Medicine Research Day – Quality Improvement in Medical Education Abstract Proposal

Title: Student-Driven Enhancement of Medical Curriculum: The Aesculapian Society's Real-Time Feedback Initiative

Authors: Heather Duplessis, Meva Beganovic, Dr. Robin English, Dr. Joy Sturtevant, Marcie "Leanne" Sorrel

Affiliation: Louisiana State University Health Sciences Center, School of Medicine – New Orleans

Background

Prior to 2021, student feedback regarding their medical curriculum was collected primarily through summative end-of-course surveys. Although effective, this method of evaluation limits the ability of course directors to identify emerging issues and make timely adjustments to an ongoing course. A framework of continuous monitoring and evaluation of student feedback can inform real-time decision-making and responsiveness to student and faculty needs.

Methods

To enhance the quality and utility of our existing student-driven feedback system, we introduced a method of formative evaluation that has transformed the utility of student feedback: real-time feedback surveys. Students submit feedback through anonymous surveys developed and continuously monitored by peer-elected liaisons who communicate their findings to course directors. By enabling surveillance of feedback during the lifetime of an ongoing course, we have developed an iterative process of assessing effectiveness of educational activities in real-time. Real-time (formative) data is supplementary to comprehensive end-of-course surveys (summative data) which together can enhance student learning experiences and help shape a course's future direction.

Results

Course directors at LSUHSC School of Medicine completed a survey assessing their perspectives on the utility of the real-time feedback system intervention. Ninety-four percent of respondents with greater than one year of experience in their role indicated that they have made instantaneous adjustments to their course because of the real-time feedback system. Eighty-four percent of these respondents also report that real-time feedback has been useful in assessing students' overall impression, or subjective appraisal, of course content. Respondents appreciate the immediate actionability of real-time feedback, highlighting its ability to pinpoint specific areas of improvement and promptly address potential misunderstandings. Respondents also report that real-time feedback has allowed for procedural adaptability of course delivery to enhance the educational experience as needed.

While course directors underscore the advantages of real-time feedback, they also highlight the value of end-of-course surveys for additional specific purposes. Respondents report that the primary limitation of the real-time feedback system involves a potential sampling bias and uncertainty of whether anonymous feedback truly reflects the consensus among students. Additional self-acknowledged limitations include potential liaison bias, deficiencies in liaison training, and limited contextual experience in pedagogical practices.

Conclusions

Survey findings reveal a strong endorsement of the real-time feedback system because of its practical utility and immediate impact on course delivery, student engagement, and ability to

provide timely, specific, and actionable information as compared to end-of-course surveys alone. Real-time feedback fosters a culture of continuous improvement and a learning environment adaptable to the needs and interests of all invested parties. We determined that evaluation of a course both in real-time and through summative end-of-course surveys is more beneficial than either alone.

The real-time feedback system can be improved with an imbedded mechanism to appropriately quantify the proportion of students submitting specific feedback, while honoring the anonymity of the survey information. The Aesculapian Society is currently trialing new methods to address this challenge and target concerns regarding sampling bias. Enhancing liaison training to incorporate modules for curriculum evaluation, monitoring, and medical pedagogics could also address potential bias and inexperience of student liaisons. The Aesculapian Society is additionally implementing an internal process evaluation to further elucidate areas of improvement.

A system of collecting real-time feedback can be easily implemented at other institutions with motivated students and faculty leaders valuing student involvement in curricular development. Feedback can be submitted and monitored using any survey platform accessible to students. A similar system of continuous feedback monitoring can also be implemented in Graduate Medical Education programing or other occupational settings outside of academia.

References:

Patton, M. Q. (1997). Utilization-focused evaluation: the new century text (3rd ed.).: Thousand Oaks, Calif., Sage Publications.

Vassar, M., Wheeler, D. L., Davison, M., & Franklin, J. (2010). Program evaluation in medical education: an overview of the utilization-focused approach. Journal of educational evaluation for health professions, 7.