

College of Southern Idaho Radiologic Technology Program Outcome Assessment Plan for the Class of 2020

Mission: To prepare students to become graduates for entry-level employment as ARRT Registered Technologists in Radiography

Note: This is a revised CSI Radiologic Technology Program outcome assessment plan for the Class of 2020 based on Gary and Tamara attended JRCERT outcome assessment seminars in Chicago, IL, in 2018 and 2019, that improved alignment with JRCERT accreditation outcome assessment standards requiring the creation and use of direct and indirect outcome measurement tools along with clarifications in the wording of several benchmarks. As a consequence, this outcome assessment plan represents the first year that data will be tracked and trends compared for several outcomes identified in Categories 2, 3, 4, and 5, starting next year with the Class of 2021.

Category I: Graduate Performance

Goal I: Program effectiveness will be measured on an ongoing basis

Outcome	Tool	Benchmark	Time Frame	Responsibility	Result
1. Enrolled students will complete the program.	CSI Institutional Research Graduation Report	≥ 80 % annual graduation rate.	Commencement (May)	Program Director	Yes 11/12 = 91.6%

Action: Track data and compare trends.

1. The program's 5-year average completion rate of 95% results in an attrition of 5%, which is exceptionally low.
2. Completion rates for the program during the past 5 years is trending at ≥ 90% as follows: 2020 = 91.6%, 2019 = 91.6%, 2018 = 100%, 2017 = 100%, 2016 = 91.6%.
3. One student resigned from the Class of 2020 at the end of the 1st semester after deciding he was not suited for a radiologic technology career.

2. Graduates will pass the ARRT exam in radiography on the first attempt.	A. Annual first-time pass rate.	A. ≥ 80 % Annual first time pass rate.	A. January 1 to December 31 for graduating class.	A. Program Director.	A. Yes 10/11 = 90.9%
<p>Action: Track data and compare trends.</p> <p>1. The Class of 2020's first time credentialing examination pass rate of 90.9% did not exceed the program's 5-year first-time average annual pass rate of 94.7% (2020 = 90.9%, 2019 = 90.9%, 2018 = 100%, 2017 = 92%, 2016 = 100%, = 473.8 / 5 = 94.7%) by 3.8 %..</p> <p>2. This indicates a downward trend.</p> <p>3. This 90.9% first time credentialing examination pass rate did, however, exceptionally exceed the benchmark of ≥ 80 % annual first time pass rate.</p>					
	B. 5-year first time pass rate.	B. ≥ 80 % 5-year first time pass rate.	B. January 1 to December 31 for graduating class.	B. Program Director.	B. Yes 54/57 = 94.7%
<p>Action: Track data and compare trends.</p> <p>1. The program's 5-year (2020 to 2016) average first time credentialing pass rate is 94.7% (2020 = 10 students passed /11 total students, + 2019 = 10/11, + 2018 = 12/12, + 2017 = 11/12, + 2016 = 11/11, = 54/57 = 94.7%).</p> <p>2. This resulted in an exceptionally low 5.3% failure rate compared to ARRT's Annual Report of Examinations 5-year first time pass rate average from 2019 to 2015 (most current ARRT data available) of 88.6%.</p> <p>3. This resulted in a 11.4% failure rate (2019 =89, 2018 = 89.4, 2017 = 89.3, 2016 = 87.2, 2015 = 88.4 = 443.3/5 = 88.6%).</p> <p>4. CSI Rad Tech Program scores for the past 5 years included 3 failures (1 in 2017, 1 in 2019, and 1 in 2020).</p>					
	C. Annual program mean scaled score.	C. ≥ 80 Annual program mean scaled score.	C. January 1 to December 31 for graduating class.	C. Program Director.	C. Yes 11/11 = 85
<p>Action: Track data and compare trends.</p> <p>1. The annual program mean scaled score of 85 for 2020 is 10 points above the ARRT's minimum passing scaled score of 75.</p> <p>2. 2020's annual scale score of 85 matched the Idaho mean scale score of 85.3 as reported in ARRT's Annual Report of Examinations.</p> <p>3. All 11 students from the class of 2020 took the ARRT examination and there was 1 failure.</p>					
	D. 5-year program mean scale score.	D. ≥ 80 % 5-year program mean scaled score.	D. January 1 to December 31 for graduating class.	D. Program Director.	D. Yes 57/57 = 85.8 (Score includes 2 failures.)
<p>Action: Track data and compare trends.</p> <p>1. CSI Rad Tech Program's 5-year program mean scaled score of 85.8 (2020 = 85, + 2019 = 82, + 2018 = 89, + 2017 = 87, + 2016 = 86 = 429 ÷ 5 = 85.8) is 2.3 points higher than ARRT's 5-year national mean scale score of 83.5 (2019 = 83.4 + 2018 = 83.6, +2017 = 83.6, + 2016 = 83.3, + 2015 = 83.7 = 417 ÷ 5 = 83.5) as calculated from ARRT's Annual Report of Examinations (2019 to 2015).</p>					

2. The 5-year program mean scaled score of 85.8 trends positively 3 to 7 points above the 5 year low of 82 (2020 = 85, 2019 = 82, 2018 = 89, 2017 = 87, 2016 = 86).					
3. Graduates will be employed within 6 months of graduation.	CSI RT Program Graduate Survey # 4 or students reporting job status.	≥ 80 % of those seeking employment of those surveys returned. (Excludes military and continuing education.)	Last day of class during the final spring semester of training. (Note: Students who are not employed as of last day of class are contacted within 6 months of graduation.)	Program Director	Yes 10/10 = 100% Note: One student did not report job status data.
Action: Track data and compare trends. 1. The 5-year average annual job placement rate for students reporting job status between 2020 and 2016 has been 100% (2020 = 11/11 = 100%, + 2019 = 10/10 = 100%, + 2018 = 12/12 = 100%, + 2017 = 11/11 = 100%, + 2016 = 11/11 = 100% = 500% ÷ 5 = 54/54 = 100%).					
4. Graduates will receive a quality education.	CSI RT Program Graduate Survey # 1: Did the CSI Radiologic Technology Program adequately prepare you for entry level employment as an ARRT Registered Technologist in Radiography? (Note: Answers to this question are anonymous.)	≥ 80% students answer YES of those who returned surveys and answered the question.	Last day of class during final spring semester.	Program Director	Yes 11/11 = 100% of students received a quality education.
Action: Track data and compare trends. 1. Of those surveys returned the past 5 years has shown 57/57 graduates (100 %) answering YES to the question: Did the CSI Radiologic Technology Program adequately prepare you for entry level employment as an ARRT Registered Technologist in Radiography (2016 = 11/11 = 100%, 2017 = 12/12 = 100%, 2018 = 12/12 = 100%, 2019 = 11/11 = 100%, 2020 = 11/11 = 100%).					
5. Employers will be satisfied with the (hard – technical) performance of graduates.	Employer Survey Question #1: What is this person’s technical abilities (i.e., radiation protection, equipment operation, quality control, image acquisition, image	≥ 95 % Combined satisfactory rating of those surveys returned.	Six months post - graduation.	Program Director	YES 100 for 3/3 respondents as of 1-11-21.

	analysis, imaging procedures, patient care)?				
Action: Track data and compare trends.					
1. Of those surveys returned the past 4 years shows that 16/16 employers (100%) were satisfied with the hard technical abilities of graduates they employed (2016 = 5/5 = 100%, 2017 = 2/2 = 100%, 2018 = no data, 2019 = 6/6 = 100%).					
Category II: Clinical Performance.					
Goal II: Students will be clinically competent.					
Outcome	Tool	Benchmark	Time Frame	Responsibility	Result
1. Students will demonstrate they have the clinical skills of a radiographer.	A. All competency exams. (Direct)	A. 95% of the total comps will be passed on the first attempt.	A. 3 rd , 4 th , and 5 th semesters.	A. Clinical Coordinator	A. Yes 562 / 574 = 98.6%
Action: Track data and compare trends starting next year with Class of 2021.					
	B. All venipuncture lab competency evaluations. (Direct)	B. 100% of students will pass their venipuncture lab competency evaluation.	B. 5 th semester	B. RADT 165 Instructor	B. YES
Action: Track data and compare trends starting next year with Class of 2021.					
	C. Trauma Case Study Part 2: #1 How well you feel your clinical experience has prepared you for trauma radiography? (Indirect)	C. Each student will have a score ≥ 3 .	C. 5 th semester	C. Clinical Coordinator	C. No 2.7
Action: Track data and compare trends starting next year with Class of 2021.					
1. Although the benchmark of ≥ 3 score for 100% of students was not met, the score was close at 2.7.					
2. This score may have been bolstered by students already completing Bontrager's Unit 15: Trauma, Mobile, and Surgical Radiography in the 4 th semester.					
3. RADT 151 (2 nd Spring) and RADT 162 (2 nd Fall) instructors continued reinforcement of basic trauma, mobile, and surgical positioning concepts during the teaching of routine entry level radiographic procedures.					
4. A clinical affiliation with a trauma one facility in SLC (Intermountain Medical Center) was established when due to covid19 it had to be cancelled.					
5. The SLC affiliation would only be available to very few students as they would need to relocate which would have been difficult for most students.					

6. There is a need to establish a focused trauma rotation at SLMV with documentation of all trauma exams during high trauma probability periods such as evenings and weekends – for all students.					
2. Students will demonstrate they have the employability skills of a radiography.	A. All Grade Determination Form B's. (Direct)	A. Each student will have a composite score ≥ 3 .	A. 3 rd and 5 th semesters.	A. Clinical Coordinator	A. No One student had a composite score of 2.7 in 5 th semester.
Action: Track data and compare trends starting next year with the class of 2021. Actual average composite score was 3.76 (but one student scored 2.7).					
	B. Anonymous Student Clinical Education Self-Assessment Survey. (Indirect)	B. Each student will have a composite score ≥ 3 .	B. 3 rd , 4 th , 5 th semesters.	B. Program Director	A. Yes 3.17
Action: Track data and compare trends starting next year with the Class of 2021.					
Category III: Problem Solving and Critical Thinking					
Goal III: Students will possess problem solving and critical thinking skills.					
Outcome	Tool	Benchmark	Time Frame	Responsibility	Result
1. Students will demonstrate critical problem-solving skills performing a variety of challenging radiography procedures.	A. Grade Determination Form B # 3: The student thinks and acts creatively.	A. Each student will have a score ≥ 3 .	A. 3 rd and 5 th semesters.	A. Clinical Coordinator	A. Yes 3.68
Action: Track data and compare trends starting next year with the Class of 2021.					
	B. CSI RT Program Evaluation of Clinical Site # 1 (Gave student opportunities to participate in various radiographic procedures) and # 23 (An adequate number of procedures).	B-1. Each student will have a score ≥ 3 . B-2. Each student will have a score ≥ 3 .	B-1. 3 rd and 5 th semesters. B-2. 3 rd and 5 th semesters.	B-1. Clinical Coordinator B-2. Clinical Coordinator	B-1. Yes 4.8 for #1. B-2. Yes 4.7 for #23.

		#1: Opportunities to Participate					#23: Adequate Number of Procedures				
	5	4	3	2	1		5	4	3	2	1
SLMV	12	2					11	2	1		
IOC	10		2				11		1		
MP2	9	2					9		1	1	
NC	3						3				
SLE	2	1					2	1			
M	3						3				
C	3						2		1		
SLWR	5						4	1			
SLJ	3						1	1	1		
Total	50	+5	+2	=57			45	+5	+5	+1	=56
	x5	x4	x3				x5	x4	x3	x2	
	250	+20	+6	=276			225	+20	+15	=2	=262
			÷52	÷57	= 4.8						÷56 = 4.68

Action: Track data and compare trends.

1. The data points between last year, 2019, (4.8 and 4.75) were similar to this year, 2020, (4.8 and 4.68) suggesting the trend of continued availability of exams and opportunities for students to participate.
2. Two students attending MP2, felt they did not have an adequate number of procedures which limits their opportunities for participation.
3. B-1, B-2 Average of $4.8 + 4.68 / 2 = 4.74$

2. Students will demonstrate basic analog and digital image analysis.	A. RADT 151 Radiographic Procedures Lab Assessment, #1-3 (Direct)	A. Each student will have a composite score ≥ 3 .	A. 2 nd semester.	A. RADT 151 Instructor.	A. Yes 11 out of 11 students scored ≥ 3 with a composite score of 3.6.
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Action: Track data and compare trends starting next year with the Class of 2021.

	B. Student Image Analysis Self-Assessment Survey, #1-5. (Indirect)	B. Each student will have a composite score ≥ 3 .	B. 5 th semester.	B. Clinical Coordinator	B. Yes 11 out of 11 students scored ≥ 3 for a composite score of 3.2.
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Action: Track data and compare trends starting next year with the Class of 2021.

Category IV: Communication Skills
Goal IV: Students will communicate and interact effectively with patients and staff.

Outcomes	Tools	Benchmark	Time Frame	Responsibility	Result
1. Students will provide appropriate patient instructions that prevent repeats due to motion prior to making an x-ray exposure.	A. All Unsatisfactory Competency Evaluation Task # 14: Patient Instructions. (Direct)	A. ≥ 95% combined satisfactory rating.	A. 3 rd - 4 th and 5 th semesters.	A. Clinical Coordinator	A. Yes 100% (8 out of 8 total unsatisfactory ratings were not due to unsatisfactory patient instruction, 8/8 = 100%).
Action: Track data and compare trends starting next year with the Class of 2021.					
	B. Anonymous Repeat Images Due to Patient Miscommunication Questionnaire # 1: How many repeated images due to patient instructions communications error. (Indirect)	B. ≤ 7.5% of all estimated repeated images due to communications errors.	B. 3 rd , 4 th , and 5 th semesters.	B. Clinical Coordinator	B. No 16.5 %
Action: Track data and compare trends starting with the Class of 2021.					
<p>1. The method of calculating the percent of repeated images due to communications errors was as follows:</p> <p>A. Estimate total number of images per student = 2320 images X 11 students = 26,074 estimated total number of images obtained during the 3rd, 4th, and 5th semesters for RADT 180, 181, 182 Clinical Education I, II, III.</p> <p>B. Estimate total number of repeated images during the 3rd, 4th, and 5th semesters = 1488.</p> <p>C. Estimate total number of repeated images due to communication errors = 246.</p> <p>D. Estimate repeated images NOT due to communications errors = 1488 - 246 = 1242. (6) Calculate estimated percent of repeated images due to communication errors = 246 ÷ 1488 = 16.5%.</p> <p>E. A line was added on the weekly exam log to track repeats due to miscommunication on each sheet.</p>					

2. An iron clad method for collecting accurate data from all students to measure repeats due to communication errors is needed as several students miscalculated their repeat rate data.																													
2. Students will be effective critical communicators in the clinical setting.	A. Clinical Instructor Student Effective Communication Survey – of surveys returned. (Direct)	A. 100 % of students will have a composite score ≥ 3 .	A. 3 rd and 5 th semesters.	A. Clinical Coordinator	A. Yes 3.76 (of 11 surveys returned)																								
		<table border="1"> <thead> <tr> <th>Student</th> <th>Composite Score (and ≤ 4 Scores)</th> </tr> </thead> <tbody> <tr><td>1</td><td>3.14 (1,2,3,4,6,7,8,9,10,12,13,14) 3rd Sem.</td></tr> <tr><td>2</td><td>3.64 (1,2,3,8,10) 5th Sem.</td></tr> <tr><td>3</td><td>3.92 (10) 3rd Sem. 3.92 (10) 5th Sem.</td></tr> <tr><td>4</td><td>4 – 5th Sem.</td></tr> <tr><td>5</td><td>4 – 5th Sem.</td></tr> <tr><td>6</td><td>4 – 5th Sem.</td></tr> <tr><td>7</td><td>4 – 5th Sem.</td></tr> <tr><td>8</td><td>3.78 (3,6,9) 3rd Sem. 3 (1,2,3,4,5,6,7,8,9,10,11,12,13,14) 5th Sem.</td></tr> <tr><td>9</td><td>4 – 5th Sem.</td></tr> <tr><td>10</td><td></td></tr> <tr><td>11</td><td></td></tr> </tbody> </table>	Student	Composite Score (and ≤ 4 Scores)	1	3.14 (1,2,3,4,6,7,8,9,10,12,13,14) 3 rd Sem.	2	3.64 (1,2,3,8,10) 5 th Sem.	3	3.92 (10) 3 rd Sem. 3.92 (10) 5 th Sem.	4	4 – 5 th Sem.	5	4 – 5 th Sem.	6	4 – 5 th Sem.	7	4 – 5 th Sem.	8	3.78 (3,6,9) 3 rd Sem. 3 (1,2,3,4,5,6,7,8,9,10,11,12,13,14) 5 th Sem.	9	4 – 5 th Sem.	10		11		Although CIs perceived all students as communicating above the benchmark score of 3, students 1, 2, and 8 were rated lower than a score of 4 and with the most communication areas suggesting improvement needed. Student 1 and 8 showed the need for greatest need for improvement in communication.		
Student	Composite Score (and ≤ 4 Scores)																												
1	3.14 (1,2,3,4,6,7,8,9,10,12,13,14) 3 rd Sem.																												
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3	3.92 (10) 3 rd Sem. 3.92 (10) 5 th Sem.																												
4	4 – 5 th Sem.																												
5	4 – 5 th Sem.																												
6	4 – 5 th Sem.																												
7	4 – 5 th Sem.																												
8	3.78 (3,6,9) 3 rd Sem. 3 (1,2,3,4,5,6,7,8,9,10,11,12,13,14) 5 th Sem.																												
9	4 – 5 th Sem.																												
10																													
11																													
Action: Track data and compare trends starting with the Class of 2021. 1. Greater emphasis needs to be placed on collecting all available surveys from CIs.																													
	B. Anonymous Student Radiographer Effective Communication Survey. (Indirect)	B. 100 % of students will have a composite score ≥ 3 .	B. 3 rd and 5 th semesters.	B. Clinical Coordinator	B. Yes 11 out of 11 students scored ≥ 3 for a composite score of 3.56 for the group.																								
Action: Track data and compare trends starting with the Class of 2021. 1. Comparison of 2020 3 rd and 5 th semesters were identical (3.56 and 3.56 respectively) demonstrating that students more than agreed they communicated effectively. 2. Both 2019 and 2020 cohort composite scores (3.67 and 3.56 respectively) met the benchmark of ≥ 3 . 3. This indicates that both 2019 and 2020 cohorts consistently agreed they were communicating effectively in the clinical setting.																													

Category V: Professional Growth and Development
Goal V: Students and graduates will behave ethically.

Outcomes	Tools	Benchmark	Tim Frame	Responsibility	Result
1. Students will adhere to ethical standards of practice.	A. Grade Determination Form B-#5: Professional Ethical Conduct. (Direct)	A. 100 % of students will have a composite score ≥ 3 .	A. 3 rd and 5 th semesters.	A. Clinical Coordinator	A. Yes 11 out of 11 students scored ≥ 3 for a composite score of 3.74 for the group.
<p>Action: Track data and compare trends starting with the Class of 2021.</p> <p>1. Comparison of 2020, 3rd, and 5th semesters were similar (3.9 and 3.5 respectively).</p> <p>2. This validates that RTs and CIs both believe students adhered to ethical standards of practice.</p> <p>3. Both 2019 and 2020 cohort composite scores (3.95 and 3.74 respectively) met the benchmark of ≥ 3.</p> <p>4. This validates that RTs and CIs believe students from both cohorts adhered to ethical standards of practice in the clinical setting.</p>					
	B. Anonymous Student Radiographer Ethics Self-Assessment. (Indirect)	B. 100 % of students will have a composite score ≥ 3 .	B. 3 rd and 5 th semesters.	B. Clinical Coordinator	B. Yes 11 out of 11 students scored ≥ 3 for a composite score of 3.7 for the group.
<p>Action: Track data and compare trends starting with the Class of 2021.</p> <p>1. Comparison of 2020 3rd and 5th semesters were about the same (3.7 and 3.8 respectively).</p> <p>2. This validates that students believe they adhere to ethical standards of practice.</p> <p>3. Both 2019 and 2020 cohort composite scores (3.78 and 3.75, respectively) met the benchmark of ≥ 3.</p> <p>4. This validates that students from both cohorts believe they adhered to ethical standards of practice in the clinical setting.</p>					
2. Employers will be satisfied with the overall personal skills (i.e., safety, flexibility, creativity, communication,	A. CSI Rad Tech Program Class of 2020 Employer Survey # 5: Please rate this person's overall personal skills (i.e., safety, flexibility,	A. ≥ 90 % combined satisfactory rating of those surveys received.	A. 6 months after May 2019 graduation.	A. Program Director	A.

professionalism) of graduates.	creativity, communication, professionalism).				
<p>Action: Track data and compare trends starting with the Class of 2021.</p> <ol style="list-style-type: none"> 1. Surveys were developed and mailed 12-22-2020 with self-addressed stamped return envelopes to Cassia, SLMC, MMH, NCMC, SL-J, SLWR, and Idaho Falls Community Hospital. 2. Results are pending. 3. Survey Monkey was not used this year as they appear to be charging now for email data collection, which was determined to not be cost effective since only 8 survey questions were being asked. 					
	B. Anonymous RT Radiographer Scope of Practice Survey.	B. 100 % of students who respond to the survey will have a composite score ≥ 3 .	B. 6 months after graduation.	B. Program Director	B. Yes 11/11 3.6
<p>Action: Track data and compare trends starting with the Class of 2021.</p> <ol style="list-style-type: none"> 1. This anonymous 19 question survey was given to the Class of 2020 within a week of graduating and passing their ARRT exams. 2. This was done because of the poor rate of return received from the Class of 2019 in which there were only two responses – both disjointed, too. 3. Further rationale for this was the need to acquire a larger survey response to increase validity of data on how well our graduates follow the ASRT Standards of Practice. 4. Since 10 out of 11 members of the Class of 2020 passed their ARRT exam on the first attempt shortly after graduation, greater confidence in the validity of the results is being assumed. 					

Program Effectiveness Measures Category I: Graduate Performance

Criteria of Acceptance

Percentages and Scaled Scores (80 to 100)	Form B and Lab Assessment Ratings (1 to 4)	Clinical Site Ratings (1 to 5)
90 to 100 = Benchmark Met and Excellent 85 to 89.9 = Benchmark Met and Above Average 80 to 84.9 = Benchmark Met and Average ≤ 79.99 = Benchmark Not Met and Below Average	3.5 to 3.99 = Benchmark Met and Excellent 3.0 to 3.49 = Benchmark Met and Above Average 2.5 to 2.99 = Benchmark Met and Average ≤ 2.49 = Benchmark Not Met and Below Average	4.5 to 5 = Benchmark Met and Excellent 4.0 to 4.49 = Benchmark Met and Exceptional 3.5 to 3.99 = Benchmark Met and Above Average 3.0 to 3.49 = Benchmark Met and Average ≤ 2.99 = Benchmark Not Met and Below Average
Category I: Graduate Performance	(1.1.1.) Benchmark for program completion rates at ≥ 80% was met at 91.6%. (1.1.2.A.) Benchmark for ARRT annual first-time pass rate at ≥ 80% was met at 90.9%. (1.1.2.B.) Benchmark for ARRT 5-year first time pass rate at ≥ 80% was met at 94.7%. (1.1.2.C.) Benchmark for ARRT annual program mean scaled score at ≥ 80 was met at 85. (1.1.2.D.) Benchmark for ARRT 5-year program mean scaled score at ≥ 80 was met at 85.8. (1.1.3.) Benchmark for graduate employment at ≥ 80 % was met at 100%. (1.1.4.) Benchmark for graduate satisfaction of training at ≥ 80% was met at 100%. (1.1.5.) Benchmark for employer satisfaction of graduate technical skills at ≥ 95 % was met at 10 %.	
Amendments to Category I: Graduate Performance (Program Effectiveness)	None	
Summary	Eight out of 8 benchmarks representing 8 outcomes for Category I: Graduate Performance (Program Effectiveness) were met at 100%. (1.1.1.) Program completion (attrition) rate is excellent at 91.6% (8.4%). (1.1.2.A.) Annual first-time pass rate is excellent at 90.9%. (1.1.2.B.) 5-year first time pass rate is excellent at 94.7%. (1.1.2.C.) Annual program mean scale score is above average at 85. (1.1.2.D.) 5-year program mean scaled score is above average at 85.8. (1.1.3.) Graduate employment rate is excellent at 100%. (1.1.4.) Graduate training satisfaction rate is excellent at 100%. (1.1.5.) The employer satisfaction rate of graduate technical skills is 100%.	

Student Learning Outcomes (Categories II – V)	
Category II: Clinical Performance	(2.2.1.A) Benchmark for all students demonstrating clinical radiography skills at $\geq 95\%$ was met at 98.6%. (2.2.1.B.) Benchmark for all students demonstrating clinical venipuncture skills at 100 % was met at 100 % (2.2.1.C.) Benchmark for students rating themselves as prepared for trauma radiography at ≥ 3 was NOT met at 2.7. (2.2.2.A.) Benchmark for CIs rating students as demonstrating radiographer employability skills at ≥ 3 was not met because one student score 2.7 (and average score was 3.76). (2.2.2.B.) Benchmark for students rating themselves as demonstrating radiographer employability skills at ≥ 3 was met at 3.
Amendments to Category II: Clinical Performance	Yes. (2.2.1.C.) Change criteria of benchmark acceptance from ≥ 3 to ≥ 2.5 , which is the middle of the rating scale of 1 to 4.
Summary	Four out of 5 benchmarks reflecting 2 outcomes for Category II: Clinical Performance were met at 80%. (2.2.1.A.) Student clinical radiography skills are excellent at 98.6%. (2.2.1.B.) Student clinical venipuncture skills are excellent at 100%. (2.2.1.C.) Students felt preparation for trauma radiography was below average at 2.7. (2.2.2.A.) CIs feel students have excellent radiographer employability skills with an average score of 3.76 (although one student score 2.7). (2.2.2.B.) Students feel they have above average radiographer employability skills at 3.0.
Category III: Problem Solving and Critical Thinking	(3.3.1.A.) Benchmark for students demonstrating creative problem-solving and critical thinking at ≥ 3 was met at 3.68 (3.3.1.B.1.) Benchmark for students to demonstrate critical problem-solving skills with sufficient opportunities to participate in various radiographic procedures at ≥ 3 was met at 4.8. (3.3.1.B.2.) Benchmark for students to demonstrate critical problem-solving skills with an adequate number of procedures at ≥ 3 was met at 4.7. (3.3.2.A.) Benchmark for students demonstrating basic analog and digital image analysis during RADT 151 lab assessment at ≥ 3 was met at 3.6. (3.3.2.B.) Benchmark for student self-assessment of basic analog and digital image analysis at ≥ 3 was met at 3.2.
Amendments to Category III: Problem Solving and Critical Thinking	None
Summary	Five out of 5 benchmarks representing 2 outcomes for Category III: Problem Solving and Critical Thinking were met at 100%. (3.3.1.A.) Students are demonstrating excellent critical problem-solving skills by thinking and acting creatively at 3.68. (3.3.1.B.1) Students are demonstrating excellent critical problem-solving skills with sufficient opportunities to participate in various radiographic procedures at 4.8.

	<p>(3.3.1.B.2.) Students are demonstrating excellent critical problem-solving skills with an adequate number of procedures at 4.7.</p> <p>(3.3.2.A.) Students are demonstrating in the RADT 151 lab assessment above average basic analog and digital image analysis at 3.6.</p> <p>(3.3.2.B.) Students have an above average self-assessment of their analog and digital image analysis knowledge and skills at 3.2.</p>
Category IV: Communication Skills	<p>(4.4.1.A.) Benchmark for students providing patient instructions that prevented repeats due to motion prior to making x-ray exposures at $\geq 95\%$ was met at 100%.</p> <p>(4.4.1.B.) Benchmark for student self-assessment on how many repeats were due to miscommunication error at $\leq 7.5\%$ was not met at 16.5%.</p> <p>(4.4.2.A.) Benchmark for students being perceived by CIs as effective communicators in the clinical setting at ≥ 3 was met at 3.76.</p> <p>(4.4.2.B.) Benchmark for students self-assessment of their communication effectiveness in the clinical setting at ≥ 3 was met at 3.56.</p>
Amendments to Category IV: Communication Skills	<p>Yes.</p> <p>(4.4.1.B.) Estimation of a more realistic benchmark and a procedure for the collection of data on student self-assessment of repeats due to miscommunication errors needs significant revision to ensure validity and reliability of data collected and treated -- beginning with the Class of 2021.</p>
Summary	<p>Three out of 4 benchmarks representing 2 outcomes for Category IV: Communication Skills were met at 75%:</p> <p>(4.4.1.A.) Students are providing excellent patient instructions to prevent repeats due to motion prior to making x-ray exposures at 100%.</p> <p>(4.4.1.B.) Students self-assessment of the number of repeats due to communication errors is at extensively high at 16.5%.</p> <p>(4.4.2.A.) Student are being perceived by CIs as excellent effective communicators in the clinical setting at 3.76.</p> <p>(4.4.2.B.) Students perceive themselves as excellent effective communicators in the clinical setting at 3.56.</p> <p>Note: There is a problem with data collection and treatment here.</p>
Category V: Professional Growth and Development	<p>(5.5.1.A.) Benchmark for students perceived as adhering to ethical standards of conduct by CIs in the clinical setting at ≥ 3 was met at 3.7.</p> <p>(5.5.1.B.) Benchmark for students self-assessments of adhering to ethical standards of conduct at ≥ 3 was met at 3.7.</p> <p>(5.5.2.A.) Benchmark of employers being satisfied with graduate personal skills at $\geq 90\%$ was met at ____%. TBD</p> <p>(5.5.2.B.) Benchmark of graduates as RTs following the radiography professions scope of practice standards at ≥ 3 was met at 3.6.</p>
Amendments to Category V: Professional Growth and Development	None
Summary	<p>Four out of 4 benchmarks representing 2 outcomes for Category 5: Professional Growth and Development were met at 100%.</p> <p>(5.5.1.A.) Students are being perceived as adhering excellently to ethical standards of conduct by CIs in the clinical setting at 3.7.</p>

	<p>(5.5.1.B.) Students perceive themselves as excellently adhering to the professions ethical standards of conduct in the clinical setting at 3.7.</p> <p>(5.5.2.A.) Employers are excellently satisfied with the personal skills of program graduates at _____%. TBD</p> <p>(5.5.2.B.) Graduate RT's are excellently following the professions radiography scope of practice standards in the clinical setting at 3.6.</p>
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Assessment Plan Review

<p>Summary</p>	<ol style="list-style-type: none"> 1. Twenty-four out of 26 benchmarks representing 16 measured outcomes across 5 categories and 5 goals were met at 92.3%, which is excellent. 2. There were 19 benchmarks the met an "Excellent" criteria of acceptance. <ul style="list-style-type: none"> 1.1.1 1.1.2.A. 1.1.2.B. 1.1.3. 1.1.4 1.1.5 2.2.1.A. 2.2.1.B. 3.3.1.A. 3.3.1.B.1. 3.3.1.B.2. 4.4.1.A. 4.4.2.A. 4.4.2.B. 5.5.1.A. 5.5.1.B. 5.5.2.A. 5.5.2.B. 3. There were 5 benchmarks that met an "Above Average" criteria of acceptance. <ul style="list-style-type: none"> 1.1.2.C. 1.1.2.D. 2.2.2.B. 3.3.2.A. 3.3.2.B. 4. There were 3 benchmarks that did "Not Meet" a satisfactory criteria of acceptance. <ul style="list-style-type: none"> 2.2.2.A.
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	<p>2.2.1.C. 4.4.1.B. 5. Conclusion: The JRCERT accredited CSI Associate of Applied Science Degree Radiologic Technology Program in Radiography is an above average to excellent program.</p>
Mission Statement	<p>No recommended changes were made to the program mission statement: The mission of the College of Southern Idaho's Associate of Applied Science Radiologic Technology Program in Radiography is to prepare students to become graduates for entry level employment as ARRT Registered Technologists in Radiography.</p>
Goals	<p>No recommended changes were made to the program goals that are established by the JRCERT to achieve the mission:</p> <ul style="list-style-type: none"> (1) Measuring program effectiveness on an ongoing basis. (2) Producing clinically competent students. (3) Producing students with problem solving and critical thinking skills. (4) Producing students who can effectively communicate and interact with patients and staff. (5) Producing students and graduates who behave ethically.
Recommended changes to the assessment plan.	<p>Yes</p> <p>1. Establish a Criteria of Acceptance for tools used in the program's outcome assessment plan so that the program's individual and collective assessments can be comparatively qualified.</p> <p>Criteria of Acceptance</p> <p>Percentages and Scaled Scores (80 to 100)</p> <p>90 to 100 = Benchmark Met and Excellent 85 to 89.9 = Benchmark Met and Above Average 80 to 84.9 = Benchmark Met and Average ≤ 79.99 = Benchmark Not Met and Below Average</p> <p>From B and Lab Assessment Ratings (1 to 4)</p> <p>3.5 to 3.99 = Benchmark Met and Excellent 3.0 to 3.49 = Benchmark Met and Above Average 2.5 to 2.99 = Benchmark Met and Average ≤ 2.49 = Benchmark Not Met and Below Average</p> <p>Clinical Site Ratings (1 to 5)</p> <p>4.5 to 5 = Benchmark Met and Excellent 4.0 to 4.49 = Benchmark Met and Exceptional 3.5 to 3.99 = Benchmark Met and Above Average 3.0 to 3.49 = Benchmark Met and Average ≤ 2.99 = Benchmark Not Met and Below Average</p>

	<p>2. (2.2.1.C.) Change criteria of benchmark acceptance from ≥ 3 to ≥ 2.5, which is the middle of the rating scale of 1 to 4.</p> <p>3. (4.4.1.B.) Estimate of a more realistic benchmark and a procedure for the collection of data on student self-assessment of repeats due to miscommunication errors needs significant revision to ensure validity and reliability of data collected and treated -- beginning with the Class of 2021.</p> <p>4. Reword program goals that are used to achieve the program's mission for improved communication:</p> <ul style="list-style-type: none"> (1) Program effectiveness will be measured on an ongoing basis. (2) Students will be clinically competent. (3) Students will solve problems creatively and think critically in the clinical setting. (4) Students will communicate and interact with patients and staff effectively in the clinical setting.. (5) Students will conduct themselves professionally and ethically in the clinical setting.
Final Thoughts	<ul style="list-style-type: none"> 1. The Class of 2021 Outcome Assessment Plan is to be assessed at the next annual program advisory committee meeting during February 2022. 2. The CSI Radiologic Technology Program will undergo its JRCERT continuing accreditation (self-study and site visit) during 2022.

Radiologic Technology Program Advisory Committee Meeting Minutes for the Review and Approval of the Class of 2020 Outcome Assessment Plan

March 3, 2021
HSHS Room 178
10:00 am – 12 noon

Present:	O. Gary Lauer	CSI RADT Program Director	glauer@csi.edu	
	Tamara Janak	CSI RADT Clinical Education Coordinator	tjanak@csi.edu	208-732-6716
	RoseAnna Holliday	CSI HSHS Department Chair	rholliday@csi.edu	208-732-6737
	Rene Rambur	CSI HSHS Student Advisor	rrambur@csi.edu	208-732-6730
	Pat Weber	CSI Center for New Directions	pweber@csi.edu	208-732-6688
	Thomas Bandolin	CSI Career Readiness Facilitator	tbandolin@csi.edu	208-732-6303
	Rae Jean Larsen	CSI Office Specialist	rlarsen@csi.edu	208-732-6701
	Kandis Pedersen	SLMV Imaging Director	pedersek@slhs.org	
	Ryan Mumford	SLMV CT Supervisor	ryanm@slhs.org	208-814-1520
	Lindsay Smith	CRMC Director of Diagnostic Imaging	Lindsay.Smith@imail.org	
	Jake Kerley	Account Executive, Turn Key Medical	jkerley@trun-keymedical.com	
	Alexi Hagen	CSI RADT Sophomore Student	ajhagen@csi.edu	
Wesley Lafleur	CSI RADT Freshman Student	WLaFleur@csi.edu		
Absent:	Jayson Lloyd	CSI HSHS Instructional Dean	jlloyd@csi.edu	208-732-6547
	Justin Viperman	CSI Grant Writer	jviperman@csi.edu	208-732-6258
	Michelle Higley	Cassia Medical Center Clinical Instructor	michelle.higley@imail.org	
	Stacey Mitchell	Product Specialist, Turn Key Medical	smitchell@turn-keymedical.com	
	Barry Pate	CTE Instructional Dean	bpate@csi.edu	208-732-6415
	Rochelle Anderson	SLMV Manager of Diagnostic Imaging	andersro@slhs.org	208-814-1521

Introduction and Purpose of Meeting:	Gary Lauer called the meeting to order at 10 am. Members were introduced and the agenda was explained.
Review and Approval of Minutes:	The minutes from the February 19, 2020 Program Advisory Committee Meeting were reviewed and discussed. A motion to approve the previous minutes by Lindsay Smith, seconded by Thomas Bandolin. All approved.
Approval of Class of 2019 Outcome Assessment Plan:	<p>The Outcome Assessment Plan for the Class of 2020 was discussed in detail. The plan was sent to the committee members through an email attachment prior to the meeting for their review. Note: This is a revised CSI Radiologic Technology Program Outcome assessment plan for the Class of 2020 based on Gary and Tamara attended JRCERT outcome assessment seminars in Chicago IL, in 2018 and 2019, that improved alignment with JRCERT accreditation outcome assessment standards requiring the creation and use of direct and indirect outcome measurement tools along with clarifications in the wording of several benchmarks. As a consequence, this outcome assessment pan represents the first year that data will be tracked and trends compared for several outcomes identified in Categories 2, 3, 4, and 5, starting next year with the Class of 2021.</p> <p>Topics of discussion included:</p> <p>Category 1: Graduate Performance. All benchmarks were met. Eleven students passed the ARRT Registry on the first attempt, one did not with a score of 78. The class scored a composite of 85 compared to the Idaho mean scale score of 85.2. Motion to approve by RoseAnna Holliday, seconded by Lindsay Smith.</p> <p>Category 2: Clinical Performance. Five tools were identified for Category 2. Outcome 2.2.1C: Trauma Case Study Part 2 Question #1 was not met. A “trauma radiation rotation” on Friday evenings and weekends has been started at St. Luke’s Magic Valley. An optional rotation at Intermountain Medical Center (Trauma I) in Salt Lake City was cancelled for this group due to COVID-19. A motion to approve by Thomas Bandolin, seconded by RoseAnna Holliday.</p> <p>Category 3: Problem Solving and Critical Thinking. Four tools were measured. All benchmarks were met. Comparing data points between 2019 and 2020 in 2.2.1B shows students continue to experience plenty of opportunities to participate in exams and there are an adequate number of procedures at each facility. Motion to approve by Kandis Pedersen, seconded by Ryan Mumford.</p>

Category 4: Communication Skills. Four tools were measured. 4.4.1B Anonymous Repeat Images Due to Patient Miscommunication was not met. Students estimated their repeats due to patient miscommunication and may have overestimated the number. A line on the clinical education Weekly Exam Log was added to track repeats due to miscommunication to provide more accurate data. Motion to approve by Lindsay Smith, seconded by Thomas Bandolin.

Category 5: Professional Growth and Development. Four tools were used to evaluate the outcomes. All were met. The anonymous RT Radiographer Scope of Practice survey was given to graduates within a week of graduation to increase participation. All students exceeded the benchmark of ≥ 3 , indicating they all follow the ASRT Standards of Practice. Employer surveys were mailed this year instead of using Survey Monkey. Return was still limited with only 3 surveys sent back. Kandis Pedersen suggested using email to send surveys with completion dates in Subject heading and sending reminders to those who have not returned the survey. Motion to approve by RoseAnna Holliday, seconded by Kandis Pedersen.

The outcome assessment plan for 2020 is a continuance of the revision made for the Class of 2019 to include indirect along with direct tools to evaluate student performance. Benchmarks were changed to state 100% of students would perform at the level specified, not just an average over all students.

A motion to approve the Class of 2020 Outcome Assessment Plan by Ryan Mumford, seconded by Rene Rambur. All approved.

Equipment Upgrades:

Turn-Key Medical upgraded the CR / film-screen energized x-ray room to a \$50,000 state-of-the-industry CareStream DR room. Students have access to the Deviation Index (DI), Target Exposure Index (TEI), and their Exposure Index (EI) on each image providing immediate feedback to measure exposure to the image receptor. Students can use this information to recalculate their exposure technique to match the TEI. CSI now has the equipment students are expected to work with in their clinical rotations.

- Travel:** Tamara travelled to Intermountain Medical Center in Salt Lake City in March to establish an optional clinical education rotation for 5th semester students to get an opportunity to be immersed into a Trauma I hospital. Unfortunately no students were able to participate in the rotation due to COVID-19 suspending clinical education beginning the middle of March. All other travel was suspended due to COVID-19.
- Clinical Instructor Workshop:** Tamara gave an update on the 2020 Clinical Instructor Workshop. The meeting was held via Zoom. The workshop focused on the need for thorough documentation of student behavior by the clinical instructor in the clinical sites. Students deserve honest feedback and the program needs the documentation to track any behaviors that may cause concern. With clinical education suspended, plans were discussed to make up missed clinical time for students once the sites were open again.
- Student Selection:** Student applications are due June 1, 2021 for the new group beginning August 2021. Interviews were held via zoom last year but hopefully we can do face-to-face interviews this year. The committee is looking for members to help with student selection interviews.
- Mammography Course Update:** The 2020 Mammography Conference was cancelled due to low registration. An agreement with Workforce Training to promote the course and manage registration has been developed. This will simplify the registration process.
- Clinical Manpower Updates:** Lindsay Smith stated Cassia Medical Center is currently fully staffed but one RT is going back to school so one position may open soon. Kandis Pedersen indicated St. Luke's Magic Valley has some openings. A few from the class of 2021 have already been hired. Idaho's population is growing so there is a large demand for RTs across the region with many opportunities available for graduating students. A new imaging center is being built in Twin Falls opening fall 2021. North Canyon Medical Center has expanded, opening a new pediatric clinic in Jerome.
- CSI Manpower Update:** Gary Lauer will be retiring as the Program Director of the Radiologic Technology Program on July 30, 2021. RoseAnna Holliday thanked Gary for his years of service to the program.

Medical Imaging Industry Update:

Jake Kerley from Turn-Key Medical gave a heartfelt thank you to all the front line workers who worked tirelessly through the pandemic. Turn-Key was busy assisting hospitals with issues caused by the pandemic. The government helped with a lot of funding. They currently do not have any open positions. Turn-Key expanded into Utah to provide sales and service for c-arms to facilities there.

Sophomore Class Updates:

Alexi Hagen from the Class of 2021 described the adversities students endured when caught in the pandemic. Face-to-face courses were suddenly moved online to zoom due to the college suspending all in person instruction. The class had a solid lab experience which they were able to convert to clinical education.

Note: Gary and Tamara are very proud of the way the Class of 2021 handled the challenges handed them due to the COVID-19 pandemic. They were in didactic and clinical courses continuously from March through December 2020 without any breaks. We never heard any complaints from them about the situation. The class has remained committed to their education, studying hard to complete their outcomes and prepare for the upcoming Registry.

Freshman Class Updates:

Wesley LaFluer from the Class of 2022 described his class's experience with an online/zoom format. Spending six hours in a day on zoom is difficult but doable. Students are excited to be in the Rad Lab for their procedures lab. Getting hands-on experience is helpful and moved them out of their comfort zone in their living room. Zoom also helped students who would have needed to commute to Twin Falls to attend class. The class is excited to start their first clinical education rotation in June.

Note: The RADT 151 lab has been divided into three sections to minimize the size of the group in the lab at one time. Only four students attend each lab. Gary takes two students and Tamara takes two students providing intensive one-on-one instruction. This has maximized lab time to build in-depth knowledge of radiographic positioning.

Other:

Kandis Pedersen said the St. Luke's system is operating at a Level 1 now. The number of COVID-19 patients has decreased dramatically since the high point last year. Approximately 40 – 50% of their employees have been vaccinated which lines up with our students also. Most of those who have chosen not to be vaccinated had COVID and are monitoring their antibodies to check for immunity.

Meeting Adjourned:

Gary Lauer thanked all attendees for attending the virtual Program Advisory Committee meeting. The meeting was adjourned at 11:46 am.