Washburn University (AMS) » Academic Affairs » School of Applied Studies » Allied Health **BHS/Certificate-Radiation Therapy** 

#### 2021-2022 Assessment Cycle Assessment Findings

#### **Program Assessment Accomplishments**

Last year's report demonstrated the Program received a score of three out of three for the Assessment Plan and Assessment Findings. The Program aimed to continue meeting the Assessment Committee's requirements over the previous year.

The Radiation Therapy program did not make modifications to PSLO's or the Program's Assessment Plan since the last report. However, the Faculty reviewed the Assessment Plan and findings and discussed ways to improve areas throughout the didactic courses - Additional assignments, self-assessment quizzes, and learning resources were created and implemented to strengthen areas throughout the program.

## **Finding per Measure**

#### **C** - Radiation Therapy Outcome Set

PSLO 1

Outcome: Students will pass the national certification exam on the first attempt within 6 months of graduation

Measure: Competency Examination Performance Assessments
 Program level Direct - Exam

Details/Description:	100% Completion of competency evaluations as required by the ARRT and the program.
Acceptable Target:	100% Completion of competency evaluations as required by the ARRT and the program with an evaluation score of 88% or higher.

#### Supporting Attachments:

Treatment Competency Evaluation Form (Adobe Acrobat Document)

Printed on: 1/26/2023 4:15:11 PM Created with with watermark Attached is the treatment competency form utilized for the radiation therapy students. Students complete treatment competencies through the duration of the program and are assessed by a supervising radiation therapist.

Findings for Competency Examination Performance Assessments	
Summary of Findings:	All graduates of the program completed all ARRT-defined competencies with an 88% or higher.
	Failing to complete the ARRT-defined competencies with an 88% or higher would prevent the student from graduating and being eligible to sit for the ARRT credentialing examination.
Results :	Acceptable Target Achievement: Met
Recommendations:	None.
Reflections/Notes:	Performance expectations for all competency evaluations is provided in the student's Program and Clinical manual and discussed by the Clinical Coordinator and the Clinical Supervisor throughout the duration of the program.

•	<b>Measure:</b> Graduate Survey Program level Indirect - Survey	
	Details/Description:	The graduate survey includes a question pertaining to credential.
	Acceptable Target:	Program to have a 5 year average for first time test takers of no less than 75%.

# Supporting Attachments:

<sup>(1)</sup>Example Graduate Survey for Class of 2021 (Adobe Acrobat Document)

Attached is an example graduate survey that is sent to graduates six months after graduation.

# Findings for Graduate Survey

Summary of Findings:	The graduate survey includes a question pertaining to credential. Graduates are asked the month and year they took the credentialing examination, along with the results of the examination.
Results :	Acceptable Target Achievement: Met
Recommendations:	None.
Reflections/Notes:	The use of the graduate survey is one method of collecting data regarding the graduate's credentials.

Substantiating Evidence:

Graduate Survey Data - Class of 2021 (Excel Workbook (Open XML))

Attached is the Excel spreadsheet used to store and track graduate survey data.

 Measure: Professional Credentialing Examination Other level Direct - Exam

Details/Description:	National Board Examination - Successfully pass the boards exam.
Acceptable Target:	5 year program average for first time test taker of no less than 75%.

#### Supporting Attachments:

ARRT National Comparison Report - 2021 (Adobe Acrobat Document)

Attached is the National Comparison Report from the American Registry of Radiologic Technologists, the credentialing agency for Radiation Therapy.

# Findings for Professional Credentialing Examination

Summary of Findings:	Of the graduates who took their national certification exam within six months, 35 out of 44 students passed on the first attempt. This provided an average of 80% for the Radiation Therapy Program. The program had 45 students in the Program, but one student did not complete an attempt within 6 months of graduation. This provided the Program with a five-year average of 93.3%.
Results :	Acceptable Target Achievement: Exceeded
Recommendations:	Faculty created an Action Plan with steps for faculty to take to aim to increase the number of passing graduates in the Class of 2022.
	Faculty reviewed the ASRT curriculum and the ARRT content specifications and compared to the program curriculum to ensure all areas were covered, additional review textbooks were purchased and implemented into the student's studies, and all presentations and content was enhanced.
Reflections/Notes:	The Radiation Therapy Program is relatively similar as the national average of 78% regarding graduates passing the national certification exam on the first attempt within 6 months of graduation.
1	Despite exceeding the Program's benchmark and meeting the national average, the certification results of 2021 was significantly different than previous years. When reviewing the examinations of the Class of 2021, scores were lower than past years, including the content overlapping their Radiologic Technology training.



As a result of this, Faculty discussed possible reasonings for the decrease in the number of passing candidates. Due to limited examination times and other life circumstances, five of the failing students waited one month or longer after program completion to attempt the certification examination. Also, the Class of 2021 was impacted by the COVID-19 pandemic in their Radiology programs - Due to the Radiation Therapy curriculum building on the Radiologic Technology curriculum, this decrease could be due to the modifications and decreased clinical education the students received in their Radiologic Technology programs as result of COVID-19.

Substantiating Evidence:

ARRT Exam Report - 2021 (Adobe Acrobat Document)

Attached is a document from the American Registry of Radiologic Technologist demonstrating the pass rate of students who took their national certification within six months of graduation.

#### PSLO 2

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Outcome: Students will demonstrate clinical competency by analyzing pertinent data from treatment planning documents.

Measure: AL305 Treatment Plan Assignment
 Course level Direct - Student Artifact

Details/Description:	AL305 Treatment Plan Assignment (Questions 2-
	13) has no less than a correct response percentage
	on 85% from item analysis within Desire2Learn.
Acceptable Target:	No less than a correct response percentage of 85% from item analysis.

Supporting Attachments:

O AL305 Treatment Assignment Instructions - 2021 (Word Document (Open XML))

Attached is a screenshot from D2L which includes the instructions provided to students for the AL305 Treatment Assignment. Students complete the assignment and submit it through the Desire2Learn Quiz area.

Findings for	AL305	Treatment	Plan	Assignment
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Summary of Findings:	Students were to obtain no less than a correct response percentage of 85% from item analysis. The average result for this class was a 95%.
Results :	Acceptable Target Achievement: Exceeded
Recommendations:	None.
Reflections/Notes:	The Radiation Therapy Program surpassed the minimum requirement of 75% with an average of correct response rate for questions 2-13 of 95%

Substantiating Evidence:

Attached is a document demonstrating the statistics for the AL305 Treatment Plan Assignment, Questions 2-13.

# Measure: Employer Survey Program level Indirect - Survey

Details/Description:	The employer survey includes a question pertaining to the graduate's ability to analyze pertinent data from treatment planning documents and accurately deliver radiation therapy treatments.
Acceptable Target:	Satisfaction with graduate's ability to analyze pertinent data from treatment planning documents and accurately deliver radiation therapy treatments question #4B scores no less than an average score of 3.25 on a 5 point scale.

#### Supporting Attachments:

Example Employer Survey - Class of 2021 (Adobe Acrobat Document)

Attached is the Employer Survey form utilized for the radiation therapy graduates. Employer Surveys are sent to employers six months after the graduate completes the radiation therapy program.

Findings for Employer Surve	У
Summary of Findings:	Students were to obtain no less than an average score of 3.25 on a 5-point scale for survey question 4B. 4B is a question that pertains to the graduate's ability to analyze the pertinent data from treatment planning documents.
	The Class of 2021 had an average of 4.58.
Results :	Acceptable Target Achievement: Exceeded
Recommendations:	None.
Reflections/Notes:	Although the benchmark was exceeded, the collected data is reliant on Employer's completion of the surveys. The Program Director sends the survey link to graduates and employers multiple times requesting the surveys be collected. However, only 26 students out of 45 completed the surveys; 23 out of the 26 responders were employed and and only 13 out of the 23 employers

responded. The Faculty identify that these numbers may not necessarily provide the most accurate data for the entire class of 2021.

#### Substantiating Evidence:

[] Employer Survey Data - Class of 2021 (Excel Workbook (Open XML))

Attached is the Excel spreadsheet utilized to score and track Employer Survey Data.

# Measure: Performance Assessments Program level Direct - Exam

Details/Description: Acceptable Target:

Verification Simulation Clinical Competency has no less than an average score of 3.0 on a 5-point scale in the final clinical semester.

#### Supporting Attachments:

Data\_Interpretation\_Competencies\_Examples.pdf (Adobe Acrobat Document)

Attached is the Data Interpretation - Verification Simulation competency form utilized for the radiation therapy students. Students complete the Data Interpretation competencies in the final summer semester clinical course (AL380). Students are assessed by a supervising radiation therapist.

Findings for Performance Assessments

Summary of Findings:

For the Data Interpretation - Verification Simulation competency, students were to have an average score of 3.0 on a five-point scale. This is a program-defined competency, as opposed to one required by the ARRT for credentialing.



Students complete the Data Interpretation -Verification Simulation in their final clinical semester.

The Class of 2021 achieved an average of 4.2 out of 5.0.

Results : Acceptable Target Achievement: Exceeded

Recommendations: None.

Reflections/Notes:

The Class of 2021 exceeded the benchmark of 3.0.

Substantiating Evidence:

O Competency Averages - First and Final Semester Report - 2021 (Excel Workbook (Open XML))

Attached is the Excel spreadsheet utilized to score and track the competency data. The Excel includes two pages, one for the first clinical semester and one page for the final clinical semester. Data related to the Data Interpretation competency is found on Excel Page 2.

# PSLO 3

Outcome: Students will demonstrate clinical competency by accurately positioning patients for treatment delivery.

Measure: Employer Survey
 Indirect - Survey

Details/Description:

The employer survey includes a question pertaining to the graduate's ability to accurately position patient for delivery of radiation therapy treatments.



Acceptable Target:	Satisfaction with graduate's ability to accurately
	position patient for delivery of radiation therapy
	treatments (Question scores # 6A). No less than an
	average score of 3.25 on a 5-point scale.

### Supporting Attachments:

Example Employer Survey - Class of 2021 (Adobe Acrobat Document)

Attached is the Employer Survey form utilized for the radiation therapy graduates. Employer Surveys are sent to employers six months after the graduate completes the radiation therapy program.

Findings for Employer Surve	У
Summary of Findings:	Students were to receive no less than an average score of 3.25 on a five-point scale for question 6A. Question 6A pertained to the graduate's ability to demonstrate competence in patient positioning.
	The Class of 2021 received an average of 4.92.
Results :	Acceptable Target Achievement: Exceeded
Recommendations:	None.
Reflections/Notes:	Although the benchmark was exceeded, the collected data is reliant on Employer's completion of the surveys. The Program Director sends the survey link to graduates and employers multiple times requesting the surveys be collected. However, only 26 students out of 45 completed the surveys; 23 out of the 26 responders were employed and and only 13 out of the 23 employers responded. The Faculty identify that these numbers may not necessarily provide the most accurate data for the entire class of 2021.

Substantiating Evidence:

Employer Survey Data - Class of 2021 (Excel Workbook (Open XML))

Attached is the Excel spreadsheet utilized to score and track Employer Survey Data.

Measure: Performance Assessments
 Program level Direct - Exam

Details/Description: Acceptable Target:

Clinical Competency "Positioning Criterion" has no less than an average score of 3.25 on a 5-point scale in the final clinical semester.

Professional Development Evaluation "Positioning Criterion #1" has no less than an average score of 3.25 on a 5 point scale.

#### Supporting Attachments:

Example Professional Development Evaluation (Adobe Acrobat Document)

Example Treatment Competency Form (Adobe Acrobat Document)

#### Findings for Performance Assessments

Summary of Findings: On the treatment competency, patient positioning criterion, students were to achieve no less than an average score of 2.75 on a five-point scale in the first clinical semester. The students obtained an average of 3.831 in the first semester. Students were to obtain no less than an average score of 3.25 on a five-point scale in the final clinical semester. The students obtained an average score of 4.32 in their final semester.

On the Professional Development



Evaluation, Positioning Criterion Item # 1, students were to obtain no less than an average score of 3.25 on a 5-point scale in the final clinical semester. The students obtained an average score of 4.48.

Results : Acceptable Target Achievement: Exceeded

None

Recommendations:

Reflections/Notes:

The assessment of the student's treatment competency in the first and final semester with an increased minimum score demonstrates the student's continued learning and improvement through the program.

Substantiating Evidence:

O Competency Averages - First and Final Semester Report - 2021 (Excel Workbook (Open XML))

Attached is the Excel spreadsheet used to figure the competency averages for the first semester and the final semester.

 Professional Development Evaluation Data - Class of 2021 (Excel Workbook (Open XML))

Attached is the Excel spreadsheet used to figure Professional Development Evaluation data for the final semester.

#### PSLO 4

Outcome: Students will demonstrate effective written communication skills.

Measure: Course Embedded Assignment

Program level Direct - Student Artifact

Details/Description:	Students will achieve no less than an average rubric score of 85% on the Scholarly Journal Article Assignment completed and assessed in the AL370 course.
Acceptable Target:	Scholarly Journal Article Summary - No less than an average rubric score of 85%

Supporting Attachments:

AL370 Scholarly Assignment Rubric - 2021 (Adobe Acrobat Document)

Attached is the rubric utilized to grade the AL370 Scholarly Journal Article Assignment.

#### Findings for Course Embedded Assignment

Summary of Findings:	Students were to obtain no less than an average rubric score of 85%. The students obtained an average rubric score of 95.3%.
Results :	Acceptable Target Achievement: Exceeded
Recommendations:	None.
Reflections/Notes:	This assignment requires an in-depth article analysis. The average rubric score demonstrates a thorough understanding of this process and APA formatting.

Substantiating Evidence:

 
 AL370 Scholarly Assignment Statistics- Class of 2021 (Word Document (Open XML))

Attached is a document demonstrating the average rubric score for the AL370 Scholarly Article Assignment.

Outcome: Students will evaluate images using various imaging technologies (MV, kV, CBCT) to ensure proper patient alignment.

•	Measure: Employer Survey Program level Indirect - Survey	
	Details/Description:	The employer survey includes a question pertaining to the graduate's ability to evaluate images using various imaging technologies to ensure proper patient alignment.
	Acceptable Target:	Satisfaction with graduate's ability to evaluate images to ensure proper patient alignment - Question scores (#6C). No less than an average score of 3.25 on a 5 point scale.

Supporting Attachments:

Example Employer Survey - Class of 2021 (Adobe Acrobat Document)

Attached is the Employer Survey form utilized for the radiation therapy graduates. Employer Surveys are sent to employers six months after the graduate completes the radiation therapy program.

Findings for Employer Surve	у
Summary of Findings:	Students were to obtain no less than an average score of 3.25 on a five-point scale for question #6C, which pertained to the graduate's ability to evaluate imaging using various technologies.
	The Class of 2021 obtained an average score of 4.62.
Results :	Acceptable Target Achievement: Exceeded
Recommendations:	None.
Reflections/Notes:	Although the benchmark was exceeded, the

collected data is reliant on Employer's completion of the surveys. The Program Director sends the survey link to graduates and employers multiple times requesting the surveys be collected. However, only 26 students out of 45 completed the surveys; 23 out of the 26 responders were employed and and only 13 out of the 23 employers responded. The Faculty identify that these numbers may not necessarily provide the most accurate data for the entire class of 2021.

#### Substantiating Evidence:

Employer Survey Data - Class of 2021 (Excel Workbook (Open XML))

Attached is the Excel spreadsheet utilized to score and track Employer Survey Data.

# Measure: Performance Assessments Program level Direct - Exam

Details/Description: Acceptable Target:

Imaging Competency has no less than an average score of 3.25 on a 5-point scale in the final clinical semester.

Professional Development Evaluation "Critical Thinking Criterion # 1" has no less than an average score of 3.25 on a 5-point scale in the final clinical semester.

#### Supporting Attachments:

Example Professional Development Evaluation (Adobe Acrobat Document)

Imaging\_Comp\_Example.pdf (Adobe Acrobat Document)

#### Findings for Performance Assessments

Summary of Findings:	Students have three imaging competencies they are to complete in the spring semester. Students are to have an average score of 3.25 on a five-point scale. These are program- defined competencies, as opposed to ones required by the ARRT for credentialing. The Class of 2021 received an average score
	of 4.2.
Results :	Acceptable Target Achievement: Exceeded
Recommendations:	None.
Reflections/Notes:	The Class of 2021 exceeded the program's defined benchmark of 3.25.

### Substantiating Evidence:

 O Competency Averages - First and Final Semester Report - 2021 (Excel Workbook (Open XML))

Attached is the Excel spreadsheet utilized to score and track the competency data. The Excel includes two pages, one for the first clinical semester and one page for the final clinical semester. Data related to the Imaging Competencies are found on Excel Page 2.

# PSLO 6

Outcome: Students will demonstrate professional work standards.

Measure: Employer Survey

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Details/Description:	The employer survey contains a questions pertaining to the graduate's ability to conduct himself/herself in an ethical and professional manner.
Acceptable Target:	Satisfaction with graduate's ability to conduct himself/herself in an ethical and professional manner (#8B). No less than an average score of 3.25 on a 5 point scale.

#### Supporting Attachments:

Findings for Employer Survey

Example Employer Survey - Class of 2021 (Adobe Acrobat Document)

Attached is the Employer Survey form utilized for the radiation therapy graduates. Employer Surveys are sent to employers six months after the graduate completes the radiation therapy program.

Summary of Findings:	For Employer Survey, # 8B, students were to obtain no less than an average score of 3.25 on a five-point scale. This question pertains to the graduate's ability to exhibit professional standards and behaviors.
	The Class of 2021 obtained an average score of 4.85.
Results :	Acceptable Target Achievement: Exceeded
Recommendations:	None
Reflections/Notes:	Although the benchmark was exceeded, the collected data is reliant on Employer's completion of the surveys. The Program Director sends the survey link to graduates and employers multiple times requesting the surveys be collected. However, only 26 students out of 45 completed the surveys; 23 out of the 26 responders were employed and and only 13 out of the 23 employers responded. The Faculty identify that these numbers may not necessarily provide the



most accurate data for the entire class of 2021.

3.25 on a 5-point scale in the final clinical semester.

#### Substantiating Evidence:

[] Employer Survey Data - Class of 2021 (Excel Workbook (Open XML))

Attached is the Excel spreadsheet utilized to store and track employer survey data.

Measure: Performance Assessments
 Program level Direct - Exam

Details/Description: Acceptable Target:	Clinical Competency "Professionalism Criterion" has no less than an average score of 3.25 on a 5- point scale in the final clinical semester.
	Professional Development Evaluation "Attitude Criterion #2" has no less than an average score of

Supporting Attachments:

Example Professional Development Evaluation (Adobe Acrobat Document)

Example Treatment Competency Form (Adobe Acrobat Document)

#### Findings for Performance Assessments

Summary of Findings: On the Treatment Competency, Professional Criterion, students were to achieve no less than an average score of 2.75 on a five-point scale in the first clinical semester. The students obtained an average of 3.875 in the first clinical semester. Students were to obtain no less than an average score of 3.25



on a five point scale in the final clinical semester. The students obtained an average score of 4.32 in their final semester.

On the Professional Development Evaluation, Attitude Criterion Item # 2, students were to obtain no less than an average score of 3.25 on a five-point scale in the final clinical semester. The students obtained an average of 4.24.

Results : Acceptable Target Achievement: Exceeded

Recommendations: None

Reflections/Notes:

The assessment of the student's treatment competency in the first and final semester with an increased minimum score demonstrates the student's continued learning and improvement through the program.

# Substantiating Evidence:

O Competency Averages - First and Final Semester Report - 2021 (Excel Workbook (Open XML))

Attached is the Excel spreadsheet used for data collection of treatment competency criterion.

 Professional Development Evaluation Data - Class of 2021 (Excel Workbook (Open XML))

Attached is the Excel spreadsheet used for data collection of Professional Development Evaluation criterion.

#### **Overall Recommendations**

Since assessment is a continuous process, the faculty will make changes to the assessment plan due to exceeding the given benchmarks for the past few years. The program's accreditor defines the Learning Goals, but changing the outcomes will allow the program to assess alternate areas of the program to enable the program to continue to improve and grow.

The changes to the assessment plan will impact the Class of 2023.

#### **Overall Reflection**

The program exceeded the assessment plan's benchmarks. However, the program will continue to assess and evaluate how it can be improved regarding courses, curriculum, clinical requirements, and the program as a whole. When making potential adjustments, the program will ensure the program remains aligned with the program's mission, the accrediting agency, and the credentialing agency standards.

#### **Faculty Collaboration**

After the data from the evaluations, assignments, surveys, and competencies has been collected for the assessment plan, the Program Director, Clinical Coordinator, and adjunct (if available) meet to discuss the findings and identify any potential changes that could improve the program.

The employer and graduate surveys and all comments are reviewed and discussed as part of the review. In addition to the surveys, the scores of the competencies, evaluations, and the ARRT National Comparison Report (when available) are reviewed for areas of weakness to aim for continuous improvement.

#### **Communication & Collaboration with Students**

The PSLOs are available on the University and Radiation Therapy websites.

In addition to these public locations, the PSLOs are identified in the student's program and clinical manual, which they purchase at the time of Orientation before the program start. At the time of Orientation, the faculty thoroughly reviews the Program and Clinical Manual with the students.

The program objectives are also listed on the course syllabi, which are embedded into the program's learning management system. The syllabi, including the objectives, are reviewed with the students on the first day of each program course.

Assessment plan data/findings are discussed at the fall and spring advisory board meetings. There is a student representative on the advisory board each year. After the Advisory Board meeting, the student representative shares what he/she learned with the rest of the class.

# **Communication & Collaboration with External Stakeholders**

The program objectives are printed in the Radiation Therapy Program and Clinical Manual, which students are instructed to deliver to the Clinical Site before starting their clinical rotation. Doing this makes the manual (and the objectives, goals, and mission) available to the staff therapists, Clinical Supervisor, and Radiation Oncologist(s).

The program objectives and quality indicators are disclosed to the public on the Washburn University Radiation Therapy Program's website. In addition, the Program and Clinical Manual is also available on the website, which also includes this information.

At the start of the student's clinical rotations, the Clinical Coordinator sends an email to the designated Clinical Preceptors to provide them with information on how to access the website to review the program's mission, goals, outcomes, and program effectiveness data. In addition, the Clinical Coordinator encourages the Clinical Supervisors to share the email and information with other relevant staff members.

The assessment plan is discussed with the Radiation Therapy Advisory Board in the fall and the spring. The mission, objectives, tools, and benchmarks are addressed in addition to the assessment plan findings. In addition to current and prior Radiation Therapy faculty, the Advisory Board also consists of individuals outside the education profession, such as a current Radiation Therapy student, Staff Radiation Therapists, Clinical Preceptors, and a Radiation Oncologist.

#### **Communication & Collaboration with University**

The Program Director has previously participated in the Taskstream workshops and Assessment extravaganza. In addition to the University workshops, the Program Director and Clinical Coordinator have participated in various Assessment workshops through the program's accrediting agency.

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