STANDARD 5: EDUCATIONAL RESOURCES AND INFRASTRUCTURE

A medical school has sufficient personnel, financial resources, physical facilities, equipment, and clinical, instructional, informational, technological, and other resources readily available and accessible across all locations to meet its needs and to achieve its goals.

5.1 ADEQUACY OF FINANCIAL RESOURCES
The present and anticipated financial resources of a medical school are adequate to sustain the medical education program and to accomplish other goals of the medical school.

Requirement 5.1-1
The present and anticipated financial resources of the medical school are adequate to sustain the medical education program and to accomplish other goals of the medical school.

A. Table 5.1-1 A

Table 5.1-1 A | Reserves, Revenues and Expenses (Core Appendix)   Source: School-reported

Amounts are school-reported by fiscal year (FY).					
(in thousands of dollars)	FY - 4	FY - 3	FY -2	FY - 1	Most recent fiscal year
	2019-20	2020-21	2021-22	2022-23	2023-24
Reserves					
Endowment reserves*	$305,251	$318,400	$329,751	$347,398	392,358
Total reserves*					
Revenues (excluding revenue from reserves)					
Total Tuition from MD students*					
Kuwait Tuition	1,848	2,380	2,643	2,478	2,333
Domestic Tuition	7,180	7,443	7,916	9,177	10,969
Total Tuition from MD Students allocated to CSM					
Kuwait Tuition	1,478	1,904	1,586	1,487	1,633
Domestic Tuition	5,745	5,954	6,332	7,060	7,787
Total revenues*	$401,958	$412,192	$430,355	$450,940	457,145
Expenses					
Bursaries, Awards and Financial Aid to MD students*					
Total expenses*	$383,484	$353,629	$382,091	$415,491	457,857
Net (Total Revenues- Total Expenses)					

* Total revenues and total expenses include research and does not constitute an operating surplus. Please refer to ***Supplemental Appendix 5.1-1 B - AFMC Financial Statement*** for further details.

B. Summarize trends in the funding sources available to the medical school, including an analysis of their stability. Explain any substantive changes that occurred over the last three fiscal years.

From 2020-21 to 2022-23 the Alberta government has implemented successive cuts totalling 16.25% to the University of Calgary in efforts to balance the books. In response, the university has passed down these cuts to the faculties and units. The Provost has been continually made aware of the financial challenges of the CSM due to the end of the Alberta Heritage Fund for Medical Research (AFHMR) grant and the reliance on Alberta Health Services (AHS) funding a portion of academic salaries. In 2020-21, the

University implemented differential cuts across the faculty and units, with CSM receiving a 0% budget cut. In the two subsequent years, CSM received a 3.5% and 4.93% cut, but was allocated a $2M foundational base budget to support the academic positions associated that were no longer funded due to the end of the AFHMR grant.

Since 2022-23, the Alberta government has continued to withhold funding for contractual salary and merit increases. Given inflationary pressures of the past couple of years, salaries continue to increase. Unfortunately, for 2024-25 budget planning purposes, the Alberta government did not provide additional funding for contractual salary increases. Due to high interest rates, the government is restraining spending as provincial debt financed at 2% is coming due and will need to be financed at a much higher rate. The University of Calgary executive leadership team is in continual discussions regarding the financial hardships unfunded contractual salary increases are causing after years of budget cuts.

The impact of no additional government funding is creating financial challenges across all faculties at the University of Calgary. In the 2023-24 fiscal year, the CSM was projecting an operating budget deficit of $4.5M that would need to be covered from the faculty's reserves. The CSM Dean has been advocating for additional funding with senior UCalgary executives which has resulted in a strategic reallocation of $2.4M in ongoing budget and $1M in one-time funds to the CSM, but this is not enough to cover two years of unfunded salary increases. As well, there is further pressure within the university to reallocate funding to central units that have been severely impacted by the government cuts. Reallocation of funding is through redistribution of overhead revenue (50/50 to 65/35 between faculty and central), strategic budget reallocations, and tuition sharing model (from 80/20 to 60/40 allocation between faculty and central). While the school continues to operate in an environment of fiscal cuts and restraint, steps have been taken to ensure the long-term financial sustainability of the faculty. For the upcoming 2024-25 fiscal year, planning is underway to undertake various budget savings initiatives including hiring restraint, long-term plan of overall net reduction of academic positions due to retirements and resignations but allowing for strategic replacements, prioritization of current activities and new budget requests, and continual review of operational areas (including vertical cuts to non-core programs) to find efficiencies and budget savings.

Revenues from tuition have been steadily increasing year-over-year due to regular tuition increases and the approval and phased implementation of the extraordinary tuition that was approved for new incoming medical students in 2022-23. The overall increases have helped to offset the cuts to the government, but at the cost of affordability for the students.

AHS has also been dealing with government funding cuts and announced a $2M total budget reduction in 2021-22 and 2022-23 for shared contingent tenure positions. Because CSM was unable to absorb the loss of funding over the long-term, the Faculty has implemented a process to assess and eliminate the positions of lower priority to the mission of the Department and the Faculty. The loss of these position will have no or minimal impact to the academic and research mission. There is an initiative to undertake this review again in 2024 but will likely only yield 1-3 positions to be eliminated.

AHS has also mandated no additional funding to cover annual merit and cost of living increases since 2021. This puts further budgetary pressure on the Faculty's finances. The CSM has negotiated for a flat AHS funding amount going forward in 2024-25 so that it is more financially sustainable for both organizations.

Supplemental Appendix 5.1-1 B – AFMC Financial Statements is included as supporting documentation.

C. Describe the medical school's annual budget process and how the medical school assures adequacy of funding for the medical education program and for the accomplishment of its other goals at all campuses and distributed sites.

The CSM is provided with the initial operating budget and budgeting parameters from the University. Within CSM, the budget is decentralized within the 70 cost centres comprising of the 4 missions: Education, Clinical, Research, and Operations/Administration. Cost centre budget owners are provided with their current budget and forecasted budget for the next fiscal year planning. They work closely with Financial Services and the Senior Director within the Faculty to make adjustments, omissions, and plan for new non-academic hires while ensuring that their overall operating budget does not exceed the budget parameters provided. After all amounts are consolidated, Financial Services reviews and communicates with budget owners regarding any adjustments, reductions, and increases to meet the consolidated budget for approval by the Dean for submission to the Provost. The Faculty is expected to provide a balanced budget to the Provost.

New initiatives or material funding requests are also gathered, reviewed, and prioritized by the Senior Director and with the appropriate Senior Associate Dean. If funding within the Senior Associate Dean's portfolio is not available, this is discussed with the Dean and Vice Dean and elevated to the Dean's Executive Council for strategic discussions and prioritization for funding at the Faculty level.

D. Describe the ways that current and projected capital needs for the missions of the medical school are being addressed. Describe the medical school's approach to financing deferred maintenance of its facilities.

Core infrastructure and base building maintenance, including deferred maintenance, is the responsibility of the University. The school occupies approximately 1.6M sq ft in four buildings. Upgrades and renovations to space are paid for by the Faculty and largely funded by philanthropy funds and government grants, supplemented by Faculty operating funds, and funding from the Provost. There is also opportunity for capital funding related to Alberta government post-secondary initiatives as new or program expansion may require renovations to existing space and is part of funding proposals to the government.

E. Describe the extent to which financial reserves have been used to balance the operating budget in recent years.

As per section B. the following chart below outlines the annual drawdown on the Faculty's reserves due to the Alberta government funding cuts to the institution and continual pressure of unfunded contractual salary increases.

Fiscal Year	Annual Drawdown
2019-20	$1,970,303
2020-21	$1,229,277
2021-22	$1,192,679
2022-23	$1,417,305
2023-24	$1,013,627

5.2 DEAN'S AUTHORITY/RESOURCES
The dean of a medical school has sufficient resources and budgetary authority to fulfill the dean's responsibility for the management and evaluation of the medical curriculum.

Requirement 5.2-1
The dean of a medical school has sufficient resources and budgetary authority to fulfill the dean's responsibility for the management and evaluation of the medical curriculum.

A. Describe how the medical school dean determines sufficiency of resources for the management and evaluation of the medical curriculum.

The Dean is responsible for the overall CSM faculty budget. This includes working closely with the CSM Senior Director to identify and address budget challenges. Depending on the budget challenges, the Dean may also strategically elevate issues through appropriate channels. These channels can include discussions with the UCalgary Executive Leadership Team (ELT) such as the Provost, President, and Vice Presidents, the Alberta Health Services leadership team including the CEO and Zone Medical Director, and Government of Alberta ministers of health or Advanced Education. Such channels provide the opportunity for the Dean to advocate for funding of new initiatives and address budget challenges beyond the existing budget allocated to the Faculty.

The Associate Dean-UME has budgetary authority for the management and evaluation of the medical curriculum and meets regularly with the CSM Senior Director regarding financial resources and issues impacting the program. Resource issues are also discussed during monthly meetings with the Senior Associate Dean, Education. The necessary resources to administer the program are determined annually based on projected class size. Budgets are developed with input from the UME leadership team and staff. Program evaluation data are also used to inform resource allocation. Additional resources are also available on a year-by-year basis from international and Department of National Defense supernumerary students. This additional funding is used to directly contribute to the administration of the medical education curriculum and can be used to offset cutbacks from the Faculty budget.

The Associate Dean-UME also participates in the following UME and CSM committees at which financial resource allocation issues are addressed:

- Attends Faculty Council and presents information regarding program updates/developments as needed
- Is a member of the Strategic Education Council which has been delegated responsibility by Faculty Council to make decisions regarding the education programs
- Is a member of the Leadership Forum, which includes Dean, Vice-Dean, Associate Deans, and Department Heads
- Chairs the Undergraduate Medical Education Committee which is responsible for the UME curriculum and charged with reviewing the adequacy of educational resources
- Chairs the UME Management Committee, which is a forum for decisions regarding operations, with budget planning included as a key responsibility
- Is a member of all five UMEC sub-committees (Clerkship, Pre-Clerkship, RIME-Pre-Clerkship, Curriculum, Innovation and Oversight and Committee, Student Evaluation) at which budgetary and resource-related issues may first arise

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RIME Curriculum

The RIME curriculum requires a different compensation model for curriculum delivery than the Legacy curriculum (entry year 2022 and earlier), with a smaller group of Educators/Facilitators engaged in teaching. However, there have been no significant changes in how the sufficiency of resources for the management and evaluation of the curriculum is determined as the UME budget continues to be developed with input from the UME leadership team and staff.

B. Describe the budgetary authority of the medical school dean for management and evaluation of the medical curriculum.

The Associate Dean-UME and the Senior Manager-UME prepare and submit an annual budget to the CSM Senior Director and Senior Associate Dean, Education, for review. The operating budget for the UME program provides for curriculum delivery including preceptor payments and the UME office operations.

The budget is based on projected class size, which is determined by the provincial government (Alberta Ministry of Advanced Education), with funding provided accordingly.

New initiatives or budget challenges are raised to the Dean for further discussion. As outlined in Section A above, the Dean may also strategically elevate issues through appropriate channels. These channels can include the UCalgary Executive Leadership Team (ELT) and the Government of Alberta ministers of health or Advanced Education. Such channels provide the opportunity for the Dean to advocate for funding of new initiatives and address budget challenges beyond the existing budget allocated to the Faculty.

5.3 PRESSURES FOR SELF-FINANCING
A medical school admits only as many qualified applicants as its total resources can accommodate and does not permit financial or other influences to compromise the school's educational mission.

Requirement 5.3-1
The medical school admits only as many qualified applicants as its total resources can accommodate.

A. Describe how and at what administrative level the size of each medical school class is set.

The size of the incoming class is set and funded annually by the Alberta provincial government. A planned enrolment increase, funded through the Alberta government in cooperation with the University of Calgary, was initiated in 2023, and will roll-out from 2023-2025. (see ***Required Appendices 5.12-1 A3 & A4*** for details - notification of change and CACMS's response). The government funding will also cover costs associated with increased resources necessary to accommodate the additional intake.

Current Enrollment:

Class of	Total Year 1	New Intake	Repeat/LOA Returns	International
2023	175	157	5	13
2024	167	150	17	0
2025	169	163	13	1
2026	180*	177	2	1
2027	186	180	5	1

*Current class is 178 due to 2 LOAs during 2023-24

Class Expansion Enrollment:*

Proposed Enrolment	2023-24	2024-25	2025-26
Year 1	10	20	30
Year 2	-	10	20
Year 3	-	-	10
Total FLE (Fill load Equivalent)	10	30	60

*The start date for the Lethbridge campus has been shifted to start in July 2026, not 2025. A revised notification document will be sent to CACMS by October 2024. The additional students will be accommodated at the Calgary Campus until 2026. At that point the 30 additional entry students will shift to begin their training in Lethbridge.

B. Describe how the medical school ensures that it admits only as many qualified applicants as its total resources can accommodate.

The size of the incoming class is set and funded annually by the Alberta provincial government. When the Alberta government notifies the University of the number of learners that can be admitted in the year one intake, the UME Admissions Office closely monitors the offer list and wait list to ensure that the number set by the Alberta Government is not exceeded.

Additional learners are funded through an expansion grant from the Alberta provincial government. The expansion funding per year is outlined below, and will be used to support the following required resources:

- additional faculty, clinical and small group facilitators, and standardized patients
- renovations to increase the number of small group/classrooms and clinical exam rooms

- additional tech support and AV equipment
- increase in staff resources in the Student Advocacy & Wellness Hub (Psychiatrists, Psychologist, Career Counsellors, EDIA support)
- additional staff in Admissions to support the increase in the number of applicants interviewed and in the number of files reviewed
- additional teaching resources for anatomy sessions in the ATSSL lab
- a minor renovation to increase the number of pods in the wet and dry labs

Funding Required	Year 1 (start of UME Seat Expansion in Calgary)	Year 2	Year 3	Year 4 (Opening of Lethbridge Campus)
	2023-2024	**2024-2025**	**2025-2026**	**2026-2027**
Ministry of Advanced Education – UME Seat Expansion, UCalgary	961,977	2,885,930	5,771,860	7,695,813

In addition to the funding from the Ministry of Advanced Education, the Ministry of Health also committed the following funds to support residents, AMHSP faculty, GP faculty, and a Lethbridge Teaching Clinic:

Funding Required	Year 1 (start of UME Seat Expansion in Calgary)	Year 2	Year 3	Year 4 (Opening of Lethbridge Campus)
	2023-2024	**2024-2025**	**2025-2026**	**2026-2027**
Ministry of Health - Residents, AMHSP, GP & Lethbridge Teaching Clinics	24,457,126	27,536,289	28,375,495	33,722,843

Funding has been committed for 10 years until the end of the fiscal year 2032-33.

Requirement 5.3-2
The medical school does not permit financial or other influences to compromise the school's educational mission.

A. Describe how the medical school mitigates against any financial or other influences that could compromise the school's educational mission.

All revisions and changes to tuition are set by the University of Calgary Board of Governors for the entire university and approved by government. There are no internal or external pressures to generate revenue from tuition, clinical care and/or research that would be used to fund the medical education program.

5.4 SUFFICIENCY OF FACILITIES AND EQUIPMENT
A medical school has, or is assured the use of, facilities and equipment sufficient to achieve its educational, clinical, and research missions.

Requirement 5.4-1
The medical school has, or is assured the use of, facilities and equipment sufficient to achieve its educational mission.

A. Describe how the medical school ensures the sufficiency of its facilities and equipment (other than audiovisual or information technology) needed to achieve its educational mission.

There are specific rooms available for UME instructional purposes and are under their management for booking. Additional space needs can be raised to the CSM Space Committee for review. Such requests will take into consideration current space assignments, utilization, and occupancy requirements.

The following rooms are available for UME instructional purposes and can accommodate an incoming class size of up to 196 students in each of the 3 years:

Room Type	Seating Setups	Individual Capacity	Total Capacity	Special Features
6-Theatres	Theatre Style seating	Ranging from 75-334 seats	1022	Computer, screen, projector, whiteboard, OH, (2 videoconference capable) Libin Theatre, Clara Christie Theatre, Theatre One, Theatre Three [Booked through Vet Medicine], G500 and Theatre Four)
31 Tutorial / Group / Classrooms	Classroom Style/flexible seating	Range from 18-70 seats	676	All classrooms are equipped with computers, LED projectors, screens, whiteboards, IN jack, phone jack. Most frequently used for small group learning.
5 Meeting Rooms/Classrooms	Board Room or Classroom set up	Range from 10-40 per room	118	Computer, projector, whiteboards, screen, phone jack, IN jack (1 video conference capable)
1 ATSSL Wet Lab	Anatomy Laboratory	160	160	Anatomy lab facility - specialized equipment
8 ATSSL Dry Lab Suites	Simulation Laboratory	10	80	Specialized task trainers and simulation equipment
35 Medical Skills Centre (Clinical Rooms)	Clinic Exam-Room set up	5-8 per room	198	Exams and teacher learner sessions purpose of evaluating student's clinical skills performance. 2 chairs, table, exam table, sink, DVD recording capable.

In the spring of 2023, the Government of Alberta (GOA) approved an expansion of the Undergraduate Medical Education program as follows:

2023-24: 10 additional students
2024-25: 20 additional students
2025-26: 30 additional students

To accommodate the enrollment expansion, a request for additional educational spaces was brought forward to the CSM Space Committee for consideration, and additional small group rooms will be added by renovating existing non-UME space to create six additional tutorial group rooms. With the opening of the Lethbridge campus in 2026, the urban Calgary UME program will go back to a baseline of 160 students. Given that in July 2026 the class size entering in the urban site will decrease to 160, no significant additional renovations to increase space are planned in an effort to ensure fiscal responsibility.

B. In cases where the facilities or equipment are used by others, describe how the shared facilities/equipment are managed to ensure the achievement of the medical program's educational mission.

UME courses are booked through the CSM Booking Services Unit, and this Unit functions as the single source booking service for educational spaces at the Foothills Campus. They coordinate bookings for UME and other internal and external stakeholders within the Faculty. Although the classrooms and theatres are shared with other educational units within the CSM, the UME has priority booking in the following rooms: theatres, classrooms, simulation suite and wet lab. UME courses are entered before other courses offered at the CSM (as per the CSM booking guidelines). Once UME courses are booked and confirmed, other educational units in CSM submit and secure their space requests.

C. Table 5.4-1 C

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

Provide the data from the Independent Student Analysis (ISA) on the number and percentage of respondents that answered "Yes" to the statement shown in the table below. Add rows as needed for each campus.					
		Number (%)			
Campus	Survey Question	Year 1	Year 2	Year 3	Year 4
Foothills Medical Centre	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%)	N/A
	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%)	N/A

Requirement 5.4-2
The medical school has, or is assured the use of, facilities and equipment sufficient to achieve its clinical mission.

A. Describe how the medical school ensures the sufficiency of its facilities and equipment needed to achieve its clinical mission.

Lecture theaters are of sufficient size to hold the entire class. There are sufficient small group rooms to accommodate all tutorial groups in the schedule.

The Advanced Technical Skills Simulation Laboratory (ATSSL) is a Royal College of Physicians and Surgeons of Canada accredited simulation centre comprised of three separate labs: the Surgical Skills Laboratory (SSL), the Clinical Skills Laboratory (CSL), and the Special Procedures Laboratory (SPL). The 30,000+ square foot ATSSL simulation facility can accommodate small and large groups (up to 80 learners per lab) simultaneously, in parallel streams. The ATSSL prioritizes sessions for Undergraduate Medical Education (UME) and Post Graduate Medical Education (PGME) followed by external groups (Alberta Health Services, Mount Royal University, and Southern Alberta Institute of Technology), symposia and industry sponsored events. UME is given first access to bookings followed by PGME. Booking conflicts are addressed in the CSM's booking policy which states UME is to be given first priority each academic year, with Thursdays of each week reserved for PGME.

The ATSSL is supported though the office the Senior Associate Dean, Education, and has nine full time staff including a manager and 25 recurring part time (RPT) staff. RPT staff support anatomy preparation/teaching, live animal surgical labs, evening and weekend simulation sessions/symposia/surgical labs as well as providing weekly augmentation as required during peak learner times. The ATSSL's large inventory of trainers and equipment is maintained and updated utilizing a combination of ATSSL's CSM operations budget, ATSSL revenue, and grants (PGME Infrastructure and Simulation Teaching Funding). A complete inventory of all ATSSL simulation training and surgical equipment is managed in SharePoint with physical condition, year of purchase, and cost of replacement (amortisation) recorded and updated yearly. The CSM received $3M in 2023 as part of the Physician Assistant Studies program grant provided by the Alberta government, with a large portion of this to be used to renovate the Clinical Skills Lab.

Requirement 5.4-3
The medical school has, or is assured the use of, facilities and equipment sufficient to achieve its research mission.

A. Describe how the medical school ensures the sufficiency of its facilities and equipment needed to achieve its research mission.

The core research facilities of the CSM are located at the University of Calgary Foothills campus and are managed by the office of the Associate Dean Research (ADR). These facilities are subsidized by the CSM in addition to financial support though user fees. Financial support includes an annual operating budget, as well as capital equipment support for the purchase of new equipment and maintenance agreements. These central core facilities include an extensive small animal facility to support pre-clinical research, a small animal MRI facility, a mass spectrometry facility, a flow cytometry facility, an optogenetics facility, a genomic sequencing facility and a center of genomic engineering. There is additional funding to support central sanitation and laundry facilities. The CSM core facilities and the ADR office employ 86 full-time staff. In addition to core facilities supported by the CSM, the CSM Institutes (Snyder Institute for Chronic Diseases, Hotchkiss Brain Institute, Alberta Children's Hospital Research Institute, Libin Cardiovascular Institute, McCaig Institute for Bone and Joint Health, Arnie Charboneau Cancer Institute and the O'Brien Institute for Public Health) financially support additional core facilities relative to the research mission of those Institutes. Financial support is also provided to a MicroCT facility, a small Electron microscopy facility and bone MRI scanning facility. The Foothills campus also houses two University research facilities created through federal and philanthropic financial support. One is a large germ-free mouse facility that is part of the University's International Microbiome Centre and the other is a Biosafety Level 3 facility that was recently refurbished and recertified to support COVID 19 research.

5.5 RESOURCES FOR CLINICAL INSTRUCTION
A medical school has, or is assured the use of, appropriate resources for the clinical instruction of its medical students in ambulatory and inpatient settings and has adequate numbers and types of patients (e.g., acuity, case mix, age, gender).

Requirement 5.5-1
The medical school has, or is assured the use of, appropriate resources for the clinical instruction of its medical students in:
  i. *ambulatory settings*
  ii. *inpatient settings*

A. Describe how the medical school determines it has, or is assured the use of, appropriate resources for the clinical instruction of its medical students in ambulatory settings and inpatient settings.

Legacy Curriculum

Students in the Legacy curriculum of the UME program had several clinical learning exposures. All of these clinical exposures were developed in a process that included detailed consideration of the clinical space to support learning. The narrative response below details each of the clinical learning events that occurred in the pre-clerkship and the setting in which learning occurred. For each of these learning events, there was more than adequate ambulatory care space. This perception was clearly shared by students as per the data reported in the ISA.

Student feedback was collected regularly: Short daily surveys were collected after each learning event and end of course surveys were completed at the end of each pre-clerkship course. Students were asked for feedback on all aspects of the course with open text comment boxes available on all survey instruments. At the end of each course, all of the feedback collected through the daily and end of course surveys was collated into a single "post-course feedback" document. The Assistant Dean of Program, Faculty and Student Evaluations reviewed this data and provided a summary report to the UME Management Committee. The survey was then released to the Assistant Dean, Pre-Clerkship, who reviewed it in its entirety and then released this to the Course Committee for review. The Course Chairs subsequently met with the Assistant Dean to review this feedback. Each course provided an annual report to the Pre-Clerkship Committee for review and discussion. Student representatives were voting members on the Pre-Clerkship Committee, and it was a standing item on the agenda for students from the two pre-clerkship classes to provide a report. Each Pre-Clerkship Course Committee had one or more student representatives who provided feedback to course leaders.

At no point since the last accreditation visit in 2016 have concerns regarding physical space been raised by students in ambulatory care environments or otherwise. Similarly, no Course Chairs have described concerns with physical space in ambulatory care environments used for clinical teaching.

Clinical Learning Events in Pre-Clerkship
In the Communications and Physical Exam units of the Medical Skills Course, students formalized clinical skills instruction in history taking and physical exam. These sessions were all interactive and hand-on sessions with standardized patients (actors) who portray patients. Many of the sessions were case-based, and the students worked in small groups (four to five students) with a clinical preceptor. These sessions took place in the simulated clinic of the Medical Skills Centre.

Within each of the pre-clerkship content courses (Courses 1-7) there were clinical correlation sessions. In these learning events, students worked in small groups (four to five students) with a preceptor. Students practiced history taking and physical examination skills relevant to the content areas included within the specific course. These clinical encounters took place in inpatient wards, outpatient clinics or within the simulated ambulatory care environment of the Medical Skills Centre.

In each of the pre-clerkship years, students were placed for a series of half-day clinics with family physicians in their offices/clinics (Family Medicine Clinical Experience course). These sessions all took place within the outpatient clinical space used by the physician.

In the summer between first and second year, all students were required to participate in the three-week Pre-Clerkship Electives course. Students arranged their own elective

with a preceptor that could be local or outside of Calgary; some students pursued international electives. A small number of students completed research or directed study electives; however, the majority pursued their clinical interests. Clinical electives occurred in a combination of inpatient and outpatient environments with no specified requirement for particular ratios of time spent in inpatient vs. outpatient locations.

In the Applied Evidence Based Medicine (AEBM) course, students had a series of lecture and small group-based learning events over the course of several months, run longitudinally with other courses. In Year 2 of this course, students had 30 hours of scheduled time to use for clinical or research 'electives' where they had real-world experiences that allowed them to apply their knowledge of AEBM in a workplace environment. Most students completed clinical elective time in a specialty of their choice with an individual preceptor. Students worked with that preceptor in a combination of inpatient and outpatient work, depending upon the clinical practice of the selected preceptor.

RIME Curriculum

The same processes remain in place as in the Legacy Curriculum, with the exception that the numbered courses are replaced with three six-month pre-clerkship blocks. The RIME curriculum is based on the following four Pedagogical Principles:
1.   Spirality – key concepts presented repeatedly with increasing layers of complexity
2.   Generalism– focus on the diagnosis and management of diverse, undifferentiated, and often complex clinical problems, and delivering a comprehensive range of services
3.   Patient-centered – the patient's social context and their unique experiences integrated into concepts presented
4.   Integration – embedding content and concepts traditionally underemphasized and compartmentalized into the clinical content

This curriculum re-organization has allowed the UME program to perform a detailed curriculum content mapping which has allowed for each specific objective in the curriculum to be allocated appropriate resources (curricular time, etc) and each learning experience can be traced back to its particular curricular objectives. Critically, each curricular objective has a designated faculty member responsible for ensuring uniformity and adequacy of content presentation for that particular objective. Each of these faculty members has a contract with Undergraduate Medical Education, ensuring that there is accountability back to UME for content and the resources needed to teach that content. Finally, there is ongoing monitoring of the curriculum appropriate resources for clinical instruction by the Curriculum Innovation & Oversight Committee.

Clerkship
There is a robust process of information collected from clerkship year students in order to assess satisfaction with all components of the clerkship year. Data are collected from clerks at the end of each clerkship rotation through an online survey. The clerkship survey includes the opportunity for students to provide comments about any aspects of the given rotation where improvements could be made. Each departmental clerkship committee has one or more student representatives from the clerkship classes.

There have been no data collected through these surveys that suggest that learners have any concern about the adequacy of space in any care environment, including those used for ambulatory care experiences. The data acquired through these surveys are analyzed in a multi-step process. The Assistant Dean of Program, Faculty and Student Evaluations reviews all of the data twice yearly for each clerkship cohort, once near the midpoint of the clerkship year and once at the time of graduation of the clerkship class. The data are then reviewed independently by the Clerkship Director and the Assistant Dean, Clerkship.

On an annual basis, each Clerkship Director is required to prepare a detailed report on the quality of the clerkship; a summary of this report is presented to the Clerkship Committee for discussion. Finally, student representatives from the clerkship year are voting members on the Clerkship Committee. Students are invited to provide a report at each meeting as a standing agenda time.

At no point since the last accreditation visit in 2016 have any concerns regarding physical space been raised by students in ambulatory care environments or otherwise.

Similarly, no Clerkship Directors have described concerns with physical space in ambulatory care environments used for clinical teaching.

B. Table 5.5-1 B

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	Year 4
Foothills Medical Centre	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%)	N/A
	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%)	N/A

Provide the data from the Independent Student Analysis (ISA) on the number and percentage of respondents that answered "Yes" to the statement shown in the table below. Add rows as needed for each campus.

Requirement 5.5-2
The medical school has, or is assured the use of, adequate numbers and types of patients (e.g., acuity, case mix, age, gender).

A. Describe how the medical school ensures and verifies that each student has access to adequate numbers and types of patients (e.g., acuity, case mix, age, gender).

Legacy Pre-Clerkship Curriculum and RIME Pre-Clerkship Curriculum
In the pre-clerkship, students have clinical learning experiences in multiple courses that include both inpatient and outpatient environments, as described above. The location of the learning experiences is determined either by the course (Medical Skills) or the individual preceptor (AEBM electives, pre-clerkship electives). These clinical learning events will typically span both inpatient and ambulatory care settings, with an emphasis on early exposure to community and generalist practice. The Family Medicine Clinical Experiences in first and second year, for example, take place entirely within an ambulatory care environment, as the goal of the courses includes the provision of exposure to broad based, generalist family medicine. However, for pre-clerkship there is no specific system in place to monitor the mix of types of patients.

Clerkship
The program endeavours to provide clinical learning activities in a variety of settings that reflect clinical practice in various disciplines and ensures exposure to the mandatory clinical presentations. For most clerkship rotations this results in a combination of inpatient and outpatient settings in order to ensure students experience the breadth of the relevant discipline. (Please see Element 6.2 regarding selection of required clinical learning experiences). Student schedules within each clerkship are arranged at the discretion of the Departmental clerkship committees, overseen by the Assistant Dean, Clerkship. The clerkship committees attempt to expose students to the relevant aspects of their clinical practice and mimic the expected locations of that practice. Capacity for students at each site is determined by the Departmental clerkship committees. Students on mandatory rotations have priority over elective students for placement. The clerkship rotations are set up by individuals who practice in the clinical domains represented in each clerkship. Each clerkship sets up a rotation that includes inpatient and outpatient experiences that mimic those seen by practitioners within that domain. Exceptions include areas such as Emergency Medicine that are purely outpatient.

The mix of inpatient and outpatient settings was recently considered in the development of the new clerkship rotation structure completed through 2018-19 that began in January 2020 for the Class of 2022. Through extensive discussion at the Clerkship Committee, informed by the discussions of each of the Departmental clerkship committees, the structure for each of the rotations, and the mix of care settings, was reconsidered. Details regarding each rotation are described briefly below.

There is mandatory logbook completion during clerkship and the details are set up to collect information about clinical presentations, not specific patients. In order to see all the required clinical presentations, the student would have to see a variety of patients to represent a broad spectrum of acuity, case mix, age and gender.

Family Medicine (8 weeks)
    As of the Class of 2021, the Family Medicine Clerkship is made up of two four-week blocks. One of these will be in urban family practice, one will be in rural family

practice. Most of the time will be spent in an ambulatory care setting; occasionally in the rural block students may spend some time in an ER or local hospital.

Internal Medicine (8 weeks)
The internal medicine clerkship includes dedicated time on the inpatient wards (Medical Teaching Unit – MTU) that makes up four weeks of the clerkship. Students then complete two two-week selectives in medical subspecialties. These will typically be predominantly out-patient, clinic-based experiences; other specialties will use a combination of inpatient and outpatient learning environments.

Pediatrics (6 weeks)
All students will complete educational events in both inpatient and ambulatory care settings. The pediatric clerkship is made up of a four-week block and a two-week block; in that six-week period all students complete time on the Clinical Teaching Unit (CTU) at one of two hospitals. The remainder of the time in this clerkship is spent in some combination of community pediatrics, pediatric ER, neonatology, pediatric subspecialities and pediatrics in a smaller center (Red Deer or Medicine Hat). Regardless of the combination of learning experiences, all students will spend time in both inpatient and outpatient pediatrics.

Surgery (6 weeks)
The surgery clerkship includes both inpatient and outpatient environments. The surgery clerkship has a four-week block and a two-week block. During the time in the surgery clerkship, students will spend three weeks on general surgery rotation (one week is on an ER consult team) and the remaining three weeks in some combination of different surgical selectives. Both general surgery and selectives will typically include both outpatient clinics and inpatient service; the mix will depend on the particular combination of specialties, reflecting the expected variability in practice by specialty.

Obstetrics and Gynecology (6 weeks)
Students experience both inpatient and outpatient environments during the OG clerkship. The clerkship has a four-week block and a two-week block. The six-week block is structured as a four-week inpatient block and a two-week outpatient block. Inpatient work will include time on labour and delivery and care of gynecology inpatients/operating rooms. The two-week block will include time in ambulatory clinics in both obstetrics and gynecology. With this schedule, students will explicitly be exposed to both inpatient and ambulatory O + G.

Psychiatry (6 weeks)
During the psychiatry rotation, students experience a four-week block and a two-week block. The four-week block includes adult psychiatry. Students will have clinical learning experiences in both inpatient (ward) as well as outpatient (clinics, ER) psychiatry. During the two-week block, students will complete child/adolescent psychiatry. This will also include learning experiences in inpatient and outpatient settings.

Anesthesia (2 weeks)
The majority of clinical learning during the anesthesia clerkship will take place in the OR (inpatient setting). However, the clerkship emphasizes the transferrable skills of peri-operative management: students will also spend a small amount of time in outpatient pre-admission clinics and pain management clinics.

Emergency Medicine (2 weeks)
Clerks will spend the entirety of the EM clerkship in the outpatient environment of the emergency room.

University of Calgary Longitudinal Integrated Clerkship (UCLIC)
During the UCLIC training the clerks spend time in both inpatient and outpatient settings. While they will work with their primary preceptor in a family medicine clinic, they will also work with preceptors in the local hospital in both outpatient (ER) and inpatient (wards, OR) environments. In addition, UCLIC students return to Calgary for a series of three four-week rotations in internal medicine, surgery and pediatrics. The majority of this time is in the inpatient setting; however this varies by rotation.

The overall schedules for the distribution of time within UCLIC is driven by the UCLIC course committee; there will be some slight variability for each instructional site as individual student schedules are developed in conjunction with the primary preceptor.

Sites used for UCLIC are required to have the following characteristics:
- Minimum of 500 consultations per week that will involve patients of all ages.
- Continual cover by family doctors who are based in the community.
- Ability to provide a minimum of one operating list per student per week.
- Active local obstetrics program that can provide students with a minimum of 10 labour and delivery experiences.
- Capability to undertake inpatient management for common problems in family medicine, internal medicine, obstetrics, pediatrics and psychiatry.
- Comfortable residential accommodations for students.
- Study room for students.
- Access to teleconferencing and high-speed Internet.

Each site has hosted medical students for the rural family medicine rotation and/or rural electives. Most communities are also residency training sites. The UME uses internal data to follow the patient number and mix during clinical learning in the clerkship.

Each clerkship maintains a list of 'must see' clinical presentations and procedures. This makes up the foundation for the logbook that each student must complete on each rotation. During each rotation, the Clerkship Director (or primary preceptor) reviews the logbook entries during each rotation so that gaps in experience may be identified and remedied for that student. Gaps can be filled by directed clinical experiences, simulated patients and case-based discussions with preceptors.

Additionally, on an annual basis, the Assistant Dean-Clerkship and the Clerkship Committee review all student logbook data.

Course 8 (a longitudinal comprehensive clinical skills course) that runs through the clerkship is designed, in part, to 'fill in the gaps' for students. This course includes case-based learning and simulation to ensure adequate exposure to common and critical clinical presentations for all students. The content of Course 8 can be adjusted on an as-needed basis to address any gaps that are identified through logbook review and/or survey data. Course 8, like all other clerkship courses, provides an annual report to the Clerkship Committee that includes a discussion of the topics taught within the course.

As outlined above, there is a robust and continuous process for collecting student feedback on clerkship (regular surveys and a multi-step process for the review of that feedback; student presentations at the Clerkship Committee; direct feedback from the student rep for each clerkship). Data from these surveys complement data obtained through external sources (GQ) and logbook data, allowing for an ongoing assessment of ensuring that all clinical presentations are being covered through the clerkship. As noted above, areas of deficiency can be addressed through learning events in Course 8.

Capacity for students at each site is determined by the Departmental clerkship committees. Students on mandatory rotations have priority over elective students for placement. Careful evaluation of student feedback (collected after each component of every clerkship rotation) is completed twice yearly to ensure that students are not describing concerns with having an excess number of learners at a particular site. When such complaints arise, the departmental clerkship committees would reallocate clerks to ensure that there are not too many learners at any one site. With a clerkship that is substantially shorter in length than other schools there is less overlap between clerkship years, which limits the risk of educational dilution by having too many clerks in the clinical environment at any one time. In some rotations with relatively small capacity for learners, the departmental clerkship committee has arranged schedules such that there is no time where both clerkship classes are scheduled on the same rotation. This is in an effort to pre-empt the concern of limited learning with too many clerks. Finally, the clerkship is scheduled such that a significant proportion of the clerks start with a series of elective weeks. This reduces the number of students that might be present on local rotations where more senior clerks may be completing mandatory rotations. Again, this schedule is used intentionally to reduce overlap of clerks and maintain the best possible exposure to patients for each clerk.

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

Provide the data from the Independent Student Analysis (ISA) on the number and percentage of respondents that answered "Yes" to the statement shown in the table below. Add rows as needed for each campus.					
		Number (%)			
Campus	Survey Question	Year 1	Year 2	Year 3	Year 4
Foothills Medical Centre	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%)	N/A
	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%)	N/A

Data from the 2023 GQ supports the data from the ISA that students feel that they have access to appropriate patients in their clinical work in clerkship. The Statement was:" I had sufficient access to the variety of patients and procedures required to complete my encounter log":

Campus	Rotation	Agree or strongly agree		
		2021	**2022**	**2023**
University of Calgary, Cumming School of Medicine	Emergency Medicine	84.8	89.3	93.8
	Family Medicine	87.7	91.8	96.2
	Internal Medicine	91.7	91.3	97.7
	Obstetrics/Gynecology	77.1	83.8	90.1
	Pediatrics	81.9	91.4	95.1
	Psychiatry	93.0	97.6	96.1
	Surgery	78.9	90.8	90.3
	Longitudinal Integrated Clerkship (LIC)	100	100	94.4

5.6 CLINICAL INSTRUCTIONAL FACILITIES/INFORMATION RESOURCES
Each hospital or other clinical facility affiliated with a medical school that serves as a major location for required clinical learning experiences has sufficient information resources and instructional facilities for medical student education.

Requirement 5.6-1
Each hospital or other clinical facility affiliated with the medical school that serves as a major location for required clinical learning experiences has sufficient information resources for medical student education.

A. Describe how the medical school monitors information resources to ensure their sufficiency for medical student education at each hospital or other clinical facility affiliated with the medical school that serves as a major location for required clinical learning experiences.

At the CSM, a mix of Software as a Service (SaaS) is used with internally developed platforms. The locally developed work has focused on two underserved areas: content management and retrieval opportunities. The extent of use of the internally developed platforms is unique among Canadian medical schools. The new platform, Fresh Sheet, manages content according to both curricular schedules (Legacy and RIME) and medically relevant taxonomies.

Cognitive psychology has taught us that the storage of knowledge must be matched with retrieval practices. With that a tool has been created that leverages the creation of practice questions by generating thousands of scenarios from faculty created templates. That tool is called Cards and it has provided the medical students with millions of formative questions that vary components of the stems so they can genuinely practice retrieval, and faculty can focus on writing content. Currently Cards has taken the following approach to external collaboration: they provide faculty authored, peer reviewed material, and deliver it on the platform in an open access format. Collaborations have included Western, UBC, Dalhousie, LearnFM, Canuc-Paeds and the AFMC. The CSM faculty creators have the choice to make material open access or timed access to specific student groups.

Student Assessment:
Summative assessments are done via OSCE (Objective Structured Clinical Examinations), MCQ (Multiple Choice Questions) exams, and Clinical Assessments. OSCE assessment and MCQ exams are managed through an in-house application called Dolphin. Clinical Assessments are completed by a range of individuals, and can include residents, health professionals, and external faculty (visiting electives). Current assessment methods use both One45 and Elentra (Post graduate Family Medicine) in various contexts for clinical assessments.

Program Evaluation:
Students in the program can provide feedback anonymously on a per event basis (via Elentra customization), at the end of courses via Elentra. In clinical settings, there are multiple opportunities to provide feedback on rotations and preceptors (via One45 or Elentra).

Because of the wealth of in-house developed platforms, there is continuous ongoing monitoring of the use of individual information resources by students. All students have online access to these learning platforms at all teaching locations via their personal computers or smartphones. There is adequate Wi-Fi available at all teaching locations. The Up-To-Date medical platform has recently become available, free of charge, for all students through an external grant. Access to this resource will continue to be funded internally.

ISA data show that students consistently rate themselves as satisfied or very satisfied with the information resources available to them.

B. Table 5.6-1 B

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	Year 4
Foothills Medical Centre	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.	11/135 (85.19%)	101/111 (90.99%)	102/112 (91.07%)	N/A
	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%)	N/A

Provide the data from the Independent Student Analysis (ISA) on the number and percentage of respondents that answered "Yes" to the statement shown in the table below. Add rows as needed for each campus.

Requirement 5.6-2

Each hospital or other clinical facility affiliated with the medical school that serves as a major location for required clinical learning experiences has sufficient instructional facilities for medical student education.

A. Describe how the medical school monitors the sufficiency of instructional facilities for medical student education at each hospital or other clinical facility affiliated with the medical school that serves as a major location for required clinical learning experiences.

For teaching sites outside of the Foothills Medical Centre complex, teaching occurs mainly during clerkship rotations. Students have access to conference and teaching rooms at all instructional sites and hospitals. During annual clerkship reports, individual clerkship directors report back on the adequacy of instructional facilities. Real-time ongoing feedback is encouraged by Clerkship directors, small group leaders and any other instructors who may have concerns with encouragement by the Assistant Deans and Associate Dean. Space or infrastructure concerns of the UME program are brought forward for discussion at the Strategic Education Council if these concerns involve resources shared with other programs (e.g. PGME). All students in the Longitudinal Integrated Clerkship are provided with dropdown space at the offices and hospitals at their site. Sites for Family Medicine clerkship placements are only selected if they have sufficient space to accommodate the student and require a separate clinic room for the student to see patients independently.

ISA data show that students are consistently very satisfied with the adequacy of instructional facilities.

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

Source: ISA

Foothills Medical Centre	Survey Question	Number (%)			
		Year 1	Year 2	Year 3	Year 4
	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%)	N/A

Provide the data from the Independent Student Analysis (ISA) on the number and percentage of respondents that answered "Yes" to the statement shown in the table below. Add rows as needed for each campus.

5.7 SECURITY, STUDENT SAFETY, AND DISASTER PREPAREDNESS
A medical school ensures that adequate security systems are in place at all locations and publishes policies and procedures to ensure student safety and to address emergency and disaster preparedness.

Requirement 5.7-1
The medical school ensures that adequate security systems are in place at all locations.

A. Describe how the medical school ensures that adequate security system(s) are in place to ensure student safety at the following locations/times:
   i. on campus(es) during regular classroom hours
   ii. on campus(es) outside of regular classroom hours
   iii. at clinical teaching sites used for required clinical learning experiences

i. on campus(es) during regular classroom hours

SECURITY SYSTEMS IN PLACE AT THE FOOTHILLS CAMPUS:

SECURITY COVERAGE: Campus Security provides security coverage at the CSM buildings 24 hours per day, 7 days per week. As such, they are the first responders to all life safety emergencies including fire, structural failure, and environment issues. Security staff are responsible for patrolling building interiors and promoting/facilitating a safe and secure learning environment. This security presence and response is augmented by main campus security staff as needed. In addition, the University has a Work Alone program in place to ensure student safety for those working after hours and a SafeWalk program to escort students to parking facilities adjacent to the complex when requested.

The building security breakdown is as follows:

- Health Sciences Centre and Heritage Medical Research Building (997, 318 sq. ft. – 3,800 students, visitors, and guests): 7 days/week, 24 hours per day patrolled by one uniformed security staff person with back up from main campus security.
- Cal Wenzel Precision Health (CWPH) and Health Research Innovation Centre (HRIC) (880, 281 sq. ft.): 7 days/week, 24 hours per day patrolled by one uniformed security staff person with back up from main campus security.

ELECTRONIC EXTERIOR DOOR ACCESS: Electronic access control system is deployed (card access only outside 7:00am-7:00pm M-F, and weekends) in student areas of the complex, such as UME, the O'Brien Centre, and throughout the CWPH and HRIC buildings.

CLOSED CIRCUIT TELEVISION: The CCTV surveillance system is used for the protection of student safety and the detection or deterrence of criminal activity. Cameras at the CSM Campus include:

- UCalgary Monitored one camera - Loading Dock (at entrance)
- Five cameras installed in the UME student locker areas
- UCalgary Monitored HRIC Atrium – 2 cameras (one at each crossover floor)
- UCalgary Monitored CWPH – 1 camera – Main Entrance (above security desk)
- UCalgary Monitored CWPH – 1 camera - Colon Cancer Screening Centre (at entrance)
- UCalgary Monitored Parking Lot 6
- 1 High-mount camera, capacity to move and zoom – Alberta Health Services Monitored Foothills Hospital Building
- 1 High-mount camera, capacity to move and zoom – Alberta Health Services Monitored HMRB
- 1 High-mount camera, capacity to move and zoom – Alberta Health Services Monitored HRIC

- 1 High-mount camera, capacity to move and zoom – Alberta Health Services Monitored McCaig Tower
- 2 High-mount cameras, capacity to move and zoom – Animal Health Centre

CONTROLLED ACCESS DOORS: Secure entrance doors that require student badges to gain access:

- All student lounge space
- Student Spirituality Space
- Medical Skills Centre
- Indigenous Hub
- ATSSL Wet Lab
- ATSSL Simulation Lab
- Hallway outside Medical Skills Centre (student classrooms)
- Library (during weekend and evening hours)

ii. on campus(es) outside of regular classroom hours

All security programs and processes operate 24 hours per day, seven days per week.

iii. at clinical teaching sites used for required clinical learning experiences

SECURITY SYSTEMS IN PLACE AT ALBERTA HEALTH SERVICES (AHS) SITES

AHS - Special Protection available to students in clinical learning environment:
Alberta Health Services Protection Services provides 24-hour security support to the four acute care hospitals, community-based clinics and programs, corporate and ancillary locations throughout the Region. Dispatch and communication centers are electronically linked to closed-circuit television cameras, door access and emergency/duress alarms, and are monitored continuously.

AHS - The 24-hour services provided on all Acute Care Sites include:
- Assisting in the management of aggressive behavior
- Assisting in locating lost or missing patients
- Loss Prevention Services and Investigations
- Staff/student escorts to parking areas are conducted during nighttime hours or under special circumstances, 24 hours per day
- Intervention with inappropriate or unruly visitors
- Lost and Found property and or inquiries are received and catalogued
- Building access and key controls
- Fire prevention and alarm response
- Protection Services Officers respond to all alarm incidents within Acute Care
- Security Patrols are continuous throughout all areas of the hospital and campus. During night hours, patrols are emphasized in areas such as hospital parking lots, hospital grounds and public areas of the buildings. Patrols by officers are conducted on foot, bicycle or marked patrol car.
- AHS emergency response codes (back of name tags) and teams at each site
- AHS procedures for dealing with high-risk infectious situations (students are directly advised not to be involved)
- All teaching sites have lockers, or other secure locations for belongings
- Safe Walk Programs are available at all affiliated sites and can be arranged 10 minutes prior to departure. Students and staff members are advised to walk in groups in

well-lit areas wherever possible. At all sites, when interacting with a patient who could be potentially violent or has a previous history of aggression towards staff, students are directed to place themselves adjacent to the door, and to not have the patient between them and their only way of escape.

Fire and Life Safety Checks: Protective Services provide basic Fire/Life Safety Checks to ensure that staff and students are fully trained on the proper procedure to follow when a fire is discovered. Silent fire drills are conducted during staff meetings to discuss REACT and PASS. Students and staff are also trained to use the fire extinguishers and notified of the locations of the fire alarm pull stations and evacuation destinations.

Violent Patient Training: Students are trained in these scenarios during the Introduction to Clinical Practice course and with a "real life" standardized patient during the Communications course. There is an OSCE station in the summative clerkship OSCE in handling a violent patient. In addition, at many sites there are:
- Security personnel
- Occupational health and safety staff

B. Table 5.7-1 B

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

Provide the data from the Independent Student Analysis (ISA) on the number and percentage of respondents that answered "Yes" to the statement shown in the table below. Add rows as needed for each campus.					
		Number (%)			
Campus	Survey Question	Year 1	Year 2	Year 3	Year 4
Foothills Medical Centre	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%)	N/A
	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%)	N/A
	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.	134/137 (97.81%)	108/112 (96.43%)	100/113 (88.50%)	N/A

Requirement 5.7-2
The medical school publishes policies and procedures to ensure student safety.

A. Provide the medical school or university policies/procedures on ensuring student safety. *Appendix 5.7-2A*

Required Appendix 5.7-2 A – Student Safety Policies

This appendix includes the following policies: Safety Policy Medical Students, Student Mistreatment Guidelines, SafeWalk, Workplace Violence Policy, Sexual and Gender Based Violence Policy, Harassment Policy, Immunization Requirements, Communicating Safety Information, Automated External Defibrillator, CSM Closed Circuit Television Camera Master List.

Required Appendix 5.7-2 B – Protocol for Injuries, Incidents & Exposures, Pre-Clerkship Handbook, Clerkship Handbook

B. Describe how medical students, faculty, and staff are informed of these policies/procedures.

At the beginning of the medical school year, the Associate Dean-UME communicates to the student body that policies relating to student safety can be found on the CSM website, in the CSM Medical Student Guide, and the Clerkship Handbook wherein the *Safety – Medical Students* policy is referenced. All UME policies are on the UME

program website. UME has created a UME Help Desk email address to assist students if they have any concerns/questions. The UME also created "A Safe Space" website which provides information and reporting mechanisms for mistreatment. This link has been presented in person and distributed to each class. Faculty have access to these policies and procedures via the main page of the UME program website.

The Emergency Business Continuity Plans for the CSM and UME also contain this information.

In addition, at the beginning of the clerkship year, AHS representatives provide an organizational orientation. At that time, AHS ID badges are handed out, which include the emergency response codes, as well as resources discussed such as the AHS on-line code training modules. A one page "Protocol for Injuries, Incidents & Exposures" is distributed at the orientation. This information is also available on the AHS websites and in email bulletins.

Requirement 5.7-3
The medical school publishes policies and procedures to address emergency and disaster preparedness.

A.   Provide the medical school or university policies/procedures related to emergency and disaster preparedness. (*Appendix 5.7-3 A*)

Required Appendix 5.7-3 A – Emergency & Disaster Preparedness Policies

The Emergency Business Continuity Plans for the CSM and Undergraduate Medical Education contain all pertinent emergency and disaster preparedness information and include: the Dean's Office Business Continuity Plan, Weather Watches and Warnings Procedures, Pandemic Preparedness and Procedures, Fire and Explosion Procedure, CSM Building Emergency Response Plan, Evacuation Instructions and Responsibilities Procedures, Protocol for Injuries, Incidents, and Exposures, Bomb Threat Procedure, and the UME Business Continuity Plan.

B.   Describe how medical students, faculty, and staff are informed of these policies/procedures.

All safety policies and process can be found on the University of Calgary website for CSM students, staff and faculty. AHS representatives provide an organizational orientation. At that time, AHS ID badges are handed out which includes the emergency response codes, as well as resources discussed such as the AHS on-line code training modules.

5.8 LIBRARY RESOURCES / STAFF

A medical school ensures ready access to well-maintained library resources sufficient in breadth of holdings and technology to support its educational and other missions. Library services are supervised by a professional staff that is familiar with regional and national information resources and data systems and is responsive to the needs of the medical students, faculty members, and others associated with the medical education program.

Requirement 5.8-1

The medical school ensures ready access to well-maintained library resources sufficient in breadth of holdings and technology to support its educational and other missions.

A. Describe how the medical school ensures ready access to well-maintained library resources sufficient in breadth of holdings and technology to support its educational and other missions.

The physical location of the Health Sciences Library (HSL) is located on the second floor of the Health Sciences Centre at the Foothill Medical Centre campus.

Students, faculty and staff of the CSM, and those associated with the medical school are provided after-hours, weekend and holiday access to the Health Sciences Library with the use of their personal University of Calgary Unicard (campus ID card). This exclusive access provides students, staff and faculty with spaces they need to study and work at times that align with their schedules.

The library has a bookable computer lab that can be split into two classrooms, complete with two instructor podiums, two projectors, two sets of whiteboards and forty-eight wired computers. Outside of the classroom space are thirteen additional wired PCs and three Mac computers. Wireless networking printing is available with Unicard payment.

The University of Calgary's Libraries and Cultural Resources (LCR) holds licenses to an extensive suite of medical resources to support student learning and faculty research. These include bibliographic indexes to the medical literature (eg: MEDLINE, EMBASE), and point of care tools (eg: Dynamed Plus, VisualDx). A number of these point of care tools are also available as mobile resources to support medical students', residents', and clinician-faculty members' bedside professional practice. The library purchases numerous e-book collections, print books, and journal subscriptions to support the medical education programs. All electronic resources, including e-books and e-journals, are available remotely, and students and faculty can access these materials from any location on and offsite, using their University of Calgary email address and sign-on credentials. While the library continues to purchase and maintain print collections, there is increasing focus on obtaining journals and books in electronic format to enable 24-hour access to collections. A series of online guides have also been created to facilitate ease of access to required information, tools, and other resources.

The University of Calgary and the University of Alberta are joint partners in the Health Knowledge Network, an organization that licenses health care resources for colleges, universities, and health regions across the Prairie provinces. Through the Health Knowledge Network and participation in other library consortia, students and faculty can be provided with access to a wide range of information resources. Collaborative relationships with other academic institutions also allow the students and faculty to benefit from a robust interlibrary loan service that enables access to collections in other libraries across North America. Student satisfaction with accessibility to available technology is high, as evidenced by the ISA data.

B. Table 5.8-1 B

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

Provide the data from the Independent Student Analysis (ISA) on the number and percentage of respondents that answered "Yes" to the statement shown in the table below. Add rows as needed for each campus.					
		Number (%)			
Campus	Survey question	Year 1	Year 2	Year 3	Year 4
Foothills Medical Centre	I consider that library holdings are readily accessible.	124/129 (96.12%)	83/92 (90.22%)	91/96 (94.79%)	N/A
	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%)	N/A

I consider that technology resources of the library are readily accessible.	132/141 (93.62%)	92/103 (89.32%)	98/102 (96.08%)	N/A
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%)	N/A

Requirement 5.8-2

Library services are supervised by a professional staff that is familiar with regional and national information resources and data systems.

A. Provide evidence that the library services are supervised by a professional staff that is familiar with regional and national information resources and data systems.

The HSL is a branch library of the University of Calgary's Libraries and Cultural Resources unit. The HSL is supervised by three staff members comprising of two professional American Library Association (ALA) accredited librarians and one Information and Administrative Specialist. Library staff members have specialized knowledge of health sciences databases, collections, and data sources. University of Calgary medical librarians maintain active memberships in key national professional associations including the Canadian Health Libraries Association and the Association of Faculties of Medicine of Canada (AFMC) Network of Libraries. Participation in these associations enable academic staff to share expertise with colleagues in hospital and academic medical libraries across Canada and collaborate on collections and service initiatives of broad national interest.

Requirement 5.8-3

Library professional staff is/are responsive to the needs of the:
*   i.   medical students*
*   ii.   faculty members*
*   iii. others associated with the medical education program*

A. Describe how library professional staff is/are responsive to the needs of the:
    i.   medical students
    ii.   faculty members
    iii. others associated with the medical education program.

i. Medical Students

Library staff are actively involved in the learning journey of the medical students, including orientation, student-led initiatives, and extra-curricular events.

Information Specialists provide in-person support at the service desk during peak times (Monday-Friday, 11:00am-1:00pm), and the online chat service connects users with real-time support Monday-Friday 9:00am-6:00pm, and robo-support in evenings and weekends. Communication with the library has been streamlined through a centralized intake system that has been implemented to ensure efficient triaging of student, faculty and staff online information and consultation/meeting requests. Librarians provide collaborative course-based teaching and learning support for Applied Evidence Based Medicine (AEBM) and Professional Role courses, and are available to medical students who need assistance with literature searching, as well as research endeavors. Instructional topics covered include question formulation using PICO, searching PubMed, PubMed Clinical Queries, and appraising data collection methods in the context of knowledge synthesis reviews. Librarians provide expert guidance with best practices for literature search execution and project management. Library professional staff also provide students with informal facilitated and self-directed learning through online instructional workshops and web-based learning guides.

Wellness is a priority, and the library provides a treadmill workstation, three adjustable standing desks, three 6-person collaboration tables, twenty-three lounging chairs (four that recline) and seven bookable group meeting rooms ranging in capacity from eight to fourteen people. Four of those rooms have AIRTAME technology, allowing for wireless casting/screen sharing. All workrooms and individual study rooms have Mimo panels that show the status of the room booking and upcoming schedule. For those

needing individual study spaces, the HSL has four private offices that are bookable for PhD candidates, and 68 solo study carrels of which 50 are wired. Students have access to a self-service cellphone charging tower, loanable chargers and adapters, as well as portable lights for the wired study carrels. The self-serve check-out machine in the library and the option to have library materials delivered from other libraries to the HSL facilitates a positive user-centered experience. An exciting development is anticipated for the library footprint – the proposed Knowledge Exchange Centre. Reimagined spaces and amenities to inspire the exchange of ideas in the health research and medical education innovation and knowledge landscape is upcoming, with a focus on expanded academic resources and new technology to enhance learning.

ii.   Faculty Members

Academic librarians maintain close working relationships with faculty and staff, including collaborating with faculty to create and deliver in-person and on-line library content to support course-based instruction, including creating content for the Re-Imagining Medical Education (RIME) curriculum. Faculty members and preceptors are able to place course materials on reserve in a conveniently placed self-service kiosk on the main floor of the Health Sciences Centre, located near medical education classrooms.

Academic librarians also collaborate with faculty on research and scholarship projects. Methodological guidance and research support are provided in the conduct of evidence synthesis reviews and in the development of research data management plans and Open Educational Resources.

Faculty members in rural settings, who all hold faculty appointments, have remote access to the libraries' services and resources.

iii.   Others Associated with the Medical School

Clinical faculty with adjunct University of Calgary appointments, including staff affiliated with research institutes (Libin, O'Brien etc) can access the full complement of library resources available to students, faculty and staff, including specific teaching and research supports outlined above. The Health Sciences Library also collaborates with the CSM's Global Health partnerships and initiatives, by providing database access to students and clinicians to promote and facilitate knowledge dissemination and health equity.

5.9 INFORMATION TECHNOLOGY RESOURCES / STAFF

A medical school ensures access to well-maintained information technology resources sufficient in scope to support its educational and other missions. The information technology staff serving a medical education program has sufficient expertise to fulfill its responsibilities and is responsive to the needs of the medical students, faculty members, and others associated with the medical education program.

Requirement 5.9-1
The medical school ensures access to well-maintained information technology resources sufficient in scope to support its educational and other missions.

A. Describe how the medical school ensures access to well-maintained information technology resources (on- and off-campus) sufficient in scope to support its educational and other missions.

The UME program has two layers of information technology support. The first is the University of Calgary Information Technology (UCIT) team, which supports campus wide initiatives, infrastructure, and security. The second is an embedded Academic Technologies (AT) team that is in direct support of the UME program. The AT team has competence expertise in software integration, development, design, research, and administration.

Geographically disparate sites are linked for synchronous educational events primarily through web conferencing software. This is used across clerkships and supported both by UME staff and CSM AV services on site, with training for preceptors available on both a formal and ad hoc basis.

Educational resources are available online through several websites operated by UCIT and the UME Academic Technologies team. Foremost among these is the Learning Management System, OSLER which is based on the Elentra system. This provides access to presentations, core documents, schedules, forums and other content attached to learning events. Additionally, multimedia attached to physical exam and procedural skills is hosted in a mobile friendly website: Core. Video podcasts are made available from didactic lectures for review via the podcast distribution site. There is also an interactive clinical problem-solving application (Cards) that generates cases for students. Finally, formative exams are available online. Access to these resources is password-protected, and accounts are created for the medical students, residents and faculty as needed. The infrastructure that delivers this web-based content is housed in the UCIT data center where it has 24/7 support and backup.

There is a high degree of satisfaction with all facets of the IT resources and support provided, as illustrated by the ISA data.

B. Table 5.9-1 B

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

Provide the data from the Independent Student Analysis (ISA) on the number and percentage of respondents that answered "Yes" to the statement shown in the table below. Add rows as needed for each campus.					
			Number (%)		
Foothills Medical Centre	Survey question	Year 1	Year 2	Year 3	Year 4
	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%)	N/A
	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%)	N/A
	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%)	N/A
	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%)	N/A

	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%)	N/A

Requirement 5.9-2
The information technology staff serving a medical education program has sufficient expertise to fulfill its responsibilities.

A. Describe how the medical school monitors the sufficiency of expertise of the information technology staff serving the medical education program at each campus.

Monitoring the sufficiency of expertise is achieved through the following mechanisms:

Governance: The CSM and UCIT have established the CSM Technology Council as a forum for faculty-scale support. These meetings involve representatives from CSM Senior Leadership and UCIT Senior Leadership. Additionally, the Manager of Academic Technologies is a voting member of various UME operational committees (Pre-Clerkship Committee, Clerkship Committee, RIME Pre-Clerkship Committee, Student Evaluation Committee, Research Committee, UME Management) and a non-voting member of the Undergraduate Medical Education Committee. This setup ensures direct accountability of AT support to faculty and student representatives on these committees, enabling feedback at a granular level, including per-course feedback.

Support: The AT team's structural integration allows for a collegial process of training and insights for ongoing development. They provide in-office and on-site support in addition to the development team. UCIT support is regularly triaged on behalf of UME program faculty, staff, and students.

Development and integration: As part of their responsibilities to the Associate Dean UME, the AT team offers software solutions that can range from integrating or utilizing third-party tools (e.g., One45) to specific software development projects (e.g., CARDS).

Application monitoring: The AT team employs uptime monitoring on applications utilized in delivering the MD program. They collaborate with UCIT to schedule critical uptime windows, which include Objective Structured Clinical Exams (OSCEs), Multiple Mini Interviews (MMIs), and other scheduled summative periods. In the rare event of an outage, AT maintains direct channels to server infrastructure and network teams, as well as UCIT leadership, ensuring prompt resolution.

Requirement 5.9-3
The information technology staff serving a medical education program is responsive to the needs of the:
   i. *medical students*
   ii. *faculty members*
   iii. *others associated with the medical education program*

A. Describe how at each campus, the medical school monitors that the information technology staff serving the medical education program is/are responsive to the needs of the:
   i. medical students
   ii. faculty members
   iii. others associated with the medical education program

i. **Medical Students**

The student experience is a top priority for both UCIT and the AT team. Institutional support has focused on integrating Microsoft Office365 for students and staff, as well as providing high-speed wireless connectivity throughout educational spaces. The AT team specifically focuses on enhancing the MD program experience.

OSLER, the localized version of the Elentra platform, serves as a Learning Management System (LMS) and also facilitates student-facing administrative processes such as shadowing and time away requests.

The AT team developed the CARDS application which has been widely adopted throughout the program. This application has generated over 5,000,000 unique cards from a bank of more than 16,000 case templates. It has been adopted by two national curricular groups (LearnFM and Canuc-Paeds), and three other institutions (UBC, Western, and Memorial) use it for delivering open access materials. On average, students in the program utilize this application for over 200 cards per week per student. It consistently receives high ratings in end-of-course surveys, making it one of the most highly regarded course components.

For the delivery of RIME, the AT team has developed the Fresh Sheet application. This platform focuses on delivering content, with a particular interest in patient presentations including a static EMR file, replacing the slideshow style patient narratives.

In the three-year program, students face challenges in clerkship rotation scheduling. To address this, an algorithm was developed that allows students to rank rotations using tokens and resolves them against capacity limitations. The goal is to assign rotations based on students' highest preferences before the MSPR cut-off for CaRMS. This algorithm has been highly successful, with the following outcomes for the Class of 2024: First Choice - 100%, Second Choice - 100%, Third Choice - 100%, Fourth Choice - 96%, Fifth Choice - 91%, Sixth Choice - 90%.

Furthermore, with infrastructure support from UCIT, the AT team regularly supports student-led initiatives. This includes the *Calgary Guide to Understanding Disease* which has gained international recognition and received over 3,600,000 views in 2022 from 600,000 users in 223 countries. Other examples of student-led initiatives include the Blackbook, ADAPT and the Living Library.

ii. **Faculty Members**

The AT team offers direct faculty support at various levels. At the broadest level, this includes assisting faculty with basic support issues such as account recovery and training. At the course or clerkship level, the team provides support in ideation and implementation of curricular delivery, such as CARDS, Core, or other content support. The AV Services team at CSM also offers video and podcast production support.

For UME leadership, the AT team directly supports award allocation and faculty performance records. Since the Class of 2020, the team has been responsible for generating reports for the Competency Committee and leading the implementation of Entrustable Professional Activities (EPAs) in Clerkship.

iii. **Others Associated with the Medical Education Program**

Administrative:
After reviewing the business processes in the UME, AT undertook two initiatives focusing on administrative processes. First, they addressed the complex landscape of contract management, which had an impact on the CSM education community. Clinical faculty members have contracts that determine their faculty status and payment mechanism. To streamline this process, AT created Vera, a secure site functioning as a rolodex of CSM faculty. Vera dynamically calculates payment eligibility based on contract status. Second, using the data from Vera, AT developed a customization in Elentra (OSLER) for preceptor recruitment. This customization enables the UME to recruit and schedule faculty for educational events based on clinical department, payment eligibility, and past performance as an educator, as determined by student feedback. Additionally, the AT team annually generates the nationally compliant Medical Student Performance Record (MSPR) for review and upload to CaRMS.

Research:

To support research initiatives in undergraduate medical education, AT established the Undergraduate Medical Education Research Committee (UMERC). As part of this integration, a research-focused team member was added to provide dedicated support for educational research endeavors. This includes handling customized data requests, offering ethics application support, and facilitating student research opportunities.

5.10 RESOURCES USED BY TRANSFER / VISITING STUDENTS
The resources used by a medical school to accommodate any visiting and transfer medical students in its medical education program do not significantly diminish the resources available to already enroled medical students.

Requirement 5.10-1
The resources used by the medical school to accommodate any visiting and transfer medical students in its medical education program do not significantly diminish the resources available to already enroled medical students.

A. Describe how the medical school ensures that resources at each campus used to accommodate any visiting and transfer medical students in its medical education program do not significantly diminish the resources available to already enroled medical students.

There is a policy to support decisions regarding students transferring into the program. A key factor in these decisions is the adequacy of resources for the transfer student and an assessment of whether the transfer student would displace resources from existing University of Calgary medical students. The policy states that decisions regarding students wishing to transfer into the CSM MD Program are made by the Student Academic Review Committee (SARC). SARC is able to consider requests for clerkship education at the University of Calgary in mandatory clerkship courses or their equivalents for the entire clerkship year provided that they are currently enrolled in a CACMS accredited medical school, and if the following conditions are met:

- There is support from the Associate Dean UME at the University of Calgary and the counterpart at the home school. This must include justification for the request from the sponsoring university, and confirmation of good academic and professional standing in the other university.
- There are sufficient resources at the University of Calgary, such that the transfer student will not displace University of Calgary students.
- Students accepted for transfer will become a University of Calgary student, and will, upon completion of all the requirements for an MD degree, be conferred a University of Calgary medical degree.
- Transfers at times other than in the final year (clerkship) will not be considered at the University of Calgary MD Program.

Visiting students are not accepted for required clinical learning experiences and are only accepted from other CACMS-accredited (i.e. Canadian) medical schools for visiting electives. Visiting student information is provided to the Alberta Health Services Medical Education Office (MEO) in order for the visiting students to be set up with hospital information system access and training. The MEO also ensures that the students have clinical ward access and access to parking services while in Calgary. The UME has a visiting electives chair who, along with the Visiting Elective Program Coordinator, is responsible for the overall administration of visiting electives, as well as ensuring that elective students do not diminish resources for local CSM medical students. The Visiting Elective Program Coordinator shares an accommodations list with the visiting students to facilitate housing while in Calgary. Student lists are provided to AHS and the UCMG office to ensure that visiting students have access to transcription services while on elective. With the exception of forensic pathology, which is administered by the Department of Justice in Alberta and not the Department of Health, there is a "blackout" period at the beginning of clerkship during which visiting students are not accepted as all of the Calgary *new* clerks are on electives and capacity would be exceeded if visiting students were permitted.

There were no visiting elective students for the 2020-2023 academic years as shown in Table 5.10-1 B due to the COVID-19 pandemic. There was a Canada-wide pause on accepting visiting elective students in March of 2020, which ended in July 2023. This was done in coordination with other CACMS accredited schools.

Table 5.10-1 B | Visiting Students and Transfer Students

Source: School-reported

Campus	Provide the number of visiting students/transfer students for the most recent three academic year (as indicated).	2022-23	2021-22	2020-21
	Transfer students into the first year (or into the pre-clerkship phase for a three-year program)	0	0	0
	Transfer into the second year (or into the pre-clerkship phase for a three-year program)	0	0	0
	Transfer students into the third year (or into the beginning of the clerkship phase for a three-year program)	1	0	0
	Transfer students into the fourth year (or the final year of a three-year program)	0	0	0
	Visiting students completing required clinical learning experiences	0	0	0
	Visiting students completing clinical electives	0	0	0

5.11 STUDY / LOUNGE / STORAGE SPACE / CALL ROOMS

A medical school ensures that its medical students have, at each campus and affiliated clinical site, adequate study space, lounge areas, personal lockers or other secure storage facilities, and secure call rooms if students are required to participate in late night or overnight clinical learning experiences.

Requirement 5.11-1
The medical school ensures that its medical students have, at each campus and affiliated clinical site, adequate study space.

A. Describe how the adequacy of study space for medical students at each campus and affiliated clinical site is ensured.

School Building: The CSM Health Sciences Centre (the 'Medical School Building') includes the medical library that has study spaces to accommodate CSM students. The following answers refer to study space within the medical school that is located outside of the library. Learners who are completing clinical placements at the Foothills Medical Centre can access the library and study spaces at the medical school as the buildings are connected.

Affiliated Hospitals: Although the affiliated hospitals in Calgary do not have dedicated study rooms for medical students, three of the five hospitals have a library to which students have regular and after-hours access and which include sufficient study spaces (tables/cubicles). AHS has physical library spaces at Alberta Children's Hospital (ACH), Rockyview General Hospital (RGH), and Foothills Medical Centre (FMC). The library at FMC is located within the Tom Baker Cancer Center and will be relocating to the Calgary Cancer Center once it is open and expanding the offerings for group meeting/group workspaces, study spaces and comfortable rest areas. All FMC staff, including residents and medical students can use the space, and there is a librarian who can provide dedicated support to FMC staff from that location. The RGH has a library on the fourth (main) floor of the Fisher building. South Health Campus does not have a dedicated library but there is a public Knowledge Resource Centre prominently located on the main floor of the hospital. There is no library at the Peter Lougheed Centre.

All the hospitals have a student lounge and a doctor's lounge available for learners' use. These are generally very quiet during non-business hours and are used by students as study spaces.

AHS and the University of Calgary provide access to a wide range of online resources which are accessible offsite for those with AHS/UCalgary credentials, as well as fulsome print collections in-library.

Knowledge Resource Service (KRS):
Knowledge Resource Service (KRS) is part of AHS' Health Evidence and Innovation department. KRS supports evidence-informed decision making and quality patient care by providing staff with access to, and support in using, high-quality evidence resources. KRS provides AHS staff and physicians with access to many online resources, such as:
- Point of care resources (e.g. Dynamed, Lippincott Advisor & Procedures)
- Drug information resources (e.g. RxTx, Lexicomp)
- Journal article databases (e.g. MEDLINE, CINAHL, PsycINFO)
- e-Journals (e.g. Lancet, NEJM, CMAJ)
- Subject guides with curated collections of top quality licensed and public domain resources

Staff, patients and families are welcome in all KRS full-service libraries to consult with KRS staff, access computers and health information, or read in quiet. All library spaces offer:
- Access to trained information specialists for consultation and help
- Computer access for patients, families, and AHS staff
- Books and journals to meet the special needs of their facility and support a provincial collection
- Quiet space to study and read

- Comfortable seating for rest and reflection
- Photocopying and printing services

B. Table 5.11-1 B

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

Provide the data from the Independent Student Analysis (ISA) on the number and percentage of respondents that answered "Yes" to the statement shown in the table below. Add rows as needed for each campus.					
Campus	Survey question	Number (%)			
		Year 1	Year 2	Year 3	Year 4
Foothills Medical Centre	The study space on my campus was adequate for my needs.	96/149 (64.43%)	70/119 (58.82%)	90/113 (79.65%)	N/A
	At all hospitals where I was assigned, the study spaces were adequate for my needs.	47/85 (55.29%)	38/68 (55.88%)	63/109 (57.80%)	N/A

Requirement 5.11-2
The medical school ensures that its medical students have, at each campus and affiliated clinical site, adequate lounge areas.

A. Describe how the adequacy of lounge areas for medical students at each campus and affiliated clinical site is ensured.

CSM Campus Learner Lounges/Study Space - HSC Building, HMRB Building, HRIC Building & Library

NON-EDUCATIONAL LEARNER SPACES

Feasby Lounge: capacity 100, open to all CSM learners. Amenities include:

- Full kitchen, large island for eating, refrigerator, coffee maker, spare cups/utensils
- Lockable storage offered
- Student bulletin/white boards
- Pool table/foosball/ping pong
- Comfortable seating (upholstered lounge chairs)
- Quiet area furnished with reconfigurable classroom tables and chairs for individual or group study or social interaction. Small snacks and granola bars are made available in the lounges when Faculty budget allows.

Interprofessional Learner Lounge (IPLL) Overview: capacity 65, is open to all CSM learners (including UME learners and Residents). Diverse and inclusive interprofessional spaces promote innovation, problem solving, and new ways of thinking. The IPLL is a newly renovated space (formerly the UME Learner Lounge) that grew out of a desire to promote inclusive, meaningful, social, and wellness interactions among all CSM learners. Amenities include:

- Lactation suite - a family friendly space that can be used for lactation purposes (for learners, faculty and staff) or can be booked by learners for family time during a long day at the Foothills campus (separate microwave and refrigerator included)
- A nap room with individual nap spaces separated by curtains, with individual light control and charging ports
- Full kitchen, large island for eating, refrigerator, microwaves, coffee makers, spare cups/utensils

- Lockable storage offered
- Student bulletin/white boards
- Pool table/foosball/ping pong
- Comfortable seating (upholstered lounge chairs)
- Office chairs around round tables for groups
- Large monitor for video games

Lounge Consultation with CSM Educational Programs and Learners:

In 2022, a meeting was organized by the Office of Senior Associate Dean Education, to introduce plans to transform the UME learner lounge. The transformation would be a part of a greater strategy connected to the CSM Strategic Plan and the Okanagan Charter. Both the Dean's Executive Council (DEC) and the Strategic Education Council (SEC) were unanimously supportive of a project that would ensure that all CSM learners had equitable access to services, and a meaningful and positive student experience.

In November 2022, UME Student Representatives communicated that they would prefer that the UME learner lounge remained closed to other CSM programs, so that UME learners could continue to occupy a place of their own. In response to that communication, a meeting was called on November 4, 2023 by the CSM Dean, that included the CSM Vice Dean, UME Learner Representatives, UME Associate Dean, Director of CSM Student Advocacy and Wellness and the Director Educational Operations. During this meeting the UME learners presented their concerns and discussion ensued. CSM representatives voiced their commitment to equitable and inclusive access, and that the lounge would remain open to all. CSM also offered financial support to maintain the lounge: supplies, additional cleaning if required, contribute to collaborative events, and repairs/replacement as required. As a part of the overall discussion, the attendees unanimously agreed that a collaboration between CSM Learners, the SAW Hub and CSM Leadership to develop programing targeted to the specific needs of individual programs and disadvantaged groups within the Faculty would be of great value.

The objective of the lounge transformation project is tied closely to the CSM Strategic Plan and the implementation of the Okanagan Charter.

Alignment with the CSM Strategic Plan (excerpts from the CSM Strategic Plan):

- Equal access to resources for learners in different education programs (i.e. counselling, career guidance, rest spaces, lounge access)
- Supporting our people and our communities
- Cultivate belonging and engagement at all levels in our school
- Create programming to support a culture of integration among learners
- Universities and faculties of medicine have contributed to the structural inequities that have existed in our society for far too long

Alignment with the Okanagan Charter (excerpts from the Okanagan Charter):

- As articulated in the responsibility statement in the Okanagan Charter we must make strong commitments to eliminate these barriers - creating an environment where all people are included and feel a strong sense of belonging.
- Principles reflected in parallel admissions pathways incorporated into all education programs and student experience.
- Create or re-orient campus services. Coordinate and design campus services to support equitable access, enhance health and well-being, optimize human and ecosystem potential, and promote a supportive organizational culture.
- Ensure comprehensive and campus-wide approaches develop and implement multiple interconnected strategies that focus on everyone in the campus community.
- Create campus cultures of compassion, well-being, equity, and social justice.
- Generate dialogue and research that expands local, regional, national and international networks and accelerates action on, off and between campuses.

Interprofessional Learner Lounge (IPLL) Timeline and Delays:
As with all mid-large sized construction projects at the University of Calgary, the lead time is substantial, as much as 6-10 months for a project to start depending on the number and scope of projects across campus.

Once the lounge project was approved by the various committees, a construction project timeline was established. The project timeline was unfortunately derailed by COVID, and the delays could not be avoided. There were significant setbacks in all aspects of the project including: permit acquisition, costing, availability of and interaction with trades, building lockdowns, and significant supply chain management delays that impacted deliver of materials (by several months to a year).

The lead time relating to scheduling inspections (City of Calgary, fire code, electrical, plumbing etc.) also prevented CSM from adhering to the project timeline and opening the lounge in a timely manner. After delays of a year or more during construction, the city and electrical inspections were completed. There were deficiencies in the electrical inspection and so the electrical team was brought back to complete the work. This remediation caused further delays as some of the required materials were on back order had not arrived.

Once final inspections (City of Calgary, electrical, fire code and plumbing) were complete and passed, Facilities Management and Risk Management were consulted and advised that the lounge could be opened to learners while continuing with the installation of the final elements to complete the renovation (some still on back order). The Lounge was opened in late August 2023. On October 3, 2023, CSM received a project completion notice from the University of Calgary Department of Facilities Management. The project file is now closed, and lounge is fully operational. The lounge was completed on budget costing $284,000 plus a nominal cost of furnishing the lactation space (sofa, chairs, fridge and microwave). The renovation was funded entirely through CSM held funds (unrelated to tuition or student fees).

CSM Rationale for IPLL:

- Promote anti-racism, anti-oppression, equity, diversity, inclusion, and accessibility in the learning environment/workplace.
- Guide and inspire action by providing a framework that reflects the latest concepts, processes and principles relevant to the Health Promoting Universities and Colleges movement.
- To cultivate a respectful, collaborative space that will create positive change in our learner community.
- To be an inclusive space. No learner space within CSM should be perceived as hierarchical or exclusionary. The IPL welcomes and engages all CSM learners equally so that no learner feels disadvantaged in their access.
- Be a haven for diverse groups where all learners are respected.
- CSM learners are uniquely positioned to foster meaningful relationships through cocurricular activities and programming that purposefully activate experiences that leverage diversity.
- The IPL community will forge cross-discipline relationships, provide opportunities for mentorship, interprofessional learning as well as diverse social support that can buffer against isolation and depression.
- Be a haven for Neurodiverse learners by providing low-light, noise-free space at specific times daily for those who are acutely bothered by light and noise.
- Offer specific time blocks weekly where members of equity deserving groups can meet and engage.
- To promote the advancement of our anti-racism, equity, diversity, inclusion, and accessibility (EDIA) efforts and commitments to ii'taa'poh'to'p, the University of Calgary's Indigenous strategy.
- To cultivate a respectful, safe campus, fostering more open communication and initiate explicit action around issues of belonging, harassment, racism and discrimination, safe reporting, and accountability, and celebrating and valuing our differences.
- The student lounge is steps away from the Student Advocacy and Wellness Hub (SAWH). SAWH supports CSM learners by providing integrated and expanded health and wellness services promoting the physical, mental, and spiritual well-being of students within a supportive community. The IP Lounge is a community built of Health Science Learners from the CSM graduate and undergraduate programs.

Study/Collaboration Space:

- CSM Classrooms: Bookable/useable, when not booked for classes, for individual/group study, socializing, and for private student functions (35 small group rooms – capacity 950+)
- Medical Skills Centre: Bookable/usable, when not booked for classes, for learners' individual practice/study for CSM clinical skills sessions (36 clinical rooms).
- HSC Library: The library encompasses seven bookable group-meeting rooms for self or group study; 44 individual wired study carrels that can accommodate personal computers; 24 public access computers for individual and group study.

CSM Public Spaces:

- HRIC Atrium – A large and open atrium space. A portion of the atrium is consistently set up with 8-10 large round tables with seating for 6-8 at each table. The space is often used by learners, faculty and staff for socializing, lunch, informal meetings, and group projects.
- HMRB Atrium – large open atrium with permanent seating and tables for 174, often used by learners, faculty and staff for socializing, lunch, informal meetings, and group projects.

Indigenous Hub:

- The Indigenous Hub is located in the Indigenous, Local and Global Health Office within the Health Sciences Centre. Elders and Indigenous community members provided input about function and design to create a welcoming, supportive, and ceremonial space for Indigenous staff, students, faculty, and Elders. A place where the CSM Indigenous community can gather individually for reflection or as a group.

Student Advocacy and Wellness Hub:

- SAW Hub has seating and counter space for 6 to 8 learners – a relaxed space where students often gather for complimentary snacks.
- Mindfulness Room SAW is a small space utilized for mindfulness sessions and can be accessed by students when not in use for discrete needs like examination review.

Multifaith Space:

- CSM multi-faith space is managed in collaboration with the Faith & Spirituality Centre and are available for students, staff, and faculty on a drop-in basis for quiet reflection, meditation, or prayer.
- The space can also be booked for one-time or re-occurring events. Events that may be booked in the space are to support spiritual wellness and religious observance.

Lockers:

- UME Lockers: Learners are each provided with a dedicated locker and lock in the HSC Building for the duration of the MD program.
- ATSSL Lab Lockers: Available for learner use while working in the ATSSL Wet Lab (100 in female change room/100 in male change room and additional space throughout campus that is dedicated to gender neutral change rooms). The Simulation Lab has coat hooks and cubicles for student use while in the lab.

AHS Sites
Foothills Hospital: There is a large physicians' lounge on the ground floor that is open 24 hrs a day, to which students have unrestricted access. This includes a breakfast and lunch service (cash payment for food), couches and TV. There is also a smaller residents' lounge on the second floor to which students also have access.

Peter Lougheed Centre: There is a physicians' lounge on the first floor, and there is a small residents' lounge, although it is less frequently used. Students have unrestricted access to both these facilities. There are a large number of lockers available in the physicians' lounge that students can use as long as they bring their own lock. On the surgery rotation, there are two dedicated lockers for clerks in the OR change room, and on MTU there are dedicated lockers (bring your own lock) in the change rooms right outside Unit 38, where daily rounds begin.

Rockyview Hospital: Students have access to the physicians' lounge and the residents' lounge. There are lockers available for clerks in one of the accessory wings that also houses the call rooms.

South Health Campus: Students have access to both the physicians' and residents' lounges. The residents' lounge is on the second floor, is large and includes large numbers of available lockers.

Alberta Children's Hospital: Students have access to the physicians' and residents' lounges. The residents' lounge is centrally located and secure, and therefore the preferred location for students to keep their belongings. There are dedicated lockers for the clerks on Clinical Teaching Unit. There are also open lockers in the OR change rooms that clerks can access.

Through the process of accreditation preparation, it became apparent that not all students were aware of the study and lounge spaces that are available (as evidenced by the information provided through the ISA). In 2024, the clerkships were advised of the need to be diligent in the provision of information about lounges and study spaces when communicating with students at the beginning of rotations.

B. Table 5.11-2 B

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

Campus	Survey question	Number (%)			
		Year 1	Year 2	Year 3	Year 4
Foothills Medical Centre	The lounge space on my campus was adequate for my needs.	49/149 (32.89%)	21/119 (17.65%)	83/113 (73.45%)	N/A
	At all hospitals where I was assigned, the lounge areas were adequate for my needs.	60/86 (69.77%)	41/74 (55.41%)	66/109 (60.55%)	N/A

Provide the data from the Independent Student Analysis (ISA) on the number and percentage of respondents that answered "Yes" to the statement shown in the table below. Add rows as needed for each campus.

Requirement 5.11-3
The medical school ensures that its medical students have, at each campus and affiliated clinical site, adequate personal lockers or other secure storage facilities.

A. Describe how the adequacy of personal lockers or other secure storage facilities for medical students at each campus and affiliated clinical site is ensured.

Alberta Children's Hospital - 44 half lockers installed in Corridor AO-400. This is located on the basement level of ACH just outside the staff fitness centre. Students must supply their own lock.

Foothills Medical Centre - Lockers are located on the ground level in the corridor between the Health Sciences Centre and the Foothills Medical Centre. Locks are in place on all lockers, with combinations provided by the UME office.

Peter Lougheed Centre - 40 half lockers installed in the physicians' lounge, Room 1619, Main Floor, corridor toward the Emergency Department. Code required.

Rockyview General Hospital - 58 half lockers installed in in the area beyond doorway 3A104 (Holy Cross A.C.C. and Fisher Building Basement Level).

South Health Campus - 50 half lockers installed in the Resident Lounge, 4th Floor, Room 480100

Through the process of preparation for accreditation, it became apparent that students were unaware of the availability of lockers (as evidenced by the information provided through the ISA). In 2024, the clerkships were advised of the need to be diligent in the provision of information about lockers when communicating with students at the beginning of rotations.

B. Table 5.11-3 B

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

Provide the data from the Independent Student Analysis (ISA) on the number and percentage of respondents that answered "Yes" to the statement shown in the table below. Add rows as needed for each campus.					
		Number (%)			
Campus	Survey question	Year 1	Year 2	Year 3	Year 4
Foothills Medical Centre	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%)	N/A
	At all hospitals where I was assigned, the personal lockers/other secure storage facilities were adequate for my needs.	46/91 (50.55%)	45/81 (55.56%)	50/110 (45.45%)	N/A

Requirement 5.11-4
The medical school ensures that its medical students have, at each campus and affiliated clinical site, adequate and secure call rooms if students are required to participate in late-night or overnight clinical learning experiences.

A. Describe how the adequacy and security of call rooms for medical students are ensured for those students who are required to participate in late-night or overnight clinical learning experiences at each campus and affiliated clinical site.

Call rooms are available for medical students at all five hospitals. Only students with a designated call room are permitted to remain in hospital for overnight call. In situations where it is felt by the clerkship rotation that call is an important part of student learning, but adequate call rooms are not available, students may complete 'evening call' where they are on call but are released by 2300h. This allows them to have the value of the learning experience of being on call but also allows them to maintain their daily work and learning schedules. Clerkships are now required, in their regular communications with preceptors, to provide reminders about the process for on-call clerks, including the requirement for release of students on evening call by 2300h (or earlier if not busy). For a normal 'overnight' call, students are released with a post-call day off, after no more than 26 hours.

Students complete call in several mandatory rotations, as noted below:

1. Internal Medicine
Maximum of seven call shifts in 28 days on MTU; most will include two weekends (one Saturday, one Friday/Sunday). Most of these are overnight call, some will be evening call, depending upon the number of learners. IM selectives may include a few call shifts (typically two or three over the two weeks) or no call. These are completed as evening call, with the exception of ICU, where students do overnight call.

2. Surgery

During the three weeks of general surgery, students will complete three evening call shifts, and a Sunday evening. Students will also complete a Friday overnight and a Saturday overnight call. On surgery selectives, students will typically be required to complete one weeknight evening call for one-week selectives and two weeknight evening call and a weekend call (which may be evening or overnight, depending on the particular selective).

3. Pediatrics

While on the two-week Pediatric CTU, students are scheduled for one 12-hour call shift on a weekend day. Students do also have a week of 'night float' where they work overnight and are off during the day (in keeping with the clinical practices for the ACH CTU). Students who do one week of neonatology have a weeknight evening call and a weekend call from 800-1700h.

4. Psychiatry

On the four-week adult psychiatry block, students complete four evening calls, two weekday and two weekend. On the child-adolescent two-week block, students do one evening call.

5. Obstetrics and Gynecology

During the four-week block, students do four overnight calls, two weeknight and two weekend.

B. Table 5.11-4 B

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

Provide the data from the Independent Student Analysis (ISA) on the number and percentage of respondents that answered "Yes" to the statement shown in the table below. Add rows as needed for each campus.					
Campus	Survey question	Number (%)			
		Year 1	Year 2	Year 3	Year 4
Foothills Medical Centre	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.	11/16 (68.75%)	18/26 (69.23%)	80/113 (70.80%)	N/A

5.12 REQUIRED NOTIFICATIONS TO THE CACMS

A medical school is required to notify* the CACMS in any of the following circumstances:

    a)   *changes in enrolment, student distribution and/or the resources to support the educational program;*
    b)   *creation of a new or expansion of a campus;*
    c)   *changes in curriculum;*
    d)   *changes in program delivery at an existing campus;*
    e)   *changes in governance or ownership.*

*Details regarding the notification are found in the CACMS Rules of Procedure

Requirement 5.12-1

The medical school is required to notify* the CACMS in any of the following circumstances:

    a)   *changes in enrolment, student distribution and/or the resources to support the educational program*
    b)   *creation of a new or expansion of a campus*
    c)   *changes in curriculum*
    d)   *changes in program delivery at an existing campus*
    e)   *changes in governance or ownership*

A. For each instance when the CACMS was notified, provide all correspondence received from the CACMS that was related to the notification. (***Appendix 5.12-1 A***)

Required Appendix 5.12-1 A1 – Notification of Change – New Curriculum
Required Appendix 5.12-1 A2 – CACMS Response – New Curriculum
Required Appendix 5.12-1 A3 – Notification of Change – Class Size
Required Appendix 5.12-1 A4 – CACMS Response – Class Size

B. Table 5.12-1 B

Table 5.12-1 B | Total Number of Students Admitted (Not Repeating Students) to the First Year of the Medical Education Program   Source: School-reported

Provide the number of new medical students (not repeating students) admitted in each academic year since the last full survey. Add rows as needed for each campus.									
Campus	AY 2024	AY 2023	AY 2022	AY 2021	AY 2020	AY 2019	AY 2018	AY 2017	AY 2016
Foothills Medical Centre	181	175	166	150	170	155	164	161	160