feedback, and the ability to report mistreatment. Improved communication between UME leadership and medical students would facilitate solutions to many minor issues as they arise and prevent the most prominent problems for the medical student community.

Appendix 1

Appendix 1 includes all completed ISA source data tables.

Standard 3: Academic and Learning Environments

Question 1

Table 3.1-1 B | Resident Participation in Medical Student Education   Source: ISA

Campus	Survey Question	Number (%)
Foothills	I worked with a Resident in at least one required or elective clinical learning experience during medical school.	n/a

Questions 2 & 3

Table 3.2-2 C | Medical Student Participation in Research/Scholarly Activities   Source: ISA

Campus	Survey Question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	The medical education program provided me with sufficient opportunities for participation in research and other scholarly activities.	85/149 (57.05%)	41/119 (34.45%)	70/113 (61.95%)	196/381 (51.44%)
	The medical education program encouraged my participation in research and other scholarly activities.	104/149 (69.80%)	47/119 (39.50%)	64/113 (56.64%)	215/381 (56.43%)

Questions 4 & 5

Table 3.4-2 B | Fostering an environment of respect   Source: ISA

Campus	Survey Question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	I feel that the medical school fosters an environment in which people are treated with respect.	142/149 (95.30%)	97/119 (81.51%)	101/113 (89.38%)	340/381 (89.24%)
	I feel that the hospitals where I was assigned fostered environments where people were treated with respect. *Note: Students who were never assigned to a hospital as part of a medical education program should select "Not applicable."*	127/130 (97.69%)	99/105 (94.29%)	100/110 (90.91%)	326/345 (94.49%)

Questions 6, 7, 8 & 9

Table 3.4-4 B | Safe Mechanisms for Reporting Discrimination   Source: ISA

Campus	Survey Question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	I feel that the medical school discriminated against me.	5/149 (3.36%)	10/119 (8.40%)	6/113 (5.31%)	21/381 (5.51%)
	For those students who feel that they experienced incidents of discrimination by the medical school: I feel that the medical school provides a safe mechanism for reporting incidents of discrimination.	1/4 (25.00%)	3/10 (30.00%)	3/5 (60.00%)	7/19 (36.84%)
	I feel that I was discriminated against at one or more hospitals to which I was assigned as a medical student. *Note: Students who were never assigned to a hospital as part of a medical education program should select "Not applicable."*	3/131 (2.29%)	9/108 (8.33%)	12/110 (10.91%)	24/349 (6.88%)
	For those students who feel that they have been discriminated against at one or more hospitals: I feel that the hospital(s) involved provided a safe mechanism for reporting.	1/3 (33.33%)	2/9 (22.22%)	2/11 (18.18%)	5/23 (21.74%)

Question 10

Table 3.6-4 A | Medical Students Reporting of Mistreatment (Core Appendix)   Source: ISA

Campus	Survey Question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	I understand how I can report mistreatment	92/149 (61.74%)	107/119 (89.92%)	107/113 (94.69%)	306/381 (80.31%)

Question 11

Table 3.6-6 C | Reporting Mistreatment (Core Appendix)   Source: ISA

Campus	Survey Question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	I feel that I can report mistreatment without the fear of retaliation	75/148 (50.68%)	54/119 (45.38%)	61/113 (53.98%)	190/380 (50.00%)

Standard 5: Educational Resources and Infrastructure

Questions 12 & 13

Table 5.4-1 C | Sufficiency of Facilities and Equipment   Source: ISA

Campus	Survey Question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	Overall, I consider that the teaching facilities are sufficient for my educational needs.	135/149 (90.60%)	100/119 (84.03%)	102/113 (90.27%)	337/381 (88.45%)
	Overall, I consider that the equipment (other than audiovisual or information technology) used for teaching is sufficient for my educational needs.	131/149 (87.92%)	100/119 (84.03%)	97/113 (85.84%)	328/381 (86.09%)

Questions 14 & 15

Table 5.5-1 B | Appropriate Resources for Clinical Instruction in Ambulatory and Inpatient Settings by Curriculum Year (as applicable)   Source: ISA

Campus	Survey Question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	Based on my experience, I consider that the resources for clinical instruction in ambulatory settings are appropriate.	122/129 (94.57%)	95/106 (89.62%)	106/113 (93.81%)	323/348 (92.82%)
	Based on my experience, I consider that the resources for clinical instruction in inpatient settings are appropriate.	128/135 (94.81%)	101/109 (92.66%)	106/113 (93.81%)	335/357 (93.84%)

Questions 16 & 17

Table 5.5-2 B | Access to Patients by Curriculum Year (as applicable)   Source: ISA

Campus	Survey Question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	At this stage of my education/training, I consider that I have sufficient access to adequate numbers of patients/simulated patients to complete my required learning objectives/clinical encounters log.	112/140 (80.00%)	88/111 (79.28%)	105/113 (92.92%)	305/364 (83.79%)
	At this stage of my education/training, I consider that I have sufficient access to the types of patients/simulated patients to complete my required learning objectives/clinical encounters log.	114/139 (82.01%)	84/111 (75.68%)	102/113 (90.27%)	300/363 (82.64%)

Questions 18 & 19

Table 5.6-1 B | Sufficiency of Information Resources in Clinical Facilities Used for Required Clinical
Learning Experiences by Curriculum Year   Source: ISA

Campus	Survey Question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	I consider that my access to computer/Internet resources is sufficient for my learning needs while I am at hospitals/clinical facilities used for required clinical learning experiences.	115/135 (85.19%)	101/111 (90.99%)	102/112 (91.07%)	318/358 (88.83%)
	I consider that information resources available to me (other than computer/Internet access) are sufficient for my learning needs while I am at hospitals/clinical facilities used for required clinical learning experiences.	115/130 (88.46%)	101/111 (90.99%)	107/112 (95.54%)	323/353 (91.50%)

Question 20

Table 5.6-2 B | Sufficiency of Instructional Facilities at Each Major Hospital or Clinical Facility Used or
Clinical Learning Experiences by Curriculum Year   Source: ISA

Campus	Survey Question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	I consider that the instructional facilities are sufficient for my learning needs while I am at hospitals/clinical facilities used for required clinical learning experiences.	132/137 (96.35%)	101/108 (93.52%)	105/113 (92.92%)	338/358 (94.41%)

Questions 21, 22 & 23

Table 5.7-1 B | Safety and Security by Curriculum Year   Source: ISA

Campus	Survey Question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	At my campus during regular classroom hours, I consider that the security systems in place are adequate to ensure my safety.	143/149 (95.97%)	117/119 (98.32%)	112/113 (99.12%)	372/381 (97.64%)
	At my campus outside of regular classroom hours, I consider that the security systems in place are adequate to ensure my safety.	140/149 (93.96%)	108/119 (90.76%)	109/113 (96.46%)	357/381 (93.70%)
	At clinical teaching sites where I was assigned for required clinical learning experiences, I consider that the security systems in place are adequate to ensure my safety. *Note: Student who have not yet been assigned to a clinical teaching site should select "Not applicable"*	134/137 (97.81%)	108/112 (96.43%)	100/113 (88.50%)	342/362 (94.48%)

Questions 24, 25, 26 & 27

Table 5.8-1-B | Access to Library Resources by Curriculum Year   Source: ISA

Campus	Survey question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	I consider that library holdings are readily accessible.	124/129 (96.12%)	83/92 (90.22%)	91/96 (94.79%)	298/317 (94.01%)
	I consider that the breadth of library holdings is sufficient for my educational needs.	142/149 (95.30%)	107/119 (89.92%)	107/112 (95.54%)	356/380 (93.68%)
	I consider that technology resources of the library are readily accessible.	132/141 (93.62%)	92/103 (89.32%)	98/102 (96.08%)	322/346 (93.06%)
	I consider that technology resources of the library are sufficient for my educational needs.	142/149 (95.30%)	109/119 (91.60%)	108/112 (96.43%)	359/380 (94.47%)

Questions 28, 29, 30, 31 & 32

Table 5.9-1 B | Access to Information Technology Resources by Curriculum Year   Source: ISA

Campus	Survey question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	I consider that my medical school provides me with sufficient access to electronic learning materials.	142/149 (95.30%)	107/119 (89.92%)	100/113 (88.50%)	349/381 (91.60%)
	I consider that information technology (IT) resources are accessible while I am on-campus.	138/144 (95.83%)	109/112 (97.32%)	106/108 (98.15%)	353/364 (96.98%)
	I consider that information technology (IT) resources are accessible while I am off-campus at teaching facilities required by my program.	121/130 (93.08%)	100/106 (94.34%)	106/111 (95.50%)	327/347 (94.24%)
	I consider that Information technology (IT) resources are sufficient in scope to support my educational needs while I am on-campus.	145/149 (97.32%)	114/118 (96.61%)	111/113 (98.23%)	370/380 (97.37%)
	I consider that information technology (IT) resources are sufficient in scope to support my educational needs while I am off-campus at teaching facilities required by my program.	140/149 (93.96%)	112/119 (94.12%)	109/113 (96.46%)	361/381 (94.75%)

Questions 33 & 34

Table 5.11-1 B | Adequacy of Study Space   Source: ISA

Campus	Survey question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	The study space on my campus was adequate for my needs.	96/149 (64.43%)	70/119 (58.82%)	90/113 (79.65%)	256/381 (67.19%)
	At all hospitals where I was assigned, the study spaces were adequate for my needs. *Note: Students who were never assigned to a hospital as part of a medical education program should select "Not applicable"*	47/85 (55.29%)	38/68 (55.88%)	63/109 (57.80%)	148/262 (56.49%)

Questions 35 & 36

Table 5.11-2 B | Adequacy of Lounge Areas   Source: ISA

Campus	Survey question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	The lounge space on my campus was adequate for my needs.	49/149 (32.89%)	21/119 (17.65%)	83/113 (73.45%)	153/381 (40.16%)
	At all hospitals where I was assigned, the lounge areas were adequate for my needs. *Note: Students who were never assigned to a hospital as part of a medical education program should select "Not applicable"*	60/86 (69.77%)	41/74 (55.41%)	66/109 (60.55%)	167/269 (62.08%)

Questions 37 & 38

Table 5.11-3 B | Adequacy of Personal Lockers or Other Secure Storage Facilities   Source: ISA

Campus	Survey question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	The personal lockers/other secure storage facilities on my campus were adequate for my needs.	144/149 (96.64%)	113/119 (94.96%)	96/113 (84.96%)	353/381 (92.65%)
	At all hospitals where I was assigned, the personal lockers/other secure storage facilities were adequate for my needs. *Note: Students who were never assigned to a hospital as part of a medical education program should select "Not applicable".*	46/91 (50.55%)	45/81 (55.56%)	50/110 (45.45%)	141/282 (50.00%)

Question 39

Table 5.11-4 B | Adequacy of Secure Call Rooms   Source: ISA

Campus	Survey question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	Each time I was on call and required to participate in a late night (i.e., after midnight) or an overnight clinical learning experience, I had a call room that was adequate and secure. *Note: Students who were never assigned to a hospital as part of a medical education program should select "Not applicable"*	11/16 (68.75%)	18/26 (69.23%)	80/113 (70.80%)	109/155 (70.32%)

Standard 6: Competencies, Curricular Objectives, and Curricular Design

Question 40

Table 6.1-4 B | Student Awareness of Medical Education Program Objectives (Core Appendix)   Source: ISA

Campus	Survey Question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	I was made aware of the medical education program objectives.	145/149 (97.32%)	113/119 (94.96%)	109/113 (96.46%)	367/381 (96.33%)

Question 41

Table 6.1-5 B | Student Awareness of Learning Objectives for Each Required Learning Experience (Core Appendix)   Source: ISA

Campus	Survey Question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	So far this academic year, I was made aware of the learning objectives for each required learning experience that I completed.	143/149 (95.97%)	112/119 (94.12%)	106/113 (93.81%)	361/381 (94.75%)

Question 42

Table 6.4-1 B | Student Clinical Experiences in Outpatient Settings   Source: ISA

Campus	Survey Question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	In my medical school curriculum to date, I have had clinical experiences in outpatient/ambulatory settings (i.e., where patients are not admitted to hospital).	141/149 (94.63%)	115/119 (96.64%)	113/113 (100.00%)	369/381 (96.85%)

Question 43

Table 6.4-2 B | Student Clinical Experiences in Inpatient Settings   Source: ISA

Campus	Survey Question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	In my medical school curriculum to date, I have had clinical experiences with inpatient settings, (i.e., where patients are admitted to hospital).	147/149 (98.66%)	116/119 (97.48%)	113/113 (100.00%)	376/381 (98.69%)

Questions 44, 45, 46 & 47

Table 6.4.1-1 B | Exposure to and Experience in Generalist Care Including Comprehensive Family
Medicine (Core Appendix)   Source: ISA

Campus	Survey Question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	I had broad exposure to generalist care.	134/149 (89.93%)	96/119 (80.67%)	110/113 (97.35%)	340/381 (89.24%)
	I had experience in generalist care.	137/149 (91.95%)	110/119 (92.44%)	113/113 (100.00%)	360/381 (94.49%)
	I had broad exposure to comprehensive family medicine.	138/149 (92.62%)	97/119 (81.51%)	109/113 (96.46%)	344/381 (90.29%)
	I had experience in comprehensive family medicine.	140/149 (93.96%)	106/119 (89.08%)	112/113 (99.12%)	358/381 (93.96%)

Question 48

Table 6.4.1-2 B | Range of Settings for Clinical Learning Experiences (Core Appendix)   Source: ISA

Campus	Survey Question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	I had clinical learning experiences (required and elective combined) that took place in more than one setting ranging from small rural or underserved communities to tertiary care health centres.	88/149 (59.06%)	88/119 (73.95%)	109/113 (96.46%)	285/381 (74.80%)

Questions 49, 50 & 51

Table 6.5-1 C | Elective/Selective Opportunities   Source: ISA

Campus	Survey Question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	I had the opportunity to supplement required learning experiences with elective (or as appropriate, selective) experiences.	134/149 (89.93%)	112/118 (94.92%)	109/112 (97.32%)	355/379 (93.67%)
	I had the opportunity to gain exposure to medical specialties in my elective (or as appropriate, selective) experiences.	137/149 (91.95%)	107/118 (90.68%)	107/113 (94.69%)	351/380 (92.37%)
	I had the opportunity to pursue my individual academic interests in my elective (or as appropriate, selective) experiences.	123/149 (82.55%)	98/118 (83.05%)	104/113 (92.04%)	325/380 (85.53%)

Questions 52 & 53

Table 6.6-1 F | Opportunities and encouragement for medical student participation in service-learning   Source: ISA

Campus	Survey Question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	I had an opportunity to participate in a service-learning activity.	111/149 (74.50%)	107/118 (90.68%)	100/113 (88.50%)	318/380 (83.68%)
	I was encouraged to participate in a service-learning activity.	117/149 (78.52%)	103/117 (88.03%)	97/113 (85.84%)	317/379 (83.64%)

During survey administration, Questions 3.1-1B, 7.4-3B and 7.6-2E (**Appendix 2**) were inadvertently removed when distributed by the AFMC. The following quote is verbatim from an email correspondence with a representative from CACMS regarding the omission of the aforementioned questions:

We agree that for different reasons uCalgary students did not have an opportunity to respond to the following 16 questions:

- *Q1/DCI Table 3.1-1 B*
- *Q54-59/DCI Table 7.2-2 B*
- *Q1/DCI Table 3.1-1 B and Q60-68/DCI Tables 7.4-3 B and 7.6-2 E*

In addition, the 2023-2024 ISA did not include the question "I am aware of the medical school procedures for the collection, storage, disclosure, disposal, and retrieval of my academic record." Table 11.5-2 C of the 2024-2025 DCI.

As previously agreed, University of Calgary can delete the relevant tables from its submission and use narrative responses only. University of Calgary can note that it was removed as the ISA did not include the related question (so it is clear to the visiting team why the information is missing). In addition, school-reported data could be collected by University of Calgary and added to your submission. If you wish you can also print this latest e-mail response and add it to your submission.

Andrea Segal
CACMS Accreditation Engagement and Analytical Specialist / Spécialiste de l'engagement et de l'analyse de l'agrément, CAFMC

Standard 7: Curricular Content

Questions 54, 55, 56, 57, 58 & 59

Table 7.2-2 B | Clinical Experiences in Continuity of Care and Preventative, Acute, Chronic, Rehabilitative, End-of-life care   Source: ISA or School-reported

Campus	Survey Question	Number (%)
		Final year students
Foothills	I had clinical experiences related to continuity of care.	n/a
	I had clinical experiences related to preventive care.	n/a

	I had clinical experiences related to acute care.	n/a
	I had clinical experiences related to chronic care.	n/a
	I had clinical experiences related to rehabilitative care.	n/a
	I had clinical experiences related to end-of-life care.	n/a

Questions 60, 61, 62 & 63

Table 7.4-3 B | Enhancement of Medical Student Skills (Core Appendix)   Source: ISA

Campus	Survey Question	Number (%) Final year students
Foothills	The curriculum helped me enhance my skills in clinical reasoning.	n/a
	The curriculum helped me enhance my skills in clinical critical thinking.	n/a
	The curriculum helped me enhance my skills in critical appraisal of evidence.	n/a
	The curriculum helped me enhance my skills in the application of the best available information to the care of patients.	n/a

Questions 64, 65, 66, 67 & 68

Table 7.6-2 E | Preparation in Cultural Competence and Health Care Disparities (Core Appendix)   Source: ISA

Campus	Survey Question	Number (%) Final year students
Foothills	The curriculum helped prepare me to recognize that factors such as culture, gender, and belief systems influence patients' perceptions of health and illness.	n/a
	The curriculum helped prepare me to recognize and appropriately address my personal biases when caring for patients.	n/a
	The curriculum helped me acquire basic skills needed to provide culturally competent health care.	n/a
	The curriculum helped prepare me to identify health care disparities.	n/a
	The curriculum helped prepare me to participate in the development of solutions to address health care disparities.	n/a

Standard 8: Curricular Management, Evaluation, and Enhancement

Question 69 & 70

Table 8.5-1 F | Processes for Medical Student Evaluations of Program Quality   Source: ISA

Campus	Survey Question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	The medical school provided me with opportunities to evaluate my required learning experiences (e.g., courses, clerkship rotations, longitudinal integrated clerkships).	145/149 (97.32%)	115/117 (98.29%)	112/113 (99.12%)	372/379 (98.15%)
	The medical school provided me with opportunities to evaluate my teachers.	149/149 (100.00%)	116/118 (98.31%)	112/113 (99.12%)	377/380 (99.21%)

Questions 71 & 72

Table 8.8-1 G | Amount of Time Students Spend in Required Activities (Core Appendix)   Source: ISA

Campus	Survey Question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	I am informed of the amount of time that the medical education program expects me to spend in required activities.	133/149 (89.26%)	90/118 (76.27%)	92/113 (81.42%)	315/380 (82.89%)
	I am disappointed by the number of times I was required by a supervisor/teacher to spend more time in required activities than expected by the medical education program.	30/149 (20.13%)	39/117 (33.33%)	36/113 (31.86%)	105/379 (27.70%)

Standard 9: Teaching, Supervision, Assessment, and Student and Patient Safety

Questions 73,74, 75, 76 & 77

Table 9.3-1 C | Clinical supervision during clinical learning situations (Core Appendix)   Source: ISA

Campus	Survey Question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	I consider that I was appropriately supervised at all times in clinical learning situations involving patient care.	141/146 (96.58%)	110/115 (95.65%)	104/113 (92.04%)	355/374 (94.92%)
	The level of supervision I received in clinical learning situations ensured my safety.	144/146 (98.63%)	112/115 (97.39%)	108/113 (95.58%)	364/374 (97.33%)
	I consider that the level of supervision I received in clinical learning situations ensured patient safety.	143/146 (97.95%)	111/115 (96.52%)	106/113 (93.81%)	360/374 (96.26%)
	I consider that the level of responsibility delegated to me in clinical learning situations was appropriate for my level of training.	137/145 (94.48%)	109/115 (94.78%)	107/112 (95.54%)	353/372 (94.89%)
	I am confident that any concerns I have about my supervision during clinical learning situations can be discussed and addressed by the medical school. *Note: Student who have not yet been assigned to clinical learning site should select "Not applicable"*	117/143 (81.82%)	77/103 (74.76%)	89/111 (80.18%)	283/357 (79.27%)

Question 78

Table 9.7-1 C | Timely Formative Feedback (Core Appendix)   Source: ISA/ School-reported*

Campus	Survey Question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	The formative feedback that I received so far this academic year was given in time for me to measure my progress in learning.	127/149 (85.23%)	103/118 (87.29%)	100/113 (88.50%)	330/380 (86.84%)

Question 79

Table 9.7-3 B | Formal Formative Feedback at Midpoint of the Required Learning Experience
(Core Appendix)   Source: ISA/School-reported*

Campus	Survey Question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	The formative feedback that I received so far this academic year was received by the midpoint of each required learning experience of four weeks or longer duration or approximately every six weeks in the case of longer educational experiences such as longitudinal integrated clerkships.	126/149 (84.56%)	98/116 (84.48%)	101/113 (89.38%)	325/378 (85.98%)

Question 80

Table 9.9-2 B | Fair and Formal Student Advancement and Appeal Process   Source: ISA

Campus	Survey Question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	I know that I have the opportunity to appeal any adverse decision related to my advancement, graduation or dismissal.	121/148 (81.76%)	106/118 (89.83%)	101/113 (89.38%)	328/379 (86.54%)

Question 81

Table 9.10-1 B | Student Health and Patient Safety (Core Appendix)   Source: ISA

Campus	Survey Question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	I know that I have an obligation to report to an appropriate authority, situations in which my personal health poses a risk of harm to patients.	144/149 (96.64%)	117/118 (99.15%)	110/113 (97.35%)	371/380 (97.63%)

Standard 11: Medical Student Academic Support, Career advising, and Academic Records

Question 82

Table 11.1-1 C | Academic Advising by Curriculum Year (Core Appendix)   Source: ISA

Campus	Survey Question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	I am aware that I can obtain academic advising through the medical school.	147/149 (98.66%)	114/118 (96.61%)	112/113 (99.12%)	373/380 (98.16%)

Question 83

Table 11.2-1 D | Awareness of Confidential Career Advising (Core Appendix)   Source: ISA

Campus	Survey Question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	I am aware that confidential career advising opportunities are available to me.	145/149 (97.32%)	115/118 (97.46%)	107/113 (94.69%)	367/380 (96.58%)

Questions 84, 85 & 86

Table 11.2-2 D | Career Advising: Choosing Electives, Evaluating Career Options and Applying to Residency Programs (Core Appendix)   Source: ISA

Campus	Survey Question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	I am aware that I can obtain assistance in choosing elective courses.	137/149 (91.95%)	109/118 (92.37%)	111/113 (98.23%)	357/380 (93.95%)
	I am aware that I can obtain assistance in evaluating career options.	145/149 (97.32%)	114/117 (97.44%)	109/113 (96.46%)	368/379 (97.10%)
	I am aware that I can obtain assistance in applying to residency programs.	139/149 (93.29%)	110/118 (93.22%)	110/113 (97.35%)	359/380 (94.47%)

Question 87

Table 11.5-2 C | Awareness of medical school procedures for collection, storage, disclosure, disposal, and retrieval of student academic records (Core Appendix)   Source: ISA

Campus	Survey Question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	I am aware of the medical school procedures for the collection, storage, disclosure, disposal, and retrieval of my academic record.	n/a	n/a	n/a	n/a

Questions 88, 89, 90 & 91

Table 11.6-1 C | Student Awareness to Review and Challenge Academic Records (Core Appendix)   Source: ISA

Campus	Survey Question	Number (%)			
		Year 1	Year 2	Year 3	Total
Foothills	I am aware that I am permitted to review my academic records.	113/149 (75.84%)	85/118 (72.03%)	94/113 (83.19%)	292/380 (76.84%)
	I am aware that I am permitted to challenge my academic records if I consider the information to be inaccurate, misleading, or inappropriate.	107/149 (71.81%)	80/118 (67.80%)	95/112 (84.82%)	282/379 (74.41%)
	I am aware that I am permitted to review my medical student performance record (MSPR).	98/149 (65.77%)	86/117 (73.50%)	111/113 (98.23%)	295/379 (77.84%)
	I am aware that I am permitted to challenge my medical student performance record (MSPR) if I consider the information to be inaccurate, misleading, or inappropriate.	93/149 (62.42%)	83/118 (70.34%)	106/112 (94.64%)	282/379 (74.41%)

Standard 12: Medical Student Health Services, Personal Counselling, and Financial Aid Services

Question 92

Table 12.8-2 B | Student Knowledge of Post-Exposure Treatment (Core Appendix)   Source: ISA

Campus	Survey Question	Year 1	Year 2	Year 3	Total
Foothills	I received instruction on steps to take following exposure to infectious or environmental hazards before undertaking any educational activities that would place me at risk.	131/149 (87.92%)	105/117 (89.74%)	104/113 (92.04%)	340/379 (89.71%)

Appendix 2

During survey administration, Questions 3.1-1B, 7.4-3B and 7.6-2E (**Appendix 2**) were inadvertently removed when distributed by the AFMC. The following quote is verbatim from an email correspondence with a representative from CACMS regarding the omission of the aforementioned questions:

> *We agree that for different reasons uCalgary students did not have an opportunity to respond to the following 16 questions:*
>
> - *Q1/DCI Table 3.1-1 B*
> - *Q54-59/DCI Table 7.2-2 B*
> - *Q1/DCI Table 3.1-1 B and Q60-68/DCI Tables 7.4-3 B and 7.6-2 E*
>
> *In addition, the 2023-2024 ISA did not include the question "I am aware of the medical school procedures for the collection, storage, disclosure, disposal, and retrieval of my academic record." Table 11.5-2 C of the 2024-2025 DCI.*
>
> *As previously agreed, University of Calgary can delete the relevant tables from its submission and use narrative responses only. University of Calgary can note that it was removed as the ISA did not include the related question (so it is clear to the visiting team why the information is missing). In addition, school-reported data could be collected by University of Calgary and added to your submission. If you wish you can also print this latest e-mail response and add it to your submission.*
>
> *Andrea Segal*
> *CACMS Accreditation Engagement and Analytical Specialist / Spécialiste de l'engagement et de l'analyse de l'agrément, CAFMC*

The following questions were not distributed:

Standard 3: Academic and Learning Environments

Question 1

Table 3.1-1 B | Resident Participation in Medical Student Education   Source: ISA

Campus	Survey Question	Number (%)
Foothills	I worked with a Resident in at least one required or elective clinical learning experience during medical school.	n/a

Standard 7: Curricular Content

Questions 54, 55, 56, 57, 58 & 59

Table 7.2-2 B | Clinical Experiences in Continuity of Care and Preventative, Acute,

Chronic, Rehabilitative, End-of-life care   Source: ISA or
                                                                                                  School- reported

Campus	Survey Question	Number (%) Final year students
Foothills	I had clinical experiences related to continuity of care.	n/a
	I had clinical experiences related to preventive care.	n/a
	I had clinical experiences related to acute care.	n/a
	I had clinical experiences related to chronic care.	n/a
	I had clinical experiences related to rehabilitative care.	n/a
	I had clinical experiences related to end-of-life care.	n/a

Questions 60, 61, 62 & 63

Table 7.4-3 B | Enhancement of Medical Student Skills (Core Appendix)   Source: ISA

Campus	Survey Question	Number (%) Final year students
Foothills	The curriculum helped me enhance my skills in clinical reasoning.	n/a
	The curriculum helped me enhance my skills in clinical critical thinking.	n/a
	The curriculum helped me enhance my skills in critical appraisal of evidence.	n/a
	The curriculum helped me enhance my skills in the application of the best available information to the care of patients.	n/a

Questions 64, 65, 66, 67 & 68

Table 7.6-2 E | Preparation in Cultural Competence and Health Care Disparities (Core Appendix)   Source: ISA

Campus	Survey Question	Number (%) Final year students
Foothills	The curriculum helped prepare me to recognize that factors such as culture, gender, and belief systems influence patients' perceptions of health and illness.	n/a
	The curriculum helped prepare me to recognize and appropriately address my personal biases when caring for patients.	n/a
	The curriculum helped me acquire basic skills needed to provide culturally competent health care.	n/a
	The curriculum helped prepare me to identify health care disparities.	n/a
	The curriculum helped prepare me to participate in the development of solutions to address health care disparities.	n/a

Question 87

Table 11.5-2 C | Awareness of medical school procedures for collection, storage, disclosure, disposal, and retrieval of student academic records (Core Appendix)   Source: ISA

Campus	Survey Question	Number (%)			
		Year 1	Year 2	Year 3	Total

Foothills	I am aware of the medical school procedures for the collection, storage, disclosure, disposal, and retrieval of my academic record.	n/a	n/a	n/a	n/a

Appendix 3

Abbreviations used in this report are labelled in the table below.

Table 1. Abbreviations used in this report.

Abbreviation	Explanation
AEBM	Applied Evidence Based Medicine
AFMC	Association of Faculties of Medicine of Canada
CACMS	Committee on Accreditation of Canadian Medical Schools
CaRMS	Canadian Resident Matching Service
CEL	Community-Engaged Learning
CSM	Cumming School of Medicine
CMSA	Calgary Association of Medical Students
FMC	Foothills Medical Centre
IPE	Interprofessional Education
ISA	Independent Student Analysis
SAW Hub	Student Advising and Wellness Hub
UME	Undergraduate Medical Education