Master of Science in Radiologic Sciences (MSRS) Program (549)

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.

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

MSRS Program Goals:

1. Prepare radiologic sciences professionals who are able to function as leaders in radiologic sciences professions.
2. Develop radiologic sciences professionals who are prepared to contribute to the professional body of knowledge.
3. Provide a foundation for radiologic sciences professionals to become lifelong learners who strive for continued professional growth.

Methodology: The assessment process for the MSRS program 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 MSRS Teams Assessment folder and reviewed by the MSRS Program Director.
3. MSRS 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 MSRS program assessment report and submitted to the CONSAH Director of Assessment, Evaluation, and Planning for review.
6. MSRS 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 MSRS program is transitioning from an academic-year assessment cycle to a calendar-year assessment cycle for consistency across CONSAH. As a result, Spring 2025 data are included in both the AC 2024–2025 MSRS assessment report and the 2025 calendar-year assessment report. This overlap should be considered when reviewing trends and comparing results across assessment cycles.

Student Learning Outcomes

SLO 1. Utilize critical thinking skills to resolve issues in radiologic or healthcare related problems.

Measure 1.1. Students will utilize critical-thinking skills to resolve issues in radiologic or healthcare-related problems through completion of the Critical Analysis Paper in RADS 5020: Current Issues in Radiologic Sciences. The assignment requires students to analyze radiologic or healthcare-related issues, apply critical-thinking strategies, and communicate findings through graduate-level scholarly writing. The expected outcome (target) is for 100% of students to achieve a score of 85% or higher on the Critical Analysis Paper.

Finding. Target was not met.

Analysis. In 2024, the target was not met. Of the 12 students assessed, 8 students (67%) achieved a score of 85% or higher on the Critical Analysis Paper, while 4 students (33%) scored below the benchmark. The results indicated a need to strengthen assignment guidance, writing support, and opportunities for feedback before final submission.

Based on the analysis of the 2024 results, faculty implemented the following actions in 2025 to drive the cycle of improvement: 1) provided information regarding common writing errors for students to avoid; 2) moved the assignment later in the semester to allow students more time to develop writing skills and incorporate feedback from earlier assignments; and 3) encouraged students to use Feedback Fruits to obtain feedback prior to submission.

As a result of these actions, in 2025, the target was not met. Of the 17 students assessed, 16 students (94%) achieved a score of 85% or higher, while 1 student (6%) scored below the benchmark. Although the target required 100% achievement and was

therefore not met, performance improved substantially from 67% in 2024 to 94% in 2025. The mean score increased from 84% in 2024 to 92.18% in 2025, demonstrating meaningful improvement in students' critical analysis and scholarly-writing performance.

Decision. In 2025, the target was not met, with 94% (16/17) of students achieving a score of 85% or higher on the Critical Analysis Paper.

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 checklist to help students proofread their work before submission; and 2) continue using Feedback Fruits to provide formative feedback on writing before final submission.

These actions will strengthen students' ability to apply critical-thinking skills, analyze healthcare-related issues, and communicate scholarly arguments effectively, thereby continuing to advance the cycle of improvement.

Measure 1.2. Students will utilize critical-thinking skills to resolve issues in radiologic or healthcare-related problems through completion of the Item Analysis Assignment in RADS 5020: Current Issues in Radiologic Sciences. The assignment requires students to evaluate test-item performance, analyze assessment data, interpret item statistics, and apply findings to improve educational assessment practices. The expected outcome (target) is for 100% of students to achieve a score of 85% or higher on the Item Analysis Assignment.

Finding. Target was met.

Analysis. In 2024, the target was met. All 7 students assessed (100%) achieved a score of 85% or higher on the Item Analysis Assignment, with a mean score of 100%. The results demonstrated that students were able to analyze assessment items and apply item-analysis principles effectively.

Based on the analysis of the 2024 results, faculty continued using the revised assignment guidelines and rubric that had been implemented in prior assessment cycles. The program also continued using this measure as an appropriate direct assessment of students' critical-thinking abilities because sufficient trended data were available to support its use.

As a result of these actions, in 2025, the target was met. All 5 students assessed (100%) achieved a score of 85% or higher on the Item Analysis Assignment, with a mean score of 98%. The results demonstrated sustained student achievement and continued usefulness of the measure for evaluating critical-thinking skills.

Decision. In 2025, the target was met, with 100% (5/5) of students achieving a score of 85% or higher on the Item Analysis Assignment.

Based on the analysis of the 2025 results, faculty will implement the following action in 2026 to drive the cycle of improvement: review the guidelines and rubric to ensure that the assignment continues to provide useful evidence of students' critical-thinking abilities.

This action will strengthen the clarity and usefulness of the measure and support continued evaluation of students' ability to analyze assessment data and apply critical-thinking skills in radiologic sciences education.

Measure 1.3. Students will utilize critical-thinking skills to resolve issues in radiologic or healthcare-related problems through completion of the Quality Management Project in RADS 5310: Operations and Resource Management in Radiologic Sciences. The project requires students to analyze quality-management issues, evaluate organizational processes, and apply evidence-based strategies to improve healthcare or radiologic sciences practice. The expected outcome (target) is for 100% of students to achieve a score of 85% or higher on the Quality Management Project.

Finding. Target was met.

Analysis. In 2024, the target was met. All 3 students assessed (100%) achieved a score of 85% or higher on the Quality Management Project, with a mean score of 96.67%. The results demonstrated that students were able to apply critical-thinking skills to quality-management issues in radiologic sciences or healthcare settings.

Based on the analysis of the 2024 results, faculty provided an exemplar to demonstrate the intent and expectations of the assignment and to support continued improvement in student performance.

As a result of this action, in 2025, the target was met. All 6 students assessed (100%) achieved a score of 85% or higher on the Quality Management Project, with a mean score of 92%. The results demonstrated sustained student achievement and provided continued evidence that students can apply critical-thinking skills to quality-management problems.

Decision. In 2025, the target was met, with 100% (6/6) of students achieving a score of 85% or higher on the Quality Management Project.

Based on the analysis of the 2025 results, faculty will implement the following action in 2026 to drive the cycle of improvement: review and revise the project guidelines and rubric to ensure that adequate detail is provided to students as they develop quality-management projects.

This action will strengthen students' ability to apply critical-thinking skills, analyze quality-management problems, and develop strong evidence-based projects, thereby continuing to advance the cycle of improvement.

SLO 2. Apply research evidence and skills in the practice setting as an educator or administrator in the radiologic sciences to improve practice.

Measure 2.1. Students will apply research evidence and skills in the practice setting through completion of the Evidence-Based Practice Project for Education and Administration in RADS 5510: Education Evidence-Based Practice or RADS 5530: Administration Evidence-Based Practice. The project requires students to apply research evidence to an educational or administrative practice problem, work with appropriate mentors, and develop a project that addresses practice improvement in radiologic sciences. The expected outcome (target) is for 100% of students to achieve a score of 85% or higher on the Evidence-Based Practice Project.

Finding. Target was met.

Analysis. In 2024, the target was not met. Of the 25 students assessed, 24 students (96%) achieved a score of 85% or higher on the Evidence-Based Practice Project, while

1 student (4%) scored below the benchmark. The results demonstrated strong performance overall but indicated a need for additional guidance regarding project expectations and required components.

Based on the analysis of the 2024 results, faculty implemented the following actions in 2025 to drive the cycle of improvement: 1) advised students of course requirements before enrollment; 2) reminded students of mentor and project requirements; and 3) created a template to help students include all required components of the assignment.

As a result of these actions, in 2025, the target was met. All 10 students assessed (100%) achieved a score of 85% or higher on the Evidence-Based Practice Project, with a mean score of 98.7%. This was the first time in three years that the target was met, demonstrating the effectiveness of the added guidance, reminders, and template.

Decision. In 2025, the target was met, with 100% (10/10) of students achieving a score of 85% or higher on the Evidence-Based Practice Project.

Based on the analysis of the 2025 results, faculty will implement the following actions in 2026 to drive the cycle of improvement: 1) advise students of course requirements during registration; 2) provide reminders regarding mentor and project requirements; and 3) continue providing the assignment template to ensure all components are included.

These actions will strengthen students' ability to apply research evidence and skills in educational and administrative practice settings within radiologic sciences, thereby continuing to advance the cycle of improvement.

Measure 2.2. Students will apply research evidence and skills in the practice setting through completion of the Teaching Methods Application Presentation in RADS 5210: Curriculum Development & Teaching Methods in Radiologic Sciences. The presentation requires students to apply evidence-based teaching methods, communicate instructional strategies, and demonstrate application of educational theory to radiologic sciences education. The expected outcome (target) is for 100% of students to achieve a score of 85% or higher on the Teaching Methods Application Presentation.

Finding. Target was met.

Analysis. In 2024, the target was met. All 5 students assessed (100%) achieved a score of 85% or higher on the Teaching Methods Application Presentation, with a mean score of 97%. The results demonstrated that students were able to apply evidence-based teaching methods in radiologic sciences education.

Based on the analysis of the 2024 results, faculty continued using the revised assignment guidelines and rubric to support consistent evaluation of student performance.

As a result of these actions, in 2025, the target was met. All 10 students assessed (100%) achieved a score of 85% or higher on the Teaching Methods Application Presentation, with a mean score of 100%. Although results remained strong, the absence of score variability indicated a need to review the assignment guidelines and rubric to ensure the measure continues to differentiate levels of student performance.

Decision. In 2025, the target was met, with 100% (10/10) of students achieving a score of 85% or higher on the Teaching Methods Application Presentation.

Based on the analysis of the 2025 results, faculty will implement the following action in 2026 to drive the cycle of improvement: review and revise the assignment guidelines and rubric.

This action will strengthen the assignment's ability to evaluate students' application of research evidence and evidence-based teaching methods in radiologic sciences education.

Measure 2.3. Students will apply research evidence and skills in the practice setting through completion of the Cybersecurity Assessment in RADS 5330: Information Management in Radiologic Sciences. The assessment requires students to apply information-management and cybersecurity concepts to administrative practice, evaluate cybersecurity risks, and use evidence-informed strategies to support secure information management in healthcare. The expected outcome (target) is for 100% of students to achieve a score of 85% or higher on the Cybersecurity Assessment.

Finding. Target was met.

Analysis. In 2024, the target was met. All 3 students assessed (100%) achieved a score of 85% or higher on the Cybersecurity Assessment, with a mean score of 91.33%. The results demonstrated that students were able to apply cybersecurity and information-management concepts in administrative practice.

Based on the analysis of the 2024 results, faculty used a video to communicate assignment expectations. Because of textbook changes and revision of the Moodle course shell, faculty also revised the assignment, updated the guidelines, and used a rubric to ensure that the measure evaluated students' ability to apply research evidence and skills in a practice setting.

As a result of these actions, in 2025, the target was met. All 5 students assessed (100%) achieved a score of 85% or higher on the Cybersecurity Assessment, with a mean score of 88%. Although the mean score decreased slightly, all students met the benchmark, demonstrating continued achievement of the expected outcome.

Decision. In 2025, the target was met, with 100% (5/5) of students achieving a score of 85% or higher on the Cybersecurity Assessment.

Based on the analysis of the 2025 results, faculty will implement the following actions in 2026 to drive the cycle of improvement: 1) review the assignment guidelines and rubric; and 2) add more information regarding assignment expectations.

These actions will strengthen students' ability to apply research evidence, information-management principles, and cybersecurity concepts in administrative practice settings within radiologic sciences.

SLO 3. Demonstrate effective communication skills in professional settings to maintain collegial, collaborative, and interdisciplinary relationships.

Measure 3.1. Students will demonstrate effective communication skills in professional settings through completion of the Individual Research Presentation in RADS 5110:

Research II. The presentation requires students to communicate scholarly information, use relevant sources, organize content clearly, and present findings in a professional manner. The expected outcome (target) is for 100% of students to achieve a score of 85% or higher on the Individual Research Presentation.

Finding. Target was not met.

Analysis. In 2024, the target was not met. Of the 13 students assessed, 12 students (92%) achieved a score of 85% or higher on the Individual Research Presentation, while 1 student (8%) scored below the benchmark. The results indicated a need to continue strengthening resources and reminders related to presentation quality and assignment expectations.

Based on the analysis of the 2024 results, faculty updated presentation-development resources and sent reminders encouraging students to review the guidelines and rubric to ensure all components were included.

As a result of these actions, in 2025, the target was not met. Of the 5 students assessed, 4 students (80%) achieved a score of 85% or higher, while 1 student (20%) scored below the benchmark. The student who did not meet the target included sources unrelated to the topic, and the presentation lacked sufficient depth. Although only one student did not meet the target, the expected outcome required 100% achievement; therefore, the target was not met.

Decision. In 2025, the target was not met, with 80% (4/5) of students achieving a score of 85% or higher on the Individual Research Presentation.

Based on the analysis of the 2025 results, faculty will implement the following actions in 2026 to drive the cycle of improvement: 1) revise due dates to ensure students have adequate time to prepare the presentation; and 2) provide reminders before assignment submission to review the guidelines and rubric and ensure all required components are included.

These actions will strengthen students' ability to communicate scholarly information effectively in professional settings and maintain collegial and collaborative relationships.

Measure 3.2. Students will demonstrate effective communication skills in professional settings through completion of the Group Presentation in RADS 5110: Research II. The assignment requires students to collaborate with peers, organize and present information as a group, and communicate professionally in a collegial and interdisciplinary context. The expected outcome (target) is for 100% of students to achieve a score of 85% or higher on the Group Presentation.

Finding. Target was met.

Analysis. In 2024, the target was met. All 13 students assessed (100%) achieved a score of 85% or higher on the Group Presentation, with a mean score of 96.31%. The results demonstrated that students were able to communicate and collaborate effectively in a group presentation format.

Based on the analysis of the 2024 results, faculty held a live online session to explain the assignment thoroughly and recorded the session for students who were unable to

attend. Faculty also sent reminders encouraging students to meet with group members as early as possible.

As a result of these actions, in 2025, the target was met. All 5 students assessed (100%) achieved a score of 85% or higher on the Group Presentation, with a mean score of 93.6%. The results demonstrated sustained achievement in collaborative communication and professional presentation skills.

Decision. In 2025, the target was met, with 100% (5/5) of students achieving a score of 85% or higher on the Group Presentation.

Based on the analysis of the 2025 results, faculty will implement the following actions in 2026 to drive the cycle of improvement: 1) hold live online sessions to explain the assignment thoroughly; and 2) send reminders early in the semester encouraging students to begin meeting with group members.

These actions will strengthen students' ability to communicate effectively, collaborate with colleagues, and maintain professional relationships in radiologic sciences settings.

SLO 4. Conduct research studies to contribute to and improve the practice of the radiologic sciences.

Measure 4.1. Students will conduct research studies to contribute to and improve the practice of the radiologic sciences through completion of the Applied Research Project in RADS 5910: Applied Leadership. The project requires students to apply the research process, develop a scholarly project, follow an established timeline, and communicate research findings related to radiologic sciences practice. The expected outcome (target) is for 100% of students to achieve a score of 85% or higher on the Applied Research Project.

Finding. Target was met.

Analysis. In 2024, the target was met. All 21 students assessed (100%) achieved a score of 85% or higher on the Applied Research Project, with a mean score of 96%. The results demonstrated that students were able to complete applied research projects and communicate findings related to radiologic sciences practice.

Based on the analysis of the 2024 results, faculty consistently used the revised rubric to grade final projects, evaluated rubric data for trends, and maintained active communication with students to support timeline compliance, content development, and writing quality.

As a result of these actions, in 2025, the target was met for the fifth consecutive year. All 15 students assessed (100%) achieved a score of 85% or higher on the Applied Research Project, with a mean score of 94%. The results demonstrated sustained student achievement in applied research.

Decision. In 2025, the target was met, with 100% (15/15) of students achieving a score of 85% or higher on the Applied Research Project.

Based on the analysis of the 2025 results, faculty will implement the following actions in 2026 to drive the cycle of improvement: 1) meet each semester to discuss potential issues and address them promptly; and 2) communicate with students throughout each

semester to identify potential problems and ensure compliance with the timeline for completion.

These actions will strengthen students' ability to conduct research studies and contribute to the improvement of radiologic sciences practice.

Measure 4.2. Students will conduct research studies to contribute to and improve the practice of the radiologic sciences through completion of the Survey Development Project in RADS 5123: Data Collection and Analysis. The project requires students to develop a survey instrument, include required components, and apply research-design principles to support data collection in radiologic sciences research. The expected outcome (target) is for 100% of students to achieve a score of 85% or higher on the Survey Development Project.

Finding. Target was not met.

Analysis. In 2024, the target was met. All 27 students assessed (100%) achieved a score of 85% or higher on the Survey Development Project, with a mean score of 95%. The results demonstrated that students were able to develop survey instruments and apply research-design principles appropriately.

Based on the analysis of the 2024 results, faculty provided reminders encouraging students to start the assignment early and review the guidelines and rubric. Faculty also provided an assignment template to help students include required components and held an online session before submission to answer questions and provide guidance.

As a result of these actions, in 2025, the target was not met. Of the 11 students assessed, 10 students (91%) achieved a score of 85% or higher, while 1 student (9%) scored below the benchmark. The student who did not meet the target scored 81 because not all required components were included in the submission. Although most students met the benchmark, the expected outcome required 100% achievement; therefore, the target was not met.

Decision. In 2025, the target was not met, with 91% (10/11) of students achieving a score of 85% or higher on the Survey Development Project.

Based on the analysis of the 2025 results, faculty will implement the following actions in 2026 to drive the cycle of improvement: 1) send email reminders encouraging students to start the assignment early and outlining assignment requirements; 2) continue using the assignment template to ensure required components are included; and 3) remind students to double-check assignments before submission to ensure all components are included.

These actions will strengthen students' ability to design survey instruments, apply research-design principles, and complete all required components of research assignments.

Measure 4.3. Students will conduct research studies to contribute to and improve the practice of the radiologic sciences through completion of the Literature Review in RADS 5110: Research II. The assignment requires students to identify relevant literature, synthesize evidence, demonstrate scholarly writing, and develop depth and breadth in analysis of a selected radiologic sciences topic. The expected outcome (target) is for

100% of students to achieve a score of 80% or higher on the Literature Review.

Finding. Target was not met.

Analysis. In 2024, the target was met. All 13 students assessed (100%) achieved a score of 80% or higher on the Literature Review, with a mean score of 89.69%. The results demonstrated that students were able to conduct literature reviews and synthesize scholarly evidence.

Based on the analysis of the 2024 results, faculty reviewed the artificial intelligence policy and video regarding artificial intelligence use and determined that both remained appropriate. Faculty also held live online sessions to answer student questions and clarify expectations.

As a result of these actions, in 2025, the target was not met. Of the 5 students assessed, 4 students (80%) achieved a score of 80% or higher, while 1 student (20%) scored below the benchmark. The student who did not meet the benchmark demonstrated writing weaknesses and limited depth and breadth in the discussion of the topic. Although only one student did not meet the benchmark, the expected outcome required 100% achievement; therefore, the target was not met.

Decision. In 2025, the target was not met, with 80% (4/5) of students achieving a score of 80% or higher on the Literature Review.

Based on the analysis of the 2025 results, faculty will implement the following actions in 2026 to drive the cycle of improvement: 1) provide students with specific feedback on early assignments to guide development of the literature review; and 2) encourage students to use Feedback Fruits to obtain feedback on writing before final submission.

These actions will strengthen students' ability to synthesize literature, improve scholarly writing, and conduct research that contributes to radiologic sciences practice.

SLO 5. Evaluate ethical standards in practice as a radiologic sciences educator or administrator.

Measure 5.1. Students will evaluate ethical standards in practice as a radiologic sciences educator or administrator through completion of the Legal and Ethical Presentation in RADS 5030: Legal & Regulatory Issues in Healthcare. The presentation requires students to analyze legal and ethical issues, apply ethical standards, and communicate implications for practice in radiologic sciences education or administration. The expected outcome (target) is for 100% of students to achieve a score of 85% or higher on the Legal and Ethical Presentation.

Finding. Target was met.

Analysis. In 2024, the target was not met. Of the 10 students assessed, 9 students (90%) achieved a score of 85% or higher on the Legal and Ethical Presentation, while 1 student (10%) scored below the benchmark. The results indicated a need to clarify assignment expectations and provide additional guidance.

Based on the analysis of the 2024 results, faculty provided sample completed presentation assignments, updated instructions to add detail regarding criteria, and provided students with a list of potential topics.

As a result of these actions, in 2025, the target was met. All 9 students assessed (100%) achieved a score of 85% or higher on the Legal and Ethical Presentation, with a mean score of 96%. The results demonstrated improved student achievement and effective application of ethical standards to radiologic sciences practice.

Decision. In 2025, the target was met, with 100% (9/9) of students achieving a score of 85% or higher on the Legal and Ethical Presentation.

Based on the analysis of the 2025 results, faculty will implement the following action in 2026 to drive the cycle of improvement: update the list of topics for students to choose from for the presentation.

This action will strengthen students' ability to evaluate legal and ethical standards and apply them to practice as radiologic sciences educators or administrators.

Measure 5.2. Students will evaluate ethical standards in practice as a radiologic sciences educator or administrator through completion of the CITI Social and Behavioral Research Module in RADS 5010: Research I. The module requires students to demonstrate knowledge of ethical research practices, human-subjects protections, and responsible conduct of social and behavioral research. The expected outcome (target) is for 100% of students to achieve a total score of 85% or higher on the CITI Social and Behavioral Research Module.

Finding. Target was not met.

Analysis. In 2024, the target was not met. Of the 11 students assessed, 10 students (91%) achieved a total score of 85% or higher on the CITI Social and Behavioral Research Module, while 1 student (9%) scored below the benchmark. The results indicated a need to continue emphasizing the importance of the module and the expectations for successful completion.

Based on the analysis of the 2024 results, faculty emphasized the importance of the CITI Social and Behavioral Research Module to students during 2025.

As a result of this action, in 2025, the target was not met. Of the 19 students assessed, 18 students (94.73%) achieved a total score of 85% or higher, while 1 student (5.27%) scored below the benchmark. Although the percentage of students meeting the benchmark improved from 91% in 2024 to 94.73% in 2025, the expected outcome required 100% achievement; therefore, the target was not met.

Decision. In 2025, the target was not met, with 94.73% (18/19) of students achieving a total score of 85% or higher on the CITI Social and Behavioral Research Module.

Based on the analysis of the 2025 results, faculty will implement the following action in 2026 to drive the cycle of improvement: revise the instructions and introductory information in Moodle to emphasize the importance of the module and the expectation that students achieve a total score of 85% or higher before completing the assignment.

This action will strengthen students' understanding of ethical research practices, human-subjects protections, and ethical standards relevant to radiologic sciences education and administration.

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

Analysis of the 2024 assessment results led MSRS faculty to implement improvements during the 2025 assessment cycle at the course, assignment, communication, grading, rubric, and assessment levels. These actions were intended to clarify expectations, improve student engagement, strengthen scholarly writing and project completion, and provide more consistent evidence of student achievement.

Critical Thinking and Healthcare Problem-Solving

Support for critical-thinking measures was strengthened through writing resources, revised assignment timelines, continued use of updated guidelines and rubrics, encouragement to use Feedback Fruits, and an exemplar for the Quality Management Project. These actions contributed to substantial improvement on the Critical Analysis Paper and sustained achievement on the Item Analysis Assignment and Quality Management Project.

Research Evidence and Practice Application

Students' ability to apply research evidence in education and administration was supported through advance information about course requirements, clarification of mentor and project expectations, assignment templates, revised rubrics, and updated guidance for cybersecurity-related assignments. All three SLO 2 measures met the expected outcome in 2025.

Professional Communication and Collaboration

Presentation resources were updated, reminders regarding guidelines and rubrics were provided, live online sessions were held and recorded, and students were encouraged to meet with group members early. These actions supported sustained achievement on the Group Presentation. The Individual Research Presentation did not meet the target because one student scored below the benchmark.

Research Development and Scholarly Writing

Continued use of revised rubrics, active communication, project-timeline monitoring, templates, reminders, online sessions, artificial intelligence guidance, and Feedback Fruits supported students' research development and scholarly writing. These actions sustained achievement on the Applied Research Project. The Survey Development Project and Literature Review did not meet the 100% target because one student scored below the benchmark on each measure.

Ethical Standards and Research Integrity

Sample presentations, revised instructions, additional topic options, and increased emphasis on the CITI Social and Behavioral Research Module strengthened support for ethical-practice measures. These actions resulted in achievement of the Legal and Ethical Presentation measure and improved performance on the CITI module. The CITI measure did not meet the target because one student scored below the benchmark.

Overall Evidence of Improvement

Students met the established target for eight of the thirteen measures reported in 2025. Evidence of improvement included substantial improvement on the Critical Analysis Paper; achievement of the Evidence-Based Practice Project target for the first time in three years; sustained achievement on the Item Analysis Assignment, Quality Management Project, Teaching Methods Application Presentation, Cybersecurity Assessment, Group Presentation, Applied Research Project, and Legal and Ethical Presentation; and improved performance on the CITI Social and Behavioral Research Module.

Each of the five unmet measures was associated with only one student scoring below the benchmark, while program benchmarks remained intentionally rigorous at 100% achievement for most measures. Collectively, these findings demonstrate 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, MSRS faculty will implement the following actions during the 2026 assessment cycle to strengthen student learning, improve assignment completion, and continue the cycle of improvement.

Assignment Guidance and Writing Support

Assignment checklists will be revised, Feedback Fruits will continue to support formative writing feedback, and specific feedback will be provided on early assignments. Due dates will also be adjusted to allow adequate preparation time, and students will be reminded to review guidelines and rubrics before submission.

Rubric Review and Assignment Alignment

Assignment guidelines and rubrics for the Item Analysis Assignment, Quality Management Project, Teaching Methods Application Presentation, Cybersecurity Assessment, Survey Development Project, and other measures will be reviewed and revised as needed to ensure that assessment data provide useful evidence of student achievement.

Student Communication and Progress Monitoring

Students will receive information about course requirements during registration, reminders regarding mentor and project expectations, and regular communication throughout each semester. Early assignment completion will be encouraged, and progress toward project timelines will be monitored.

Research and Ethical Practice Support

Templates will continue to support completion of required project components. Topic options for the Legal and Ethical Presentation will be updated, and Moodle instructions will be revised to emphasize the importance of the CITI Social and Behavioral Research Module and the expectation that students achieve a total score of 85% or higher.

Expected Impact

These actions are expected to improve assignment clarity, strengthen scholarly writing and presentation quality, promote timely submission of required components, improve

consistency in grading and rubric use, and enhance the usefulness of assessment data. They will also support students' ability to apply critical thinking, use research evidence, communicate professionally, conduct scholarly projects, and evaluate ethical standards in radiologic sciences education and administration.

Collectively, these actions will strengthen student learning, improve consistency in assessment practices, and support continued improvement in the MSRS Program.