# Trinity Health Radiologic Technology Program/Advisory Committee Meeting Minutes January 31, 2024 2:00 pm Dakota Room

In Attendance	Michelle Bratton, (PD), Renae Stratton (Clin Preceptor), Jim Coffin (Radiology Dept Manager), Janel Feehan (PACS), Andrea Roedocker (Coor. Strategic Development), Axel Aceves (Clin Preceptor), Abbie Richardson (Student Rep)  By phone: Lonna Brown  Absent: Becky Hoes (Community member), Jess Anderson (Lead Tech), Jim Miller (Program Medical Director); Cindy Milkey
	(community member), Dawn Rubbleke (Kronos)
I. JRCERT Update	A. JRCERT accreditation status: Program was granted an award of 8 years of accreditation in September of 2020. A self-study report will be due in 2026 and the next site visit will be around February 2027 for reaccreditation.
	After moving to the new hospital, program officials assessed the number of clinical areas and techs and felt that they could support another student each year for a total of 14 students at any given time. JRCERT approval was sought and received in January 2024.
II. Master Education Plan	<ul> <li>A. <u>Didactic Curriculum</u>: The 6 juniors (class of 2025) began in August and are doing well. Senior class of 2024 is nearing the end of didactic coursework and will begin registry review mid- March after Spring Break. Several are interested in staying at Trinity and pursuing other modalities 2 in mammography, 1 in cath lab and 2 in CT/MR after they graduate.</li> <li>B. <u>Academic schedule:</u> no changes</li> <li>C. <u>Clinical Plan</u>: RS adjusted the clinical rotations to fit the new clinical areas with no issues.</li> </ul>
	D. Policy Manual – Only minor adjustments 2023 PM: clinical site details due to new facility and revisions to admission scoring process to include specific point breakdown for healthcare experience etc.
	E. GI Bill <sup>TM</sup> : 1 2023 graduate used it and currently 1 senior student uses these benefits. The classes of 2024 and 2025 do not have any eligible students under this bill.
	F. <u>6 Month Graduate/Employer surveys</u> : All graduate surveys were returned so they are discussed below, but don't have all the employer surveys back yet, so will leave that for the next meeting.
	6 month post graduate survey for 2023 class: This is an electronic 3 part Google survey, easy to use and view responses. 6 of 6 surveys were returned.
	• The first section is information about the registry and employment for the 2023 grads. PD noted that all grads remain members of the ASRT and 5 with the NDSRT at the time of the survey. All 6 graduates started working at Trinity after graduation, 4 remain, with 1 going to Rad Therapy school in August and another moved to Washington. 2 grads took the mammography certification, 1 still with Trinity at MAC. 3 grads are still working at Trinity in diagnostic.
	• <u>The second section</u> has each grad score their <u>educational experience</u> 6 months later with ranges between 1-10 (very unsatisfied to extremely satisfied). All ranked their experience overall as 9-10 (extremely satisfied) on registry preparation and that the program prepared them for the career.
	When rating the <u>technologists' professionalism</u> 3 grads - 10, 3 graduates – 9/8 – very professional and 1. This has improved overall from a few years ago. In 2019, 2 students scored it lower than "good" or "excellent". In 2020, the scores were <i>extremely</i> professional (1 grad), <i>very</i> professional (3 grads) and <i>usually</i> professional (1). 2021 grads all ranked this as 8.
	On <u>tech supervision</u> 5 grads said they had excellent supervision (10) and one great (8) supervision.

As for whether students were allowed enough independence to develop confidence, the 2023 class had 4 score this a 10 (excellent level of independence) and 2 gave 8 (above average level of independence). The third section of the survey has the graduates score themselves on 7 questions related to critical thinking and job skills, with the highest score (10 – always, 9-almost always, 8-mostly). 1-Confidence in positioning skills – 10(5) and 8(1) 2-Modifying for age and other variables – 10(3), 9(2), 8(1) 3-Technique adjustment on dif equipment – 10(3), 9(2), 7(1) 4-Image evaluation - 10(4), 9(1), 8(1) 5-Independent judgment - 10(3), 9(2), 8(1) 6-Pt care skills - 10(4), 9(1), 8(1) 7-Satisfied with career – 5 – Love it!; 1- Very satisfied Overall, the 2023 class felt very prepared for the career and had a good experience. Action: As is common, graduates note they wish they had more surgery/c-arm experience— Members discussed ways to ensure students get more surgical experience. Surgery is an area students sometimes avoid due to their level of comfort with higher stress situations. Renae and Axel recently did a c-arm clinic with the juniors so they could practice maneuvering the c-arm in mock situations. This was well received and will continue. Students have plenty of opportunity to observe and work in surgical situations in their rotations. We will discuss the employer survey next meeting when all responses have been received. III. Resource **Developmental Tests and Registry Review**: The class of 2024 will utilize St. Catherine's tests, RadTech Boot Camp, Lange /Staff Updates Review book, Mosby Review book, ASRT resources and updated registry review material/mock exams. No major changes here other than to ensure they are in class enough to complete the usual review materials. B. ASRT: Seniors now become members in January so they can take advantage of SEAL tests and review materials on ASRT – cost is \$35 a student. This cost is part of the student fees taken out of the initial \$300 deposit when students accept a position with the program. RTBC (\$130/student for 6 months) is also paid for with the initial deposit. C. The Program won an ASRT educational item for signing up a group of students for membership. RS and MB decided on the Positioning guide modules worth \$2500 retail. D. Fundraising for program: Students and program officials did an online fundraiser (DoubleGood popcorn) and earned over \$1900 in November. The funds are held by the Foundation for the school and are used to assist with expenses to attend the NDSRT conference and misc. student related things. We have considered trying to raise enough money to get a full body phantom (\$30,000 +) or asking the Foundation to help with the cost of a phantom along with more fundraising. Another wish list item would be to provide desktop or laptops for each student in the classroom setting (like a computer lab setup) with an educational electronic platform (Blackboard or Google classroom) where electronic assignments and testing could be utilized to cut down on printed materials. Assessment Plan/SLOs: The 2023 Assessment Plan (combining results from classes of 2024 and 2025) is complete for the Assessment senior class (4th semester) results and a draft of results was disseminated prior to the meeting for discussion. Plan/SLOs

## DISCUSSION OF RESULTS of 2023-4

<u>General discussion</u>: MB and RS met at length and worked on revisions to wording of goals and SLO's after reviewing the JRCERT standards and other programs around the country. The revised wording for each Goal and SLO is bolded below, any substantive changes are noted throughout the discussion below. Junior class data is mostly collected in the 2<sup>nd</sup> semester now, so it will be discussed at the next meeting in July.

**NEW GOAL 1: Students will demonstrate effective verbal and written communication skills.** (Old: To graduate students who possesses effective verbal and written communication skills).

<u>SLO 1.1: Students will effectively communicate with patients.</u> (old: Students will demonstrate effective patient communication skills).

**Tool A: Competency Evaluations-** In Competency Evals, techs score students 1-4 (4 = 100%, 3 = 75%, 2 = 50%) for their patient communication skills during a supervised exam (identify self/patient, communicate info). 6 random Comp eval scores in the category/student are averaged individually and as a class. The 2024 class met the benchmark (87.5%) as a class (95.8%) and individually. No action needed.

**Tool B: Technologist Evaluations of Student-**Supervising technologists are asked to evaluate students during specific diagnostic rotations, which are valuable in assessing overall performance over a longer period of time and not one procedure. 6 evals per student are averaged on categories of "Communication skills" and "Patient rapport;" the 2024 class met the benchmark (87.5%) both as a class (97.2, 97.8%) and individually.

**DISCUSSION**: Students consistently score well in patient communication. No action needed.

SLO 1.2: Students will demonstrate effective verbal communication. (old: Students will demonstrate effective written and verbal communication skills. We decided to split up written and verbal communication to make results easier to discuss.

**Tool A: Procedure Grab Bags-** 4 random procedure grab bags/student graded by RS with a rubric. This number was increased for both classes from last cycle. One of the new grab bag scenarios for the seniors for verbal communication is mocking fluoroscopic procedure explanations to patients, where students were assigned random procedures then had time to prepare an explanation before simulation. The senior class found the exercise useful and helpful. The 2024 class met the benchmark (87.5%) as a class (94.5%) and individually when averaging the grab bag grades together.

**Tool B: Technologist Evaluations of Student-**Supervising technologists are asked to evaluate students during specific diagnostic rotations. 6 evals per student are averaged on categories of "asking questions" and "initiative;" The 2024 class met the benchmark (87.5%) as a class (93.9, 94%) but 1 student was individually below the mark (86.7 and 83.3%) respectively. The student was counseled during semester conference with MB and RS to push through and continue to work hard and learn as much as possible from the technologists even though they have many competencies under their belt.

At the last discussion of this tool, it was decided that reporting individual scores that fall below the class average benchmark makes comparison to previous years more direct. No other action is necessary.

**Tool C: Ethics Presentation** -Juniors present an ethics paper they wrote in class and are scored with a rubric by MB and RS. The 2025 junior class met the benchmark (80%) individually with a range of 95-100%. MB provided more instruction for the Ethics paper assignment along with the grading rubric this year and remarked that the junior class seems very comfortable with oral presentations.

**Tool D: Scientific Research Paper Presentation**- Defer to next meeting, this is assessed in the 5<sup>th</sup> semester.

#### SLO 1.3: **Students will demonstrate effective written communication skills.** (Broke down old SLO 1.2 into verbal and written)

**Tool A: Ethics Paper** - Junior students are graded on a short paper on an ethical issue, usually completed at the end of the 1<sup>st</sup> or beginning of the 2<sup>nd</sup> semester. The 2025 juniors met this benchmark (80%) individually with a range of 95-100%. This class is very comfortable writing papers and was given the rubric and sample formats to work from. No action needed.

**Tool B: Scientific Research Paper** - Senior students' scientific research papers for the Michelle Keller scholarship are scored by an anonymous judge. The 2024 class met the benchmark (75% individually) as a class (84.3%) (range of 74-95%) but one student did not meet it (74%) individually. This student was counseled by MB and the paper comments were reviewed in order to make revisions to the paper before submitting it to the NDSRT paper contest this spring.

No action needed.

**GOAL 2: Students will demonstrate critical thinking skills in professional practice.** (old: To graduate students who can apply critical thinking skills to professional practice)

SLO 2.1 **Students will exhibit necessary critical thinking skills when performing routine and nonroutine procedures** (old: Students will exhibit necessary critical thinking skills in the positioning and performance of patient exams.

**Tool A: Competency Evaluations-** In Competency Evals, techs score students 1-4 (4 = 100%, 3 = 75%, 2 = 50%) for critical thinking during an exam (appropriate positioning and technical factors, necessary modifications). 6 random Comp eval scores in the category/student are averaged individually and as a class. The 2024 class met the benchmark (87.5%) as a class (94.4%) and individually. No action needed.

**Tool B: Procedure Grab Bags-** 3 Random procedure grab bags/student are graded by RS with a rubric on critical thinking. The 2024 class met the benchmark (87.5%) as a class (88.1%) but 3 students did not meet the mark individually at 83%. During grab bags, critical thinking is solely on the student with no "back up" from a technologist and this increases the difficulty. Increasing the number of grab bags was done to help improve the individual student scores for this skill. Members discussed the types of procedures used and RS noted that they are the less common exams or trauma patients.

<u>Action plan:</u> RS and MB had discussed trying to do 4 grab bags for each class, but the fluoroscopy patient explanation simulation was not a good indicator of critical thinking because they were given time to prepare for the explanation. RS will try to schedule a

4<sup>th</sup> grab bag to assess critical thinking with seniors. Perhaps another a grab bag could be combined with a c-arm mock situation for both critical thinking and hands on experience with c-arm use, a category that graduates feel less prepared in.

<u>SLO 2.2 Students will demonstrate the ability to critically evaluate radiographs for quality.</u> (old – Students will demonstrate the ability to critically evaluate completed radiographs).

**Tool A: Image Analysis Tool** – Juniors undertake image analysis of several different radiographs and are graded individually by RS with a rubric. This will be assessed in the 2<sup>nd</sup> semester.

**Tool B: McQuillen Image Analysis Test** - This is a new tool, where seniors are graded with the same rubric from Tool A for juniors, but on comprehensive image analysis tests with multiple images in categories of Respiratory & Upper extremities. These tests are taken after seniors complete and review the McQuillen Image Analysis workbook for those sections. The 2024 senior class met this benchmark (87.5%) as a class (95.1%) and individually. This seems to be a good tool for assessing this critical skill because there is no technologist back up on what the student decides on the quality of an image.

**Tool C: Technologist Evaluations of Student-**Supervising technologists are asked to evaluate students during specific diagnostic rotations. 6 evals per student are averaged on category of "ability to critique images." Historically students meet the benchmark as a class, but this is an area where new graduates often report feeling uncomfortable. The 2024 seniors met tool B benchmark (87.5%) as a class (91.7%), but individually, one student fell slightly below (86.7%).

DISCUSSION/ACTION PLAN: Program will continue to use the McQuillen workbook and testing for positioning critique and modification as this has been helpful. Members discussed the difficulties of assessing quality technique (kVp and mAs) in the digital arena where techniques are programmed into equipment and where images are usually not "repeatable" due to bad technique. Students often comment on their discomfort in adjusting technique because of this and they don't get hands on experience doing so. No changes necessary, but perhaps there just needs to be more memorization of techniques in class/during clinical testing to help reinforce the basic techniques per procedure.

**GOAL 3: Students will demonstrate clinical competence as entry level radiographers.** (Old: To graduate students who are clinically competent entry level radiographers)

<u>SLO 3.1: Students will competently operate equipment to produce quality images exhibiting accurate positioning and acceptable technique.</u> (old-Students will produce images exhibiting accurate positioning and acceptable radiographic quality)

**Tool A:** Competency Evaluations- In Competency Evals, techs can score students 1-4 (4 = 100%, 3 = 75%, 2 = 50%) for clinical competence categories of "Image analysis" and "equipment use." 6 random Comp eval scores in the category/student are averaged individually and as a class. The 2024 class met the benchmark (87.5%) as a class (97.9, 100%) and individually. No action needed.

**Tool B: Technologist Evaluations of Student-**Supervising technologists are asked to evaluate students during specific diagnostic rotations. 6 evals per student are averaged on a new categories "manipulation of equipment," "positioning skills" and "setting technical factors." The 2024 class met the benchmark (87.5%) as a class (96.1, 96.1, 90.6%) on 6 evals/student as a class for each category. However, 2 students fell a bit short in the technical factors category at 86.9%.

**Tool C: Recheck Performance Evaluations**- Recheck performance evals on seniors in the 4<sup>th</sup> semester are scored by techs on 6 random exams per student. The 2024 class met the benchmark (87.5%) as a class (99.3%) and individually. No action necessary.

**DISCUSSION**: The addition of equipment operation in the Comp and Tech evaluation forms made it easy to modify this competency based SLO to include more clinical skills to assess. Committee liked the addition of existing other categories. See the discussion above under Tool C of SLO 2.2 for discussion on techniques setting.

<u>SLO 3.2: Students will use appropriate radiation safety practices for patients, self and others.</u> (old- To graduate students with effective radiation protection practices for self, patients and healthcare team.)

**Tool A: Competency Evaluations-** In Competency Evals, techs can score students 1-4 (4 = 100%, 3 = 75%, 2 = 50%) for clinical competence category of Radiation Protection that includes repeats, pregnancy screening, collimation, technique and shielding. The 2024 class met the benchmark (87.5%) as a class (96.5%) and individually.

**Tool B: Technologist Evaluations of Student-**Supervising technologists are asked to evaluate students during specific diagnostic rotations. 6 evals per student are averaged in the radiation protection category. The 2024 class met the benchmark (87.5%) as a class (98.3%) and individually.

**DISCUSSION/ACTION PLAN:** During the last meeting, there was discussion how reducing repeat exams and collimation are the main focus of effective radiation protection with the new shielding guidelines. There was also discussion of bringing back a repeat rate analysis for the students on the equipment, because techs are who generally sign into the equipment, students continue to keep track of exams in their own log books along with repeats. RS did review repeat data from the equipment but for now we will continue to track student log book repeats since they are more inclusive even if students aren't good at tracking all of them. Since there are usually at least 2 people involved in a study, it is difficult to assign a repeat to one person.

Members also discussed the new policy of foregoing gonadal shielding and did not know of any issues with it other than getting used to not shielding. It was noted that if a patient or family member asks for shielding it is provided.

**GOAL 4: Students will exhibit ethical and professional behavior suitable to entry level radiographers.** (Old-To graduate students who possess ethical and professional behaviors necessary for an entry level radiographer)

<u>SLO 4.1: Students will use appropriate discretion and exhibit professionalism.</u> (old-Students will demonstrate professionalism and ethical behavior.)

**Tool A – Professional Development Eval -** Professional development evaluations are completed each semester by RS. Discretion and professional appearance have historically been assessed, but the categories of "punctuality/attendance" were added to this

SLO, as these are important aspects of professionalism. The 2024 class met the benchmark in each category (87.5%) as a class (100, 100, 90) and individually.

**Tool B- Technologist Evaluations of Student-**Supervising technologists are asked to evaluate students during specific diagnostic rotations. 6 evals per student are averaged the Professionalism category and a new category "discretion" was added to this SLO as well. 6 evals per student were scored and the 2024 class met the benchmark (87.5%) in both as a class (97.8, 98.3%) and individually.

**Tool C- Ethics Clinical Activity** - Juniors are graded in an Ethics clinical conducted by the senior students and participation and professionalism is graded by rubric by RS and MB. This is typically conducted at the end of the 1<sup>st</sup> or beginning of the 2<sup>nd</sup> semester. Juniors met this benchmark (75%) as a class (100%) and individually. The 2025 class is overall comfortable talking about ethical concerns and behaved professionally throughout the activity.

**DISCUSSION/ACTION PLAN**: Adding more professional behaviors that are scored in this category was easy and informative because behaviors were already being assessed in the tool. No action needed.

# <u>SLO 4.2: **Students will be dependable and work efficiently with healthcare team members.** (old-Students will demonstrate professionalism with the healthcare team.)</u>

"Dependability" and "efficiency" were added to the wording of the SLO due to new categories assessed in existing tools.

**Tool A – Professional Development Eval -** Professional development evaluations are completed each semester by RS. Student "relationship with others" has historically been assessed, but the categories of "productivity" and "dependability" were added to this SLO because they were also being evaluated and are important qualities of entry level radiographers. The 2024 class met the benchmark in each category (87.5%) as a class (100, 96.7, 100%) and individually.

**Tool B- Technologist Evaluations of Student-**Supervising technologists are asked to evaluate students during specific diagnostic rotations. 6 evals/student are averaged individually and as a class. Interdepartmental professionalism of students during clinical rotations has historically been assessed, but new categories of "dependability" and "organization" were added to the form and so were added to the assessment here. The 2024 class met the benchmark in each category (87.5%) as a class (97.8, 98.3, 95.6%) and individually.

**DISCUSSION/ACTION PLAN:** No changes were recommended for this SLO.

### SLO 4.3: NEW – Student will exhibit confidence under stress and gracefully accept feedback.

This is a new SLO that takes advantage of categories of professionalism being assessed in existing tools that weren't previously reported. It is thought that this will assist in assessing our students behaviors on a broad and individual scale.

	<b>Tool A – Professional Development Eval -</b> Professional development evaluations are completed each semester by RS. Categories of "self-confidence," "reaction under stress," and "accept feedback" were added here to assess these important qualities of entry level radiographers. The 2024 class met the benchmark in each category (87.5%) as a class (90, 93, 100%) and individually.
	<b>Tool B- Technologist Evaluations of Student-</b> Supervising technologists are asked to evaluate students during specific diagnostic rotations. 6 evals per student are averaged individually and as a class. The categories of "Application of knowledge" and "Critical thinking" are important qualities of professionalism in entry level technologists. The 2024 class met the benchmark in each category (87.5%) as a class (95.5, 92.2%) and individually.
	<b>DISCUSSION/ACTION PLAN:</b> Members liked this new SLO and agreed that these qualities are difficult to assess, but since they are being assessed in existing tools, tracking it will be useful in reviewing the overall professional behavior of the students.
	Summary: Senior class met all benchmarks as a class, and the few that fell slightly below the benchmark individually were addressed. Revisions to language of Goals and SLOs and inclusion of more scored categories in several existing tools will provide more detailed assessment of broad categories over time.
V. Administrative Schedule/Open discussion	<ul> <li>New Students: 20 interviews were conducted (22 applications). The 7 students accepted will begin in August 2024.</li> <li>Graduation: 2024 graduation will be May 9<sup>th</sup> at 10:00 am in the Prairie Rose room like last year.</li> <li>Update: classroom will be moving to the MAC skywalk conference rooms (along with US program). PD's office will be nearby on 5<sup>th</sup> floor. Move will happen mid-July before the new class begins. Will have to update address info with JRCERT, website and mailing address when the move occurs.</li> <li>Update: Next meeting July 23.</li> </ul>
VI. Student Report	No concerns.