

Blackhawk Technical College

Associate Degree Radiography Program

Outcomes and Assessment
for the Class of 2021

Cohort Group 2019-2021



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BLACKHAWK TECHNICAL COLLEGE ASSOCIATE DEGREE RADIOGRAPHY PROGRAM MISSION AND GOALS

PROGRAM MISSION:

The Mission of the Blackhawk Technical College Associate Degree Radiography Program is to prepare the Student to Practice Entry-Level Diagnostic Medical Radiography.

PROGRAM GOALS:

- GOAL 1: STUDENTS WILL PERFORM COMPETENT RADIOGRAPHY
- GOAL 2: STUDENTS WILL COMMUNICATE EFFECTIVELY
- GOAL 3: STUDENTS WILL USE CRITICAL THINKING AND PROBLEM SOLVING SKILLS
- GOAL 4: STUDENTS WILL DEMONSTRATE PROFESSIONALISM

PROGRAM OUTCOMES

- OUTCOME 1: CARRYOUT THE PRODUCTION AND EVALUATION OF RADIOGRAPHIC IMAGES
- OUTCOME 2: PRACTICE RADIATION SAFETY PRINCIPLES
- OUTCOME 3: PROVIDE QUALITY PATIENT CARE
- OUTCOME 4: MODEL PROFESSIONAL AND ETHICAL BEHAVIOR CONSISTENT WITH THE A.R.R.T. CODE OF ETHICS
- OUTCOME 5: APPLY CRITICAL THINKING AND PROBLEM SOLVING SKILLS IN THE PRACTICE OF DIAGNOSTIC RADIOGRAPHY

GOAL 1: STUDENTS WILL PERFORM COMPETENT RADIOGRAPHY					
Outcomes	Measurement Tool	Benchmark	Timeframe	Responsible Party	Results
OUTCOME 1: CARRYOUT THE PRODUCTION AND EVALUATION OF RADIOGRAPHIC IMAGES	1. Clinical Competency Form/Unsuccessful Competency Form	1. All students successfully complete 80% in clinical 2 and 85% in clinical 3 & 5 competency attempts on first attempt.	1. Clinical 2, 3 & 5 End of Semester	1. All radiography faculty	<ul style="list-style-type: none"> • Semester 2: 86.1% (180/209) • Semester 3: N/A • Semester 5: 98.6 (229-435)
	2. Lab Rubric	2. All students successfully complete 75% of laboratory competency attempts on first attempt	2. End of Semester Fall Y1 & Spring Y1	2. Course instructors	<ul style="list-style-type: none"> • Fall Y1: 86.7% (13 of 15) • Spring Y1: N/A (COVID)
	3. End of Semester Image Evaluation Tests	3. All students pass image evaluation examinations	3. End of Semester Fall & Spring Y1	3. Course instructor	<ul style="list-style-type: none"> • Fall: 92.9% (13 of 14) • Spring: 100% (13 of 13)
	4. Random Lab assessment	4. All students will pass this activity with a score of 85%	4. End of Semester Fall Y1 End of Semester Fall Y2	4. Course instructor	<ul style="list-style-type: none"> • Fall: 100% (14 of 14) • Fall Y2: (COVID)
OUTCOME 3: PRACTICE RADIATION SAFETY PRINCIPLES	1. Clinical Competency Form/Unsuccessful Competency Form	1. Less than 10% of unsuccessful competency attempts due to rad. safety issues for 100% of students.	1. Clinical 2, 3 & 5 End of Semester	1. All radiography faculty	<ul style="list-style-type: none"> • Clin 2: 17.2% (5 of 29) • Clin 3: 7.14%(1 of 14*) • Clin 5: 0% (0 of 6)
	2. Clinical radiation safety policy infractions	2. 10% or less students incurring clinical infractions for radiation safety issues.	2. Clinical 2, 4 & 6 End of Semester	2. All radiography faculty	<ul style="list-style-type: none"> • Clin 2: 6.67(1 of 15) • Clin 4: 0 (0 of 13) • Clin 6: 7.69% (1 of 13)
Exhibits Supporting Goal 1:					
<ul style="list-style-type: none"> • Clinical Competency Form • Unsuccessful Competency Form • Procedures Lab Rubric • Procedures 1 & 2 End of Semester Image Evaluation Tests Information • Random Lab checkoff • Clinical Radiation Safety Infraction Information • Policy Infraction Investigation Form (as necessary) 					
See Next Page for Action Plan for Goal 1					

Action Plan: Goal 1**Outcome 1: Measurement Tool 1 Competency/Unsuccessful Competency Forms**

Unsuccessful competency rate calculated by dividing successful competency attempts by total competency attempts:

- Semester 2: 86% (180/209)
- Semester 3: N/A; Clinical Activities suspended for COVID
- Semester 5: 98.6 (229-435)

Benchmark met for semesters 2 & 5, clinical activities were suspended for clinical 3 at midterm, so there was incomplete/inadequate data.

However the shift in responsibility of completion of form from technologist to student is yielding very useful data.

- Better compliance with completion of these forms by both students and faculty
- Increased discussion and training on this topic with both Advisory and Clinical Instructor committees

Based on this information, the program will continue to track data as indicated, and re-evaluate in the future.

Outcome 1: Measurement Tool 2: Lab Rubric

The benchmark for semester 1 was not met, while this activity for the 2nd was suspended owing to COVID restrictions limiting on-campus activities. For the first semester:

- 1 of the 2 unsuccessful did not complete the semester owing to difficulties with all aspects of the program.
- The 2nd of the 2 students struggled through the program in the clinical setting, despite a wide range of remediation and extra clinical time provided. The student was ultimately unsuccessful for issues of clinical infractions.

Based on this information, the program will continue and expand:

- The increased use of open laboratory sessions for students to practice and be given instruction prior to evaluation
- The use of senior radiography students for these open lab sessions assuring that someone was always available for instruction and allowing for the use of both radiography labs
- The conscious increase in rigor in all lab sessions better emulating the actual clinical competency testing experience

Outcome 1: Measurement Tool 3 End of Semester Image Test

The pass rate for the fall image evaluation test was 92.85% (13 of 14), marking the first time the benchmark was not met in 4 years. This was the first year that the benchmark for passing the test was increased from 75% to 80%.

The pass rate for the spring image evaluation examination increased to 100%, compared to 72% for the class of 2020. Although the pass rate for this test traditionally decreases for reasons previously indicated, the drastic increase for this administration could be related the fact that this test was administered remotely and normal testing security were not in place.

Additionally, the spring semester examination addresses items requiring higher-level understanding as opposed to the fall examination. Based on the 2018 data, a greater emphasis on image evaluation was made for the Radiographic Procedures 2 course to address the shortcomings. The program is also starting to explore methods of recording/using lecture capture to allow students to re-watch image evaluation sessions from Procedures 1 & 2 courses.

Based on this information the program will:

- Maintain the increased benchmark for the first semester test
- Increase the use of image analysis videos recorded, and make the library of this videos available for repeat viewing.
- Return to proctored administration of IA examinations

Outcome 1 : Measurement Tool 4 Random Lab Assessment

The use of random laboratory sessions to “spot-check” students following laboratory competency evaluation has proved a useful exercise. For the class of 2021 the switch was made to using the full clinical competency form – as opposed to a specialized rubric designed for this activity – to better simulate the clinical experience as well as to increase the level of rigor for this assessment. There was 100% success for the class of 2021 for the fall 2020 Procedures 1 course, but this activity did not occur in the second semester owing on restrictions on on-campus activities.

Based on this information the program will continue this activity as described for the foreseeable future.

Outcome 3: Measurement Tool 1 Competency/Unsuccessful Competency Forms

Unsuccessful competency rate calculated by dividing successful attempts divided by total competency attempts.

The data shows that the benchmark was met for 2 of the 3 semesters evaluated. For the semester that the benchmark was not met, 3 of the 5 unsuccessful comps related to radiation safety infraction were for issues of shielding that can be attributed to students receiving very conflicting and inconsistent information regarding shielding practices, To rectify these issues the program has:

- Change in program policy related to patient shielding to reflect that students adhere to clinical affiliate policy relative to shielding
- Change instructional materials to assure teaching is consistent with AAPM and ASRT positions regarding shielding.

Based on this information, the program will continue to clarify shielding issues with students and clinical affiliates.

Outcome 3: Measurement Tool 2: Radiation Safety Policy Infractions

The benchmark was not met for all 3 semester of evaluation. The program has determined that this can be traced to the following factors:

These policies and practices are taught and reinforced throughout the curriculum. The program published posters related to JRCERT supervision requirements that are available in all clinical affiliates for staff review. The program has codified radiation safety policy and practice into the revamped clinical infraction process, and information related to shielding is consistent through the curriculum and communicated to the affiliates.

Based on this information, the program will continue to assure that policy infractions related to issues of safe radiation safety/ALARA process are monitored and addressed. The program will continue to teach good radiation safety practices and evaluate those practices in the laboratory setting with the goal of decreasing if not eliminating such infractions.

GOAL 2: STUDENTS WILL COMMUNICATE EFFECTIVELY					
Outcomes	Measurement Tool	Benchmark	Timeframe	Responsible Party	Results
OUTCOME 4: PROVIDE QUALITY PATIENT CARE	1. Affective Evaluation #8: <i>Appropriately interacts with patients (courteous, thoughtful, empathetic, displays patience and non-judgmental)</i>	1. Average score of 4 or better: 1-5 scale	1. Clinical 2, 3 & 5 End of Semester	1.All radiography faculty	<ul style="list-style-type: none"> Clinical 2: 3.55 average Clinical 3: N/A Clinical 5: 4.59 average
	2. Clinical Competency Form/Unsuccessful Competency Form	2. Less than 10% of unsuccessful competency attempts identified in Patient Preparation and History category for 100% of students	2. Clinical 2, 3 & 5 End of Semester	2.All radiography faculty	<ul style="list-style-type: none"> Clinical 2: 3.44% (1 of 29) Clinical 3: 0.0 (0 of 14): incomplete semester Clinical 5: 0.0% (0 of 6)
	3. Non-English Speaking Communication Lab	3. 100% students score in affirmative for statement “repeat instructions as needed” to assure adequate communication.	3. Radiographic Procedures 1 & 2	3. Faculty Panel	<ul style="list-style-type: none"> Procedures 1: 87% (13 of 15) Procedures 2: N/A
OUTCOME 5: MODEL PROFESSIONAL AND ETHICAL BEHAVIOR CONSISTENT WITH THE A.R.R.T. CODE OF ETHICS	1. Affective Evaluation #10: <i>Communicates effectively within the healthcare setting (communicates appropriate information, applies confidentiality, uses appropriate medical terminology)</i>	1. Average score of 3 or better: 1-5 scale	1. Clinical 2, 3 & 5 End of Semester	1. All radiography faculty	<ul style="list-style-type: none"> Clinical 2: 3.55 average Clinical 3: N/A Clinical 5: 4.49
	2. Professionalism in the Classroom Rubric Statement 3: <i>Communicates effectively within the classroom setting (communicates appropriate information, applies confidentiality, used appropriate medical terminology)</i>	2. 100% of students attain an average score of 4 or better: 1-5 scale	2. Fall Y1 & Spring Y2 (midterm)	3. Course instructors	<ul style="list-style-type: none"> Fall Y1: 73% (11 of 15) Spring Y2: 91.7% (11 of 12)
	3. Competency form	3. 100% of students successfully pass all items in “Patient Preparation and History” section of form.	4. Procedures 1	5. Course faculty	<ul style="list-style-type: none"> Procedures 1: 86.6% (13 of 15)
Exhibits Supporting Goal 2:					
<ul style="list-style-type: none"> Affective Evaluation through Dataarc (www.dataarc.ws) Clinical Competency Form Unsuccessful Competency Form Communication Lab Rubric: Non-English Speaking Scenario Professionalism in the Classroom Rubric 					
See Next Page for Action Plan for Goal 2					

Action Plan: Goal 2

Outcome 4: Measurement Tool 1: Affective Evaluation Statement # 8

Although the benchmark for Clinical 2 was not met (3.55 of 4.0), it is not unusual that students struggle with adapting to the clinical environment during the first placement. This issue was compounded by the students not participating in clinical activities the following semester owing to COVID lockdown. This problem was exacerbated as a semester of growth and development professionally was lost. Upon return for the summer semester, many issues that might have been identified and remediated still existed. Although the scores for the final evaluation reflected that the benchmark was exceeded, they were not reflective in the behaviors seen by faculty and reported anecdotally by various staff technologists. This is attributable to the general levels of stress and pressure in the imaging departments after students returned, These issue can also be, at least in part, responsible for the high level of attrition with this particular cohort.

Based on this information the program will:

- Redouble efforts to require and assess college core abilities with students exhibiting acceptable levels of professionalism in all aspects of the program.
- Continue to grow the Medical Imaging club, increasing the level of professional and community involvement of the radiography students.

Outcome 4 Measurement Tool 2 Competency/Unsuccessful Competency Forms

This benchmark continues to be met, however there continues to be issues of technologists/CPs determining clinical competency solely on the basis of image quality. The program will once again begin to provide training to technologists regarding clinical evaluation. An increased emphasis will be placed on the entire procedure performance process, especially communication skills. Again the program will continue to instruct and evaluate these skills in the classroom and laboratory settings.

Based on this information, the program will:

- Continue staff training for better use of both competency and unsuccessful competency forms through the CE approved CI/Technologist training.
- Continue to emphasize communication skills as a vital part of clinical competency assessment.

Outcome 4 Measurement Tool 3: Non-English Speaking Communication Lab

This activity was new for the class of 2021, consequently there is little data to determine its ultimate usefulness. The program will continue to use this tool and expand. Plans have been made to create communication scenarios beyond “non-English speaking’ to include scenarios such as intoxicated/combatative as well as deaf or blind patients.

Due to limited on-campus activities spring semester 2020, the planned activities did not happen.

Based on this information, the program will:

- Continue to develop and evaluate this activity as a method of evaluating communications/professionalism..

Outcome 5 Measurement Tool 1: Trauma Lab Rubric

This tool was implemented and piloted previously and has provided good data for evaluation of communication skills in the clinical setting. However, the program will be implementing a different online evaluation system following AY 2021. This new vendor allows flexibility of customizing the tool to better fit program needs. As such the program is re-designing the form to evaluate against college Core Abilities and using the ARRT code of ethics as evaluation criteria. This however lacks somewhat in addressing potential issues of unprofessionalism not related to communication such as patient privacy. The program will instead address such issues as policy infraction.

Based on this information the program will:

- As a new assessment tool for the class of 2021, the program will continue to use the trauma laboratory rubric to assess a variety of student knowledge and skills, including communication.
- The trauma lab rubric will be evaluated to be less general in nature and perform more specific assessment of communication skills.

Outcome 5 Measurement Tool 2: Professionalism in the Classroom Rubric Statement 3

As was done the previous year, this evaluation is performed as a blind assessment at mid-term by multiple faculty in a variety of classroom and laboratory activities. The assessment is a “snapshot” of a particular day in the classroom, each instructor makes a more global assessment of types of activities to complete the rubric on each student. The completed rubrics for each student are compiled and an average score is identified. This information is shared with the student as part of mid-term advising.

While the benchmark was not met for the fall semester (11 of 15), it was met for the spring semester (11 of 12). This can be attributed that the attrition seen between fall and spring semesters included students whose communication skills (as well as other affective behaviors) resulted in not progressing in the program. In 2 of the 3 cases, the students recognized that these difficulties would negative impact on their ultimate success in the program as chose to withdraw. Additionally, the program transitioned from face-to-face to remote/online instruction. Communication issues were less problematic as less communication occurred that could be evaluated.

Based on this information the program will:

- Continue to evaluate professionalism in the classroom. The college and program are currently reviewing and revising these tools.
- Maintain the aspiration benchmark of 100% for the foreseeable future.

Outcome 5 Measurement Tool 3: Random Lab evaluation tool/rubric

For this cohort, the program switched from a specialized evaluation tool to using the program clinical competency form. This form provides a more rigorous evaluation, as well as to make comparison of laboratory and clinical behaviors/competence more consistent. Special attention was paid to patient preparation and history area of the tool. The benchmark of 100% was not met, rather 13 of 15 students (86.6%) met the benchmark. In one instance, the student consistently struggled more in the laboratory setting as opposed to clinical. By her own admission she struggled more in a role-playing situation than actual patient care. In the second, the student struggled with many situations that called for critical thinking or problem solving. Despite a large amount of time devoted to remediation activities with this student, she was ultimately unsuccessful.

Based on this information the program will:

- Continue to use the random lab evaluation tool/rubric as a method of assessing professional communication skills.
- Monitor 100% as a realistic benchmark.

Trauma Lab Rubric

This tool was implemented and piloted previously and has provided good data for evaluation of communication skills in the clinical setting. However, the program will be implementing a different online evaluation system following AY 2021. This new vendor allows flexibility of customizing the tool to better fit program needs. As such the program is re-designing the form to evaluate against college Core Abilities and using the ARRT code of ethics as evaluation criteria. This however lacks somewhat in addressing potential issues of unprofessionalism not related to communication such as patient privacy. The program will instead address such issues as policy infraction.

Based on this information the program will:

- As a new assessment tool for the class of 2021, the program will continue to use the trauma laboratory rubric to assess a variety of student knowledge and skills, including communication.

The trauma lab rubric will be evaluated to be less general in nature and perform more specific assessment of communication skills.

GOAL 3: STUDENTS WILL USE CRITICAL THINKING AND PROBLEM SOLVING SKILLS

Outcomes	Measurement Tool	Benchmark	Timeframe	Responsible Party	Results
OUTCOME 6: APPLY CRITICAL THINKING AND PROBLEM SOLVING SKILLS IN THE PRACTICE OF DIAGNOSTIC RADIOGRAPHY	1. Affective Evaluation #11: <i>Efficient planning and management of time (prioritizes work, adapts to changing workload and completes assignments on time)</i>	1. Average score of 3 on 1-5 scale for Clinical 2 & 3; Average score of 4 on 1-5 scale for Clinical 5	1. Clinical 2, 3 & 5 End of Semester	1. All radiography faculty	<ul style="list-style-type: none"> Clinical 2: 3.12 average Clinical 3: N/A Clinical 5: 4.37 average
	2. Clinical Competency Form/Unsuccessful Competency Form	2. Less than 10% of unsuccessful competency attempts due to critical thinking/problem solving issues for 100% of students	2. Clinical 2, 3 & 5 End of Semester	2. All radiography faculty	<ul style="list-style-type: none"> Clinical 2: 34.5% (10 of 29) Clinical 3: 35.7% (5 of 14) Incomplete Semester Clinical 5: 10% (1 of 10)
	3. BTC Core Ability Rubric: Solve Problems Efficiently.	3. 100% of students score at a level of "acceptable" in the "develop approaches to problem" category	3. Random lab fall semester year 1 (class of 2021 only)	3. Course instructor	<ul style="list-style-type: none"> Fall Y1: 100%
OUTCOME 3: PROVIDE QUALITY PATIENT CARE	1. "Say this, not that" video activity.	1. All students positively define and analyze proper interactions in written reflection.	1. Clinical 3 (spring year 1)	1. Course instructor	<ul style="list-style-type: none"> Clinical 3: 79% (11 of 14)
	2. Communication Lab: Non-English speaking scenario	2. All students are able utilize at least 4 identified strategies for communication in order to complete simulated procedure.	2. Procedures 1 (fall Y1)	2. Course instructor	<ul style="list-style-type: none"> Procedures 1: 100% (15 of 15)
Exhibits Supporting Goal 3					
<ul style="list-style-type: none"> Affective Evaluation through Dataarc (www.dataarc.ws) Clinical Competency Form Unsuccessful Competency Form BTC Core Ability Rubric: Solve Problems Efficiently "Say This, Not That" Video Activity Information Communication Lab Rubric: Non-English Speaking Scenario 					
See Next Page for Action Plan for Goal 3					

Action Plan: Goal 3

Outcome 6 Measurement Tool 1: Affective Evaluation:

The affective behavior evaluation through Dataarc remains a very good method of collecting data related to critical thinking skills and the program will continue to rely on this data as a primary method of assessing these skills.

As was indicated in the assessment document for the class of 2020, the program recognized that the assessment of affective behaviors, primarily those related to communication and critical thinking skills needed to be better incorporated into the clinical grade. The program implemented a process whereby student receiving consistently low scores in this evaluation would complete a plan for success and strategies for improvement would be devised and monitored. Students would additionally be put in contact with student program advising and counseling staff, and if warranted referral to college access and accommodations staff would be considered.

Although the DATAARC tool has been useful for collecting this information, the program is currently evaluating a replacement product that will allow more customization of evaluation statements that will better reflect assessment items related to program outcomes, BTC core abilities, and ARRT code of ethics. This tool should be in place for use in the 2nd year for the class of 2022, and for the entirety of the class of 2023.

Based on this information the program will develop a better tool to assess specific shortcomings identified by the program related to being self-directed and timely completion of tasks.

Outcome 6 Measurement Tool 2: Clinical Comp Form and Unsuccessful Comp Form:

Although the benchmark was not met in 2 of the 3 semesters, for the reasons earlier documented, these scores are viewed as likely more accurate relative to previous years. Technologists seem to have a tendency ascribe many unsuccessful competency attempts to “positioning” when closer consideration can result in the reason reassigned to a category more closely describing the actual issue. The program will continue to monitor these scores, recognizing that students that struggle with communication and critical thinking skills in the 2nd & 3rd clinical semesters frequently require continued assistance and development entering the second year of the program. The program discusses the scores of these evaluations with all students each semester at mid-term advising, and more aggressive measures taken when a pattern of low scores is noted.

Based on this information the program will continue to assess these skills and work with students showing difficulty. Before changing the benchmark because of it consistently not being met, the program will redouble its efforts to remediate those students not passing laboratory and/or clinical competency for issues related to critical thinking and communication.

Outcome 6 Measurement Tool 3: BTC Core Ability Rubric: Solve Problems Efficiently.

This activity normally occurs in the spring semester, but as the college was in lockdown for most of that semester, this activity did not occur. Fortunately, a similar activity was performed in the fall semester that is not normally used as part of the program assessment as it is felt that the activity in the second procedures course, after the students have completed a full semester of clinical would yield more meaningful data. But rather than perform no assessment at all, the fall semester data – having been collected and compiled – is used for the class of 2021, even if the critical thinking skills will not be as fully developed if the first clinical semester:

Only 50% of the students met the “acceptable” standard for this assessment, validating the program’s belief that this activity should not be performed before the Radiographic Procedures 2 course in the spring semester after students have spent a semester performing clinical radiography.

Based on this information the program will return to performing this assessment in the spring semester of the first year and continue the process of a second assessment in the spring semester of the second year. As this process is still relatively new, review of the appropriateness of benchmarks will not be performed until more data – especially of the 2nd year students – is collected.

Outcome 3 Measurement Tool 1: Video Exercise:

This activity was used for the first time with the class of 2021. As students were performing limited clinical activities, educational opportunities that allowed students to reflect on a video demonstrating good and bad practices as they prepared to increase their own patient interactions was viewed as an acceptable substitute. For those not meeting the benchmark, the written reflections demonstrated a negative or somewhat cynical attitude towards the information presented in the video. As students returned to clinical activities, they encountered an environment of very stressed, frustrated, and exhausted technical staff that only exacerbated these attitudes in the students. Program faculty recognized that more constant discussion and debriefing with students was necessary to minimally allow students to voice frustrations in an acceptable forum.

Based on this information the program will continue to use this activity. Although this was not used in clinical 3 for the class of 2022, the program will look at having the students perform this activity prior to graduation.

Outcome 2 Measurement Tool 2 Communication Lab: Non-English speaking scenario:

This activity was performed for the first time with the class of 2021 as a result of feedback from advisory committee. It was noted that the program should incorporate activities whereby students must demonstrate the ability to communicate with patients with any number of communication barriers; non-English speaking, intoxicated, deaf/hard of hearing were some of the suggestions. The program decided to use the non-English speaking scenario for the class of 2021, and rotate through different scenarios for subsequent years. The benchmark was met, as students demonstrated the ability to maintain minimal communication using a variety of strategies; gestures, repeat instructions, demonstration etc.

Based on this information, the program will continue to utilize this activity, rotating through a variety of scenarios as suggested by program advisory committee

GOAL 4: STUDENTS WILL DEMONSTRATE PROFESSIONALISM					
Outcomes	Measurement Tool	Benchmark	Timeframe	Responsible Party	Results
OUTCOME 4: PROVIDE QUALITY PATIENT CARE	1. DATAARC Affective Behavior Evaluation Tool; used in its entirety.	1. All students will meet and maintain an score of 3 in all categories	1. Mid-Term and End of semester	1. Faculty assigned to specific clinical course	<ul style="list-style-type: none"> Clinical 2: 80% (12 of 15) Clinical 3: N/A Clinical 5: 92% (11 of 12)
	2. Medical Imaging Club participation	2. 100% membership and participation in all required club activities.	2. All semesters enrolled in the program	2. Club advisor and Medical Imaging Club President (student)	<ul style="list-style-type: none"> Year 1: 100% Year 2: 100%
OUTCOME 5: MODEL PROFESSIONAL AND ETHICAL BEHAVIOR CONSISTENT WITH THE A.R.R.T. CODE OF ETHICS	1. Affective Evaluation #1: <i>Professional appearance (cleanliness, grooming and proper attire)</i>	1. Average score of 3 on 1-5 scale	1. Clinical 2, 3 & 5 End of Semester	1. All radiography faculty	<ul style="list-style-type: none"> Clinical 2: 4.41 average Clinical 3: N/A Clinical 5: 4.88 average
	2. Affective Evaluation #9: <i>Conducts himself/herself in an ethical and professional manner (displays integrity, sincere and applies discretion.</i>	2. Average score of 3 on 1-5 scale	2. Clinical 2, 3 & 5 End of Semester	2. All radiography faculty	<ul style="list-style-type: none"> Clinical 2: 3.6 average Clinical 3: N/A Clinical 5: 4.55 average
	3. Professionalism in the Classroom Rubric	3. All students score of 75% of possible (19 of 25)	3. Mid-term Fall & Spring Y1 & 2	3. All radiography faculty	<ul style="list-style-type: none"> Fall Y1: 73% (11 of 15) Spring Y1: 79% (11 of 14) Fall Y2: 100% (12 of 12) Spring Y2: 100% (12 of 12)
Exhibits Supporting Goal 4:					
<ul style="list-style-type: none"> Affective Evaluation through Dataarc (www.dataarc.ws) Medical Imaging Club Information BTC Core Ability Rubric: Professional in the Classroom 					
See Next Page for Action Plan for Goal 4					

Action Plan: Goal 4

Outcome 4 Measurement Tool 1: DATAARC Affective Behavior Evaluation Tool; used in its entirety.

The program continues to use of the DATAARC Affective Behavior evaluation in its entirety to evaluate professionalism. As a benchmark of 3 or better remains appropriate to track issues and address with students as part of formal or informal counseling sessions. The program continues to only address these scores in clinical 2 at the time of mid-term counseling. Only in the instances of a pattern of low scores (end of semester or subsequent semester) would result in more aggressive strategies – probation, plan for success, referral to counselor – being utilized. Additionally, the program has experienced a relatively high rate of turnover in those CI positions. The program does extensive training for individuals new to this role but some amount of inconsistency would be expected,

The benchmark for clinical 2 was not met. This was in part to a relatively new CI not having an understanding of a specific issue of physical illness/capabilities resulting in students evaluated negatively for dependability/reliability. In another instance students that struggled mightily with interpersonal/communication skills, and were ultimately unsuccessful. The use of this form became very useful to document issues and served as the basis for discussion in subsequent advising sessions. This assessment was not performed for clinical 3 owing to COVID lockdown for clinical activities. In clinical 5, the only student not reaching the benchmark was evaluated lower for reliability owing to attendance issues which were attributable to COVID.

Based on this information the program will leave current benchmarks in place, knowing that it will rarely be met in the first year. The program believes that issues of professionalism are at least aspirational.

Outcome 4 Measurement Tool 2: Medical Imaging Club participation

The BTC Medical Imaging Club is housed under the umbrella of the Student Government Association. The club receives funding for attendance at the WSRT/WAERT student educational symposium (which was unfortunately cancelled spring 2020, and held virtually in 2021). The club purchased ASRT student membership for all members, which proved invaluable during COVID lockdown. While these monetary benefits allow for better access to these professional activities, the primary goal of the club is to foster a sense of professional and community involvement in its members. During AY 2020-2021 radiography students were less able to perform the number of college and community outreach activities owing to COVID restrictions although the Beloit community “trunk or treat” was held with club members participating. BTC had the winter carnival during the first year of the cohort, but was cancelled for the senior year, as was the college awards banquet. The spring clean-up at an area historic Site (Beckman Mill) continued.

Based on this information the Medical Imaging club will continue to foster professionalism as well as increase the level of college and community involvement by students of the BTC Radiography program. Moving forward, the program will continue to assess club involvement, but will likely use data to evaluate a different program goal, such as “Demonstrate Diverse and Inclusive Practices”.

Outcome 5 Measurement Tool 1 Affective Evaluation #1; Professional Appearance:

As we evaluate this tool and assessment, it has become increasing clear that evaluating appearance as a measure of professionalism is an imperfect tool. The program has witnessed enough instances of very professional students not always looking the best owing to work schedules and other life issues. There are also instances of the opposite being true as well.

Based on this information, the program will no longer use appearance as part of the assessment of student professionalism. The program will instead address issues of violations of dress code policy as a matter of policy infraction, which would impact the clinical grade.

Outcome 5 Measurement Tool 2 Affective Evaluation #9; Conducts self in a professional manner.

As with professional appearance the program has met benchmarks for all semester of assessment (although again Clinical 3 did not happen owing to COVID), and scores have risen with each assessment. This is also attributed to varying factors:

- Increased emphasis on affective behaviors/professionalism into all aspects of the educational program
- Concerted effort on the part of the program to better incorporate affective behaviors into the clinical grading schema
- Training and discussion at CI meetings regarding the importance of affective behaviors/professionalism as equally important to demonstrating clinical competency.

Bases on this information the program will continue to use the DATAARC Affective Behavior tool Statement #9 Conducts self in a professional manner. As a tool to assess the level of student professionalism in the clinical setting.

Outcome 5 Measurement Tool 3: Professionalism in the Classroom Rubric

Although the benchmark was met for each semester of assessment, it should be noted that the “classroom” became the Zoom video conference for most program for the class of 2021. Consequently, the validity of the data for this assessment is somewhat suspect.

Based on this information, along with the notion that this assessment has produced good data in the past, the program will continue with assessment unchanged until more reliable data can be collected.

Blackhawk Technical College Associate Degree Radiography Program Graduate Completion Worksheet Class of 2019						
Name	Complete Program 2 Y.	Passed ARRT 1 st Attempt	Passed ARRT Subsequent	Placed in Field Within 1 Year	Placed in Field Subsequent	Not Actively Seeking Employment
1. Student 1						
2. Student 2	X	X		X		
3. Student 3*						
4. Student 4	X	X		X		
5. Student 5						
6. Student 6	X	X		X		
7. Student 7	X	X		X		
8. Student 8	X	X		X		
9. Student 9	X	X		X		
10. Student 10	X	X		X		
11. Student 11						
12. Student 12*						
13. Student 13	X	X		X		
14. Student 14*						
15. Student 15	X	X		X		
16. Student 16	X	X		X		
17. Student 17*						
18. Student 18	X	X		X		
Summary: Class of 2021 Program Completion: 85% (15 of 18)* ARRT Pass Rate 1 st Attempt: 100% (11 of 11) ARRT Pass Rate Subsequent: N/A Placed in Field 1 Year Following Graduation: 100% (11 of 11)			Summary: BTC Total & 5 Year Averages Program Completion 5 Year Average: 86% (77 of 90) ARRT 1 st Attempt 5 year Average: 92% (67 of 73) ARRT Pass Rate Subsequent 5 year Average: 99% (72 of 73) Placed in Field 1 Year Following Graduation 5 Year Average:			
Notes						
Consistent with JRCERT Policy, the BTC Radiography Program Considers a Graduate "Not Actively Seeking Employment" if: <ul style="list-style-type: none"> • Fails to communicate with program officials regarding employment status after multiple attempts, • Is unwilling to seek employment that requires relocation, • Is unwilling to accept employment due to salary or hours, • Is on active military duty, and/or • Is continuing education. • <i>*Indicates nonacademic withdrawal</i> 						