## STANDARD 6: COMPETENCIES, CURRICULAR OBJECTIVES, AND CURRICULAR DESIGN

**The faculty of a medical school defines the competencies to be achieved by its medical students through medical education program objectives and is responsible for the detailed design and implementation of the components of a medical curriculum that enables its medical students to achieve those competencies and objectives. The medical education program objectives are statements of the knowledge, skills, behaviours, and attitudes that medical students are expected to exhibit as evidence of their achievement by completion of the program.**

### *6.1 PROGRAM AND LEARNING OBJECTIVES*

***The faculty of a medical school defines its medical education program objectives in competency-based terms that reflect and support the continuum of medical education in Canada and allow the assessment of medical students' progress in developing the competencies for entry into residency and expected by the profession and the public of a physician. The medical school makes these medical education program objectives known to all medical students and those faculty members with leadership roles in the medical education program, and others with substantial responsibility for medical student education and assessment. In addition, the medical school ensures that the learning objectives for each required learning experience are made known to all medical students and those faculty members, residents, and others with teaching and assessment responsibilities in those required experiences.***

***Requirement 6.1-1***

*The faculty of a medical school defines its medical education program objectives in competency-based terms.*

A. Provide a copy of the medical school's medical education program objectives that define those objectives in competency-based terms. (***Appendix 6.1-1 A***)

***Required Appendix 6.1-1 A – Big 10 and CSM Medical Education Program Objectives***

The Big 10 Educational Objectives were last revised in 2014 and developed to guide the undergraduate medical education program to create a competent graduate. The objectives require revision to stay relevant as the requirements of a medical program graduate have changed with evolving societal needs. As such, a working group was struck by UMEC in September 2023, following a recommendation from the Strategic Education Council (SEC) in March 2023, to modernize the objectives. The working group began to meet to determine which objectives are in scope for revision, and the working principle was that the "Big 10" would remain but may need updating. The specific recommendations by SEC regarding the medical education program objectives are as follows:

1. There should there be a stronger statement regarding the importance of acting and working in an anti-oppressive, and anti-racist, non-ableist way and about promoting Indigenous Health
2. Public Health should be raised as an issue
3. Social Science Research is a major pillar as well, not only Clinical Sciences
4. Planetary Health should be addressed
5. The promotion of learner wellness should be captured

It became evident during the February 2024 UMEC review that greater stakeholder representation was necessary for the revision of the Program objectives. Work is ongoing to modernize these objectives and ensure they are inclusive and represent the goals of the curriculum. The goal is to have the revised objectives approved and adopted for the class beginning in July 2025.

***Supplemental Appendix 6.1-1 A*** chronicles the revision progress to date.

B. Provide a copy of the faculty council or equivalent committee minutes during which the medical education program objectives were approved. Highlight the appropriate section. (***Appendix 6.1-1 B***)

No documentation is currently available for Required Appendix 6.1-1 B. Revisions to the medical education program objectives are in progress and will be reviewed by the the Strategic Education Council (SEC) once complete.

***Requirement 6.1-2***

*The medical education program objectives reflect and support the continuum of medical education in Canada.*

A. Describe how the medical education program objectives reflect and support the continuum of medical education in Canada.

The 'Big 10' graduation objectives describe the expectations for a learner at the end of the MD program, and thus prepared to begin residency. At the first stage of medical training, undergraduate medical education has a responsibility to produce a learner who is adequately prepared with the knowledge, skills and attitudes to continue learning through both the next stages of their formal medical education but also as a life-long learner through the duration of their careers. The program objectives guide the inculcation of content knowledge, clinical skills, approaches to learning and professional attitudes – the building blocks for a successful medical career.

***Requirement 6.1-3***

*The medical education program objectives allow the assessment of medical students' progress in developing the competencies for entry into residency and expected by the profession and the public of a physician.*

A. Describe how the medical education program objectives allow the assessment of medical students' progress in developing the competencies for entry into residency and expected by the profession and the public of a physician.

A series of measures are used throughout the curriculum to continually assess learners' progress in achieving the program objectives. These are described in detail in ***Required Appendix 6.1-1 A***, but in short include objectives of increasing complexity moving from acquisition of knowledge to application of knowledge in a supervised setting. The objectives are not limited to acquisition and application of knowledge related to clinical presentations, but also include collaboration, leadership, advocacy, scholarship, and professionalism.

The assessment of the medical students is multimodal, including multiple choice questions blueprinted to the objectives (including non-clinical presentation material), OSCEs, ITERs, and EPAs, all of which are directly related to the objectives of the specific learning environment or the program as a whole. Particularly with the EPAs, the students are assessed using a competence score, ranging from early competence to that of a student entering residency. This provides an explicit assessment of the student's skill level in that area and allows demonstration of progression over time, exposure, feedback, and continued experience.

To assess whether clinical experiences are reflective of clerkship rotation objectives, an end of clerkship rotation survey is distributed to all students and they are asked to note their agreement with the statement below. The responses from four years (January 2020-March 2024) have yielded the results below. Note that each student would have had an opportunity to complete ~ eight surveys during their clerkship, with the denominator below reflecting this ability.

Survey Question: "I was able to see the type of patients required of me as stated in the objectives" Source: School-reported

| Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|
| 42/5124 | 134/5124 | 428/5124 | 2003/5124 | 2517/5124 |
| 0.8% | 2.6% | 8.4% | 39.1% | 49.1% |

***Requirement 6.1-4***

*The medical school makes these medical education program objectives known to all medical students and those faculty members with leadership roles in the medical education program and others with substantial responsibility for medical student education and assessment.*

A. Describe how the medical school makes these medical education program objectives known to i) all medical students and ii) those faculty members with leadership roles in the medical education program and others with substantial responsibility for medical student education and assessment.

All medical students are made aware of the program objectives via the UME website, and they are also posted in common areas at the medical school. These objectives are explicitly presented to the students during orientation sessions and are printed on the first page of the Student Handbook. Students use OSLER (the online curriculum repository) on a regular basis; the landing page for OSLER has one of the 'Big 10' objectives highlighted at the time of each login. All the program objectives are available on OSLER by scrolling through the featured section.

Similarly, teachers and educational leaders can access the program objectives via the UME website and will similarly be aware of the objectives posted in common areas at the medical school. The UME website includes a link to preceptor resources which includes the program objectives. The objectives are regularly included as agenda items of UMEC and its sub-committees.

Each time a preceptor completes an ITER, they are required to acknowledge their awareness of the Big 10 program objectives and a link to the objectives is provided on the ITER form.

Clerkship directors and department heads are aware of the medical education program objectives, with departmental and residency program newsletters and websites often specifying these learning goals. ***Supplemental Appendix 6.1-4 A*** provides an example of how rotation and learning objectives are distributed to Medical Teaching Unit preceptors on the Internal Medicine rotation.

B. Table 6.1-4 B

Table 6.1-4 B | Student Awareness of Medical Education Program Objectives (Core Appendix) 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 was made aware of the medical education program objectives. | 145/149 (97.3%) | 113/119 (95%) | 109/113 (96.5%) | N/A |

***Requirement 6.1-5***

*The medical school ensures that the learning objectives for each required learning experience are made known to all medical students and those faculty members, residents, and others with teaching and assessment responsibilities in those required experiences.*

A. Describe how the learning objectives for each required learning experience are made known to i) all medical students and ii) those faculty members, residents, and others with teaching and assessment responsibilities in those required experiences.

**Pre-clerkship**:

All pre-clerkship course objectives can be accessed through OSLER and Freshsheet, the online (password protected) learning events system. Students can access course level information and individual learning events through these platforms. Faculty members teaching in pre-clerkship have access to the learning objectives on Freshsheet and through the curricular maps that are available from Block Directors and other curriculum leaders. For those without access to Freshsheet such as allied health professionals, guest speakers, residents, or others, the session lead provides the objectives for review as part of the development and preparation of the session.

For the Legacy curriculum, course and rotation-specific objectives were available to all students and faculty via the on-line resource management system, OSLER. Objectives specific to individual sessions (such as small group cases, simulation activities, etc.) were also distributed with the case information.

An example from the RIME curriculum is below. This information would be available on FreshSheet to anyone involved in the session.

**RIME Curriculum**

**2-hour small group-September 2023**

**Session Overview**
The purpose of this small group session is to explore the evolution of a Shiga toxin-producing Escherichia coli (STEC) infection as it progresses to haemolytic uremic syndrome and to evaluate potential causes. Earlier presented material regarding hemolysis and renal function will be reviewed. An approach to outbreak investigation will be discussed, including public health responses and their communication to clinicians and the public.

**Learning Goals**
1. Explore the pathophysiology and presentation of complicated E. Coli infections
2. Discuss the management of severe and complicated diarrheal illnesses
3. Examine the potential sources of E.Coli contamination in an outbreak setting
4. Recognise the approach to and challenges of outbreak investigation, control, and communication

**Pre-Session Preparation: Practice Questions**

1. Why is some E.Coli dangerous?
2. How can enterotoxic E. Coli enter the food supply?
3. How would find the source of an outbreak? Stop it? Prevent it?
4. Do you trust the safety of your food supply? Have you ever lost that trust?

**Clerkship**:

Preceptors are sent the link to the objectives at the beginning of clerkship rotation, and specific objectives are provided to clerkship preceptors by email on an annual basis. Several clerkship rotations also utilize reminder cards (Family Medicine, Pediatrics, Obstetrics and Gynecology, and Anesthesia) which include the rotation objectives. When possible, printed copies of rotation specific objectives are available in common teaching rooms and in department offices at various sites.

Clerkships are diligent about directly providing preceptors and residents with the rotation objectives, with the details noted below:

**Family Medicine**
The clerkship sends out their preceptor manual and core document with rotation objectives once a year (August 1) to the Family Medicine PGME team members. This allows for direct distribution to all PGY1 and 2 FM residents. These documents are also sent to all preceptors who will have a clerk under their supervision, at the beginning of the clerkship year and again four weeks prior to the arrival of scheduled clerkship students.

**Internal Medicine**
The Department of Medicine website (educational portion) is regularly updated, including the updated MTU rotation objectives. The Department of Medicine has all these materials and is working on uploading it to the centralized departmental website under the education section. This website also has a dedicated education resources section for preceptors (***Supplemental Appendix 6.1-4 A)***.

The Big 10 and MTU objectives are included in the MTU call schedules that are sent out each month and will be added to the IM residency website portal that is still being built. Both sets of objectives will be added to the Department of Medicine and Internal Medicine (IM) residency newsletters. This will be a recurring request 2-3x per year. The clerkship director provides a presentation about the clerkship and its objectives episodically at the departmental monthly meeting with the department education lead. This also serves as an opportunity to promote education opportunities in clerkship. This meeting involves all of the section heads who can then help disseminate this information to their own sections.

The IM clerkship director has requested the Big 10 and rotation objectives be circulated to preceptors for rotations that fall outside of the organizational structure of IM (neurology, critical care). The director is also working with the departmental education lead to approach each section's program director to ensure all of the PGY4 and 5s are up to speed with objectives and teaching expectations.

**Anesthesia**
All faculty are emailed the Core Document for the rotation (which includes objectives) prior to the start of the new clerkship year (in January). The Core Document is also posted on 'basecamp' (Anesthesia website used as the main platform for communication within the department) which is regularly accessed by faculty and residents. Resident representatives on the departmental clerkship committee undertake a similar process – reminding their resident colleagues to review the clerkship objectives at the beginning of each clerkship year.

**Emergency Medicine**
All preceptors are required to complete a daily evaluation form on One45 each time they work with a clerk. Like the ITER forms, these daily evaluation forms include a prompt that requires the preceptor to indicate that they are familiar with the Big 10 objectives (which are directly linked on the form for reference).

The EM Department has developed a departmental app that will include a section on UME teaching, including the objectives and a primer for staff physician teachers. Clerkship objectives and a primer for senior residents who will be working with clerks are being added to the University of Calgary Emergency Medicine website.

Residents in the program are provided with a departmental medical education workshop at the beginning of each academic year. UME EM clerkship objectives are reviewed during this program.

**Psychiatry**
Rotation objectives are communicated to all participants at the annual Psychiatry UME retreat. Clerkship site leaders and residents are included in all Departmental Clerkship Committee meetings. Site leaders take any changes to the objectives back to their colleagues and the resident representatives remind their fellow residents about the objectives and any changes. The Core Document (including objectives) is reviewed yearly.

**Obstetrics and Gynecology**
Emails that include the clerkship objectives are sent out by the Clerkship Director to faculty and residents twice per year. The first is sent in the summer (when the new cohort of residents begins their training). The second is sent early in the calendar year to coincide with the entry of the new class into clerkship (January-February). Periodically, educational leaders will use departmental grand rounds to provide preceptors and residents with reminders of the objectives (both the Big 10 as well as the

clerkship objectives).

**Pediatrics**
The pediatrics clerkship objectives are sent to all residents in July of each year. Faculty are reminded of the objectives as a part of the reminders that are provided to all faculty at the Pediatrics Executive meeting. Objectives are also sent out regularly via the departmental weekly bulletin.

**Surgery**
The clerkship objectives are emailed to each of the surgical programs which then provide the objectives to their residents.

**UCLIC (University of Calgary Longitudinal Integrated Clerkship)**
Objectives are communicated to preceptors via email annually, as well as during orientation and subsequent preceptor meetings throughout the year.

There are no residents in the program specifically (UCLIC is a UME program), however, residents are involved with teaching when they are concurrently located at a site. In these instances, preceptors provide program information to residents that are unfamiliar with the UCLIC program.

B. Table 6.1-5 B

Table 6.1-5 B | Student Awareness of Learning Objectives for Each Required Learning Experience (Core Appendix) 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 | So far this academic year, I was made aware of the learning objectives for each required learning experience that I completed. | 143/149 (95.9%) | 112/119 (94.1%) | 106/113 (93.8%) | N/A |

## *6.2 REQUIRED PATIENT ENCOUNTERS AND PROCEDURES*

***The faculty of a medical school defines the types of patients and clinical conditions that medical students are required to encounter, the skills and procedures to be performed by medical students, the appropriate clinical settings for these experiences, and the expected levels of medical student responsibility.***

***Requirement 6.2-1***

*The faculty of a medical school defines the:*

*i. types of patients and clinical conditions that medical students are required to encounter*
*ii. skills and procedures to be performed by medical students*
*iii. the appropriate clinical settings for these experiences*
*iv. the expected levels of medical student responsibility*

A. Table 6.2-1 A

Table 6.2-1 A | Required Patient Encounters (Core Appendix) Source: School-reported

| List and describe each clinical condition that students are required to encounter. For each clinical condition describe patient type, clinical setting and the expected level(s) of student responsibility. Add rows as necessary. | | | |
|---|---|---|---|
| Clinical Condition | Patient type(s) | Clinical setting(s) | Level of student responsibility |
| Abdominal Distension | Real or virtual patient | Surgery | Must see patient |
| Abdominal mass | Real or virtual patient<br>Standardized patient | Surgery, pediatrics, comprehensive clinical skills course | Must see patient |
| Abdominal pain | Real or virtual patient<br>Standardized patient | Pediatrics, Surgery, Emergency Medicine, Internal Medicine, Family Medicine, Comprehensive clinical skills course | Must see patient |
| Abnormal liver function tests | Real or virtual patient | Internal medicine, surgery | Must see patient |
| Abuse | Real or virtual patient | Pediatrics | Must see patient |
| Attention deficit | Real or virtual patient | Pediatrics, psychiatry | Must see patient |
| Back pain | Real or virtual patient<br>Standardized patient | Family medicine, emergency medicine, surgery, comprehensive clinical skills course | Must see patient |
| Blood from GI tract | Real or virtual patient<br>Simulation | Surgery, Internal Medicine, comprehensive clinical skills course | Must see patient |
| Blood in urine | Real or virtual patient | Surgery | Must see patient |
| BP abnormal | Real or virtual patient<br>Lecture (sepsis)<br>Standardized patient | Emergency Medicine (sepsis), Anesthesia (hypertension and hemorrhage), obstetrics and gynecology (gestational HTN), Internal Medicine, Pediatrics, Family Medicine, comprehensive clinical skills course | Must see patient |
| Breast disorders | Real or virtual patient | Surgery | Must see patient |
| Burns | Real or virtual patient | Surgery | Must see patient |
| Calcium abnormal | Real or virtual patient<br>Standardized patient | Internal Medicine, comprehensive clinical skills course | Must see patient |
| Chest pain | Real or virtual patient<br>Simulation | Emergency Medicine, Anesthesia, Internal Medicine, Family Medicine, comprehensive clinical skills course | Must see patient |
| Coagulation abnormalities | Real or virtual patient | Pediatrics, Internal Medicine | Must see patient |
| Constipation | Real or virtual patient | Surgery | Must see patient |
| Contraception | Real or virtual patient<br>Standardized patient | Obstetrics & Gynecology, Family Medicine, comprehensive clinical skills course | Must see patient |

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|---|---|---|---|
| Cough | Real or virtual patient | Family Medicine, pediatrics | Must see patient |
| Cyanosis/hypoxia | Real or virtual patient | Anesthesia (and hypocapnia), pediatrics | Must see patient |
| Developmental delay | Real or virtual patient<br>Standardized patient | Pediatrics, comprehensive clinical skills course | Must see patient |
| Diarrhea | Real or virtual patient<br>Standardized patient | Pediatrics, Family Medicine, comprehensive clinical skills course | Must see patient |
| Dizziness/vertigo | Real or virtual patient | Internal Medicine, Family Medicine | Must see patient |
| Dysphagia | Real or virtual patient | Surgery | Must see patient |
| Dyspnea | Real or virtual patient<br>Simulation | Pediatrics, Emergency Medicine, Internal Medicine, family medicine (must see asthma), comprehensive clinical skills course, pediatrics | Must see patient |
| Ear pain | Real or virtual patient | Pediatrics, Family Medicine | Must see patient |
| Edema | Real or virtual patient<br>Simulation | Pediatrics, comprehensive clinical skills course | Must see patient |
| Eye redness | Real or virtual patient | Pediatrics | Must see patient |
| Failure to thrive | Standardized patient | Comprehensive clinical skills course | Must see patient |
| Fatigue | Real or virtual patient | Family Medicine | Must see patient |
| Fractures/dislocations | Real or virtual patient | Surgery, pediatrics | Must see patient |
| Frailty | Real or virtual patient | Family Medicine | Must see patient |
| Glucose abnormal | Real or virtual patient<br>Standardized patient | Family Medicine, Obstetrics and Gynecology (gestational diabetes) | Must see patient |
| Headache | Real or virtual patient | Pediatrics, Internal Medicine, Family Medicine, Comprehensive clinical skills course | Must see patient |
| Hemoglobin abnormal | Real or virtual patient<br>Standardized patient | Pediatrics, Internal Medicine, comprehensive clinical skills course | Must see patient |
| Acid base abnormality | Real or virtual patient<br>Simulation | Internal Medicine, comprehensive clinical skills course | Must see patient |
| Infertility | Real or virtual patient | Obstetrics and gynecology | Must see patient |
| Jaundice | Real or virtual patient | Pediatrics, Surgery, Internal Medicine | Must see patient |
| Joint pain | Real or virtual patient<br>Standardized patient | Surgery, Internal Medicine, pediatrics, comprehensive clinical skills course | Must see patient |
| Limp in children | Real or virtual patient | Surgery | |
| Lipids abnormal | Real or virtual patient<br>Standardized patient | Internal Medicine, comprehensive clinical skills course | Must see patient |
| Lymphadenopathy | Real or virtual patient | Pediatrics | Must see patient |
| Menopause | Real or virtual patient | Obstetrics & Gynecology | Must see patient |
| Menstrual cycle abnormal | Real or virtual patient | Obstetrics & Gynecology | Must see patient |
| Mental status altered | Real or virtual patient<br>Lecture<br>Simulation | Pediatrics, Internal Medicine, comprehensive clinical skills course | Must see patient |
| Mood disorder | Real or virtual patient<br>Standardized patient | Psychiatry (bipolar disorder, major depression), pediatrics, Family Medicine, comprehensive clinical skills course | Must see patient |
| Neck mass/goiter | Real or virtual patient<br>Standardized patient | Surgery, comprehensive clinical skills course | Must see patient |
| Newborn, depressed | Real or virtual patient | Pediatrics | Must see patient |

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|---|---|---|---|
| Non reassuring fetal status | Real or virtual patient | Obstetrics & Gynecology | Must see patient |
| Pain | Standardized patient | Internal Medicine | Must see patient |
| Palpitations | Real or virtual patient<br>Simulation | Internal Medicine, comprehensive clinical skills course, anesthesia (specifically bradycardia and tachycardia) | Must see patient |
| Panic/anxiety | Real or virtual patient | Psychiatry, pediatrics, Family Medicine | Must see patient |
| Peds emergency, acutely ill | Real or virtual patient | Pediatrics | Must see patient |
| Pelvic mass | Real or virtual patient | Obstetrics & Gynecology | Must see patient |
| Pelvic pain | Real or virtual patient | Obstetrics & Gynecology | Must see patient |
| Periodic health exam | Real or virtual patient | Pediatrics, Family Medicine | Must see patient |
| Personality disorders | Real or virtual patient | Psychiatry, pediatrics | Must see patient |
| Potassium abnormal | Real or virtual patient | Internal Medicine | Must see patient |
| Pregnancy | Real or virtual patient<br>Lecture<br>Standardized patient | Obstetrics & Gynecology (antepartum care, intrapartum care, postpartum care, preterm labour, antepartum hemorrhage, first trimester complications, multiple gestation, prenatal screening and diagnosis, postpartum hemorrhage, emergent obstetrical complications), Family Medicine, comprehensive clinical skills course | Must see patient |
| Prolapse/pelvic relaxation | Real or virtual patient | Obstetrics & Gynecology | Must see patient |
| Psychotic patient | Real or virtual patient<br>Standardized patient | Psychiatry, pediatrics, comprehensive clinical skills course | Must see patient |
| Renal failure | Real or virtual patient | Internal Medicine | Must see patient |
| Scrotal mass | Real or virtual patient | Surgery | Must see patient |
| Scrotal pain | Real or virtual patient | Surgery | Must see patient |
| Seizures | Real or virtual patient<br>Lecture | Pediatrics, comprehensive clinical skills course | Must see patient |
| Skin rash macules | Real or virtual patient | Pediatrics, Internal Medicine, Family Medicine | Must see patient |
| Skin rash papules/blisters | Real or virtual patient | Family Medicine, pediatrics, Obstetrics & gynecology (vulvar lesions) | Must see patient |
| Skin ulcers/tumors | Real or virtual patient | Surgery, Family Medicine, pediatrics | Must see patient |
| Sodium abnormal | Real or virtual patient<br>Standardized patient | Internal Medicine, pediatrics, comprehensive clinical skills course | Must see patient |
| Sore throat | Real or virtual patient | Pediatrics | Must see patient |
| Stature abnormal | Real or virtual patient | Pediatrics | |
| Substance abuse | Real or virtual patient | Psychiatry | Must see patient |
| Suicidal behavior/prevention | Real or virtual patient | Psychiatry, pediatrics | Must see patient |
| Temperature abnormal | Real or virtual patient<br>Lecture | Pediatrics, Internal Medicine, Family Medicine, anesthesia (specifically hypothermia), comprehensive clinical skills course | Must see patient |
| Trauma | Real or virtual patient | Surgery, Emergency Medicine (including bone and joint injuries) | Must see patient |
| Urinary frequency | Real or virtual patient<br>Lecture | Pediatrics, Surgery, comprehensive clinical skills course | Must see patient |
| Urinary obstruction/prostate | Real or virtual patient | Pediatrics | Must see patient |
| Vaginal bleeding | Real or virtual patient | Obstetrics & Gynecology | Must see patient |
| Vaginal discharge | Real or virtual patient | Obstetrics & Gynecology, Family Medicine | Must see patient |

| | | | |
|---|---|---|---|
| Violence, family | Real or virtual patient | Pediatrics | Must see patient |
| Vision loss | Real or virtual patient | Pediatrics | Must see patient |
| Vomiting, nausea | Real or virtual patient | Pediatrics, Surgery | Must see patient |
| Weakness | Standardized patient<br>Lecture | Comprehensive clinical skills course | Must see patient |
| Weight abnormal | Real or virtual patient<br>Standardized patient | Internal Medicine, Family Medicine, comprehensive clinical skills course | Must see patient |
| Well baby | Real or virtual patient | Family Medicine | Must see patient |
| Wheezing | Real or virtual patient<br>Lecture<br>Standardized patient<br>Simulation | Anesthesia, Family Medicine, pediatrics, comprehensive clinical skills course | Must see patient |

B. Table 6.2-1 B

Table 6.2-1 B | Required Skills and Procedures (Core Appendix) Source: School-reported

| List and describe each skill/procedure that students are required to encounter. For each skill/procedure describe patient type, clinical setting and the expected level(s) of student responsibility. Add rows as necessary. | | | |
|---|---|---|---|
| Skill/Procedure | Patient type(s) | Clinical setting(s) | Level of student responsibility |
| Plot growth chart | Real patient | Pediatrics | Demonstrate skill |
| Write prescription | Real patient | Pediatrics | Demonstrate skill |
| Assess suicidal risk in Emergency Department | Real patient | Psychiatry | Must see patient |
| Perform cognitive assessment | Real patient | Psychiatry | Demonstrate skill |
| ECT treatment | Real patient | Psychiatry | Observe ECT session and discuss |
| Discuss Psychotherapy | Real patient | Psychiatry | Discuss with preceptor |
| Mental status exam | Real patient | Psychiatry | Demonstrate skill |
| Assess surgical drain | Real patient | Surgery | Demonstrate skill |
| Assess catheter | Real patient | Surgery | Demonstrate skill |
| Assess surgical wound | Real patient | Surgery | Demonstrate skill |
| Use universal precautions | Real patient | Surgery | Apply during patient encounters |
| Use Surgical Safety Checklist (3 elements) | Real patient | Surgery | Apply during patient encounters |
| Request midpoint feedback from a faculty member | Real patient | Surgery | Demonstrate skill |
| Perform suturing | Real patient | Procedural skills course pre-clerkship<br>Surgery, Emergency Medicine | Demonstrate skill<br>Apply during patient encounters |
| Sterile technique/scrub & gown | Real patient | Procedural skills course pre-clerkship<br>Surgery | Demonstrate skill<br>Apply during patient encounters |
| Blood gas interpretation | Real patient | Emergency Medicine, Internal Medicine | Demonstrate skill |
| Cast application (and splinting) | Real patient | Procedural skills course pre-clerkship<br>Emergency Medicine | Demonstrate skill |
| Lumbar puncture | Real patient | Procedural skills course pre-clerkship, Internal Medicine | Demonstrate skill |
| 12 lead ECG interpretation | Real patient | Emergency Medicine, Internal Medicine, anesthesia | Demonstrate skill |

| | | | |
|---|---|---|---|
| Cervical dilatation assessment | Real patient | O &G | Demonstrate skill |
| Episiotomy/vaginal tear repair | Real patient | O &G | Demonstrate skill |
| Leopold's maneuvers | Real patient | O &G | Demonstrate skill |
| Pelvic examination and Pap smear | Real patient | O &G | Demonstrate skill |
| Spontaneous vaginal delivery | Real patient | O & G | Must assist/observe, may perform |
| Artificial rupture of membranes | Real patient | O & G | Must assist/observe |
| Caesarean section | Real patient | O & G | Must assist/observe |
| Dilatation and curettage | Real patient | O & G | Must assist/observe |
| Endometrial biopsy or IUD insertion | Real patient | O & G | Must assist/observe |
| Hysterectomy | Real patient | O & G | Must assist/observe |
| Hysteroscopy | Real patient | O & G | Must assist/observe |
| Laparoscopy | Real patient | O & G | Must assist/observe |
| Obstetric ultrasound | Real patient | O & G | Must assist/observe |
| Operative vaginal delivery | Real patient | O & G | Must assist/observe |
| Abdominal ultrasound (FAST examination) | Standardized patient | Procedural skills course pre-clerkship<br>Comprehensive clinical skills course | Demonstrate skill |
| Lung ultrasound | Standardized patient | Comprehensive clinical skills course | Demonstrate skill |
| Subcostal cardiac ultrasound | Standardized patient | Procedural skills course pre-clerkship | Demonstrate skill |
| Examine airway | Simulator<br>Real patient | Procedural skills course pre-clerkship<br>Anesthesia | Demonstrate skill<br>Apply during patient encounters |
| Perform ASA classification | Real patient | Anesthesia | Apply during patient encounters |
| Bag/mask ventilation | Simulator<br>Real patient | Procedural skills course pre-clerkship<br>Anesthesia | Demonstrate skill |
| Intubation | Simulator<br>Real patient | Procedural skills course pre-clerkship<br>Anesthesia | Demonstrate skill |
| IV start | Simulator<br><br>Real patient | Procedural skills course pre-clerkship (as well as IO access)<br>Anesthesia (at least 3), Internal Medicine | Demonstrate skill |
| Insert laryngeal mask airway | Simulator<br>Real patient | Procedural skills course pre-clerkship<br>Anesthesia | Demonstrate skill |
| Adjuncts to narcotics | Real patient | Anesthesia | Discuss with preceptor |
| Pharmacology of propofol +succinylcholine | Real patient | Anesthesia | Discuss with preceptor |
| Principals of patient-controlled anesthesia indications and dosing | Real patient | Anesthesia | Discuss with preceptor |
| Preoperative assessment | Real patient | Anesthesia | Demonstrate skill |
| Physiology, risk factors, treatment of post operative nausea and vomiting | Real patient | Anesthesia | Discuss with preceptor |
| Observed history | Real patient | Anesthesia, Emergency medicine, Family medicine, Internal medicine, Pediatrics (adolescent and child), Psychiatry, Surgery | Demonstrate skill |
| Observed physical examination | Real patient | Anesthesia, Emergency medicine, family medicine, Internal medicine, Pediatrics (adolescent and child), Surgery | Demonstrate skill |
| Present case | Real patient | Pediatrics (Adolescent, infant and child) | Demonstrate skill |

| | | | |
|---|---|---|---|
| Rapid sequence induction | Real patient | Anesthesia | Must assist/observe |
| Advanced care planning/goals of care discussion | Real patient | Family Medicine | Demonstrate skills |
| Blood glucose/glucometer | Real patient | Family Medicine | Demonstrate skill |
| Intramuscular injection | Real patient | Family Medicine | Demonstrate skill |
| Pap smear | Real patient | Family Medicine | Demonstrate skill |
| Throat swab | Real patient | Family Medicine | Demonstrate skill |
| Urinalysis | Real patient | Family Medicine | Demonstrate skill |
| Vaginal smear/swab | Real patient | Family Medicine | Demonstrate skill |
| Wound swab | Real patient | Family Medicine | Demonstrate skill |
| Joint injection/aspiration | Simulator<br>Real patient | Family Medicine, Comprehensive clinical skills course,<br>Internal medicine | May observe/assist or perform |
| Skin biopsy | Real patient | Family Medicine | May observe/assist or perform |
| Syringe auditory canal | Real patient | Family Medicine | May observe/assist or perform |
| Cryotherapy | Real patient | Family Medicine | May observe/assist or perform |
| Chest X-ray interpretation | Real patient | Internal Medicine | Demonstrate skill |
| Central line insertion | Real patient | Internal Medicine | May observe/assist or perform |
| Paracentesis/Thoracentesis | Simulator<br>Real patient | Comprehensive clinical skills course<br>Internal Medicine | Demonstrate skill<br>May observe/assist or perform |
| Venipuncture | Real patient | Internal Medicine | May observe/assist or perform |

C. Define each level of student responsibility listed in Table 6.2-1 A and Table 6.2-1 B.

**Must see patient** – Student must participate in direct patient care during clinical clerkship OR interact with a virtual patient with that condition OR complete self-study around that clinical presentation and discuss with a preceptor. Encounters recorded in clerkship logbook.
**Apply during patient encounters** – Student must apply the skill in direct patient care setting.
**Demonstrate skill** – Student must perform the skill in direct or simulated patient care setting.
**Must assist/observe** – Student is not expected to complete independently but required to assist or observe.
**May observe/assist or perform** – Students encouraged to participate in procedure if opportunity is available on rotation. Level of responsibility may vary.
**Discuss with preceptor**- Students must discuss this with their preceptor during the rotation.

The CSM blueprinted the undergraduate Legacy curriculum to a comprehensive clinical presentation list. In the pre-clerkship curriculum, presentations were divided amongst the course directors, who were responsible for educating students on those presentations (usually by lectures, small group teaching, and clinical correlation sessions). The presentations are/were then reinforced in clerkship. In clerkship, as clinical exposure is more variable, each clerkship has a mandatory logbook that includes a list of mandatory presentations that must be seen during that rotation, to ensure that all key clerkship clinical presentations (of which there are 78) are seen. The initial list of 78 presentations was created historically after collaboration between the Associate Dean and all of the clerkship directors. For all clerkships, the students must log all mandatory presentations during the clerkship rotation and submit a logbook prior to the end of the rotation (except for surgery where they must log >80% of the presentations). Ideally, the presentations are seen in a real clinical encounter, but when this is not possible, students can complete reading and self-study around the topic(s) and then discuss with a preceptor, or in some cases, such as in family medicine, interact with virtual patients with the condition in order to meet their logbook requirements. Students are encouraged to let their preceptors know about missing clinical presentations during the rotation(s) so that preceptors can help identify patients that can be seen to fill the deficiencies.

The program recognized that despite the above-described processes there can be gaps in exposure to key clinical presentations in clinical rotations. As a response to this, a Comprehensive Clinical Skills curriculum was developed that runs in a longitudinal fashion throughout clerkship and fills in the gaps of the traditional clerkship training model using lectures, standardized patient interactions, simulation sessions, and procedural skills sessions.

**RIME Curriculum**

When the RIME curriculum was designed, the curriculum committee used the MCC clinical presentations list to distribute all clinical presentations throughout the pre-clerkship curriculum. Each presentation is managed by a pre-clerkship educator who ensures that the presentation is covered, in full, by the end of the pre-clerkship curriculum. As the program uses a spiral curriculum, presentations are introduced gradually, and knowledge is gained in an iterative fashion over time, with multiple instances of revisiting each presentation. ***Supplemental Appendix 6.2-1 C*** illustrates the clinical presentations and how these have been mapped to each of the Blocks, Units and weeks in the RIME curriculum.

D. Describe how i) medical students, ii) faculty members, and iii) residents are informed of the required patient encounters and procedural skills.

In the procedural skills course, students are informed of the required procedural skills in the course core document. In clerkship, medical students are required to complete a clerkship logbook during each rotation which consists of a written record of the required clinical presentations they have seen/participated in. The list of required clinical presentations and procedures are available in a logbook that is located on the OSLER website. In the comprehensive clinical skills course, the list of required clinical presentations is located in the course core document.

Faculty and residents are informed of the required patient encounters and procedural skills directly by the clerkship directors, through review of the clerkship core document(s), and/or by reviewing the students' logbooks.

### *6.3 SELF-DIRECTED AND LIFE-LONG LEARNING*

***The faculty of a medical school ensures that the medical curriculum includes self-directed learning experiences and unscheduled time to allow medical students to develop the skills of lifelong learning. Self-directed learning involves medical students' self-assessment of learning needs; independent identification, analysis, and synthesis of relevant information; appraisal of the credibility of information sources; and feedback on these skills.***

***Requirement 6.3-1***

*The faculty of the medical school ensures that the medical curriculum includes self-directed learning experiences to allow medical students to develop the skills of lifelong learning. Self-directed learning involves medical students' self-assessment of learning needs; independent identification, analysis, and synthesis of relevant information; appraisal of the credibility of information sources; and feedback on these skills.*

A. Describe where in the medical curriculum each of the following components of self-directed learning are included:
   i. self-assessment of learning needs
   ii. independent identification, analysis, and synthesis of relevant information
   iii. appraisal of the credibility of information sources
   iv. feedback on these skills

Self-directed learning experiences were a component of all Legacy pre-clerkship courses in the form of small group preparation, formative assessment preparation, and the exam review processes. Throughout the pre-clerkship years there were specific courses that focused on the development of these skills within the medical context.

*CARDS*
CARDS are an online tool created at CSM designed to allow students the opportunity to practice knowledge recall and identify areas of knowledge gaps. CARDS could be considered a self-assessment tool. CARDS are created in decks that allow students to apply knowledge within a certain medical area, for example, abnormal liver enzymes. Students are able to answer hundreds of practice questions with feedback provided (through the online tool), based on the response given. CARDS are also used to create formative assessments, such as the biannual cumulative Associate Dean's exam, allowing students to identify areas of strengths and weaknesses to target within their study strategies.

*Integrative I and II*
Students worked in small groups with a faculty preceptor and a standardized patient to navigate approaches to patient cases. Cases were designed to simulate patient-physician encounters, integrating the components of the CanMEDS medical expert, collaboration, communication, health advocate, scholar and professional roles. There were requirements to explore information resources appropriate to the clinical question including application of evidence-based medicine. Each student was responsible for presenting their educational prescriptions to the group.

*Intro to Clinical Practice I and II*
Students were required to prepare for their clinical practice experiences by watching a series of podcasts. This was then followed up with five scheduled sessions that involved low-fidelity simulation designed to allow students the opportunity to practice collaboration, medical content recall, communication and information gathering (CanMEDS). Students were also required to complete three educational tasks: infection prevention and control modules, sending EPA-6 to their preceptor for a formative assessment of their presentation skills, and an online formative exam. Students received feedback on their educational tasks.

*Example of relevant learning objectives for the Intro to Clinical Practice (ICP) course:*
-Find at least five electronic resources that can be used to answer clinical questions.
-Find information efficiently to answer practice clinical questions.
-Identify tools to look-up prescription considerations for patient contexts (i.e. liver disease, renal disease, pregnancy, breastfeeding)
-Identify where to obtain information on drug interactions, including the tracked prescription program (TPP) Alberta

*Applied Evidence Based Medicine Course (AEBM)*
Within this longitudinal course over both Year 1 and Year 2, students were required to prepare and present several Critically Appraised Topics (CAT) and Educational Prescriptions (EPs). In Year 1, these were done in groups within class sessions and subsequently transitioned to be done individually.

*Reflective assignments*
Reflection is a powerful tool to promote life-long learning. Reflective assignments were requirements within the following courses: Ethics, Global Health and Course 5.

**RIME Curriculum**

Two of the guiding principles in the creation of RIME were integration and spirality. The design included appropriate length podcasts covering relevant content, supplemented with educational resources to be utilized by learners prior to in-person learning events. Students independently identify areas they need to explore further and come together with peers and preceptor to further discover and discuss.

CARDS are the cornerstone of self-assessment. Students are given required CARDS decks to "play" on a weekly basis. This allows immediate feedback on performance and areas that need attention. Students are assessed within the tutorial groups for engagement and completion of pre-session components.

Within the Professional Role course, students have flexibility to explore areas of interest within scholarship and career exploration. Much of the time is purposefully flexible to allow students to shadow, work on scholarly activity, or other aspects of the curriculum that are less amenable to a fixed scheduled time. A portion of the Professional Role time is specifically dedicated to acquiring the skills for self directed learning, as well as resource identification and critical appraisal.

**Supplemental UME Course for Competence in Educational Skills and Strategies (SUCCESS) Program**
Students who are struggling academically are invited to participate in this program. Students are paired with a uniquely trained and remunerated faculty mentor to work on strategies to improve study skills with ongoing self-study, guidance and self-assessment.

**Clerkship**
Clerkship rotations each determine the day-to-day schedules for their individual rotation components; these schedules largely mimic those of the preceptors and other team members within the specialty. For each of the rotations, clerks are provided with dedicated learning sessions, either as academic half days or episodic teaching rounds.

Several of the clerkships build in specific opportunities for self-directed learning, as noted below:

**Anesthesia**
The Anesthesia clerkship provides independent study time on the first day of the block for students to complete a set of case studies; they then review these with a resident from the program to prepare them for the expectations on the rotation. Clerks on this rotation are also provided with time each day to complete independent study (related to patient care) that then drives clinical conversations with their preceptors. This independent study often includes assessment and evaluation of the pertinent medical literature.

**Obstetrics/Gynecology**
There are opportunities provided for independent learning during the four-week block. During the first week of the block, clerks are given time for independent review of podcast cases and videos (e.g. pelvic exam video, knot tying video) in preparation for the in-person components on the afternoon and the following day. There are several CARDS, PowerPoint learning modules, and cases that students have as references for most topics expected to be covered for the curriculum.

**Family Medicine**
Clerks on the FM rotation complete a patient-centered care project. The project topic is determined by the learner identifying a specific health challenge for a patient seen

in clinical practice. Students are given two half days of protected time to complete the research required to address the clinical issue and present these on an academic day during the rotation. Students are also given a chance to discuss their results with the patient in a follow-up appointment.

**Internal Medicine**
As a component of the weekly academic half day, clerks are provided with protected time to work on CARDS that have been developed for IM clinical presentations. These are always available to learners and serve as a driver for independent learning.

**Psychiatry**
Students are provided with a half day of protected time for independent study during their two-week Child Psychiatry block. The clerkship provides several resources on their webpage that are intended for use during these (or other times) for independent study. It is common on the adult and child psychiatry rotation that clerks may have unscheduled time in the late afternoon while on the psychiatry inpatient service, which is intended as another opportunity for them to pursue independent learning.

**University of Calgary Longitudinal Integrated Clerkship (UCLIC)**
Students in the UCLIC stream have several opportunities for development of independent learning skills.

*Family Medicine Academic Sessions:* Students are responsible, on a rotating schedule, for presenting a family medicine topic. Sessions are typically attended by the UCLIC Assistant Director, UCLIC Director, preceptor, or an experienced physician, who is there in a supervisory role only. During the session, the preceptor will interject if there is a significant error (unusual) or if there are practical tips that would benefit the students. They are not expected nor asked to lecture about the topic. The specific preceptor and topics will be scheduled well in advance to allow for student preparation. Topics will be chosen so that overarching goals and objectives will be met prior to upcoming exams. Students are expected to use the remainder of the afternoon to study for examinations or complete mandatory research projects.

*Narrative Medicine Project:* This has been added into the medical curriculum to help inspire empathy, improve active listening/reading skills, and demonstrate the therapeutic role of narrative for patients and physicians.

<u>Suggested/Examples of Readings:</u>
Atul Gawande, Being Mortal
Rita Charon, Narrative Medicine: Honouring the Stories of Illness
Anne Sexton, The Touch
On Doctoring: Stories, Poems, Essays
Susan Sontag, Illness as a Metaphor
William Carlos Williams, The Use of Force
Chris Adrian, The Sum of Our Parts
Elisabeth Bishop, In the Waiting Room
WH Auden, The Surgical Ward
Monica Kidd, Handfuls of Bone
Paul Kalanithi, When Breath Becomes Air
Brian Goldman, The Power of Kindness

*Evaluation:* Students are graded based on pass/fail. They must complete the following:
Small groups
Close reading analysis
Final project / Essay

*UCLIC Community Engagement Project:* UCLIC students have a unique opportunity to spend 32 weeks in their specific community during clerkship. Understanding the needs of the community and the agencies involved in the care of the individuals within the community is an important part of a physician's ability to care for patients. Students can help fill a gap in an area of need by collaboratively working with a community stakeholder.

Objectives:
1. Build relationship with a community agency
2. Identify an area of need for community
3. Develop a project to fill a gap in this area of need with community agency
4. Implement & report on the project

Components of Project:
1. Title
2. Background & Rationale – describe the project, timeframe, why the project is important
3. Project Description – partners, how it was conducted, methods, resources used
4. Project Outcomes – results, successes and drawbacks
5. Sharing Project Results – how results will be shared, recommendations for agency/ community
6. Reflections – ways in which project enhanced learning

Students are expected to present their Family Medicine Projects to the UCLIC group. If a student chooses a Community Engagement Project, they can start this as a Family Medicine Project and continue the community project for the year. A student can report on their project based on a poster submission to the UCLIC committee. Each year, a UCLIC Community Engagement Award will be offered.

***Requirement 6.3-2***

*The faculty of the medical school ensures that the medical curriculum includes unscheduled time to allow medical students to develop the skills of lifelong learning.*

A. Describe how unscheduled time is included in the curriculum to allow medical students to develop the skills of lifelong learning.

Independent study time (IST) accounted for an average of 3 half-days a week in the Legacy curriculum. This was scheduled within the timetable. Based on student feedback, IST times increased in frequency closer to the end of numbered courses, prior to end of course assessments. Students felt this time was valuable to consolidate knowledge and practice recall. During IST students were free to use it in ways best suited to their learning needs: preparation for small groups, assigned reading, study, pursue research or career exploration opportunities. This time could be “exchanged” for other formal but flexible curricular activity scheduled such as clinical correlation or family medicine clinical encounter.

## RIME Curriculum

The schedule follows a predictable pattern in every week. self-directed time (SDT) can be seen in white. This is when the entire class does not have scheduled educational activities. For Tutorial Groups, Clinical Skills and Anatomy – only half the class is present at any given time – thus the other half of the class has SDT. This totals 14 hours per week. Within the Professional Role course there is more than 25% allocated to SDT.

| Time | July 17, 2023 | July 18, 2023 | July 19, 2023 | July 20, 2023 | July 21, 2023 |
|---|---|---|---|---|---|
| Fundamentals 1 | | | | | |
| 8:30 - 10:30 | Self directed time | Self directed time | Professional Role | Indigenous Health | Professional Role |
| 10:30 - 12:30 | Patient Presentation Lecture | Large group session | | | |
| 12:30 - 13:30 | | | | | |
| 13:30 - 15:30 | Tutorial Groups A | Clinical Skills Group A/Anatomy Group B | Tutorial Groups A | Large group session | Review: Putting It All Together |
| 15:30 - 17:30 | Tutorial Groups B | Clinical Skills Group B/Anatomy Group A | Tutorial Groups B | Self directed time | Self directed time |

### Clerkship

Please see section 6.3-1 above.

## *6.4 OUTPATIENT / INPATIENT EXPERIENCES*

***The faculty of a medical school ensures that the medical curriculum includes clinical experiences in both outpatient and inpatient settings.***

***Requirement 6.4-1***

*The faculty of the medical school ensures that the medical curriculum includes clinical experiences in outpatient settings.*

A. Describe how the medical school ensures that each medical student has clinical experiences in outpatient settings.

**Pre-Clerkship**

In the Legacy curriculum, students had many clinical experiences; some of which occurred in outpatient settings. All of these were mandatory components of the curriculum and completed by all students.

In each of Courses I-VII, students had five to twelve hours of Clinical Correlations sessions. In each of these sessions, students worked in groups of approximately five students with a staff or resident preceptor to learn and practice the clinical skills relevant to the clinical areas covered in the course. Clinical Correlation sessions could occur in real clinical environments (inpatient or outpatient) or within a simulated outpatient environment (the Medical Skills Centre). Course I – 12 hours; Course II – 8 hours; Course III – 12 hours; Course IV – 5 hours; Course V – 10 hours; Course VI – 10 hours; Course VII – 6 hours.

Students also completed the Family Medicine Clinical Experience course in the first and second academic years of the program. In each of these courses, students spent three-four half days working one on one with a family medicine preceptor. Student experiences throughout southern Alberta could be urban, suburban, or rural. All locations delivered care to patients and families, diagnosed and managed most presenting complaints (comprehensive care) and saw patients over time (continuity of care). Students were intentionally placed in different clinics in years one and two to experience and care for patients in a variety of practices, populations, and care teams. The year one experience was more observational whereas in year two it was expected that students would take focused histories, examine patients (supervised), and document findings in a SOAP format note. Family physician guidance and student autonomy was adjusted as student skills increased. Some physicians care for patients outside the office setting. In these circumstances at least 50% of the total student experience was in the community clinic, and the remainder in care locations consistent with the physician practice - most commonly emergency, long-term care, or acute care.

Through the pre-clerkship, all students participated in the Career Development program. One aspect of this program was the completion of three weeks of clinical electives, which were dispersed across the 18 months of the first two academic years. Students were able to have some degree of choice into the clinical area in which they completed their time; this would include a mixture of both inpatient and outpatient settings, dependent upon the clinical practice of their preceptors. Students were required to complete each week in a different CaRMS entry discipline. For the class of 2024, students completed the following Career Exploration clinical experiences (representing inpatient and outpatient experiences):

| Rotation | Spring 2022 | Summer 2022 | Winter 2022 | TOTAL |
|---|---|---|---|---|
| Anesthesia | 11 | 6 | 7 | 24 |
| Clinical Genetics | | 2 | 1 | 3 |
| Critical Care | 4 | 4 | 7 | 15 |
| Dermatology | 1 | | 3 | 4 |
| Diagnostic Radiology | 6 | 2 | | 8 |
| Emergency Medicine | 32 | 22 | 21 | 75 |
| ENT | | 3 | 4 | 7 |
| Family Medicine | 6 | 16 | 10 | 32 |
| Internal Medicine | 28 | 26 | 22 | 76 |
| Medical Genetics | 1 | | | 1 |
| Medical Microbiology | 2 | | 1 | 3 |
| Neurology | 5 | 4 | 5 | 14 |
| Obstetrics and Gynecology | 6 | 9 | 11 | 26 |
| Ophthalmology | 2 | | 1 | 3 |
| Otolaryngology | 2 | | | 2 |
| Pathology | 7 | 2 | 4 | 13 |
| Pediatrics | 18 | 15 | 21 | 54 |
| Physical Medicine & Rehabilitation | 6 | 2 | 5 | 13 |
| Psychiatry | 16 | 9 | 11 | 36 |
| Public Health | 5 | 4 | | 9 |
| Radiation Oncology | | 2 | 2 | 4 |
| Surgery | 20 | 44 | 15 | 79 |
| Urology | 1 | 6 | 1 | 8 |

In the second phase of their Applied Evidence Based Medicine (AEBM) course (Fall of their second year), students completed a 30-hour elective. Most students chose to complete a clinical elective, with a small number of students who chose to do a research or directed-study elective. For those students that chose a clinical elective, they would work in either or both of inpatient and outpatient environments as dictated by the practice of their preceptors.

Students in the pre-clerkship were allowed to shadow in clinical environments. Students arranged this on their own time, outside of the formal curriculum. Shadowing experiences could include inpatient or outpatient clinical environments, as dictated by the preceptor's practice. Shadowing rules and processes are governed by the Shadowing Policy (***Supplementary Appendix 6.4-1 A***).

## RIME Curriculum

Within the RIME curriculum students continue to have experiences in the outpatient setting. The Family Medicine Clinical Encounter, as described above, has been maintained to foster continuity of care and an understanding of the unique aspects of family medicine in an outpatient setting. With the flexibility of the predictable schedule (also known as the rhythm) of RIME, students are also able to engage in additional experiences in suburban and rural settings through the Family Medicine Clinical Encounter Program.

The Career Exploration Program has also been maintained in the RIME curriculum. Students have the opportunity to explore three specialties with three one-week placements, many of which have at least a component of medicine in an outpatient setting. The details related to the 174 students and their first of three career exploration weeks is noted below. Students in the RIME pre-clerkship also have an expanded opportunity to shadow, and again due to the rhythm of the schedule and more flexible timing, shadowing in the outpatient setting is more feasible.

| Career Development Week Placements | Students | Career Development Week Placements | Students | Career Development Week Placements | Students |
|---|---|---|---|---|---|
| Cardiology Calgary | 6 | Hematology - Foothills Medical Centre | 1 | Pediatric General - Alberta Childrens Hospital | 3 |
| Community Pediatrics Calgary | 1 | Infectious Disease Calgary | 2 | Pediatric Neonatal Intensive Care Calgary | 2 |
| Critical Care Medicine ICU Calgary | 9 | Internal Medicine Medical Teaching Unit Calgary | 4 | Pediatric Nephrology Calgary | 1 |
| Dermatology Calgary | 3 | MEDICAL GENETICS Calgary | 1 | Pediatric Rheumatology Calgary | 1 |
| Developmental Pediatrics Calgary | 1 | Medical Oncology Calgary | 4 | Pediatric Surgery Calgary | 1 |
| Diagnostic Radiology Calgary | 3 | Neonatology Calgary | 2 | PEDS Hospitalist - Calgary | 1 |
| Emergency Medicine | 17 | Nephrology Calgary | 2 | Physical Medicine and Rehabilitation Calgary | 1 |
| Endocrinology Calgary | 2 | Neurology Adult Calgary | 4 | Plastic Surgery Calgary | 1 |
| ENT/Otolaryngology Calgary | 1 | Neurosurgery Calgary | 2 | Psychiatry Assessment Services Calgary | 5 |
| Family Medicine - Calgary Clinic | 1 | Obs and Gyn Canmore | 1 | Psychiatry Child & Adolescent Calgary | 1 |
| FM - Low Risk Obstetrics/Urgent - FMC, S. Chumir Urgent Care, Riley Park Maternity Clinic | 3 | Obs and Gyn Calgary | 5 | Psych, Consult, Liaison Calgary | 2 |
| Family Medicine - South Health Campus | 2 | Obs and Gyn. Medicine Hat | 1 | Psychiatry Forensic Calgary | 1 |
| Family Medicine - Urgent Care Centre | 1 | Ophthalmology Calgary | 1 | Public Health Calgary | 1 |
| Family Medicine Calgary | 6 | Orthopedic Surgery Calgary | 4 | Pulmonary Medicine Calgary | 2 |
| Gastroenterology Calgary | 1 | Palliative Care Calgary | 1 | Rheumatology Calgary | 3 |
| General Internal Medicine Calgary | 1 | Pediatric Cardiology Calgary | 1 | Rural Placement | 4 |
| General Pathology Calgary | 3 | Pediatric Community Calgary | 1 | Urology Calgary | 1 |
| General Psychiatry Calgary | 4 | Pediatric Emergency Medicine Calgary | 1 | Vascular Surgery Calgary | 2 |
| General Surgery Calgary | 11 | Pediatric Endocrinology Calgary | 3 | Visiting Placement | 17 |
| Geriatric Medicine Calgary | 6 | Pediatric Gastroenterology Calgary | 1 | **TOTAL** | **174 students** |

**Clerkship**

Students in their clinical clerkship complete mandatory rotations in each of Anesthesia, Family Medicine, Obstetrics and Gynecology, Surgery, Internal Medicine, Emergency Medicine, Pediatrics and Psychiatry. Students also complete electives in clinical areas of their choice. Through these clinical rotations, students work in both in inpatient and outpatient settings. The actual mix of time spent in each environment depends upon the location of a student's particular rotations and the practice of their individual preceptor. Some rotations (Emergency Medicine) are completed entirely within an inpatient environment, while the others would be expected to include a mixture of inpatient and outpatient work. The Family Medicine clerkship would typically be entirely in an outpatient setting; with a total duration that was extended from six weeks to eight weeks in 2018. Electives would usually involve both inpatient and outpatient service, dependent upon the type of clinical practice for that elective.

In the 2023 Graduate Questionnaire, 97.8% of graduating students indicated that they felt comfortable with caring for both hospitalized patients and patients in the ambulatory setting.

B. Table 6.4-1 B

Table 6.4-1 B | Student Clinical Experiences in Outpatient Settings — 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 | In my medical school curriculum to date, I have had clinical experiences in outpatient/ambulatory settings (i.e., where patients are not admitted to hospital). | 141/149 (94.63%) | 115/119 (96.64%) | 113/113 (100.00%) | N/A |

**RIME Curriculum**

Table 6.4-1 B | Student Clinical Experiences in Outpatient Settings — **Source: Pre-accreditation survey-Class of 2026**

| 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. **Completed as a pre-accreditation review -modelled after original ISA** | | | | | |
|---|---|---|---|---|---|
| Campus | Survey Question | Number (%) | | | |
| | | Year 1 | Year 2 | Year 3 | Year 4 |
| Foothills Medical Centre | In my medical school curriculum to date, I have had clinical experiences in outpatient/ambulatory settings (i.e., where patients are not admitted to hospital). | 43/43 (100%) | N/A | N/A | N/A |

***Requirement 6.4-2***

*The faculty of the medical school ensures that the medical curriculum includes clinical experiences in inpatient settings.*

A. Describe how the medical school ensures that each medical student has clinical experiences in inpatient settings.

As described above, students have clinical training dispersed through the pre-clerkship and through the entirety of the clerkship. In the Legacy pre-clerkship, students would typically spend some time in an inpatient setting through their Clinical Correlations sessions, their Career Development weeks and their AEBM clinical electives. In the clerkship, all rotations, except most Family Medicine rotations, would include training in an inpatient setting.

**RIME Curriculum**

Students have the opportunity to complete Career Development Weeks and shadowing in the inpatient setting. Additionally, within Family Medicine Clinical Encounter, students may choose to work with a family physician providing inpatient care, such as in a hospitalist setting.

B. Table 6.4-2 B

Table 6.4-2 B | Student Clinical Experiences in Inpatient Settings 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 | In my medical school curriculum to date, I have had clinical experiences with inpatient settings, (i.e., where patients are admitted to hospital). | 147/149 (98.66%) | 116/119 (97.48%) | 113/113 (100.00%) | N/A |

**RIME Curriculum**

Table 6.4-2 B | Student Clinical Experiences in Inpatient Settings **Source: Pre-accreditation survey-Class of 2026**

| 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.- **Completed as a pre-accreditation review -modelled after original ISA** | | | | | |
|---|---|---|---|---|---|
| Campus | Survey Question | Number (%) | | | |
| | | Year 1 | Year 2 | Year 3 | Year 4 |
| Foothills Medical Centre | In my medical school curriculum to date, I have had clinical experiences with inpatient settings, (i.e., where patients are admitted to hospital). | 36/43 (83.7%) | N/A | N/A | N/A |

### *6.4.1 CONTEXT OF CLINICAL LEARNING EXPERIENCES*

***Each medical student has broad exposure to, and experience in, generalist care including comprehensive family medicine. Clinical learning experiences for medical students occur in more than one setting ranging from small rural or underserved communities to tertiary care health centres.***

***Requirement 6.4.1-1***

*Each medical student has broad exposure to, and experience in, generalist care including comprehensive family medicine.*

A. Provide evidence that each medical student has broad exposure to, and experience in, generalist care including comprehensive family medicine.

Within the Legacy pre-clerkship curriculum, students had significant exposure to both Family Physicians as teachers as well as clinical experiences in Family Medicine. A large proportion of teaching within the pre-clerkship was provided by Family Physician preceptors. This exposure to family doctors as teachers within the medical school was intentional: the goal was to clearly represent family doctors as an important part of the processes of academic medicine. Students had a greater understanding of the work of family doctors through this exposure, and through the conversations that evolved with their teachers. Family physicians were particularly well represented as teachers within the Medical Skills communications and physical exam components, where students learned essential clinical skills.

The Family Medicine Clinical Experience course paired each student with an individual Family Physician. The student spent three to four half days with that preceptor in their clinic, seeing patients and observing the practice of full-spectrum family medicine. Students were paired with a different preceptor in each of first and second year, in order to provide a broader representation of the practice of family doctors.

In clerkship, all students complete a mandatory eight-week block in Family Medicine. This is broken into two four-week components, urban and rural. Each student completes one rotation in each of these environments. This is the longest block within the clerkship as it is felt that the family medicine experience is a vital part of medical student clinical training, allowing for exposure to the generalist nature of the specialty and the value of exposing students to comprehensive family medicine patient care.

Students do have other generalist experiences in the clerkship. All Students complete four weeks of inpatient medical teaching unit service as a part of the Internal Medicine clerkship and three weeks on the Pediatric Clinical Teaching Unit. Students also all complete two weeks of Emergency Medicine. Through electives and selectives (within IM and Peds) many students have further generalist clinical experiences.

**RIME Curriculum**

Within the RIME curriculum, a focus on generalism has been one of the important forces driving both curricular change as well as the structure of the new curriculum. Students are introduced to the concept of generalism during orientation with both a large group session as well as a tutorial group session to follow. The intent is to set the stage for future teaching, as all content created is done so through a generalist lens. The concepts of generalism are reinforced with each *patient of the week* presentation, as the presentations are those that would face a generalist practitioner.

Family Medicine Clinical Encounter has been maintained in the RIME curriculum, and additional opportunities are available owing to the flexibility of scheduling. Additionally, to provide students with an opportunity to experience comprehensive family medicine, clinical experiences in family medicine specialties such as hospitalist medicine are also encouraged as a component of the clinical experience.

B. Table 6.4.1-1 B

Table 6.4.1-1 B | Exposure to and Experience in Generalist Care Including Comprehensive Family Medicine (Core Appendix) 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 | I had broad exposure to generalist care. | 134/149 (89.93%) | 96/119 (80.67%) | 110/113 (97.35%) | N/A |
| | I had experience in generalist care. | 137/149 (91.95%) | 110/119 (92.44%) | 113/113 (100.00%) | N/A |
| | I had broad exposure to comprehensive family medicine. | 138/149 (92.62%) | 97/119 (81.51%) | 109/113 (96.46%) | N/A |
| | I had experience in comprehensive family medicine. | 140/149 (93.96%) | 106/119 (89.08%) | 112/113 (99.12%) | N/A |

***Requirement 6.4.1-2***

*Clinical learning experiences for medical students occur in more than one setting ranging from small rural or underserved communities to tertiary care health centres.*

A. Provide evidence that clinical learning experiences for medical students occur in more than one setting ranging from small rural or underserved communities to tertiary care health centres.

All students have clinical learning experiences across varied community sizes and clinical settings.

In the Legacy curriculum, some students had clinical experiences in the Family Medicine Clinical Experience course, during their AEBM clinical electives or during their Career Exploration weeks in rural physician practices. Others completed these in secondary and tertiary care centres within Calgary.

**RIME Curriculum**

Family Medicine Clinical Experience and Career Exploration Weeks are maintained in the RIME curriculum, with increased opportunities for experiences in a variety of settings ranging from small rural to tertiary care health centres.

The Community Engaged Learning program has been maintained in the RIME curriculum to ensure that students are gaining clinical learning experience in underserved communities. Students are paired with community partners and have 13 dedicated sessions to work with the partner on a project, while attending large and small group sessions to explore the social and the structural factors that are important for working in underserved communities.

Within the clerkship, all students complete four weeks in each of urban and rural Family Medicine. Some students in Psychiatry and Pediatrics also complete part of their rotations in rural communities.

Students within the University of Calgary Longitudinal Integrated Clerkship (UCLIC) program spend the majority of their time in the clerkship working in a small rural community, under the supervision of one or two family physician preceptors.

All students complete rotations that include time spent at a tertiary care centre. Mandatory rotations in Anesthesia, Obstetrics/Gynecology, Psychiatry, Pediatrics, Internal Medicine, Emergency Medicine and Surgery are all based within Calgary at one of four adult and one pediatric hospitals. UCLIC students complete four-week blocks in each of Internal Medicine, Pediatrics and Surgery at the tertiary care sites in Calgary, to ensure that they have this type of tertiary care exposure. Electives completed in clerkship could be undertaken in any setting, including small and large sized centres and primary, secondary and tertiary care environments.

With respect to underserved communities, all students complete a week of Community Engaged Learning early in their clerkship year. During this week, students have teaching sessions on topics such as *Power and Privilege* and *Implicit Bias*. Students then spend three days working with community partner organizations that work with underserved communities in and around Calgary. Partners include organizations that provide care and services to Indigenous communities, newly arrived immigrants and sex trade workers, among others.

A small number of students will complete international clerkship electives under the auspices of the Indigenous, Local and Global Health (ILGH) Office. These preceptor-led experiences allow approximately ten students per clerkship year to complete a four-week clinical elective in an underserved developing country. All students are informed of the option to request to participate in these international electives. Students are emailed with an invitation to attend an information session with representatives from ILGH and those students who remain interested will have their schedule customized so that four weeks of elective time are grouped together at the time point when the ILGH elective has been arranged.

B. Table 6.4.1-2 B

Table 6.4.1-2 B | Range of Settings for Clinical Learning Experiences (Core Appendix) 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 had clinical learning experiences (required and elective combined) that took place in more than one setting ranging from small rural or underserved communities to tertiary care health centres. | 88/149 (59.06%) | 88/119 (73.95%) | 109/113 (96.46%) | N/A |

### *6.5 ELECTIVE OPPORTUNITIES*

***The faculty of a medical school ensures that the medical curriculum includes elective opportunities that supplement required learning experiences, permit medical students to gain exposure to and deepen their understanding of medical specialties and pursue their individual academic interests.***

***Requirement 6.5-1***

*The faculty of the medical school ensures that the medical curriculum includes elective opportunities that a) supplement required learning experiences b) permit medical students to gain exposure to and deepen their understanding of medical specialties and c) permit medical students to pursue their individual academic interests.*

A. Describe how the medical school ensures that the medical curriculum includes elective or as appropriate, selective opportunities for each of the purposes listed above (a, b and c).

In the Legacy pre-clerkship curriculum, students completed several clinical electives. Through the Career Exploration program, students were provided with the opportunity to have career conversations with a variety of specialists. Students were provided with the contact information for physicians from four different disciplines (including specialists in family medicine and other areas). For the Class of 2024, physicians recruited represented 26 different CaRMS entry disciplines; of the 465 preceptors, 102 were family physicians, including 20 rural family doctors. Students were invited to set up times to have conversations with these individual doctors, one on one, to talk about future career options. The second component of the program was a series of three career development weeks that are spread across the pre-clerkship. In each of these weeks, students chose to spend a week in any clinical area (subject to availability). Students were required to select different CaRMS entry disciplines for each of the three weeks. The type and number of clinical electives completed (for the Class of 2022) are listed in element 6.4 (above).

In the Applied Evidence Based Medicine course (AEBM) students were given the opportunity to complete 30 hours of elective time. A small number of students completed directed study or research electives; the majority completed their time in a clinical setting with one or more preceptors. Students were allowed to choose the type of elective that they complete. The clinical AEBM course provided students with additional inpatient and/or ambulatory exposure in an area of interest. In the examples above, time was interwoven into the pre-clerkship period to allow for students to both gain exposure to and deepen their understanding of medical specialties as well as allow for medical students to pursue their individual academic interests.

**RIME Curriculum**

As a part of the Career Exploration Program weeks, students have an opportunity to explore elective areas of interest to them. In addition, there is an intentionally scheduled block in which students have the opportunity to complete two consecutive weeks bordered by vacation time, allowing them to travel to other parts of Canada or to complete international electives.

In the clerkship, students have a total of 14 weeks of electives. Within the confines of the national limits on electives, limits on allowed visiting electives and available capacity, students are free to complete these electives in any area of medicine at any medical school in Canada. The AFMC Diversification of Electives policy was followed with close monitoring for all classes.

During the COVID pandemic, all visiting electives were cancelled for students at all Canadian medical schools. Some students in the Class of 2021 completed one or more visiting electives prior to the pandemic; students in the Classes of 2022 and 2023 were not allowed to undertake any visiting electives. For the Class of 2024, visiting electives were once again permitted. However, given that CSM students complete some of their elective weeks at the beginning of their clinical clerkship, some schools were not accepting visiting elective students at that point, and schools that were accepting students often had limited capacity. The Class of 2024 was the first class to use the new AFMC *Visiting Electives Booking Portal*. With CSM students being amongst the first in the country to use the new system, several challenges were discovered as this portal rolled out and feedback was provided to the AFMC regarding barriers faced.

In the Internal Medicine, Surgery and Pediatrics clerkships, students complete selectives (clinical rotations under the umbrella of the clerkship that are outside of the core inpatient ward service). In Surgery and Pediatrics, students have two weeks of selective time and in Internal Medicine students have four weeks of selective opportunities. Students are asked to rank their preferences for the particular selective(s) that they wish to complete in each of these areas, and when possible these requests are honoured. Capacity limitations prevent all students from getting their first choices in all situations. For the Class of 2026, an additional 2-week selectives rotation will be in place for students to gain exposure to one of: laboratory medicine, diagnostic imaging, neurology, oncology, genetics, public health, or research. This will allow students to gain exposure and experience in an area that does not have a core rotation, and may be complimentary to the career trajectory of the student.

### B. Table 6.5-1 B

**Legacy Curriculum** Source: School-reported

Table 6.5-1 B | Required Elective/Selective Weeks

| Provide the number of required weeks of elective or selective time in each year of the curriculum. | | | | |
|---|---|---|---|---|
| Required weeks | Year 1 | Year 2 | Year 3 | Year 4 |
| Elective Weeks | Three weeks of Career Exploration; 30 hours of AEBM elective | | 14 | N/A |
| Selective Weeks | | | 8 | N/A |

**RIME Curriculum** Source: School-reported

Table 6.5-1 B | Required Elective/Selective Weeks

| Provide the number of required weeks of elective or selective time in each year of the curriculum. | | | | |
|---|---|---|---|---|
| Required weeks | Year 1 | Year 2 | Year 3 | Year 4 |
| Elective Weeks | Three weeks Career Exploration electives | | 14 | N/A |
| Selective Weeks | | | 10 | N/A |

### C. Table 6.5-1 C

Table 6.5-1 C | Elective/Selective Opportunities 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 | I had the opportunity to supplement required learning experiences with elective (or as appropriate, selective) experiences. | 134/149 (89.93%) | 112/118 (94.92%) | 109/112 (97.32%) | N/A |
| | I had the opportunity to gain exposure to medical specialties in my elective (or as appropriate, selective) experiences. | 137/149 (91.95%) | 107/118 (90.68%) | 107/113 (94.69%) | N/A |
| | I had the opportunity to pursue my individual academic interests in my elective (or as appropriate, selective) experiences. | 123/149 (82.55%) | 98/118 (83.05%) | 104/113 (92.04%) | N/A |

For the Classes of 2022 and 2023, a variety and choice of electives was maintained within the confines of Calgary and students had access to electives in the vast majority of specialties which allowed for students to complete electives across the spectrum of opportunities.

**Clerkship – Classes of 2022 & 2023**

| | Class of 2022 | Class of 2023 |
|---|---|---|
| **Electives** | **Total # of Electives** | **Total # of Electives** |
| Anatomical Pathology | 6 | 2 |
| Anesthesia | 34 | 44 |
| Cardiac Surgery | 4 | 4 |
| Critical Care Medicine/Intensive Care Unit | 10 | 7 |
| Dermatology | 14 | 20 |
| Diagnostic Radiology | 31 | 37 |
| Emergency Medicine | 81 | 80 |
| Family Medicine | 118 | 95 |
| Forensic Pathology | 5 | 2 |
| General Pathology | 2 | 5 |
| General Surgery | 28 | 40 |
| Gynecologic Oncology | 12 | 11 |
| Hospitalist Medicine | 31 | 40 |
| Internal Medicine - Cardiology | 30 | 26 |
| Internal Medicine - Consult Service | 44 | 37 |
| Internal Medicine - Endocrinology | 0 | 3 |
| Internal Medicine - Gastroenterology | 21 | 15 |

| | | |
|---|---|---|
| Internal Medicine - Geriatric Medicine | 18 | 16 |
| Internal Medicine - Hematology | 18 | 3 |
| Internal Medicine - Infectious Diseases | 16 | 13 |
| Internal Medicine - MTU | 67 | 69 |
| Internal Medicine - Nephrology | 12 | 17 |
| Internal Medicine - Respirology | 17 | 15 |
| Internal Medicine - Rheumatology | 4 | 5 |
| Low Risk Obstetrics | 27 | 27 |
| Maternal Fetal Medicine | 3 | 3 |
| Medical Genetics | 4 | 4 |
| Medical Oncology | 11 | 12 |
| Neurology | 36 | 52 |
| Neuropathology | 0 | 4 |
| Neuropsychiatry | 6 | 3 |
| Neurosurgery | 7 | 12 |
| Obstetrics & Gynecology | 28 | 31 |
| Ophthalmology | 8 | 5 |
| Orthopedic Surgery | 29 | 44 |
| Otolaryngology | 12 | 11 |
| Palliative Care | 15 | 13 |
| Pediatric Cardiology | 6 | 0 |

| | | |
|---|---|---|
| Pediatric - Community | 17 | 3 |
| Pediatric Critical Care Medicine/Intensive Care Unit | 3 | 1 |
| Pediatric - Developmental | 1 | 1 |
| Pediatric Emergency Medicine | 0 | 3 |
| Pediatric Endocrinology | 7 | 5 |
| Pediatric Gastroenterology | 7 | 3 |
| Pediatric - General (CTU) | 12 | 13 |
| Pediatric General Surgery | 1 | 4 |
| Pediatric Hematology | 3 | 2 |
| Pediatric Immunology | 0 | 1 |
| Pediatric - Infectious Disease | 4 | 2 |
| Pediatric - Neonatology | 4 | 15 |
| Pediatric Nephrology | 5 | 4 |
| Pediatric Neurology | 8 | 13 |
| Pediatric Oncology | 2 | 3 |
| Pediatric Respirology | 4 | 2 |
| Pediatric Rheumatology | 10 | 8 |
| Physical Medicine & Rehabilitation | 10 | 23 |
| Plastic Surgery | 32 | 25 |
| Psychiatry | 56 | 41 |
| Psychiatry - Family Therapy | 4 | 10 |

| | | |
|---|---|---|
| Psychiatry - Forensic | 3 | 4 |
| Psychiatry - Child & Adolescent | 8 | 8 |
| Public Health | 7 | 9 |
| Radiation Oncology | 5 | 7 |
| Renal and Transplant Pathology | 1 | 0 |
| Sport Medicine | 4 | 4 |
| Thoracic Surgery | 1 | 4 |
| Toxicology | 1 | 1 |
| Trauma Surgery | 7 | 8 |
| Urology | 10 | 10 |
| Vascular Surgery | 9 | 17 |
| Other - Health and Medical Humanities | 5 | 3 |
| Other - College of Physicians and Surgeons of Alberta | 1 | 2 |
| Other - Research | 9 | 10 |
| | 1076 | 1096 |

### *6.6 SERVICE-LEARNING*

***The faculty of a medical school ensures that the medical education program provides sufficient opportunities for, encourages, and supports medical student participation in a service-learning activity.***

***Requirement 6.6-1***

*The faculty of the medical school ensures that the medical education program:*

*i. provides sufficient opportunities for medical student participation in a service-learning activity.*
*ii. encourages medical student participation in a service-learning activity.*
*iii. supports medical student participation in a service-learning activity.*

A. Describe how the medical school ensures sufficient opportunities for medical student participation in a service-learning activity.

In terms of service-learning there are several opportunities in both pre-clerkship (Legacy & RIME curricula) as well as clerkship that encourage participation, prepare students, and ensure student reflection. The examples below illustrate the mandatory and optional components of the curriculum:

*Community Engaged Learning Program*
All Year 1 medical students took part in the Community Engaged Learning Program. This involved a large group orientation session, mandatory readings, videos, resources and social identity activity and a small group session. This was followed by two half days spent with one of a variety of community partners. The course concluded with a small group session. There were *must complete* elements of the course that included attendance, a written thank you to the community partner and a final self-reflection paper.

The learning objectives were as follows:

1. Demonstrate exploration of contextual factors in a patient's life that may influence their wellness, views of health and access to care
2. Describe skills and qualities required to respectfully interact with equity-deserving populations using a patient-centered approach
3. Describe a reflective process to confront and challenge personal biases, stigma and stereotypes
4. Describe the role/value of interdisciplinary teamwork and holistic care that extends beyond the health system to include social work, law, and community services.
5. Discuss the concept of social accountability in medicine and the importance of cultivating a culture of "civic professionalism" in the medical profession

In addition, for students placed with the Miskanawah Indigenous Community Partner, learning objectives included:

1. Discuss the knowledge required to develop respectful community relationships with Indigenous communities including with Elders
2. Contextualize Indigenous knowledge and ways of knowing and learning in the provision of patient-centered care to marginalized populations, including Indigenous patients

Community partners were/are:

- Safelink Canada
- Centre for Suicide Prevention
- The Mustard Seed
- Sonshine Community Services
- Miskanawah Community
- Calgary Drop-In Centre
- Calgary Catholic Immigration Society

- Obesity Canada
- Vecova
- Centre for Sexuality
- AAWEAR
- Potential place

*Student Run Clinic*
The Student Run Clinic (SRC) is another opportunity for CSM learners to participate in service-learning activities. This is a not-for-profit group with a board of directors and strong CSM presence. The clinic operates at The Mustard Seed under the direction of a primary care physician, Dr. Andrew Wong. Clinics are typically run in the evenings once a week. Students involved also provide "Wellness Workshops". All students are made aware of the SRC soon after starting in the MD program.

*Clerkship Community Engaged Learning*
The Classes of 2023 and 2024 each participated in a one-week Community Engaged Learning experience.

This involved an introductory podcast followed by an in-person workshop in partnership with Stage Left Productions. The online description of the production company states the following: "Stage Left is Popular Theatre company of diverse artists and non-artists / catalysts of change who create pathways to systemic equity – in and through the arts."

There was half a day participating in a Sharing Circle with Indigenous Miskanawah partners.

There were three days of experience at different community partners.

The final day involved a Bystander Intervention Training workshop followed by small group session and a written reflection.

Assessment was based on attendance, a written thank you to community partner and a final written self-reflection.

B. Describe how the medical school encourages medical student participation in a service-learning activity.

Encouragement is in part related to the mandatory nature of the service-learning activities, such as the mandatory community engagement learning program. There is also a mandatory clerkship community engagement program, which involves a podcast, workshop, and required exposure to several community partners.

C. Describe how the medical school supports medical student participation in a service-learning activity.

Support is available through mandatory allocated clerkship time, as well as protected independent study time and after hours' time available to attend opportunities such as the Student Run Clinic which is overseen by a faculty lead.

D. Describe how the medical school prepares students for service-learning activities.

Service-learning activities are introduced through the modality of podcasts, large group orientation sessions, videos as well as small group sessions.

## E. Describe how the medical school ensures student reflection following participation in service-learning activities.

Self-reflection exercises were a mandatory component in the Legacy clerkship's Community Engagement Learning week. Self-reflection exercises have been modified to have three mandatory components in the RIME curriculum and these are linked to the RIME placements, as described below.

## F. Table 6.6-1 F

Table 6.6-1 F | Opportunities and encouragement for medical student participation in service-learning 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 | I had an opportunity to participate in a service-learning activity. | 111/149 (74.50%) | 107/118 (90.68%) | 100/113 (88.50%) | N/A |
| | I was encouraged to participate in a service-learning activity. | 117/149 (78.52%) | 103/117 (88.03%) | 97/113 (85.84%) | N/A |

**RIME Curriculum**

Within The Professional Role course, there are longitudinal community engaged learning events. There are a total of 10 large group sessions that involve Community Partners as educators to discuss core concepts especially from equity-deserving communities. There are also 13 half days of community learning experience at different community-based partners. These are spread longitudinally over 12 months of the pre-clerkship curriculum.

Prior to going into the community service placements, students are given preparation sessions including participating in a Sharing Circle with Indigenous Elders, participating in a Stage Left Theatre of the Oppressed Love theatre session, and completing a reflection exercise considering their learning objectives and anticipated challenges.

The Learning Objectives are:

1) Demonstrate exploration of social and structural contextual factors in a patient's life that may influence their wellness, views of health and access to care.
2) Demonstrate skills and qualities required to respectfully interact with marginalized populations using a patient-centered approach.
3) Demonstrate a reflective process to confront and challenge personal biases, stigma and stereotypes.
4) Describe the role/value of interdisciplinary teamwork and holistic care that extends beyond the health system to include social work, law, and community services.
5) Discuss the concept of social accountability in medicine and the importance of cultivating a culture of civic responsibility in the medical profession.
6) Discuss the knowledge required to develop respectful community relationships with Indigenous communities, including Elders, and understand the impacts of intergenerational trauma.
7) Contextualize Indigenous knowledge and ways of knowing and learning in the provision of patient-centered care to equity deserving populations, including Indigenous patients.
8) (for non-Indigenous students) Discuss the process of critically examining our own positionality as settlers and its impact on engaging with Indigenous communities.

During the Community Engaged Learning experience, the students spend time with the same Community Partner and engage in service learning projects identified jointly with the partner and the Community Organization. At the mid-point of their community placements, there is a debriefing small group session with faculty at the medical school, where participants share and debrief on their experiences, update on their projects, and complete a reflection on their challenges and learnings.

At the end of their time with their community partner, students again return to the medical school to present at a symposium, where they showcase their work to their fellow students and faculty. They also participate in a final debriefing session and written reflection.

Assessment:

1) Participation in all preparation and debrief sessions, and attendance at a minimum of 10/13 of the half days with the assigned community partner
2) Completion of a podcast about the assigned community partner
3) Completing a Thank You to the community partner
4) Completion of three reflection exercises throughout the placement
5) Presentation of community learning project at the symposium

***6.7 Currently, there is no element 6.7***

## *6.8 EDUCATION PROGRAM DURATION*

***A medical education program includes at least 130 weeks of instruction.***

***Requirement 6.8-1***

*The medical education program includes at least 130 weeks of instruction.*

A. Table 6.8-1 A

Table 6.8-1 A | Number of Scheduled Weeks per Year — Source: School-reported

| Report the number of scheduled weeks of instruction in each academic year of the medical curriculum (do not include vacation time). Record data on separate rows for each curricular track or parallel curriculum. Add rows as needed. | | | | | |
|---|---|---|---|---|---|
| | Number of scheduled weeks | | | | |
| Curricular track/Parallel curriculum | Year 1 | Year 2 | Year 3 | Year 4 | Total Scheduled Weeks |
| | **48** | **22** | **62** | **n/a** | **132** |

Notes:

1. Students have flexibility to do 48 weeks in Year 1 and 22 weeks in Year 2 or 47 weeks in Year 1 and 23 weeks in year 2 depending on scheduling of career development weeks.

2. The “years” do not align with calendar years because of the need to fit 4 years of traditional instruction time (2 pre-clerkship years and 2 clerkship years) into 3 academic years.

Breakdown of weeks by year:

Year 1:
Instructional Time: 48 weeks
Winter Break 2 weeks
Spring Break: 1 week
Summer break: 1 week

Year 2
Instructional Time: 22 weeks
Summer break: 1 week
Winter Break 2 weeks

Year 3:
Instructional time: 60 weeks clerkship plus 2 weeks MCC Review/Clerkship OSCE
Fall Break: 1 week
Winter Break: 2 weeks
CaRMS Interview Period: 3 weeks