

## **QUALITY ASSURANCE - CYCLICAL PROGRAM REVIEW OF THE NORTHERN ONTARIO SCHOOL OF MEDICINE MD PROGRAM**

### **Final Assessment Report & Implementation Plan (April 2013)**

In accordance with the Lakehead University Institutional Quality Assurance Process (IQAP), the Final Assessment Report has been prepared to provide a synthesis of the external evaluation and NOSM's response and action plan. This report identifies the significant strengths of the program, opportunities for program improvement and enhancement, and sets out and prioritizes the recommendations that have been selected for implementation.

The report includes an Implementation Plan that identifies who will be responsible for approving the recommendations set out in the Final Assessment Report; who will be responsible for providing any resources made necessary by those recommendations; any changes in organization, policy or governance that will be necessary to meet the recommendations; who will be responsible for acting on those recommendations; and timelines for acting on and monitoring the implementation of those recommendations.

### **SUMMARY OF THE CYCLICAL PROGRAM REVIEW OF THE NORTHERN ONTARIO SCHOOL OF MEDICINE MD PROGRAM**

The Northern Ontario School of Medicine (NOSM) submitted a Self-Study (March 2012) to the Office of the Provost and Vice- President at Lakehead and Laurentian University. Volume One presented the description of the program and outcomes, an analytical assessment of the program, and relevant program data. Volume Two and Three provided a collection of the program course outlines and clerkship descriptions, and the *curriculum vitae* for the NOSM faculty.

Two external reviewers and one internal reviewer from each institution were selected from a set of proposed reviewers. The Review Team examined the materials and completed a two-day site visit March 2012. The visit included interviews with the Provost and Vice-Presidents (Academic) of Lakehead and Laurentian Universities, the Deputy Provost, the Dean of NOSM, and the Associate Dean Undergraduate Medical Education. The Review Team interviewed faculty, staff, and students on both campuses using videoconferencing technology. The Reviewers also had an opportunity to tour the NOSM Northwestern Campus at Lakehead – including administrative offices, lecture rooms, small group learning spaces, the student lounge, the library, simulation rooms (standardized patients, mannequins and computer based simulation), and Basic Science research laboratories. A tour of the Thunder Bay Regional Health Science Centre (TBRHSC) included the student and resident lounge, on-call rooms, learning centre (library), and common patient care areas.

In their report, submitted May 2012, the Review Team provided feedback that describes how the Northern Ontario School of Medicine MD Program meet the evaluation criteria outlined in the Quality Assurance Framework, and is consistent with the missions and academic priorities of both Universities. The MD curriculum is fully mapped allowing for the identification and linkage of the key curriculum components to defined program learning outcomes and institutional expectations. The admission standards, curriculum structure and delivery, and teaching and assessment methods are appropriate and are effective in preparing graduates to meet defined outcomes and the degree level expectations. The Reviewers noted that the NOSM distributed model ensures that students on both University campuses have high quality standardized educational interventions. NOSM, like other Canadian Medical Schools, incorporates a variety of formative and summative assessments. The Reviewers stated that there are excellent systems in place to identify and support learners. Results from the Canadian Student Graduate Questionnaire and MCC Examinations demonstrate student performance in the top percentiles of peer schools. The success of NOSM's model is best exemplified by their students' achievement rates of residency matches in the first iteration, and the students' passing rates on both Medical Council of Canada (MCC) qualifying examinations.

The Review Team summarized their report by stating that the NOSM MD program is strong and graduates competent physicians. The curriculum is innovative and has been purposefully designed to meet a defined social accountability mandate. The School is led by a team with a passionate commitment to service and to the design of a "new type of medical school", grounded in its context of Northern Ontario. It is supported by motivated faculty and boasts an accomplished student body. The host Universities have provided NOSM with supportive intellectual environments in which to educate physicians.

The Review Team also identified areas for improvement and made suggestions and recommendations for consideration and action. A number of these focused on challenges associated with the clinical environment. During the interviews with students, the Reviewers received feedback that the medical content in some of the modules should be updated. Students also commented that the amount of exposure to several areas of specialty medicine (in particular, radiology/oncology/dermatology and importantly, critical illness and acute care) was inconsistent. The Reviewers stated that there should be greater student input on curriculum development/delivery and on governance issues. Finally, the Reviewers stated that a priority for future funding and investment in additional human resources should be the establishment of a rich and diverse postgraduate residency training program fashioned on the pillars of the undergraduate program at NOSM. They believed that this would positively impact on student teaching, clinical research, and physician recruitment in the NOSM region.

A NOSM team composed of the Associate Dean Undergraduate Medical Education, the Assistant Dean Curriculum and Planning, and the Chair of NOSM Accreditation Collaborative, submitted a response to the Reviewers' Report (November 2012). They responded to each of the recommendations made by the Reviewers and, where necessary, presented clarification and corrections. Follow-up actions and associated timelines were identified.

## SUMMARY OF THE REVIEW TEAM'S RECOMMENDATIONS AND NOSM's RESPONSE

1. There is a need to have full student voice at all levels of curricular governance. We suggest that the UMEC implement an amendment to their terms of reference to allow representation from the student body of Years 1, 2, 3 and 4. Formalize student participation on curriculum governance.

***NOSM responded that this is a misunderstanding as there has always been student representation. Student membership is included on all committee terms of reference. A protocol designed to facilitate learner involvement in committee work provides guidance to students on their role and to committee chairs on the role of student members.***

2. The terms of reference and membership of all committees should be reassessed annually to ensure they fit best practice.

***The UMEC Constitutional Review Group has undertaken a review of all UME terms of reference. A standard template has been developed and an annual review of the terms of reference and each committee's membership is included.***

3. Regular reviews of leaders

***All NOSM leaders receive regular reviews but depending on the position involved there are various different annual review formats. Managers and Directors complete annual Performance Development & Learning Plans (PDLPs), which reviewed by their managers. Unionized Faculty (whether or not they also fulfill an administrative function) are governed by the Collective Agreement and complete an annual report of their activities for their respective Division Heads. Clinical Faculty members receive an annual report on their teaching evaluations from their Division or Section Heads. The Dean annually reviews members of Executive Group, including the Associate Dean UME. This review now includes a 360 component.***

4. There should be discussion and planning at the AC level for setting aside the monies for technology replacement at regular intervals.

5. NOSM must be supported in retaining and advancing IT processes and contents due to the key importance of this as a core competency of this medical school.

6. There should be monitoring of the IS system and staffing upgrades to ensure that they have addressed the concerns raised by faculty and students.

***The responsibility for fiscal matters at NOSM lies with Executive Group and the Board; Academic Council has no involvement with fiscal matters. Technology replacement is the responsibility of the Technology and Information Management Support (TIMS). The information technology infrastructure and tools that underpin the academic programs are critical as they undoubtedly affect the long-term viability of our undergraduate medical education program. Consequently, the school has established an evergreen fund to support our technology infrastructure on an ongoing basis. This fund ensures that resources are allocated annually toward infrastructure renewals as needed.***

7. There should be close monitoring by the CWG and UMEC of assessment and evaluations from the new Pharmacology module implemented for at least two years.

***The Pharmacology Thread is intrinsically woven into the program and not easily trackable as a discrete entity. Theme 4 Committee includes a pharmacist who***

**continues to work with theme 4 to insure appropriate implementation of the new curricular material.**

8. Facilitators for online and telephone based learning groups should be given education on handling this challenging task. There may be an opportunity for formal rules for such groups as the lack of “face-to-face” encounters could allow for difficulty for each student to contribute equitably.

**Faculty Development/CEPD have been asked to address faculty development in this area. NOSM recognizes that there are specific challenges inherent in the use of online and teleconference based learning groups. The undergraduate medical education program will work in collaboration with the Continuing Education and Professional Development (CEPD) unit to develop tools and training for facilitators that will be involved with virtual groups.**

9. Review the student concerns regarding the weighting of gross vs. histological anatomy teaching.

**NOSM reviewed the current exam blueprints and assessment performance and believe the weighting is appropriate.**

10. The volume, alleged repetition and suggested lack of diligence in currency of articles and assigned reading for independent and team learning should be reviewed regularly. The CWG should document this practice and set parameters around timing of and submission dates for such practice.

11. Define Theme and Module leads’ accountability with respect to up-to-date references in course instructional material design, and in the Basic Science underpinnings of the clinical material.

**Policies are set by UMEC and not CWG. The NOSM Curriculum Map database includes learning objectives, events and assessment. There is work underway to include learning resources. This Curriculum Map will be available in a limited capacity to learners and faculty. It will allow NOSM to effectively track and review resources more easily. The timeline and workflow of when the resources are reviewed can be integrated into the Curriculum Map.**

12. NOSM should continue to annually review the technologic and safety issues of the Phase 1 community placements.

**NOSM is committed to ensuring safe and seamless learning environments at all of our teaching sites. In response to concerns regarding the learning environment during the Aboriginal Integrated Community Experience (CBM 106 ICE), a CBM 106 ICE Emergency/Crisis Response and Host Site Contingency Plan Procedures document was approved by the NOSM Executive Group in February 2011. This document outlines the recommended procedures for the school and our community partners in the event of a community or student emergency/crisis during the CBM 106 ICE. This document was in place for the past two CBM 106 ICE placements (in 2011 and 2012).**

13. A priority for the Dean and senior decanal group should be to address the issue of funding for an Alternative Funding Plan for clinical teachers in the AHSC’s and seeking means to bring more faculty into a teaching role for NOSM.

**AFP expansion and consolidation through the local education groups (LEGs) will address these issues.**

14. There should be a regular diligent attempt to offer clinical teaching, evaluation and curricular development to faculty in distributed and AHSC sites in various fashions (electronic, online, videoconference and accredited sessions).

***A robust curriculum of faculty development is offered to all NOSM faculty, including those at AHSC. There remain challenges related to the distributed nature of NOSM faculty for clinical evaluation.***

15. The duration and clinical patient care exposure of some Phase 3 clinical rotations warrants reassessment.

16. There should be attention at a Decanal level in working with the senior leadership at each AHSC to look at solutions to allow students more and consistent exposure to acute care adult patients.

***The duration of clinical rotations is mandated through the NOSM blueprint. The patient care exposure is reviewed annually with the Phase 3 director as well as the clerkship leads. NOSM responded that the duration and clinical rotation exposure is currently adequate.***

17. The role of residents as teachers has been demonstrated in the Medical Education literature as being a powerful learning tool for students. The identified issues for the student learning experience from the small number of residents at each AHSC warrants review and recommendations for improvement as a separate process. As NOSM rolls out the residency-teaching program, their already strong supportive academic and personal culture should also be present in the resident culture.

***NOSM responded that they have residents acting as teachers (RATS) and this is documented and reportable, and have central monitoring of RATs activity – through UME as part of the continuous program evaluation.***

18. There should be further dialogue with the student body on the balance between all CanMEDS roles in the curriculum and address the perception that social responsibility is receiving a disproportionate amount of Phase 1 time. We are not advocating this as true, but feel that continued dialogue with students when renewing the curriculum is needed. The theme balance policy should be both revisited and the actual and experienced balance tested in the current and recent versions of the curriculum.

19. In addressing curriculum renewal there is a need to assess leadership as well. Students raised concerns with lack of accessibility of some Theme chairs. We suggest further dialogue with students and perhaps an evaluation process for curricular leads.

***Theme chairs and other curricular leads must be available to meet with students and faculty. Theme chairs who have not been able to fulfill their roles have been replaced.***

20. NOSM should be supported for prioritized internal funding streams to expand and retain all aspects of research.

***NOSM continues to support research through such funding streams.***

21. There should be more summer research studentships created in Basic and Clinical Science research through internal and external funding streams.

22. Lakehead and Laurentian should undertake a process to evaluate the physical plants of each campus. This should assess the benefits of present model vs. consolidation and ability to handle future expansion and involve all staff in addition to representatives of each year of the student body.

23. NOSM's Basic Science research laboratory areas are acknowledged as demonstrating efficiencies in staffing and physical plant/equipment budgetary expenditures. This should be lauded in the new era of funding that universities are entering. Our team feels this may need further expansion to support recruitment of additional Basic Science and clinical scientists.

24. Lakehead and Laurentian should work diligently with the Dean and decanal team of NOSM in increasing Basic Science teachers. This may lead to expanding the physical footprint on campus and advocacy for research funding and organizational supports (staff, equipment, processes).

***NOSM responded that the current complement of Basic and Clinical Sciences is sufficient for NOSM's needs.***

25. A priority for funding and human resource should be the establishment of a rich and diverse postgraduate residency training program fashioned on the pillars of the undergraduate program at NOSM. This will address student teaching, clinical research, and physician recruitment in the NOSM region.

The postgraduate programs are expanding and developing. Curriculum development for new programs is underway.

***Curriculum development reflects a philosophy of seamless transition from UME to PG to CEPD learning.***

26. Acknowledgment by Lakehead and Laurentian for NOSM having such a high engagement in family and generalist physicians as part of their teaching faculty.

27. NOSM should make a priority of ensuring that all curricular teaching is by faculty appointed to the NOSM staff at either the Northwestern or Northeastern campuses.

***All teachers involved in curricular teaching at the undergraduate level are appointed to NOSM.***

28. There is a need to support the Dean and decanal team in achieving success in their plans for increasing specialists as teachers in the medical curriculum.

***Students are exposed to specialists other than family medicine specialists throughout all four years of the curriculum. This is currently sufficient for the UME program and reflects the medical community in Northern Ontario.***

29. There needs to be a regular transparent process for dialogue between community/clinical teachers and NOSM leaders to support retention of faculty. NOSM indicated that they agree.

30. NOSM should work with the student body on strengthening the present peer evaluation process and considering a group assessment component for group learning. NOSM indicated that they agree.

31. There is a perceived gap [in communication] by some students and we suggest a process with the Associate Deans and student leaders to address this.

***NOSM responded that they have worked diligently over the past two years to develop open lines of communication between the student leaders and the school leadership. Since start of 2011, the NOSM Student Society (NOSM SS) has had regular monthly meetings with the Associate Dean, UME to discuss issues of concern to the student body. In addition, the Learner Affairs Sub-Committee (a sub-committee of the NOSM SS) has been meeting monthly for several years. This sub-committee consists of representatives from the NOSM SS executive including the class representatives from each year from the east and west campuses and the Assistant Dean, Learner Affairs and the Director of Learner***

**Affairs & UME Administration. The LASC functions as a forum for discussion of issues that pertain to student life at NOSM and has the express goal of increasing the level of communication between the administration and the student body. The Dean of NOSM also meets at least once per academic year to discuss issues of concern to the student body. In addition to these formal meetings individual learners, groups of learners and/or the NOSM Student Society class representatives regularly bring concerns directly to Learner Affairs and the Associate Dean, UME for discussion.**

32. Formalize student participation on curriculum governance.

**NOSM clarified that there has always been student representation at UMEC and all of its standing committees. Student membership is included on all committee terms of reference.**

33. Engage in a reflective process to assess and define what can and should be offered/available in French. Ensure that any policies that result from this reflective process are transparent and available to potential and present students and faculty.

**NOSM clarified that it is not funded as a French program. Opportunities for learning in French are offered at sites in second and third year.**

34. Separate Learner Relations from Undergraduate Medicine by appointing an academic champion for learner relations.

**Dr. Laura Piccinin was appointed Assistant Dean, Learner Affairs in mid-May. This newly redeveloped role (previously Associate Dean, Learner Affairs) focuses on enhancing the medical education learning experience and promoting student success and engagement.**

35. Define Theme and Module leads' accountability with respect to specialty medicine exposures, in particular in the clinical environments.

**There is exposure to RCPSC specialties throughout Phase 2. Students rotate and are assessed in domains that map to the same specialties. In Phase 3, students rotate through 6 RCPSC specialties and are assessed in these domains as well. There is adequate exposure to specialty medicine.**

36. Articulate research/knowledge creation priorities related to missions of host universities and NOSM.

**There are ongoing discussions between NOSM and the host universities on these issues, particular with the Associate Dean Research.**

37. Clarify attribution and affiliation issues for academic products.

**At present the only official School language about IP relating to academic products is found in the Unit 1 Collective Agreement relating to 'Course Materials'. This is not binding to non-unionized faculty, staff or management and only covers materials specifically developed by the individual. A draft policy covering all parties is being developed for those products that are collectively developed, in particular the MD program curriculum to define appropriate processes of attribution and reuse of curriculum artifacts. A NOSM Institutional Repository is being planned to house curriculum artifacts alongside research artifacts and other entities pertaining to the school. The issue of stipendiary faculty IP remains relatively undefined. The requirement for all teachers to have a faculty contract addresses this in part.**

38. Review the role of research in the MD curriculum as well as extracurricular opportunities for students in research.

***NOSM provided an overview of the opportunities related to research as a curriculum activity, research as a content focus in the curriculum, extracurricular opportunities, and the conduct of medical education research.***

39. Curriculum leadership to address metrics, ongoing data collection, best practices and benchmarking in the following areas:

- Curricular outcomes
- Inter-professional education outcomes
- Admissions, demographics and social accountability outcomes
- Outcomes with respect to the inculcation of social accountability as a core value in graduates
- Validity, reliability of assessment tools

***Curricular outcomes: The Outcomes and Objectives document is at UMEC currently. It will be further developed and implemented by CIDs across the curriculum. A large part of this is the Syllabus Review document, which outlines how the syllabi are reviewed on annual basis across themes and phases. Once the outcomes and objectives are better defined within the curriculum, they can then be properly measured by program evaluation. The task of defining and implementing Inter-professional education outcomes is also a curricular activity. It can be done with support from CIDs and related Inter-professional education staff. Once the outcomes are well established, they can then be measured by program evaluation. Admissions, demographics and social accountability outcomes can be addressed by working together with the Admissions office. Reviewing the validity and reliability of assessment tools is a core responsibility of the Office of Assessment and Evaluation and the Assessment Working Group and OSCE Committees.***

40. Funding streams such as third party donations should be explored.

***The advancement office is currently involved in developing NOSM's advancement strategies.***

41. Technology is a key component of learning at NOSM. Past models reviewed stated planning for IT renewal through strategic envelopes from the Ministry. NOSM should plan for this not occurring and enact (if not already in place as we did not review the Board minutes) saving the depreciation funds or embarking on a contractual agreement that ensures continual evergreening of all technology.

***NOSM stated that the responsibility for fiscal matters at NOSM lies with Executive Group and the Board; Academic Council has no involvement with fiscal matters. See response to R4-6.***



**NOSM Quality Assurance Implementation Plan  
April 2013**

<b>Recommendations Requiring Follow-up</b>	<b>NOSM Follow-Up</b>	<b>Responsibility and Timeline*</b>
2. The terms of reference and membership of all committees should be reassessed annually to ensure they fit best practice.	The UMEC Constitutional Review Group will complete a full review by the end of December 2012 and will continue to act as a review body thereafter.	2012-2013 - Associate Dean Undergraduate Medical Education
7. There should be close monitoring by the CWG and UMEC of assessment and evaluations from the new Pharmacology module implemented for at least two years.	Theme 4 committee monitors performance on all theme 4 assessment items including pharmacology.	Ongoing - Chair of the Theme 4 Committee.
8. Facilitators for online and telephone based learning groups should be given education on handling this challenging task. There may be an opportunity for formal rules for such groups as the lack of "face-to-face" encounters could allow for difficulty for each student to contribute equitably.	<p>In the short term, UME will develop written materials that outline the challenges associated with virtual learning and that provide suggestions for appropriate methods of engaging learners in this type of learning environment. These materials will be provided to all facilitators in advance of modules involving online and/or teleconference learning sessions. A workshop on facilitating online and teleconference based learning groups will hopefully be offered at the upcoming Faculty Development Conference in January 2013.</p> <p>In the long term, UME will collaborate with CEPD to develop online modules through Moodle to further support the development of our facilitators in this area. The online modules will be available for facilitators to work through independently prior to the start of modules in which they will be facilitating online or teleconference based sessions. This will be an ongoing activity with CEPD and UME.</p>	2013-2014 - Associate Deans Dr. McCready and Dr. Graves
<p>10. The volume, alleged repetition and suggested lack of diligence in currency of articles and assigned reading for independent and team learning should be reviewed regularly. The CWG should document this practice and set parameters around timing of and submission dates for such practice.</p> <p>11. Define Theme and Module leads' accountability with respect to up-to-date</p>	Readings are reviewed annually as part of the module reviews. The curriculum map will allow the more effective review of the assigned reading.	This annual review cycle is supported by the Assistant Dean of Curriculum and Planning, UME and Associate Dean Undergraduate Medical Education

<b>Recommendations Requiring Follow-up</b>	<b>NOSM Follow-Up</b>	<b>Responsibility and Timeline*</b>
<p>references in course instructional material design, and in the Basic Science underpinnings of the clinical material.</p>		<p>A complete review of case-based learning sessions is being completed in 2012-13 and topic-oriented session review is planned for 2013-14 to address this as well.</p>
<p>12. NOSM should continue to annually review the technologic and safety issues of the Phase 1 community placements.</p>	<p>In fall 2012, the Assistant Dean, Learner Affairs Dr. Piccinin took the lead on reviewing these procedures to ensure that they remain appropriate.</p> <p>In addition, the Assistant Dean, Learner Affairs will review the current processes that are in place for learners to express concerns regarding safety and/or technologic issues to the school both during and after community placements to ensure that they provide an open and comfortable forum.</p> <p>Beginning fall 2012, Year 1 students will be sent a survey using the One45 System, which surveys them about academic sessions, cultural sessions, accommodations, and travel arrangements, as well as, their LCCs and any other people with whom they have contact. Low performance flags are set on the survey inform us about students' ratings of experience in any of these areas lower than a set acceptable level. One45 sends an email to the people we select to notify them that a student has given a low rating one or more questions. The student is contacted immediately to determine if there is a safety issue, and IT issue, or any other type of problem. The timing of this survey is set when required, at the beginning of their community placement or in the middle, or both.</p> <p>The 106 Site Readiness Working Group, which includes representation from UME, Learner Affairs, Aboriginal Affairs, Community Engagement and Technology, will debrief any issues related to safety, housing and</p>	<p>Ongoing - Assistant Dean, Learner Affairs supported by Associate Dean Undergraduate Medical Education</p>

Recommendations Requiring Follow-up	NOSM Follow-Up	Responsibility and Timeline*
	technology that were reported in 2012. Strategies to address the issues must be in place for 2013CBM 106 ICE placements.	
14. There should be a regular diligent attempt to offer clinical teaching, evaluation and curricular development to faculty in distributed and AHSC sites in various fashions (electronic, online, videoconference and accredited sessions).	Faculty Affairs is working with UME and PG to improve the faculty evaluation process. This issue will be addressed for the UME and PG accreditation visits scheduled for early 2014.	2012-2014 - Dr. McCready, Dr. Cervin and Dr. Graves
15. The duration and clinical patient care exposure of some Phase 3 clinical rotations warrants reassessment. 16. There should be attention at a Decanal level in working with the senior leadership at each AHSC to look at solutions to allow students more and consistent exposure to acute care adult patients.	Annual review of clinical patient care exposure during Phase 3 will continue.	Ongoing - Dr. Lee Toner, the Phase 3 Coordinator oversees this process and regularly reports to UMEC on the findings from these reviews.
17. The role of residents as teachers has been demonstrated in the Medical Education literature as being a powerful learning tool for students. The identified issues for the student learning experience from the small number of residents at each AHSC warrants review and recommendations for improvement as a separate process. As NOSM rolls out the residency-teaching program, their already strong supportive academic and personal culture should also be present in the resident culture.	UME and PG will continue to work on the development of the residents as teachers program. This is an accreditation requirement that must be in place for the 2014 accreditation visit for PG.	2012-2014 - Dr. Cervin and Dr. Graves
18. There should be further dialogue with the student body on the balance between all CanMEDS roles in the curriculum and address the perception that social responsibility is receiving a disproportionate amount of Phase 1 time. We are not advocating this as true, but feel that continued dialogue with students when renewing the curriculum is needed.	CWG is currently reviewing the themes and phases policy.	2012-2013 - Dr. Graves is chair of the Curriculum Working Group.
19. In addressing curriculum renewal there is a need to assess leadership as well. Students raised concerns with lack of accessibility of some Theme chairs. We suggest further dialogue with students and perhaps an evaluation process for	Ongoing annual review of theme and other curricular lead contracts will continue.	Ongoing - Theme chairs are reappointed on an annual basis by Dr. Graves

Recommendations Requiring Follow-up	NOSM Follow-Up	Responsibility and Timeline*
curricular leads.		
21. There should be more summer research studentships created in Basic and Clinical Science research through internal and external funding streams.	The tuition set aside proposal will allow additional funding for students to pursue Basic, Clinical and Social Science summer student research.	This funding will become available during the 2012-13 academic year through the Bursary Committee chaired by Dr. Piccinin, Assistant Dean, Learner Affairs.
22. Lakehead and Laurentian should undertake a process to evaluate the physical plants of each campus. This should assess the benefits of present model vs. consolidation and ability to handle future expansion and involve all staff in addition to representatives of each year of the student body.	An internal review of space at Lakehead and Laurentian sites has been initiated	Timeline for review to be developed by Administration (Mr. Ken Adams, CAO.)
<p>23. NOSM's Basic Science research laboratory areas are acknowledged as demonstrating efficiencies in staffing and physical plant/equipment budgetary expenditures. This should be lauded in the new era of funding that universities are entering. Our team feels this may need further expansion to support recruitment of additional Basic Science and clinical scientists.</p> <p>24. Lakehead and Laurentian should work diligently with the Dean and decanal team of NOSM in increasing Basic Science teachers. This may lead to expanding the physical footprint on campus and advocacy for research funding and organizational supports (staff, equipment, processes).</p>	<p>An internal review of space at Lakehead and Laurentian sites has been initiated.</p> <p>Continue the work to create Research Chairs and explore ways to otherwise expand the complement of Basic Science teachers and other Faculty as opportunities become available.</p>	<p>Timeline in development for this review by Administration (Mr. Ken Adams, CAO)</p> <p>Dean and Associate Deans</p>
25. A priority for funding and human resource should be the establishment of a rich and diverse postgraduate residency training program fashioned on the pillars of the undergraduate program at NOSM. This will address student teaching, clinical research, and physician recruitment in the NOSM region.	PG program development is in progress for new residency programs.	2013-2014 - This will be reviewed for the 2014 PG accreditation visit. (Dr. Cervin.)
29. There needs to be a regular transparent process for dialogue between community/clinical teachers and NOSM leaders to support retention of faculty.	Faculty Affairs is working with UME and PG to improve the faculty evaluation process.	2013-2014 - This issue will be addressed for the UME and PG accreditation visits scheduled for early

Recommendations Requiring Follow-up	NOSM Follow-Up	Responsibility and Timeline*
		2014. (Drs. McCready and Graves.)
30. NOSM should work with the student body on strengthening the present peer evaluation process and considering a group assessment component for group learning.	The Assessment Working Group will be tasked to review this recommendation.	2012-2013 - Student Assessment and Promotions Committee (SAPC) chaired by Dr. Stacey Ritz.
33. Engage in a reflective process to assess and define what can and should be offered/available in French. Ensure that policies that result from this reflective process are transparent and available to students and faculty.	Opportunities for learning in French will continue to be explored through collaborations between UME and Community Engagement	Ongoing - Drs. Graves and Marsh respectively
36. Articulate research/knowledge creation priorities related to missions of host universities and NOSM.	This process is in progress.	Ongoing - Dr. Greg Ross, Associate Dean Research
37. Clarify attribution and affiliation issues for academic products.	These initiatives will require a broader review of academic IP at the Northern Ontario School of Medicine. Faculty Affairs will establish a working group to undertake this review.	2013-2014 - Dr. McCready
38. Review the role of research in the MD curriculum as well as extracurricular opportunities for students in research.	A working group to integrate evidence-based medicine teaching in the MD has been established with the assistant dean for curriculum and planning	Ongoing - Dr. Ellaway with the support of Dr. Graves.
39. Curriculum leadership to address metrics, ongoing data collection, best practices and benchmarking in the following areas: <ul style="list-style-type: none"> <li>• Curricular outcomes</li> <li>• Inter-professional education outcomes</li> <li>• Admissions, demographics and social accountability outcomes</li> <li>• Outcomes with respect to the inculcation of social accountability as a core value in graduates</li> <li>• Validity, reliability of assessment tools</li> </ul>	This work is ongoing as part of ongoing curriculum review and renewal cycle and with Admissions and the NOSM tracking study.  Reviewing the validity and reliability of assessment tools is a core responsibility of the Office of Assessment and Evaluation and the Assessment Working Group and OSCE Committees.	Ongoing - Dr. Blair Schoales, Assistant Dean for Admissions and Dr. Wayne Warry, Director of the Centre for Rural and Northern Health Research (CRANHR). Work on assessment tools ongoing - Office and Assessment and Evaluation (Dr. Elaine Hogard)

\* The Dean of the Faculty shall be responsible for monitoring the implementation plan. The details of progress made will be presented in the Deans' Annual Report and filed

with both of the Vice-Presidents (Academic). The Executive Summary and the monitoring reports will be posted on the Lakehead University web site.