## Bachelor of Science in Radiologic Sciences (BSRS) Program: Radiography Concentration (615R)

**Division or Department: School of Allied Health**

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**Northwestern State University's (NSU) Mission.** Northwestern State University is a responsive, student-oriented institution committed to acquiring, creating, and disseminating knowledge through innovative teaching, research, and service. With its certificate, undergraduate, and graduate programs, Northwestern State University prepares its increasingly diverse student population to contribute to an inclusive global community with a steadfast dedication to improving our region, state, and nation.

**NSU College of Nursing and School of Allied Health (CONSAH) Mission.** Northwestern State University's College of Nursing and School of Allied Health advances the mission of the University through innovative teaching, experiential service learning, and scholarship. The College of Nursing and School of Allied Health offers quality healthcare education to a diverse student population to achieve their goal of becoming responsible healthcare providers who improve the health of our region, state, and nation.

**BSRS Program Mission Statement**. The BSRS Program follows the mission of the College of Nursing and School of Allied Health.

**BSRS Radiography Concentration Goals:**

1. Provide students with the education and skills to function as an integral part of the health care community and the opportunity for advancement in the allied health professions.
2. To provide opportunities that will enhance the development of roles in the radiologic sciences professions.
3. To provide a foundation for radiologic science professionals to become lifelong learners and to strive for continued professional growth.

**Methodology:** The assessment process for the Radiography Concentration is as follows:

1. Course reports are completed by lead faculty at the end of each term in which the course is taught. Course reports include enrollment and completion data, aggregate grade distributions, relevant Student Learning Outcome (SLO) measures, actual results, and identified trends.
2. Course reports are stored electronically in the BSRS Teams Assessment folder and reviewed by the Radiography Concentration Coordinator.
3. BSRS faculty review and analyze assessment results annually by calendar year. Faculty compare actual results with established expected outcomes and identify actions for the following assessment cycle.
4. Course reports and related curriculum matters are reviewed by the School of Allied Health (SAH) Program Curriculum Committee. Faculty may provide

feedback regarding course delivery, student learning, assessment findings, and opportunities for improvement.

5. Student Learning Outcome measures, results, analyses, and decisions are incorporated into the annual BSRS Radiography Concentration assessment report and submitted to the CONSAH Director of Assessment, Evaluation, and Planning for review.
6. BSRS faculty review the annual assessment findings, identify needed revisions or additional actions, and forward recommendations to the SAH Program Curriculum Committee. The SAH Program Curriculum Committee reviews significant findings and discusses proposed curricular or programmatic changes.
7. The completed assessment report is submitted to the CONSAH Dean for review and approval. Following approval, the report is forwarded for institutional assessment review. Significant findings and actions requiring broader programmatic consideration are presented to the CONSAH Academic Leadership Council.

**Program Assessment Note:** Beginning with the 2025 assessment cycle, the BSRS Radiography Concentration assessment is reported on a calendar-year cycle for consistency across CONSAH assessment reporting. Prior trend data from 2021 through 2024 are retained where available to support longitudinal review. The 2024 results were used to identify improvement actions implemented during 2025, and the 2025 results will guide actions for the 2026 assessment cycle.

## Student Learning Outcomes

### SLO 1. Students will perform quality radiographic procedures.

**Measure 1.1.** Students will perform quality procedures through achievement of a score of 85% or higher on Question 16, Quality of Work and Performance, of the Clinical Preceptor Evaluation in RADS 4611: Clinic V. The expected outcome (target) is for 100% of students to achieve a score of 85% or higher on the Quality of Work and Performance question of the Clinical Preceptor Evaluation.

**Finding.** Target was met.

**Analysis.** In 2024, the target was met. All 34 students assessed (100%) achieved a score of 85% or higher on the Quality of Work and Performance question of the Clinical Preceptor Evaluation. The results demonstrated that students consistently performed quality radiographic procedures and exhibited satisfactory work performance in the clinical setting.

Based on the analysis of the 2024 results, faculty implemented the following actions in 2025 to drive the cycle of improvement: 1) reviewed clinical preceptor evaluations following each clinical rotation and shared feedback with students; 2) required counseling sessions for students scoring below 85% on clinical evaluations; and 3) required clinical preceptors to provide written comments when ratings of average, below average, or unsatisfactory were selected to improve the quality of feedback and support student remediation.

As a result of these actions, in 2025, the target was met. Of the 30 students assessed, all 30 students (100%) achieved a score of 85% or higher on the Quality of Work and Performance question of the Clinical Preceptor Evaluation. The mean score increased from 96.36% in 2024 to 97.6% in 2025. These findings demonstrate continued student achievement in performing quality radiographic procedures and indicate that the assessment process continues to provide meaningful information regarding clinical performance.

**Decision.** In 2025, the target was met, with 100% (30/30) of students achieving a score of 85% or higher on the Quality of Work and Performance question of the Clinical Preceptor Evaluation.

Based on the analysis of the 2025 results, faculty will implement the following actions in 2026 to drive the cycle of improvement: 1) continue reviewing clinical preceptor evaluations after each clinical rotation and posting evaluation feedback for students; 2) continue conducting individual meetings with students whose scores fall below the benchmark; 3) continue using clinical preceptor comments to guide student improvement and remediation efforts; and 4) continue frequent faculty-student interactions emphasizing quality clinical performance and professional expectations.

These actions will strengthen students' ability to perform quality radiographic procedures and maintain high standards of clinical performance, thereby continuing to advance the cycle of improvement.

**Measure 1.2.** Students will perform quality procedures through successful completion of the Comprehensive Lab Final Exam in RADS 3820: Positioning II. The expected outcome (target) is for 100% of students to achieve a score of 77% or higher on the Comprehensive Lab Final Exam.

**Finding.** Target was met.

**Analysis.** In 2024, the target was not met. Of the 32 students assessed, 30 students (93%) achieved a score of 77% or higher on the Comprehensive Lab Final Exam, while 2 students (7%) scored below the benchmark. The results demonstrated that most students were able to perform quality radiographic procedures; however, opportunities remained to strengthen student performance on comprehensive positioning competencies.

Based on the analysis of the 2024 results, faculty implemented the following actions in 2025 to drive the cycle of improvement: 1) required academic learning contracts for students scoring below 80% on examinations; 2) required targeted remediation for examinations below 80%; and 3) expanded supplemental learning opportunities through tutoring and additional academic support activities.

As a result of these actions, in 2025, the target was met. Of the 37 students assessed, all 37 students (100%) achieved a score of 77% or higher on the Comprehensive Lab Final Exam. The mean score increased from 86.5% in 2024 to 95.27% in 2025. These findings suggest that the implemented interventions improved students' ability to perform quality radiographic procedures and demonstrate positioning competencies successfully in a simulated clinical environment.

**Decision.** In 2025, the target was met, with 100% (37/37) of students achieving a score of 77% or higher on the Comprehensive Lab Final Exam.

Based on the analysis of the 2025 results, faculty will implement the following actions in 2026 to drive the cycle of improvement: 1) continue requiring academic learning contracts and targeted remediation for students scoring below 80% on examinations; 2) continue requiring completion of RadTech Bootcamp activities; 3) continue requiring tutoring for students demonstrating academic risk; 4) continue integrating ASRT professional resources into tutoring and course activities; 5) continue requiring independent use of supplemental learning resources; and 6) provide additional open-laboratory practice opportunities to reinforce positioning skills and clinical decision-making.

These actions will strengthen students' ability to perform quality radiographic procedures and demonstrate competency in radiographic positioning, thereby continuing to advance the cycle of improvement.

**SLO 2. Students will develop the assessment skills of an imaging professional.**

**Measure 2.1.** Students will develop the assessment skills of an imaging professional through performance on the Assessment Tests in ALHE 3840: Advanced Patient Care. The assessments require students to evaluate patient conditions, identify risks and limitations, interpret clinical information, and adapt care for imaging procedures. The expected outcome (target) is for 100% of students to achieve a mean score of 80% or higher on all Assessment Tests.

**Finding.** Target was not met.

**Analysis.** In 2024, the target was not met. Of the 38 students assessed, 36 students (95%) achieved a mean score of 80% or higher on the Assessment Tests, while 2 students (5%) scored below the benchmark. The results demonstrated that most students applied patient-assessment concepts successfully; however, the target required 100% achievement.

Based on the analysis of the 2024 results, faculty implemented the following actions in 2025 to drive the cycle of improvement: 1) provided regular reminders regarding assessment deadlines and the effect of the late policy on course grades; 2) required students to complete a Respondus LockDown Browser orientation quiz before the first examination; 3) required students to resolve technological issues before testing; and 4) incorporated Respondus LockDown Browser guidance into the syllabus, course announcements, and course modules.

As a result of these actions, in 2025, the target was not met. Of the 37 students assessed, 26 students (70%) achieved a mean score of 80% or higher, while 11 students (30%) scored below the benchmark. The cohort mean was 83.73%, with scores ranging from 68% to 94%. Review of individual and aggregate performance revealed variability across content categories without a consistent pattern of strengths or deficiencies, indicating that the broad set of quizzes may not have been equally aligned with the intended patient-assessment outcome.

**Decision.** In 2025, the target was not met, with 70% (26/37) of students achieving a mean score of 80% or higher on the Assessment Tests.

Based on the analysis of the 2025 results, faculty will implement the following actions in 2026 to drive the cycle of improvement: 1) conduct a comprehensive review of quiz formats, question types, difficulty, and cognitive level; 2) analyze individual student performance and aggregate quiz outcomes; 3) designate the Patient History Assessment Quiz as the primary assessment instrument because it most directly measures the intended outcome; 4) revise the benchmark to evaluate an average score of 80% or higher on the selected quiz; 5) conduct item-level analysis when the benchmark is not met; and 6) revise items as needed to strengthen alignment with application of knowledge, interpretation of information, and clinical decision-making.

These actions will strengthen the validity of the measure and improve students' ability to assess patient conditions, identify risks and limitations, and apply clinical decision-making when adapting imaging procedures, thereby continuing to advance the cycle of improvement.

**Measure 2.2.** Students will develop the assessment skills of an imaging professional through completion of the Trauma Lab Exam in RADS 3820: Positioning II. The exam requires students to assess simulated trauma patients, identify safety concerns, adapt positioning procedures, and demonstrate appropriate clinical decision-making. The expected outcome (target) is for 100% of students to achieve a score of 77% or higher on the Trauma Lab Exam.

**Finding.** Target was met.

**Analysis.** In 2024, the target was not met. Of the 32 students assessed, 31 students (96%) achieved a score of 77% or higher on the Trauma Lab Exam, while 1 student (4%) scored below the benchmark. The results demonstrated that most students applied patient-assessment skills effectively in simulated trauma situations; however, the target required 100% achievement.

Based on the analysis of the 2024 results, faculty implemented the following actions in 2025 to drive the cycle of improvement: 1) refined the trauma lab evaluation process to improve grading accuracy and consistency; 2) incorporated donated portable radiographic units at each campus; 3) scheduled students for on-campus trauma simulation practice using portable equipment; and 4) added cervical collars, splints, and other immobilization devices to improve the realism of simulated trauma scenarios.

As a result of these actions, in 2025, the target was met. Of the 37 students assessed, all 37 students (100%) achieved a score of 77% or higher on the Trauma Lab Exam. The mean score increased from 90% in 2024 to 94.67% in 2025, with scores ranging from 81% to 100%. These findings demonstrate improved application of patient assessment, positioning adaptation, and clinical decision-making in simulated trauma situations.

**Decision.** In 2025, the target was met, with 100% (37/37) of students achieving a score of 77% or higher on the Trauma Lab Exam.

Based on the analysis of the 2025 results, faculty will implement the following actions in 2026 to drive the cycle of improvement: 1) revise the trauma lab evaluation tool based on observations from its use in 2025; 2) update trauma scenarios to align with the revised evaluation tool; 3) continue simulation practice using portable radiographic

units; 4) continue using trauma supplies and immobilization devices; 5) require tutoring for students who are unsuccessful on prior RADS 3310 and RADS 3820 laboratory examinations; 6) integrate the American Society of Radiologic Technologists professional video series on positioning and image critique into tutoring and independent preparation; and 7) provide additional open-laboratory practice opportunities.

These actions will strengthen students' ability to assess trauma patients, adapt radiographic procedures, and demonstrate clinical readiness in simulated imaging environments, thereby continuing to advance the cycle of improvement.

**SLO 3. Students will evaluate a clinical situation and perform accordingly using critical-thinking skills.**

**Measure 3.1.** Students will evaluate a clinical situation and perform accordingly using critical-thinking skills through completion of the Trauma Lab Exam in RADS 3820: Positioning II. The exam requires students to interpret trauma scenarios, prioritize patient needs, adapt radiographic procedures, and apply clinical judgment in a simulated environment. The expected outcome (target) is for 100% of students to achieve a score of 77% or higher on the Trauma Lab Exam.

**Finding.** Target was met.

**Analysis.** In 2024, the target was not met. Of the 32 students assessed, 31 students (96%) achieved a score of 77% or higher on the Trauma Lab Exam, while 1 student (4%) scored below the benchmark. The results demonstrated that most students evaluated simulated trauma situations and responded appropriately; however, the target required 100% achievement.

Based on the analysis of the 2024 results, faculty implemented the following actions in 2025 to drive the cycle of improvement: 1) refined the trauma lab evaluation tool; 2) incorporated portable radiographic units at each campus; 3) scheduled on-campus trauma simulation practice; and 4) enhanced scenarios with cervical collars, splints, and other immobilization devices.

As a result of these actions, in 2025, the target was met. Of the 37 students assessed, all 37 students (100%) achieved a score of 77% or higher on the Trauma Lab Exam. The mean score increased from 90% in 2024 to 94.67% in 2025. These findings demonstrate improved clinical reasoning, prioritization, and adaptation of radiographic procedures in simulated trauma situations.

**Decision.** In 2025, the target was met, with 100% (37/37) of students achieving a score of 77% or higher on the Trauma Lab Exam.

Based on the analysis of the 2025 results, faculty will implement the following actions in 2026 to drive the cycle of improvement: 1) revise the trauma lab evaluation tool; 2) align trauma scenarios with the revised tool; 3) continue simulation practice using portable radiographic units; 4) continue using realistic trauma supplies and props; 5) require tutoring for students who are unsuccessful on prior laboratory examinations; 6) integrate professional positioning and image-critique resources into tutoring; and 7) schedule additional open-laboratory practice.

These actions will strengthen students' ability to interpret clinical information, prioritize patient needs, adapt procedures, and apply critical thinking in trauma situations, thereby continuing to advance the cycle of improvement.

**Measure 3.2.** Students will evaluate a clinical situation and perform accordingly using critical-thinking skills, as evaluated through Question 17, Adapt Routine to Patient Condition, of the Clinical Preceptor Evaluation in RADS 3911: Clinic III. The evaluation assesses students' ability to recognize patient-specific needs and modify routine radiographic procedures appropriately. The expected outcome (target) is for 100% of students to achieve an average score of 85% or higher on Question 17.

**Finding.** Target was not met.

**Analysis.** In 2024, the target was met. All 36 students assessed (100%) achieved an average score of 85% or higher on Question 17 of the Clinical Preceptor Evaluation, with a mean score of 95%. The results demonstrated that students consistently adapted routine procedures to patient conditions in the clinical setting.

Based on the analysis of the 2024 results, faculty continued reviewing clinical evaluation scores and counseling students who scored below 85% on the Adapt Routine to Patient Condition question.

As a result of these actions, in 2025, the target was not met. Of the 33 students assessed, 32 students (97%) achieved an average score of 85% or higher, while 1 student (3%) scored below the benchmark. The mean score was 94.58%, with scores ranging from 76.7% to 100%. Faculty addressed the outlying performance through an individualized one-on-one intervention focused on patient assessment and procedural adaptation.

**Decision.** In 2025, the target was not met, with 97% (32/33) of students achieving an average score of 85% or higher on Question 17 of the Clinical Preceptor Evaluation.

Based on the analysis of the 2025 results, faculty will implement the following actions in 2026 to drive the cycle of improvement: 1) conduct a structured one-on-one meeting with any student scoring below 85%; 2) review contributing factors and establish expectations for improvement; 3) revisit evaluation results during midterm and final clinical evaluations; 4) schedule meetings when technologist comments identify concerns, regardless of score; and 5) document clinical preceptor comments and evaluation feedback in the Moodle gradebook for student review.

These actions will strengthen students' ability to evaluate patient-specific conditions and adapt radiographic procedures using sound clinical judgment, thereby continuing to advance the cycle of improvement.

**SLO 4. Students will critically evaluate and assess challenges within the healthcare administrative setting.**

**Measure 4.1.** Students will critically evaluate and assess challenges within the healthcare administrative setting through completion of the Quality Management Proposal Project Presentation in ALHE 4610: Introduction to Health Care Quality. The assignment requires students to identify a quality-management issue, develop an improvement proposal, and communicate the proposal through a professional

presentation. The expected outcome (target) is for 100% of students to achieve a score of 80% or higher.

**Finding.** Target was not met.

**Analysis.** In 2024, the target was met. All 36 students assessed (100%) achieved a score of 80% or higher on the Quality Management Proposal Project Presentation, with a mean score of 93%. The results demonstrated that students were able to analyze quality-management challenges and develop appropriate improvement proposals.

Based on the analysis of the 2024 results, faculty implemented the following actions in 2025 to drive the cycle of improvement: 1) required submission of the project as a narrated PowerPoint presentation; 2) provided detailed presentation guidelines; 3) provided an instructional video, supplemental templates, and a grading rubric; and 4) incorporated peer-review and reflection activities through Feedback Fruits.

As a result of these actions, in 2025, the target was not met. Of the 31 students assessed, 30 students (96%) achieved a score of 80% or higher, while 1 student (4%) scored below the benchmark. The mean score was 93.4%, with scores ranging from 76% to 100%. Review of the measure indicated that peer-review participation and reflection activities within Feedback Fruits affected the weighted grade and reduced the measure's direct alignment with students' mastery of the quality-management proposal.

**Decision.** In 2025, the target was not met, with 96% (30/31) of students achieving a score of 80% or higher on the Quality Management Proposal Project Presentation.

Based on the analysis of the 2025 results, faculty will implement the following actions in 2026 to drive the cycle of improvement: 1) evaluate the quality-management proposal as a standalone grade; 2) eliminate Feedback Fruits from the weighted proposal grade; 3) require students to submit presentations directly in Moodle; 4) place peer responses in a separate discussion assignment; and 5) grade the reflection separately within the discussion-forum category.

These actions will strengthen alignment between the assessment and the intended learning outcome and improve students' ability to evaluate administrative challenges and present quality-improvement proposals, thereby continuing to advance the cycle of improvement.

**Measure 4.2.** Students will critically evaluate and assess challenges within the healthcare administrative setting through completion of the Management Case Study Project in ALHE 4630: Healthcare Organization and Management. The assignment requires students to assume the role of a healthcare manager, analyze an organizational problem, identify contributing issues, and develop an appropriate resolution. The expected outcome (target) is for 100% of students to achieve a score of 80% or higher.

**Finding.** Target was not met.

**Analysis.** In 2024, the target was not met. Of the 43 students assessed, 41 students (95%) achieved a score of 80% or higher, while 2 students (5%) scored below the benchmark. The mean score was 92%. The results demonstrated that most students

analyzed healthcare-management challenges successfully; however, the target required 100% achievement.

Based on the analysis of the 2024 results, faculty implemented the following actions in 2025 to drive the cycle of improvement: 1) revised the case study guidelines to clarify all assignment criteria; 2) updated the assignment checklist; 3) required students to email their proposed topic to the instructor for approval; and 4) required students to post their topic in a shared discussion forum for review.

As a result of these actions, in 2025, the target was not met. Of the 36 students assessed, 35 students (97.2%) achieved a score of 80% or higher, while 1 student (2.8%) scored below the benchmark. The mean score increased from 92% in 2024 to 98.10% in 2025. The student who did not meet the benchmark submitted the assignment two weeks late and omitted required components, resulting in a reduced score.

**Decision.** In 2025, the target was not met, with 97.2% (35/36) of students achieving a score of 80% or higher on the Management Case Study Project.

Based on the analysis of the 2025 results, faculty will implement the following actions in 2026 to drive the cycle of improvement: 1) provide additional and more frequent reminders of assignment due dates; and 2) require students to submit designated portions of the case study as graded or monitored draft checkpoints to support timely progress and completion.

These actions will strengthen students' ability to analyze administrative challenges, identify organizational issues, and develop appropriate management responses, thereby continuing to advance the cycle of improvement.

**SLO 5. Students will demonstrate an understanding of professional advocacy.**

**Measure 5.1.** Students will demonstrate an understanding of professional advocacy through participation in professional associations and activities in RADS 4511: Clinic IV. Professional involvement may include membership in the Louisiana Society of Radiologic Technologists or American Society of Radiologic Technologists, conference attendance, competitive events, leadership programs, professional meetings, or advocacy-related activities. The expected outcome (target) is for at least 25% of students to demonstrate professional involvement.

**Finding.** Target was met.

**Analysis.** In 2024, the target was met. Of the 67 students assessed, 28 students (41%) demonstrated involvement in professional associations or activities, while 39 students (59%) did not demonstrate professional involvement during the assessment period. Student participation included attendance at the Louisiana Society of Radiologic Technologists conference, competitive events, and leadership-development opportunities. Because the expected outcome required at least 25% participation, the benchmark was exceeded.

Based on the analysis of the 2024 results, faculty continued guiding students in fundraising activities to offset expenses associated with professional-conference attendance.

As a result of these actions, in 2025, the target was met. Of the 71 students assessed, 19 students (27%) demonstrated involvement in professional associations or activities, while 52 students (73%) did not demonstrate professional involvement during the assessment period. Participation included conference attendance, student competitions, the Louisiana Society of Radiologic Technologists Student Leadership Development Program, and the American Society of Radiologic Technologists leadership program. Although participation decreased from 41% in 2024 to 27% in 2025, achievement remained above the expected outcome of 25%.

**Decision.** In 2025, the target was met, with 27% (19/71) of students demonstrating involvement in professional associations or activities.

Based on the analysis of the 2025 results, faculty will implement the following actions in 2026 to drive the cycle of improvement: 1) broaden the measure to capture professional engagement throughout the academic year; 2) include membership, conference attendance, professional meetings, competitive events, leadership programs, and advocacy activities; 3) assist students in identifying fundraising opportunities; 4) promote membership in the Louisiana Society of Radiologic Technologists and the American Society of Radiologic Technologists; 5) encourage participation in state competitive events; 6) provide incentives for professional engagement; and 7) offer structured preparation sessions for competitive events.

These actions will expand opportunities for professional engagement and strengthen students' understanding of advocacy, leadership, networking, and service within the radiologic sciences profession, thereby continuing to advance the cycle of improvement.

**Measure 5.2.** Students will demonstrate an understanding of professional advocacy through completion of the Service-Learning Project in ALHE 3840: Advanced Patient Care. The project requires students to complete service activities, document participation, reflect on the experience, and communicate how service contributes to the profession and community. The expected outcome (target) is for 100% of students to achieve a score of 80% or higher.

**Finding.** Target was not met.

**Analysis.** In 2024, the target was not met. Of the 38 students assessed, 36 students (95%) achieved a score of 80% or higher, while 2 students (5%) scored below the benchmark. The results demonstrated that most students completed the service-learning requirements successfully; however, incomplete project components prevented achievement of the 100% target.

Based on the analysis of the 2024 results, faculty implemented the following actions in 2025 to drive the cycle of improvement: 1) sent frequent reminders regarding completion of service hours and assignment deadlines; 2) emphasized the assignment's grading weight and rubric; 3) provided a list of preapproved volunteer opportunities; 4) allowed students to submit additional opportunities for approval; and 5) required submission of a service plan within the first two weeks of the semester.

As a result of these actions, in 2025, the target was not met. Of the 37 students assessed, 35 students (95%) achieved a score of 80% or higher, while 2 students (5%) scored below the benchmark. One student omitted required components. The second

student submitted an incomplete, non-narrated presentation, did not address required questions adequately, did not engage in peer responses, and submitted the assignment late. The results indicated that the unmet target was associated primarily with incomplete student submissions rather than deficiencies in assignment design.

**Decision.** In 2025, the target was not met, with 95% (35/37) of students achieving a score of 80% or higher on the Service-Learning Project.

Based on the analysis of the 2025 results, faculty will implement the following actions in 2026 to drive the cycle of improvement: 1) divide the project into multiple sequential assignments leading to the final presentation; 2) grade and weight each component separately; 3) provide timely feedback after each submission; 4) make the final presentation a standalone grade; and 5) monitor student progress and contact students early when components are missing or delayed.

These actions will strengthen assignment completion, provide earlier opportunities for intervention, and improve students' ability to connect service activities with professional advocacy and community engagement, thereby continuing to advance the cycle of improvement.

**SLO 6. Students will integrate adherence to professional behaviors.**

**Measure 6.1.** Students will integrate adherence to professional behaviors, as evaluated through Question 2, Professional Behavior, of the Clinical Preceptor Evaluation in RADS 4611: Clinic V. The evaluation assesses students' conduct, accountability, reliability, ethical behavior, and adherence to professional expectations in the clinical education setting. The expected outcome (target) is for 100% of students to achieve an average score of 90% or higher.

**Finding.** Target was met.

**Analysis.** In 2024, the target was met. All 34 students assessed (100%) achieved an average score of 90% or higher on Question 2 of the Clinical Preceptor Evaluation, with a mean score of 99.19%. The results demonstrated consistent adherence to professional behavior expectations in the fifth clinical level.

Based on the analysis of the 2024 results, faculty made frequent clinical-site visits, interacted with students to reinforce professional behavior, reviewed submitted evaluations, and counseled students whose scores fell below 90%.

As a result of these actions, in 2025, the target was met. Of the 30 students assessed, all 30 students (100%) achieved an average score of 90% or higher on Question 2, Professional Behavior, of the Clinical Preceptor Evaluation. The mean score increased from 99.19% in 2024 to 99.89% in 2025. These findings demonstrate sustained achievement in professional conduct, accountability, reliability, ethical behavior, and adherence to professional expectations in the clinical education setting.

**Decision.** In 2025, the target was met, with 100% (30/30) of students achieving an average score of 90% or higher on Question 2 of the Clinical Preceptor Evaluation.

Based on the analysis of the 2025 results, faculty will implement the following actions in 2026 to drive the cycle of improvement: 1) review and post clinical preceptor evaluation scores and comments after each rotation; 2) schedule in-person meetings when

comments identify concerns; 3) conduct one-on-one meetings with students scoring below 90%; 4) revisit evaluation results during midterm and final evaluations; and 5) continue frequent clinical-site visits to reinforce professional behavior.

These actions will strengthen students' adherence to professional standards and support timely identification and remediation of concerns, thereby continuing to advance the cycle of improvement.

**Measure 6.2.** Students will integrate adherence to professional behaviors, as evaluated through Question 2, Professional Behavior, of the Clinical Preceptor Evaluation in RADS 3911: Clinic III. The evaluation assesses students' conduct, accountability, reliability, ethical behavior, and adherence to professional expectations in the clinical education setting. The expected outcome (target) is for 100% of students to achieve an average score of 90% or higher.

**Finding.** Target was not met.

**Analysis.** In 2024, the target was met. All 36 students assessed (100%) achieved an average score of 90% or higher on Question 2 of the Clinical Preceptor Evaluation, with a mean score of 97.58%. The results demonstrated consistent professional behavior in the third clinical level.

Based on the analysis of the 2024 results, faculty made frequent clinical-site visits, interacted with students to reinforce professional expectations, reviewed submitted evaluations, and counseled students whose scores fell below 90%.

As a result of these actions, in 2025, the target was not met. Of the 33 students assessed, 32 students (97%) achieved an average score of 90% or higher, while 1 student (3%) scored below the benchmark. The mean score was 98.47%. Faculty addressed the outlying performance through a structured one-on-one intervention to review the evaluation, identify contributing factors, and provide individualized corrective guidance.

**Decision.** In 2025, the target was not met, with 97% (32/33) of students achieving an average score of 90% or higher on Question 2 of the Clinical Preceptor Evaluation.

Based on the analysis of the 2025 results, faculty will implement the following actions in 2026 to drive the cycle of improvement: 1) address unprofessional behavior promptly in accordance with disciplinary policies; 2) make frequent clinical-site visits and solicit feedback from technologists; 3) review professional behavior expectations during clinical orientation; 4) reinforce the professional behavior policy in the Student Handbook; 5) review and post evaluation scores and comments in Moodle; 6) conduct one-on-one meetings with students scoring below 90%; and 7) monitor patterns across clinical rotations and intervene when concerns emerge.

These actions will clarify expectations, strengthen accountability, and support consistent professional behavior across clinical settings, thereby continuing to advance the cycle of improvement.

**SLO 7. Students will develop oral communication skills.**

**Measure 7.1.** Students will develop oral communication skills with patients, as evaluated through Question 4, Communication with Patients, of the Clinical Preceptor Evaluation in RADS 4611: Clinic V. The expected outcome (target) is for 100% of students to achieve an average score of 90% or higher.

**Finding.** Target was met.

**Analysis.** In 2024, the target was not met. Of the 34 students assessed, 33 students (97%) achieved an average score of 90% or higher on Question 4, while 1 student (3%) scored below the benchmark. The mean score was 96.91%. The results demonstrated strong communication with patients overall but did not meet the 100% target.

Based on the analysis of the 2024 results, faculty implemented the following actions in 2025 to drive the cycle of improvement: 1) reviewed evaluations during each clinical rotation; 2) scheduled counseling for students scoring below 90%; 3) posted evaluation scores and preceptor comments in Moodle; 4) documented when no comments were provided; and 5) revisited evaluation findings during midterm and final clinical evaluations.

As a result of these actions, in 2025, the target was met. Of the 30 students assessed, all 30 students (100%) achieved an average score of 90% or higher on Question 4, Communication with Patients, of the Clinical Preceptor Evaluation. These findings demonstrate improved and consistent oral communication with patients in the clinical education setting.

**Decision.** In 2025, the target was met, with 100% (30/30) of students achieving an average score of 90% or higher on Question 4 of the Clinical Preceptor Evaluation.

Based on the analysis of the 2025 results, faculty will implement the following actions in 2026 to drive the cycle of improvement: 1) monitor evaluation scores related to communication with patients; 2) post scores and preceptor comments in Moodle after each rotation; 3) schedule meetings when comments identify concerns; 4) conduct one-on-one meetings with students scoring below 90%; 5) revisit communication performance during midterm and final evaluations; and 6) continue frequent clinical-site visits to reinforce effective patient communication.

These actions will strengthen students' ability to communicate clearly, respectfully, and professionally with patients, thereby continuing to advance the cycle of improvement.

**Measure 7.2.** Students will develop oral communication skills with radiologic technologists, as evaluated through Question 5, Communication with Technologists, of the Clinical Preceptor Evaluation in RADS 4611: Clinic V. The expected outcome (target) is for 100% of students to achieve an average score of 90% or higher.

**Finding.** Target was met.

**Analysis.** In 2024, the target was not met. Of the 34 students assessed, 33 students (97%) achieved an average score of 90% or higher on Question 5, while 1 student (3%) scored below the benchmark. The mean score was 96.91%. The results demonstrated strong communication with technologists overall but did not meet the 100% target.

Based on the analysis of the 2024 results, faculty implemented the following actions in 2025 to drive the cycle of improvement: 1) reviewed evaluations during each clinical rotation; 2) scheduled counseling for students scoring below 90%; 3) posted evaluation scores and preceptor comments in Moodle; 4) documented when no comments were provided; and 5) revisited evaluation findings during midterm and final clinical evaluations.

As a result of these actions, in 2025, the target was met. Of the 30 students assessed, all 30 students (100%) achieved an average score of 90% or higher on Question 5, Communication with Technologists, of the Clinical Preceptor Evaluation. The mean score was 99.31% in 2025. These findings demonstrate improved and consistent professional communication with radiologic technologists in the clinical education setting.

**Decision.** In 2025, the target was met, with 100% (30/30) of students achieving an average score of 90% or higher on Question 5 of the Clinical Preceptor Evaluation.

Based on the analysis of the 2025 results, faculty will implement the following actions in 2026 to drive the cycle of improvement: 1) monitor evaluation scores related to communication with technologists; 2) post scores and preceptor comments in Moodle after each rotation; 3) schedule meetings when comments identify concerns; 4) conduct one-on-one meetings with students scoring below 90%; 5) revisit communication performance during midterm and final evaluations; and 6) continue frequent clinical-site visits to reinforce professional communication.

These actions will strengthen students' ability to communicate effectively and collaboratively with radiologic technologists and other members of the healthcare team, thereby continuing to advance the cycle of improvement.

**SLO 8. Students will develop written communication skills.**

**Measure 8.1.** Students will develop written communication skills through completion of the Research Proposal Paper in ALHE 4520: Research in Healthcare. The assignment requires students to organize scholarly information, synthesize evidence, use professional and academic writing conventions, and communicate a research proposal clearly. The expected outcome (target) is for 100% of students to achieve a score of 80% or higher.

**Finding.** Target was not met.

**Analysis.** In 2024, the target was met. All 36 students assessed (100%) achieved a score of 80% or higher on the Research Proposal Paper, with a mean score of 95.3%. The results demonstrated that students successfully applied written communication and scholarly-writing skills.

Based on the analysis of the 2024 results, faculty implemented the following actions in 2025 to drive the cycle of improvement: 1) required submission through Feedback Fruits; 2) incorporated peer review before final submission; 3) used Feedback Fruits tools to identify grammatical concerns and provide suggestions; 4) used a grading rubric within the platform; and 5) provided an APA-formatted template and academic-writing activities.

As a result of these actions, in 2025, the target was not met. Of the 31 students assessed, 29 students (93.5%) achieved a score of 80% or higher, while 2 students (6.5%) scored below the benchmark. The mean score was 90%. Student feedback indicated difficulty navigating Feedback Fruits within Microsoft Teams, locating peer papers, and managing the technical requirements. The ungraded peer-review process increased stress and consumed time without producing sufficient instructional benefit.

**Decision.** In 2025, the target was not met, with 93.5% (29/31) of students achieving a score of 80% or higher on the Research Proposal Paper.

Based on the analysis of the 2025 results, faculty will implement the following actions in 2026 to drive the cycle of improvement: 1) eliminate Feedback Fruits from the assignment; 2) require students to post a structured summary of their proposals in a course discussion forum; 3) require peer feedback using guided questions; and 4) streamline the peer-review process to reduce technological barriers and promote focused academic discussion.

These actions will strengthen students' scholarly writing, organization, evidence synthesis, and peer-feedback skills while reducing unnecessary technological barriers, thereby continuing to advance the cycle of improvement.

**Measure 8.2.** Students will develop written communication skills through completion of the Patient Education Infographic Assignment in RADS 4530: Radiation Protection. The assignment requires students to translate radiation-safety information into a clear, accurate, and visually accessible patient-education resource. The expected outcome (target) is for 100% of students to achieve a score of 85% or higher.

**Finding.** Target was met.

**Analysis.** In 2024, the target could not be evaluated because RADS 4530: Radiation Protection was not offered during the calendar year following a curriculum-sequence change. The course was last offered in 2023, when 96% of students met the benchmark. Therefore, no assessment data were available for 2024, and the 2025 results represent the first assessment data collected following implementation of the revised assignment.

Based on the prior assessment findings and curriculum change, faculty implemented the following actions in 2025 to drive the cycle of improvement: 1) converted the former Patient Education Brochure Assignment to a Patient Education Infographic Assignment; 2) revised the assignment checklist to align with the infographic format; 3) revised the grading rubric; and 4) provided a sample infographic to model assignment expectations.

As a result of these actions, in 2025, the target was met. Of the 31 students assessed, all 31 students (100%) achieved a score of 85% or higher on the Patient Education Infographic Assignment. The mean score was 95.07%, with scores ranging from 87% to 100%. These findings demonstrate that students effectively communicated radiation-safety information in a clear, accurate, and accessible written format.

**Decision.** In 2025, the target was met, with 100% (31/31) of students achieving a score of 85% or higher on the Patient Education Infographic Assignment.

Based on the analysis of the 2025 results, faculty will implement the following actions in 2026 to drive the cycle of improvement: 1) revise the rubric to provide clearer descriptions and more detailed guidance for each category; 2) define future infographic topics more clearly; 3) share an exemplar that met 2025 expectations; and 4) review the assignment guidelines, rubric, and expectations during a scheduled class session and provide students with an opportunity to ask questions.

These actions will clarify expectations and strengthen students' ability to communicate technical radiation-safety information accurately and effectively to patients, thereby continuing to advance the cycle of improvement.

## Comprehensive Summary of Key Evidence of Improvements Based on Analysis of Results

Analysis of the 2024 assessment results led BSRS faculty to implement multiple improvements during the 2025 assessment cycle at the course, clinical, simulation, assignment, grading, communication, remediation, and assessment levels. These actions were intended to strengthen clinical competence, critical thinking, professional behavior, communication, student support, and the usefulness of assessment data.

### Clinical Competence and Patient Assessment

Faculty strengthened students' clinical competence through systematic review of clinical preceptor evaluations, timely feedback, individual counseling, academic learning contracts, targeted remediation, tutoring, RadTech Bootcamp activities, professional positioning and image-critique resources, and expanded open-laboratory practice. Faculty also increased use of portable radiographic equipment, trauma supplies, immobilization devices, and realistic simulation scenarios to strengthen patient assessment, positioning, and clinical readiness.

These actions contributed to sustained achievement on the Clinical Preceptor Evaluation measure for quality of work and performance and improved performance on the Comprehensive Lab Final Exam and Trauma Lab Exam. The Comprehensive Lab Final Exam increased from 93% meeting the benchmark in 2024 to 100% in 2025, while the Trauma Lab Exam increased from 96% to 100%.

### Critical Thinking and Clinical Judgment

Faculty revised trauma evaluation tools, expanded simulation opportunities, and provided individualized feedback to strengthen students' ability to interpret clinical situations, prioritize patient needs, adapt procedures, and apply clinical judgment. Students demonstrated strong performance on the Trauma Lab Exam, and most students met the benchmark on the Clinical Preceptor Evaluation measure addressing adaptation of routine procedures to patient conditions.

Although the clinical-preceptor measure did not meet the 100% target in 2025, only one student scored below the benchmark. Faculty responded through individualized counseling and targeted support focused on patient assessment, procedural adaptation, and clinical decision-making.

**Healthcare Administration and Quality Improvement**

Faculty revised assignment guidelines, checklists, grading rubrics, and submission processes for the Quality Management Proposal Project Presentation and Management Case Study Project. Faculty also provided instructional resources, templates, topic-approval processes, and structured opportunities for assignment development.

Students demonstrated strong overall performance in evaluating administrative challenges and developing quality-improvement and management solutions. Although both measures remained slightly below the 100% target, 96% of students met the benchmark on the Quality Management Proposal Project Presentation and 97.2% met the benchmark on the Management Case Study Project. The mean score on the case study increased from 92% in 2024 to 98.10% in 2025.

**Professional Advocacy and Professional Behavior**

Faculty promoted professional advocacy through participation in professional associations, conferences, competitions, leadership-development programs, and service-learning activities. Students continued to engage in professional organizations and activities at a level above the established benchmark.

Faculty also strengthened professional behavior through frequent clinical-site visits, review of clinical evaluations, documentation of preceptor comments, and individualized counseling when concerns were identified. Students demonstrated sustained high performance on professional-behavior measures, with all students meeting the benchmark in RADS 4611 and 97% meeting the benchmark in RADS 3911.

**Oral and Written Communication**

Faculty reinforced oral communication through review of clinical-preceptor feedback, individual meetings, and continued monitoring of communication with patients and radiologic technologists. In 2025, all students met the benchmark on both oral-communication measures.

Faculty strengthened written communication through structured research assignments, peer-feedback opportunities, assignment templates, revised rubrics, and conversion of the Patient Education Brochure Assignment to a Patient Education Infographic Assignment. All students met the benchmark on the infographic assignment. The Research Proposal Paper remained below the 100% target, and faculty identified technological barriers associated with Feedback Fruits as a factor affecting student performance and engagement.

**Assessment and Program Evaluation**

Faculty identified opportunities to strengthen assessment quality by improving alignment between Student Learning Outcomes, assessment instruments, assignment requirements, grading rubrics, and expected outcomes. Faculty also identified the need for more focused measures, item-level analysis, clearer grading criteria, consistent documentation of feedback, and earlier intervention when students are at risk of not meeting a benchmark.

The 2025 BSRS Radiography Concentration assessment findings demonstrated that rigorous 100% benchmarks frequently resulted in measures being classified as unmet when only one or two students scored below the benchmark. Faculty nevertheless used

these findings to identify specific student needs, strengthen assessment processes, and develop targeted actions for the 2026 assessment cycle.

### Overall Evidence of Improvement

Students met the established target for the majority of measures reported in 2025. Evidence of improvement included sustained achievement in clinical quality and performance, increased performance on comprehensive and trauma laboratory examinations, strong clinical judgment and procedural-adaptation skills, improved performance on administrative case studies, sustained professional behavior, achievement of both oral-communication measures, and strong written communication on the Patient Education Infographic Assignment.

Several measures did not meet the BSRS Radiography Concentration's rigorous 100% target because one or two students scored below the benchmark. Faculty reviewed these results at the student, assignment, rubric, course, and assessment levels and identified targeted actions to improve performance and strengthen the validity and usefulness of assessment data. Collectively, these findings demonstrate faculty's continued use of assessment results to strengthen student learning and advance the cycle of improvement.

## Plan of Action Moving Forward

Based on analysis of the 2025 assessment results, BSRS Radiography Concentration faculty will implement the following actions during the 2026 assessment cycle to strengthen student learning, improve assessment consistency, and continue the cycle of improvement.

### Clinical Competence and Simulation

Academic learning contracts, targeted remediation, tutoring, RadTech Bootcamp activities, professional positioning and image-critique resources, and open-laboratory practice will continue. Trauma laboratory evaluation tools and scenarios will be revised, while portable radiographic equipment, realistic trauma supplies, and expanded simulation practice will reinforce assessment, positioning, image evaluation, and procedural adaptation.

### Patient Assessment and Clinical Judgment

The assessment strategy in ALHE 3840 will be reviewed, and the Patient History Assessment Quiz will become the primary measure of patient-assessment skills. Quiz format, question construction, difficulty, cognitive level, and alignment with the Student Learning Outcome will also be evaluated, with item-level analysis conducted when benchmarks are not met.

Clinical-preceptor evaluations related to procedural adaptation will continue to be monitored. Students scoring below the benchmark will receive structured counseling, targeted support, and follow-up during midterm and final clinical evaluations.

### Administrative and Quality-Improvement Assignments

Submission and grading processes for the Quality Management Proposal Project Presentation will be revised so the proposal is evaluated independently from peer-

review and reflection activities. Peer responses and reflections will be assessed separately to improve alignment with the intended outcome.

Additional reminders and monitored or graded draft checkpoints will support timely completion of all required components of the Management Case Study Project.

**Professional Advocacy and Professional Behavior**

The professional-advocacy measure will be broadened to capture year-round participation in professional membership, conferences, competitions, leadership programs, meetings, service activities, and advocacy initiatives. Professional engagement will be promoted through membership opportunities, fundraising assistance, and preparation for competitions and leadership activities.

Clinical-preceptor evaluations, scores, and comments will continue to be reviewed and posted in Moodle. One-on-one meetings will be conducted when concerns are identified, and professional-behavior expectations will be reinforced during orientation and clinical-site visits.

**Oral and Written Communication**

Oral communication will continue to be monitored through clinical-preceptor evaluations, with individualized feedback provided when concerns arise. Performance will be revisited during midterm and final clinical evaluations.

Feedback Fruits will be removed from the Research Proposal Paper and replaced with a more accessible peer-feedback process using structured discussion forums and guided questions. The Patient Education Infographic rubric, topics, and expectations will also be clarified, with exemplars provided and assignment requirements reviewed during class.

**Assessment and Data Quality**

Assessment measures, rubrics, benchmarks, and data-collection procedures will continue to be reviewed for alignment and consistency. Faculty will increase the use of focused measures, criterion-level data, item-level analysis, and clearly defined performance expectations. Documentation of results, implemented actions, responsible faculty, and follow-up plans will support accurate reporting and continuous improvement.

**Expected Impact**

These actions are expected to improve clinical competence, patient-assessment skills, critical thinking, procedural adaptation, administrative decision-making, professional behavior, advocacy, and communication. They should also strengthen assignment completion, remediation, student support, alignment between assessment measures and Student Learning Outcomes, and the usefulness of assessment data.

Collectively, the actions will strengthen student learning, improve consistency in teaching and evaluation, support early identification of students needing assistance, and advance improvement in the BSRS Radiography Concentration.