**GOAL 4 Students will be prepared for duties and responsibilities of entry-level, registered radiographers.**

| EXPECTED Outcomes: | MEASUREMENT TOOLS | Benchmarks | Frequency of Review | Responsible Individual(s) |
|---|---|---|---|---|
| 4.1 Employers will hire IU Kokomo future graduates | A. Employer Survey Q#14 | A. 90 % | A. Yearly in January | A. Program Director |
| **Results A: Employers will hire IU Kokomo Graduates:**<br>**2005** 100%<br>**2006** 100%<br>**2007** will be available in January 2008 | | | | |
| **Action Plan A:** 10 different hospitals and three clinics have hired graduates from the first two years of program's existence. We believe the number of employment places and satisfaction with our graduates indicates the quality of our program. Four hospitals and two large outpatient clinics have once again employed our 2007 graduates. The program is satisfied with these results especially in light that 2 hospitals are clinical sites for "other" radiography programs. As of July, 2007, 9 of 11 2007 graduates have employment, I will send out employer surveys in Dec. 2007 and should have the results late Jan 2008. | | | | |
| **EXPECTED Outcomes:** | **MEASUREMENT TOOLS** | **Benchmarks** | **Frequency of Review** | **Responsible Individual(s)** |
| 4.2 Graduates will be satisfied with the outcomes of the program | A. Graduate Survey Q#16 – Graduates will select responses a or b: Completely or mostly satisfied with the program | A. 80% | A .Yearly in January | A. Program Director |
| | B. Graduate Survey Q#17 Graduates will select response a. | B. 80% | B. Yearly in January | B. Program Director |
| | C. Graduate survey Q # 6 didactic course prep | C. 80% | C. Yearly in January | C. Program Director and Advisory Committee |
| | D. Graduate survey Q #7 clinical education prep | D. 80% | D. Yearly in January | D. Program Director and Advisory Committee |
| **Results A: GS- Q#16 Graduates are completely satisfied or mostly satisfied with the program:**<br>**2005** 100%<br>**2006** 100%<br>**2007** will be available in January 2008 | | | | |
| **Analysis / Action Plan A:**<br>**2006:** 8 returned surveys- All respondents were either Completely or Mostly satisfied--------- 3 completely satisfied, 5 mostly satisfied with the program<br>**2007:** 7 returned surveys – All respondents were either Completely or Mostly satisfied--------- 3 completely satisfied, 4 mostly satisfied with the program<br>The number one suggestion on how to make the program better was: to have clinical education sites closer to IUK.<br>Since, at present we cannot change the distance to our clinical sites, I looked at the second most comment and that was less "busy" work. I reduced the number of research papers due in R 222 and increased the image case requirements. The students were more satisfied with this change in 2007 per course evaluation, but will need to see would graduate survey will indicate. Graduate survey for 2007 graduates will be available January 2008. | | | | |

**Results B: GS- Graduates would recommend the Program to Others:**

| 2005 | 2006 | 2007 |
|---|---|---|
| 100% | 100% | will be available in January 2008 |

**Analysis / Action Plan B:**

**The program will monitor this outcome. The program has only graduated 3 classes and graduate survey results from 2 (will have 2007 graduates results when surveys are returned January 2008 ). We will want to have at least a 5 year average to have sufficient number of returns.**

**Results C: GS- Q# 6: graduates believe didactic material corresponded to a. (all) or b. (most) of their entry level duties:**

| 2005 | 2006 | 2007 |
|---|---|---|
| 100% | 100% | will be available January 2008 |

**Results D: GS- Q#7: graduates believe their clinical education corresponded to a. (all) or b. (majority) of their entry level clinical procedures**

| 2005 | 2006 | 2007 |
|---|---|---|
| 100% | 100% | will be available in January 2008 |

**Analysis / Action Plans C and D :**

For didactic education, the students believed that all the material needed to perform entry level radiography duties were presented. One change the program did make as a result of comments is to require microbiology as a prerequisite. From conversations upon graduating, the class of 2005 believed it helped them in patient care and some clinical care areas. The IU Kokomo advisory committee approved J200 Microbiology as a prerequisite beginning with the class admitted in 2007. Dr. Chauret is the professor and committee member. He did suggest that the accompanying lab did not have to be included. It was voted, with his suggestion, to not make the lab a mandatory prerequisite.

R 222 Principles of Radiologic Technology is a course that I have diversified to include the principles of each imaging modality used in radiology. A guess speaker is brought in to give a presentation on each special modality. They present educational and skill requirements needed. The professor presents the underling physics principles and corresponding sectional anatomy so the students will have better knowledge of what the guess speaker is attempting to present. Students are also assigned observations in each of these modalities. Several of our graduates have been hired in specialty modalities directly upon graduation. The one comment returned on the survey was:

One student, who took an interventional technologist position, suggested we offer more interventional experience. We are looking into expanding days in an interventional lab for increased observation as optional rotation when HRHS opens in lab in late fall of 2007 or early 2008. Also possible to send them to Lafayette with program's alumni who suggested this plan.

| EXPECTED Outcomes: | MEASUREMENT TOOLS | Benchmarks | Frequency of Review | Responsible Individual(s) |
|---|---|---|---|---|
| 4.3 Students will pass simulated certification test | Simulated registry exam in R 207. | At least 75% on one of three simulated registries given in R 207 | A. Yearly in May | A. Faculty or Program Director |

**Results:**

| | 2005 | 2006 | 2007 |
|---|---|---|---|
| **Average score** | 100% | 100% | 100% |

**Analysis / Action Plan:**
**2005:** All students were able to score at least 75% on one of three simulated registry examinations. 7 of 11 scored 80% or more. **The class average on ARRT exam was 91.2. Correlates well with the scores earned by this class.**
**2006:** All students were able to score at least 75% on one of three simulated registry examinations. 5 of 11 scored 80% or better on at least one simulated registry exam. 5 students were able to score 75% or better on each of the three examinations.
**2007:** All students were able to score at least 75%on one of three simulated registry examination in R 207. 5 of 11 scored 80% or better on at least one simulated registry exam. 4 students were able to score 75% or more on each examination taken

Monitor registry certification scores. May have to adjust exams or provide more time. 150 minutes were given for each 200 question exam.
2007 – Students passing the first, two simulated boards examinations at 80% or greater, will not be required to take the third exam. It will be their optional. This is a suggestions from the students implemented in the spring 2007. Will monitor ARRT exams scores to see if averages change.

| EXPECTED Outcomes: | MEASUREMENT TOOLS | Benchmarks | Frequency of Review | Responsible Individual(s) |
|---|---|---|---|---|
| *4.4 Graduates will successfully pass ARRT certification examination on their 1st attempt* | A. ARRT radiography certification examination | A. 80% | A. Yearly – in November and 5 year moving average beginning in November 2009 | A. Program Director |
| | B. Scores in each category on the ARRT. | B. 7.5 (on a scale of 1.0 – 9.9) | B. Yearly in November and 5 year moving average | B. Program Director |

**Results A:**

| **2005** | **2006** | **2007** |
|---|---|---|
| 100% | 100% | 100% |

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**Analysis / Action Plan A: Continue to monitor and re-analyze when program has 5 years of data.**

**2005:** the program was in 95 percentile of all program's ARRT examination scores
**2005:** All graduating students passed the ARRT examination; Ave score = 91.4. Scores ; High = 98; Low = 87

**2006:** the program was is the 88 percentile of all program's ARRT examination scores
**2006:** All graduating students taking the ARRT exam passed ; Average - = 89.3 Scores; High = 96 (x3); Low = 79
The student scoring 79 did not take the test until November, 5 months post graduation. This individual had some legal issues and had to submit extra paper work to the ARRT before being allowed to take the certification examination. Would advise her or anyone to take examination as soon as possible. She did not tell the program what legal issues she was having. She was advised during the program to take time off because of her absences and tardiness to clinical education. She was also referred to counseling through the IU Kokomo out reach program. She did have six counseling session, but the information she shared was confidential to them.
**2007** : All graduating students taking the ARRT exam passed ; Average - = 89.0 Scores; High = 98; Low = 82
The slight decrease in average score corresponded to a decrease in average scores on simulated registry tests in R 207. It also reflects a decrease in GPA for these

admitted students compared to two previous years. 2008 class had decrease GPA in math and Sciences compared to all previously admitted classes. We will see and comment on results when available November 2008. We expect to see a decrease. One issue the program has is that as class graduate, present students seek information from previous graduates. These graduates are communicating that the ARRT examination is easier than the course grades and "not to worry" so much. Al the program professors and the IUK advisory board believes this is a contributing factor to decreased scores in the program. This will lead to decrease ARRT scores because students will study less and be satisfied with "passing". The faculty has notice an over-all campus malaise and a belief that students seem to be entitled to second chances and easier routes because of personal challenges in their lives. The success of the first three years of the program average being in the top 10% - 15% of all radiography program scores seems to have given a false sense of security also; like 2008 class does not have to work because the people before them did not and look what they scored. This is a comment heard often by the faculty in advising sessions. With the 2008 class.
There is some pressure on IU Kokomo administration to meet Indiana University goals in both admissions and graduates at all campuses. University funding from the State is tied to these benchmarks.

**Results B: by ARRT certification examination section category:**

| 2005 | 2006 | 2007 |
|---|---|---|
| **A. 9.1** | **A. 9.4** | **A. 9.1** |
| **B. 9.2** | **B. 8.7** | **B. 8.9** |
| **C. 9.0** | **C. 9.0** | **C. 8.9** |
| **D. 9.2** | **D. 8.7** | **D. 8.6** |
| **E. 9.4** | **E. 9.5** | **E. 9.4** |

**Analysis / Action Plan B:**

**2005** Category stats – all students scored at least at 7.5% in each of the 5 ARRT knowledge categories. (Individual Stats from available scores Only*)

A Rad Protect: Average – 9.1 High – 9.2 Low - 7.9 B. Equipment OP & Maint. Average – 9.2 High – 9.6 Low – 8.1
C Image Prod. & eval.: Average – 9.0 High – 9.8 Low – 8.1 D. Rad Procedure: Average – 9.2 High – 9.7 Low – 8.8
E. patient care & Ed.: Average – 9.4 High – 9.9 Low – 8.5

**2006** Category stats - all students scored at least at 7.5% in each of the 5 ARRT knowledge categories

A Rad Protect: Average –9.4 High – 9.9 Low – 9.1 B. Equipment OP & Maint. Average – 8.7 High – 9.4 Low – 8.2
C Image Prod. & eval.: Average – 9.0 High – 9.8 Low – 8.0 D. Rad Procedure: Average – 8.7 High – 9.6 Low – 7.8
E. patient care & Ed.: Average – 9.5 High – 9.9 Low – 9.1

**2007 Results will be available in November 2007.**

A Rad Protect: Average – 9.1 High – 9.8 Low – 8.5 B. Equipment OP & Maint. Average – 8.9 High – 9.9 Low – 7.9
C Image Prod. & eval.: Average – 8.9 High – 9.9 Low – 7.6 D. Rad Procedure: Average – 8.6 High – 9.6 Low – 7.7
E. patient care & Ed.: Average – 9.4 High – 9.9 Low – 8.9

Continue to monitor and compare to mock boards scores and exercises in R 207 Seminars in Radiography course. At present seems to correlate well. Need a minimum of 5 years average. There may be trend downward from the first year. If it continues down, the program will look for reasons. The advisory committee did revise the points assigned for re-applying for the program from 2 to 1. In the admitted class in 2004 and 2005, at least 40% of the class was admitted after re-application from the previous year. When the program, the advisory committee was adamant about having a mechanism for students who were at the lower end of the GPA cut-off. Assigning points for re-applying was the chosen method. After analyzing the admission data, many higher GPA students were being deferred a year. So, in order to put less emphasis on re-application and more on GPA, the re-application points were lowered for the students applications for admission fall of 2007. We will continue to look at this and if alternates to the program have a different certification score than those originally accepted. Only one graduates scored

**Indiana University Kokomo Radiography Program: Assessment of Goal #4 Classes of 2005 – 2007**

| EXPECTED Outcomes: | MEASUREMENT TOOLS | Benchmarks | Frequency of Review | Responsible Individual(s) |
|---|---|---|---|---|
| 4.5 Students will graduate from the program | A. Program admission verses completion | A. 80% | A. Yearly in May then 5 year moving average in May 2009. | A. Program director and Advisory Committee |

**Results A:**

| 2005 | 2006 | 2007 |
|---|---|---|
| 92% | 92% | 92% |

**Action Plan A:**

**2005:** 11 of 12 students starting the program in graduated on time May 2005. One drop-out of program in 1st semester.
**2006:** 11 of 12 students are still in class began graduated in May 2006. One dropped 2nd semester
**2007:** 11 of 12 students starting the program graduated on time May 2007. One drop-out of program in 1st semester (Total three years of program 33 /36 = 92%)

**2004 and 2005:** we tweaked interview process and questions in order to have less emphasis and ask more questions about student's knowledge of radiology.
**2005:** added J 200 (microbiology) as prerequisite to better prepare student for infection control in core course material.
**2006:** discussed option of increasing GPA for program consideration from 2.5 to 2.8 as IUPUI has chosen. Advisory committee voted to leave at 2.5 minimum.
2007: As stated in outcome 4.4 B, the points for re-application to the program was changed from 2 to 1. We do not believ with the data that this will have any effect on the admission / graduation statistics as the reasons for dropping were all personal.

Will continue to monitor and analysis. Need 5 years for establishing and trends as of now.

| EXPECTED Outcomes: | MEASUREMENT TOOLS | Benchmarks | Frequency of Review | Responsible Individual(s) |
|---|---|---|---|---|
| *4.6 Program graduates looking for employment, will be employed within 6 months of graduation* | A. Graduate Survey Q#1 | A. 80% | A. Yearly in January and 5 year moving average | A. Program Director |

**Results:**

| 2005 | 2006 | 2007 |
|---|---|---|
| 100% | 91% | 100 % as of November |

**Analysis / Action Plan**

**2005:** All 11 graduates who were seeking employment were employed within six months of graduation.
**2006:** 8 of 9 students who graduated in May 2006 and were seeking found employment, found employment within six months of graduation. One student continued formal education and did not want to be employed. One person who did not find employment did not want to move or work any shift except days.
**2007:** As of June, 2007, 6 of 8 graduates have found employment. The other three students are continuing their formal education at IU Kokomo new baccalaureate degree in Medical Imaging Technology. Update. November 2007, all graduates have found employment.
Totals for three years of program 32 / 33 (97%) graduates seeking employment have found employment within 6 months of graduating from IU Kokomo.

Mrs. Thomason, IUK Clinical Coordinator has contacted IUK personnel to present interviewing tips and resume' writing help graduates better prepare for job interviews. Also have emphasized to the classes graduating in 2008 and 2009 that they should be prepared to move or drive a longer distance to find employment if area trends continue.

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