UND SMHS Strategic Plan Individual Unit Report for 2020 GOAL 4 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 4: Enhance discovery at a level consistent with most research intensive universities (Carnegie R1) Goal by 2022, (\$120) million-internal and external funding sources.

UND SMHS Strategic Plan Goal 4: The SMHS will enhance basic, clinical, and translational health sciences discoveries while focusing on its stated purpose "of discovery of knowledge that benefits the people of this state and enhances the quality of their lives." The SMHS will support Goal 4 by increasing its extramural funding by 10% per year based on a three year rolling average.

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

EDUCATION RESOURCES/MEDICAL EDUCATION

The Teaching, Learning and Scholarship division of Education Resources has enhanced basic, clinical, and translational discoveries by:

- 1. Supporting the application and submission of several grants and serving as PI, CoPI, and/or senior personnel on those grants which were funded
- 1.1. \$3.75M HRSA grant on Geriatrics Workforce (Serve as Program Director, Curriculum Engagement)—building a game for healthcare professionals to learn to apply Geriatric 4Ms to patient populations
- 1.2. \$75M HRSA supplemental grant for telehealth interprofessional team-based assessment and care planning
- 1.3. \$20.3M NIH DACCOTA Dakota Cancer Collaborative on Translational Activity (Evaluation Core CoDirector)
- 1.4. \$30,000 AMA Innovation Grant (PI for competency-based education badging)
- 2. Independently and collaboratively directing research studies and disseminating original scholarship
- 2.1. Van Eck, R., Mylona, E., & Dubaybo, B. (2021). Evaluating Coaching Programs. In M. Hammoud (Ed) Coaching Handbook. Mahwah, NJ: Elsevier.
- 2.2. Abrams, S., & Van Eck, R. (In Press). Mixed methods survey research design and evaluation.
- 2.3. Roberts, N., & Van Eck, R. (2019). How and where do I teach my students about the Master Adaptive Learner model? In W Cutrer, M Pusic, LD Gruppen, MM Hammoud, & SA Santen (Eds.) The Master Adaptive Learning. AMA MedEd Innovation Series; Chicago: American Medical Association.
- 2.4. Van Eck, R. N., Shute, V. J., & Rieber, L. (2018). Leveling up. In R. A. Reiser, & J. V. Dempsey (Eds.), *Trends and issues in instructional design and technology* (4th ed., pp. 321–332). New York, NY: Pearson Education.
- 2.5. Dempsey, J., & Van Eck, R. (2018). Instructional design in eLearning. In R. A. Reiser, & J. V. Dempsey (Eds.), Trends and issues in instructional design and technology (4th ed., pp. 229–237). New York, NY: Pearson Education.
- 2.6. Mylona, E., & Van Eck, R. N. (2017). Evaluating coaching programs. In N. M. Deiorio and M. Hammoud, *Coaching in medical education: A faculty handbook*. Chicago: American Medical Association.

- 2.7. J. Bryan Carmody...Richard N. Van Eck, Julie H. Youm, Deborah J. Ziring, Senthil K. Rajasekaran (In Press). Medical Student Attitudes toward USMLE Step 1 and Health Systems Science A Multi-Institutional Survey. *Teaching and Learning in Medicine*
- 2.8. Renger, R., Renger, J., Souvannasacd, E., Basson, MD, Hart, G., Van Eck, R. & Renger, J. (with editor). Using the Homeland Security and Exercise Evaluation Program (HSEEP) Building Block Approach to Implement System Evaluation Theory (SET) to evaluate a Centre for Translational Research (CTR)
- 2.9. Renger, R., Basson, M. D., Hart, G., Van Eck, R., Souvannasacd, E., Renger, J., & Foltysova, J. (2020). Lessons learned in evaluating the infrastructure of a Centre for Translational Research. Evaluation Journal of Australasia, 20(1), 6–22. https://doi.org/10.1177/1035719X20909910
- 2.10. Basson MD, Carr P, Van Eck RN, Zelewski S, Salentiny A. University of North Dakota School of Medicine and the Health Sciences. Academic Medicine. (in press). In 2020 AAMC Snapshots in Medical Education in the United States and Canada. Association of American Medical Colleges.
- 2.11. Poltavski, D., Van Eck, R., & Winger, A. (2018). Using a polygraph system for evaluation of the Social Desirability Response Bias in self-report measures of aggression. *Applied Psychophysiology and Biofeedback*, pp. 1–10. https://doi.org/10.1007/s10484-018-9414-4.
- 2.12. Appianing, J., & Van Eck, R. N. (2018). Development and validation of the Value-Expectancy STEM Assessment Scale for students in higher education. *International Journal of STEM Education*.
- 2.13. Ribbens, W., Malliet, S., Van Eck, R., & Larkin, D. (2016). Perceived realism in shooting games: Towards scale validation. *Computers in Human Behavior, 64*, 308–318. doi: 10.1016/j.chb.2016.06.055.

3. Providing faculty development and support of research and education scholarship skills

3.1. 20-30 hours per year of meeting with faculty to support their scholarship

In the Medical Education division of Education Resources, Drs. Minnie Faith Kalyanadundaram and Patrick Carr are working on educational grant funding related to associations between matriculation profiles, performance in the curriculum, and standardized assessment outcomes.

INTERPROFESSIONAL EDUCATION

IPE has 3 established activities (IPHC course, Interprofessional Student-Led Community based Learning Experiences (ISCLE), and the PharmD/MD student match, with evaluation components. In addition, there are now 3 IP simulation activities including the ROBOTS sim developed with AMA grant funding.

A number of other activities are under development including the creation of learning objectives in IPE for several clerkships.

As many of these activities and evaluation methods are novel, opportunity exists for scholarly activity. We have received 3 separate AMA grants for a total of \$75,000 (an increase of \$25,000 this year) with respect to the ROBOTS project the "Chronic Disease History and Physical", and the hypertension treatment interactive virtual module. We have already done 9 presentations at international, national, and state meetings, as well as 3 posters and 1 journal publication since 2018. Development and dissemination of IP learning is very important for better team-based learning and health care for North Dakota.

OFFICE OF MEDICAL PROGRAM ACCREDITATION AND QUALITY IMPROVEMENT

The work related to continuous quality assurance (QA) by the Office of Medical Accreditation (OMA) and the work related to continuous quality improvement (CQI) by the Dean's Quality Improvement Panel (DQIP) addresses Goal 4 in the ongoing reviews of LCME Standards and Elements associated with medical school's research efforts and by analyzing outcome data from AAMC Graduate Questionnaire (GQ). Two accreditation "elements" that best represent this goal are expectations related to "Community of Scholars/Research Opportunities" and "Scholarly Productivity".

3.2 The medical education program is conducted in an environment that fosters the intellectual challenge and spirit of inquiry appropriate to a community of scholars and provides sufficient opportunities, encouragement, and support for medical student participation in the research and other scholarly activities of its faculty.

4.2 The faculty of a medical school demonstrate a commitment to continuing scholarly productivity that is characteristic of an institution of higher learning.)

LIBRARY RESOURCES

Library Resources supports accomplishment of Goal 4 by educational programs, particularly *information literacy*, by continuing to explore electronic resources that best fit the needs of the SMHS community. We have established trials and temporary access to several new tools made available by vendors during the pandemic quarantine period. We have provided continued library instruction sessions to increase the information literacy levels of faculty and students. With the move to remote, virtual instruction, librarians have been creative and effective in providing content in new and engaging ways.

INFORMATION RESOURCES

Information Resources supports departments in scholarly and creative activity by implementing and maintaining appropriate technologies and systems.

2. Describe how your efforts are being assessed.

EDUCATION RESOURCES/MEDICAL EDUCATION

Efforts are being assessed by amount of funding, increase in funding year-over-year, number of publications, hours per year

INTERPROFESSIONAL EDUCATION

There is a high priority to develop and implement evaluation and outcome measures that are meaningful.

- "Competency checklists" with gamification/badging components across a wide variety of IP settings will be
 used for many of these activities for the processes of evaluation and outcome measures, i.e., proficiency in
 IPE. Done in conjunction of Dr. Richard Van Eck, Dr. Adrienne Salentiny, and Michelle Montgomery, MSW
 I CSW
- Clerkship IP Learning objectives will be part of routine clerkship evaluations.
- IPHC- MCQ for medical students, preceptor evaluation, student reflection
- ISCLE-preceptor and student reflection
- AMA grant projects were assessed/will be assessed by students and faculty for suitability in curriculum development.

OFFICE OF MEDICAL PROGRAM ACCREDITATION AND QUALITY IMPROVEMENT

The medical education program's efforts to achieve successful outcomes related to these specific elements are accomplished though self-assessment processes in which the LCME data collection instrument (DCI) is utilized to gather data and answer related questions. These data are analyzed by the established accreditation review committees. Further insight was obtained through the use of outside consultants.

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

EDUCATION RESOURCES/MEDICAL EDUCATION

The Teaching, Learning and Scholarship division of Education Resources has increased funding year over year by more than 10% and have an average of 2.5 publications per year. This exceeds our goals given current resources.

INTERPROFESSIONAL EDUCATION

For the ROBOTS sim, the CATS measurement tool for interprofessional collaboration was modified to include the telehealth component for assessment and led to incorporating an important IP activity into curriculum. Nursing students and medical students will evaluate the AMA hypertension interactive learning module in development for suitability for curriculum nationwide. Some scholarly activity surrounded this development. As noted, badging is being developed as an assessment tool. We anticipate scholarly activity surrounding this.

OFFICE OF MEDICAL PROGRAM ACCREDITATION AND QUALITY IMPROVEMENT

Support and mentoring of junior research faculty and providing research opportunities for medical students are considered to be successful.

Identified areas of challenge relate to the development and support of community faculty in research/scholarship and in making student participation in research a bit easier.

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

EDUCATION RESOURCES/MEDICAL EDUCATION

The Teaching, Learning and Scholarship division of Education Resources is reapplying for the next round of HRSA and NIH funding opportunities this year and will publish and present on ongoing research. There is little to no additional capacity for additional research or funding given current resources and the current rate of scholarly productivity will be difficult to sustain.

INTERPROFESSIONAL EDUCATION

We are always on the lookout for IP education and collaboration partners. IP is a curricular area that has many opportunities for teaching and learning scholarship. As well, this plays a role in workforce development. Barriers are often institutional, but this is less of an issue as time goes on. IP collaboration across institutions is the next goal after the successful launch of the PharmD/MD student match program with NDSU and success within UND. This will almost certainly lead to additional scholarly activity in the teaching and learning realm. IP collaboration is an important skill set for the future delivery of health care in North Dakota.

OFFICE OF MEDICAL PROGRAM ACCREDITATION AND QUALITY IMPROVEMENT

DQIP is addressing the identified challenge areas and will determine if changes are required and if so how to best implement further changes.

PROVIDE A RATING OF YOUR PROGRESS ON THIS GOAL: On Track; Delayed; Behind

Education and Faculty Affairs units are on track with progress on Goal 4