Radiography Program Meeting
January 23rd, 2025
9:00 a.m. – 11:00 a.m.

The faculty analyzed assessment data for the Class of 2024.

Goal 1: Clinical Competency: Students will demonstrate proficiency in technical and clinical skills.

The assessment data for Goal 1 highlights a strong and consistent progression in clinical competence among radiography students from 2020 to 2024, focusing on both diagnostic radiographic procedures and patient care assessment skills.

Beginning with SLO 1.1, the Class of 2024 achieved an impressive average score of 4.12 for the RAD 120 Final Clinical Performance Evaluation. This score reflects a slight dip from the Class of 2022's peak at 4.18 but demonstrates strong consistency over the years. Notably, 31% of the students received the highest score of 5, and half secured a score of 4, showcasing a solid grasp of technical competencies. The previous classes generally exhibited a trend of increasing scores, particularly following the introduction of a 5-point scale, which indicates the assessment's efficacy in calibrating student performance. The Class of 2024's results suggest that the program's curriculum effectively builds on earlier cohorts' successes, maintaining high standards while illustrating that students are consistently becoming proficient in handling radiographic equipment.

Analyzing the outcomes from the RAD 150 Radiographic Positioning Simulation Exercises, the Class of 2024 maintained the high standards established by their predecessors, achieving a commendable average score of 97.2% in the joint assessment covering all extremities and the spinal column. This consistency in performance, paralleling the 97.7% for the Class of 2023 and 98% for the Class of 2022, reflects not only the students' mastery of radiographic positioning skills but also the effectiveness of the instructional strategies employed by Ms. Hammond over the years.

In terms of competency maintenance, the Class of 2024 achieved an average score of 4.92 on the RAD 240 Final Clinical Performance Evaluation, reflecting a slight decline from the 4.96 recorded by the Class of 2023. However, it is noteworthy that 92% of the students attained the highest score of 5, underscoring their proficiency in executing previously mastered procedures with minimal assistance. This consistency in high performance indicates that even amidst a minor dip in average scores, the majority of students continue to demonstrate strong clinical competence and readiness for professional practice.

For SLO 1.2, the analysis of patient care assessment skills yielded particularly encouraging results for the Class of 2024. After adjustments were made to the assessment rubric for patient transfer skills, this cohort achieved an average score of 45.8 out of a newly established total of 48 points, indicating not just improvement, but a commendable grasp of this essential patient care competency. When compared to the Class of 2020's average score of 37, this upward trend evident over the years points towards enhanced curriculum design and teaching methodologies that cultivate a rigorous learning environment, resulting in students who are more proficient in patient care.

In the evaluation of vital signs, both the Class of 2023 and the Class of 2024 achieved commendable average scores of 90, with all students reaching this benchmark. This remarkable consistency not only reflects previous outcomes but also reinforces the program's commitment to fostering mastery of essential patient assessment skills. The uniformity in results highlights the effectiveness of the instructional methods used in RAD 101 Methods in Patient Care, along with the valuable guidance offered by Mr. Skufis throughout the RAD 222 course. His innovative teaching strategies significantly bolster students'

confidence in executing these critical skills during evaluations, ultimately enhancing their readiness for clinical practice.

In summary, the Class of 2024 has adeptly built upon the successes of previous cohorts, consistently demonstrating high levels of competency in both technical skills and patient care assessment. These results exemplify the program's commitment to providing an effective education focused on preparing students for real-world clinical environments. Faculty interpret the slight variations in performance percentages as indicators for ongoing evaluation of teaching and assessment strategies. Continued focus on instructional methodologies and curriculum enhancement will be essential to maintain and elevate students' preparedness in the ever-evolving field of radiography, ensuring that future cohorts also meet and exceed these benchmarks of proficiency.

Goal 2: Critical Thinking: Students will demonstrate critical thinking and problem-solving skills.

The assessment data for the Class of 2024 reveals significant progress in critical thinking and problem-solving skills within the radiography program, aligning with and often exceeding the achievements of previous cohorts. A thorough analysis of the data highlights consistent improvement across multiple assessment tools, indicating that students in this cohort have developed a strong aptitude for critical thinking necessary in clinical settings.

Focusing first on Student Learning Outcome 2.1, which evaluates students' ability to calculate exposure factors, we see a clear upward trajectory in performance from 2020 to 2024. The Class of 2024 achieved an impressive average score of 24.67 in the RAD 124 Lab Assignment, marking a commendable mastery of concepts related to the Exposure Maintenance Formulas. This score not only reflects an increase from the Class of 2023, which scored 24.1 but also signifies those students become more adept at engaging with the curriculum and applying their knowledge effectively. The presence of several high scores, including three students earning extra credit scores of 28, highlights exceptional student performance, although disparities in scores also point to areas where further improvement and support may be needed.

After careful consideration, faculty have decided to replace the current assessment tool with a new lab assignment from RAD 124 – The Effects of Grids on Contrast and Image Quality. This assignment will take place in Room C, where students will calculate the appropriate mAs factors for imaging an abdomen phantom while examining and comparing techniques using a non-grid and an 8:1 grid. Additionally, students will evaluate the resulting differences in photographic properties of each image. The faculty believe that this revised assessment will deepen students' understanding of the imaging principles related to grid usage, enhance their awareness of how grids influence and improve image contrast, and strengthen their critical thinking and analytical skills necessary for informed decision-making in clinical settings. Ultimately, this new lab assignment aims to enhance students' comprehension of the impact that technical factors have on diagnostic imaging outcomes.

In the RAD 217 Radiographic Technique Manual Project, which assesses students' skills in a broader range of radiographic procedures, the Class of 2024 maintained a high average score of 97.2%. This result, although a slight decrease from the Class of 2023's peak at 98.5%, still demonstrates a level of excellence consistent with previous classes. The endurance of high scores across cohorts, reflected by averages of 97% and higher since 2020, corroborates the effectiveness of the assignment in fostering a strong comprehension of radiographic exposures for a variety of imaging procedures. As future evaluations are conducted, maintaining these high standards will remain crucial.

Turning to Student Learning Outcome 2.2, the assessment of students' critical thinking and problem-solving skills in clinical settings has shown significant improvement, as demonstrated through the RAD

225 Final Evaluation and the Radiography Student Professional Skills Evaluation. Starting with the Class of 2020, which utilized a 4-point scale, students achieved an average score of 3.6, with 36% earning the highest mark of 4. This foundational performance set the stage for the following classes.

The Class of 2021 marked a turning point, transitioning to a 5-point scale and achieving an average score of 4.73, where 76% of students received a perfect score of 5. This upward trend continued in the Class of 2022, which maintained an impressive average of 4.55, and in the Class of 2023, which recorded an average score of 4.6. Each of these classes demonstrated strong critical thinking skills, with a significant portion of students earning top scores.

The Class of 2024 set a new benchmark with an average score of 4.82, highlighting the program's success in fostering critical thinking competencies. In response to these positive outcomes, faculty have decided to revise the assessment tool for the Class of 2025, moving to an earlier evaluation from RAD 150. This change aims to provide a more comprehensive overview of students' problem-solving abilities during the first year of their clinical training, allowing for targeted support as they progress through the program.

In addition to the RAD 225 evaluations, the Radiography Student Professional Skills Evaluation showed consistent improvements from 2020 to 2024. The Class of 2020 and 2021 each scored an average of 3.8, with a high percentage of students attaining a score of 4. Although there was a slight dip in the Class of 2022 to an average of 3.77, subsequent classes rebounded with average scores of 3.83 for the Class of 2023 and 3.84 for the Class of 2024. Altogether, these assessments reflect both the dedication of students and the effectiveness of the educational framework in enhancing critical thinking and problem-solving skills vital for their clinical practice.

In conclusion, the comprehensive assessment data for the Class of 2024 indicates a significant advancement in both calculating exposure factors and effectively solving clinical problems. These accomplishments underscore the effectiveness of the curriculum and instructional methods utilized throughout the program. Faculty members interpret these results as evidence of a solid foundation laid by preceding cohorts, while also recognizing the importance of addressing the diverse understanding levels present among students. The ongoing discussions regarding the modifications to assessment tools, aimed at capturing developmental aspects of student capabilities early in the program, signal a commitment to continuous improvement in educational strategies. By fostering an environment that supports critical thinking and problem-solving skills, faculty can ensure that future students are well-equipped to navigate the complexities of clinical practice with confidence and competence.

Goal 3: Communication Skills: Students will demonstrate the ability to effectively communicate orally and in writing.

The assessment of communication skills among students from different cohorts has revealed significant strides in both oral and writing competencies, reflecting the program's commitment to preparing students for effective patient interactions in clinical settings.

Beginning with SLO 3.1, for the RAD 120 Final Performance Evaluation, the Class of 2020 established a solid baseline with an average score of 3.7 on a 4-point scale, where 71% of students demonstrated strong communication skills. The disruption of the COVID-19 pandemic in 2021 temporarily halted data collection, but subsequent classes showed a notable upward trend. The Class of 2022 achieved an impressive average of 4.27 on a 5-point scale, indicating that 55% of the cohort excelled with the highest score possible. This improvement continued with the Class of 2023, reaching an average of 4.36, and culminating with the Class of 2024, which recorded an average of 4.5. The consistent increase in scores

and the percentage of students obtaining top ratings point to a strong enhancement in students' oral communication skills, vital for future radiographers.

The Radiography Student Professional Skills Evaluation – Question 1 has shown a consistently positive trend in oral communication skills across several graduating classes. Beginning with the Class of 2020, students averaged a score of 3.8, with 18 students achieving the highest score of 4 and four others scoring a 3. The Class of 2021 marked a significant improvement, raising the average to 3.94, as 20 students attained a score of 4 and only one student scored a 3. This momentum continued with the Class of 2022, which maintained high performance with an average of 3.91; 18 students again scored a 4, while two students scored slightly lower, one at 3.67 and another at 3. Notably, the Class of 2023 achieved a remarkable milestone, with all 24 students earning a perfect score of 4, demonstrating effective communication skills in alignment with entry-level expectations for radiographers. The positive trend carried on into the Class of 2024, where 23 students scored a 4, and two students received a 3. Overall, this data reflects a promising trajectory of enhanced oral communication proficiency among radiography students, effectively preparing them for their future roles in clinical settings.

For SLO 3.2, the assessment of writing abilities has also produced strong results across the years. Analysis of written assignments, specifically the RAD 120 Contrast Case Study Paper, showed that the Classes of 2020 through 2023 maintained an impressive average score of 97. Only slightly lower, the Class of 2024 achieved an average of 95.5, with several students earning perfect scores, affirming a high level of mastery. In response to this consistent success, faculty discussions led to the decision to introduce a new assignment focusing on Medical Emergencies and Communicating with Difficult Patients. This shift aims to align writing skills with real-world clinical challenges while continuing to emphasize crucial communication strategies.

Further validating the program's writing instruction, students' performance in the RAD 225 Advanced-Level Training Research Paper from 2020 to 2024 has illustrated an impressive climb in writing proficiency. Average scores progressed from 96 in 2020 to a peak of 99 in 2023 before adjusting to 98 in 2024, reflecting sustained excellence. The most recent cohort's performance included multiple perfect and near-perfect scores, showcasing students' dedication and skill in academic writing.

Overall, the data collectively suggests a promising trajectory in both oral and writing communication abilities among radiography students, equipping them with essential skills for their clinical practices and fostering a culture of academic excellence within the program.

Goal 4: Professional and Ethical Principles: Students will demonstrate the ability to analyze and address ethical and medical issues in patient care while exhibiting professionalism in the clinical setting.

The assessment data for the Class of 2024 in the radiography program evidences a significant commitment to professional values, attitudes, behaviors, and ethics, revealing marked improvements and maintaining high standards in the recognition of ethical issues and professional behaviors within clinical settings. Analyzing the trends and performances across recent cohorts provides valuable insight into the effectiveness of the program’s instructional approaches and curriculum enhancements.

Beginning with Student Learning Outcome 4.1, which emphasizes the importance of recognizing ethical and medical issues in patient care, the Class of 2024 achieved an impressive average score of 95 on the RAD 110 Patient/Co-Worker Communication and Cultural Diversity assignment, marking the highest performance among all examined cohorts. This outcome reflects a strong grasp of essential ethical principles among our students and continues the trend of solid performance seen in previous classes: the Class of 2020 averaged 94, while the Classes of 2022 and 2023 scored 93 and 92, respectively. Notably,

six students from the Class of 2024 achieved perfect scores, highlighting an effective engagement with the course material and fostering a competitive learning environment. However, the fact that some students scored as low as 80 or 81 indicates a potential area for improvement, suggesting that targeted support could be beneficial in helping all students realize their fullest potential.

Transitioning to the RAD 222 ARRT Code of Ethics assignment, the Class of 2024 also exhibited progress by achieving an average score of 39.81, a slight improvement over the Class of 2023's average of 38.91. This upward trend in performance indicates that the new assessment tool for evaluating ethical standards is effectively promoting critical discussions and enhancing comprehension of ethical healthcare practices. The achievement of 25 students scoring the highest mark of 40 demonstrates a strong commitment to understanding professional ethics, as well as the effectiveness of Mr. Skufis' teaching. The assessment of Student Learning Outcomes 4.2 pertaining to professionalism in clinical settings within the program has revealed a commendable trajectory of improvement over recent years. Particularly, the RAD 150 Final Performance Evaluation focuses on interpersonal relationships, emphasizing students' ability to communicate effectively and interact professionally with clinical staff, peers, and physicians, thereby fostering a respectful and productive healthcare environment. The average score for the class of 2020 stood at 3.9 on a 4-point scale, with an impressive 88% of students achieving the highest score of 4. This trend was consistent in 2021, as the class maintained the same average and saw an increase to 91% in top scores.

In 2022, the program transitioned to a more nuanced 5-point scale. This change led to an exceptional performance by the class of 2022, who achieved an average score of 4.86, with 85% of students earning a perfect score, indicating a significant enhancement in their communication and professional skills. The following year, the class of 2023 reported an average of 4.42, with 58% attaining a score of 5. Meanwhile, the class of 2024 built upon this foundation, reaching an average score of 4.58, with an impressive 69% achieving a perfect score, showcasing the program's continued focus on developing professional communication.

The Radiography Student Professional Skills Evaluation underwent modifications, moving from a focus on professional interactions to a deeper evaluation of using professional judgment and respect for organizational norms. The results from this updated assessment reflected an average score of 3.96 for the class of 2023, with 97% scoring a 4 or above, maintaining a consistent trend into the class of 2024, which scored an average of 3.92, reinforcing the program's effectiveness in preparing students for professional challenges.

In summary, the Class of 2024 illustrates a positive trend in both ethical understanding and professional behavior, building on the strong foundations set by previous classes. The high average scores achieved, especially in the RAD 110 course and in recognizing ethical standards in patient care, reflect the program’s successful pedagogical strategies and the dedication of both faculty and students to uphold professionalism in healthcare. Moving forward, continued emphasis on mentoring and developing the few students who scored lower could further enrich the overall efficacy of the program, ensuring all graduates are well-prepared to excel in their clinical roles as competent and ethical professionals.

Program Effectiveness Measures

The WCC Radiography Program has consistently demonstrated outstanding effectiveness across several key performance metrics over the last five years, underscoring its commitment to producing highly skilled and employable graduates.

One of the most significant indicators of the program's strength is its 99% five-year average pass rate on the ARRT credentialing examination. Faculty interpret this exceptional result, which not only surpasses

the minimum requirement of 75%, as a reflection of the program's rigorous curriculum and effective teaching methodologies. The achievement of perfect pass rates in multiple years (100% in 2020, 2022, 2023, and 2024) shows a steadfast commitment to academic excellence and student success, positioning the program favorably within the field of radiography education.

Equally impressive is the program's job placement rate for graduates actively seeking employment, with a commendable five-year average of 96%. Faculty are particularly encouraged by the upward trend in these rates, with a perfect job placement rate of 100% achieved in 2022. The data reveals that 24 out of 25 graduates from the Class of 2024 found employment within six months of graduation, although one student remains enrolled in the WCC MRI program. Faculty recognize that this proactive job placement strategy not only reflects the program's alignment with market demands but also highlights their supportive approach to facilitating graduates' smooth transitions into the workforce.

In terms of student retention, the program has shown an improvement in completion rates, exceeding the benchmark of 70%. Faculty have noted this upward trend, particularly with the latest data showing completion rates of 92% for 2021 and 2024. The decision to consider raising the completion benchmark from 70% to 80% for future reviews demonstrates the faculty's proactive stance in striving for academic excellence and ensuring sustained student success throughout their educational journey.

Surveys of graduates consistently reveal a high level of satisfaction with the program's preparation for entry-level positions. Since 2020, average scores on exit surveys have remained elevated, even with a slight dip in 2024; nonetheless, 80% of graduates still strongly agreed that they felt adequately prepared. Faculty members discussed the possible reasons behind one student selecting "Neither Agree nor Disagree" regarding their preparedness. Mr. Nelson noted that disgruntled students may sometimes disagree with classroom or clinical policies. He emphasized that every faculty member is approachable; students are encouraged to address any concerns directly. Mr. Nelson reiterated that program policies are designed to maintain the integrity of the program, including clinical sites, and to ensure fair treatment for all students. Consequently, students who violate rules will face appropriate repercussions as outlined in the program handbook. While some students may not appreciate these necessary actions, the faculty collectively agreed that the majority of the Class of 2024 expressed satisfaction with the education they received during their time in the program.

Employer evaluations further corroborate the program's success, reflecting a positive trend in their perceptions of graduates' preparedness for the workforce. The increase in average scores from employers—from 3.82 in 2020 to 3.92 in 2024—demonstrates growing confidence in the abilities of the program's graduates. Faculty interpret this positive employer feedback as validation of their focus on equipping students with essential skills and competencies needed in the radiography field.

Overall, the data provides a clear narrative of a program that is not only meeting but exceeding critical benchmarks in student success, job placement, and employer satisfaction. Faculty remain committed to continuous improvement, using these metrics to refine instructional approaches and ensure that graduates are not only prepared for the challenges of the radiography profession but also positioned for long-term success in their careers.

Assessment Plan Review:
The following is a synopsis of the changes recommended by the program faculty:
SLO 2.1 - Students will calculate the correct exposure factors.
Initial Assessment Tool – RAD 124 Lab Assignment Effect of Distance on Density/Exposure Maintenance Formula
New Assessment Tool - RAD 124 Lab Assignment The Effects of Grids on Contrast and Image Quality
The rationale for Updating the Assessment Tool:
The rationale for changing the assessment tool comes from the need to provide students with relevant and practical learning experience that aligns with appropriate imaging practices. The new lab assignment from RAD 124 will allow students to engage in hands-on calculations and evaluations of mAs factors and image quality while directly exploring the significant impact of grid techniques on radiographic outcomes. By focusing on these critical skills, the updated assessment aims to enhance students' understanding of imaging principles and foster their analytical abilities. This change reflects our commitment to continuous improvement in education and student learning outcomes.

SLO 2.2 - Students will solve problems in the clinical setting.
Initial Assessment Tool – RAD 225 Final Evaluation (Judgment/Accountability 8th Statement
"The student demonstrates the ability to think critically and solves problems or challenges as they arise"
New Assessment Tool - RAD 150 Final Evaluation (Judgment/Accountability 8th Statement
"The student demonstrates the ability to think critically and solves problems or challenges as they arise"
The rationale for Updating the Assessment Tool:
The faculty has decided to replace the RAD 225 Final Evaluation with the Final Performance Evaluation from RAD 150 for the Class of 2025. This change aims to provide a more comprehensive assessment of students' critical thinking and problem-solving abilities from the beginning of the program. By establishing an early benchmark, faculty believe they can better capture initial student development, allowing for targeted interventions and support throughout their education. This approach seeks to enhance students' skills and performance as they progress in their clinical training.

SLO 3.2 - Students will practice writing skills.
Initial Assessment Tool – RAD 120 - Contrast Case Study Paper
New Assessment Tool - RAD 110 Clinical Site Orientation Paper – Medical Emergencies & Communicating with Difficult Patients
Rationale for Updating Assessment Tool
In light of consistently high performance in writing skills demonstrated through the RAD 120 Contrast Case Study Paper, faculty have decided to implement the Clinical Site Orientation Assignment for the Class of 2025. This change aims to align assessments with real-world clinical scenarios, enhancing the relevance of assignments by incorporating clinical communication and emergency response. The new assignment seeks to not only evaluate writing skills but also to strengthen critical thinking and communication competencies essential for future healthcare roles, ultimately providing a more productive educational experience in clinical settings.

Program Effectiveness Measure - Students admitted to the program will successfully complete the program within the 2-year sequence.
Initial Benchmark – 70% of the students admitted and enrolled in the program will complete the program within two years.
New Benchmark - 80% of the students admitted and enrolled in the program will complete the program within two years.
Rationale for Updating Assessment Tool
The program's completion rates have shown a positive trend, exceeding the 70% benchmark with rates of 92% in 2021, 80% in 2022, 82% in 2023, and again 92% in 2024. In light of this progress, faculty are considering raising the benchmark to 80% for the next review cycle. This proposed increase aims to

establish a more ambitious standard for student success, encouraging sustained academic achievement and further enhancing the program's commitment to student retention and successful completion.

All proposed changes will be discussed during the next Advisory Board meeting.

Program Mission Statement Reviewed:

No recommendations to change the Program's Mission Statement