INDEPENDENT STUDENT ANALYSIS REPORT

UNIVERSITY OF TORONTO
FACULTY OF MEDICINE
MD PROGRAM

Independent Student Analysis Report for the CACMS Accreditation in May 2020
University of Toronto, Faculty of Medicine
This report references data tables, surveys, and \textit{a priori} hypotheses in appendices that are available on the University of Toronto MD Program Website, or by contacting the ISA Leads Arshia Javidan & Yesh Rai**

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Special Acknowledgements:
Chris Jones, University of Toronto, Faculty of Medicine
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Erin Howe, University of Toronto, Faculty of Medicine
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## 1.2 Table of Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CACMS</td>
<td>Committee on Accreditation of Canadian Medical Schools</td>
</tr>
<tr>
<td>CaRMS</td>
<td>Canadian Residency Matching Service</td>
</tr>
<tr>
<td>CBL</td>
<td>Case-Based Learning</td>
</tr>
<tr>
<td>CBSL</td>
<td>Community-Based Service Learning</td>
</tr>
<tr>
<td>EEE</td>
<td>Enriching Educational Experiences</td>
</tr>
<tr>
<td>FMLE</td>
<td>Family Medicine Longitudinal Experience</td>
</tr>
<tr>
<td>HC</td>
<td>Health in the Community</td>
</tr>
<tr>
<td>HSR</td>
<td>Health Sciences Research</td>
</tr>
<tr>
<td>ICE</td>
<td>Integrated Clinical Experience</td>
</tr>
<tr>
<td>IPE</td>
<td>Interprofessional Education</td>
</tr>
<tr>
<td>ISA</td>
<td>Independent Student Analysis</td>
</tr>
<tr>
<td>LAMP</td>
<td>Longitudinal Academic Mentorship Program</td>
</tr>
<tr>
<td>LinC</td>
<td>Longitudinal Integrated Clerkship Program</td>
</tr>
<tr>
<td>MAM</td>
<td>Mississauga Academy of Medicine (Mississauga campus)</td>
</tr>
<tr>
<td>ME</td>
<td>Mastery Exercises (assessments that take place every 1 to 4 weeks)</td>
</tr>
<tr>
<td>MSB</td>
<td>Medical Sciences Building (Downtown Toronto campus)</td>
</tr>
<tr>
<td>OHPSA</td>
<td>Office of Health Professions Student Affairs</td>
</tr>
<tr>
<td>Selectives</td>
<td>Post-CaRMS electives</td>
</tr>
<tr>
<td>STG</td>
<td>St. George (Downtown Toronto campus)</td>
</tr>
<tr>
<td>TDHSC</td>
<td>Terrence Donnelly Health Sciences Complex (Mississauga Campus)</td>
</tr>
<tr>
<td>UME</td>
<td>Undergraduate Medical Education</td>
</tr>
<tr>
<td>UofT</td>
<td>University of Toronto</td>
</tr>
<tr>
<td>UTM</td>
<td>University of Toronto Mississauga (campus)</td>
</tr>
</tbody>
</table>
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1.4 Background Information and Introduction

This report was created in preparation for the Accreditation site visit by the Committee on Accreditation of Canadian Medical Schools (CACMS) in May of 2020. This Independent Student Analysis (ISA) report was made possible through the combined efforts of the ISA Task Force, University of Toronto Medical Society, and all those consulted for guidance and recommendations (see comprehensive list in Section 1.1).

The ISA is a core pillar for accreditation, facilitated by a student steering committee (the ISA Task Force). In the form of an extensive survey evaluating aspects of the medical education program, it is completed by students at the University of Toronto’s Faculty of Medicine MD Program. The ISA Task Force members were involved in all components of the accreditation process, including survey design, development, distribution, data analysis and the eventual dissemination of this report. Students at the University of Toronto’s Faculty of Medicine were asked to critically evaluate and assess all aspects of their medical education. Notable changes to the UofT MD Program since the last accreditation visit in 2011 include the creation of a new satellite campus, the Mississauga Academy of Medicine (MAM), and a complete restructuring of the pre-clerkship curriculum through the newly implemented Foundations Curriculum. In completing this report, students identified areas of strengths, borderline areas, and areas of improvement (results and discussion below). The ultimate goal of this report is to celebrate strengths, explore weaknesses, and offer recommendations to further strengthen the program.

We hope that this report can lead to the improvement of the student experience and ultimately facilitate the school continuing to produce excellent physicians for society.

Sincerely,

Arshia Javidan
MD/MSc Student, Class of 2021
Accreditation Student Co-lead

Yeshith Rai
MD Student, Class of 2021
Accreditation Student Co-lead
2.0 Executive Summary

Between September of 2018 and June of 2019, the Independent Student Analysis was conducted at the University of Toronto for its upcoming accreditation site visit by the Committee on Accreditation of Canadian Medical Schools in May of 2020. The ISA involved a granular examination of all of the elements and standards established by CACMS, as well as additional supplementary questions which the ISA Task Force deemed important to gather student perceptions about.

Transparency was very important to us during this process. We sought to remain transparent with faculty, MD program leadership, and students as a whole through frequent communication. We intend on maintaining transparency by making this report publicly available.

Overall, the ISA response rate was a resounding success, with 942 of 1080 students completing the entirety of the survey, resulting in an 87.2% response rate. Over 90% of students initiated some component of the survey but for robustness of our data analysis, we only included full responses. The response rate had strong representation from students of all genders, years (including MD/PhD), academies, and campus sites.

Below we have presented a summary of the programmatic strengths, key areas of improvement, and critical recommendations to be considered moving forward. In some notable areas of strength, we have still identified recommendations for further improvement after consulting narrative comments and student experts. In light of time and resources being limited, we have generated a priority system for our recommendations. Naturally, those recommendations for areas of strength are not as highly prioritized.

In reading this report, please be wary that our results demonstrate student perceptions of the University of Toronto MD Program, and are not necessarily objective truths about the program. Our survey of the student population was intended to capture the subjective student experience. With this in mind, overall, our results demonstrate that students are quite content with most aspects of their MD education at the University of Toronto’s Faculty of Medicine. The program has many strengths to celebrate, with a few notable areas of weakness. We hope that through the process of considering our recommendations and their subsequent implementation we can collectively improve upon our weaknesses and our strengths for current and future generations of medical students.
2.1 Programmatic Strengths

4.2 Student-Faculty-Administrative Relationships
- Effective Office of Health Professions Student Affairs (OHPSA) accessibility, responsiveness, and inclusion of students on key working groups
- Effective Office of the Vice-Dean accessibility, responsiveness, and inclusion of students on key medical school committees

4.3 Learning Environment
- High student awareness of mistreatment policies, excellent respect in learning environments, and high quality of overall learning experience and satisfaction with class diversity
- Effective processes in place for academic support and a manageable level of stress amongst students
- Strong mentorship by faculty and residents

4.4 Facilities
- Ample space at didactic and clinical teaching sites
- High student satisfaction with secure storage space and relaxation space at teaching sites

4.5 Library and Information Technology Resources
- Accessible library resources both on campus and off-campus
- Robust information technology network, including Wi-Fi, electronic learning resources, and information resources

4.6 Student Services
- Ample availability of student health services, mental health services, and personal counselling and programs to support student-well being
- Effective career counselling services with high availability
- Effective financial counselling services and debt management counselling
- Ample availability of education around the prevention of and exposure to infectious diseases and how to deal with these situations
- Ample guidance from Faculty in preparing students for the CaRMS process and providing support in booking electives and selectives

4.7 Medical Education Program
- Accessible academic records, ability to care for individuals from diverse backgrounds, broad exposures to generalist care and family medicine, and broad settings in which clinical experiences take place
- Student satisfaction with time between evaluations; evaluations are generally looked upon as fair and representative of the content
- Sufficient time spent in educational and patient care activities in pre-clerkship and clerkship, appropriate preceptor expectations in clerkship, appropriate amount of
feedback received in pre-clerkship and clerkship, and appropriate integration of student feedback overall

- High satisfaction from MD/PhD students in the program preparing them for a career as a clinician-scientist
- Overall strengths and weaknesses of the components of the pre-clerkship Foundations curriculum and aspects of clerkship streams are represented in the tables at the end of Key Areas of Improvement (Table 1, Table 2, Table 3)

4.8 Opportunities for Research, Scholarly Activities, and Service-Learning

- Ample opportunities for service learning, scholarly research activities, and extracurricular activities
2.2 Key Areas of Improvement

4.2 Student-Faculty-Administrative Relationships
● Excessive number of requests from Faculty to students to share feedback and opinions on curriculum

4.3 Learning Environment
● Significant number of students experiencing mistreatment, poor accessibility of student mistreatment reporting systems, and lack of student comfort with reporting mistreatment
● Significant student concern with cost of education (including tuition and living expenses)
● Overall lack of funding from Faculty to attend and/or present at conferences
● Low student comfort with seeking clarification or challenging feedback from faculty on evaluations, student hesitation with taking personal days and/or asking for accommodations, and relative lack of transparency from the MD program around procedures in the event that students are unable to meet academic standards.
● Low perceived socioeconomic (SES) diversity and poor integration across the St. George and MAM campuses
● High levels of stress and/or anxiety experienced by students regarding not matching in the CaRMS process

4.4 Facilities
● Key areas of improvement not identified

4.5 Library and Information Technology Resources
● Key areas of improvement not identified

4.6 Student Services
● Insufficient financial support to offset the costs of medical schools
● Inadequacy of support in securing away or UofT electives (when no electives were available), lack of availability of financial support and/or funding for electives, and unsatisfactory guidance provided when choosing electives

4.7 Medical Education Program
● All years: inadequacy of opportunities of clinical opportunities to explore interests to guide career choices for CaRMS, lack of opportunities to review assessments and unsatisfactory experience during the Community-Based Service Learning (CBSL) placement
● Clerkship: inadequate opportunities to explore clinical interests prior to the CaRMS deadline during the clerkship and elective period, lack of time and flexibility to pursue activities outside of class, low levels of satisfaction with the Medical Student Performance Record (MSPR) as a fair and effective method of communicating performance to residency programs
● MD/PhD: lack of satisfaction with the way the faculty accommodates the unique needs of integrating clinical and research training for MD/PhD students
• Overall strengths and weaknesses of the components of the pre-clerkship Foundations curriculum and aspects of clerkship streams are represented in the tables below

4.8 Opportunities for Research, Scholarly Activities, and Service-Learning
• Relatively low medical student participation rate in research/scholarly activities, although this is mostly isolated to first year students who indicated that they intend on becoming involved with a research/scholarly activity in the future
**Table 1.** Student satisfaction rates (satisfied + very satisfied) for components of the pre-clerkship/Foundations curriculum

<table>
<thead>
<tr>
<th>Component of Foundations Curriculum</th>
<th>Student Satisfaction (S+VS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anatomy and Histology</td>
<td>78.0%</td>
</tr>
<tr>
<td>CanMEDS Themes</td>
<td>79.9%</td>
</tr>
<tr>
<td>Case-based Learning (CBL)</td>
<td>73.3%</td>
</tr>
<tr>
<td>Enriching Educational Experiences (EEE)</td>
<td>85.8%</td>
</tr>
<tr>
<td>Ethics &amp; Professionalism</td>
<td>81.1%</td>
</tr>
<tr>
<td>Health in the Community (HC)</td>
<td>67.0%</td>
</tr>
<tr>
<td>Health Sciences Research (HSR)</td>
<td>48.2%</td>
</tr>
<tr>
<td>Integrated Clinical Experience (ICE)</td>
<td>94.2%</td>
</tr>
<tr>
<td>Interprofessional Education (IPE)</td>
<td>58.2%</td>
</tr>
<tr>
<td>Lectures</td>
<td>95.9%</td>
</tr>
<tr>
<td>Portfolio</td>
<td>82.9%</td>
</tr>
<tr>
<td>Resilience Curriculum</td>
<td>62.7%</td>
</tr>
</tbody>
</table>

**Green:** Area of strength (>70%)

**Yellow:** Borderline area (60-69.9%)

**Red:** Area of weakness (<60%)
<table>
<thead>
<tr>
<th>Clerkship Stream</th>
<th>Time Spent (Adequate) [S51]</th>
<th>Was observed while taking a patient’s history [Q48]</th>
<th>Was observed while performing a physical/mental status examination [Q49]</th>
<th>Received mid-point feedback [Q52]</th>
<th>Had sufficient access to the variety of patients and procedures [Q53]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Medicine</td>
<td>92.0%</td>
<td>86.4%</td>
<td>90.2%</td>
<td>90.7%</td>
<td>96.0%</td>
</tr>
<tr>
<td>Family Medicine</td>
<td>93.2%</td>
<td>97.9%</td>
<td>97.3%</td>
<td>98.5%</td>
<td>95.5%</td>
</tr>
<tr>
<td>Internal Medicine</td>
<td>82.2%</td>
<td>94.5%</td>
<td>96.6%</td>
<td>97.9%</td>
<td>97.5%</td>
</tr>
<tr>
<td>Obstetrics/Gynecology</td>
<td>84.8%</td>
<td>77.9%</td>
<td>93.7%</td>
<td>87.5%</td>
<td>92.8%</td>
</tr>
<tr>
<td>Pediatrics</td>
<td>91.9%</td>
<td>87.5%</td>
<td>91.5%</td>
<td>92.7%</td>
<td>94.5%</td>
</tr>
<tr>
<td>Psychiatry</td>
<td>93.4%</td>
<td>96.1%</td>
<td>92.2%</td>
<td>95.5%</td>
<td>96.1%</td>
</tr>
<tr>
<td>Surgery</td>
<td>72.7%</td>
<td>73.0%</td>
<td>77.8%</td>
<td>82.9%</td>
<td>90.2%</td>
</tr>
<tr>
<td>Ophthalmology*</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Otolaryngology*</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Anesthesia*</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Green:** Area of strength (>70%)
**Yellow:** Borderline area (60-69.9%)
**Red:** Area of weakness (<60%)

*Note that cells marked with N/A did not have these questions asked for these clerkship streams*
Table 3. Student satisfaction rates (agree + strongly agree) for clerkship streams

<table>
<thead>
<tr>
<th>Clerkship Stream</th>
<th>Learning objectives provided were clear and adequate preparation [S53] SA+A</th>
<th>Faculty provided direction to access sufficient/useful resources [S54] SA+A</th>
<th>The evaluations were fair [S55] SA+A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Medicine</td>
<td>97.6%</td>
<td>98.5%</td>
<td>97.7%</td>
</tr>
<tr>
<td>Family Medicine</td>
<td>92.7%</td>
<td>92.7%</td>
<td>92.7%</td>
</tr>
<tr>
<td>Internal Medicine</td>
<td>92.1%</td>
<td>68.0%</td>
<td>82.6%</td>
</tr>
<tr>
<td>Obstetrics/Gynecology</td>
<td>94.0%</td>
<td>97.9%</td>
<td>96.7%</td>
</tr>
<tr>
<td>Pediatrics</td>
<td>95.4%</td>
<td>95.8%</td>
<td>89.4%</td>
</tr>
<tr>
<td>Psychiatry</td>
<td>92.7%</td>
<td>83.4%</td>
<td>79.2%</td>
</tr>
<tr>
<td>Surgery</td>
<td>80.3%</td>
<td>54.9%</td>
<td>78.8%</td>
</tr>
<tr>
<td>Ophthalmology</td>
<td>79.4%</td>
<td>93.6%</td>
<td>72.0%</td>
</tr>
<tr>
<td>Otolaryngology</td>
<td>77.2%</td>
<td>65.7%</td>
<td>70.6%</td>
</tr>
<tr>
<td>Anesthesia</td>
<td>92.7%</td>
<td>93.3%</td>
<td>92.6%</td>
</tr>
</tbody>
</table>

**Green:** Area of strength (>70%)

**Yellow:** Borderline area (60-69.9%)

**Red:** Area of weakness (<60%)
2.3 Critical Recommendations

Note: these recommendations are only a concise summary. For a detailed breakdown, please find the full descriptions in the associated section of the Results.

In light of the fact that accreditation reflects a continuous quality improvement process, we have generated recommendations for both areas of improvement and areas of strength. We acknowledge that because time and resources are limited, certain areas should take priority. As such, we have developed the following priority system for our recommendations:

Priority level A: Area of weakness or borderline area AND explicitly linked to accreditation criteria (i.e., mandatory CACMS question)

Priority level B: Area of weakness or borderline area AND not explicitly linked to accreditation criteria (i.e., supplementary question)

Priority level C: Area of strength AND explicitly linked to accreditation criteria (i.e., mandatory CACMS question)

Priority level D: Area of strength AND not explicitly linked to accreditation criteria (i.e., supplementary question)

4.2 Student-Faculty-Administrative Relationships

OHPSA:
- Priority level C: Optimize key aspects of OHPSA, including accessibility.

Office of the Vice-Dean:
- Priority level C: Optimize key facets of the Office of the Vice-Dean, including student knowledge about the role of the Vice-Dean.

Faculty-Student Communications:
- Priority level D: Streamline opportunities for students to share feedback to minimize feedback fatigue, tailor communication to student preferences for receiving information from the MD Program, and make upcoming changes to the program more transparent.

4.3 Learning Environment

Mistreatment
- Priority level A: Establish a student-centric mistreatment portal that is easy to navigate.
- Priority level A: Revise mistreatment reporting/disclosure policies surrounding timing of report/disclosure following the incident to ensure timely but safe action to address mistreatment.
- Priority level A: Introduce a mistreatment disclosure banking system to identify global trends of mistreatment and professionalism amongst faculty.
- Priority level A: Introduce a mistreatment response centre with recruitment of trained non-instructional/evaluative counsellors and personnel.
- **Priority level A**: Introduce annual mistreatment e-learning modules to improve and reinforce awareness of mistreatment policies and reporting mechanisms.

**Diversity and Integration**
- **Priority level B**: Host a greater proportion of lectures from MAM with video-conferencing to the St. George campus to reach the goal of 20% of lectures originating from MAM.
- **Priority level B**: Ensure that extracurricular events and presentations held at the St. George campus are accessible to MAM students via videoconferencing.

**Accommodations, Feedback, and Academic Support**
- **Priority level B**: Review accommodations and personal day policies and determine if there is space for revision of these policies to be more in line with student needs. This should involve explicit clarifications of the appropriateness of accommodations/personal day and plans to disseminate policies amongst faculty to increase awareness.
- **Priority level B**: Conduct a review of the policies surrounding evaluations and feedback to students as they relate to student challenges. Consider the creation of a response system for students seeking clarification on challenging feedback, and introduce support systems for students who receive unfair or unjustified feedback with mechanisms for addressing them.
- **Priority level B**: Conduct a review of remediation policies in consideration of the areas of weakness with regards to academic support, and actively disseminate such policies to reduce ambiguity amongst students.

**Finances**
- **Priority level B**: Integrate the exploration of financial stressors into the resilience curriculum.
- **Priority level B**: Construct a focus group to examine how the bursary application process can be more equitable without considerations of parental income.
- **Priority level B**: Consider allocating funds for a new programmatic initiative to support MD students to attend/present at academic conferences.
- **Priority level B**: Explore opportunities to attract funding from alumni, philanthropic, or medical society sources to support such programs and eliminate barriers for students with demonstrated financial need.

**Student Wellness**
- **Priority level B**: Provide additional resources concerning the CaRMS process.
- **Priority level D**: Increase opportunities for access to student wellness services during key times of transition, especially at MAM.

**Mentorship**
- **Priority level D**: Implement interventions to improve awareness of established mentorship programs between students and both residents and faculty (with a focus on resident
mentorship at MAM), expand existing programs, and optimize current mentee-mentor relationships.

**Academic Support**
- **Priority level B**: In line with recommendations above, conduct a careful review of remediation policies and standardize such policies across pre-clerkship years and/or clerkship years.
- **Priority level B**: Promote active dissemination of such policies to ensure that there is no ambiguity concerning the consequences of failing assessments.

**4.4 Facilities**

**Adequacy of Space at Teaching Sites**
- **Priority level C**: Create a centralized platform of all available study spaces affiliated with the UoT MD Program for students to reserve study rooms in their respective campuses and academy affiliated health centres.
- **Priority level C**: Allow generalized access (ex. by badge) to all campus and hospital facilities affiliated with their academy for the duration of their studies.
- **Priority level C**: For study spaces or entrances that may be more remote or difficult to locate, have signs to help direct students.
- **Priority level C**: Inform students about safe walking programs already offered by UoT (ex. TravelSafer at St. George, WalkSafer at UTM).

**Travel**
- **Priority level C**: Relieve costs associated with travel outside the downtown core for curriculum events (ex. subsidize parking costs, offer taxi chits/discounted fares, expand existing travel support programs, etc.)

**Call Rooms**
- **Priority level C**: Improve the quality of call rooms (i.e. greater availability, proper cleaning, increased lighting, access to a phone, etc.)

**4.5 Library and Information Technology Resources**

**Library Resources**
- **Priority level C**: Augment library support and services (ex. standardizing services available for students from all years and campuses) and provide information sessions about library resources offered.

**Information Technology Services**
- **Priority level C**: Stronger emphasis on the use of the microphone system by lecturers and students at both campuses to ensure proper communication.
- **Priority level C**: Integrate various educational platforms (i.e. Elentra, MedSIS, OASES etc.) to improve usability and provide mobile accessibility for Learner Chart.
4.6 Student Services

Health and Personal Counselling
- **Priority level C**: Recruit counsellors who can more frequently or permanently provide health and personal counselling services at MAM. Increase the time availabilities offered to MAM students.
- **Priority level C**: Conduct more periodic assessments of student mental and personal health to inform the Faculty of the unique needs of students at the MAM and St. George campuses and guide the necessary changes.

Academic and Career Advising
- **Priority level C**: Provide earlier career counselling starting in first year; consider mandatory pairing of students with counsellors and the establishment of regular reviews.
- **Priority level C**: Improve accessibility of counselling in clerkship to all students by expanding office hours or providing mandatory time-off during rotations.
- **Priority level C**: Improve accessibility of counselling specifically to students at the Mississauga campus by increasing the number of days counsellors are physically available on-site and/or the number of counsellors available.
- **Priority level C**: Consolidate alumni data and perform appropriate analysis to improve OHPSA’s ability to provide more specific advice to individual applicants, including those interested in non-traditional or non-clinical careers.
- **Priority level C**: Organize additional in-person or virtual information sessions with Program Directors, staff physicians, and/or residents during clerkship and pre-clerkship.
- **Priority level C**: Organize information sessions to increase CaRMS transparency.

Financial Support
- Recommendations can be found above in the Finances section of Learning Environment.

Support for Clerkship and Electives
- **Priority level A**: Increase resources for Year 3 students prior to the time of booking electives and provide students with greater detail of information to support them in booking away electives.
- **Priority level A**: The Electives’ office should utilize various modalities of support and improve response times to better support students before and during the electives application process.
- **Priority level A**: The Faculty should provide greater transparency on the electives and match statistics from previous years.
- **Priority level B**: Offer greater financial support during the process of booking electives (ex. through bursaries).
- **Priority level B**: We recommend that UofT advocate for lower application costs. If not possible, we recommend for UofT to follow a model similar to the University of Calgary, whereby students can confirm electives with an elective coordinator before paying the AFMC fee.
4.7 Medical Education Program

Clerkship (Evaluations, Feedback, and Flexibility)

- **Priority level B**: Implement mandatory subspecialty rotations for certain rotations, such as Pediatrics and Internal Medicine, similar to the current structure of the Surgery rotation.

- **Priority level B**: Increase opportunities for exposure to a broad range of specialties in pre-clerkship training, through clinical placements (ex. Family Medicine Longitudinal Experience).

- **Priority level B**: Encourage more career exploration opportunities in pre-clerkship and clerkship (ex. through mentorship programs and shadowing).

- **Priority level B**: Expand the MSPR to include student selected comments from preceptors (ex. comments included in the end-of-rotation feedback forms).

- **Priority level B**: Explore the clerkship schedules and service to learning ratios at MAM versus St. George to better understand the lower rate of satisfaction with flexibility during clerkship at MAM.

- **Priority level B**: Use workshops to explore how to increase student flexibility during clerkship.

Clerkship Rotations:

- **Emergency Medicine**: Not identified.

- **Family Medicine**:  
  - **Priority level B**: Provide students with a standardized handbook to help students better prepare for the written exam.

- **Internal Medicine**:  
  - **Priority level B**: Provide students with a standardized study resource to make explicit the core content required for evaluations.  
  - **Priority level D**: Increase formalized teaching at MAM with the goal of matching the quality and quantity of formalized teaching at St. George.

- **OB/GYN**:  
  - **Priority level D**: Explore potential discrepancies in clinical experiences between students at the Mississauga and St. George campuses  
  - **Priority level D**: Ensure that staff at MAM provide mid-point feedback and observe students perform a history.

- **Pediatrics**: Not identified.

- **Psychiatry**:  
  - **Priority level D**: Re-evaluate the content of the written Psychiatry exam to ensure its fairness and appropriateness of questioning.

- **Surgery**:  
  - **Priority level B**: Ensure that faculty provide sufficient direction regarding learning objectives and learning resources.  
  - **Priority level D**: Further explore the discrepancies in clinical experiences between MAM and St. George and address these deficits.
○ **Priority level D**: Ensure evaluations are completed by preceptors who are responsible for supervising the student being evaluated and that this responsibility is not passed onto the Surgery site director or another preceptor.

- **Ophthalmology**:
  - **Priority level D**: Understand the significant differences in clerkship experience between MAM and St. George.

- **Otolaryngology**:
  - **Priority level D**: Explore significant discrepancies in clinical experiences between Mississauga and St. George campuses.
  - **Priority level B**: Focus on foundational Otolaryngology concepts that will be more broadly applicable to primary care settings and other specialties.

- **Anesthesiology**:
  - Not identified.

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**Pre-clerkship (Evaluations, Feedback, and Flexibility, Blocks and Components)**

- **Priority level C**: In line with previous recommendations, continue to increase lectures given from MAM towards the original goal of 20%.
- **Priority level C**: Schedule mandatory educational events in locations that minimize the length of commute required from MAM students.

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**Pre-clerkship Components**

- **Anatomy and Histology**:
  - **Priority level D**: Greater support in anatomy teaching and improve scheduling so that anatomy exams do not coincide with mastery exercises.

- **CanMEDS Themes**:
  - **Priority level D**: Use small group learning in lieu of large group sessions focusing on CanMEDS themes.

- **Case-Based Learning (CBL)**:
  - **Priority level D**: Use integrated summary lectures to ensure that important topics from CBL are summarized.

- **Enriching Educational Experiences (EEE)**:
  - **Priority level D**: Provide additional structure so students know who they are able to contact for EEE experiences.

- **Ethics and Professionalism**:
  - **Priority level D**: Move away from large group lectures to small group learning.

- **Health in Community (HC)**:
  - **Priority level B**: Offer more opportunities for students to choose their HC placements.
  - **Priority level B**: Establish clear goals and stringent time expectations for students and organizations.

- **Health Science Research (HSR)**:
  - **Priority level B**: More emphasis on the critical appraisal component of HSR.

- **Integrated Clinical Experience**: 

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Interprofessional Experience (IPE):
- **Priority level B**: Ensure discussions are solutions-oriented and productive and do not reinforce negative perceptions regarding any one profession.

Lectures:
- **Priority level D**: In line with previous recommendations, work towards the goal of 20% of lectures being hosted at MAM.

Portfolio:
- Not identified.

Resilience curriculum:
- **Priority level B**: Integrate the resilience curriculum into the overarching curriculum (ex. through Portfolio).

**Overall (exposures to clinical practice, overall evaluations and feedback)**
- **Priority level B**: Explore hosting summary sessions following mastery exercises to explain key and/or challenging concepts.

**MD/PhD**
- **Priority level B**: Offer opportunities for better integration (ex. PhD phase students allowed to complete MD program requirements and vice versa).
- **Priority level B**: Work with the Physician Scientist Training Program (PSTP) to reform/reinstate enriched CBL (eCBL) and create an exemption from/restructure HSR for MD/PhD students.
- **Priority level B**: Better facilitate the re-integration of students returning from PhD studies into their new MD class.
- **Priority level B**: Promote cooperation between Undergraduate Medical Education (UME), School of Graduate Studies (SGS), and PSTP administration and streamline resources and contacts for MD/PhD students.

**4.8 Opportunities for Research, Scholarly Activities, and Service-Learning**
- Refer to Pre-clerkship: Components for detailed recommendations around HC.
3.0 Methods and Data Analysis

The ISA was a process that took place from September 2018 (recruitment of ISA Leads) to July 2019 (publication of report and response to report). For clarity, we have divided our methods into five phases, representing the chronological order of steps we took to generate this report. We sought to remain fully transparent to all relevant stakeholders during the process of conducting the ISA. Finally, to uphold standards, we consistently referred to the *Guide to the Independent Student Analysis* document provided by CACMS\(^1\), as well as the *Accreditation Toolkit* developed by previous ISA leads\(^2\).

3.1 Phase 1: Team Recruitment
(October 2018 to November 2018)

The University of Toronto Medical Society conducted a recruitment campaign to encourage MD students to apply to be ISA leads and to serve on class-specific task forces. A recruitment Google Form was disseminated through email and Facebook.

Once applications were received, selection of ISA leads was conducted by anonymizing the applications and having the First-year, Second-year, and Medical Society (MedSoc) Presidents score applicant’s answers (relating to their motivations and role-specific skill-set). Appointments to each position were made primarily from aggregate scores, while also considering the unique perspectives and skills that each applicant brought to the team.

Selection of class-specific task forces differed among classes: the First-year and Second-year task forces were selected through the application process outlined above. The task forces for Third-year, Fourth-year, and MD/PhD classes were assembled by the respective class presidents.

3.2 Phase 2: Survey Development
(November 2018 to January 2019)

**Consulting Previous ISA Leads**

Prior to taking any initial steps in communicating with the ISA team, we communicated with five ISA leads from other schools to learn from their strengths and to improve on their areas of weakness. We kept these considerations in mind as we moved forward with the development of the survey, roll-out, analysis, and generation of the report.

**Social Media:**

We opened a Google Form to students across all four year to get a broader understanding of the main issues and concerns facing students-at-large. We kept these considerations in mind as we consulted with the ISA Task Force to develop the Mandatory and Supplementary Questions of the ISA.
**Survey Development:**
Feedback from prior ISA Leads, students-at-large, and the ISA Task Force were used to:

1. Cater the mandatory questions as outlined by the CACMS documents.
2. Guide the development of the supplementary questions to accurately reflect concerns brought forward by the medical student body.

In order to minimize the survey length, we assigned a cap of 10 supplementary questions per year. Overall, to generate the supplementary questions, various members of the student body were consulted, including the task force at large, student leadership, and the Medical Society.

Survey questions (both mandatory and supplementary) were developed and drafted iteratively through a collaborative Google Sheets spreadsheet. We continuously sought feedback from our team. Key to this process was consultation with our survey design expert, Jeffrey Cheung, to ensure that the survey questions were not leading, that they were presented in a logical order, and to advise our team on any survey considerations that we may have not previously considered.

Once the questions were finalized, with the help of Jennifer Holland in the MD Program office, we imported the survey to Qualtrics, an online survey sharing platform whose data is stored in secure Canadian servers. We piloted our survey to members of the ISA Task Force, as well as members of the Medical Society that were interested in providing feedback. We used the feedback gathered from the pilot to refine survey logic, improve user experience, and optimize questions.

**3.3 Phase 3: Survey Dissemination**
(November 2019 to March 2019)

Prior to survey dissemination we collaborated with members of the ISA Task Force, Office of Communications (University of Toronto, Faculty of Medicine), MD Program Leadership, and the Accreditation Officer to:

1. Identify survey completion dates most conducive to each respective year.
2. Develop social media and marketing content.
4. Establish protected curriculum time in MedSIS Calendars and locations for students to complete the survey.

After consulting with the team outlined above, these dates were determined to be most conducive for survey completion for each respective cohort:

- **Year 1:** February 25th, 2019
- **Year 2:** February 20th, 2019
- **Year 3:** February 21st, 2019
- **Year 4:** February 6th, 2019

**MD/PhD:** due to geographical constraints related to the nature of their schedules, the MD/PhD students mainly completed their surveys remotely.
In addition to these dates, students were able to complete the survey remotely using a custom link that they had been provided with. The survey was officially closed on March 12\textsuperscript{th} at 1:00 AM. We advertised the survey closing at March 11\textsuperscript{th} at 11:59 PM, so that individuals that started the survey late still had the opportunity to finish the survey and complete their responses. Multiple reminders were sent via Facebook and Qualtrics (directly to student emails) to each respective year between the date of initial survey dissemination and survey closure.

**Incentives**

In order to maximize response rates, we collaborated with Faculty to secure funding for incentives. These incentives took multiple forms. Firstly, we catered lunches and/or snacks with coffee/tea (depending on the time of day). Secondly, we had a monetary incentive for each student that completed the ISA. This took the form of either:

- A $10 gift card (Starbucks, Indigo, Tim Hortons, or Amazon) or a charitable donation to The Canadian Cancer Society, the charity historically and currently supported by the University of Toronto’s MD Program’s Daffydil The Musical. We collaborated with Daffydil 2019 Producers Stephanie Hosang and Mana Modares for this mutually beneficial partnership.
- An opportunity to be entered into a prize draw for one of five Amazon gift cards worth up to $300 in value, depending on overall student participation in the ISA survey (up to 79% participation: $100, 80-89%: $150, over 90%: $300).

Additionally, all survey respondents were automatically entered into a draw to win one of 20 *Toronto Notes 2019* textbooks. We collaborated with Toronto Notes 2020 Editors-in-Chiefs Sara Mirali and Ayesh Seneviratne in order to promote this mutually beneficial partnership.

To maximize response rates, students who wrote the survey during dedicated MedSIS times were entered into the draws twice. MD/PhD students that wrote the survey within the first week (who did not have a dedicated MedSIS time/catered event) were also entered into the surveys twice.

**Efforts to maximize student knowledge of the ISA**

Simultaneous to survey development and its dissemination, we undertook efforts in order to maximize student knowledge of U of T Medicine’s upcoming accreditation process, the role of the ISA, the importance of accreditation, and the importance of maximizing a response rate for the survey. In collaboration with Erin Howe, who spearheads the coordination of social media for the MD Program, our task force, and MD Program leadership, these efforts included the following:

- On November 7, 2018, via Listserv email lists, we sent out emails to the entire student body describing the ISA’s role in accreditation, and letting students that they will have the opportunity to write it in the coming months.
On January 10, 2019, ISA Year 2 Co-lead Spandana Amarthaluru was featured on Faces of U of T Medicine as well: [https://md.utoronto.ca/news/faces-u-t-medicine- spandana-amarthaluru](https://md.utoronto.ca/news/faces-u-t-medicine-spandana-amarthaluru).

On February 5, 2019, through the Registrar email, we sent out another email to the entire student body, indicating what the ISA was, focusing on the fact that students will have dedicated times and events in their MedSIS calendars to write the survey.

Simultaneously with the above, we inputted announcements into the online MedEd platform (Elentra) that students use to access course materials, and we made posts on social media (Facebook & Twitter) about the ISA's incoming rollout. This email also included links to a YouTube video made about the ISA that was uploaded on January 29, 2019 ([https://www.youtube.com/watch?v=UiEoJEAYv6E](https://www.youtube.com/watch?v=UiEoJEAYv6E)) and links to U of T MD Website pages about the ISA and accreditation ([uoft.me/medcred](https://uoft.me/medcred) & [uoft.me/MDISA](https://uoft.me/MDISA)), which were made live on January 22, 2019.

During each of the catered events, ISA year leads delivered brief remarks about the ISA.

Once the survey was live, we made repeated posts on our Facebook groups, and sent email reminders for students to complete the survey.

### 3.4 Phase 4: Data Analysis
(March 2019 to April 2019)

The majority of survey question responses were analyzed using descriptive statistics, namely count data (ex. number of students who reported “Yes” or “No”). To determine the response rate data for each of the years, we compiled students’ self-reported Year of Study (Year 1, 2, 3, 4/4+) and status as a MD-PhD student currently in their PhD portion of their training. These data were compared with total student enrolment data for each of these categories that was provided by the Office of the Vice Dean of Medical Education. For the purposes of the response rate, students in any Year of Study beyond year 4 were included in the 4/4+ category, and MD-PhD students currently completing the MD program portion of their training were included in their self-reported Year of Study. For all subsequent data analyses, responses from students currently completing their PhD portion of their studies were included in the Year of Study they reported as being their most recent.

For questions gauging student Agreement/Satisfaction or Yes/No, count data were reported in data tables and stratified by Campus (Aggregate of St. George and MAM) and Year of Study. As per CACMS ISA recommendations[^1][^2], each of these survey questions were categorized as either an:

1. Area of strength (≥ 70% “agree” / “satisfied” or “strongly agree” / “very satisfied” or “yes”)
2. Borderline area (60-70% “agree” / “satisfied” or “strongly agree” / “very satisfied” or “yes”)
3. Area of improvement (≤ 60% “agree” / “satisfied” or “strongly agree” / “very satisfied” or “yes”)

[^1]: CACMS ISA recommendations
[^2]: CACMS ISA recommendations
Further, also as per CACMS ISA recommendations, differences greater than 10% between the year of study and campuses were determined as significant, and flagged for further discussion.

For questions that asked participants to rank a series of options by preference from 1 to X (with 1 being most preferred, X being least preferred), we calculated a score for each of the options by using a weighted-rank score. For example, if a survey question had 6 possible options to rank, the most preferred option with a rating of 1 would be given a score of 6, whereas the least preferred option with a ranking a 6 would receive a score of 1. Hence, options given a higher preference would be given a higher score than those with lower preference. We summated the total scores from all student responds to create the total weight-rank score of the item (the higher the score the more preferred) and visually represented the data using a bar graph.

In addition to descriptive analyses, the ISA team established a set of a priori group comparisons. These comparisons were based upon student stakeholder input and were used to avoid statistical challenges issues from conducting multiple comparisons (ex. type 1 family-wise error). A meeting was set up in early March to discuss a priori hypotheses, initiate data analysis, and further analyze differences between previously identified groups as outlined here:

1) Differences between all 4 academies as it pertains to:
   a) Learning environment
   b) Facilities
   c) Student services
   d) Medical education program
   e) Opportunities for research

2) Differences between St. George and MAM specifically as it pertains to:
   a) Student-faculty-admin relationships
   b) Learning environment
   c) Library and information technology resources
   d) Student services
   e) Medical education program
   f) Opportunities for research

3) Differences between gender as it pertains to:
   a) Learning environment
   b) Student services

4) Differences between pre-clerkship and clerkship as it pertains to:
   a) Student-faculty-admin relationships
   b) Learning environment
   c) Student services

We used Analysis of Variance (ANOVA) to assess for statistical differences in the comparisons and further used partial eta-squared to determine effect size. Given the relatively large sample size for each comparison, we were likely to detect significant group differences, and thus focused instead on effect size to gauge the practical importance of these differences.
We chose to conduct post-hoc tests for comparisons with a partial eta-squared value ≥0.1, which denoted a medium-large effect size (10% of variance explained by the comparator variable, i.e. “Year of Study”) and used an alpha $\alpha = 0.01$ for all comparisons.

Finally, we used narrative comments to complement all quantitative analyses. Pairs of student leaders were assigned to review data tables and analyses for different subsections of the survey, including narrative comments. Pairs were instructed to use their judgement in summarizing the narrative comments and work to establish consensus of the overarching themes that emerged from the data.

**3.5 Phase 5: Report Generation**  
(April 2019 to July 2019)

Following the completion of our data analysis, we generated summarized data tables for every question. We distributed the instructions for analysis to our team and distributed the write-up of the report amongst the members of the ISA team in accordance with these instructions.

Data analysis was conducted in accordance with the guidelines that we had established *a priori*, using predetermined cutoffs to determine if an area was an area of strength, borderline area, or an area of weakness. We consulted the narrative comments when possible to corroborate this information and to provide maximal scope of the issue.

In generating recommendations for each area, we consulted various sources, including the previous ISA report, the literature, and self-identified student experts in each area. In some areas, we noted that even though our quantitative data indicated that it was an area of strength, qualitative data in the form of narrative comments indicated notable areas of improvement. Cognizant that accreditation may act as a continual quality improvement process, we sought to recommend suggestions for improvement even for those areas that were seen as strengths, where appropriate. However, because resources in the form of manpower, time, and finances are limited, we have also generated a priority system that should be considered when examining the recommendations. The priority system was generated as follows:

**Priority level A:** Area of weakness or borderline area AND explicitly linked to accreditation criteria (i.e., mandatory question)

**Priority level B:** Area of weakness or borderline area AND not explicitly linked to accreditation criteria (i.e., supplementary question)

**Priority level C:** Area of strength AND explicitly linked to accreditation criteria (i.e., mandatory question)

**Priority level D:** Area of strength AND not explicitly linked to accreditation criteria (i.e., supplementary question)
Throughout the process of report generation, we went through an iterative process where we consulted year leads, the ISA task force as a whole, self-identified student experts, and student leadership to ensure that our recommendations reflected student wishes.

3.6 Transparency
We sought to remain entirely transparent with all stakeholders along each step of the way. Our efforts in transparency involved:

- We worked with U of T’s Accreditation Officer to develop a number of webpages including all relevant information about our school’s accreditation ([https://md.utoronto.ca/ md-program-accreditation](https://md.utoronto.ca/ md-program-accreditation)), including information about the Independent Student Analysis ([https://md.utoronto.ca/independent-student-analysis-isa](https://md.utoronto.ca/independent-student-analysis-isa)) as well.
- Although the ISA is a student-driven process, to maintain transparency, we voluntarily consulted with MD Program leadership about any additional supplementary questions that they want to include or poll the students about. We considered these opinions in the generation of supplementary questions, and the student task force had the final say on the questions that were asked in the final survey.
- We voluntarily provided the Accreditation Officer and MD Program leadership frequent updates of our progress on the ISA.
- This final report, along with the associated final survey and data tables, will be publicly available to Faculty, students, trainees, and any member of the public that wishes to read it. We hope that other schools will follow suit.
4.0 Results

**Interpretation Note:** As mentioned in the methods section, the ISA survey included both mandatory questions, as mandated by CACMS, as well as supplementary questions that were deemed appropriate and important by the student body. Mandatory questions are marked with Q and Supplementary questions are marked with S.

4.1 Response Rates

**Demographics and Summary**

The ISA survey link was distributed to all current U of T medical students (1080 total), and 942 students completed the entirety of the survey, resulting in an 87.2% survey completion rate. Over 90% of students began and completed some portion of the survey, but we only included full response rates in our analysis.

Full response rates stratified by academy, year, & gender are displayed below in Tables 4 & 5.

**Table 4.** Distribution of ISA survey response rates by academy and year

<table>
<thead>
<tr>
<th>Academy</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4/4+</th>
<th>PhD</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mississauga Academy of Medicine</td>
<td>54/56 (96.4%)</td>
<td>48/54 (88.9%)</td>
<td>46/54 (85.2%)</td>
<td>48/56 (85.7%)</td>
<td>0/0 (0%)</td>
<td>196/220 (89.1%)</td>
</tr>
<tr>
<td>Peters-Boyd</td>
<td>59/60 (98.3%)</td>
<td>56/60 (93.3%)</td>
<td>47/59 (79.7%)</td>
<td>50/57 (87.8%)</td>
<td>4/8 (50.0%)</td>
<td>216/244 (88.5%)</td>
</tr>
<tr>
<td>Wightman Berris</td>
<td>86/95 (90.5%)</td>
<td>77/88 (87.5%)</td>
<td>71/92 (77.2%)</td>
<td>73/89 (82.0%)</td>
<td>20/22 (90.9%)</td>
<td>327/386 (84.7%)</td>
</tr>
<tr>
<td>FitzGerald</td>
<td>51/56 (91.1%)</td>
<td>51/55 (92.7%)</td>
<td>43/57 (75.4%)</td>
<td>51/54 (94.4%)</td>
<td>7/8 (87.5%)</td>
<td>203/230 (88.3%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>250/267 (93.6%)</td>
<td>232/257 (90.3%)</td>
<td>207/262 (79.0%)</td>
<td>222/256 (86.7%)</td>
<td>31/38 (81.6%)</td>
<td>942/1080 (87.2%)</td>
</tr>
</tbody>
</table>
Table 5. Distribution of ISA survey response rates by academy and gender

<table>
<thead>
<tr>
<th>Academy</th>
<th>Male</th>
<th>Female</th>
<th>Do not wish to specify</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mississauga Academy of Medicine</td>
<td>84/102 (82.3%)</td>
<td>111/117 (94.8%)</td>
<td>1</td>
<td>196/220 (89.1%)</td>
</tr>
<tr>
<td>Peters-Boyd</td>
<td>87/96 (90.6%)</td>
<td>129/146 (88.4%)</td>
<td>2</td>
<td>216/244 (88.5%)</td>
</tr>
<tr>
<td>Wightman Berris</td>
<td>152/192 (79.2%)</td>
<td>173/189 (91.5%)</td>
<td>5</td>
<td>327/386 (84.7%)</td>
</tr>
<tr>
<td>FitzGerald</td>
<td>84/94 (89.3%)</td>
<td>118/136 (86.8%)</td>
<td>0</td>
<td>203/230 (88.3%)</td>
</tr>
<tr>
<td>Total</td>
<td>407/484 (84.1%)</td>
<td>531/588 (90.3%)</td>
<td>8</td>
<td>942/1080 (87.2%)</td>
</tr>
</tbody>
</table>
4.2 Student-Faculty-Administrative Relationships

Subheadings
OHPSA: Q1, Q2, Q3
Vice-Dean: Q4, Q5, Q6
Faculty-Student Communications: S1, S2, S3, S4, S5

Areas of Strength
- OHPSA
  - [Q1]: 91.9% of students agreed or strongly agreed that OHPSA was accessible.
  - [Q2]: 91.1% were satisfied or very satisfied with the responsiveness of OHPSA to student concerns.
  - [Q3]: 89.6% of students agreed or strongly agreed that there was adequate inclusion of students on key working groups related to OHPSA.
- Vice-Dean
  - Note: The majority of students did not express an opinion on either accessibility (64.8%) or responsiveness (59.3%).
  - [Q4]: Overall, 83.1% of students were satisfied or very satisfied with the accessibility of the Office of the Vice Dean.
  - [Q5]: 82.5% of students were satisfied or very satisfied with the responsiveness of the Office of the Vice Dean.
  - [Q6]: Among those who expressed an opinion (44.1%), 86.3% of students were satisfied with the consultation or inclusion of students on key medical school committees and working groups.
- Faculty-Student Communications (S4 in discussion as not applicable)
  - [S3]: 84.7% of students found that the amount of information they receive about the MD program (ex. goals, objectives, schedules, roles and responsibilities, current issues) was sufficient.
  - [S5]: 73.6% of students overall were satisfied or very satisfied with the MD program’s transparency around informing students about current or upcoming changes to the programs.

Borderline Areas
- Not identified

Areas of Improvement
- Faculty-Student Communications (S4 in discussion, as not applicable)
  - [S1]: 43.5% of students thought there were too many requests to share their opinion.

Discussion and Recommendations

4.2.1 OHPSA
Overall, OHPSA was perceived well by students in terms of its accessibility, responsiveness to student concerns, and inclusion of students on key working groups. It is certainly an area of strength at the University of Toronto Faculty of Medicine and should be celebrated. However, differences brought to light in the narrative comments between years and campus sites are important to address and further investigate.

**OHPSA Accessibility to Students:** The majority of students (91.9%) felt that OHPSA was accessible to any questions or concerns that they had. This satisfaction was similar across all years of students but quite disparate between campus locations. While not a significant difference (i.e., not greater than our *a priori* 10% threshold for significance) only 86.7% of MAM students across all years felt that OHPSA was accessible in comparison to 93.4% of St. George students, who responded similarly. This discrepancy is largely due to first- and second-year students at MAM: 25% of first-year MAM students felt that OHPSA was not accessible to them, and this was the case for 16.7% of second-year MAM students.

We propose several hypotheses to explain the trends observed in the results. First, there may be limited access to resources for counselling and career support offered at the Mississauga Campus, in comparison to those services offered at St. George. The OHPSA website does not clearly distinguish between resources that are offered at both MAM and St. George campuses, with the website appearing to be targeted toward students placed at downtown academies. Moreover, for resources that are not offered full-time at MAM by OHPSA, it could be challenging for students to commute downtown within the working hours of the office. Narrative comments identified that the most significant barrier to accessing OHPSA was the limited hours of service. At both MAM and St. George, OHPSA is open only from 9:00 am until 5:00 pm. This hypothesis is supported by comments such as, “[OHPSA] is not accessible. 9-5 working hours are not sufficient for student in class/clinic during those exact hours. Asking us to miss clinical duties to access services is not appropriate. The few times I have booked evening appointments with them, they have cancelled within 48 hours of the appointment. This entire office needs to be restructured,” and “OHPSA hours are VERY limited, and make accessibility nearly impossible during clerkship. I would love to see more evening hours offered, as well as options for phone/Skype if needed.” Some other comments include, “The MD program advertises availability of OHPSA counsellors. However, in practice, it is quite challenging to book an appointment with a counsellor because there is such a high demand (in part due to increase in advertising of these resources over the past few years). As a result, it is becoming more challenging to book appointments, and I personally have often felt unsupported in this regard (as have my peers).” Such comments warrant the review of the availability of OHPSA resource and their division between campuses.

**Responsiveness of OHPSA:** The majority of students (91.1%) felt that OHPSA was responsive to the professional, personal, and academic concerns of students. There were no significant differences in satisfaction across campus locations (91.4% at St. George versus 90.3% at MAM) or between class years. However, it is worth mentioning that fourth-year students at both academies had the lowest satisfaction rates regarding the responsiveness of OHPSA.
Specifically, 86.7% of fourth-year students at MAM and 86.8% of fourth-year students at St. George feel as though OHPSA is responsive to their concerns.

One hypothesis that may explain the relative dissatisfaction of fourth-year medical students with OHPSA is that there are challenges in responding to the academic, personal, and professional stressors that are associated with matching and transitioning into residency. This hypothesis is corroborated by narrative comments from students including, “OHPSA has been very unhelpful. One of my appointments with them was very confrontational and I left very discouraged[...].” Some students complain of receiving little guidance or support regarding the match process with messages of “You need to accept that going unmatched is part of the process. We will help you when you go unmatched” and “OHPSA career counselling has not been overly helpful in terms of suggestions for electives or reassurance that I am on the right track career wise. The Electives’ office often did not respond to my emails in a timely manner and I had to email numerous time to get an answer.” While recognizing that 91.1% of students overall are satisfied with OHPSA, these comments may warrant the additional auditing of counselling practices within OHPSA and the allocation of more resources to support the emotional, psychological, and professional concerns of students.

Inclusivity of OHPSA: The majority of students (89.6%) felt as though OHPSA conducted adequate consultation and inclusion of students on key medical committees and working groups. While not a significant difference (i.e., a priori 10%), it is worth noting that there was a difference between MAM (84.0%) and St. George (91.2%) students with regard to the satisfaction of consultation and inclusion of students in key medical committees. It may be worthwhile to examine if MAM is being sufficiently included in consultations regarding OHPSA.

Recommendations for OHPSA:

- **Priority level C**: Increasing accessibility and equitability of OHPSA
  - Increasing evening hours for counselling services, as well as offering mixed-method counselling (in-person and electronic) to improve access. Moreover, the times when OHPSA is most utilized throughout the year can be analyzed to inform where and when the hours should be increased to best meet student needs.

- **Priority level C**: Increasing responsiveness and inclusion of students
  - Creating a committee comprised of key stakeholders, including MAM and St. George students, as well as pertinent members of OHPSA to review the current services offered, the barriers to accessing them, and comprehensive strategies to overcome the identified barriers. It would be valuable to ensure that there is sufficient MAM and fourth-year student representation to respond to the discrepancies that exist amongst these groups.

4.2.2 Office of the Vice-Dean

Overall, students were satisfied with the accessibility and responsiveness of the Office of the Vice Dean, we well as the inclusion of students on key issues. However, a close examination of the data revealed some areas of improvement. Several narrative comments indicated uncertainty
Regarding the role of the Vice Dean. This may have contributed to the majority of students not expressing an opinion on the accessibility/responsiveness of the Vice Dean (64.8% across all four years and at both campuses).

Interestingly, students in Year 2 rated the accessibility and responsiveness of the Office of the Vice Dean less favourably than their peers in other years. The percentage of Year 2 students who were very dissatisfied or dissatisfied with the accessibility and responsiveness (25.3%) was significantly higher than their peers in Year 3 (9.9%) and Year 4 (15.1%), and non-significantly higher than their peers in Year 1 (16.4%). This trend is difficult to explain. The current Year 2 class is the second cohort to experience the new Foundations curriculum and so may not have anticipated the changes made to the curriculum since its first iteration during the prior year. Some individuals described specific instances in the narrative comments which may shed further light on this discrepancy. In particular, these comments indicated that the Office of the Vice Dean “seemed hostile to change [in response to] feedback” and “appeared to dismiss our request [regarding starting a new initiative in the MD Program].”

The amount of pre-clerkship (Year 1 and 2) students at MAM who were satisfied or very satisfied with the consultation or inclusion of students in these committees was 15% lower than their peers in pre-clerkship at St. George. This must be interpreted carefully, given the low absolute number of responses. However, it may be helpful to offer MAM students greater opportunities for inclusion. MAM students may feel that working groups and committees are inaccessible to them due to location or the lack of targeted recruitment to such committees reaching the MAM campus. Furthermore, they may not fully appreciate the impact of these committees as their agendas may be more so focused on policies regarding the St. George campus.

Recommendations for the Office of the Vice-Dean:

- **Priority level C:** Clarifying the role of the Vice-Dean
  - We recommend that during orientation week and another occasion early in the year that the Vice Dean offers a description of their role and discusses potential comments which would be appropriate to discuss with her office. This may further clarify her roles and responsibilities to students.

- **Priority level C:** Increasing accessibility and responsiveness of The Office of the Vice-Dean
  - The Office of the Vice Dean may offer opportunities for small-group meetings with a variety of students (ex. through “Meet and Greet” lunches, year and academy-specific forums on curriculum changes, facilitating focus groups with students etc.) throughout the academic year.

- **Priority level C:** Student Consultation and Inclusion in Committees and Working Groups
  - MD Program working groups and committees should make efforts to include MAM students at their tables. Reserving a place for MAM students, making phoning into meetings more accessible, and advertising opportunities to participate in these committees more widely may help remedy MAM students’ concerns.
The minutes, discussions, and results of working groups and committees should be shared broadly with students at both campuses to ensure students were consulted adequately and to give students an assurance of the value of these groups to their experiences in the program.

4.2.3 Faculty-Student Communications

Students Sharing Feedback with Faculty: A significant portion of students (43.5%) felt that there were “too many” requests to share their opinion, indicating that the amount of evaluations are potentially overwhelming for a portion of students. This effect is amplified throughout the years with a 17.5% increase in fourth-year students answering with “Too many requests to share my opinions” compared to first-year students. Looking to MedSIS in year one, students are required to complete end-of-term course evaluations (three total), weekly evaluations for lectures and workshops, and evaluations for individual anatomy teaching assistants, ICE: Health in Community instructors, and CBL tutors (which can change weekly). While this system may allow for the gathering of specific feedback on numerous components of the curriculum and those responsible for delivering them, the large number of requests for feedback may create burnout minimizing the effectiveness, quality, and volume of feedback received.

The weighted sum for students’ preference for sharing feedback with the MD program indicates that diverse venues for feedback should be encouraged and maintained in order to create an accurate depiction of student needs (Figure 1). The single highest option selected for sharing feedback was “Informally in person”, followed by “MedSIS evaluation forms” and “Official Surveys distributed by the MD program” which illustrates the need for both formal and informal processes.
Student preferences for sharing feedback with the MD program from all 942 survey participants. Values represented a weighted rank score of student preferences with higher values representing the more preferred method.

Receiving information: There is excellent feedback regarding the amount of information students are receiving about the MD program, with consistently high scores across all years and campuses. It would be effective for the MD program to continue and encourage their current efforts to inform students on the goals, objectives, schedules, roles and responsibilities, and current issues of the program.

The preferred methods of receiving information from the MD Program included mass e-mail and class announcements, with social media following closely behind (Figure 2). The MD program should consider these preferences moving forward.
Figure 2. Student preferences for receiving information from the MD program from all 942 survey participants. Values represented a weighted rank score of student preferences with higher values representing the more preferred method.

Transparency of changes to the program: Although the transparency of upcoming changes to the program, as a whole, was noted as an area of strength (73.6% of students were satisfied or very satisfied), it is worth noting that significant differences exist between years and campuses, the most notable of these being noted in pre-clerkship students and those students at MAM. Specifically, at MAM, a significantly greater proportion of pre-clerkship students were very dissatisfied or dissatisfied with transparency of changes to the program (Year 1: 48.1% and Year 2: 31.1%) compared to clerkship students (Year 3: 17.4% and Year 4: 29.2%). At the St. George campus, a significantly greater proportion of first-, second- and third-year were very dissatisfied or dissatisfied with transparency (26.5%, 31.1% and 25.5% respectively) compared to fourth-year students (14.4%).

While it is difficult to pinpoint the cause of this trend, there are some insights provided in the narrative comments in terms of changes to the program that students do not feel were adequately communicated. Firstly, the cancellation of the longitudinal integrated clerkship program (LInC) was mentioned on multiple occasions with narrative comments such as “I felt that the change to LInC program was very abrupt and did not leave students with sufficient time to plan” and “[I am] dissatisfied with transparency due to failure to include students in discussion regarding stopping LInC.” Several comments indicated that students were interested in the program and felt they were uninformed regarding the program’s cancellation and the reasons behind it. This may account for some of the dissatisfaction among third-year students at St. George.

Secondly, changes to the University of Toronto financial aid program (UTAPS) and the Faculty of Medicine grant system were indicated as being inadequately communicated. In particular, comments say that the faculty “did not communicate changes to the UTAPS/grant funding [system] well” and “there was no transparency with respect to how funding was allocated and
distributed.” Multiple comments mentioned dissatisfaction regarding the unexpected inclusion of parent’s financial information and the lack of communication regarding this change. In particular, several students noted that they received substantially less funding as a result of the change without adequate notice to prepare accordingly. As this change disproportionately affects students early in the program, this may explain some of the dissatisfaction with transparency particularly among second year students.

Thirdly, several students express concerns regarding “transparency of expectations”, grading, and standard setting. In some comments, students mention that there is a lack of “transparency regarding the next steps when students fail an exam, course, etc. [which] tends to be an area of great uncertainty and contributes to intense stress” and “that the faculty should make the policies on remediation and processes for students unable to meet academic standards more transparent” as they are unclear of the policies and procedures surrounding this topic. Within this area, students expressed concerns about “the lack of feedback [regarding] Mastery Exercises” and the fact that several solutions were proposed with some indication of acceptance by the faculty (such as releasing explanations for poorly answered questions), but were not implemented. Students also expressed concern regarding the different academic standards between pre-clerkship and clerkship with one comment noting “in pre-clerkship [...] a failure results in redoing an exam, while in clerkship the stakes are much higher.” Given the significant changes in the Foundations curriculum over the last three years regarding examinations, setting of the passing grades, and the evaluation processes—and the rumours and speculations surrounding these changes which students are aware of based on interactions with upper year students—the lack of transparency in this area may play a significant role in the dissatisfaction of Years 1 & 2.

To improve transparency, it is important that students are adequately informed as early is possible in the process regarding changes. Students should be consulted where applicable and notified in a timely manner through multiple methods. One comment notes that notification of changes feels “reactive and [...] very last minute with very minimal reaction time [available].” The faculty should provide advanced notice to students regarding changes wherever possible in order to allow students time to adequately plan and prepare for upcoming changes as needed. Furthermore, an explanation regarding the reason for particular changes (ex. with regards to academic standards) wherever possible, would be valuable in ensuring students are fully informed and that processes are viewed as transparent. In some cases, the information regarding changes and policies already exists, however it is poorly presented to students. It would be valuable to standardize the process of informing students about changes and to dedicate a specific location (ex. on the MD program website, Elentra or MedSIS) where documentation regarding changes can consistently be found. Finally, it is important to ensure staff and faculty members are equally informed of changes to avoid confusion and conflicting sources of information.

Recommendations for Faculty-Student Communications:

- **Priority level D:** Opportunities for students to share feedback:
  - It is recommended that the MD program work to streamline or consolidate the venues to share student opinions to minimize feedback fatigue.
- **Priority level D: Receiving information from the MD Program:**
  - The MD program should continue their current efforts to inform students and offer them opportunities to engage and ask questions (ex. through town halls, such as Foundations Forum) in advance of changes.
  - The MD Program should continue to consider student preferences for receiving information.
- **Priority level D: Transparency of changes to the program:**
  - The MD Program should prioritize earlier and clearer communication with the student body with regard to large-scale changes (ex. changes to LinC and financial grants system).
  - The MD Program should provide reasoning behind programmatic changes whenever possible.
  - The MD Program should provide notice of changes to students by multiple methods and provide a record of such changes and updated policies/procedures in a consolidated location.
4.3 Learning Environment

Subheadings
Mistreatment: Q7, Q8, S6, Q9, S7
Learning environment: Q10, Q11, S8
Diversity and Integration: S9, S10, S11, S12, S13, S14, S15, S16
Accommodations/Feedback/Academic support: S17, S18, S19, S20
Finances: S21, S22, S26, S27
Student Wellness: S23, S24, S25
Mentorship: S28, S29

Areas of Strength:
- Mistreatment
  - [Q7]: 89.7% of students were aware that the University of Toronto MD Program has policies on the mistreatment of medical students.
- Learning Environment
  - [Q10]: 94.0% of students agreed or strongly agreed that the University of Toronto MD program and all its affiliated training sites/hospitals fostered a learning environment in which all individuals are treated with respect.
  - [Q11]: 95.4% of students felt that learning environments were conducive to their learning and professional development.
  - [S8]: 94.7% of students were satisfied with the quality of their overall learning experience in medical school.
- Diversity
  - [S9]: 79.1% of students agreed or strongly agreed that their respective medical school class was suitably diverse in terms of ethnicity.
  - [S10]: 98.2% agreed or strongly agreed that there was suitable diversity in terms of gender.
  - [S11]: 91.6% agreed or strongly agreed that there was suitable diversity in terms of religious background.
  - [S13]: 70.7% agreed or strongly agreed that there was suitable diversity in terms of educational background.
  - [S14]: 78% agreed or strongly agreed that there was suitable diversity in terms of age.
  - [S15]: 88.7% agreed or strongly agreed that the MD program has made adequate efforts to address commitment to diversity and inclusion.
- Academic Support
  - [S19]: 76.5% of students felt that processes in place for students who were unable to meet academic standards and cut-offs were efficient, effective, and supportive.
- Student Wellness
  - [S23]: 73.8% of students disagreed or strongly disagreed with experiencing excessive and/or debilitating stress balancing medical education with personal life.
With respect to student wellness, 88.2% of students agreed or strongly agreed that the stress of medical school is manageable.

- Mentorship
  - 79.5% of medical students agreed or strongly agreed that mentorship by faculty members at hospital sites affiliated with their campus was adequate.
  - 71.9% agreed or strongly agreed that mentorship by residents at hospital sites affiliated with their campus was adequate.

Borderline Areas:
- Accommodations, Feedback, and Academic Support
  - 61.7% of students felt comfortable seeking clarification or challenging feedback received from faculty on evaluations.

- Finances
  - 33.5% of students reported that their concerns about covering the costs of education (ex. tuition, books, living expenses, etc.) had a negative impact on their performance and ability to participate in medical school activities.

Areas of Improvement:
- Mistreatment
  - 59.0% of students knew how to report mistreatment.
  - 41.1% of students either strongly disagreed or disagreed with feeling comfortable reporting mistreatment.
  - 14.9% of students reported personally experiencing mistreatment during their training. Of the students who experienced mistreatment, the most commonly reported forms of mistreatment included being publicly humiliated (48.6%), being subject to offensive, sexist remarks/names (37%), racially or ethnically offensive remarks/names (20%). From narrative comments, medical students identified four key issues surrounding mistreatment at the University of Toronto Faculty of Medicine:
    1. Accessibility of student mistreatment reporting systems;
    2. Definitions of student mistreatment and how to address ‘grey-area’ incidents;
    3. Repercussions faced by students reporting mistreatment; and
    4. Effectiveness of the mistreatment reporting process.

- Diversity (S12, S16)
  - 43.9% of students agreed or strongly agreed that their respective class was suitably diverse in terms of socioeconomic status (SES).
  - 57.0% of students agreed or strongly agreed that there was adequate integration across the St. George and MAM campuses

- Accommodations, Feedback, and Academic Support (S17, S20)
  - 57.7% of students felt comfortable taking personal days and/or asking for accommodations as needed to preserve their health and wellness or for other important reasons.
○ [S20]: 59.4% of students felt that there is transparency from the MD Program with regard to procedures in the event that students are unable to meet academic standards.

● Finances (S21, S26, S27)
  ○ [S21]: 69.1% of students found their cost of education, including tuition, books, and living expenses, to be unaffordable.
  ○ [S26]: 52.8% of students reported that costs associated with attending and/or presenting at an academic conference have deterred them from their attendance at the conference.
  ○ [S27]: 82.3% of students were unable to secure funding to attend and/or present at academic conferences from the MD program.

● Student Wellness (S25)
  ○ [S25]: 51.2% of students reported that the stress and/or anxiety experienced regarding not matching for residency (to the discipline of choice and/or in general) affects them negatively on a regular basis.

Discussion and Recommendations

4.3.1 Mistreatment and Learning Environment

While the focus of this discussion will be on areas of improvement and recommendations for changes, it is important to note the positive student perceptions of the University of Toronto Faculty of Medicine learning environment. Well over 90% of the student population felt that they were in a learning environment that treated them with respect and fostered learning and professional development, and were satisfied with the quality of their overall learning experience. We also recognize that the Faculty of Medicine is committed to maintaining this positive academic atmosphere through ongoing initiatives including the formation of the Optimizing our Learning Environment Working Group to address learning environment challenges in pre-clerkship and clinical teaching settings.

Within this landscape there are a few areas of concern, most notably, our data reflecting the lived experiences of students who have experienced mistreatment. An unacceptably large proportion of the medical school student body had experienced some form of mistreatment (140/942 students). Mistreatment was commonly experienced in the form of public humiliation (68/140 counts), sexist remarks (52/140), and racially or ethnically offensive remarks (28/140).

Overall, fourth year students experienced significantly more mistreatment (33.3% compared to the student body average of 14.9%). It is difficult to determine whether this finding is a result of the fourth year clinical environment being one where students are more susceptible to mistreatment, or a time-related effect, where it is possible that the longer students spend in medical school, the more likely they may be to experience mistreatment. This latter explanation may be supported by the general trend that mistreatment counts appear to increase non-linearly with progression through medical school (Year 1: 4.8%, Year: 8.2%, Year 3: 15.9%, and Year 4: 33.3%).
We observed statistically significant differences in the incidence of mistreatment when we compared student responses from each campus. We found that more fourth year students at MAM have experienced mistreatment than those at St. George (45.8% vs 29.9%). There were no statistically significant differences in mistreatment counts within each of the other three medical school classes, suggesting that overall mistreatment incidences at MAM may be largely attributable to student experiences during their fourth year of medical school or specific to the 2019 class.

From the narrative responses, we propose two hypotheses to explain these trends here. First, it is possible that some preceptors at MAM are less interested in teaching medical students and that this might be associated with greater student mistreatment in clerkship. This is supported by a quote of a preceptor from a student’s narrative comment: “We [clinical instructors] came out to the community so we could avoid you students […] it's not to say you're not welcomed here.” To address this hypothesis, a careful review of instructor evaluations at MAM is warranted. Second, it is possible that there may be differential treatment of MAM students by clinicians in Toronto compared to St. George students. One comment that suggests this is: “I have been discriminated by downtown Toronto staff for being a Mississauga student […] I would introduce myself as a UoT medical student but my preceptor would specifically say, ‘she is from the Mississauga site, who knew where that was […] Some of my preceptor[s] were even surprised by how much I know and said ‘oh they teach you that in Mississauga.'” Such comments warrant review of teaching evaluations of instructors that interact with MAM students in Toronto.

We also observed that more fourth year students at MAM did not feel comfortable with reporting mistreatment compared to those at St. George (66.7% vs 44.3%). We otherwise did not appreciate any statistically significant differences between comfort in reporting mistreatment between academies, campus sites, years, gender, and pre-clerkship/clerkship status. We similarly did not appreciate any statistically significant differences between awareness of existing University of Toronto Faculty of Medicine policies surrounding mistreatment between academies, campus sites, years, gender, and pre-clerkship/clerkship status.

In the narrative comments, students provided examples of mistreatment commonly experienced during clerkship, such as “being called stupid in front of [everyone] in the OR”, being forced to get food for the team and missing out on important clinical cases/learning, and working in learning environments where students received the impression that preceptors clearly did not want to teach, resulting in instances of sub-optimal clinical learning. On the other hand, during pre-clerkship, students primarily reported sexist and racist remarks from preceptors in small-group sessions, including case-based learning tutorials. While three comments mentioned mistreatment from other students, the overwhelming majority of comments were regarding mistreatment by preceptors, and that will be the focus of the qualitative analysis that follows.

We utilized a grounded theory approach to identify four major themes from the narrative comments of both clerkship and pre-clerkship students which inform our recommendations:
Accessibility
41% of students indicated that they did not know how to report mistreatment with the MD program. To report mistreatment, students click on the red “Student Assistance” box (previously named “the Red Button”) on the UofT MD Website or the learning platform Elentra, click on the “Student mistreatment” hyperlink, and scroll down to click on the “Event Disclosure Form”. However, multiple narrative comments from students indicated that they were “[u]nsure if the Red Emergency button on the MD website is for reporting mistreatment” and multiple students believed that MedSIS evaluations were the central mode of reporting mistreatment with the MD Program. Further, focused discussions with students suggest that the new name may contribute to confusion surrounding reporting procedure since other aspects of student life are also encompassed by “Student Assistance”. Students also expressed frustration with the lack of explicit material surrounding the reporting of mistreatment and expressed uncertainty with the reporting process (i.e., concerns of anonymity, the identities and biases of faculty/staff responding to reports).

Consistent with quantitative data provided above, students expressed concerns with the delivery of information on mistreatment policies and reporting procedures. Currently, all first-year students are briefed on the policies and are required to complete faculty-wide and site-specific e-learning modules on workplace harassment and mistreatment. Though all students have access to relevant policies and procedures online through the OHPSA and Faculty of Medicine websites and through the student handbook, one possible explanation for the poor awareness surrounding mistreatment reporting is the fact that students are not exposed to policies with enough regularity. Indeed, one student commented “[a]t the start of first year there was a lot of information on how to report mistreatment, but I think it should be reinforced at the start of every year (i.e. at least at the start of second year).”

Definitions
Students recounted “incidences [that] were borderline mistreatment, but weren’t quite serious enough to report,” reflecting a lack of clarity surrounding the definition of student mistreatment. The challenging decision that must be made about whether an incident is “worth the trouble to go through formal reporting,” especially in the absence of concrete examples set within a clinical context, may contribute to the under-reporting of instances of mistreatment. Further, this would create a bias toward the identification of individuals who committed major instances of mistreatment and miss individuals who consistently committed minor instances of mistreatment.

Many students also described incidents where they witnessed unprofessional behaviour (including racist and sexist remarks), abuses of power, or micro-aggressions that compromised the learning environment but did not fit under the formal definition of ‘mistreatment’. These are
issues of workplace professionalism and though they are not formally instances of mistreatment, they reflect an underlying culture that is problematic and that may be permissive to instances of mistreatment.

The MD Program has the processes in place to address this: there is the option to make an anonymous disclosure if a student deems an issue not to be major enough to warrant action or direct follow-up by the faculty, and students can specify whether their incident classifies as “other incidents of unprofessionalism” or whether they are unsure what type the incident was. However, the difference between a disclosure and a report are not outlined in the Incident Disclosure Form (https://documents.med.utoronto.ca/Forms/ume-incident-report) and the terms are used interchangeably in the form (see the URL and the headers for Section 2 and Section 3). It is worth noting that since the writing of this report, the MD Program has resolved these inconsistencies, using the term “Form” rather than “Report,” and ensuring that there is internal consistency with the use of the term “disclosure form” rather than “report.”

Further, examples of the different incident types are not provided and students are instead referred to a 9-page “Protocol for addressing incidents of discrimination, harassment, mistreatment and other unprofessional behaviour” to learn about the definitions for each incident type. Under the definitions section of this protocol, the definition for “discriminatory harassment” is a hyperlink to a 7-page university statement from 1994 and the definition for “sexual harassment” is a hyperlink that returns a “Page Not Found” error. Lastly, the Incident Disclosure Form provides a hyperlink to this protocol but clicking on the link returns a “Page Not Found” error. It is worth noting that since the writing of this report, the MD Program has fixed both these hyperlinks.

The lack of clarity surrounding definitions of mistreatment and the reporting process may set an artificially high barrier to disclosure, especially for students who are confused as to whether the mistreatment they experienced is major enough to warrant the hassle. One student indicated that “it seems the reporting policy is there in paper, but not student-friendly.”

Repercussions
41.1% of students did not feel comfortable reporting mistreatment. Accordingly, a majority of narrative comments centered on hesitation or reluctance to report mistreatment fearing academic or professional repercussions or retaliation. Indeed, students described that reporting mistreatment is often seen as a “career-threatening” action. These concerns are not unfounded—some students reported experiences where they reported mistreatment to site contacts and were subsequently confronted by the preceptors they reported, with one student mentioning that they received a negative evaluation as a consequence. These constitute breaches of confidentiality in the reporting process and raises the question of potential conflicts of interest and biases in those responsible for handling these reports.

Even in most cases where reporting is handled properly and confidentiality is maintained, there is the concern that students may be easily identified, particularly when they are one of few
students supervised by the preceptor they were reporting. As a consequence, many students who reported experiencing mistreatment explicitly mentioned that they did not report the incident because of the power dynamic: the preceptor in question often had control over their evaluations or could influence their residency application. One respondent summarised these concerns very well: “Even if my comments are "anonymous" I felt that he would be able to trace the story back to me. How can we better ensure student confidentiality in these types of situations?”

Effectiveness
Students have reported mixed experiences with the effectiveness of mistreatment reports. While one student mentioned that after “report[ing] the mistreatment of the individual […] they are no longer in a teaching position,” other students recounted instances where mistreatment was reported, but as their stories could not be corroborated by a second party, no action was taken. In these situations, students were “left feeling frustrated and abandoned” and as if “no one really seemed to care,” which may discourage other students from reporting their own experiences with mistreatment while impacting those directly affected negatively.

Additional areas of concern
Two additional areas of concern identified through narrative comments are related to clinical teaching sites, specifically. First, students indicate that they are unsure to whom mistreatment should be reported when mistreatment occurs in clinical sites. Medical students occupy a unique space that one respondent identifies as “hospital territory and university territory overlapping,” which may complicate the reporting procedure. Students also report being unsure to whom mistreatment should be reported when mistreatment is caused by allied healthcare professions, including nurses.

Recommendations for Mistratment:
Recognizing the importance of addressing mistreatment within the Faculty of Medicine and across affiliated clinical teaching sites, we propose the following recommendations:

- **Priority level A:** Establishment of a student-centric mistreatment reporting portal. Student comments suggest that the current mistreatment/disclosure system is challenging to navigate and students are often confused about the process, starting from the initiation of the report/disclosure. Within this recommendation, we propose the following changes:
  - Establish clear definitions of learner mistreatment and provide clear clinical examples of instances representative of different types of mistreatment as well as instances that do not qualify as mistreatment. For each type of mistreatment (including workplace unprofessionalism), clearly outline what paths student reporters can take and what action they can expect from it.
  - Rebrand the current mistreatment reporting/disclosure web portal to improve user-friendliness and draw attention to mistreatment issues. Other institutions have rebranded their mistreatment reporting/disclosure portals. For instance, the University of Calgary has branded their Faculty of Medicine-specific mistreatment reporting/disclosure website as “a safe space” (https://mistreatment.ucalgary.ca/),
while the University of Ottawa has branded their equivalent website as “Be in the Know” (https://med.uottawa.ca/undergraduate/beintheknow).

- Redesign the current web-based portal for reporting/disclosing mistreatment in order to enhance user-friendliness and lower the barrier for reporting critical incidents. Redesign will occur in consultation with faculty sponsors (ex. OHPSA, Optimizing our Learning Environments working group) and focused interviews with students. Consider contracting a user-experience (UX) designer to ensure that the portal is truly intuitive and student centric. All weblinks to online resources will also be repaired to ensure that policies and supporting information remain accessible to students and staff at all times.

- Renaming the “Student Assistance” button to “Report Mistreatment” or introducing a new “Mistreatment” button to obviate any ambiguity for the usage of the online reporting/disclosure system.

- **Priority level A:** Revise mistreatment reporting/disclosure policies surrounding timing of report/disclosure following the incident to ensure timely but safe action to address mistreatment. In order to encourage students to come forth with their experiences of mistreatment while protecting students from professional harm in the form of retaliation or retribution, we propose instituting an automatic six-month period prior to acting on reports of student mistreatment by staff members at the Faculty of Medicine that can be waived at any time to allow for either immediate action or delayed action at the discretion of the student making the report/disclosure. The purpose of the standardized six-month period is to protect student anonymity by increasing the amount of time since the student last encountered the reported/disclosed perpetrator. This practice is common at other medical schools in Canada. For instance, McGill University has an automatic six-month waiting period between initial report/disclosure and action. The University of Ottawa similarly permits indefinite waiting between initial report/disclosure and action to ensure that students do not experience academic or professional repercussions prior to action taken in response to their report. The University of British Columbia has a similar policy as well. At the time of reporting, students may opt to waive the six-month waiting period for immediate action. Similarly, at the end of the six-month waiting period, students will be provided the opportunity to extend the waiting period if they are uncomfortable with action being taken at this stage.

- **Priority level A:** Introduction of a mistreatment disclosure banking system to identify global trends of mistreatment and professionalism among teaching faculty. This is to address the current bias wherein students are choosing only to report major issues in the Incident Disclosure Form. By normalizing disclosures from students, whether confidential or anonymous, the MD Program will have more data on the professionalism of teaching faculty. Distinct disclosures regarding the same perpetrator should be stored and taken into consideration when processing formal reports against that individual. Further, there should be an option for students to take multiple disclosures that they have made against a perpetrator and activate them together into a formal report.

- **Priority level A:** Introduction of a mistreatment response centre and recruitment of trained non-instructional/evaluative counsellors and personnel. Consistent with recent
recommendations advanced by the Canadian Federation of Medical Students and in response to concerns voiced by our students on the potential biases from site contacts and other Faculty of Medicine personnel responsible for handling cases of mistreatment, we propose the establishment of a multidisciplinary response centre staffed by trained counsellors, who are not involved in student instruction and evaluation, and who do not participate in processes related to career advancement (ex. CARMS match, hospital staffing) to receive and act on student reports/disclosures of mistreatment. The response centre must be able to handle cases and support students experiencing physical, psychological, and professional harm, while remaining impartial. Personnel that are familiar with faculty, staff, or students perpetrating mistreatment must recuse themselves from handling such cases in order to mitigate bias during case review. As the University of Toronto Faculty of Medicine is a large academic centre where physicians may regularly be involved with instruction and evaluation, we propose recruiting personnel from outside of the Faculty at the discretion of the OHPSA.

- **Priority level A**: Introduction of annual mistreatment e-learning modules to improve awareness of mistreatment policies and reporting mechanisms. As part of registration requirements, all incoming first-year and third-year Faculty of Medicine students are required to complete one e-learning module on “Workplace Violence and Harassment” accessible via MedSIS. The module presents a basic definition of violence and harassment and offers general advice for resolving these issues; these resolutions are not necessarily specific for University of Toronto Faculty of Medicine learners, as the reporting/disclosure process is not explicitly delineated. We recommend the construction of a new mistreatment e-learning module to replace/complement the “Workplace Violence and Harassment” module, guided by student focus group-input, CFMS guidelines, and similar programs at other institutions, including McGill University and the University of Calgary. Students would then be required to complete this mistreatment e-learning module annually as part of mandatory registration requirements.

**4.3.2 Diversity and Integration**

Diversity is generally an area of strength for the MD program with the majority of students across both campuses and all four years of the program reporting satisfaction with the diversity of their respective classes in terms of ethnicity, gender, religious background, educational background, and age. Furthermore, a significant proportion of students in the MD program feel that the MD program has made adequate efforts to address its commitment to diversity and inclusion. Indeed, this commitment is highlighted by the introduction of new initiatives, including the Black Student Application Program and the Indigenous Student Application Program, which have helped to reduce some of the barriers traditionally faced by underrepresented populations when applying to the MD program.

A significant opportunity of improvement in the MD program is its SES diversity among students in the program. More than half of the students surveyed do not believe that there is suitable diversity in terms of SES in their respective classes. Interestingly, when reviewing results from the past two accreditation surveys, this particular concern has been raised consistently, perhaps
indicating that this finding represents a complex, multi-faceted issue that has yet to be fully addressed. Indeed, narrative comments from students highlight the importance of this issue to the current student body. Ensuring SES diversity should be a priority for the MD program due to the fact that a diverse physician population that represents the population it serves can help reduce health inequities faced by individuals of lower SES.\(^3,4\)

In the discussion of improving SES diversity at UofT, we wish to recognize an organization affiliated with the MD program, Community of Support (COS), which provides resources and assistance during the medical school admissions process to underrepresented students at UofT and elsewhere. This program, which was started in March 2015, is aimed at disseminating admissions information, connecting prospective students with mentorship and experiential opportunities, and supporting these students during the application cycle through a free Medical College Admissions Test (MCAT) course (MCAT Student Support Program or MSSP) and interview preparation. Today, COS supports 1400 post-secondary students and graduates from across Canada, and current efforts are aimed at expanding the program across Canada through provincial and national collaboration to provide assistance to students facing systemic barriers and developing a multi-pronged regional/national strategy to reduce the costs associated with applying to medical school. COS’ MSSP has recently expanded its program size from approximately 30 students in 2017 and 2018 to 70 students this year; of the 2017 cohort of students, nearly one-third have been granted admission to medical school. The expansion of COS and associated programs, including MSSP, with additional funding to support more students may help to address SES diversity issues.

Lastly, the availability of financial support for students once they enter the program should be examined, as high tuition and living costs with limited support may discourage students from lower SES backgrounds from applying to the program and matriculating once they are admitted. Explicit recommendations to improve socioeconomic diversity amongst students are listed in the Finances section of this report.

Another area of improvement is the integration of students from the MAM and St. George campuses. Over 40% of students surveyed believe that there was insufficient integration between the two campuses. Interestingly, this dissatisfaction was largely driven by students at MAM (66.3%) as a smaller proportion of St. George students reported poor integration between the two campuses (34.6%). Since its introduction to the Faculty of Medicine in 2011, MAM supports approximately 54 students in each year, representing over 20% of the student body in the MD program. However, given the recency of this addition, our previous independent student analysis did not include data on integration of the two campuses, and we are therefore unable to draw any tangible comparisons. It is worth noting that the University of Toronto is not unique in providing education to medical students across more than one campus site. For instance, the University of British Columbia has four campus sites (Vancouver, Okanagan, Prince George, Victoria), McMaster University has three campus sites (Hamilton, Kitchener, St. Catharines), and Western University Schulich School of Medicine and Dentistry has two campus sites (London, Windsor). Interestingly, while campus sites at the other Canadian medical schools are located more than 50
km from one another, the MAM and St. George campuses are within 30 km of one another, and travel time between the campuses is usually less than an hour by car. Given the smaller distance between the two campus sites, integration should be a priority in order to ensure that all students have equal access to experiences and opportunities across both campuses.

Recommendations for Diversity and Campus Integration:

- **Priority level B**: In an effort to increase SES diversity among students in the MD program, the Faculty of Medicine may form a working group with students from across the program to identify systemic barriers to medical school admissions that are unique to the UofT MD Program. This working group may help to inform new admissions policies by collaborating with the Admissions office and the MD Program admissions representatives.

- **Priority level B**: In accordance with current efforts by COS to reduce systemic barriers to medical school admissions, the Faculty of Medicine may collaborate with medical school, university, provincial, and national leaders to address SES diversity through programmatic strategies including the subsidization of MCAT examination fees and the elimination of medical school application fees.

- **Priority level B**: Hosting a higher proportion of lectures from MAM with video-conferencing to the St. George campus. MAM students in narrative comments reported difficulty hearing class discussion at the St. George campus during lectures, or find themselves unable to ask their own questions when the lecturer is not physically present. One MAM student also reported that they feel “alienated” by being referred to as “remote site” by some lecturers. Hosting additional lectures at MAM should ideally help students feel more integrated across campuses and improve their learning experience.

- **Priority level B**: Ensuring that extra-curricular events and presentations hosted at the St. George campus are accessible to MAM students by video-conferencing (and vice-versa). Moreover, students attending at either site should have access to the same opportunities (ex. food provided at both locations, interaction with lecturers/presenters, etc.). Inclusion of MAM students in extracurricular events held on the St. George campus hosted by Medical Society-affiliated student organizations is mandated by their affiliation, but inclusion is not always strictly enforced, leading to MAM students feeling less satisfied with cross-campus integration.

4.3.3 Accommodations, Feedback, and Academic Support

**Accommodations**

With regards to accommodations, over 40% of students were uncomfortable taking personal days and/or asking for accommodations as needed for health, wellness, or other significant personal reasons. Comfort with seeking accommodations or time-off generally appears to decrease with progression through medical school. Indeed, first-year medical students were the most comfortable seeking accommodations (71.1%), while fourth-year medical students were the least comfortable (40.6%). We did not observe significant differences between academies and between campuses. We attribute these findings to three phenomena.
The first concerns knowledge of the policies surrounding personal days. Narrative comments, including “I believe that [the] use of personal days could be better explained” and “this [personal days we are allowed to take] should be abundantly more clear because they are a very good and important idea for our wellness,” suggest that students may not be fully aware of policies relating to accommodations and personal days and that greater awareness may result in greater comfort and utilization.

Moreover, feedback from student narrative comments suggest that there are significant barriers to obtaining time off for wellness reasons. In particular, students cite having to (1) contact preceptors and site administrators directly and (2) justify their request for time off. Students indicate that these systemic barriers make it more difficult for students to seek personal days, and many simply abandon their attempts because of the process.

Finally, given the dynamic nature of the MD program, its curriculum, and its policies over the past 3-4 years, issues relating to comfort with seeking personal days may be attributable to abrupt changes to policies. For instance, several students indicated in their narrative comments that students were previously allocated an annual quota of personal days that could be taken at any point. This option was supported by students who used such days for wellness reasons. Students indicate that the policy was changed such that students would need to apply for time off four weeks in advance, and several point out that personal challenges (i.e. poor mental health) often cannot be anticipated that far in advance.

It is important to recognize, however, that the intention behind such “personal days” was to accommodate students who may have commitments, including doctor's appointments, weddings, family activities, etc., that could be scheduled more than four weeks in advance. With regards to wellness, students could still take time off whenever they needed without four weeks of advance notice, in the form of “unplanned absences”. Despite these policies, some concerns are raised in the narrative comments which help elucidate why students feel uncomfortable asking for accommodations:

- “When we tried to take time off it was sometimes made very difficult by the same people who told us to take care of ourselves.”
- “…I still feel unsupported by the Faculty at large through feeling afraid to ask for personal days, and am afraid to ask for accommodations, or accommodations being denied.”
- “Although there is much talk of wellness, they are superficial and don’t address core issues.”
- “…the fact that students can’t get accommodations for exams for legitimate activities apart from research conferences…”

The sum of these anecdotal examples highlights perhaps insufficient communication specifically about personal days and accommodations between the Faculty of Medicine, its teaching sites, and the student body, and that better communication of policies and relevant policy changes may be able to mitigate this issue entirely in the future.
Recommendations for Accommodations:

- **Priority level B**: Careful review of the accommodations and personal day policy with student input in the form of a focus group or working group in order to develop policies that are more consistent with student needs during pre-clerkship and clerkship.
- **Priority level B**: Clarification of limitations on the use of accommodations and personal days.
- **Priority level B**: Faculty-wide dissemination of the accommodations and personal day policy to increase awareness and utilization.

**Feedback**

While the majority of students indicated that they were comfortable seeking clarification or challenging feedback received from faculty on evaluations, a significant proportion of students (38.3%) reported being uncomfortable. Student comfort with seeking clarification or challenging feedback decreases with progression through the MD program. A closer examination of narrative comments revealed two common themes that could potentially contribute to this issue.

First, students across the four-year program consistently reported being unable to access feedback on written examinations to identify areas in which they were weaker. For instance, during pre-clerkship, students write mastery exercises that cover material learned during the 1-4-week-long block. Students are currently unable to access the marked examination (including questions and correct answers); students who have previously sought feedback on mastery exercises were reportedly told that questions and answers cannot be released as they may be reused in later years, a common strategy employed across disciplines, training levels, and institutions. These anecdotes suggest that perhaps students may be discouraged from seeking clarification on assessments after not being able to receive adequate feedback during their pre-clerkship years.

The narrative comments also suggested that students may be discouraged from seeking clarification or challenging feedback since responses to their prior requests were less timely. One student indicated that their request for feedback clarification took more than two weeks to be answered by their site director. This issue may be compounded by the fact that on occasion, feedback may not be returned to students in a timely way. For instance, students indicated that feedback for a clinical skills assessment was not provided to students until more than two months following the assessment; others report experiencing stress waiting for written examination results for more than six weeks. Taken together, the timeliness of feedback and requests for clarification may impact student willingness to act on feedback provided. Finally, students cite poor experiences when seeking clarification on feedback. In an extreme example, following one request for feedback clarification, a faculty member reprimanded the student and wrote that the student "wasn’t able to take feedback." Though these severe examples are sparse, they highlight perhaps broader issues within the culture of education as it pertains to providing learner feedback that warrant action by the institution as a whole.

Recommendations for Feedback:
- **Priority level B**: Careful review of the evaluations and feedback policies that concern student clarification/challenge, timeliness of response, and mistreatment by evaluators.
- **Priority level B**: Creation of Faculty of Medicine response systems for seeking clarification/challenging feedback staffed by impartial members of the faculty across teaching sites.
- **Priority level B**: Introduction of support systems for students who receive unfair or unjustified feedback and mechanisms for addressing them.

**Academic Support**
The majority of students reported satisfaction with the transparency of academic standards and cut-offs on medical school assessments. Of the 40.6% of students who were dissatisfied with the current level of transparency, the largest proportion came from the second year of medical students, of which 64.1% reported dissatisfaction. Narrative comments from second year students, specifically, identified several common elements, including poor awareness of the consequences of failing assessments, leading to increased stress. Among the comments, one student said “there needs to be more transparency from the beginning of year 1 regarding protocol around remediation. There is a lot of uncertainty and confusion currently regarding what happens when a student fails a component of the course.” These comments may be motivated by the observation that several students in the second-year cohort across both campus sites were asked to remediate dissatisfactory coursework. Similar concerns were voiced by students in other years as well, highlighting the importance of clear communication between faculty and students regarding expectations at each stage of medical training. There is a clear need to standardize academic standards and inform students appropriately to prevent students from experiencing unnecessary and debilitating stress, which may engender inappropriate behavior, including academic dishonesty. We must recognize, however, that while students are concerned about the transparency of academic standards and remediation processes, the majority of students (76.5%) reported that processes for students who failed to meet expectations were efficient, effective, and supportive.

**Recommendations for Academic Support:**
- **Priority level B**: Careful review of remediation policies and standardization of such policies across pre-clerkship years and/or clerkship years
- **Priority level B**: Active dissemination of such policies to ensure that there is no ambiguity concerning the consequences of failing assessments

**4.3.4 Finances**
While the Faculty of Medicine has demonstrated a commitment to student financial support, the costs associated with medical education continue to be an area of concern among medical students. According to the Association of Faculties of Medicine of Canada (AFMC), the median debt directly attributable to medical students was $100,000.

Perhaps reflecting the growing cost of both medical school tuition, as well as the cost of living in the city of Toronto (ex. rental/housing costs, food, transport, etc.), the majority of students (69.1%)
strongly disagreed or disagreed with the suggestion that the cost of their education was affordable. These concerns have implications for student well-being and academic performance. While much discussion exists on the growing debt load of medical school graduates, the cost of education appears to negatively impact student academic performance and access to activities during medical school. Nearly a third (33.5%) of medical students strongly agreed or agreed that concerns about covering the cost of education had a negative impact on their performance and ability to participate in medical school activities. Studies of academic performance among medical students in the United Kingdom suggest that students who tend to worry about money have higher debt load and perform less well than their peers in degree examinations. While the relationship between stress, academic performance and debt among medical students is not clear, student perceptions of their financial health appear to contribute to student performance and participation.

Narrative comments regarding student finances identified several potential areas of improvement. For instance, students across the four years of the MD program indicated dissatisfaction with the current University of Toronto Faculty of Medicine bursary program, which in previous years, has been successful in allowing students to afford tuition and program costs. Currently, students must submit parental income as part of the bursary application process; the Faculty of Medicine considers parental income in distributing bursaries to its students. Despite some students being financially independent or receiving minimal contribution from their parents, they may not receive bursaries as their parental income disqualifies them from financial assistance.

Furthermore, of students seeking to attend and/or present at academic conferences, 52.8% strongly agree or agree that the costs associated with their involvement were a deterrence to their attendance at the conference. Of students who have attempted to secure funding from the MD program (37.2% of all students), 82.3% were not able to secure funding to attend academic conferences. Despite the university’s reputation for medical research and commitment to particularly supporting medical students to participate in research (ex. through programs such as the Comprehensive Research Experience for Medical Students (CREMS)), students have struggled to access financial support from the MD Program to attend or present at academic conferences. One could also argue that investigators should seek to support the costs for their own students since there are some external sources of funding for students to access financial support to attend conferences (ex. those administered by the Ontario Medical Students' Association (OMSA), Canadian Federation of Medical Students (CFMS)). However, these funding options have timeline constraints and may not be accessible to all, and overall students appear to be deterred from presenting their work due to insufficient financial support.

From our preliminary search of conference funding available to medical students across all 17 schools in Canada, we found that 9/17 medical schools had an MD Program, MD Student Society, or combined conference funding program. Table 6 highlights some details from each of these programs:
Table 6. Cross-jurisdictional survey of MD Programs in Canada for availability of conference funding

<table>
<thead>
<tr>
<th>School</th>
<th>Value</th>
<th>Accepted expenses</th>
<th>Logistics</th>
<th>Source of Funding</th>
<th>Link to policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of British Columbia</td>
<td>$500.00</td>
<td>Travel, accommodation, conference registration fees</td>
<td>Competition, priority given to applicants who are not prior recipients. If funding request exceeds funding available, all eligible applicants enter a lottery.</td>
<td>MD Program</td>
<td><a href="https://www.med.ubc.ca/current-learners/research/funding/medical-student-travel-award/">https://www.med.ubc.ca/current-learners/research/funding/medical-student-travel-award/</a></td>
</tr>
<tr>
<td>University of Saskatchewan</td>
<td>$500.00</td>
<td>Travel, accommodation, conference registration fees</td>
<td>One time reimbursement. Priority given to those with financial need. No information on website on method of disbursement.</td>
<td>MD Program</td>
<td><a href="https://medicine.usask.ca/policies/student-travel-fund.php">https://medicine.usask.ca/policies/student-travel-fund.php</a></td>
</tr>
<tr>
<td>University of Manitoba</td>
<td>Unlisted</td>
<td>Travel, accommodation, conference registration fees</td>
<td>One time reimbursement. First come-first serve basis. Priority given to those with financial need. Only available if presenting at a conference.</td>
<td>MD Program</td>
<td><a href="http://umanitoba.ca/faculties/health_sciences/medicine/education/undergraduate/awards/med_all.html">http://umanitoba.ca/faculties/health_sciences/medicine/education/undergraduate/awards/med_all.html</a></td>
</tr>
<tr>
<td>McMaster University</td>
<td>$500.00</td>
<td>Travel, accommodation, conference registration fees</td>
<td>$500 maximum over the course of the degree. Available for both attending and presenting at conferences.</td>
<td>MMSC (Student Society)</td>
<td><a href="http://www.macmedsc.ca/uploads/5/6/5/6/56562867/conferencefundingrequestform20162017.docx">http://www.macmedsc.ca/uploads/5/6/5/6/56562867/conferencefundingrequestform20162017.docx</a></td>
</tr>
<tr>
<td>Institution</td>
<td>Amount</td>
<td>Description</td>
<td>Additional Information</td>
<td></td>
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<td>-------------------------------------------------</td>
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</tr>
<tr>
<td>Queen's University</td>
<td>$1,000.00</td>
<td>Travel, accommodation, conference registration fees</td>
<td>$1000 total over course of degree. First-come first serve, with annual funding capped at $60,000/yr.</td>
<td><a href="https://meds.queensu.ca/academics/undergraduate/current-students/awards-funding-conferences">MD Program</a></td>
<td></td>
</tr>
<tr>
<td>University of Ottawa</td>
<td>$1,000.00</td>
<td>Travel, accommodation, conference registration fees</td>
<td>For students who present at academic conferences. Must have financial need as determined by financial aid office.</td>
<td><a href="https://scholarships.uottawa.ca/p/a/18428/">Aesculapian Society (Student Society)</a></td>
<td></td>
</tr>
<tr>
<td>McGill University</td>
<td>$450 per student</td>
<td>Travel, accommodation, conference registration fees</td>
<td>$450/pp at conference, maximum $900 per conference. Possible top-up support from Office of Student Affairs.</td>
<td><a href="http://www.mcgillmed.com/mss-general-council/conference-funding/">McGill Medical Students' Society</a></td>
<td></td>
</tr>
<tr>
<td>Dalhousie University</td>
<td>$750.00</td>
<td>Travel, accommodation, conference registration fees</td>
<td>For students who present their original research completed over the 4 years of medical school. May apply for funding once per fiscal year. Granted first-come first serve upon committee review.</td>
<td><a href="https://cdn.dal.ca/content/dam/dalhousie/pdf/faculty/medicine/departments/core-units/student-affairs/Travel-Assistance-Application.pdf">MD Program, Endowed Donor Funds</a></td>
<td></td>
</tr>
<tr>
<td>Memorial University of Newfoundland</td>
<td>$500.00</td>
<td>Travel, accommodation, conference registration fees</td>
<td>$500 total over course of degree. Per diems provided for meals. Amount of funding awarded at discretion of Office of Student Affairs.</td>
<td><a href="https://www.med.mun.ca/StudentAffairs/Financial-Support/Student-Loans.aspx">MD Program</a></td>
<td></td>
</tr>
</tbody>
</table>
As the above table suggests, the idea of a conference fund has strong uptake in medical schools across Canada. While the approaches to executing the fund differ across schools, there is an opportunity for the MD program to coordinate among its donors, as well as the University of Toronto Medical Society to devise, develop, and implement a conference funding program for students to attend and/or present research. In discussions with the 2018-2020 VP Finance of the University of Toronto Medical Society (who is also the student expert of this section), there is strong interest from the Medical Society to coordinate with the Office of MD Admissions & Student Finances to arrange for such a fund. A meeting was also held on Tuesday February 26th, 2019 among representatives of the Medical Society, as well as representatives from Student Financial Services to discuss ways in which such a fund could be developed. Both groups acknowledged the importance of conference funds, and hope to move forward on the topic in the 2019-2020 academic year.

Recommendations for Finances:

- **Priority level B**: Acknowledging and integrating the contributions of both modifiable and non-modifiable financial stressors in the newly developed resilience curriculum.
- **Priority level B**: Recognizing that proving financial need without considering parental income can be challenging, we encourage the Faculty of Medicine to assemble a focus group with students to devise new strategies and proxies to determine financial need to make the bursary application process more equitable.
- **Priority level B**: Consider allocating funds for a new initiative or program within the Faculty of Medicine that supports MD students with demonstrated financial need in order to allow them to attend/present at academic conferences. Prospective funding could be distributed at a level that is equitable to the costs of attending/presenting at the conference in question and the relative merit of the opportunity to the career development of the student.
- **Priority level B**: Explore opportunities to attract funding from alumni, philanthropic, or medical society sources to support such programs and reduce barriers for students with demonstrated financial need.

### 4.3.5 Student Wellness

The majority of medical students indicated that stress of medical school was manageable and that they were balancing medical education and personal life without excessive or debilitating stress. In their narrative comments, pre-clerkship students indicated that a significant proportion of their day-to-day stress stemmed from their academic workload, specifically, a heavy volume of weekly self-learning materials. Other sources stress included meeting academic standards (see above), finances (see above), mentorship and learning opportunities (see below). However, it is important to recognize that 51.2% of students agreed or strongly agreed that the stress and anxiety related to matching for residency negatively impacted them on a regular basis. There also appears to be a trend that students experience increased stress relating to residency matches in the later years of their medical school training, and this stress peaks during year 3, remaining high during year 4 (45.0% for first years, 47.1% for second years, 59.9% for third years and 55.0% for fourth years). There are several possible explanations. First, students are likely aware that there are insufficient residency positions for all graduating medical students, especially in their
preferred field and location, which may cause some students to go unmatched annually. This stress is compounded by the fact that 20 University of Toronto Faculty of Medicine graduates were unmatched in 2018, prompting the Faculty to increase efforts to improve mentorship and matching. These circumstances may contribute to the high baseline levels of stress observed in first- and second-year students who have yet to enter clerkship. Moreover, as first-year students, at the time of the ISA, have not received formal instruction surrounding CaRMS, they may be experiencing elevated stress levels attributable to their poor awareness of the match process. We also attribute the increased level of CaRMS-related stress in third-year students to their recent entry into clerkship, where they are beginning to foster relationships with faculty and must perform well on assessments for the purposes of matching to their desired residency programs. These potential mechanisms are supported by narrative comments provided by student respondents. For this reason, it may be beneficial to improve understanding of the residency match process and the ways in which students can be proactive and make decisions that will help them match, especially to their preferred choices.

There are significant differences between years that must be considered. 31.9% of students in their third year agreed or strongly agreed that they experienced excessive or debilitating stress in balancing their medical education and personal life compared to first years (20.8%). This significant difference is not observed when comparing to second years (29.1%), fourth years (24.3%) or the average (26.2%). Thus, it is possible that this difference between third and first years is due to increasing responsibilities as students’ progress through each year of medical school. Third year also marks the entry into clerkship, which introduces changes to learning and scheduling and may account for excessive stress with balancing medical education and personal life. As such, increasing opportunities to access wellness support and balancing medicine with personal life as students progress through medical school, especially at times of major changes (ex. transition between pre-clerkship and clerkship), may be helpful. This concern is especially important considering challenges with seeking accommodations and clarifying feedback described above.

Comparing between campuses, responses were comparable, except that 27.1% (13/48) of fourth year medical students at MAM disagreed or strongly disagreed that the stress of medical school is manageable compared to fourth year students at St. George (11.5%, 20/174) and the average for all students at MAM (14.3% (28/196)). Fourth year marks preparation and interviewing for CaRMS, (residency matching), and therefore may contribute to greater stress in managing medical school. Indeed, 60.4% of fourth year students at MAM agreed or strongly agreed that the stress or anxiety of matching for residency negatively impacted them on a regular basis compared to 53.4% of St. George students. Careful analysis of student free responses suggest that this issue is multi-faceted and may relate to concerns surrounding mentorship, teaching quality, feedback, and the general perception of MAM students by faculty members in downtown Toronto and beyond. These surprising statistics highlight perhaps the need for careful attention as it concerns clinical education and student support at MAM, which will be discussed in detail in other sections of this ISA report. We strongly urge the Faculty of Medicine to carefully examine the
clerkship experience at MAM and St. George to help students better manage the stress of medical school and the residency matching process.

Recommendations for Student Wellness:

- **Priority level B**: Providing resources for the residency matching process beyond the video available on the CaRMS website, with information such as:
  - Key considerations when deciding or choosing a residency
  - Strategies to employ to successfully match to residency of interest or overall
- **Priority level D**: Increase opportunities for access to student wellness services as medical students progress through medical education, especially at times of major changes and increasing responsibilities (ex. transition from pre-clerkship to clerkship, CaRMS application).
- **Priority level D**: Improve access to student wellness services at MAM, especially at times of high stress (ex. transition to clerkship, CaRMS application).

4.3.6 Mentorship

Overall, medical students were satisfied or very satisfied with the mentorship by faculty members at hospital sites affiliated with their campus, and the majority agreed or strongly agreed that the mentorship by residents at hospital sites affiliated with their campus were adequate. However, there are important differences between years and between campuses that must be highlighted.

Dissatisfaction with mentorship increased with each year, with the greatest proportion of dissatisfied students in their fourth year of study (13.8% in first year, 17.9% in second year, 22.8% in third year and 28.8% in fourth year). A brief analysis of the narrative comments suggest that there are differences in the barriers experienced by pre-clerkship and clerkship students in accessing mentorship.

Of the pre-clerkship students that were dissatisfied with mentorship, some indicated in their narrative comments that formalized mentorship opportunities were challenging to access due to a relative lack of availability of accessible mentorship programs. A number of student- and faculty-driven initiatives seeking to improve access to mentorship at the University of Toronto exist. These include the Alumni Mentorship Program, which connects students to a program alumnus, the Diversity Mentorship Program, which seeks to support marginalized medical students, and various initiatives through student interest groups and program academies. Most recently, the Medical Society responded by launching the Longitudinal Academic Mentorship Program (LAMP) in September 2018, which has been successful in providing physician- and near-peer mentorship opportunities to 150 pre-clerkship students. However, continued perception of a lack of accessibility to mentorship despite these developments compels a consideration of whether mentorship programs are being promoted appropriately to pre-clerkship students. Among our recommendations regarding mentorship is to train personal counsellors, career counsellors, faculty leadership, and each of the mentorship programs on the different mentorship opportunities available to students. A coordinated effort to streamline the referral of students to appropriate mentorship programs should be emphasized throughout the academic year.
Contrastingly, third- and fourth-year students attributed the structure of the clerkship curriculum as the primary barrier to engaging in meaningful relationships with mentors. Students commented on how their interactions with clinical preceptors, with whom they could potentially form strong mentor-mentee relationships, were too short as they were frequently assigned different preceptors during the course of their rotations. Moreover, other students indicated that their responsibilities as medical students often made it challenging to engage in mentor-mentee relationships, especially during work hours. While opportunities to remodel the clerkship curriculum and schedule remain limited, the importance of mentorship to clerkship students should not be understated. In response, we recommend identifying and promoting the diversity of extra-curricular mentorship available to clerks during key points of their transition, such as during Transition to Clerkship, during the electives application period, and during CaRMS. In addition, to cater to demanding clerkship schedules, differences in commitment required by mentorship programs should be emphasized at this time. For instance, mentees of the Alumni Mentorship Program are expected to meet their mentor only once, while mentees of LAMP are expected to meet with their mentors two to three times per semester.

In addition to differences in experience with mentorship across the four years of the MD program, we noted differences in satisfaction between the MAM and St. George campus students. There is significantly greater dissatisfaction with the mentorship provided by residents at the hospital sites affiliated with MAM compared to those affiliated with St. George across all four years of the MD program (46.3% vs 25.6% for year 1, 48.8% vs 23.5% for year 2, 55.5% vs 24.1% for year 3 and 68.8% vs 15.2% for year 4). These statistics are supported by narrative comments, which indicate that there is a lack of resident learners at MAM-affiliated clinical sites. Surveyed students indicated that while they may benefit from fewer learners (i.e. more learning opportunities), they lack sufficient exposure to mentorship from residents, who are closer to them in terms of training level than staff physicians. Greater efforts should be taken to connect MAM students to residents and junior physicians. Leadership of different faculty- and student-initiated mentorship programs should also be reminded of policy requirements to provide equal opportunities to MAM students for all extra-curricular activities. Resources should be dedicated to facilitate the expansion of near-peer mentorship programs such as LAMP in MAM.

To build upon current efforts to improve mentorship in UME, program evaluation should be encouraged to identify areas of improvement. The MD Program’s newly emerging Mentorship Committee, which consists of leadership from each of the structured mentorship programs, should be supported and mobilized to promote coordinated advocacy for issues identified from program evaluation. Furthermore, a review on the meaning and characteristics of mentoring in academic medicine identified that successful mentoring requires mentors to be active listeners, understanding, non-judgemental, reliable, accessible, and be compatible with mentees in terms of practice style, and personality. Barriers to good mentoring include structural factors such as lack of time, no continuity, not enough selection, and relational barriers such as lack of fit, mentee being taken advantage of by mentor, or the mentor having unrealistic expectations of the mentee. Facilitators of good mentorship include mentorship training, increasing the number of mentors.
available, assessing for fit of mentor and mentee relationship, creating time and space for mentorship and developing a partnership agreement that identifies expectations and goals of both parties.

Recommendations for Mentorship:

- **Priority level D:** Train personal counsellors, career counsellors, faculty leadership, and each of the mentorship programs on the different mentorship opportunities available to students.
- **Priority level D:** Effectively promote and streamline the referral of students to appropriate mentorship programs.
- **Priority level D:** Promote the diversity of extra-curricular mentorship available to clerks during key points of transition, with emphasis on opportunities with different levels of commitment.
- **Priority level D:** Greater focus on connecting MAM students with residents at MAM-affiliated hospitals.
- **Priority level D:** Dedication of resources to facilitate expansion of current formalized mentorship programs, including LAMP.
- **Priority level D:** Support the communication between the leadership of different mentorship programs through the Mentorship Committee.
- **Priority level D:** Ensure policies are in place so mentees can report mistreatment by mentors.
- **Priority level D:** Formal evaluation of all mentorship activities to identify and address possible areas of improvement.
4.4 Facilities

Subheadings
Adequacy of space at teaching sites: Q12, Q13, Q14, Q15, Q17, Q19, Q22,
Storage and Relaxation: Q18, Q20, Q21

Areas of Strength
- Adequacy of space at teaching sites (Q12, Q13, Q14, Q15, Q16, Q19, Q22)
  - [Q12]: 96.3% of students were satisfied or very satisfied with the adequacy (i.e. number, quality and quantity of space, availability) of lecture halls and large group classroom facilities on campus.
  - [Q13]: 86.2% of students were satisfied or very satisfied with the adequacy of small group teaching spaces on campus.
  - [Q14]: 95.1% of students were satisfied or very satisfied with the adequacy of space for clinical skills teaching at their academy sites and affiliated hospitals.
  - [Q15]: 93.7% of students were satisfied or very satisfied with the adequacy of space in ambulatory care clinics at clinical teaching sites.
  - [Q16]: 95.8% of students were satisfied or very satisfied with the adequacy of teaching spaces in their academy and affiliated hospitals for required learning experiences, such as ICE/ASCM, HC, and Portfolio sessions.
  - [Q17]: 98.6% of students were satisfied or very satisfied with the safety and security at instructional sites.
  - [Q19]: 86.0% of students were satisfied with the adequacy of student study space on campus.
  - [Q22]: 83.9% of Year 3 and 4 students were satisfied with the adequacy of call rooms at their clinical teaching sites.
- Storage and Relaxation (Q18, Q20, Q21)
  - [Q18]: 84% of students were satisfied or very satisfied with the adequacy of relaxation space for medical students on campus (i.e. medical student lounges).
  - [Q20]: 93.7% of students were satisfied or very satisfied with the adequacy of secure storage space for belongings (i.e. lockers) on campus.
  - [Q21]: 89% of students were satisfied or very satisfied with the adequacy of secure storage spaces for belongings (i.e. lockers) in their academy and affiliated hospitals/healthcare centre for required learning experiences (i.e. ICE/ASCM, HC, Portfolio, etc.)

Borderline Areas
Not identified.

Areas of Improvement
Not identified.

Discussion and Recommendations
4.4.1 Adequacy of space at teaching sites

As a whole, students reported that they were satisfied or very satisfied with the facilities provided by the University of Toronto MD Program, both at the St. George and Mississauga campuses as well as their affiliated hospitals and healthcare sites. However, further analysis of the data and assessment of narrative comments from students identified several important trends that were indicative of differences among facilities provided across campuses. They also offered suggestions that can be made by our faculty to improve the student learning experience, which are described as follows.

**Student study spaces on the medical school campus.**

Overall, satisfaction levels with regards to study spaces are similar between St. George and MAM students, which are 85.7% and 87.1%, respectively. However, it is noted that 85.8% of Year 1 St. George students are satisfied with the adequacy of student study space, compared to 96.3% of Year 1 MAM students. Furthermore, this high satisfaction rate at MAM drops to 83.0% for Year 2 MAM students, a 13.3% difference. These two findings suggest discrepancy between perceived availability and quality of study space between campuses and years.

Student narrative comments have identified several pertinent issues regarding insufficient spaces on the medical school campuses. For instance, comments from St. George students have included: “There are no study spaces for medical students on campus, it's hard to meet with groups to get things done; it's difficult to arrange meetings with extracurricular teams due to this lack in space” and “I wish there was a quiet study room in MSB so that I did not have to go to Gerstein [library]. Sometimes Gerstein is closed.”

Following the 2011 ISA, a medical student study space on McCaul Street, near MSB, had been opened and is available to students of all years and campuses. Students overall are grateful for having access to the space, however, some have reported the location to be far from their classes, study rooms to be often occupied close to examination times, and feeling unsafe studying late at night due to lack of security and dim lighting. One comment that highlights the security concern is as follows, “I marked that I was ‘dissatisfied’ with the safety and security at instructional sites as a reflection of my experiences at the McCaul study space in particular. The access to the building is terribly enclosed[…]. For that reason me (and many peers I know) do not go to McCaul to study.”

Students at the Mississauga campus have expressed concern over recent changes to the availability of study space at the Terrence Donnelly Health Sciences Complex (TDHSC). While the second floor of the building was originally reserved for use by only medical students, the expansion of the Occupational Science/Occupational Therapy (OS/OT) program to the UTM campus in September 2018 has resulted in both student cohorts sharing the space for curriculum programming and self-study.
With regards to differences between MAM and St. George students, the availability of some study rooms in TDHSC, which is in a more centralized location relative to curriculum programming, compared to McCaul Street in Toronto, may be a contributing factor.

In addition, some students have been able to use study rooms in their respective teaching hospitals as quiet workspaces or clinical rooms to practice physical examinations; however, others have expressed concern that their academy affiliated hospital either does not have dedicated after-hours study space or is located far from the downtown core and is therefore difficult to access. This is similarly the case in Mississauga, where the hospitals are not easily accessible from campus without access to a car.

We acknowledge that adequate space for quiet study and group work is integral to the learning environment of our medical students. We also realize that lack of awareness of available space may be contributing to many of their concerns, as it may not be clear which spaces are available at a time, or how to properly access them.

Recommendations for Adequacy of Space at Teaching Sites:

- **Priority Level C:** Greater awareness of the summary sheet of available study spaces affiliated with the UofT MD Program, along with their hours of operation, for each campus and academy.
  - This summary sheet should be brought to the attention of students at the beginning of the year (i.e. during orientation week, one of the earlier course lectures, etc.) and they should be told where to find it if needed.

- **Priority Level C:** Allow students to have generalized access (ex. by badge) to all campus and hospital facilities affiliated with their academy for the duration of their studies.
  - For instance, students from the PB academy should have access to facilities at Sunnybrook, Women’s College Hospital, and North York General Hospital irrespective of their current small group or clerkship rotation.
  - This will allow students from each academy to have equal access to all of their respective facilities and services, which may be closer to class or their place of residence.

- **Priority Level C:** For study spaces or entrances that may be more remote or difficult to locate, having signage posted on the walls to help direct students to the correct location.
  - For instance, signs to the alternative entrance to the McCaul building through the Dalla Lana School of Public Health.

- **Priority Level C:** Creating a platform for students to reserve study rooms for specific times and locations on their respective campuses and academy affiliated health centres.
  - This may also enable certain locked spaces (ex. first floor TDHSC seminar rooms) to be open during select hours for students to work.

- **Priority Level C:** Inform students about safe walking programs already offered by UofT (ex. TravelSafer at St. George, WalkSafer at UTM)
  - These programs are available for travelling on campus, such as near the McCaul Street Study space.
Travel

It is known that UofT MD students from different academies attend rotations, CBL, and other mandatory and non-mandatory programming at various academy affiliated hospitals. While some hospitals (ex. University Health Network hospitals, Women’s College, Mount Sinai, St. Michael’s Hospital) are located near the St. George campus, others (ex. Sunnybrook, St. Joseph’s Health Centre, North York General, Credit Valley, and Mississauga Hospital) are located significantly further from the respective U of T campuses. Students who travel to further locations often require additional time and payment for their own transportation costs, including transit tickets, gas, and hospital parking. This has led to concerns regarding equity among our medical students, as some students require different amounts of time, effort, and cost to obtain the same learning experiences as others.

Current methods to assist with student travel include shuttle services (ex. Sunnybrook shuttle, UTM shuttle), faculty arranged transportation to some mandatory events, and some reimbursement programs, such as the MAM Third Year Clerkship Travel Support Program. However, these are often not applicable to many mandatory classes or events, and students frequently still finance their transportation out-of-pocket.

Recommendations for Travel:

- **Priority Level C:** Partnering with academy affiliated hospitals and health centres (ex. Trillium Health Partners) to subsidize parking costs for students who drive to curriculum events (ex. ICE/ASCM) or rotations.
- **Priority Level C:** Offering taxi chits or discounted fares for students travelling to curriculum locations outside the downtown core.
- **Priority Level C:** Expanding existing travel support programs to include pre-clerkship students attending mandatory classes, seminars, and exams.

Call Rooms

Narrative comments received from Year 3 and 4 students regarding call rooms have included a variety of concerns. The most common themes included 14 comments about inadequate quantity of rooms for students on call (particularly at Mississauga Hospital), 9 comments addressing lack of cleanliness, and 9 comments about uncomfortable temperatures, among many others. We recommend that the faculty work with their affiliated hospitals to advocate for improved call room experiences for clerkship students.

Recommendations for Call Rooms:

- **Priority Level C:** Increased availability of rooms so that every student on call has access to a call room during their shift.
  - This could be assisted by separating call rooms between medical learners and residents/staff physicians, as students report often finding their rooms being used by other residents and physicians.
- **Priority Level C:** Proper cleaning of the rooms after each learner’s shift.
- **Priority Level C**: Ensuring that each call room is equipped with a phone, computer with EPR access, and wireless internet.
- **Priority Level C**: Increase lighting in call rooms, for instance, through the addition of desk lamps.

### 4.4.2 Storage and Relaxation

Overall students reporting being satisfied with the adequacy of relaxation space on campus, and storage space on campus and at hospital sites. The aggregate of 84% of students satisfied with relaxation space is increased from the 2011 ISA survey, wherein 65% of students strongly agreed or agreed to the question: “The Medical Alumni Association Lounge is an adequate place for students to relax and congregate.” This is likely due to the relocation and opening of the new Medical Student Lounge in 2014, in the Medical Sciences Building. This lounge allows students to host meetings and video conferences in one half of the room and provides space for socializing in the other.

There were no significant differences in satisfaction with the adequacy of relaxation and storage space between students at MAM and St. George campuses.
4.5 Library and Information Technology Resources

Subheadings:
Library Resources: Q23, Q24
Information Technology: Q25, Q26, Q27, Q28, Q29

Areas of Strength
- Library Resources (Q23, Q24)
  - [Q23]: 96.8% of students are satisfied or very satisfied with the accessibility of library resources and holdings both on campus (St. George and Mississauga, physically and virtually) and off-campus (virtually).
  - [Q24]: 97.2% of students also reported being satisfied or very satisfied with the quality (i.e. helpfulness) of library supports and services.
- Information Technology (Q25, 26, 27, 28, 29)
  - [Q25]: 90.4% of students from both campuses are satisfied or very satisfied with the accessibility of electronic learning resources, accessed either through Elentra/Portal, Quercus, Examsoft, and MedSIS.
  - [Q26]: 86.8% of students are satisfied or very satisfied with adequacy of wireless networks.
  - [Q27]: 91.0% of students were satisfied or very satisfied with access to electrical outlets in classrooms and study spaces.
  - [Q28]: 96.1% of students were satisfied or very satisfied with the audio-visual technology used to deliver lectures.
  - [Q29]: 91.5% of students were satisfied or very satisfied with accessibility of information resources (i.e. computers, internet access), at their respective academies and affiliated hospital sites.

Borderline Areas
- Not identified

Areas of Improvement
- Not identified

Discussion and Recommendations

4.5.1 Library Resources

As noted above, the majority of students were satisfied with the accessibility of library resources and holdings both on-campus and off-campus, and there were no significant differences between years or campuses. This finding is consistent with opinions expressed in the 2011 ISA survey. The majority of students were also satisfied with the quality of library support and services. However, students in Years 1 and 2 from MAM reported significantly lower satisfaction rates (84.6% and 87.1% respectively) compared to students from other years and campuses (Years 3 and 4 MAM: 97.1% and 96.7%, STG overall: 98.5%). In the narrative comments, students
reported “when I needed help with a literature search, the librarian told me they did not have the capacity to run the search for me and I had to go to Gerstein [library] for that.” and that “it would be great if the library could give us a statistician or stats services”. These factors may have contributed to the lower satisfaction rates.

Recommendations for Library Resources:
- **Priority level C:** Library support and services should be standardized across the curriculum so that students from all years and campuses are provided equitable library support (ex. help with statistics) and services.
- **Priority level C:** Offering library information sessions and drop-in hours at both campuses, rather than at just St. George.
- **Priority level C:** Improving awareness about library services. At least one library information session should be held early (ex. between August and October) in the Year 1 Foundations curriculum in order to educate students about the library resources on offer.

4.5.2 Information Technology Services

The majority of students were satisfied with the adequacy of wireless networks in classrooms and study spaces, with no significant difference noted between the St. George and MAM campuses.

Overall, students were also satisfied with access to power outlets, however, this varied across specific hospital/academy sites, which may not have been captured in this survey. For example, students from the Peters-Boyd academy at Sunnybrook found that many of the seminar rooms did not have power outlets accessible from work tables and required extension cables.

Again, most students were satisfied with the use of audiovisual technology used to deliver lectures. Interestingly, 2T2 MAM students in particular were less satisfied (85.2%) than St. George students (STG overall: 97.2%). This may be attributed due to many lectures being delivered with the lecturer at the St. George campus, questions and comments from students at being missed by students at MAM (ex. if the speaker doesn’t use the button to activate their microphone/camera).

The majority of students were also satisfied with the accessibility of information resources at their academy and affiliated hospital/healthcare centres required for clinical learning experiences, such as computers and internet access. However, 2T2 MAM students reported lower satisfaction rates (74.1%) compared to students at St. George (STG overall: 92.5%) and upper-years at MAM (Year 2: 87.5%, Year 3: 97.8% and Year 4: 93.8%).

The majority of students were satisfied with accessing electronic learning resources available across both campuses. However, narrative comments like “there are too many websites - wish that everything on MedSIS, Elentra, and OASES was on a single site” and “please make Learner Chart accessible via phone” shine light on some improvements that could be made to information technology services.
Recommendations for Information Technology Services:

- **Priority level C**: Stronger emphasis on the use of the microphone system to both lecturers and students at both campuses to ensure proper communication.

- **Priority level C**: Integrating various educational platforms (i.e. Elentra, MedSIS, OASES etc.) to improve accessibility and usability.

- **Priority level C**: The provision of mobile accessibility for Learner Chart.
4.6 Student Services

Subheadings:
Health and Personal Counselling: Q30, Q31, Q32, Q33, Q34
Academic and Career Advising: Q35, Q36, Q40
Financial Support: S30, Q38, Q39
Harm Prevention: Q41, Q42, Q57
Support for Clerkship and Electives: S32, S33, S34, S35, S36, Q37, S37

Areas of Strengths:

● Health and Personal Counselling (Q30-Q34)
  ○ [Q30]: 84.4% of the students were satisfied or very satisfied with the availability of student health services (ex. appointment with a healthcare professional for a physical health concern).
  ○ [Q31]: 85.3% of the students were satisfied or very satisfied with the availability of mental health services (ex. mental health counselling).
  ○ [Q32]: 87.4% of the students were satisfied or very satisfied with the availability of personal counselling (i.e. Office of Health Professions Students Affairs, UTM Health and Counselling Centre).
  ○ [Q33]: 95.6% of the students were satisfied or very satisfied with the confidentiality of personal counselling (i.e., Office of Health Professions Student Affairs, UTM Health and Counselling Centre).
  ○ [Q34]: 88.5% of the students were satisfied or very satisfied with the availability of programs to support student well-being (i.e., Office of Health Professions Student Affairs, student-led initiatives).

● Academic and Career Advising: (Q35, Q36, Q40)
  ○ [Q35]: 77.2% of students were satisfied or very satisfied with the adequacy of career counselling.
  ○ [Q36]: 95.7% of students were satisfied or very satisfied with the confidentiality of career counselling.
  ○ [Q40]: 83.7% of students were satisfied or very satisfied with the availability of career counselling.

● Financial Support (Q38, Q39)
  ○ [Q38]: 83.2% of students were satisfied or very satisfied with the availability of financial counselling services.
  ○ [Q39]: 74.5% of students were satisfied or very satisfied with the availability of debt management counselling regarding student loans and line of credit.

● Harm Prevention (Q41, Q42, Q57)
  ○ [Q41]: 90.9% of students were satisfied or very satisfied with the availability of education about the prevention of and exposure to infectious diseases (i.e., needle-stick procedures, hand hygiene) at their respective campuses and hospital sites.
○ [Q42]: 89.0% of students said they would know what to do if exposed to an infectious or environmental hazard (i.e., needle-stick injuries, eye or skin exposure to a hazardous material).
○ [Q57]: 92.7% of students said that they knew the University of Toronto Faculty of Medicine requires them to report situations in which their personal health poses a risk of harm to patients.

● Support for Clerkship and Electives (S33, S35, S36, S37)
  ○ [S33]: 76.4% of students were satisfied or very satisfied with the accuracy of catalog description of home electives.
  ○ [S35]: 73.7% of students were satisfied or very satisfied with the adequacy of support and guidance from UofT in preparing for the CaRMS process.
  ○ [S36]: 75.3% of students were satisfied or very satisfied with the adequacy of support from the electives office.
  ○ [S37]: 81.9% of students were satisfied or very satisfied with the information and support in arranging selectives.

Borderline Areas:
  ● Financial Support (S30)
    ○ [S30]: 61.6% of students were satisfied or very satisfied with the availability of financial support to offset costs of medical school.
  ● Support for Clerkship and Electives (S32)
    ○ [S32]: 62.7% of students were satisfied or very satisfied with the adequacy of support in securing away or U of T electives when no electives were available.

Areas of Improvements:
  ● Support for Clerkship and Electives (S34, Q37)
    ○ [S34]: 50.8% of students were satisfied or very satisfied with the availability of financial support from the University of Toronto MD Program and external funding sources for electives.
    ○ [Q37] 53.5% of students were satisfied or very satisfied with the guidance provided in choosing electives.

Discussion and Recommendations

4.6.1 Health and Personal Counselling
Aggregate responses show that overall students were satisfied or very satisfied with the availability and confidentiality of student health services, including mental health and personal counselling, and the availability of programs that support student well-being. Despite this, there is a significant discrepancy between campus-specific responses that should be addressed.

Comparing between campus responses, 71.1% of the MAM students (compared to 89.0% of the St. George students) felt satisfied or very satisfied with the availability of mental health services. 74% of the MAM students (compared to 90.9% of the St. George students) felt satisfied or very
satisfied with the availability of personal health services. Overall, the first, second, and fourth years at MAM are significantly less satisfied with the availability of mental health and personal health counselling services, and with the availability of programs supporting student wellness, compared to their St. George counterparts. The exception was third year students at MAM, who responded with satisfaction levels comparable to the students at St. George. This raises the notion that third year students receive more supportive services and resources as they enter clerkship. Extension of this increased support to pre-clerkship and graduating students could improve their satisfaction in accessing health and counselling services. Another major factor that contributes to the decreased satisfaction in MAM students, is the limited time slots available for appointments at the MAM site. There are greater time availabilities allotted to the St. George students due to their greater numbers, however this poses a challenge for the MAM students to schedule health and counselling services in a timely and easily accessible manner. Although there are options to have appointments over telecommunication to overcome campus barriers, students may feel less comfortable with virtual communication when discussing personal issues, and therefore feel less inclined to access such services. Moreover, programs, initiatives, and events that promote a culture of wellness are more pervasive at St. George than at MAM. Students at MAM may feel more isolated and less satisfied in the availability of opportunities to connect with this culture of wellness.

Recommendations for Health and Personal Counselling:
- **Priority level C:** Recruit counsellors who can more frequently or permanently provide health and personal counselling services at MAM, to increase the time availabilities offered to MAM students
- **Priority level C:** Conduct more periodic assessments of student mental and personal health, to inform the Faculty of the unique needs of students at the MAM and St. George campuses and guide the necessary changes

As student responses from MAM were not available for the 2011 Student Accreditation Survey, this is the first report showing the need for increased availability of health and personal counselling services for the MAM students.

4.6.2 Academic and Career Advising
The majority of the student population reported high levels of satisfaction with both the availability and confidentiality of academic and career counselling, with comparable satisfaction between years and campuses. However, there was a trend of decreasing perception of adequacy in career counselling with increasing academic year, where final year students were significantly less satisfied compared to first year students at both St. George campus (74.7% vs. 86.0%) and Mississauga campus (60.4% vs. 87.0%). It is important to consider that final year students had, relative to other years, the most amount of experience in career preparation and therefore able to offer more comprehensive feedback. These results then reflect the notion that as students transitioned from pre-clerkship to clerkship and subsequently CaRMS, their continued needs for increasing career counselling were not met. Narrative comments from students revealed frustration with inadequate information received (ex. number and types of electives required to be
a competitive applicant, application characteristics deemed favourable by programs) as well as unsatisfactory timing (ex. inadequate counselling during pre-clerkship). As such, students had to rely on external sources of information for decision making (ex. friends in upper years, resources from other medical schools). It is also worthwhile to note that final year students at the Mississauga campus were significantly less satisfied with adequacy of career counselling compared to those at St. George campus (60.4% vs. 74.7%). Narrative comments highlighted the disparity that OHPSA counsellors were only physically available at the Mississauga campus one day per week in comparison to five days per week at the St. George campus. This drastically reduces students’ ability to receive counselling in a timely basis, especially during clerkship.

Recommendations for Academic and Career Advising:

- **Priority level C:** Provide earlier career counselling starting in first year; consider mandatory pairing of students with counsellors and the establishment of regular (ex. annual) reviews
- **Priority level C:** Improve accessibility of counselling in clerkship to all students by expanding office hours or providing mandatory time-off during rotations
- **Priority level C:** Improve accessibility of counselling specifically to students at the Mississauga campus by increasing the number of days counsellors are physically available on-site and/or the number of counsellors available
- **Priority level C:** Consolidate alumni data and perform appropriate analysis to improve OHPSA’s ability to provide more specific advice to individual applicants, including those interested in non-traditional or non-clinical careers
- **Priority level C:** Organize additional in-person or virtual information sessions with Program Directors, staff physicians, and/or residents during clerkship and pre-clerkship to provide specific advice regarding specialty profiles and characteristics of strong applicants (ex. number and types of electives required, extracurricular activities undertaken)
- **Priority level C:** Organize information sessions to increase CaRMS transparency (ex. CaRMS statistics, options for unmatched applicants)

4.6.3 Financial Support

Overall students were satisfied with the ability of student financial services, such as counselling, but a strong proportion of students were not satisfied with the availability of financial supports to offset the costs of medical education. UofT currently offers a host of needs-based bursaries (MD Admission Bursaries), grants (Faculty of Medicine Student Grants), and stipends (Travel Stipend) as well as merit-based scholarships to complement existing access to federal and provincial loans, as well as private professional line of credit accounts. Despite this access, with significant increases to the cost of living and renting in the Toronto area, as outlined in the previous sections, student services have an opportunity to improve upon existing programs for financial support. Recommendations can be found above in the finances section of learning environment.

4.6.4 Harm Prevention
Overall students feel satisfied with the availability of education for prevention of infectious disease, this was consistent across all years and campuses. If exposed to an infectious environment, 89% of students said they would know what to do. The only year below 90% in this category were the 2T1s. This suggests that a refresher on hazardous exposures might be indicated for second year students, if not already in place. Finally, the majority of students were aware that they had to report personal health risks to the faculty of medicine. This was consistent across years and campuses.

This data reflects closely the 2011 ISA wherein most students agreed that they had been sufficiently prepared to protect their own health in clinical encounters (i.e. infection control, occupational hazards, personal safety around patients).

Harm prevention should be considered a significant area of strength in this ISA.

4.6.5 Support for Clerkship and Electives

Overall students feel positively about the process of learning about and arranging selectives, the accuracy of description for home electives, adequacy of support from the electives office and adequacy of support in preparing students for the CaRMS process. Borderline areas of satisfaction include the adequacy of support in securing away electives, or alternatively a UofT elective if an away elective was not available, as well as the dissatisfaction associated with the costs of electives.

Importantly, our data revealed a major area of improvement in ensuring adequate financial support from the MD Program and external funding sources for clinical electives. There was only an overall 50.8% rate of satisfaction with the current level of financial support received, and this is congruent across year 3 and 4 students in both campuses. Narrative comments demonstrated high costs associated with away electives. “AFMC application costs were excessive”, described as “a financial drain” and “many classmates had to spend thousands of dollars just arranging electives”, which is in addition to the cost of elective travelling and accommodations. There was a lot of frustration expressed as students ultimately felt the costs associated with booking, traveling to and finding accommodations for away electives was unreasonable, given the significant amount of tuition paid in 4th year.

Another major area of improvement is providing students with enough guidance with choosing electives as only 53.5% of students felt very satisfied or satisfied. Narrative comments from student demonstrate frustration in the lack of “support for elective planning”, confusion about how to “maximize [their] chances of booking appropriate electives to match [their] specialty of choice” and “did not set [them] up for success”. Others comments illustrate the lack of clarity in the guidance provided, stating information was “vague”, “out of touch with the advice from program directors and residents” and that “information lectures are held to late”. When students reached out to the electives’ office, several students commented on the “significant time lag” of weeks in responses, or complete lack of response, which is concerning as students were having “difficulty
securing time-sensitive electives”. Overall, the experience of booking electives was “stressful and discouraging”.

Recommendations for Support for Clerkship and Electives:

- **Priority level A**: Increased resources should be available for Year 3 students prior to the time of booking electives. This includes delivering informative lectures well in advance of the date that elective booking opens, as well as informative handouts outlining important timelines for both home and away electives.

- **Priority level A**: Greater detail of information is required to support students in booking away electives. This includes providing information about timelines and protocols that differ across schools. For example, the University of Calgary has a unique way and timeline for booking electives that students were not equally aware of.

- **Priority level A**: The elective office must shorten the time required to respond to student inquiries to <24-48 hours to ensure students feel well supported before and during the elective application process. Various modalities of support are encouraged in addition to email, such as in-person meetings, telephone calls. Additional staff may be required to handle the high volume of inquiries during elective booking season.

- **Priority level A**: The Faculty should provide greater transparency on the electives and match statistics from previous years. This information should be readily available to all students, without having to reach out to OHPSA.

- **Priority level B**: Greater financial support is needed to ensure the satisfaction of 3rd and 4th year students during the process of booking electives. Given the difficulty in securing an elective through AFMC, which generates a large cost associated with electives, we suggest creating a new bursary to help offset this cost. This should be available to all students and be sufficient to provide the financial support to apply to a minimum number of AFMC applications for away electives. Alternatively, the bursary could apply as a reimbursement and return a fraction of each students’ total amount spent on applications.

- **Priority level B**: The AFMC application process is costly. This is a cost that affects not only students at UofT. As such, we recommend that UofT advocate for lower application costs. If that is not possible, we recommend for UofT to follow a model similar to the University of Calgary, whereby students can confirm electives with an elective coordinator before paying the AFMC fee. Hopefully, this would encourage other schools to follow in a similar model.
4.7 Medical Education Program

Subheadings:

Clerkship
Evaluations, Feedback, Flexibility: S41, S55_1 through to S55_10, S57, S58, S59, Q48_1 through to Q48_7, Q49_1 through to Q49_7, Q51, Q52_1 through to Q52_7, Q53_1 to Q53_7
Clerkship Rotations: Q46, S51_1 through to S51_7, S53_1 to S53_10, S54_1 through to S54_10

Pre-clerkship
Evaluations, Feedback, Flexibility: Q45, Q50
Blocks: Q44, S43, S44
Components: S45, S48_1 through to S48_12, S49, S50

Overall
Exposures to clinical practice and integration of feedback: Q54, Q55, S52, S56, Q47
Overall evaluations and feedback: S38, S39, S40, Q43, S56

MD/PhD: S46, S47

Areas of Strength

- All years:
  - [Q43]: 91.7% of students were satisfied or very satisfied with the accessibility of their academic records (U of T transcript centre, ACORN, Learner Chart, MedSIS).
  - [Q47]: 86.7% of students were satisfied or very satisfied with the adequacy (i.e. amount, quality) of education in caring for individuals from diverse backgrounds.
  - [Q54]: 84.8% of students agreed that the curriculum provided them with broad exposure to and experience in generalist care (including family medicine and non-specialist hospital care).
  - [Q55]: 84.8% of students agreed that the curriculum provided them with broad exposure to and experience in family medicine specifically.
  - [Q56]: 84.8% of students agreed that their clinical learning experiences (core and elective combined) took place in more than one setting ranging from small rural or underserved communities to tertiary care health centres (ex. ICE/ACSM, community home visit).
  - [S39]: 74.5% of students were satisfied or very satisfied with the amount of time between evaluations (mastery exercises, exams, bell ringers, portfolio reflections, HC presentations, etc.).
  - [S40] 85.2% of students were satisfied or very satisfied with the fairness of evaluations.
- Clerkship:
  - [Q46]: 95.6% of students were satisfied or very satisfied with the time spent in educational and patient care activities in clerkship as a whole.
○ [S59]: 89.5% of students agreed or strongly agreed that the expectations of clerkship preceptors reflected the students’ level of training.
○ [Q51]: 83.0% were satisfied or very satisfied with the adequacy (i.e., amount and quality) of formative feedback received during clerkship (ex. case report feedback, MedSIS evaluations, etc).
○ [S56]: 76.9% of students agreed or strongly agreed that the medical school adequately integrated student feedback in a manner that improved the learning and clinical experiences of students

● Pre-clerkship
○ [Q45]: 86% of students were satisfied or very satisfied with the time spent in educational activities in pre-clerkship.
○ [Q50]: 89.9% were satisfied or very satisfied with the adequacy (i.e. amount and quality) of formative feedback received during pre-clerkship (ex. case report feedback, MedSIS evaluations, etc).
○ [S45]: 91% of students are satisfied or very satisfied with the preparedness of CBL tutors to provide a meaningful educational experience.

● MD/PhD:
○ [S47]: 72.7% of MD/PhD respondents were satisfied or very satisfied by the opportunities provided by the faculty to prepare them for a career as a clinician-scientist.

Borderline Areas
● All years:
○ [S52]: 69.6% of students were satisfied or very satisfied with the adequacy of opportunities (i.e. amount and quality) to explore their clinical interests to guide their career choices for CaRMS

● Clerkship:
○ [S58]: 64.8% of students agreed or strongly agreed that clerkship and the elective period provided them with adequate opportunities to explore their clinical interests prior to the CaRMS deadline.

● MD/PhD:
○ [S46]: 61.1% of MD/PhD respondents were very dissatisfied or dissatisfied with the way the faculty accommodates the unique needs of integrating clinical and research training for MD/PhD students

Areas of Improvement
● All years:
○ [S38]: 46% of students were satisfied or very satisfied with their opportunities to review assessments (exams, mastery exercises, bell ringers, portfolio meetings, etc.) to understand how they may have improved.
○ [S49]: 53.7% of students were satisfied or very satisfied with their community-based service learning (CBSL) placement

● Clerkship:
○ [S41]: Only 48.7% of students were satisfied or very satisfied with the clerkship curriculum providing adequate time and flexibility to pursue activities outside of class (e.g., extracurricular activities).

○ [S57]: Only 51.5% of students felt that the Medical Student Performance Record (MSPR) is a fair and effective method of communicating my performance as a clinical clerk to residency programs.

Areas of strength, borderline areas, and areas of improvement for clerkship rotations are summarized below (in both table and text form).

Areas of strength (green), borderline areas (yellow), and areas of improvement (red) are summarized in the tables below (Tables 7-8), and expanded upon in the subsequent descriptions.
<table>
<thead>
<tr>
<th>Clerkship Stream</th>
<th>Time Spent (Adequate) [S51]</th>
<th>Was observed while taking a patient’s history [Q48]</th>
<th>Was observed while performing a physical/mental status examination [Q49]</th>
<th>Received mid-point feedback [Q52]</th>
<th>Had sufficient access to the variety of patients and procedures [Q53]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Medicine</td>
<td>92.0%</td>
<td>86.4%</td>
<td>90.2%</td>
<td>90.7%</td>
<td>96.0%</td>
</tr>
<tr>
<td>Family Medicine</td>
<td>93.2%</td>
<td>97.9%</td>
<td>97.3%</td>
<td>98.5%</td>
<td>95.5%</td>
</tr>
<tr>
<td>Internal Medicine</td>
<td>82.2%</td>
<td>94.5%</td>
<td>96.6%</td>
<td>97.9%</td>
<td>97.5%</td>
</tr>
<tr>
<td>Obstetrics/ Gynecology</td>
<td>84.8%</td>
<td>77.9%</td>
<td>93.7%</td>
<td>87.5%</td>
<td>92.8%</td>
</tr>
<tr>
<td>Pediatrics</td>
<td>91.9%</td>
<td>87.5%</td>
<td>91.5%</td>
<td>92.7%</td>
<td>94.5%</td>
</tr>
<tr>
<td>Psychiatry</td>
<td>93.4%</td>
<td>96.1%</td>
<td>92.2%</td>
<td>95.5%</td>
<td>96.1%</td>
</tr>
<tr>
<td>Surgery</td>
<td>72.7%</td>
<td>73.0%</td>
<td>77.8%</td>
<td>82.9%</td>
<td>90.2%</td>
</tr>
<tr>
<td>Ophthalmology</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Otolaryngology</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Anesthesia</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Green - area of strength (>70%)  
Yellow - borderline area (60-69.9%)  
Red - area of weakness (<60%)
### Table 8. Student satisfaction rates (satisfied + very satisfied) for clerkship streams

<table>
<thead>
<tr>
<th>Clerkship Stream</th>
<th>Learning objectives provided were clear and adequate preparation [S53] SA+A</th>
<th>Faculty provided direction to access sufficient/ useful resources [S54] SA+A</th>
<th>The evaluations were fair [S55] SA+A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Medicine</td>
<td>97.6%</td>
<td>98.5%</td>
<td>97.7%</td>
</tr>
<tr>
<td>Family Medicine</td>
<td>92.7%</td>
<td>92.7%</td>
<td>92.7%</td>
</tr>
<tr>
<td>Internal Medicine</td>
<td>92.1%</td>
<td>68.0%</td>
<td>82.6%</td>
</tr>
<tr>
<td>Obstetrics/ Gynecology</td>
<td>94.0%</td>
<td>97.9%</td>
<td>96.7%</td>
</tr>
<tr>
<td>Pediatrics</td>
<td>95.4%</td>
<td>95.8%</td>
<td>89.4%</td>
</tr>
<tr>
<td>Psychiatry</td>
<td>92.7%</td>
<td>83.4%</td>
<td>79.2%</td>
</tr>
<tr>
<td>Surgery</td>
<td>80.3%</td>
<td>54.9%</td>
<td>78.8%</td>
</tr>
<tr>
<td>Ophthalmology</td>
<td>79.4%</td>
<td>93.6%</td>
<td>72.0%</td>
</tr>
<tr>
<td>Otolaryngology</td>
<td>77.2%</td>
<td>65.7%</td>
<td>70.6%</td>
</tr>
<tr>
<td>Anesthesia</td>
<td>92.7%</td>
<td>93.3%</td>
<td>92.6%</td>
</tr>
</tbody>
</table>

**Green** - area of strength (>70%)
**Yellow** - borderline area (60-69.9%)
**Red** - area of weakness (<60%)

**Emergency Medicine:**
- **Areas of Strength:**
  - [S53_1]: 97.6% of students felt the objectives were clear and adequate to prepare for the Emergency Medicine rotation.
○ [S54_1]: 98.5% of students agreed or strongly agreed that the Faculty of Medicine provided sufficient amount of resources to guide their self study for the required clinical learning experience in Emergency Medicine.
○ [S51_1]: 92.0% of students felt that time spent in educational activities and patient care activities in Emergency Medicine was adequate.
○ [Q53_1]: 96.0% of students had sufficient access to the variety of patients and procedures in Emergency Medicine to complete their Case Logs.
○ [Q48_1]: 86.4% of students were observed by a faculty member or resident at some point during the time they were taking a history in Emergency Medicine.
○ [Q49_1]: 90.2% of students were observed by a faculty member or resident at some point during the time they were performing a physical examination in Emergency Medicine.
○ [Q52_1]: 90.7% of students received mid-point feedback in Emergency Medicine.
○ [S55_1]: 97.7% of students agreed that the evaluations (ex. written examinations, OSCEs, oral examinations, etc.) were appropriate and fairly reflected the objectives provided in Emergency Medicine.

● Borderline Areas:
○ Not identified

● Areas of Improvement:
○ Not identified

Family Medicine:

● Areas of Strength:
○ [S53_2]: 97.2% of students agreed or strongly agreed that the objectives were clear and adequate to prepare for the Family Medicine rotation.
○ [S54_2]: 92.8% of students felt that if needed, the Faculty of Medicine provided and/or directed them to a sufficient amount of useful resources (textbooks, guides, lecture PDFs, etc.) to guide their self-studying for Family Medicine.
○ [S51_2]: 93.2% of students felt that time spent in educational activities and patient care activities in Family Medicine was adequate.
○ [Q53_2]: 95.5% of students had sufficient access to the variety of patients and procedures in Family Medicine to complete their Case Logs.
○ [Q48_2]: 97.8% of students were observed by a faculty member or resident at some point during the time they were taking a history in Family Medicine.
○ [Q49_2]: 97.3% of students were observed by a faculty member or resident at some point during the time they were performing a physical examination in Family Medicine.
○ [Q52_2]: 98.5% of students received mid-point feedback in Family Medicine.
○ [S55_2]: 92.7% of students agreed that the evaluations (ex. written examinations, OSCEs, oral examinations, etc.) were appropriate and fairly reflected the objectives provided in Family Medicine.

● Borderline Areas:
○ Not identified
Areas of Improvement:
  ○ Not identified

Internal Medicine:
  ● Areas of Strength:
    ○ [S53_3]: 92.1% of students agreed or strongly agreed that the objectives were clear and adequate to prepare for the Internal Medicine rotation.
    ○ [S51_3]: 82.2% of students felt that time spent in educational activities and patient care activities in Internal Medicine was adequate.
    ○ [Q53_3]: 97.5% of students had sufficient access to the variety of patients and procedures in Internal Medicine to complete their Case Logs.
    ○ [Q48_3]: 94.5% of students were observed by a faculty member or resident at some point during the time they were taking a history in Internal Medicine.
    ○ [Q49_3]: 96.6% of students were observed by a faculty member or resident at some point during the time they were performing a physical examination in Internal Medicine.
    ○ [Q52_3]: 97.9% of students received mid-point feedback in Internal Medicine.
    ○ [S55_3]: 82.6% of students agreed that the evaluations (ex. written examinations, OSCEs, oral examinations, etc.) were appropriate and fairly reflected the objectives provided in Internal Medicine.
  ● Borderline Areas:
    ○ [S54_3]: 68% of students felt that if needed, the Faculty of Medicine provided and/or directed them to a sufficient amount of useful resources (textbooks, guides, lecture PDFs, etc.) to guide their self-studying for Internal Medicine.
  ● Areas of Improvement:
    ○ Not identified

Obstetrics/Gynecology:
  ● Areas of Strength:
    ○ [S53_4]: 94.0% of students agreed or strongly agreed that the learning objectives were clear and adequate to prepare for the Obstetrics/Gynecology rotation.
    ○ [S54_4]: 97.9% of students felt that if needed, the Faculty of Medicine provided and/or directed them to a sufficient amount of useful resources (textbooks, guides, lecture PDFs, etc.) to guide their self-studying for Obstetrics/Gynecology.
    ○ [S51_4]: 84.8% of students felt that time spent in educational activities and patient care activities in Obstetrics/Gynecology was adequate.
    ○ [Q53_4]: 92.8% of students had sufficient access to the variety of patients and procedures in Obstetrics/Gynecology to complete their Case Logs.
    ○ [Q48_4]: 77.9% of students were observed by a faculty member or resident at some point during the time they were taking a history in Obstetrics/Gynecology.
- [Q49_4]: 93.7% of students were observed by a faculty member or resident at some point during the time they were performing a physical examination in Obstetrics/Gynecology.
- [Q52_4]: 87.5% of students received mid-point feedback in Obstetrics/Gynecology.
- [S55_4]: 96.7% of students agreed that the evaluations (ex. written examinations, OSCEs, oral examinations, etc.) were appropriate and fairly reflected the objectives provided in Obstetrics/Gynecology.

**Borderline Areas:**
- Not identified

**Areas of Improvement:**
- Not identified

**Pediatrics:**

**Areas of Strength:**
- [S53_5]: 95.4% of students agreed or strongly agreed that the learning objectives provided were clear and adequate enough to prepare them for required clinical learning experiences in Pediatrics.
- [S54_5]: 95.8% of students agreed or strongly agreed that, if needed, the Faculty of Medicine provided and/or directed them to a sufficient amount of useful resources (ex. textbooks, guides, lecture PDFs, etc.) to guide their self-studying for required clinical learning experiences Pediatrics.
- [S51_5]: 91.9% of students felt that time spent in educational activities and patient care activities in Pediatrics was adequate.
- [Q53_5]: 94.5% of students had sufficient access to the variety of patients and procedures in Pediatrics to complete their Case Logs.
- [Q48_5]: 87.5% of students reported being observed by a faculty member or a resident at some point during the time they were taking a patient’s history in each of the required clinical learning experiences in Pediatrics.
- [Q49_5]: 91.8% of students reported being observed by a faculty member or a resident at some point during the time they were performing a physical examination in each of the required clinical learning experiences in Pediatrics.
- [Q52_5]: 92.7% of students reported receiving mid-point feedback in each of the required clinical learning experiences in Pediatrics.
- [S55_5]: 89.4% of students agreed or strongly agreed that the evaluations (ex. written examinations, OSCEs, oral exams, etc.) were appropriately and fairly reflected in the objectives provided for their Pediatrics rotations.

**Borderline Areas:**
- Not identified

**Areas of Improvement:**
- Not identified

**Psychiatry:**
Areas of Strength:
- [S53_6]: 92.7% of students agreed or strongly agreed that learning objectives provided were clear and adequate enough to prepare for required clinical learning experiences in Psychiatry.
- [S54_6]: 83.4% of students felt that if needed, the Faculty of Medicine provided and/or directed them to a sufficient amount of useful resources (textbooks, guides, lecture PDFs, etc.) to guide their self-studying for Psychiatry.
- [S51_6]: 93.4% of students felt that time spent in educational activities and patient care activities in Psychiatry was adequate.
- [Q53_6]: 96.1% of students had sufficient access to the variety of patients and procedures in Psychiatry to complete their Case Logs.
- [Q48_6]: 96.1% of students reported being observed by a faculty member or a resident at some point during the time they were taking a patient’s history in each of the required clinical learning experiences in Psychiatry.
- [Q49_6]: 92.5% of students reported being observed by a faculty member or a resident at some point during the time they were performing a mental status exam in each of the required clinical learning experiences in Psychiatry.
- [Q52_6]: 95.5% of students received mid-point feedback in Psychiatry.
- [S55_6]: 79.2% of students felt that evaluations in Psychiatry fairly reflected the learning objectives.

Borderline Areas:
- Not identified

Areas of Improvement:
- Not identified

Surgery:

Areas of Strength:
- [S53_7]: 92.7% of students agreed or strongly agreed that learning objectives provided were clear and adequate enough to prepare for required clinical learning experiences in Surgery.
- [S51_7]: 72.7% of students felt that the time spent in educational activities in Surgery was adequate.
- [Q53_7]: 90.2% of students had sufficient access to the variety of patients and procedures in Surgery to complete their Case Logs.
- [Q48_7]: 73.0% of students reported being observed by a faculty member or a resident at some point during the time they were taking a patient’s history in each of the required clinical learning experiences in Surgery.
- [Q49_7]: 77.8% of students reported being observed by a faculty member or a resident at some point during the time they were performing a physical examination in each of the required clinical learning experiences in Surgery.
- [Q52_7]: 82.9% of students received mid-point feedback in Surgery.
- [S55_7]: 78.8% of students felt that evaluations in Surgery fairly reflected the learning objectives.
**Area of Strength:**
- Borderline Areas:
  - Not identified
- Areas of Improvement:
  - [S54_7]: 54.9% of students agreed or strongly agreed that the Faculty of Medicine provided sufficient amount of resources to guide their self study for the required clinical learning experience in Surgery

**Ophthalmology:**
- Areas of Strength:
  - Borderline Areas:
    - Not identified
  - Areas of Improvement:
    - [S54_8]: 93.6% of students agreed or strongly agreed that the Faculty of Medicine provided sufficient amount of resources to guide their self study for the required clinical learning experience in their Ophthalmology rotation.
    - [S55_8]: 72% of students agreed or strongly agreed that the evaluations were appropriate and fairly reflected the objectives provided for the Ophthalmology rotation.

**Otolaryngology**
- Areas of Strength:
  - Borderline Areas:
    - Not identified
  - Areas of Improvement:
    - [S54_9]: Otolaryngology: 65.7% of students felt that if needed, the Faculty of Medicine provided and/or directed them to a sufficient amount of useful resources (textbooks, guides, lecture PDFs, etc.) to guide their self-studying for Otolaryngology.

**Anesthesiology:**
- Areas of Strength:
○ [S53_10]: 92.7% of students agreed or strongly agreed that learning objectives provided were clear and adequate enough to prepare for required clinical learning experiences in Anesthesiology.
○ [S54_10]: 93.3% of students felt that if needed, the Faculty of Medicine provided and/or directed them to a sufficient amount of useful resources (textbooks, guides, lecture PDFs, etc.) to guide their self-studying for Anesthesiology.
○ [S55_10]: 92.6% of students agreed or strongly agreed that evaluations (ex. written examinations, OSCEs, oral examinations, etc.) appropriate and fairly reflected the objectives provided for Anesthesiology.

● Borderline Areas:
  ○ Not identified

● Areas of Improvement:
  ○ Not identified

Discussion and Recommendations:
4.7.1 Clerkship

4.7.1a Flexibility
The majority of student respondents (64.8%) agreed or strongly agreed that clerkship and the elective period provided them with sufficient opportunities to explore their clinical interests prior to the CaRMS deadline. There were no significant discrepancies between students in different clerkship years, or between students at the St. George and MAM campuses. Although the 2011 Accreditation Survey did not explicitly assess this area, it did find that a strong majority of students (70% and 73% of third- and fourth-year students, respectively) were satisfied with their preparation for the next stage of their careers. Results of the present survey largely align with these 2011 survey findings. Key areas of concern highlighted by student respondents in the present survey include: lack of flexibility with clerkship rotation schedules in general, resulting in inadequate career exploration opportunities (n=5); lack of flexibility with specific clerkship rotations, resulting in inadequate career exploration opportunities (ex. lack of exposure to subspecialties within Internal Medicine, Pediatrics, and Surgery subspecialties; n=6); lack of resources and support for students around guidance around choosing electives and applying to CaRMS (n=3); lack of opportunities to explore career options earlier in medical school, such as through pre-clerkship electives (n=3); and lack of exposure to clinical rotations in small rural settings or underserved communities (n=1).

Beginning next year, there are two significant changes that may improve student perceptions in this area. With the introduction of the new clerkship structure, beginning with the class of 2021, students now have an elective in the middle of their core clerkship period, and there has been national implementation of the 8-week cap on electives in a given specialty. We are hopeful that these changes can facilitate students exploring a greater breadth of clinical experiences and facilitate the possibility of parallel planning during CaRMS without being penalized by residency programs.
It is concerning that only 48.7% of students felt that the clerkship curriculum provided enough time and flexibility to pursue activities outside of clerkship and that these results were more pronounced at MAM with only 37.2% versus 51.9% of St. George students. Flexibility for extracurricular activities during clerkship was not assessed in the 2011 ISA survey. Research suggests that increasing flexibility during clerkship increases student engagement. However, it is well understood that clerkship is a challenging part of medical school and marks the transition from a didactic environment to a clinical one. The intensity of clerkship allows students to maximize their growth as budding physicians, and we are hesitant to suggest changes that may diminish the learning opportunities in clerkship.

Recommendations for Flexibility:

- **Priority B**: Implementing mandatory subspecialty rotations for certain rotations, such as Pediatrics and Internal Medicine, similar to the current structure of the Surgery rotation.
- **Priority B**: Increasing opportunities for exposure to a broad range of specialties in pre-clerkship training, through clinical placements (ex. Family Medicine Longitudinal Experience) thereby allowing greater exposure before clerkship.
- **Priority B**: Encouraging more career exploration opportunities in pre-clerkship and clerkship, such as through interest groups, shadowing opportunities, and mentorship programs.
- **Priority B**: Further explore the clerkship schedules and service to learning ratios at MAM versus St. George to possibly explain the lower rate of satisfaction with flexibility during clerkship at MAM.
- **Priority B**: Explore areas where students may be able to increase their flexibility in clerkship through a working group.

4.7.1b Evaluations and Feedback

The majority (89.5%) of the students agreed that clerkship preceptor expectations reflected the students' level of training. Across all sites and years, students were overwhelmingly satisfied (95.6%) with their educational and patient care experiences in clerkship. The majority of students (83.0%) were satisfied with the adequacy of formative feedback and believe that the medical school adequately integrated student feedback to improve learning and clinical experiences.

Similar to the 2011 report, only about half of the student body agreed that the MSPR is a fair and effective method of reflecting performance throughout clerkship (51.5% compared to 46% in 2011). Upon further analysis, direct feedback from students clearly stated that they felt the MSPR, a purely numerical score, did not accurately encompass their performance during their clinical rotations. For instance, many students expressed frustration, noting that the current 1-5 scoring system can be skewed by preceptor subjectivity (“preceptors who give only 3's” despite offering supportive/encouraging feedback throughout the rotation). Student's also stated that they experienced significant stress throughout their rotations to achieve 5/5 evaluations. To improve this, students suggested having preceptor’s comments integrated into the MSPR. Students
overwhelmingly stated that including comments in the report would provide a more complete reflection of their performance during their clinical rotations. Certain students believe that this would ultimately strengthen their residency applications with some going as far to say that they feel disadvantaged compared to students from other schools where selected feedback/commentary is incorporated into their clerkship evaluations. It is worth noting that since the writing of this report, the Vice-Dean at the University of Toronto Faculty of Medicine (Dr. Patricia Houston) is spearheading an effort to standardize the MSPR across all schools, including the addition of room for qualitative comments.

To address this issue, the following recommendations are suggested:

- **Priority B**: Expanding the MSPR to include student selected comments from preceptors (ex. comments included in the end-of-rotation feedback forms)
- **Priority B**: Alternatively, the school may provide only selected comments to residency programs, forgoing the numerical scoring system altogether

4.7.1c Clerkship Rotations

**Emergency Medicine**

The majority of the students at the University of Toronto agreed that the learning objectives, supplemental study resources, and evaluations were fair for the Emergency Medicine rotation. A significantly less amount of Year 4 students across both campuses agreed that they had a faculty member or resident observe them perform a patient history (83.8% vs. 92.5%, Year 4 and 3, respectively). Unfortunately, comments did not reveal any possible hypotheses about why these differences exist. Compared to the 2011 Accreditation Survey, more students feel that the learning objectives were clear and adequate to prepare for the Emergency Medicine rotation (98% compared to 81% aggregate in 2011).

**Family Medicine**

The majority of students across all sites and years expressed high satisfaction with the Family Medicine rotation. The vast majority of students were observed taking a history and physical exam, received mid-rotation feedback and felt that time spent in educational and patient care activities were adequate. The majority of students across all years and sites showed high satisfaction with the evaluations, learning objectives, and resources to guide their self-studying. There was sufficient access to a variety of patients and procedures. However, satisfaction in these areas was significantly less among all Year 3 students (85.3% vs. 96.4%) but are an improvement compared to 72% satisfaction with learning objectives in the 2011 ISA survey. Though it is difficult to identify the underlying cause for these differences, comments did express frustration that the training received at academic Family Medicine sites not being reflective of community Family Medicine practice. Others noted being placed with preceptors who had specialized practices (ex. a plus one in obstetrics), and thus lacked a general practice experience. With respect to the study materials provided by the Faculty of Medicine, third year students across both campuses were in less agreement than compared to fourth year students (85.3% vs. 96.4%). This discrepancy could be due to differences in the pre-clerkship curriculum, which should be designed to help build a
generalist knowledge foundation. Regardless, comments revealed requests for a consolidated handbook to help prepare for the written exam.

**Internal Medicine**

Only 68% of students, based on total aggregate responses, felt that supplemental resources for self-study were acceptable for the Internal Medicine rotation. This is likely due to the fact that the Faculty of Medicine does not provide a handbook for the Internal Medicine rotation, only learning objectives. There was no difference across the campuses or clerkship years. Data also revealed a significant difference between Year 3 and 4 MAM students in their perceived fairness of the Internal Medicine evaluations (88% vs. 70.8%, respectively), though this trend is not seen in the St. George group. Although comments did not reveal anything directly about these differences, it was apparent that MAM students often felt there is inadequate formal and informal teaching in Mississauga. One student noted “residents are often the ones who are able to take over the teaching role and we for the most part did not have access to this”. Currently, some teaching is shared across the campuses through videoconferencing, though comments have revealed issues with this: “videoconferencing technology during Internal medicine actually wasn't booked a number of times”. Other comments revealed concerns on the lack of subspecialty exposure compared to General Internal Medicine.

**Recommendations for Internal Medicine:**

- **Priority level B:** To provide students with a standardized study resource, we encourage the Department of Medicine to provide a centralized, standardized handbook to make explicit the core content required for evaluation purposes.
- **Priority level D:** Increase formalized teaching at MAM (with the goal being to match the quality and quantity of formalized teaching at St. George). This may include recruitment of a chief resident who organizes teaching for the Mississauga sites or asking rotating residents to engage in more formalized teaching.

**Ob/Gyn**

Overall, students were generally satisfied with their Obstetrics/Gynecology rotation. Particularly, the vast majority of the student population felt that the learning objectives, evaluations and provided supplemental resources for self-study were acceptable. There was sufficient access to a variety of patients and procedures. Upon further analysis, it appears that multiple differences exist between the two campuses. For instance, according to respondent data on the ISA, less students from MAM indicated that they received midpoint feedback (77.1% vs. 90%, at MAM and St. George respectively). Furthermore, only 68.2% of Year 3 MAM students indicated that they were observed by faculty while performing a history, compared to 82.8% of Year 3 St. George students. While these statements are based on respondents’ recollection during the ISA, we believe these differences should be further investigated. Additionally, fewer Year 3 St. George students felt that they had adequate time spent in educational and patient care activities (82.6% compared to 95.5% of MAM students). Interestingly, despite the high rate of agreement in the Year 3 MAM students, only 75% of Year 4 MAM students felt they had adequate time spent in patient care activities. Unfortunately, narrative comments did not reveal any trends that may
explain these differences. One comment however, did note that having only done, “2 consults during the 6-week rotation, and my ambulatory experience was completely observational. When I asked my preceptor for opportunities to see patients I was told that clerks in the past had taken too long.” As such, it is possible that the decreased agreement is reflective of discrepancies in clinical rotations experienced at different teaching hospitals. Possible differences include patient volumes, number of learners or interest medical education teaching by preceptors.

Recommendations for Ob/Gyn:
- **Priority level D:** Explore potential discrepancies in clinical experiences between students at the Mississauga and St. George campuses
- **Priority level D:** Ensure that staff at MAM provide mid-point feedback and observe students perform a history.

**Pediatrics**
Students reported almost universally identified positive experiences during their Pediatrics rotations. There were very high rates of satisfaction (88-96% of students) with the learning objectives, supplemental study resources, and evaluations, agreeing that they were fair and adequate. They also reported spending adequate time in educational activities and patient care. Similarly, the vast majority of students also reported being observed by a faculty member or resident while taking a patient’s history, being observed performing a physical examination, and receiving mid-point feedback. There was sufficient access to a variety of patients and procedures. There were no significant discrepancies between students in different clerkship years, or between students at the St. George and MAM campuses. These findings align closely with the results of the 2011 Accreditation Survey.

**Psychiatry**
Students were overwhelmingly satisfied by the learning objectives, resources, and evaluations provided to them during the Psychiatry rotation. Students in Year 3 were more likely to agree and agree strongly with the feeling that the Faculty of Medicine directed students to a sufficient amount of resources for self-studying than Year 4 students (93.6% vs. 78.4%). Similarly, increased rates of agreement were seen with respect to the appropriateness and fairness of evaluations in Psychiatry between Year 3 and 4 students overall (91.1 vs. 74.3%). This likely reflects the transition away from using the textbook of Black and Andreason as the main resource for studying, and students having been instead provided a study guide created by the Faculty of Medicine. Comments did reveal frustrations with the written examination, noting that “volume of self-study material for Psychiatry was excessive” and “the Psychiatry written exam tested memorization of trivia rather than important practical knowledge and concepts”. Fourth year MAM students reported a significantly lower rate of having had a faculty member or resident observe them perform a mental status exam. This may be attributed to the fact that there are little to no psychiatry residents that rotate through the Mississauga hospitals. Oftentimes, it may be residents who have more time to spend teaching or observing medical students. Of note however, there was no significant difference between the Year 3 MAM and St. George clerkship students and so this trend did not carry through the years.
Recommendations for Psychiatry:

- **Priority level D:** The Faculty of Medicine with the Department of Psychiatry should re-evaluate the content of the written Psychiatry exam to ensure its fairness and appropriateness of questioning.

Surgery

The majority of students agreed that the evaluations, learning objectives, time spent in activities, and opportunities for observation in the Surgery clerkship rotation were appropriate without major disparities between years or campuses. However, a greater proportion of students at MAM indicated that they were observed taking a history compared to students at the St. George campus (80.8% vs. 70.1%). It should also be noted that 100% of Year 3 MAM students felt that they had sufficient access to the variety of patients needed for the clinical learning, whereas only 88.6% of Year 3 students at St. George agreed with this statement. These campus differences could be explained by the reduced number of learners (medical students, elective students and residents) rotating through the Mississauga hospitals. The reduced learner to staff ratio may allow for greater opportunity for direct preceptor observership and exposure to patient cases. Nonetheless, some students felt that at times they were made to stay for the maximum 12 hours despite having a limited role on the surgical team. Furthermore, students felt that their evaluations from the designated preceptor were discordant from the feedback they had received from the surgeons they actually worked with during the rotation. In addition, students found that it was difficult to demonstrate their clinical acumen and skills on the rotation. Some students questioned the utility of the first week of the rotation, in which there is didactic and surgical skills teaching. Students from both campuses were in overall agreement that there is also an insufficient amount of resources provided to guide self-study. However, this perspective was more pronounced amongst third year students across the campuses (55.8% vs. 40.1%, for Year 3 and 4 students respectively). This difference is difficult to explain, but may be attributed to expected difficulty of the clerkship Surgical exam. During clerkship for the fourth-year students, the Surgical written exam was changed from previous years from being based off the National Board of Medical Examiners (NBME) exam, to one that was created by U of T Faculty. The perceived level of difficulty of the expected NBME Surgical exam was high, and so in comparison, the faculty created exam that was administered may have paled in comparison. As such the difference in expected written exam for students across the years may have explained their comfort with the provided study materials. As mentioned earlier, comments revealed that students at MAM reported a different learning environment in which there are few other trainees, and their responsibilities were limited as they felt that they did not have to carry pagers or take calls.

Recommendations for Surgery:

- **Priority level B:** Explore more effective resources for self-study.
- **Priority level D:** To further explore the discrepancies in clinical experiences between MAM and St. George, and to make efforts to address deficits in these experiences at either sites (ex. holding the pager at MAM).
**Priority level D:** Evaluations should be completed by the preceptors who are responsible for supervising the student being evaluated, and this responsibility should not be passed onto the Surgery site director or another preceptor with less exposure to the student.

**Ophthalmology**
The majority of the student population, based on the total aggregate responses, felt that the learning objectives, evaluations, and provided supplemental resources for self-study were acceptable for the Ophthalmology rotation. However, upon closer analysis, there is a significant difference across the campuses, particularly in the Year 4 students. Only 47.9% of Year 4 MAM students strongly agreed or agreed to the appropriateness of evaluations, compared to 73% agreement by the Year 4 St. George students. Furthermore, a low rate of agreement by 4th years MAM students were found with respect to the clarity of learning objectives (68.8%), which is significantly different from 4th year St. George students (77%) and Year 3 MAM students (84.6%). Notably, the learning objectives and evaluations for the Ophthalmology rotation are the same across the two campuses. Unfortunately, no comments were made to provide possible hypotheses to explain these differences, however it is possible that the decreased agreement by MAM students is reflective of a discrepancy in their clinical rotation experience than compared to St. George.

**Recommendations for Ophthalmology:**
- **Priority level D:** Further work is needed to understand the significant differences in clerkship experience between MAM and St. George.

**Otolaryngology**
The majority of students agreed that objectives provided during the Otolaryngology rotation were clear, and that evaluations were adequate and reflected objectives. However, significantly less Mississauga students felt that their evaluations appropriately reflected objectives compared to St. George students (61.6% vs. 73.2%). Given that evaluations were the same between the two campuses, it is possible that the decreased agreement by MAM students was reflective of a discrepancy in their clinical rotation experience than compared to St. George. Unfortunately, narrative comments did not highlight any potential factors contributing to the inter-campus disagreement. A borderline proportion (65.7%) of the students felt that the Faculty of Medicine provided enough useful resources to guide effective self-studying. Narrative comments highlighted student frustration that the end-of-rotation exam focused on testing minor details instead of broader concepts, especially in the context of the relatively shorter two-week rotation. Comments also discussed the perception that the Otolaryngology rotation was of limited usefulness, where placements in clinics in tertiary care centers (e.g., Sunnybrook) were too subspecialized to allow for learning of foundational knowledge broadly applicable to primary care and other specialties. To address these issues, the following recommendations are suggested:
- **Priority level D:** Explore potential discrepancies in clinical experiences between Mississauga and St. George campuses that may explain why less Mississauga students felt that their evaluations appropriately reflected objectives.
Priority level B: Enhance student learning in foundational Otolaryngology concepts that will be more broadly applicable to primary care settings and other specialties by:

- Providing more effective self-study resources that focus on general principals
- Revise the end-of-rotation exam to test more broad concepts instead of minor details
- Place students into general Otolaryngology clinics instead of sub-specialty clinics

Anesthesiology
The majority of students felt that learning objectives provided during the Anesthesiology rotation were clear, that the Faculty of Medicine provided a sufficient amount of useful resources for self-studying, and that the evaluations appropriately and fairly reflected the objectives. There were no significant difference between years of campuses. No further recommendations are suggested at this time.

4.7.2 Pre-clerkship

4.7.2a Evaluations, Feedback, and Flexibility
The majority (86.0%) of the students were satisfied or very satisfied with the time spent in pre-clerkship educational activities, as well as the adequacy of formative feedback they received (89.9%). Overall, there was a minimal discrepancy between the first, second, third, and fourth years within the St. George and MAM campuses. However, between these two campuses, the first and second-year students at MAM were significantly less satisfied with the time spent in educational activities as compared to those at St. George. This may be influenced by the difference in the experience of educational activities, such as attending lectures, between campuses. Lectures are more commonly given at St. George, while MAM students attend via video conference. St. George students may have more opportunities to ask questions related to the course material and to seek additional academic and networking opportunities. Even though the lecturers are encouraged to provide more lectures at MAM, there is no formal guideline on the minimum number of lectures to be provided at MAM. Furthermore, MAM students spend a large amount of time commuting to mandatory anatomy labs and interprofessional events scheduled at St. George. It is important to note that Faculty have made improvements, which includes opening up the anatomy facility at MAM.

Recommendations for Pre-clerkship:

- **Priority Level C**: Continue to increase lectures given from MAM towards the original goal of 20%
- **Priority Level C**: It is recommended that the Faculty of Medicine schedule mandatory educational events in locations that minimize the length of commute required from MAM students.

4.7.2b Pre-clerkship Blocks
We identified the top 5 blocks that students felt were well done (Figure 3), and the top 5 blocks that students felt needed revision (Figure 4). We did this in order to identify common themes/aspects, from narrative comments and student expert consultation about these blocks, that Faculty should keep in mind for future curriculum planning.

**Figure 3.** Top 5 Blocks that students felt were well done (S43_1 to S43_26)

<table>
<thead>
<tr>
<th>Block</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hematology</td>
<td>379</td>
</tr>
<tr>
<td>Microbiology</td>
<td>354</td>
</tr>
<tr>
<td>Immunology</td>
<td>300</td>
</tr>
<tr>
<td>Dermatology</td>
<td>274</td>
</tr>
<tr>
<td>Ophthalmology</td>
<td>244</td>
</tr>
</tbody>
</table>

**Figure 4.** Top 5 Blocks that students felt needed revision (S44_1 to S44_26)

<table>
<thead>
<tr>
<th>Block</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiovascular</td>
<td>351</td>
</tr>
<tr>
<td>Molecules, Genes, and Chromosomes</td>
<td>193</td>
</tr>
<tr>
<td>Gynecology and Sex and Gender...</td>
<td>173</td>
</tr>
<tr>
<td>Obstetrics</td>
<td>143</td>
</tr>
<tr>
<td>Neurology</td>
<td>110</td>
</tr>
</tbody>
</table>

The following themes were identified amongst the five blocks that were well done.

**Repetition**
Students found that blocks which highlighted difficult concepts multiple times were better able to improve their understanding of and experience with the material. Supplementing difficult concepts with case-based presentations and approaches was an appropriate method of consolidation information, while also providing opportunities to introduce new clinical pearls regarding difficult concepts. The use of self-learning materials as an adjunct to lecture material instead of a platform to introduce new concepts aided the students learning of complex material.

**Connection to Pathophysiology**
Blocks which spent time discussing the pathophysiology of diseases, and using that discussion as a framework to discuss diagnosis and management options were well-liked by students. This method lessened the burden of memorization, as students were able to reason out diagnostic and management pathways. Students also expressed that understanding the mechanisms of
diseases and connecting clinical information to that framework improves their confidence to use this information in more clinical settings.

Big Picture

The focus on a ‘big picture’ was a frequent theme that emerged from the students’ discussion on the well-received blocks. Providing charts, tables, and figures in lectures and self-learning materials, which appropriately summarizes and compartmentalizes information really is found to really help with student experience of the material. When lecturers circle back to these big picture resources and reconnect new pieces of information to them, it helps reinforce concepts for students. Examples of this include the approach included the Microbiology Week flowchart of pathogens and tables for antibiotics and the Ophthalmology ‘Big Picture’ approach to red eye lecture.

The following themes were identified amongst blocks that students felt needed revision.

Lack of continuity

Structuring each block to build on previously learned content is important for students to develop their clinical understanding towards concepts. Lectures, CBL, and self-learning materials are opportunities for compounding this knowledge. In the bottom 5 blocks, students found that the lectures within weeks and across weeks did not flow well into each other and were disjoint, which made it difficult to see how concepts build on each other. Due to this lack of continuity, it was difficult for students to recognize relevant clinical takeaways. Some suggestions included better structuring of lectures, inserting signposting slides, adding slide headings, and including summary slides.

Lack of consistency

Block directors have the responsibility of compiling a variety of learning resources that fulfill the block learning objectives. These resources include lecturers, modules, videos, and readings. In the blocks needing revision, students found a general lack of coordination among these resources. Some blocks included educational materials from external websites that were difficult to navigate and unclear in learning objectives. Student would like to have seen more curriculum content made by UofT Faculty rather than from disparate sources.

Students found that the format and presentation of information varied widely between individual lectures and self-learning material, making it difficult to understand and differentiate the various types of cancers.

In addition to the identified themes, there were two particular areas of concern that may need directed attention.

ECG

There was an overwhelming amount of feedback on the lack of foundational knowledge that was necessary for understanding ECGs before learning pathological state – ex. leads, axis, normal ECG patterns, etc.

Students, in general, appreciate repetition and new concepts should not be rushed. Students suggest incorporating an algorithm to approach ECG interpretation that will be consistently used
through the block.

**OB/GYN**
The self-learning module (SLM) on *menopause* was poorly received, found to be disorganized and unclear. Suggestions included redoing the module and adding more summary slides with key points.
4.7.2c Pre-clerkship Components
We examined the components of the pre-clerkship Foundation (Table 9) and developed areas of strength, borderline areas, areas of improvement, and recommendations accordingly.

**Table 9.** Student satisfaction rates (satisfied + very satisfied) for components of the pre-clerkship/Foundations curriculum

<table>
<thead>
<tr>
<th>Component of Foundations Curriculum</th>
<th>Student Satisfaction (S+VS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anatomy and Histology</td>
<td>78.0%</td>
</tr>
<tr>
<td>CanMEDS Themes</td>
<td>79.9%</td>
</tr>
<tr>
<td>Case-based Learning (CBL)</td>
<td>73.3%</td>
</tr>
<tr>
<td>Enriching Educational Experiences (EEE)</td>
<td>85.8%</td>
</tr>
<tr>
<td>Ethics &amp; Professionalism</td>
<td>81.1%</td>
</tr>
<tr>
<td>Health in the Community (HC)</td>
<td>67.0%</td>
</tr>
<tr>
<td>Health Sciences Research (HSR)</td>
<td>48.2%</td>
</tr>
<tr>
<td>Integrated Clinical Experience (ICE)</td>
<td>94.2%</td>
</tr>
<tr>
<td>Interprofessional Education (IPE)</td>
<td>58.2%</td>
</tr>
<tr>
<td>Lectures</td>
<td>95.9%</td>
</tr>
<tr>
<td>Portfolio</td>
<td>82.9%</td>
</tr>
<tr>
<td>Resilience Curriculum</td>
<td>62.7%</td>
</tr>
</tbody>
</table>

**Green** - area of strength (>70%)
**Yellow** - borderline area (60-69.9%)
**Red** - area of weakness (<60%)
**S48_1 Anatomy & Histology**

- **Areas of Strength:**
  - Aggregate data indicates 78% of students were satisfied or very satisfied with the Anatomy & Histology components of the Foundations Curriculum.
- **Borderline Areas**
  - Not identified
- **Areas of improvement**
  - Not identified

**Discussion and Recommendation**

Although the aggregate data indicates overall satisfaction with the Anatomy & Histology components, this was not the case with the first-year cohort, whose satisfaction was 65% overall—with only 57.4% of first year students at MAM, and 67% of first year students at St. George being satisfied or very satisfied with the pre-clerkship Anatomy & Histology Curriculum.

**Recommendations for Anatomy and Histology:**

- **Priority Level D:** Greater support in anatomy learning, including but not limited to more TA support, formal teaching in dissection techniques, in-person lecture teaching and histology teaching that is not exclusively self-module-based.
- **Priority Level D:** Better scheduling so that anatomy exams do not coincide with mastery exams.

**S48_2 CanMEDS Themes**

- **Areas of Strength:**
  - Aggregate data indicates 79.9% of students were satisfied or very satisfied with the CanMEDS Themes component of the Foundations Curriculum.
- **Borderline Areas**
  - Not identified
- **Areas of improvement**
  - Not identified

**Discussion and Recommendations**

There were no significant differences between years or campuses with respect to the CanMEDS Themes.

**Recommendations for CanMEDS Themes:**

- **Priority Level D:** Narrative comments seem to support the use of small group learning in lieu of large group sessions focusing on CanMEDS themes, as this may be more effective and preferable for students.

**S48_3 Case Based Learning (CBL)**

- **Areas of Strength:**
Aggregate data indicates that 73.3% of students were satisfied or very satisfied with the Case Based Learning component of the Foundations Curriculum.

- **Borderline Areas**
  - Not identified
- **Areas of improvement**
  - Not identified

**Discussion and Recommendation**

Although aggregate data indicates overall satisfaction with the Case Based Learning component, this was not the case with the second-year cohort whose satisfaction was only 66.1%. There were significant differences between the first (70.0%) and second year (66.1%) cohort satisfaction scores in comparison to the third-year cohort (85.8%). There were also significant differences between MAM and St. George sites, with first and third year students at MAM reporting significantly higher satisfaction scores than their St. George counterparts. Second year students at MAM reported significantly lower satisfaction scores than their St. George counterparts. Narrative comments suggest that students’ experience in CBL is very variable and is highly dependent on individual tutors, and therefore take-home points for the cases are not always clear especially in those weeks where CBL is used to teach new content. Students feel that student-led CBL is not working effectively as students are not always collaborating together to go through the case. In addition, students have found that the independent questions have not been effective at encouraging group and team learning.

**Recommendations for Case-Based Learning (CBL):**

- **Priority level D:** Use of integrated summary lectures to ensure that important topics from CBL are summarized

**S48_4 Enriching Educational Experiences**

- **Areas of Strength:**
  - Aggregate data indicates that 85.8% of students were satisfied or very satisfied with the Enriching Educational Experiences (EEE) component of the Foundations Curriculum.
- **Borderline Areas:**
  - Not identified
- **Areas of Improvement:**
  - Not identified

**Discussion and Recommendations**

There was a significant difference between the percentage of students in third year who were satisfied or very satisfied (77.5%) with their EEE experience, compared with first year (89.4%) and second year (89.0%) students.

**Recommendations for Enriching Educational Experiences (EEE):**
• **Priority Level D**: Students discuss having more structure, so students know who they are able to contact for EEE experiences.

*S48_5 Ethics and Professionalism*

• **Areas of Strength**:
  ○ Aggregate data indicates that 81.1% of students were satisfied or very satisfied with the Ethics and Professionalism component of the Foundations curriculum

• **Borderline Areas**
  ○ Not identified

• **Areas of improvement**
  ○ Not identified

**Discussion and Recommendations**

Significant differences exist between the percentages of students satisfied with the Ethics and Professionalism component at MAM (73%) and St. George (83.2%) campuses.

**Recommendations for Ethics and Professionalism:**

• **Priority Level D**: Students discuss the value of having the small group learning for Ethics and Professionalism components, rather than large group lectures.

*S48_6 Health in Community (HC)*

• **Areas of Strengths**
  ○ The Year 1 cohort resonates well with their HC experience (80.6% satisfaction), the Year 3 coordinate indicates moderate satisfaction (72.1% satisfaction) with their experience

• **Borderline Areas**
  ○ Not identified

• **Areas of improvement**
  ○ Greater than half of the Year 2 cohort, across all campuses, express dissatisfaction (52.5% dissatisfaction) with their HC experience.

**Discussion and Recommendations**

Greater analysis should be conducted to assess why the Year 2 cohort are dissatisfied by their health in community experience. Narrative feedback from the survey indicates that home visits for health in the community may be burdensome for some students to attend, especially when inaccessible by public transit. Some students feel as though the in-group sessions are not adding to their knowledge base or are a frivolous use of their time.

HC experiences in second-year in the form of Community Based Service Learning - CBSL - are often heavily dependent on the organization and preceptor involved. Hence, significant variability in the type of placement, supervisor engagement, project expectations, and time commitment may exist between students. The lack of standardization was an overwhelmingly strong theme in
the narrative feedback. Some students indicated that they were conducting full literature reviews, others stated that they were engaged in forced volunteering, some stating that they were left folding pamphlets for some of their 3-hour CBSL sessions. Moreover, limited control in the type of placement may result in placements that are not relevant to the student’s interest, dampening their drive to engage in meaningful advocacy work.

Recommendations for Health in Community (HC):

- **Priority Level B**: greater opportunities for student choice when assigning HC placements. This may be facilitated by having students submit a rank link of pre-selected HC placements or advocacy themes that they wish to explore.
- **Priority Level B**: HC experiences should be more focused and standardized. All students should have a clear understanding of what their role is within their community organization from the onset, and be guided towards a focused, timely approach to complete a project. Clear and stringent time expectations should be shared with site leads and students, so that standardization can be met. Moreover, tutors should ensure that projects are framed around advocacy work and are challenging students to use a Social Determinants of Health and advocacy framework to tackling problems.

**S48_7 Health Science Research (HSR)**

- **Areas of Strengths**: Not identified
- **Borderline Areas**: Not identified
- **Areas of improvement**
  - There is a global dissatisfaction with HSR across all cohorts (51.8% dissatisfaction across Years 1-3)
  - There is a significant difference in HSR dissatisfaction between MAM and STG (60.1% dissatisfaction and 49.5% dissatisfaction, respectively)

**Discussion and Recommendations**

Based on the survey results, HSR appears to be one of the weakest components of the MD Program. Students are cognizant of the fact that health science research (HSR) literacy is crucial to their future practice as physicians. However, they feel as though the HSR course is not structured in a way that reinforces important skills. Students felt that writing a grant proposal for a theoretical research project was not beneficial to their learning of health sciences research. Students feel that, rather than grant writing, critical appraisal is an essential skill for all physicians (researchers or otherwise) and students would greatly benefit from more opportunities to critically appraise articles in small-group settings. Moreover, HSR can be reinforced longitudinally within the curriculum by integrating HSR content more seamlessly with other components of the Foundations curriculum, such as case-based learning sessions.

**Recommendations for Health Science Research (HSR):**
Priority Level B: Based on the narrative comments, there is overwhelming feedback that the critical appraisal component of HSR needs to be brought into the forefront of the HSR curriculum.

Priority Level B: More emphasis should be placed on the practical application of the skills of critical appraisal, allowing the educational goal of HSR to be met in a more grounded and effective way. This may be facilitated by delivering U of T-based didactic lectures on HSR content (instead of Stanford modules) and beginning the process of critical appraisals in small-group tutorials within the first year of Foundations.

S48_8 Integrated Clinical Experience (ICE)

Areas of Strengths
- All years express high rates of satisfaction with the clinical skills (ICE) component of the curriculum (>90% satisfaction between Years 1-3)

Borderline Areas
- Not identified

Areas of improvement
- Not identified

Discussion and Recommendations
ICE is a highly valued component of the curriculum and Faculty should continue to uphold these excellent standards.

S48_9 Interprofessional Education (IPE)

Areas of Strengths
- Not Identified

Borderline Areas
- Year 1 and 3 students report weak satisfaction with IPE (66% and 61% satisfaction, respectively)

Areas of improvement
- 58.2% of students are satisfied or very satisfied with their experiences in IPE. Greater than half of the Year 2 cohort, across all campuses, express dissatisfaction (53.8% satisfaction) with their IPE experience.

Discussion and Recommendations
IPE seems to be a weak point within the curriculum across all cohorts of students who have undergone the new curriculum. First year students are not well-acclimated with their roles and scope of practice such that the discussion during IPE sessions seems unproductive.

Multiple narrative comments report that the general climate of IPE appears to be hostile towards medical students and physicians. Students do not find the large didactic lecture sessions helpful, as they tend to reinforce abstract and/or obvious concepts about team dynamics that do not leave the students with concrete skills or approaches to working with allied health professionals.
Narrative comments indicate that IPE should allow students to work with other health professions to solve problem cases with adequate guidance and feedback from an experienced facilitator. More opportunities for role-playing and case-based learning in IPE should be considered, as these approaches were met with positive feedback in the narrative comments.

Recommendations for Interprofessional Experience (IPE):
- **Priority Level B**: Steps should be taken to ensure discussions are solutions-oriented and productive, and do not reinforce negative perceptions regarding any one profession.
- **Priority Level B**: Steps should be taken to ensure IPE is more interactive and focused on developing concrete approaches to interprofessional collaboration.

**S48_10 Lectures**
- **Areas of Strengths**
  - High satisfaction rates (95.9% satisfaction between Years 1-3) with lectures in the Foundations Curriculum
- **Borderline Areas**
  - Not Identified
- **Areas of improvement**
  - Narrative comments suggest that periods of long stretches without an in-person lecture at MAM results in MAM students being disengaged from lectures

**Discussion and Recommendations**
In line with narrative comments, and in line with recommendations arising from other areas of the report, our recommendations are to:
- **Priority D**: Work towards the goal of 20% of lectures being hosted at MAM, and ensure that lectures are divided well across the timeframe of a school year.

**S48_11 Portfolio**
- **Areas of Strengths**
  - Overall, there is a positive response to Portfolio (82.9% satisfaction between Years 1-3)
- **Borderline Areas**
  - Not Identified
- **Areas of improvement**
  - Not Identified

**Discussion and Recommendations**
Students welcome the space that portfolio provides for the humanistic side of medicine, where discussion and reflection can occur as part of their educational experience. It seems that the attempt to standardized sessions, by having students prepare reflections beforehand and encouraging preceptors to elicit reflections may potentially take away from the student experience. There may be value in promoting more free-flowing discussion during portfolio.
**S48_12 Resilience Curriculum**

- **Areas of Strengths**
  - Not identified

- **Borderline Areas**
  - Low-Moderate satisfaction with Resilience Curriculum across Foundations
    Cohorts (62.7% satisfaction across Years 1-3)

- **Areas of improvement**
  - A large difference exists between MAM and STG campuses with respect to
    satisfaction with resilience curriculum (53.5% satisfaction vs. 65.5% satisfaction, respectively)

**Discussion and Recommendations**

Feedback on the resilience curriculum suggests that students find it ineffective due to the large group nature of the sessions, the emphasis on didactic sessions without practicality, the lack of focus on individualized resilience strategies, and a lack of conversation regarding the toxic cultural environment of medicine as a profession. Some students find that they are discouraged to share concerns in a large group setting, due to the nature of their sensitive disclosures. Moreover, large group resilience sessions may not allow for a holistic and personalized discussion of resilience. Some students do not feel as though they are taking away concrete strategies or setting learning goals with respect to their resiliency journey.

Moreover, the resilience curriculum should work to contextualize the need for resilience as a response to the environment of the broader medical profession. Discussions need to include how the environment, culture and external pressures of medical practice lead to burnout/suicide/depression. Currently, the lack of contextualization of the resilience curriculum with respect to these external pressures makes the curriculum seem out of touch and distant.

The resilience curriculum needs to be delivered in smaller group settings, with less focus on unstructured discussion and more on skill-building and reflection. Portfolio is a well-received aspect of the curriculum; it is an ideal medium by which the MD program can deliver a better resilience curriculum. Integration of the resiliency curriculum into portfolio should be investigated. Discussions should revolve around how resilience can be a professional strength, both from a clinical and personal standpoint, as well as a necessity given the demands of medicine. Portfolio may provide an environment for more thoughtful discussion on resilience and delivery of resiliency curriculum. Moreover, through the ‘Learning Goals’ component of portfolio, resiliency practice can be encouraged.

**Recommendations for the Resilience Curriculum:**

- **Priority level B**: Consider more seamlessly integrating the resilience curriculum into the overarching curriculum, for example through Portfolio
• **Priority level B:** Move towards small-group sessions that focus on individualized strategies and that address how the broader environment of medicine, ex. systems-level factors, necessitates the need for resilience.

### 4.7.3 Overall Experiences (Years 1-4)

#### 4.7.3a Overall Exposures to Clinical Practice

The large majority (84.8%) of students agreed that the curriculum provided them with broad exposure to and experience in generalist care (including family medicine and non-specialist hospital care), with 84.8% of students agreeing that the curriculum provided them broad exposure and experience and in family medicine specifically. Additionally, 84.8% of students agreed that their clinical learning experiences (core and elective combined) took place in more than one setting ranging from small rural or underserved communities to tertiary care health centres (ex. ICE/ACSM, community home visit).

Regarding the adequacy (i.e. amount, quality) of education in caring for individuals from diverse backgrounds, 86.7% of students were satisfied or very satisfied. First year St. George students feel as though these aforementioned aspects of clinical exposure and experience are lacking. Only 68.4% of first year St. George students vs. 78.8% first year MAM students felt the curriculum provided them broad exposure to and experience in generalist care, including specific exposure to family medicine. Additionally, only 68.4% of first year St. George students vs. 78.8% first year MAM students felt their clinical learning experiences took place in more than one setting (ranging from small rural/underserved to tertiary care health centres). With the wealth of teaching sites available in downtown Toronto for clinical exposure, it is important to ensure that first year students have more exposure to generalist practice (including family medicine) in multiple settings to fully gain an appreciation for the diversity of care and patient populations our city has to offer (as seen more prominently with their second, third and fourth year counterparts).

It is concerning that only 69.6% of students were satisfied or very satisfied with the adequacy of opportunities (i.e. amount and quality) to explore their clinical interests to guide their career choices for CaRMS. In particular, MAM students of all years collectively reported 37.2% dissatisfied or very dissatisfied, compared to 28.6% at St. George. In particular, second and fourth year students at MAM reported the lowest satisfaction with opportunities to explore clinical choices for CaRMS, with over 40% dissatisfied or very dissatisfied. We are unsure as to why these differences may exist, and they may be worthwhile investigating. The University of Toronto has taken the initial steps in addressing this problem by implementing 2 weeks of elective space in the third-year clerkship curriculum, providing students an opportunity to explore an area of interest beyond that of the core clerkship rotations.

**Recommendations for Exposures to Clinical Practice:**

• **Priority level C:** Continue to provide opportunities such as the Rural Ontario Medicine Program, FMLE, and community placements in order to expose students to clinical learning experiences in more than one setting.
- **Priority level B**: Continue to present opportunities to students that facilitate exploration of clinical career choice. The recent changes made locally (2 week elective during the core clerkship rotations in third year) and nationally (8 week electives cap) may affect student satisfaction in these areas going forward.

**4.7.3b Overall Evaluations and Feedback**

The majority of students expressed positive responses regarding several aspects of their evaluations. Specifically, 85.2% of students were satisfied or very satisfied with the fairness of their evaluations. Additionally, 91.7% of students were satisfied or very satisfied with the accessibility of their academic records (ex. via University of Toronto Transcript centre, MedSIS, etc.). Regarding the timeline of evaluations, 74.5% of students were satisfied or very satisfied with the amount of time between evaluations, including mastery exercises, anatomy bell ringers, portfolio reflections, Health in Community presentations, etc. Conversely, only 46% of students were satisfied or very satisfied with their opportunities to review the aforementioned assessments to understand how they may improve. Notably, although first, second and third year medical students at both the St. George and MAM campuses consistently had satisfaction rates below 50%, fourth year medical students had much higher satisfaction rates, with 72.1% of fourth years stating they were satisfied or very satisfied with the availability of opportunities to review assessments. This may be due to the assessment structures unique to fourth year students, who did not experience the Foundations Curriculum at the time of the ISA. Regarding feedback provided to the faculty, 76.9% of students agreed or strongly agreed that the medical school adequately integrated student feedback in a manner conducive to improving the learning and clinical experiences of students.

**Recommendations for Overall Evaluations and Feedback:**

- **Priority Level B**: We understand that Faculty would like to keep Mastery Exercise questions confidential. To balance this with students’ desire to understand how to improve on their mistakes, it may be worthwhile to host summary sessions following mastery exercises explaining key concepts that many students struggled with. Alternatively, the faculty can post summary documents online regarding these topics if student turnout to summary sessions is a concern.

- **Priority Level B**: Continue the class collaborative Google Docs for a predetermined period following mastery exercises for each unit, so that students can discuss questions they struggled with and seek clarification from faculty members involved in teaching the material.
4.7.4 MD/PhD

The majority (72.7%) of MD/PhD students expressed satisfaction with regards to the presence of opportunities which help prepare them for a career as a clinician scientist. However, only a minority (40.0%) of students expressed satisfaction with the integration between MD and PhD training throughout the dual degree program.

In 2014, the National Institutes of Health (NIH) released the Physician-Scientist Workforce Working Group Report, which highlighted the substantial decline in the number of physician-scientists who form a unique and essential part of the biomedical research and clinical landscapes in both Canada and the US\textsuperscript{10}. MD/PhD programs provide a structured pathway for trainees to achieve both degrees and compelling evidence exists to support the effectiveness of integrated training programs with 84.8% of Canadian MD/PhD graduates indicating the combined degree helped their careers and 71.7% agreeing they would be substantially involved in research in the future\textsuperscript{11}. However, despite the success and importance of MD/PhD programs, there is no established theory for MD/PhD programs to follow regarding how to integrate the two degree programs - which is ultimately the source of the uniqueness of MD/PhD trainees\textsuperscript{12}. To this end, the University of Toronto has a unique opportunity as the oldest and largest MD/PhD training program in Canada to reimagine the nature of integrated MD/PhD training. To capitalize on this opportunity, we recommend that the MD program facilitate the individualization of MD/PhD training in accordance with each student’s needs. This hinges on allowing students to pursue truly integrated training by allowing flexibility in fulfilling MD and PhD program requirements and on the creation of MD/PhD specific curriculum and course work.

Recommendations for the MD/PhD program:

- **Priority Level B**: Offer opportunities for PhD phase students to complete MD program requirements and vice versa\textsuperscript{12}. This integration strategy has already been successfully implemented to varying degrees in US Medical Scientist Training Programs (MSTP) and non-MSTP programs\textsuperscript{13}. It is essential that these opportunities be optional, to accommodate for the wide variety of expectations and time constraints between research departments and during different phases of research.
  a. The MD program should facilitate the mechanism by which MD/PhD trainees can engage in longitudinal shadowing experiences/clinical exposure in accordance with PhD-phase student needs, which can help ease the challenges of returning to clinical training following PhD studies\textsuperscript{14}.
  b. The MD program should expand the ability for MD-phase students to complete graduate courses.

- **Priority Level B**: Work with the Physician Scientist Training Program (PSTP) to reform and reinstate enriched CBL (eCBL). Exposure to and case discussion with physician-scientist tutors is extremely valuable for trainees and offers opportunities for trainees to evaluate current gaps in medical knowledge and consider how to address this gap through research or conversely, how recent research discoveries may apply to the particular case and what
steps are still required for the translation of these discoveries. This promotes trainee competence in both medicine and research simultaneously.

- **Priority Level B**: Work with the PSTP to either create an exemption from HSR for MD/PhD trainees, or to reform HSR and provide a tailored curriculum for MD/PhD students, acknowledging their significant investment in research during PhD studies. During the course of PhD studies, MD/PhD students will fulfill and surpass the objectives and expectations of the HSR course and its assessments. In particular, PhD students develop extensive understanding of a variety of research methodologies and techniques, and become well versed in how to critically appraise research and apply their findings to various situations. Furthermore, numerous narrative comments both from MD/PhD students and MD-only students with extensive research backgrounds question the value of HSR for this population of students citing “redundancy” and the fact that “their research training will go [or has gone] well beyond what [is learned] in HSR.” As such, providing an exemption, or at minimum an alternative option, for MD/PhD students would be extremely beneficial.

- **Priority Level B**: Facilitate the re-integration of students returning from PhD studies into their new MD class. This can be achieved through a number of avenues:
  - Continue to allow PhD-phase students access to MD program curriculum materials on Elentra and other platforms. This will support students wishing to revisit some of their MD studies before returning to the MD program full time as the transition between highly specialized knowledge required during research years to the generalized knowledge required for medical training is frequently noted as a major challenge in MD/PhD training.
  - Ensuring PhD phase students are maintained on MD listservs and other methods of mass communication even after their original MD-only cohort has graduated to ensure PhD students are able to participate in MD activities if they are interested in doing so and are aware of upcoming changes to the MD program which may affect them.

- **Priority Level B**: Promote cooperation between Undergraduate Medical Education (UME), School of Graduate Studies (SGS) and PSTP administration and streamline resources and contacts for MD/PhD students. In the narrative comments, students report “being left to [their] own devices during PhD years,” being “left out of major announcements in the MD program,” and a lack of transparency. This suggests that additional support would be beneficial for MD/PhD students as they progress through the program. In particular:
  - Ensure OHPSA counsellors are familiar with the details of the MD/PhD program and some of the main challenges that MD/PhD students typically face.
  - Ensure Student Financial Services is familiar with the particulars of the MD/PhD stipend and its distribution. In the past there has been confusion regarding the limits of interest-free status on provincial loans and how to report the MD/PhD stipend during provincial and other financial aid applications, and there are numerous instances of MD/PhD students being unable to find a clear answer.
  - Continue to develop partnerships between UME and SGS and its departments to simplify the process and administrative requirements of MD students taking
graduate courses and vice versa, and the process of transitioning between full time medical and graduate studies.

- Support students through the transition process between MD to PhD and PhD to MD by interdepartmental communication to ensure students are fully informed of and able to complete registration requirements (ex. vaccination records) and logistical requirements (ex. payroll) in a timely manner.

- Educate departmental administrators on the latest policies and requirements regarding MD/PhD students.
4.8 Opportunities for Research, Other Scholarly Activities, and Service-Learning

Subheadings
Opportunities for Research, Other Scholarly Activities, and Service-Learning Q58, Q59, S62, S63

Areas of Strength
- Opportunities for Research, Other Scholarly Activities, and Service-Learning (Q58, S62, S63)
  - [Q58]: 92.7% of respondents participated in a service learning activity during their time as a student in the MD program.
  - [S62]: 87.0% of respondents were either satisfied or very satisfied with the availability of scholarly research activities.
  - [S63]: 97.1% of respondents were either satisfied or very satisfied with the availability of extracurricular activities, including but not limited to athletics, clubs, and councils.

Borderline Areas
- Opportunities for Research, Other Scholarly Activities, and Service-Learning (Q59)
  - [Q59]: 67.5% of respondents indicated that they had participated in research or other scholarly activities as a medical student.

Areas of Improvement
- None identified

Discussion and Recommendations:
The great majority of students participated in a service learning activity as part of the MD curriculum. Examples of these include CBSL, ICE-HC, and community home visits. The results were very similar across both the MAM and the St. George campus, and throughout all the years of the MD program. It is possible that these results can be attributed to the introduction of the mandatory Health in the Community field visits, as well as other service-learning experiential opportunities, such as the CBSL placements. However, while participation rates in service-learning activities are high, the satisfaction with these experiences is not equally positive. Refer to Pre-clerkship - Components for detailed recommendations.

A majority of students (67.5%) indicated they had participated in scholarly activities while in medical school. While this appears to be a borderline area, further analysis suggests this is not the case. In particular, when considering second to fourth year students only, a large majority have participated in research (82.6%) with an additional 4.9% indicating plans to participate in research in the future. Furthermore, while 29.7% of first year respondents indicate they have already participated in research, a majority of first year respondents (51.7%) indicate that they plan to participate in research. Given that the summer following first year is a time when many
students participate in research for the first time given their reduced academic demands, and that the ISA survey was administered in February, these results are not unexpected. Furthermore, a mere 5.9% of students in all years indicate that there are too few research opportunities available suggesting that availability of research opportunities is not a major barrier to student participation. However, there is a significant difference between second year respondents indicating a lack of available opportunities based on campus with 2% of St. George students and 14.6% of MAM students indicating there are too few opportunities. However, there is no significant difference in percentage of respondents indicating they have participated in research. Accordingly, continuing to provide and promote research opportunities both at St. George and at MAM is advised.

An overwhelming majority of students indicated that they are either satisfied or very satisfied with the availability of extra-curricular activities within the MD program. Again, this pattern of responses was consistent across all years and both campuses. These results have remained similar to the 2011 ISA, where >85% agreed or strongly agreed that there are adequate opportunities for extra-curricular involvement, indicating that this is a consistent strength of the MD program at UofT. Based on these trends, it is recommended that this be maintained through continued efforts to raise awareness about extra-curricular activities and encouragement from faculty and administration for student to participate in such activities.
4.9 A Priori Hypotheses Analyses

As outlined in the methods section, in addition to the descriptive analysis, the ISA team established a set of *a priori* group comparisons. These comparisons were based on student stakeholder input and were used to analyze differences between previously identified groups.

We chose to conduct post-hoc tests for comparisons with a a partial eta-squared value ≥ 0.1, which denotes a medium-large effect size (10% of variance explained by the comparator variable, ex., ‘Year of Study’) and used an alpha $\alpha = 0.01$ for all comparisons.

4.9.1 Significant Differences

These were defined as having a partial eta-squared of greater than 0.1. Across all the group comparisons that were conducted, there was a significant difference found only for item S28 (comparing mentorship at the St. George and MAM campuses).

The items presented in this table compare *mentorship between the St. George and MAM campuses*.

<table>
<thead>
<tr>
<th>ITEM</th>
<th>eta</th>
<th>eta-squared</th>
</tr>
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<tbody>
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<td>S28 Mentorship - There is adequate (i.e., availability, quality) mentorship by residents at hospital sites affiliated with my campus</td>
<td>0.327</td>
<td>0.107</td>
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</table>

Follow-up analysis show that MAM scores significantly lower on item S28 when compared to all other academies (all $p < 0.01$). The effect size for these post-hoc comparisons is also medium-large (all Cohen’s D = 0.8).
Dependent Variable: S28 Mentorship - There is adequate (i.e., availability, quality) mentorship by residents at hospital sites affiliated with my campus

<table>
<thead>
<tr>
<th>Academy</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
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<tbody>
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<td>177</td>
</tr>
<tr>
<td>PB</td>
<td>2.99</td>
<td>.737</td>
<td>205</td>
</tr>
<tr>
<td>WB</td>
<td>3.02</td>
<td>.723</td>
<td>313</td>
</tr>
<tr>
<td>FG</td>
<td>2.90</td>
<td>.744</td>
<td>191</td>
</tr>
<tr>
<td>Total</td>
<td>2.85</td>
<td>.809</td>
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</tbody>
</table>

Note: For borderline and non-significant differences please see 7.4 Appendix D: A priori Hypotheses
4.10 Mississauga Academy of Medicine Report

In this section, we have summarized the background of MAM, and any differences that exist between the two campuses.

**Background**

The Mississauga Academy of Medicine (MAM) was created in 2011 at the University of Toronto Mississauga (UTM) campus. It admits 54 students representing roughly 20% of the medical student population year to year (216 students across 4 years). MAM links the UofT Faculty of Medicine with Trillium Health Partners, which is comprised of three main hospital sites: Credit Valley Hospital, Mississauga Hospital, and Queensway Health Centre. The MD Program academic curriculum is designed to be identical between STG and MAM.

The St. George and MAM campuses are approximately 30 kilometers apart. Students have the option of taking the UTM shuttle between the STG and MAM campuses which have extended hours (typically 6am-11pm, departing from both locations). While lectures are video-conferenced across campuses and small group learning takes place at respective academic sites, events such as IPE, Anatomy bellringer assessments and some anatomy labs require MAM students to commute to the STG campus.

Terrence Donnelly Health Sciences Complex (TDHSC) is the hub for Faculty of Medicine students on the UTM campus. The state-of-the-art building includes prosection labs, 12 small group learning rooms (seats 10), student lounge, six 30-person classrooms, and two large lecture halls. Many classrooms and tutorial rooms are equipped with video conferencing technology.

**Built Environment**

Regarding the built environment at MAM, first-year MAM students reported higher satisfaction with adequacy of study spaces than first-year STG students. Satisfaction rate drops by 13.3% for year 2 MAM students, suggesting discrepancy between perceived availability and quality of study space between different years. There is lower satisfaction rates amongst classes of 2T1 and 2T2 at MAM with the library services offered at the UTM campus, possibly due to lack of knowledge about library services offered at MAM. Many students report being referred to Gerstein Library in the STG campus when needing librarian assistance. Generally, MAM students reported higher satisfaction of adequacy of wireless networks across all classes.

**Pre-clerkship**

Year 1 and 2 MAM students were significantly less satisfied with the time spent in educational activities as compared to those at St. George. This may be influenced by the number of in-person lectures provided at MAM vs at St. George, differences in opportunities to ask questions to lecturers, and the amount of commuting time required of MAM students for mandatory anatomy activities and IPE events scheduled at St. George. 57.4% of first year students at MAM and 67% of first year students at St. George reporting being satisfied or very satisfied with the pre-clerkship Anatomy & Histology Curriculum. Significant differences exist between the percentages of
students satisfied with the Ethics and Professionalism component at MAM (73%) and St. George (83.2%) campuses. There is no clear reason why this discrepancy exists.

Clerkship
Importantly, Year 4 MAM students reported significantly higher rates of mistreatment & were more uncomfortable reporting mistreatment than at STG, but no differences between the other classes (Years 1-3) were found—overall mistreatment incidences at MAM may be largely attributable to student experiences during fourth year of clerkship. In addition, 50.6% more fourth year students at MAM reported being uncomfortable with reporting mistreatment compared to those at STG. This may be best explained by misconceptions of the MAM academic culture by physicians in downtown Toronto sites (where many 4th year MAM students do elective rotations) as well as MAM physicians being newer to teaching and therefore having less experience with learner engagement. Only 48.7% of students felt that the clerkship curriculum provided enough time and flexibility to pursue activities outside of clerkship and that these results were more pronounced at MAM with only 37.2%, compared to 51.9% of St. George students. There were greater feelings of inadequacy of call rooms amongst clerks in MAM (particularly at Mississaugga Hospital).

Individual Rotations
- Ophthalmology rotation: a low rate of agreement by fourth-year MAM students was found with respect to the clarity of learning objectives (68.8%), which is significantly different from fourth-year St. George students (77%) and third-year MAM students (84.6%). While objectives across campuses are the same, this might indicate a difference in clinical rotation experiences.
- Otolaryngology: significantly less Mississaugga students felt that their evaluations appropriately reflected objectives compared to St. George students (61.6% vs. 73.2%). While evaluations across campuses are the same, this might indicate a difference in clinical rotation experiences.
- Surgery rotations: students at MAM reported a different learning environment in which there are few other trainees, and their responsibilities were limited as they felt that they did not have to carry pagers or take calls.
- Obstetrics/gynecology rotation: far less students from MAM received midpoint feedback (90% vs. 77.1%). Furthermore, only 68.2% of Year 3 MAM students were observed by faculty while performing a history, compared to 82.8% of Year 3 St. George students.

Career Exploration
There was greater dissatisfaction with the availability of mentorship across all 4 years at MAM as compared to STG. Many MAM students identify the major reason for this to be due to lack of resident learners at MAM-affiliated clinical sites compared to the number of residents available at STG-affiliated clinical sites. There is also significantly greater dissatisfaction with the mentorship provided by residents at the hospital sites affiliated with MAM compared to those affiliated with St. George across all four years of the MD program (46.3% vs 25.6% for year 1, 48.8% vs 23.5% for year 2, 55.5% vs 24.1% for year 3 and 68.8% vs 15.2% for year 4). Some surveyed students indicated that while they may benefit from fewer overall healthcare team members (including staff
physicians) for more learning opportunities, they would similarly benefit from the mentorship of residents, who are closer to them in terms of training level than staff physicians.

There were no differences in the perceived availability of scholarly research projects between students at MAM and STG. Moreover, similar proportions of MAM and STG students participated in scholarly research activities during their time in medical school. However, it should be noted that the vast majority of research projects are conducted within hospitals affiliated with the three STG academies (data not captured by survey). Only a minority of research projects are offered within MAM-affiliated sites due to the relative lack of established clinical research programs/offices within Mississauga (with the exception being the Institute for Better Health). These findings may suggest that MAM students feel the need to compete with STG students to secure research projects or travel further distances to acquire the same opportunities as STG students. As a result, these barriers may be contributing to the increased dissatisfaction of MAM students particularly with the pre-clerkship curriculum.

There was not enough data captured in the survey to evaluate differences in shadowing experiences between MAM and STG students. However, based on anecdotal evidence, students report that there are increased opportunities to participate actively during shadowing experiences at MAM-affiliated clinical sites compared to those at STG. These opportunities include but are not limited to: taking histories, performing physical exams, and performing certain procedures in the OR (e.g. inserting Foley catheter). The reason for this is likely due to fewer learners within MAM-affiliated sites. Despite this, the quality of shadowing experiences of certain specialties regarded to be “competitive” has anecdotally been perceived to be lower at MAM. In fact, many MAM students share the sentiment that shadowing at STG-affiliated sites is more beneficial for these “competitive” specialties than shadowing in Mississauga. This perception could be less related to the actual quality of the shadowing experiences, but more related to the quality of being in contact with more established doctors within those competitive specialties. There were no major complaints about the availability of shadowing opportunities at MAM vs. STG.

**Student Services**

Although not statistically significant, MAM students felt that OHPSA was less accessible for them than STG students (86.7% vs. 93.4%), and 25% of MAM students in the class of 2T2 felt that OHPSA was not accessible to them. MAM students were also significantly less satisfied with the availability of mental health services and personal health services compared to St. George students. Reasons could include: lack of full-time OHPSA counsellors at MAM, limited access to OHPSA resources within the working hours of the day and outside working hours (i.e. evenings), and limited number of days that counsellors are present at the UTM campus. MAM students also felt less inclusivity in key medical committees and working groups associated with OHPSA (and otherwise) –MAM (84.0%) and St. George (91.2%) for OHPSA, and pre-clerkship MAM students 15% lower than St. George for other general committees/working groups. This could be due to lack of MAM-based stakeholders in these committees currently, inaccessibility due to location, or lack of advertisement about such committees at the MAM campus. The OHPSA website also does not delineate between services offered at MAM versus St. George, so some students may
be unclear or unaware of what is available on the MAM campus in terms of support and counselling. Students from both campuses were similarly satisfied with the responsiveness of OHPSA with regards to student concerns (91.4% at St. George versus 90.3% at MAM).

MAM students reported significantly higher dissatisfaction (66.3%) with insufficient integration between the two campuses than STG (34.6%). With MAM being an addition to the Faculty of Medicine in 2011, the lack of integration reported by the students may be a result of institutional lag. A significantly higher proportion of fourth-year MAM students disagreed/strongly disagreed that the stress of medical school is manageable compared to fourth year students at STG, or other classes at STG. This could be explained in part due to the mistreatment being faced (see above) and stress/anxiety of matching into residency from believing that being at MAM negatively impacts their CaRMS applications.

Summary and recommendations
There is a need to further explore the discrepancies in clerkship experiences between MAM and St. George, and to make efforts to address deficits in these experiences at either site. Notable areas of improvement include access to OHPSA services and availability of mentorship to MAM students. Greater efforts should be taken to connect MAM students to residents and junior physicians. Leadership of different faculty- and student-initiated mentorship programs should also be reminded of policy requirements to provide equal opportunities to MAM students for all extra-curricular activities. Resources should be dedicated to facilitate the expansion of near-peer mentorship programs such as LAMP in MAM. Administration should include MAM students on quality improvement and change initiatives to appropriately integrate the satellite campus as the UofT MD program moves forward. Cultivating UofT expertise in the satellite campus community should be a priority for the Faculty of Medicine, both to increase the accessibility of well-connected clinician teachers for students, and to promote better horizontal integration of the Faculty of Medicine’s mission and values.


5.0 Conclusion

Through an iterative process involving extensive data analysis, comparison with external data sources and historical data, and consultation of student experts, the 2019 ISA has systematically identified the strengths and key areas of improvement for the University of Toronto's Faculty of Medicine’s MD Program. Our results have demonstrated that the MD program upholds the vision of excellence that the University aspires to achieve. Aware of the program’s commitment to improvement, we have generated recommendations for both areas of improvement and areas of strength. We are grateful that the Faculty values student feedback and listens to the voice of the students. We are cognizant that many efforts are already in place to improve the areas of improvement that we have identified, and we hope that consideration of our recommendations can bolster these efforts.

All members of the ISA Task Force are proud to be students of this school, and it has been a privilege to hear the strong, diverse voices of our colleagues in this process. Given our robust survey response rates, we are confident that the quantitative and qualitative data captured in this report effectively represents the student voice of the MD Program. Through commitment to continuous quality improvement, we hope that the recommendations that we have put forth can continue to improve the student experience and further propagate the University of Toronto Faculty of Medicine as a world champion in academia, research, and patient care.
6.0 References


