STANDARD 9
ELEMENT EVALUATION FORMS

STANDARD 9: TEACHING, SUPERVISION, ASSESSMENT, AND STUDENT AND PATIENT SAFETY

A medical school ensures that its medical education program includes a comprehensive, fair, and uniform system of formative and summative medical student assessment and protects medical students' and patients' safety by ensuring that all persons who teach, supervise, and/or assess medical students are adequately prepared for those responsibilities.

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9.1 PREPARATION OF RESIDENT AND NON-FACULTY INSTRUCTORS

In a medical school, residents, graduate students, postdoctoral fellows, and other non-faculty instructors who supervise, teach or assess medical students are familiar with the learning objectives of the required learning experience in which they participate and are prepared for their roles in teaching and assessment. The medical school provides resources to enhance and improve residents' teaching and assessment skills, with central monitoring of their participation in those opportunities provided.

Requirement 9.1-1

In the medical school, residents, graduate students, postdoctoral fellows, and other non-faculty instructors who supervise, teach, or assess medical students are familiar with the learning objectives of the required learning experience in which they participate.

Analysis of evidence for requirement 9.1-1

Pre-clerkship

Resident and non-faculty instructors who teach at the medical school are provided with the learning objectives. This is either by email or through one of the online resource management systems (OSLER or Fresh Sheet).

Clerkship

For every clerkship rotation, there is a manual or website that houses the clerkship rotation's learning objectives, and this information is distributed to faculty and residents. If there is no manual or website, clerkship objectives are disseminated by email.

Requirement 9.1-2

In the medical school, residents, graduate students, postdoctoral fellows, and other non-faculty instructors who supervise, teach, or assess medical students are prepared for their roles in teaching and assessment.

Analysis of evidence for requirement 9.1-2

Residents are prepared for their roles in teaching and assessment by undergoing a Resident as Teachers Toolkit (RATTS) workshop hosted by the PGME office. Residency programs can also offer an alternative, equivalent training program within their specialty to replace the RATTS training.

Non-faculty instructors are involved in the teaching and the supervision of the pre-clerks in two specific curricular components. Clear examples of the preparation material provided (course objectives, student expectation) and pre-session on-site briefing are provided for the Interprofessional Education (IPE) sessions.

There is no evaluative role for the non-faculty instructors. The second major event where non-faculty instructors supervise or teach medical students is the Community Engaged Learning (CEL) initiative. There are many community partners who engage with the learners for several half-days in the pre-clerkship. The objectives for the sessions are distributed in advance of the student's arrival, and an evaluative component is not expected.

The school does not typically use graduate students or postdoctoral fellows to teach.

Requirement 9.1-3
The medical school provides resources to enhance and improve residents' teaching and assessment skills, with central monitoring of their participation in those opportunities provided.

Analysis of evidence for requirement 9.1-3

The PGME office offers a Resident as Teachers Toolkit (RATTS) workshop. This workshop is mandatory for all residents. When a resident completes this workshop, a report of completion is sent to the resident's residency program for record-keeping. If a residency program has an equivalent training option, that option can be used instead. The residency program would oversee and monitor this training.

Other opportunities to enhance/improve residents' teaching/assessment skills include workshops through the Office of Faculty Development and Performance that residents can register for.

Medical students evaluate residents on their teaching and a year-end teaching performance report is given to the residents via their program director.

9.2 SUPERVISION OF REQUIRED CLINICAL LEARNING EXPERIENCES

A medical school must ensure that the supervision of medical students in required clinical learning experiences is provided by faculty members of the medical school.

Requirement 9.2-1

The medical school ensures that supervision of medical students is provided throughout required clinical learning experiences by faculty members of the medical school.

Analysis of evidence for requirement 9.2-1

All physicians who teach in the program must have a faculty appointment, including clerkship and pre-clerkship clinical learning experiences. Information provided confirms that 100% of clinical supervisors at the University of Calgary hold faculty appointments. The UME Office ensures faculty are clinical supervisors through a database, and any error in this regard would be captured via the UME financial office and faculty performance records.

The ISA indicates that over 94% of students believed that they always had appropriate supervision in clinical learning situations involving patient care.

9.3 CLINICAL SUPERVISION OF MEDICAL STUDENTS

A medical school ensures that medical students in clinical learning situations involving patient care are appropriately supervised at all times in order to ensure patient and student safety, that the level of responsibility delegated to the student is appropriate to the student's level of training, and that the delegated activities supervised by the health professional are within the health professional's scope of practice.

Requirement 9.3-1

The medical school ensures that medical students in clinical learning situations involving patient care are appropriately supervised at all times in order to ensure:

- *i. patient and student safety*
- *ii. that the level of responsibility delegated to the student is appropriate to the student's level of training*
- *iii. that the delegated activities supervised by the health professional are within the health professional's scope of practice*

Analysis of evidence for requirement 9.3-1

Medical students are supervised in clinical learning rotations. A primary preceptor is assigned for all students and oversees the educational experience in the clinical context. Primary preceptors are given objectives and policies relevant to supervising a medical student. Important safeguards built into clinical supervision include co-signing of notes and orders and feedback mechanisms to address possible concerns with supervision. All tasks delegated to learners are expected to be within scope of practice, and the primary preceptor is tasked with oversight.

Graded responsibility and increasing autonomy for medical students is granted based on individual observation and feedback. This is further cemented by providing objectives and anchors on ITERS and EPA assessments. Appropriate responsibility delegation is monitored via student feedback. The feedback from student ISA confirms that supervision is appropriate with over 97% indicating level of supervision ensured their safety and over 96% of students indicating that level of supervision ensured patient safety.

There are several mechanisms by which concerns about supervision can be brought forward by a student. This includes multiple levels, from directly with their preceptor to the Associate Dean UME or external resources including other offices within the CSM and main campus. Reporting options, pathways and mechanisms with the CSM continue to be evaluated.

9.4 ASSESSMENT SYSTEM

A medical school ensures that, throughout its medical education program, there is a centralized system in place that employs a variety of measures (including direct observation) for the assessment of student achievement, including students' acquisition of the knowledge, core clinical skills (e.g., medical history-taking, physical examination), behaviours, and attitudes specified in medical education program objectives, and that ensures that all graduates achieve the same medical education program objectives.

Requirement 9.4-1
The medical school ensures that, throughout its medical education program, there is a centralized system in place that:

- i. *employs a variety of measures (including direct observation) for the assessment of student achievement, including students' acquisition of the knowledge, core clinical skills (e.g., medical history-taking, physical examination), behaviours, attitudes specified in medical education program objectives*
- ii. *ensures that all graduates achieve the same medical education program objectives*

Analysis of evidence for requirement 9.4-1

The UME program uses various measures for student achievement assessment. Direct observation of students' skills is included as part of the assessment program in all three years of the program. Also, the program uses various tools to assess students in all required domains, including knowledge, clinical skills, behaviors, and attitudes.

In the pre-clerkship component of the program, acquisition of knowledge is assessed using written multiple-choice examinations, peripatetic examinations (for anatomy content in the Legacy curriculum), OSCE examinations (involves direct observation), as well as some assignments and presentations (involves direct observation). Acquisition of core clinical skills in the pre-clerkship program are assessed using OSCE examinations (two in the Legacy curriculum and three in the RIME curriculum) as well as preceptor ITER evaluations and EPAs, both of which involve the direct observation of these skills.

Attitudes are assessed on ITER evaluations as well as through oral and or paper-based assignments and presentations. In the clerkship curriculum, knowledge is assessed using written multiple-choice examinations, a clerkship OSCE (involves direct observation), preceptor ITERs (involves direct observation), and EPA assessments (involves direct observation). Clinical skills are assessed on OSCE examinations (involves direct observation), preceptor ITERs (involves direct observation), EPA assessments (involves direct observation), and observed histories and physical exams which involve direct observation. Attitudes are assessed on the clerkship OSCE (involves direct observation), preceptor ITERS (involves direct observation), and presentations (involves direct observation). Table 9.4 GQ data shows the percentage of students observed and assessed on their performance in history taking and physical examination throughout their clerkship rotations. The percentages are high but not 100%. This may be in part due to recall error. The lowest numbers were consistently observed for the surgery rotation, but interventions have been put in place, and this has improved over the past two years. The UME program has responded to the need for directly observed histories and physical exams by mandating that all students complete an assessment of EPA 1 (history and physical examination) during their surgery rotation.

Although oversight of the assessment program is provided by the Assistant Dean of Evaluations and Research (with support from the Student Evaluation Committee), acquisition of the medical education program objectives (i.e. the Big 10) is ensured by SARC, which is tasked with making progression and graduation decisions. To inform the decisions about progress and promotion, the UME program created a RIME pre-clerkship and clerkship level Competency Committee, which includes various relevant stakeholders. Each committee meets approximately every 6 months to review the assessment data for each student. The committee is tasked with making consensus recommendations regarding students' readiness to progress within the program and to graduate from the program. To recommend graduation from the program, the committee must ensure that each student meets the Big 10 graduation objectives, which it does by reviewing each student's assessment data in detail. When the committee recommends against progression or graduation, the committee

provides recommendations for criteria that must be met prior to recommending that student for progression or graduation. These recommendations are provided to the Associate Dean, who then presents them to the SARC which makes final progress and graduation decisions. This process ensures that every student has met the Big10 graduation objectives by the completion of the program.

In the Legacy curriculum, instead of a Competency Committee, students had to pass all evaluation components of the pre-clerkship curriculum before being recommended for progression to clerkship.

9.5 NARRATIVE ASSESSMENT

A medical school ensures that a narrative description of a medical student's performance, including the student's non-cognitive achievement, is included as a component of the assessment in each required learning experience in the medical education program whenever teacher-student interaction permits this form of assessment.

Requirement 9.5-1
The medical school ensures that a narrative description of a medical student's performance, including the student's non-cognitive achievement, is included as a component of the assessment in each required learning experience in the medical education program whenever teacher-student interaction permits this form of assessment.

Analysis of evidence for requirement 9.5-1

Narrative assessment is an ongoing part of both the pre-clerkship and clerkship curriculums:

1. Pre-clerkship
    a. Legacy curriculum: narrative feedback is provided for several required components including: 1) Family Medicine clinical experience; 2) Applied Evidence-Based Medicine (clinical, directed study or research); and 3) Career Exploration. In these experiences, In-Training Evaluation Reports (ITERs) are completed at the end of the experience and the midpoint in the family medicine clinical experience. All ITERs contain a narrative comment box. In addition, there are med-skills OSCE's in both years of the pre-clerkship. Rating and comments are provided for each student at each station, by the station examiner. These comments are also released to the students, after review by the UME leadership, to facilitate learning. The volume and quality of these comments are consistently excellent.
    b. RIME curriculum: Narrative feedback is designed to be continuous within the RIME curriculum. EPA assessments that can be either student or preceptor initiated form the basis of narrative assessments in most clinical and educational settings within the pre-clerkship. Forms are linked to a specific encounter or task with an overall assessment and narrative comments. In addition, there are cumulative OSCE exams at the end of each of the three blocks of the RIME pre-clerkship curriculum. As with the Legacy curriculum, narrative comments along with ratings are recorded at each station by the evaluator. Like the Legacy curriculum, it is expected that these are substantial in breadth and depth. These comments are also released to the students, after review by the UME leadership, to facilitate learning.

2. Clerkship: The narrative assessment is a continuous feature of evaluation. Each rotation ITER has two comments sections. One is for comments reflective of the students' performance that the evaluators feel would be appropriate to appear on the MSPR. In addition, a second comments box is provided for constructive feedback/advice to allow for further development in student learning or performance that the preceptors do not feel represent a significant issue that should appear on the MSRP and impact the student's success in the CaRMS match. The purpose of this second box is to enhance the depth or narrative assessment without undue impact on student wellness or success. In addition, the clerkship students must successfully complete a specified number of each of the EPAs for graduating medical students. These forms require a rating of performance on an entrustment scale (O-Score derived) and narrative assessment comments. Finally, the clerkship OSCE includes narrative assessment in addition to overall ratings (mapped to EPAs). Like the OSCEs in the pre-clerkship, the breadth and depth of comments seen on these evaluations is consistently of high value. Narrative assessment comments are available to the Competency Committee in their assessment of students regarding graduation recommendations.

The provision of narrative assessment across the above settings ensures a well-rounded student assessment with emphasis on both cognitive and non-cognitive domains of performance.

The richness of student narrative assessment is enabled by appropriate preparation of preceptors to provide high quality descriptions of student performance. There is focus on this task at the orientation sessions for OSCE examiners. The use of appropriate anchors and descriptors for EPA and ITER forms provides guidance around expectations that narrative assessment comments can be positioned against for comparison. Links to the program

objectives provide a further narrative frame of reference against which to judge performance. The provision of the non-MSPR comment box on ITERs allows for rich narrative assessment to guide student learning without undue effects on outcomes related to the residency match. For example, if preceptors feel that a student would benefit further from more focus on "X" but that this does not represent a performance level below what is expected they can make this assessment in the non-MSPR box without significant consequence to the student.

Finally, educational activities for preceptors are available via the Office of Faculty Development and Performance and include topics such as "how to give effective feedback". Within RIME, all educators were given a mandatory RIME specific faculty development course leading up to the curriculum launch, which included a session on giving effective feedback.

9.6 SETTING STANDARDS OF ACHIEVEMENT

A medical school ensures that faculty members with appropriate knowledge and expertise set standards of achievement in each required learning experience in the medical education program.

Requirement 9.6-1
The medical school ensures that faculty members with appropriate knowledge and expertise set standards of achievement in each required learning experience in the medical education program.

Analysis of evidence for requirement 9.6-1

The response outlines the oversight of setting achievement standards in all required learning experiences by the Assistant Dean of Evaluations and Research and the Student Evaluation Committee. Specific course exams and assessments are constructed by course faculty and course chairs, and then approved by the Assistant Dean of Evaluations and Research. This Assistant Dean is chosen based on experience and expertise in standard setting, and there is focused faculty development and mentorship when there is change in this position.

Any policy change or procedures enacted by the Assistant Dean of Evaluations and Research must be approved by the Student Evaluation Committee, which includes widespread partner representation from important groups, as well as a Senior Evaluation Advisor and Medical Education and Research Advisor, both of whom have extensive expertise in standard setting.

9.7 TIMELY FORMATIVE ASSESSMENT AND FEEDBACK

A medical school ensures that the medical education program provides timely formative assessment consisting of appropriate measures by which medical students can measure their progress in learning. Each medical student is assessed and provided with formal formative feedback early enough during each required learning experience four or more weeks in length to allow sufficient time for remediation. Formal feedback occurs at least at the midpoint of the learning experience. In medical education programs with longer educational experiences (e.g., longitudinal integrated clerkship, year-long courses) formal feedback occurs approximately every six weeks. For required learning experiences less than four weeks in length alternate means are provided by which medical students can measure their progress in learning.

Requirement 9.7-1
The medical school ensures that the medical education program provides timely formative assessment consisting of appropriate measures by which medical students can measure their progress in learning.

Analysis of evidence for requirement 9.7-1

There are clear policies developed detailing expectations. Formative exams exist for all pre-clerkship and clerkship courses. There are clear policies regarding the requirement for providing feedback. There is a required CARDS program for RIME students providing frequent, low-stakes formative assessment.

Requirement 9.7-2
Each medical student is assessed and provided with formal formative feedback early enough during each required learning experience four or more weeks in length to allow sufficient time for remediation.

Analysis of evidence for requirement 9.7-2

In the pre-clerkship Legacy curriculum, formative exams were provided at midpoint of each course. For clerkship rotations, formative MCQ exams as well as OSCE are provided at the midpoint. In the RIME curriculum there are pre-clerkship EPA, OSCE and mandatory CARDS assessments.

The addition of a surgical skills day is helpful for formative assessment of surgical skills.

There are formative review exams prior to the final summative exam for medical school (MCCQE).

Requirement 9.7-3
Formal feedback occurs at least at the midpoint of the learning experience.

Analysis of evidence for requirement 9.7-3

There are policies developed regarding mandatory feedback. Feedback during the surgery clerkship has improved by having a specific preceptor designated to give feedback.

Requirement 9.7-4
In medical education programs with longer educational experiences (e.g., longitudinal integrated clerkship, year-long required learning experiences) formal feedback occurs approximately every six weeks.

Analysis of evidence for requirement 9.7-4

There are regular meetings weekly for the first 12 weeks, and then every 6 weeks are an expectation.

Requirement 9.7-5
For required learning experiences less than four weeks in length alternate means are provided by which medical students can measure their progress in learning.

Analysis of evidence for requirement 9.7-5

Specific assessments for shorter learning experiences are outlined in Table 9.7-5A and appear satisfactory.

9.8 FAIR AND TIMELY SUMMATIVE ASSESSMENT

A medical school has in place a system of fair and timely summative assessment of medical student achievement in each required learning experience of the medical education program. Final grades are available within six weeks after the end of a required learning experience.

Requirement 9.8-1
The medical school has in place a system of fair and timely summative assessment of medical student achievement in each required learning experience of the medical education program.

Analysis of evidence for requirement 9.8-1

There is a clear policy regarding release of results with 14 working days after each assessment.
There is strong committee oversight of evaluation changes.

Requirement 9.8-2
Final grades are available within six weeks after the end of a required learning experience.

Analysis of evidence for requirement 9.8-2

The school meets expectations for the release of exam scores in written evaluation. Ongoing effort to work on the completion of ITERs for clinical rotations; most are within 6 weeks, but there are some outliers.

9.9 STUDENT ADVANCEMENT AND APPEAL PROCESS

A medical school ensures that the medical education program has a single set of core standards for the advancement and graduation of all medical students across all locations. A subset of medical students may have academic requirements in addition to the core standards if they are enrolled in a parallel curriculum. A medical school ensures that there is a fair and formal process for taking any action that may affect the status of a medical student, including:

- ***a) timely notice of the impending action,***
- ***b) disclosure of the evidence on which the action would be based,***
- ***c) an opportunity for the medical student to respond,***
- ***d) an opportunity to appeal any adverse decision related to advancement, graduation, or dismissal.***

Requirement 9.9-1

The medical school ensures that the medical education program has a single set of core standards for the advancement and graduation of all medical students across all locations. A subset of medical students may have academic requirements in addition to the core standards if they are enrolled in a parallel curriculum.

Analysis of evidence for requirement 9.9-1

Pre-clerkship is centralized with consistent examinations. Promotion standards throughout the medical school curriculum are uniform. There are mandatory reviews of all students by the Competency Committee in both pre-clerkship and clerkship. Approval of graduation is necessary by SARC. There is an annual review of decentralized sites to ensure similar outcomes.

Requirement 9.9-2

The medical school ensures that there is a fair and formal process for taking any action that may affect the status of a medical student, including:

- *a) timely notice of the impending action*
- *b) disclosure of the evidence on which the action would be based*
- *c) an opportunity for the medical student to respond*
- *d) an opportunity to appeal any adverse decision related to advancement, graduation, or dismissal*

Analysis of evidence for requirement 9.9-2

There is a well-defined formal process through SARC with notice, disclosure, pre-committee meeting, opportunity to respond and appeal. Details are made available to all students.

9.10 STUDENT HEALTH AND PATIENT SAFETY

The medical school has effective policies to address situations, once identified, in which a student's personal health reasonably poses a risk of harm to patients. These patient safety policies include:

- ***a) timely response by the medical school***
- ***b) provision of accommodation to the extent possible***
- ***c) leaves of absence***
- ***d) withdrawal processes***

Requirement 9.10-1
The medical school has effective policies to address situations, once identified, in which a student's personal health reasonably poses a risk of harm to patients.

Analysis of evidence for requirement 9.10-1

The UME has a policy on "Student – Injury, Incident, and Exposure Reporting". It states that "after regular hours, a student who is injured during their course of study must go immediately to Emergency or Urgent Care Centre or drop-in clinics for medical support". As well, "special situations should be brought to the attention of UME Management". Students who are injured during their course of study must also communicate with the UME Immunization Specialist, ideally within 24 hours of occurrence, according to this policy.

The UME policy is not clear what "special situations" represent. If someone has a medical or psychological health issue that may pose a risk of harm to patients, it is not clear in the policy what are the exact steps the medical school would take to support the learner and their effectiveness. This is challenging to assess from the data given, because the UME policy does not specifically speak about a health issue that "poses a risk of harm to patients".

The UME is also part of the University of Calgary, so UME students fall under the university's Student Accommodation Policy. There is a policy in place to provide accommodation for students. Examples and effectiveness of accommodations are unclear from this document; it is only noted that accommodations can happen.

Medical students are regulated members of the College of Physicians and Surgeons of Alberta (CPSA). They are subject to the Duty to Report Self policy. This deals with the duty to report, but it does not specify the policy to address the situation.

The Student Academic Review Committee (SARC) Terms of Reference outlines leaves of absence. For medical/personal leave of absences, this is a decision by the Associate Dean, and a SARC appearance is not necessary. There is no particular guidance regarding how the decision is made, and it does not specify any relation to "reasonably poses a risk of harm to patients".

Requirement 9.10-2
These patient safety policies include:

- *a) timely response by the medical school*
- *b) provision of accommodation to the extent possible*
- *c) leaves of absence*
- *d) withdrawal processes*

Analysis of evidence for requirement 9.10-2

a) Students should ideally report their injury within 24 hours to the medical school. However, there is no specification that the medical school would report back in a timely manner. The term "injury" overall seems to apply to physical injury, rather than mental health issues. In the university's student accommodation policy, it notes that the university has a duty to "consider and assess all Accommodation requests on a case-by-case basis and in a timely and responsive manner".

b) In the university's Student Accommodation policy, it notes that the university has a duty to "consider and assess all accommodation requests on a case-by-case basis and in a timely and responsive manner". The student accommodation policy outlines that "The University has a Duty to Accommodate to the point of Undue Hardship in the provision of its services."

c) The policy pertaining to leaves of absence is contained with the UME's Student Academic Review Committee (SARC) Terms of Reference.

d) The policy regarding the withdrawal process is contained with the UME's Student Academic Review Committee (SARC) Terms of Reference. SARC can require a student to withdraw after reviewing all available information and hearing statements by all parties. Also, students can voluntarily withdraw from the Program; these students are invited to meet with the Associate Dean. If the Associate Dean deems that the student has made an informed decision, the Associate Dean will write an approval for the student to withdraw. The student then fills out a Notice of Withdrawal form from the University of Calgary Registrar's Office.