



Radiologic Sciences [RADS]

Cycles included in this report:

Jun 1, 2023 to May 31, 2024

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Program Name: Radiologic Sciences [RADS]**Reporting Cycle: Jun 1, 2023 to May 31, 2024****1 Is this program offered via Distance Learning?**

100% Traditional or less than 50% Distance/Traditional

2 Is this program offered at an off-site location?

No

2.1 If yes to previous, provide addresses for each location where 50% or more of program credits may be earned.

3 Example of Program Improvement

2019-2020:

The RADS program has as one of its objectives/outcomes that students be able to apply the principles of radiation protection for the patient, self, and others. The tool used to assess the accomplishment of this outcome is the Performance Evaluation (Form f-9), section III, A-D completed during RADS 356. The benchmark is an average score of 3 with a possibility of 4 points from the sample selected. In 2019, the results for section III A-D on Form F-9 were a perfect score of 4 points, up from 2018.

2020-2021:

During the 2020-2021 academic year, the RADS program, along with other academic programs, entered survival mode, focusing on maintaining adequate clinical assignments and effective didactic course delivery. The 2020 assessment plan primarily called for continued monitoring, as the priority was to endure the challenges. Despite this, there were still areas within the assessment plan that showed improvement. For instance, in Objective 1.2, the same test tool was used, with the main difference being the course delivery method. In 2021, the program returned to face-to-face instruction, resulting in a 3-point increase on this particular test. This highlights the importance of in-person learning for a hands-on profession like RADS, where face-to-face interaction is crucial.

2021-2022:

During the 2021-2022 academic year, the RADS program, particularly in its professional phase, observed a decline in knowledge retention from foundational RADS courses. Program faculty and officials attributed this decline to disruptions in course delivery caused by COVID-19 and multiple natural disasters affecting the Lake Charles area. The 2021 assessment plan primarily involved continued monitoring, but one area where the benchmark was not met was the selection of proper exposure factors.

To address this issue, university faculty collaborated with Clinical Preceptors at clinical settings to create exercises reinforcing the proper selection of exposure factors. Additionally, in the RADS 465 capstone course, daily quizzes were implemented to focus on this topic. As a result, there was an improvement in answering questions related to exposure factor selection on mock certification exams administered during RADS 465. The national certification examination results for this cohort (class of 2022) in the area of exposure factor selection will provide further documentation of these efforts.

2022-2023:

- SLO 1.3 evaluates the student's ability to apply the principles of radiation protection. One of the tools used to measure this was the average grade on RADS 349 test 2. In the Fall of 2022, the faculty decided to change the textbook for the course, which we believe contributed to an increase in the average score by 2.8%.
- The national first-time passage rate on the certification examination for the 2023 cohort of students will be evaluated to see if the purchase of the Cloverlearning Boot Camp platform increases the first-time passage rate. The program had planned to review the results of the national certification examination in the area of exposure factor selection; however, because of the poor results of the first-time passage rate, the results would be skewed.

2023-2024:

The RADS faculty purchased the Cloverlearning Radtech Boot Camp to increase the first time passage rate. This was in Spring 2023, and the first-time passage rate for the National Certification rate increase by 23%.

4 Program Highlights from the Reporting Year

2019-2020:

The RADS program had a community service project for Valentine's Day to give food from the heart. It was a campus-wide food drive and at the Clinical Education sites, and the event was very successful. Enough food was collected to share with four different community food banks in the Lake Charles area. All the program faculty and 22 students attend the Mid-Winter Seminar of the Louisiana Society of Radiologic Technologists (LSRT). Two students placed first and third place respectively in the 2019 LSRT Student Scientific Essay Competition.

2020-2021:

During this past year, the program had several graduates elevated to administrative positions or recognized nationally.

- Kevin Clark - Named by the American Society of Radiologic Technologists as Researcher and Writer of the Year.
- Jared Fontenot - Appointed as Director of Radiology at Savoy Medical Center in Mamou
- Glenn Dailey - Appointed CEO of Ochsner St. Martin Hospital in Breaux Bridge

2021-2022:

Four faculty members and 30 students attended the Louisiana Society of Radiologic Technologists (LSRT) Annual Meeting, in July of 2021, in New Orleans. At this meeting, a quiz bowl team from the University's Radiologic Sciences Program Coached by Susie Beasley came in second place in a statewide competition. Another student came in third place for her scientific essay in a statewide competition. Allison Puente, a faculty member, was installed as President-Elect of the LSRT. A graduate of the program Dr. Laura Aaron was elevated to Life Member of LSRT, which is the highest honor of the organization, the presentation was made by McNeese Department Head of Radiologic and Medical Laboratory Sciences, Greg Bradley.

The RADS faculty planned activities involving all the students in the processional phase of the program for National Radiologic Technology Week.

The Radiologic Sciences Seniors participated in an Anatomage tournament. The McNeese team came in first place, and was coached by two McNeese faculty members, Allison Puente and Monica Weber.

2022-2023:

During this year with the opening of many more education meetings in the face-to-face format, the faculty and students have been able to attend some beneficial meetings. Those meetings include:

- In June of 2022, 17 students and 4 faculty attended the American Society of Radiologic Technologists (ASRT) Symposium and House of Delegates in Orlando, Florida. Allison Puente an Assistant Professor for the RADS program served as one of two delegates for the state of Louisiana at the ASRT House of Delegates. Greg Bradley and Allison Puente both faculty members for the RADS program were part of a group from Louisiana who were recognized for receiving an award from the National organization for the best Advocacy affiliate in the nation. Dr. Kevin Clark a 2000 graduate from the McNeese RADS program was one of two ASRT members elevated to the status of fellow by the ASRT. During the fellows' presentation, McNeese State University was written on the opening slide along with the MSU composite picture of Dr. Clark's graduating class in the background during his presentation. Presenting Dr. Clark with his ASRT Fellow medallion was another McNeese RADS program graduate from the class of 1991 Dr. Laura Aaron. Dr. Aaron mentioned the excellent RADS program faculty who not only educate their graduates to obtain nothing but excellent medical images for proper diagnosis of patients. Dr. Aaron stated further stated that the McNeese faculty also instill things such as professionalism, advocacy, and excellent patient care in their graduates and stated that Dr. Clark shared stories with her about two retired faculty and two current MSU RADS faculty of which she stated by name during the presentation. The McNeese program had more students attend this meeting than any other RADS program in the nation.
- In July of 2022, students and faculty attended the Louisiana Society of Radiologic Technologists meeting held in Baton Rouge. At the meeting, Allison Puente an assistant professor in the Radiologic sciences program was installed as President of the statewide organization. Monica Weber another faculty member was installed as the recording secretary, while two other faculty members were appointed to positions within the organization. Greg Bradley was appointed as the Director of Publications for the organization, and Susie Beasley was appointed to serve as Historian for the Louisiana Society of Radiologic Technologists. The Radiologic Sciences program had a quiz bowl team that competed against the other programs within the state. The MSU team finished 4th place in the quiz bowl competition. Miranda Haugen a junior student in the RADS program was elected to serve as the Southwestern Louisiana Student Representative on the LSRT Student Council. Shikha Sharma a senior student won first place in the LSRT Scientific Essay competition for students, and Peter Sheppard another junior student came in 3 place in the same competition.
- In November of 2022, 20 Students and 6 faculty members attended the Radiologic Society of North America (RSNA) an international meeting that was held in Chicago. The RSNA meeting had educational presentations, as well as the international unveiling of the last Medical Imaging equipment, as supplemental equipment. The RSNA reported more than 38,000 in attendance for this meeting. While in Chicago the faculty and students visited the International Museum of Surgical Procedures, which devotes an entire floor to medical imaging.
- In March of 2023, 11 students and 5 faculty members attended the Louisiana Society of Radiologic Technologists (LSRT) midwinter seminar held in Alexandria, Louisiana. During this event, 5 MSU RADS faculty members were actively involved in the Seminar. Ms. Susie Beasley served as Moderator for the 2023 Student Bee Competition, Mr. Greg Bradley served as a judge for the Student Bee Competition, Ms. Allison Puente and Ms. Monica Weber presented a lecture on their research about radiation exposure, and Ms. Caitlan Clark served as the meeting planner for the entire event.

2023-2024:

The RADS program faculty participated in the following highlights during the academic year:

- June 2023 4 RADS faculty attend a National meeting for Radiologic Technologists in Reno.
- July 2023- Four RADS faculty and 40 students attend the Annual Meeting of the Louisiana Society of Radiologic Technologists in New Orleans for 3 days.
- August of 2023, two RADS faculty members testified before the Louisiana State Board of Medical Examiners (LABME) regarding the lack patient with the proposed rule change for the Private Radiologic Technologists
- November 2023 the RADS faculty sponsored a local RADS quiz bowl competition for National Radiologic Technology week. During this event it was announced that RADS senior student Sarah Coker was awarded the Daniel A Herpin Memorial Scholarship.
- RADS program Director appointed by governor to serve another term on the Louisiana State Radiologic Technology Board of Examiners, and was elected as 2nd Vice Chairman for the Board.
- RADS Senior Student McKenzie Mitchell was the first student nationally to publish a paper in the the Peer reviewed journal entitled Radiologic Technologists published by the American Society of Radiologic Technologists.

5 Program Mission

The Bachelor of Science in Radiologic Sciences program prepares students for the health care profession as competent radiographers. In addition, the program prepares students for career opportunities in mammography, computed tomography, magnetic resonance imaging, bone densitometry, vascular intervention, quality management, and departmental management. The program integrates learning and clinical environments to promote advanced professional development.

The program goals are:

1. To provide an education that promotes clinical competency.
 - SLO - 1.1 Students will be able to demonstrate radiographic positioning skills accurately.
 - SLO - 1.2 Students will provide patient care and comfort to patients while performing radiographic procedures.
 - SLO - 1.3 Students will be able to apply the principles of radiation protection for the patient, self and others.
2. To foster critical thinking skills enabling effective problem solving in the professional environment.
 - SLO - 2.1 Students produce radiographic images demonstrating proper selection of exposure and technical factors.
 - SLO - 2.2 Students will evaluate finished radiographic images, for proper: anatomy visualized, positioning, and exposure factors.
3. Apply effective communication skills in the professional environment.
 - SLO - 3.1 Students will be able to communicate with their patients while implementing the radiography process.
 - SLO - 3.2 Students will be able to communicate effectively with clinical staff and peers.
4. To promote professionalism in radiologic sciences.
 - SLO - 4.1 The student will maintain appropriate conversation with and in the presence of patients.
 - SLO - 4.2 The student will demonstrate professional ethics while at the assigned Clinical Education Setting.

6 Institutional Mission Reference RADS program mission reference

The program mission aligns with the University mission to emphasize in-depth disciplinary knowledge and its application to academic and professional environments. Students achieve success through the studied acquisition of content knowledge, the demonstration of discipline-specific skills and dispositions as well as mastery of general education competencies such as critical thinking, effective communication, and independent learning.

7 Assessment and Benchmark SLO 1.2 - RADS 320L Exam I and RADS 467 F-26

Assessment: Students will provide patient care and comfort to patients while performing radiographic procedures.

Assessment Instruments:

1. RADS 320L Examination 1 average score
2. RADS 467 Form F-26 (Clinical Preceptor Evaluation) Item 6

Benchmark 1: Students will earn an average score of 85 or higher on RADS 320L Examination 1.

Benchmark 2: 80% of students will earn 9 points or higher on RADS 467 Form F-26 Item 6.

Files: See list of attachments to view. (Requires Adobe Reader or compatible viewer).

Completion Rates

Completion Rates

Outcome Links

Patient Care [Program]

Students will provide patient care and comfort to patients while performing radiographic procedures

7.1 Data

Academic Year	RADS 320L Examination 1 Average Score		Students earning 9 points or higher on RADS 467, Form F-26 Item 6	
	#	Average	#	%
2023-2024	21	92.5	19	100

Outcome Links

Radiographic Positioning [Program]

Students will be able to demonstrate radiographic positioning skills accurately.

7.1.1 Analysis of Data and Plan for Continuous Improvement

2019-2020:

Analysis for this benchmark was the score on all time for 2019 is slightly down from 2018, will trend for one more year to make sure it is not trending downward.

2020-2021:

The benchmark was met, however it was a slight decline from 3.4 in 2020. but consider changing the tool.

2021-2022:

The benchmark was met. However, this item had been trending for several years now and should have been changed. It will be considered for a change in the instrument at the first faculty meeting in the Fall of 2022.

2022-2023:

The benchmark was met, demonstrating that students provided good patient care and comfort to patients while performing radiographic procedures.

2023-2024:

The tools to assess this item were changed during this past year, as the benchmark was consistently met with the previous tools used for assessment of SLO 1.2. The benchmarks for both tools were met, and we will continue to trend as this was the first year for both of these tools.

Effective 2023-2024 for SLO 1.2 "Students will provide patient care and comfort to patients while performing radiographic procedures," there will be two assessment instruments used:

1. RADS 320L Examination 1 average score with the following benchmark: "Students will earn an average score of 85 or higher on RADS 320L Examination 1."
2. RADS 467 Form F-26 (Clinical Preceptor Evaluation) Item 6 with the following benchmark: "80% of students will earn 9 points or higher on RADS 467 Form F-26 Item 6."

8 Assessment and Benchmark SLO 1.1 - RADS 321L Final test, and F-10 II C RADS 461

Assessment: Students will be able to demonstrate radiographic positioning skills accurately.

Assessment Instruments:

1. RADS 321L Final examination (positioning portion only).
2. Performance Evaluation (Form F-10)–Item II C, completed during RADS 461 (random sampling of 3 per student)

Benchmark 1: An average score of 70 (100 points possible) or higher on the positioning portion of the final examination for RADS 321L.

Prior to 2017-2018, the benchmark was an average score of 80 (100 points possible) on the final examination.

During the 2018-2019 academic the test format changed, to be out of 100 points

Benchmark 2: An average score of 2 (demonstrate acceptable with minor improvements) or higher on II C of Form F-10 for the sample selected.

Outcome Links

Radiographic Positioning [Program]

Students will be able to demonstrate radiographic positioning skills accurately.

8.1 Data

Academic Year	# of students in RADS 321L	Average score on positioning portion of RADS 321L final examination	# of students in RADS 461	RADS 461, Form F-10, Item II C
2017-2018	19	77.1/80	—	2.88
2018-2019	22	97/100	19	2.67
2019-2020	21	97/100	22	2.55
2020-2021	22	67.67/70 96.67/100	21	2.7
2021-2022	22	97.14/100	22	2.6
2022-2023	19	98.13/100	22	2.6
2023-2024	21	88.62	19	2.55

8.1.1 Analysis of Data and Plan for Continuous Improvement

2019-2020:

The program will continue to trend and monitor for one more year as this is the fourth year the benchmark has been met.

2020-2021:

This is the 5th year of using this assessment tool. The established benchmark was met for the 5th time. It is established the benchmark continues to being met, therefore will consider a new assessment tool or objective at our June meeting.

2021-2022:

The average score on the positioning Portion of the 321L final examination was a 97.14 for this cohort of students (class of 2023). This is the fourth year of using this assessment tool. The established benchmark was met for the fourth time, will continue to trend for a maximum of another year. If the established benchmark continues to being met, will consider a new assessment tool or objective.

2022-2023:

The average score on the positioning portion of the 321L final examination was 98.13 for this cohort of student (class of 2024). At the Fall 2022 faculty meeting, it was decided to trend this item for one more year using the RADS 3321L final exam. At the 2023 Fall faculty meeting, a new instrument will be selected for SLO 1.1.

2023-2024:

For the 2023-2024 academic year, the average score on the positioning portion of the 321L final examination was 88.62. At the Fall 2023 RADS faculty meeting, no new instrument was selected, so the same tool was used. However, after observing a 10% decrease from last year, we will continue to monitor this trend using the current assessment tool. RADS 461, Form F-10, was also trended to evaluate SLO 1.1, and evidence suggests a downward trend. The RADS faculty will meet in Fall 2024 to develop a plan of action.

8.2 Data

Academic Year	RADS 461 Average score for F-10 IIC	
	#	Average
2017-2018	—	2.88
2018-2019	19	2.67
2019-2020	22	2.55
2020-2021	21	2.7
2021-2022	22	2.6
2022-2023	22	2.6
2023-2024	19	2.5

8.2.1 Analysis of Data and Plan for Continuous Improvement

2019-2020:

The program will continue to monitor, as this benchmark was met for the fourth year, and the results have went up and down since the program has been assessing this since 2016 using the RADS 461 Form F-10, item II C, and a random sample of three. This is the lowest score since it has been monitor. Will need to trend to make sure it is not going in a downward direction.

2020-2021:

Will continue to monitor, as this benchmark was met for the fifth year, and the program was gradually going up then went down in 2019, still plan to trend to see if the program is going to continue to increase.

2021-2022:

The average score on this item for 2021 is 2.6. This is down from 2.7 in 2020. The established benchmark was met. Looking at the trends of this from 2016-2.38, 2017-2.88, 2018-2.67, 2019-2.55, 2020 2.7. In 2020 decided to trend to see if the results continued to increase. Now in 2021, there is a decrease, therefore will continue to trend.

2022-2023:

The average score on this item for 2022 is 2.6 again. This is exactly what it was in 2021. The established benchmark was met. Looking at the trends of this from 2017-2.88, 2018-2.67, 2019-2.55, 2020 2.7, 2021 2.6. Will continue to trend, as there the benchmark is being met, however, there have been functions since 2018 to current, where it goes up and down. This year is the same as last year. Tending to make sure not consequently on a downward trend for evaluating that students are demonstrating radiographic positioning skills accurately.

2023-2024:

We will continue to monitor this area, as the benchmark is currently being met. However, there have been fluctuations since 2018, with the trend showing ups and downs. This year marks the lowest point so far. We will keep trending this to ensure it does not continue on a downward trajectory.

9 Assessment and Benchmark SLO 1.3 RADS 349 Test 2, and RADS 356 F-9 III A-D

Assessment: Students will be able to apply the principles of radiation protection for the patient, self, and others.

Assessment Instruments:

1. RADS 349 Test 2 average grade
2. RADS 356 F-9, section III A-D

Benchmark 1: An average score of 85 (100 points possible) or higher on Test 2 for RADS 349.

Benchmark 2: 80% or more will score a perfect score of 3 on III A-D of Form F-9 for the sample selected from RADS 356.

Outcome Links

Radiation Protection [Program]

Students will be able to apply the principles of radiation protection for the patient, self and others

9.1 Data

Academic Year	# of students in RADS 349	RADS 349 Test 2 average grade (Average score of 85 or higher)	# of students in RADS 356	RADS 356 Form F-10, Item II D (80% or more will score a perfect score of 3 on this item)
2017-2018	—	86.43%	—	—
2018-2019	24	76.26%	—	—
2019-2020	24	79.75%	—	—
2020-2021	24	82.25%	—	—
2021-2022	24	79.25%	—	—
2022-2023*	27	82.08%	19	63%
2023-2024	30	87.2%	21	57%

*First time to use the RADS 356 F- 10 item II D.

9.1.1 Analysis of Data and Plan for Continuous Improvement

2019-2020:

The program is seeing an increase with this cohort of students over last year's cohort. The actual increase is 4%; however, it is still 5% short of reaching the established benchmark. The program will continue to monitor this outcome in the positive direction.

2020-2021:

The benchmark was still not met, for the third straight year, however it did increase approximately 3 more points from the 2020 cohort of students. For an increase of 6 points from 2019. Will continue to trend as seeing an upward improvement, since 2018 when the benchmark was met.

2021-2022:

The average score for the 2022 cohort taking RADS 349 was 79.25%. The benchmark was still not met, for the fourth straight year, it did decrease approximately 3 more points from the 2021 cohort of students. It is close to the 2020 Cohort which was 79.6, but the all-time low was 2019 when it was 76.26. RADS 349 will not be taught again until the Spring of 2023, at which time a review of content for Test 2, and alternative presentations of material will be discussed at the first faculty meeting of the Fall of 2022.

2022-2023:

Will continue to trend and decide if this tool should be kept since the benchmark was met for the first time in four years. Will be presented at the first faculty meeting in the Fall of 2023.

2023-2024:

During the 2023-2024 academic year, the benchmark was met for RADS 349 Test 2, showing a gradual upward trend, which suggests that the recent textbook change was beneficial. The RADS 356 benchmark of 80% or higher received a perfect score of 3 for the second consecutive year of using this tool, though the benchmark was not met for one of the tools. We will continue to monitor this with some modifications, which will be decided at the Fall 2024 RADS faculty meeting.

10 Assessment and Benchmark SLO 2.1 RADS 461, and SLO 2.2 RADS 320 L (image analysis)

SLO 2.1:

Assessment: Students produce radiographic images demonstrating the proper selection of exposure and technical factors.

Assessment Instrument: Embedded Question on RADS 461 unit test, questions 29, 34, 36, 37, 72 and 73.

Benchmark: 80% of the students will answer the embedded question correctly.

SLO 2.2:

Assessment: Students will evaluate finished radiographic images, for proper: anatomy visualized, positioning, and exposure factors.

Assessment Instrument: RADS 320L Test 3, Image Analysis section.

Benchmark: 75% of the students will pass the image analysis section of the test.

Outcome Links

Patient Communication [Program]

Student will be able to communicate with their patients while implementing the radiography process

10.1 Data

Academic Year	Students answering embedded questions correctly RADS 461 (SLO 2.1)		Students passing the image analysis section RADS 320L (SLO 2.2)	
	#	%	#	%
2017-2018	—	75.30%	—	74%
2018-2019	19	78.4%	22	72.7%
2019-2020	21	77.63%	21	59.7%
2020-2021	21	70%	22	80%
2021-2022	22	88%	22	95%
2022-2023	22	77.5%	22	71.4%
2023-2024	19	82%	19	100%

10.1.1 Analysis of Data and Plan for Continuous Improvement

2019-2020:

The desired benchmark wasn't met. The result is 77.63% of the students in this cohort answered the embedded question correctly. This is a decrease from 78.4 in 2018. Individually it is two of the six embedded questions that were not met. In 2017 and 2018 the benchmark was not met either year. There was a PowerPoint presentation developed and presented in Spring 2018 and there was a 3% increase from 2017 to 2018, however, still not meeting the benchmark. The program will need to plan what to do to improve this area. Even on the second part of assessing this objective of evaluating finished radiographic image for proper anatomy, visualized, positioning, and exposure factors. The program is in the process of developing an exercise or product analysis to emphasize image analysis.

2020-2021:

This marks the 4 straight year that this benchmark was not met. The actual questions were reviewed with the clinical instructors at an advisory meeting. The instructors were asked to incorporate similar questions during the case analysis portion of the clinical competency evaluations. In addition, the unit test date is being moved to a date away from the MSU homecoming and NRTW celebrations.

2021-2022:

Collectively, the bench mark was met if you consider the average on all six embedded questions. However, if you consider each individual embedded question the desired benchmark not met. The results are met for all but two of the 6 embedded questions. In 2020, the benchmark was met in only two embedded questions, therefore significant progress. When considering each question individually and the bench mark is 80% of the students will answer the questions correctly. This marks the 5th straight year that this benchmark was not met. However, significant was made. The actual questions were reviewed with the clinical preceptors. The preceptors were asked to incorporate similar questions during the case analysis portion of the clinical competency evaluations. In addition, the unit test date was moved to a date away from the MSU homecoming and NRTW celebrations. Continuing to trend.

Regarding objective 2.2 which states the student will evaluate finished radiographic image for proper anatomy visualized, positioning, and exposure factors. The benchmark is 75% of the student will pass the image analysis section for RADS 320L test.

The results were that 95% of this cohort of students passed the image analysis section of the test. This is up from 80% in 2020. The established benchmark was met for the second time in 4 years. Evidence that the Clinical Preceptors asking more informed questions continued to help increase this score again this year.

Continue to trend, as this is the 6th year for using this particular tool. However, the results have be up and down in this area. Clinical Preceptors were asked to continue to increase the questioning on the product analysis to emphasize image analysis.

2022-2023:

For the embedded question on the RADS 461 unit test only 77.5% answered the questions correctly. This marks the 6th straight year that this benchmark was not met. The actual questions were reviewed with the clinical preceptors. The preceptors were asked to incorporate similar questions during the case analysis portion of the clinical competency evaluations. Will continue to monitor or trend. For the RADS 320L Tes3 Image analysis section, on 71.4% of the cohort passed this section on the test and the benchmark is 75% of the students will pass this section on the test. The benchmark was met in 2021. Will continue to trend, as this is the 7th year for using this particular tool. However, the results have be up and down in this area. Clinical Preceptors were asked to continue to increase the questioning even more on the product analysis to emphasize image analysis.

2023-2024:

The benchmark was met for at least 80% of the cohort of students answered the embedded questions correctly. Will continue to trend as this was only the second time in the past seven years this benchmark was met. Will continue to monitor or trend as having the Clinical preceptors as more exposure questions during clinical competency evaluations helped to increase the percentage answering correctly. The actual questions were reviewed with the clinical preceptors. The preceptors were asked to incorporate similar questions during the case analysis portion of the clinical competency evaluations. In addition, the unit test date was moved to a date away from the MSU homecoming and NRTW celebrations. For the RADS 320L test, the 3 Image Analysis section the benchmark was also met The benchmark was met for at least 80% of the cohort of students answered the embedded questions correctly. Will continue to trend as this was only the second time in the past seven years this benchmark was met. Will continue to monitor or trend as having the Clinical preceptors as more exposure questions during clinical competency evaluations helped to increase the % answering correctly. The actual questions were reviewed with the clinical preceptors. The preceptors were asked to incorporate similar questions during the case analysis portion of the clinical competency evaluations. In addition, the unit test date was moved to a date away from the McNeese homecoming and NRTW celebrations. For the RADS 320L test, the three Image Analysis section benchmark was not met. Will continue to trend as the benchmark was met in the previous two years.

Files: See list of attachments to view. (Requires Adobe Reader or compatible viewer).

2018 Exposure Image Acquisition pptx (1) (2)

2018 Exposure Image Acquisition pptx (1) (2)

11 Assessment and Benchmark

SLO 3.1:

Assessment: Students will be able to communicate with their patients while implementing the radiography process.

Assessment Instruments:

1. RADS 321L Test 2, Procedure section.
2. RADS 355 F-26, item 6

Benchmark 1: 75% of the students will pass the procedure section of the RADS 321 L test 2.

Benchmark 2: 85% of students will receive a score of 8 (10 points possible) or higher on item 6 of Form F-26 final CI evaluation RADS 355.

SLO 3.2:

Assessment: Students will be able to communicate effectively with clinical staff and peers.

Assessment Instruments:

1. RADS 336 F-9 Item V-E.
2. RADS 461 F-26, item 6

Benchmark 1: The average score of 3 (4 points possible) or higher on V- E, of Form F-9 for the sample selected.

Benchmark 2: 90% of students will receive a score of 9 (10 points possible) or higher on item 6 of Form F-26 final CI evaluation RADS 461.

Outcome Links

Radiographic Positioning [Program]

Students will be able to demonstrate radiographic positioning skills accurately.

11.1 Data

Academic Year	Students passing the procedure section, test 2 RADS 321L (SLO 3.1)		Students receiving 8/10 for item 6, F-26 RADS 355 (SLO 3.1)		Student average 3/4 on item V-E, F-9 RADS 356 (SLO 3.2)		Students receiving 9/10 on item 6, F-26 RADS 461 (SLO 3.2)	
	#	%	#	%	#	%	#	%
2017-2018	—	74%	—	100%	—	4.00	—	100%
2018-2019	22	77%	22	100%	22	4.0	19	100%
2019-2020	21	78%	21	100%	21	4.0	22	100%
2020-2021	22	100%	22	100%	22	3.98	21	100%
2021-2022	22	100%	22	100%	22	4.0	22	100%
2022-2023	19	100%	19	100%	19	4.0	22	100%
2023-2024	21	90%	21	100%	21	3.98	19	95%

11.1.1 Analysis of Data and Plan for Continuous Improvement

2019-2020:

The established benchmarks for all assessments were met. This is the first year of the new benchmarks decided in 2018.

2020-2021:

The benchmark was met, with a 22% increase. Will continue to monitor using the same instrument, to make sure the results are not Skewed, because there was a different professor teaching the course.

2021-2022:

For Objective 3.1, two instruments are used and the benchmark was met for both instruments. Will continue to trend using both instruments, as the benchmarks have not always been met.

For Objective 3.2, two instruments are used, one is completed in the spring semester and the program will continue to monitor, as this benchmark was changed in 2018, and there has been an increase each year.

2022-2023:

SLO 3.1, two instruments are used and the benchmark was met for both instruments. Will continue to trend using both instruments, as the benchmarks have not always been met.

Documenting Students are able to communicate with their patients while implementing the radiography process

SLO 3.2, two instruments are used, one is completed in the spring semester and the program will continue to monitor, as this benchmark was changed in 2018, and there has been an increase each year. For the other, it is the sixth year this particular tool was used to evaluate this objective. Decided to keep this established tool, as we can trend what happens in a year with the same cohort of students. For this SLO the benchmark was demonstrating the students communicate effectively with clinical staff and peers.

2023-2024:

The benchmark was met for all four items used to evaluate proper communication with the patient, clinical staff, and peers. Will continue to trend using the same instruments to make sure the results are not skewed with the change of instructors teaching the different course. Also, the benchmark was changed in 2020 for the 3.1 tool Clinical Preceptor Evaluation F-26 item 6 completed during RADS 355 final CP evaluation the benchmark was raised to 90 % from 85% for student in cohort scoring and eight or higher on item six. Will continue to trend there was a drop in the score for this item.

12 Assessment and Benchmark SLO 4.1 - RADS 356, and SLO 4.2 RADS 461**SLO 4.1:**

Assessment: The student will maintain appropriate conversation with and in the presence of patients

Assessment Instrument: Performance Evaluation (Form F-9) - Item V-A, completed during RADS 356 (random sampling of 3 per student).

Benchmark: 85% of students will score 4 points out of 4 points possible on item V-A, of Form F-9 for the sample selected.

SLO 4.2:

Assessment: The student will demonstrate professional ethics while at the assigned Clinical Education Setting.

Assessment Instrument: Clinical Instructor Evaluation of the Student (Form F-26) item 10 for the final CI Evaluation for RADS 461.

Benchmark: 85% of students will receive a score of 10 out of 10 points possible on item 10 of Form F-26 final CI evaluation RADS 461.

Prior to 2016-2017, the benchmark was 85% of students receiving a 9 out of 10.

Outcome Links**Image Evaluation [Program]**

Students will evaluate finished radiographic images, for proper: anatomy visualized, positioning, and exposure factors

Patient Care [Program]

Students will provide patient care and comfort to patients while performing radiographic procedures

Radiation Protection [Program]

Students will be able to apply the principles of radiation protection for the patient, self and others

12.1 Data

Academic Year	Students receiving 4/4 on item V-A, F-9 RADS 356 (SLO 4.1)	
	#	%
2017-2018	—	100%
2018-2019	22	100%
2019-2020	21	100%
2020-2021	22	86.36%
2021-2022	22	99.2%
2022-2023	22	100%
2023-2024	21	100%

12.1.1 Analysis of Data and Plan for Continuous Improvement

2019-2020:

For 2020, all of in the random sampling scored a 4 out of 4 on F-9, V-AA. The benchmark was met. This was the fifth year of trending and the benchmark was met; therefore, the advisory committee will meet and evaluate this objective using another tool to assure that the objective is being met!

2020-2021:

Will continue to trend as this is the 6th year of using this tool to measure the objective, however, there was a 14% reduction in the number of student scoring 4/4, therefore will use the tool for at least 2 more cycles.

2021-2022:

Continue to monitor, as this benchmark was changed in 2018, and there has been an increase each year. Will continue to trend as this is the 6th year of trending with an increase in the benchmark.

2022-2023:

Will continue to trend as this is the 8^h year of using this tool to measure the objective, however, there has been an increase in those receiving a 4/4 this year it is 100% for a second straight year, however, in the past there fluctuations, therefore will investigate for a different tool to evaluate this item in the future at the first faculty meeting in the Fall of 2023

2023-2024:

We will continue to monitor this trend. This is the third consecutive year that 100% of the students have met the established criteria. Although there were fluctuations in the past and another tool was considered, it was decided in the Fall 2023 meeting to use this evaluation for one more cycle.

12.2 Data

Academic Year	Students receiving 10/10 on item 10, F-26 RADS 461 (SLO 4.2)	
	#	%
2017-2018	—	88%
2018-2019	19	90%
2019-2020	21	100%
2020-2021	21	95%
2021-2022	22	95%
2022-2023	22	91%
2023-2024	19	94.7

12.2.1 Analysis of Data and Plan for Continuous Improvement

2019-2020:

For the Fall of 2019, the score on this item is 100% of the cohort of students scored a 101 on item 10, which is up from 90% in 2018. The benchmark was met. The program will continue to trend, this is the fourth year of a 5-year trending cycle.

2020-2021:

For the Fall of 2020, the score on this item was 95% down from 100% in 2019. This is the third year of a 5 year trending cycle. Trends have gone up and down on this item and it has not stabilized, will continue to trend.

2021-2022:

For the Fall of 2021, the score on this item once again was 95%. The benchmark was met. Continuing to trend even though it is the fifth year of a 4-5 year trending cycle which was decided in 2016, trends are going up and down and have not stabilized.

2022-2023:

For 2022, 91% of the cohort of students scored a 10 out of 10 for the tool used to evaluate whether the student demonstrates professional ethics while assigned to the Clinical setting. We will continue with the use of this tool as this bar was raised to a score of 90% in 2020, after seeing the trend that was typically 100% of the cohort receiving a score of 8 or higher.

2023-2024:

Decision was made to continue with the use this tool, as this bar was raised to a score of 90% in 2020, after seeing the trend that was typically 100% of the cohort receiving a score of 8 or higher.

13 Assessment and Benchmark Certification and Licensure Exam

Assessment: Graduates will pass the national certification examination on first attempt.

Assessment Instrument: American Registry of Radiologic Technologists (ARRT) national certification, annual first-time passage rates.

Benchmark 1: The % of graduates who take the ARRT radiography certification examination to become certified radiographers will meet or exceed the national passage rate for first-time examinees.

Benchmark 2: Regardless of the national % passage rate on the ARRT examination, the program passage rate should never drop below 75% over a five-year period.

13.1 Data [Approved]

Academic Year	MSU first-time pass rate	National first-time pass rate	Graduates passing on the first or second attempt		The 5-year average for first time passage rate
			#	%	
2012-2013	83.3%	93.0%	—	100%	96% (08-12)
2013-2014	100%	89.7%	—	100%	96% (09-13)
2014-2015	95%	88.9%	—	100%	95% (10-14)
2015-2016	100%	88.4%	—	100%	95.4% (11-15)
2016-2017	100%	87.2%	—	100%	96.7% (12-16)
2017-2018	100%	89.3%	—	100%	98.94% (13-17)
2018-2019	95%	89.4%	18	100%	97.87% (14-18)
2019-2020	95%	89.0%	19	100%	97.87% (15-19)
2020-2021	100%	88.2%	22/22	100%	98% (16-20)
2021-2022	100%	83.8%	21/21	100%	97.2% (17-21)
2022-2023	68%	83.5%	21/22	96%	91.26% (18-22)
2023-2024	91%	91%	21/21	100%	91.2% (19-23)

13.1.1 Analysis of Data and Plan for Continuous Improvement

2019-2020:

The benchmark was met for both the first-time passage rate and for the 5-year average.

2020-2021:

The RADS Program continues to excel in meeting the first-time passage rate and the 5-year average. The program met the benchmarks for both areas of the objective and will continue with the current plan of making sure the graduates are prepared for the national certification examination.

2021-2022:

The RADS Program continues to excel in meeting the first-time passage rate and the 5-year average. The program met the benchmarks for both areas of the objective and will continue with the current plan of making sure the graduates are prepared for the national certification examination.

2022-2023:

The RADS program is devastated to report that the MSU program did not have a first-time passage rate of 100%. The first-time passage rate is 68.2 % die 2922. To date, all of those who have retaken the examination have passed with the exception of one student. Our program has never been here before, making it difficult to counsel those who are in this state. The question was raised, how did this compare with their work in the RADS 465 class which prepares the students for the national certification examination, and is the capstone course for the program? Mr. Bradley reported for the first test for the 2022 cohort of students was the lowest in the history of the course. The average score on test one was 52.55 %, below is a comparison of the mock certification raw scores of the tests in RAD 465 for the past 3 years. As the table reveals there was no indicator other than the first test, as the class of 2022 scored higher on all tests.

Year	T1 Avg	T2 Avg	T3 Avg	T4 Avg	T5 Avg	T6 Avg	First time passage %	Passage rate %
2020	59.86	69.54	75.82	78.39	85.35	83.12	100%	100%
2021	55.79	65.3	76.79	77.9	81.4	83.12	100 %	100%
2022	52.55	71.9	79.4	84.95	87.5	83.2	68.2 %	TBD

In summary, this is the class that had the most interruptions in their education. Also, this cohort of students had most of their foundation courses in the professional phase delivered in the online format. This was also the first cohort nationally to take the test under the new content specifications.

The other benchmark the program uses on this program effectiveness data item is the first-time % 5-year passage rate should not drop below 75 %. For 2022, the first-time page rate 5-year average is 91.26%.

The decision was made to conduct a thorough curriculum review and investigate alternate review methods. Several of the students who retested stated they used the Clover learning boot camp platform and found it very useful. The program has investigated purchasing review books for all senior students and will purchase the boot camp for students in the 2023 cohort of students.

2023-2024:

The benchmark was met. The program did purchase the Clover Learning Bootcamp for Radiologic Technology for all senior students, as well as purchase review books for those who had not already purchased them. The results do show an improvement in the passage rate from the previous year. Will continue to monitor, as the data reflects a 100% passage rate on the first or second attempt of the national certification examination.

End of report