UND SMHS Strategic Plan Individual Unit Report for 2023 GOAL 2 for EDUCATION AND FACULTY AFFAIRS

Mission of Education and Faculty Affairs: Education and Faculty Affairs sustains a vibrant, inclusive and dynamic environment that enables learners and educators to achieve academic and professional excellence.

Education and Faculty Affairs and its units provide resources, services and support for academic units as each carries out its strategic initiatives in alignment with UND SMHS Strategic Goals and the OneUND Strategic Plan.

Units Reporting to Associate Dean for Education and Faculty Affairs: Education Resources; Library Resources; Information Resources; Simulation Center; Interprofessional Education; Medical Accreditation

LEARNING

One UND Strategic Plan Goal 2: Increase undergraduate, graduate, and professional graduation rates. UND SMHS Strategic Plan Goal 2: SMHS Units will expand their current systems of student support to ensure continued high graduation rates and improve student satisfaction with the overall quality of their education.

1. Describe if/how your unit has addressed this goal.

EDUCATION RESOURCES/MEDICAL EDUCATION

In the last 20 months, the medical program has supported the development of a student-led peer tutoring program led and supported by fourth-year medical students. This has been received with very positive narrative student feedback. As of October, 2022, the *Medical Student Peer Education Society* has become an official, student-lead UND organization. This group does have an official faculty advisor.

Because Teaching, Learning and Scholarship (TLAS) is not itself an academic program or department, it has no specific curriculum nor students. However, TLAS provides faculty development (workshops; recordings and resources on our website; annual needs assessment survey; outreach to departments) and consults specifically with the medical curriculum on multiple initiatives designed to improve student learning and thus, retention and graduation. For example, we have served as a resource on multiple assessment and curriculum initiatives for test preparation (NBME, CBSE, Step 1 preparation), integration of clinical and basic sciences within Phase 1 and Phase 2, and redesign of formative assessment practices (*e.g.*, iSpiral) designed to provide early intervention for struggling students, all of which would be expected to increase student success and retention and graduation.

The faculty development efforts of the Teaching Learning and Scholarship (TLAS) division of Education Resources indirectly supports this goal by helping faculty be more innovative (promoting retention) and effective (promoting learning and success). TLAS has offered more than 20 workshops each of the previous two years, reaching over 800 faculty and staff since April of 2020. We have also conducted a Teaching Academy for 10 faculty across all health sciences programs, each of whom engaged in multiple activities, projects, and presentations as part of that curriculum and we are offering a second class with a focus on development of high-quality interactive learning modules using the new Recording Studio.

The Medical Curriculum has expanded its current system of student support through both personnel and structure. The Medical Curriculum employs a Learning Specialist and a Director of the Academic Success Program, who along with two Wellness Advocates assists students with the development of tools required to acquire the knowledge, skills and behaviors necessary to be successful in the medical

curriculum and in the profession. Our Learning Specialist assists students with the development of academic study plans, time management, test-taking strategies, active learning strategies and memory techniques. Our Director of the Academic Success Program is MBBS/PhD responsible for the Academic Success Program. She collaborates with medical curriculum administrators and staff to develop, coordinate and deliver a longitudinal series of experiences throughout the medical curriculum. Responsibilities are focused on advancing individual student knowledge regarding physician tasks and competencies related to basic medical knowledge/scientific concepts. Specifically, focus is on general principles of foundational science, organ systems, multisystem processes and disorders and the relationship of those competencies to profession-related standardized board examinations and licensure. The Academic Success Program focuses on Phase 1 (pre-clerkship) and parallels existing medical curricular content. Where applicable, students in allied health professional programs or graduate programs in the School of Medicine and Health Sciences may also participate in particular activities, in whole, or in part. Part of the Academic Success Program is the organization and administration of National Board of Medical Examiners examinations (Customized Assessment, Subject Exams and Comprehensive Basic Science Exams) that serve formative summative and gateway functions in our curriculum.

The organization and inter-relationship of all of these advisory/ support activities are codified through Wellness, Career Counseling, Academic Advising and Tutoring (assistance with acquiring specific knowledge, skills and behaviors) Systems White Papers and organizational graphics in order to effectively implement a holistic approach to student support. Intentional organizational steps have been recently taken to improve student satisfaction with the overall quality of their medical education. An Office of Medical Program Accreditation and Quality Assurance has been created and acts as to coordinate quality assurance and quality improvement activities between the Dean's Quality Improvement Panel, accreditation review committees (covering Education, Faculty and Student Standards) and Medical Program Committees.

In addition, the MD program has incorporated multiple other forms of student feedback which are routinely evaluated to identify issues with student satisfaction. One of these methods is the Independent Student Analysis (ISA), which was run by students in 2020 as part of the MD program accreditation process and was administered to every student in the program. Hundreds of recommendations were made resulting in dozens of changes and adjustments, each of which was communicated to students. In 2021, a second survey was done to measure the impact of these changes. A 175-page report on the results is currently being reviewed, but preliminary review indicates the most measures of student satisfaction improved.

Student support is extremely robust in the medical program. Major changes have been implemented that coincide with the curriculum revision and development of an office of Academic Success. In the last year, major changes have been implementation of alternative mechanisms for submission of anonymous student feedback, development of HeadsUp! Informative meetings and execution of numerous initiatives that arose from accreditation-related student working groups.

INTERPROFESSIONAL EDUCATION

Collaborative, engaged learning environments employ high-impact practices of team dynamics, understanding of health care team member roles, relationship-building, communication skills and actively assessing and addressing the health care needs of patients and populations to enhance student learning and satisfaction with the quality of their education. The Office of Interprofessional Education was able to convert the Interprofessional Health Care Course, our "anchor" IPE learning experience for 350-450 students annually across 8 professions in 3 colleges/schools, to an online version to retain this important required course for medical students and maintain quality established with the traditional inperson course. As well, with the online version of the course allows some programs to have more students taking the course. IPE learning has been incorporated into well received simulations and is in further development for clinical environments to enhance IPE learning experiences. The IPE "elective" is

now required for all medical students in Phase 2. The point system/badging for IPE has launched, and will add valuable clinic IP interactions.

In summary, Interprofessional education is a logical set of linear, layered, and progressive learning from competent to mastery of these learning objectives across multiple touch points based on nationally recognized competencies and are organized around Domain 7. With the "anchor course" IPHC students learn the basics about teams and teamwork in the context of interprofessional education in an active learning format. Team STEPPS, error disclosure, team case management, and learning from, with, and about each other strengthens not only their own professional identity, they learn about each other's professions, roles, and responsibilities.

From this starting point, students go on to simulation and clinical environments where these principles are applied and assessed, preparing them for graduation and practice.

Interprofessional Education is advancing along with the new curriculum to have progressive and relevant learning activities, including the soon to be implemented point system/badging system, which should enlighten students to the possibilities and benefits of team-based care across the spectrum of their education, future residencies and future clinical and/or academic careers. Students will be able to select their level of desired IPE expertise in the point system. The new badge offering in IPE requires students to demonstrate competency in IPE through participation in mandatory activities as well as the identification and assessment of additional IPE activities. This badge will also allow students to pursue and demonstrate deeper expertise in IPE at the Expertise and Mastery levels through participation and assessment of multiple IPE activities at high levels of complexity.

Badging Platform for SMHS

We are implementing a badging program for the next year to allow departments to create badges for students to demonstrate deeper expertise in existing, required curriculum outcomes and to pursue and document skills, abilities, and dispositions that are related to their professional and personal goals.

OFFICE OF MEDICAL PROGRAM ACCREDITATION AND QUALITY IMPROVEMENT

The work of the medical program accreditation review committees utilizing QA and QI processes identified opportunities to ensure higher graduation rates and improve student satisfaction with the overall quality of their education particular in regards to academic advising services. Graduate and student surveys found that medical students were not satisfied with the academic advising services. The current academic advising system was evaluated and opportunities to improve the system have been identified.

SIMULATION

Incorporation of Clinical Reasoning in Y2 instruction and testing. Class sessions, on-line practice sessions, end-of-block summative assessment using TeachingMedicine.com.

Students complete exams on Standardized Patients, document their History & Physical, record a 5minute case oral presentation all receiving formative constructive feedback.

Interprofessional Simulations with NDSU Pharmacy, UND Nursing, PT, OT, Social Work, Med School including telemedicine component and with students of diverse intercultural backgrounds.

LIBRARY RESOURCES

Research success is critical for success in health care fields. In collaboration with the Director of Learner Research, librarians provided several sessions for students enrolled in Research Experience for Medical Students (REMS) I. With the opportunity for multiple sessions embedded in a research focused course, librarians were able to move beyond presenting foundational information to helping students establish skills of locating and ethically using high quality information. These skills will benefit this group of students with current research projects and future scholarly work. Additionally, this experience provided an example of a successful faculty-librarian partnership on which librarians can model future courses.

INFORMATION RESOURCES

Information Resources supports academic programs delivering course materials, instructions and assessments to students and faculty by implementing and maintaining appropriate technologies and systems.

2. Describe how your efforts are being assessed.

EDUCATION RESOURCES/MEDICAL EDUCATION

Student narrative and Likert feedback is specifically utilized to evaluate the effectiveness of our peertutoring program.

Counts of TLAS faculty development offerings, website use metrics, participation rates in activities, usage and feedback on forms and initiatives provided by stakeholders. Descriptive statistics and counts of activities; number of students impacted. A doubling of faculty development activities year-over-year reaching 806 attendees indicates good outreach and potential impact on the students of those faculty, but no other direct measures are possible. We will continue to provide the same services and outreach, including piloting a new teaching academy, but these are again only indirectly connected to this goal.

Tactics: Learning specialist, NBME question use in preclinical exams, gateway exam, moving USMLE Step 1 into the clinical phase

Tactics: Reassessment and renewal of the curriculum by the faculty

Metric: Failure and reexamination rates

Comment: Although we could aspire to zero block failures and zero re-examinations, some failures and re-examinations are probably inevitable given the substantial demands of the medical curriculum. As we move into Curriculum 2.0, the structures of the curriculum will change and the metric will be reformulated based upon the new curricular structures and assessments when they are determined and to continue to track such issues closely to make sure that the new compressed curricula do not impair student performance.

Metric: Mean USMLE Step 1 scores

Comment: We hope that our continued improvements in student support and the increasing incorporation of USMLE questions into our various assessments will maintain or even further improve this. We will continue to track.

Tactics: Develop professionalism standards for clinical clerkships that will make boundaries for expected behavior clear to students.

Metric: Adoption of professionalism standards. The professionalism objective and procedure were adopted for all clerkships. Each department is determining how they will account for it in the clerkship grade.

Comment: This has now been established. We will report back next year how departments will use these in grading.

Tactic: Adoption of a plan and timeline for curriculum revision by UMEC.

Metric: Subsequently following this timeline. The timeline for implementation of a revised curriculum is execution of the revised curriculum for Academic Year 2021-2022. This timeline is currently being successfully met with planning and organization for the new curriculum completed for a July 2021 deployment.

Tactic: Development of clinical differential review sessions for pre-clinical students, correlating disease and pathology findings to clinical presentations and approach to management. *Metric:* Students attending optional and enhanced learning sessions; evaluations from sessions

Comment: Patient-centered learning, team-based learning, simulation scenarios and oral case presentations, write-ups as part of the ambulatory care experience all are focused on providing both formative and summative feedback regarding clinical presentations. These sessions range from optional high-fidelity simulation scenarios using mannequins to mandatory clinical skills assessment.

Tactic: Development and deployment of the ISA to measure student satisfaction. *Metric*: Likert-type ratings of satisfaction and qualitative analysis of student written comments. *Comment*: This ongoing process has made improvements in student satisfaction and will continue into the future.

INTERPROFESSIONAL EDUCATION

Standardized student evaluations (RIPLS scale) for IPHC, brief, debrief to collect data to assess satisfaction and make ongoing improvements to student IPE experiences. Medical students are required to take a quiz at the end of their IPHC course. Sim experiences are assessed by the sim team(s) with brief, debrief, and other sim-specific tools.

The IPE elective will be assessed the same as other electives. Nearly all clerkships now have an IPE/C learning objective that will be evaluated as a usual part of the clerkship, stressing the value of interprofessional patient care in differing practice environments.

The online version of IPHC had nearly identical student evaluations as the in-person version with high satisfaction rates.

Students will soon be using an IPE point/badging system to track their IPE learning across all 3 phases of the medical curriculum, with the possibility of different levels of expertise. As many of the activities will be in a variety of learning environments, this will allow them to see the value of Interprofessional teambased patient care in clinic environments.

SIMULATION

Qualtrics surveys to all students participating After Action meetings for faculty/staff to debrief events Summative testing of students

OFFICE OF MEDICAL PROGRAM ACCREDITATION AND QUALITY IMPROVEMENT

Student satisfaction data will be tracked annually by UMEC and the Office of Medical Accreditation and reported to the Dean's Quality Improvement Panel further recommendations.

3. Describe how your unit analyzed these data and what assessments were determined.

EDUCATION RESOURCES/MEDICAL EDUCATION

Student narrative and Likert feedback is analyzed to determine if the peer-tutoring program is being utilized effectively, with positive results. Regular announcements are implemented to ensure that students know the existence of this program and have current peer-tutor contact information. See above for further ER information on data analysis.

Badging Platform for SMHS

- Generation of badges in the system
- Number of badges claimed by students

INTERPROFESSIONAL EDUCATION

Students report positive experiences with IPE at different "touch points" in the curriculum, consistent with accepted IPE teaching methods. Interaction with other health professions appears to be important for medical student learning. Specifically, students evaluate the IPHC course with the validated RIPLS tool with consistently satisfactory results, which can be made available upon request. The IPE elective

evaluation is the same as other elective with positive results after the recent launch. Clerkship IPE learning objectives are assessed the same as other clerkship learning objectives.

SIMULATION

Staff member gathers all Qualtrics data, compiles and puts into document for all faculty and staff to review. Information used to make appropriate changes/improvements to sessions.

OFFICE OF MEDICAL PROGRAM ACCREDITATION AND QUALITY IMPROVEMENT

Student satisfaction data are the primary outcome measurements. Data from the Graduate Questionnaire and the annual medical student survey are analyzed by UMEC and its committees as well as the medical program's accreditation review committees. National Benchmarking data and previous years' survey are used for comparison in drawing conclusions and recommendations. In addition, for academic years 2020-21 and 2021-22 student satisfaction data from the Independent Student Analysis (ISA) and a follow up survey (ISA2) were carefully considered.

4. Describe how your unit will implement any further changes and what barriers may exist.

EDUCATION RESOURCES/MEDICAL EDUCATION

See above.

Badging Platform for SMHS

• Ongoing analysis and monitoring of the platform will identify issues and challenges.

INTERPROFESSIONAL EDUCATION

Anticipation of ongoing online or "hybrid" versions of IPE activities will need to continue to improve quality student experiences in this curricular area. As well, ongoing development of IPE activities (i.e., clinical environments, sim) is always active. IPE informs quality future clinical professional interactions.

Anticipated barriers include reception by students of more online or hybrid learning, training enough faculty to do online or hybrid IPE teaching to keep and increase a high-level student IPE experience, and the need to overcome usual institutional barriers (dedicated time, who hosts, who teaches, etc) to increase the number of quality sim and clinical IPE experiences. Building quality IP experiences in clinical environments will require creativity as students are scattered across several clinic/hospital systems to establish, maintain, and increase these experiences to enhance skills for graduation. The previously mentioned point/badging system for IPE learning has been launched. This will allow tracking of IPE/C activities across all 3 phases of education and determination of different levels of learning- competent, expert, and mastery. We anticipate this will become a badging series when UND adopts a formal and acceptable program

SIMULATION

Use After Action reports, Qualtric data to identify areas of need/improvement and apply appropriate changes as needed.

Utilizing nationwide reference material obtained from professional simulation and directors' groups. We also contribute to the reference material.

OFFICE OF MEDICAL PROGRAM ACCREDITATION AND QUALITY IMPROVEMENT

Demonstrating how resources are better managed using an internally designed "systems flow diagram", identifying academic advisors for students at risk for academic failure, and initiating a new peer tutoring system for all interested students are examples of how changes will be implanted. A barrier to student peer teaching may result when the shorten preclinical phase goes into effect.

It was further discovered that students conflate the terms career counseling with academic advising and therefore this makes interpreting student satisfaction data difficult.

Medical students are now involved in a process of reviewing and providing implementable recommendations for how the medical program might improve its academic and career counseling efforts.



Education and Faculty Affairs units are on track with progress on Goal 2