

Community College of Philadelphia
Division of Mathematics, Science and Health Careers

Modified Academic Program Audit

Diagnostic Medical Imaging

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I. DESCRIPTION OF THE PROGRAM

The Diagnostic Medical Imaging Program (DMI) provides students with the entry-level skills needed to use ionizing radiation in both diagnostic radiographic and fluoroscopic procedures. The Diagnostic Medical Imaging curriculum accepts a new cohort of students once a year at the start of the late Summer Session (July). DMI is a 24 month, 8 consecutive semester program of study for a minimum of 76 credits. The Program combines classroom/laboratory components at the College with Clinical Education courses at area affiliate hospitals. In the Clinical Education components, the student-radiographer is supervised by College faculty and clinical staff while interacting with the patient in the general radiographic/fluoroscopic setting, the emergency room, the operating room, the CT suite, doing mobile (portable) x-rays, and in the angiographic/interventional radiology suite.

Accreditation: The Program is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT), and graduates are eligible to take the national certifying examination administered by the American Registry of Radiologic Technologists (ARRT).

II. MISSION AND GOALS

The Diagnostic Medical Imaging Program prepares students in the judicious use of ionizing radiation in both diagnostic radiographic and fluoroscopic procedures. This is accomplished by the application of knowledge in: anatomy, physiology, and osteology; the skillful positioning of the client/patient; the selection of correct technical factors; the proper handling and manipulation of radiation producing equipment; the utilization of accepted radiation protection procedures; and the processing of the image in preparation for diagnostic interpretation.

Goals

- To graduate students as entry-level radiographers with the knowledge and skills to competently and safely perform radiographic/fluoroscopic procedures
- To graduate students who demonstrate effective communication skills, critical thinking and problem-solving skills
- To graduate students who demonstrate importance of life-long learning and professionalism
- To help fulfill the healthcare community's need for ARRT certified radiographers

III. PROGRAMATIC STUDENT LEARNING OUTCOMES:

Upon successful completion of the Diagnostic Medical Imaging, graduates will be able to:

1. Demonstrate they possess the knowledge and skills to competently and safely perform radiographic/fluoroscopic procedures as American Registry of Radiologic Technologists (ARRT) certified radiographers.
2. Demonstrate effective communication skills, critical thinking and problem solving skills.

3. Demonstrate the importance of lifelong learning and professionalism through advanced education and professional continuing education.

IV. PROGRAM RESTRUCTURING (1998-1999; 2004)

In the 1998-99 academic-years, faculty undertook the task of restructuring the Radiologic Technology program to again keep pace with the needs of the profession and the graduate Radiographer. The following steps were taken in this restructuring process:

- The Radiologic Technology Program (RT) was renamed the Diagnostic Medical Imaging Program (DMI) to concur with the terminology used in medical practice and other College based programs.
- Course content was not changed or deleted, but several RT courses were combined in order to integrate inter-related courses and to add coherence to the newly designated DMI course offerings.
- The following General Education courses were added as requirements for graduation:
- Humanities elective; Social Science elective; and CIS 103 (PC Applications).

Administrative approval for the DMI Program was granted in April 1999. The Class of 2000 was the last class to complete the previous Radiologic Technology curriculum. The Class of 2001 was the first class completing the new Diagnostic Medical Imaging curriculum.

In Fall 2004, a course revision was undertaken for DMI 101. Faculty determined that the course material needed to be revised, updated and expanded to reflect the changing trends in patient care. The course changed from a 1 credit course with 2 contact hours/week to a 2 credit course with 4 contact hours/week. Subsequently, the graduation requirements of an Associate of Applied Science degree in Diagnostic Medical Imaging was increased from 69 to 70 credits, with 41 credits in DMI courses and 29 credits in General Education. This change was approved by the Administration in July 2005 for the start of the Class of 2007.

V. PREVIOUS AUDIT RECOMMENDATIONS

The last time the DMI Program was audited was in 2003, after the last accreditation site visit. In this audit the Board made three recommendations with corresponding time lines. These recommendations were:

1. Program faculty will work with the Department Head, Dean, and other appropriate persons to determine the “right size” for the DMI Program. In addition to enrollment and expense, the plan must consider the implications for staffing, equipment and facilities, the number of clinical affiliates needed, and other cost-benefit issues. The College’s

developing Enrollment Management and health Career Plans will be taken into consideration as the “right size” of the Program is determined.

2. The Program Director, Department Head, and the College’s Career Counselor will work with Thomas Jefferson University, College of Health Professions and the University of St. Francis to develop a procedure for reporting the number of graduates who enter these receiving institutions each year.
3. The Program Director and Department Head will research alternative educational delivery modes used in diagnostic medical imaging at other institutions of higher education and document how successful these efforts have been. They will explore ways to use these innovations at the College. The College’s developing Enrollment Management and health Career Plans will be taken into consideration as alternative educational models are considered.

A follow-up report addressing these recommendations was made to the Board in 2007. An update on these recommendations is as follows:

1. **Clinical Affiliates:** Enrollment in the DMI Program continues to be driven by the number of clinical education seats which is determined by the accrediting agency. In 2007 an affiliation with the Philadelphia Veterans Administration Medical Center was just beginning. This affiliation continues and three graduates from the Program have been hired into available full time positions. The affiliation with Aria Health System has yielded agreements with the Frankford Division and the Torresdale Division. Aria is also affiliated with Holy Family University. The number of new students who began the DMI program since 2005 have varied from 24 to 30 (average = 26 students). The number of clinical seats remains at a maximum of 27 but can be increased when the number of students in the senior cohort is lower.
2. **Classroom/Laboratory space:** The classroom located at W2-13 has been renovated for use as an Allied Health classroom by the College. Many, if not all, DMI lectures are held in this classroom. The classroom was recently equipped with a smart podium.

Job Market: The job market in Philadelphia remains sparse. The national economy is having an effect on hiring in hospitals and clinics. Full time positions continue to be offered to those already on part time status. These openings are not automatically filled, but must be re-justified within the health system before hiring new employees.

3. **Articulation:** The DMI Program Director works with the College Transfer Counselor in all articulation agreements. The articulation agreement with Thomas Jefferson University, College of Health Professions no longer exists due to changes in the entrance

requirements established by the University. While they continue to work directly with the DMI Program to facilitate transfer of the graduates, no contract exists. The Transfer Counselor has repeatedly tried to contact St. Francis University regarding the articulation agreement. These contacts have gone unanswered. A new agreement is being reviewed between St. Joseph College of Maine and the College. This agreement has been reviewed by the Transfer Counselor and is proceeding through the College channels.

4. **Alternative educational delivery:** Alternative educational delivery modes are not successful in the entry-level courses. Colleges who have tried this mode of delivery are abandoning it due to poor results on the national certification examination. Those who teach in rural areas of the country who still use on-line delivery have had to extend the length of the training program to accommodate competency requirements. It is still deemed an inappropriate delivery system for our students and this curriculum. However, hybrid course development is appropriate for advanced studies in DMI and is presently being proposed for a new certificate in Mammography.

VI. 2002 REAPPROVAL

In 1999 the Radiologic Technology Program conducted its self study in preparation for the impending accreditation site visit in 2000. However, since the Program had begun a restructuring of the curriculum (1998-1999), and was in the midst of the conversion, a one-year extension was requested and granted. Ultimately, due to scheduling difficulties and the tragedy of 9/11/01, the JRCERT (Joint Review Committee on Education in Radiologic Technology) site visit did not occur until May 2002.

The results of the 2002 site visit were exceptionally favorable. At the exit interview, the team reported that the Radiography Program sponsored by the Community College of Philadelphia was a “model” for other curricula of this nature. The final April 30, 2003 report yielded no recommendations and awarded full accreditation for eight years with a projected site visit in 2010. Further, the May 2006 Interim Report to the JRCERT resulted in “Maintenance of Accreditation for a Period of Eight Years,” which is the maximum award of accreditation from the JRCERT.

VII. 2010 REAPPROVAL

In 2009 -2010, the DMI Program carried out a self study and had its re-approval accreditation site visit in 2010. After review of the self study and the subsequent on-site visit, the Joint Review Committee on Education in Radiologic Technology (JRCERT) awarded the Program with accreditation for a period of eight years, the maximum duration that may be awarded by the committee. An interim report is due in 2014 and if accreditation is maintained, the next site visit will occur in the Second Quarter of 2018.

VIII. PROGRAM EFFECTIVENESS

Program Outcomes

In 2003, the DMI Program began to formulate data in the assessment plan model provided by the Joint Review Committee (JRC). Thus, the Program has instituted an ongoing systematic process that incorporates programmatic goals and uses specific desired outcomes to support these goals. The assessment plan measures outcome related data in the following areas: program completion; clinical performance and competencies; problem solving and critical thinking skills; communication skills; professional development and growth; graduate satisfaction and employer satisfaction. Use of the assessment plan model has led to revision of the mission, and goals, formulation of rubrics for student assessment, curricular revision, and coordination of clinical and didactic communication. Assessment Plans and Outcome data, 2003 through 2010, are available for review in Appendix A of this Report

Significant to note, is the fact that for fourteen years, the Program has consistently had a 100% pass rate on the American Registry of Radiologic Technologists (ARRT) credentialing examination; except for one student in 2003, students passed on the first attempt. In addition, the program uses a benchmark of 90% employment within 6 months from graduation which is higher than the five year average job placement rate of not less than 75% within six months of graduation which JRCERT requires. A review of the data (Appendix A) demonstrates that the programmatic benchmarks are consistently achieved.

In Fall 2008, the Board of Trustees of Community College of Philadelphia awarded the Diagnostic Medical Imaging program the *Sustained Academic Excellence* award. The Sustained Academic Excellence highlights programs that clearly demonstrate a record of significant positive impact over an extended period of time. Programs must demonstrate over a five-year period that a significant number of students achieve excellence based on an externally-validated standard. The DMI program demonstrated this by the following achievements:

- Since 1983 the program's pass rates on the certifying exam has ranged from 85 % to 100% for a total of 344 students over a span of 25 years. During that time only twice were the pass rates below 92%.
- From 1995 to 2007 the program has had a consistent pass rate of 100% on the certifying exam for a total of 112 students over a span of 13 years.
- The program also has other initiatives that speak to its high academic standards
 - a. Development of a Student Outcome Assessment Plan
 - b. Recent curriculum revisions to include vital information and skills necessary for future student success in their radiographer career.
 - c. Strategic liaisons with area hospitals resulting in
 - i. Donations of equipment
 - ii. New clinical sites
 - iii. Student awards at their pinning ceremony

- The last site visit (Fall 2006) resulted in the renewal of accreditation for the Diagnostic Medical Imaging Program for the maximum award of a period of eight years.

The program continues to have a pass rate of 100% over 17 years total.

A recently (Spring 2011) completed Program Performance Indicator Report (see Appendix B) showed that the Program maintained high quality (3.9 out of a possible score of 4.0) and above average viability (score = 2.7). Lower Fall to Fall retention scores were responsible for decreasing the viability score. Complete documentation related to outcomes assessment is contained in the November, 2009 Diagnostic Imaging Self Study Binder #0232 available in the Division of Math, Science, Health Careers.

IX. PROGRAM ALLIANCES

The Program uses the following means for gathering information from its program alliances, in an effort to determine if the Program is meeting community expectations and to assess the Program's efforts in meeting its own desired outcomes: Advisory meetings; graduate surveys; employer surveys; graduate exit interviews; student evaluations of faculty, clinical staff, and preceptors.

Over the 36 year history of the Program, the Advisory Committee and perspective employers have provided valuable assistance in keeping the curriculum vibrant and timely. The Assessment Plan established in 2003 and which is shared with the Advisory Committee (see Appendix C), has led to numerous upgrades in curriculum, clinical evaluation methods and classroom assessment rubrics. Through the assistance of various program alliances, the Program has strived to stay ahead of the American Society of Radiologic Technologists (ASRT) curriculum by developing a curriculum that surpasses the minimum standards. Graduates have taken advantage of a curriculum like this by quickly advancing into Mammography, CT Scanning, Interventional Radiology, and Cardiac catheterization.

The Program continues to analyze and use feedback from its communities of interest and outcome data for continuous improvement of its policies, procedures, and educational offerings. Further, this analysis also provides a means of accountability to communities of interest.

X. OPERATING COSTS AND FUNDING

According to the 2010 fiscal year information, DMI is one of the five most expensive programs at the College. There has been ongoing, stable, and adequate funding for the Program since its inception. Allocations for faculty salaries, benefits, and professional development initiatives are substantial and assure the Program's ability to recruit and retain qualified faculty. In addition to the College's capital and operating financial support, the DMI Program has been the recipient of significant Perkins funding for capital expenditures, such as a total refurbishment of the present laboratory space, and new non-energized equipment, a table-top processing unit,

and preventive maintenance of the Franklin Head Unit. The Program has also been the recipient of mammography equipment donated from Methodist Hospital.

XI. CLINICAL AFFILIATIONS

The College holds affiliation agreements on behalf of the DMI Program with the following clinical settings:

- Pennsylvania Hospital of the University of Pennsylvania Health System
- Penn Presbyterian Medical Center
- Philadelphia Veterans Administration Medical Center
- Mercy Hospital of Philadelphia
- Thomas Jefferson Hospital-Methodist Division
- Aria Health System-Frankford and Torresdale Division
- Children's Hospital of Philadelphia-pediatric rotation only in the Level II year

XII. CONCLUSION

The Diagnostic Medical Imaging Program has demonstrated excellence throughout its inception and continues to surpass the minimum requirements set forth by the 2007 ASRT curriculum guidelines upon which the DMI curriculum is based. The consistent accreditation award with maximum of eight years, speaks to the quality and effectiveness of the curriculum, the faculty and institutional support. The Program will continue to use its assessment model and community resources as the means for keeping the Program current, both in theory and practice, thus meeting the competency and credentialing standards set forth by the accrediting body and the future employers of our graduates. Retention outcomes, particularly of the first year students, should be carefully monitored. Intervention measures that are planned for Fall 2011 may help to increase retention.

APPENDIX A

ASSESSMENT PLANS AND OUTCOMES (2003-2010)

Assessment Plan Executive Summary to the Board of Trustees

The Diagnostic Medical Imaging Program developed an assessment plan in 2003 based on requirements of the Joint Review Committee on Education in Radiologic Technology (JRCERT). The assessment plan has evolved over the years since then to reflect the Program's commitment to the following:

1. Maintaining quality in education
2. Fulfilling the Standards for accreditation
3. Monitoring student learning outcomes

Three areas are so important to the JRCERT that they are reflected in Standards to be met by all accredited programs:

1. Retention data
2. Results on the national examination of the ARRT
3. Job placement within 6 months of graduation

Depending upon the needs of the profession, the emphasis of their focus may vary with each accreditation visit. The focus was on retention when there were not enough technologists for the job market. At the last accreditation visit the focus was ARRT results. Communication with the JRCERT is presently indicating that the focus over these next few years will be job placement. This reflects the national concern that the economy and rising hospital costs have placed a freeze on new full time radiography positions being offered.

As each assessment year is completed, the JRCERT requires that the assessment document is discussed with the Advisory Committee and their comments and actions be noted. These actions are recorded in the minutes of these meetings and are provided in the self-study document for reaccreditation along with each assessment plan. In this way changes can be effected in areas such as clinical procedures that are beyond the direct control of the Program.

COMMUNITY COLLEGE OF PHILADELPHIA
 DIAGNOSTIC MEDICAL IMAGING PROGRAM
 ASSESSMENT PLAN 2003-2004

MISSION STATEMENT: The Diagnostic Medical Imaging Program prepares the individual in the judicious use of ionizing radiation in both diagnostic radiographic and fluoroscopic procedures. This is accomplished by the application of knowledge in anatomy, physiology, and osteology; in the skillful positioning of the client/patient; the selection of correct technical factors; the proper handling and manipulation of radiation producing equipment; the utilization of accepted radiation protection procedures; and the processing of the image in preparation for diagnostic interpretation.

GOAL	OUTCOMES/BENCHMARK	EVAL. METHOD	RESULT/OUTCOME	ACTION
To graduate students as entry-level radiographers with the knowledge and skills to competently and safely perform radiographic procedures	Students will pass the required clinical competency exams with an average score of 80%	Clinical Competency examinations ANNUALLY	CI 2003 Level II FI 95.3 Sp 94.6 CI 2004 Level I FI 93 Sp 92.4 Level II FI 97.5 Sp 92.5 CI 2005 Level I FI 89.3 Sp 85.6	Benchmark achieved
	90% of employer surveys returned will indicate that graduates were adequately prepared to perform as entry-level practioners.	Employer surveys Items 1 – 7 EVEN YEARS/OCT.	N/A	
	90% of graduates who take the ARRT exam will pass.	ARRT results ANNUALLY/JANUARY	CI 2003 100% pass 90% 1st try	Benchmark achieved
	90% of surveys returned by graduates will indicate employment in the field or pursuit of continued education in the field within 6 months of graduation.	Graduate survey Items 1, 3, 15 ANNUALLY/APRIL	100% employment	Benchmark achieved

COMMUNITY COLLEGE OF PHILADELPHIA
 DIAGNOSTIC MEDICAL IMAGING PROGRAM
 ASSESSMENT PLAN 2003-2004

GOAL	OUTCOMES/BENCHMARK	EVAL. METHOD	RESULT/OUTCOME	ACTION
	<p>90% of graduates responding to the Survey will report they are members of a professional organization.</p> <p>85% of the students will pass the required academic courses with a minimum grade of 75% in the first Fall Semester. 90% of the students in subsequent semesters.</p>	<p>Graduate survey Item 16 ANNUALLY/APRIL</p> <p>Course semester grades ANNUALLY</p>	<p>New question for 2004</p> <p>CI 2003 Level II FI 100% Sp 100%</p> <p>CI 2004 Level I FI 91% Sp 94%</p> <p>Level II FI 93% Sp 100%</p> <p>CI 2005 Level I FI 95% Sp 100%</p>	<p>Benchmark met but will need to monitor</p>
<p>The Program will help fulfill the community's need for nationally certified radiographers</p>	<p>90% of graduates responding to the survey will find employment within 6 months of graduation.</p> <p>90% of employers responding to the survey will rate the performance of graduates as above average</p>	<p>Graduate survey Item 1 ANNUALLY/APRIL</p> <p>Employer Survey EVEN YEARS/OCT.</p>	<p>CI 2003 100%</p> <p>N/A</p>	<p>Benchmark achieved</p>

COMMUNITY COLLEGE OF PHILADELPHIA
 DIAGNOSTIC MEDICAL IMAGING PROGRAM
 ASSESSMENT PLAN 2003-2004

GOAL	OUTCOMES/BENCHMARK	EVALUATION METHOD	RESULT/OUTCOME	ACTION
<p>To graduate students who demonstrate effective communication, critical thinking and problem-solving skills.</p>	<p>90% of employer surveys returned will indicate graduate performance as above average.</p>	<p>Employer surveys EVEN YEARS/OCT.</p>	<p>N/A</p>	
	<p>The average monthly clinical staff radiographer evaluations will be at least 65 points in 1st semester and 80 points thereafter</p>	<p>Monthly clinical staff radiographer evaluations ANNUALLY/MAY</p>	<p>CI 2003 Level II FI 90.9 Sp 89.9 CI 2004 Level I FI 73.3 Sp 86.2 Level II FI 91.8 Sp 86.2 CI 2005 Level I FI 75 Sp 87.5</p>	<p>Benchmark achieved</p>
	<p>The average clinical ed. grade of each class will be at least 80%</p>	<p>Clinical performance grades ANNUALLY/MAY</p>	<p>CI 2003 Level II FI 95.3 Sp 93.6 CI 2004 Level I FI 87.6 Sp 81.7 Level II FI 95.5 Sp 92.7 CI 2005 Level I FI 88.9 Sp 91.5</p>	<p>Benchmark achieved but may wish to raise. Continue to monitor.</p>
	<p>90% of graduating students will note these skills listed in the goal are not weaknesses in the faculty exit interview survey.</p>	<p>Exit interview Strength/weakness ANNUALLY/JUNE</p>	<p>CI 2003 100% CI 2004 100%</p>	<p>Benchmark achieved and continue to monitor.</p>

COMMUNITY COLLEGE OF PHILADELPHIA
 DIAGNOSTIC MEDICAL IMAGING PROGRAM
 ASSESSMENT PLAN 2004-2005

MISSION STATEMENT: The Diagnostic Medical Imaging Program prepares the individual in the judicious use of ionizing radiation in both diagnostic radiographic and fluoroscopic procedures. This is accomplished by the application of knowledge in anatomy, physiology, and osteology; in the skillful positioning of the client/patient; the selection of correct technical factors; the proper handling and manipulation of radiation producing equipment; the utilization of accepted radiation protection procedures; and the processing of the image in preparation for diagnostic interpretation.

GOAL	OUTCOMES/BENCHMARK	EVAL. METHOD	RESULT/OUTCOME	ACTION
To graduate students as entry-level radiographers with the knowledge and skills to competently and safely perform radiographic procedures	Students will pass the required clinical competency exams with an average score of 80%	Competencies done by College faculty at clinical sites ANNUALLY	CI 2004 Level II Sp 92.5% CI 2005 Level I FI 89.3% Sp 85.6% Level II FI 96.6% CI 2006 Level I FI 93.2%	Benchmark Achieved Will continue to monitor annually
	90% of employer surveys returned will indicate that graduates were adequately prepared to perform as entry-level practioners.	Employer surveys Items 1 – 6 EVEN YEARS/OCT.	Oct. 04 (N=11) 82% properly prepared 2 felt OR weak 1 felt attitude poor	1 st time use. Benchmark unmet. 1. move benchmark to 80% due to low N. 2. Ask Preceptors to intro. OR equip. 3. Continue to monitor
	90% of graduates who take the ARRT exam will pass.	ARRT results ANNUALLY/JANUARY	CI 2004 100% on 1 st attempt	Benchmark met Benchmark met.

COMMUNITY COLLEGE OF PHILADELPHIA
 DIAGNOSTIC MEDICAL IMAGING PROGRAM
 ASSESSMENT PLAN 2004-2005

GOAL	OUTCOMES/BENCHMARK	EVAL. METHOD	RESULT/OUTCOME	ACTION
To graduate students as entry-level radiographers with the knowledge and skills to competently and safely perform radiographic procedures	90% of surveys returned by graduates will indicate employment in the field or pursuit of continued education in the field within 6 months of graduation.	Graduate survey Items 1, 3, 15 ANNUALLY/APRIL	CI 2004 100% employment	Benchmark met.
	90% of graduates responding to the survey will report they are members of a professional organization.	Graduate survey Item 16 ANNUALLY/APRIL	New Question	_____
	85% of the students will pass the required Programmatic academic courses with a minimum grade of 75% in the first Fall Semester. 90% of the students in subsequent semesters.	Course semester grades ANNUALLY	CI 2004 Level II Sp 100% CI 2005 Level I FI 95% Sp 100% Level II FI 100% CI 2006 Level I FI 86%	Benchmark met

COMMUNITY COLLEGE OF PHILADELPHIA
DIAGNOSTIC MEDICAL IMAGING PROGRAM
ASSESSMENT PLAN 2004-2005

GOAL	OUTCOMES/BENCHMARK	EVALUATION METHOD	RESULT/OUTCOME	ACTION
<p>The Program will help fulfill the community's need for nationally certified radiographers</p>	<p>90% of graduates responding to the survey will find employment within 6 months of graduation.</p> <p>90% of employers responding to the survey will rate the performance of graduates as above average.</p>	<p>Graduate survey Item 1 ANNUALLY/APRIL</p> <p>Employer Survey Question 1 - 5 EVEN YEARS/OCT.</p>	<p>CI 2004 100%</p> <p>Oct. 2004 81% felt average or below</p>	<p>Benchmark met Continue to monitor</p> <p>1. Benchmark too high for amount of returns 2. Make benchmark say performance of graduates as average or above. 3. Suggest lower benchmark to 80%.</p>
<p>To graduate students who demonstrate effective professional conduct, communication skills, critical thinking and problem-solving skills.</p>	<p>90% of employer surveys returned will indicate graduate performance as above average.</p> <p>The average monthly clinical evaluations performed by staff radiographer will be at least 65 points in 1st semester and 80 points thereafter</p> <p>The average monthly evaluations performed by clinical staff radiographers will show average or above average performance in appearance, attendance, interpersonal relations, accountability and empathy to patients.</p> <p>The average clinical ed. grade of each class will be at least 80%</p>	<p>Employer surveys Question 6 EVEN YEARS/OCT.</p> <p>Monthly clinical staff radiographer evaluations ANNUALLY/MAY</p> <p>Monthly clinical staff radiographer evaluations ANNUALLY/MAY</p> <p>Clinical performance grades ANNUALLY/MAY</p>	<p>Oct. 2004 82% (N=11) 1 felt avg; 1 felt below avg.</p> <p>CI 2004 Level II Sp 86.2 CI 2005 Level I FI 75 Sp 87.5 Level II FI 91.9% CI 2006 Level I FI 75.2%</p> <p>CI 2005 Level II 100% CI 2006 Level I 100%</p> <p>CI 2004 Level II Sp 92.7 CI 2005 Level I FI 88.9 Sp 91.5 Level II FI 88.4% CI 2006 Level I FI 87.2%</p>	<p>1. Change outcome to read avg or above 2. This would change data to be 91%.</p> <p>Benchmark met Will monitor annually</p> <p>Benchmark met Continue to monitor</p> <p>Benchmark met Will monitor annually</p>

COMMUNITY COLLEGE OF PHILADELPHIA
 DIAGNOSTIC MEDICAL IMAGING PROGRAM
 ASSESSMENT PLAN 2004-2005

GOAL	OUTCOMES/BENCHMARK	EVALUATION METHOD	RESULT/OUTCOME	ACTION
	90% of graduating students will note these skills listed in the goal are not weaknesses in the faculty exit interview survey.	Exit interview Strength/weakness ANNUALLY/JUNE	CI 2004 100%	Benchmark met

COMMUNITY COLLEGE OF PHILADELPHIA
 DIAGNOSTIC MEDICAL IMAGING PROGRAM
 ASSESSMENT PLAN 2005-2006

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GOAL	OUTCOMES/BENCHMARK	EVAL. METHOD	RESULT/OUTCOME	ACTION
To graduate students as entry-level radiographers with the knowledge and skills to competently and safely perform radiographic/ fluoroscopic procedures	Students will pass the required clinical competency exams with an average score of 80%	Competencies done by College faculty at clinical sites ANNUALLY	CI 2005 Level I FI 89.3% Sp 85.6% Level II FI 96.6% Sp 96.1%	Benchmark achieved. Continue to monitor.
	90% of employer surveys returned will indicate that graduates were adequately prepared to perform as entry-level practioners.	Employer surveys Items 1 – 6 EVEN YEARS/OCT.	CI 2006 Level I FI 93.2% Sp 93.1%	1 st time use. Benchmark unmet. 1. Move to 80% due to low N. 2. create COE for C-Arm. 3. DMI 101 changes will not show up until 2008. 4. Continue to monitor
	90% of graduates who take the ARRT exam will pass.	ARRT results ANNUALLY/JANUARY	Oct. 04 (N=11) 82% properly prepared 2 felt OR weak 1 felt attitude poor	Benchmark achieved
	90% of surveys returned by graduates will indicate employment in the field or pursuit of continued education in the field within 6 months of graduation.	Graduate survey Items 1, 3, 15 ANNUALLY/APRIL	CI 2004 100% on 1st attempt CL 2005 100% on 1st attempt	Benchmark achieved

COMMUNITY COLLEGE OF PHILADELPHIA
 DIAGNOSTIC MEDICAL IMAGING PROGRAM
 ASSESSMENT PLAN 2005-2006

GOAL	OUTCOMES/BENCHMARK	EVAL. METHOD	RESULT/OUTCOME	ACTION
	<p>90% of graduates responding to the survey will report they are members of a professional organization.</p> <p>85% of the students will pass the required Programmatic academic courses with a minimum grade of 75% in the first Fall Semester. 90% of the students in subsequent semesters.</p>	<p>Graduate survey Item 16 ANNUALLY/APRIL</p> <p>Course semester grades ANNUALLY</p>	<p>CI 2004 100% employment 8 full time 2 per diem 2 CT</p> <p>CI 2004 9/10 yes 90% CI 2005 Level I FI 95% Sp 100% Level II FI 100% Sp 100% CI 2006 Level I FI 86% Sp 90%</p>	<p>Benchmark achieved</p> <p>Keep benchmark. Continue to monitor.</p>
<p>The Program will help fulfill the healthcare community's need for nationally certified radiographers</p>	<p>90% of graduates responding to the survey will find employment within 6 months of graduation.</p> <p>90% of employers responding to the survey will rate the performance of graduates as above average.</p>	<p>Graduate survey Item 1 ANNUALLY/APRIL</p> <p>Employer Survey Question 1 - 5 EVEN YEARS/OCT.</p>	<p>CI 2004 100%</p> <p>Oct. 2004 81% felt average or above</p>	<p>Benchmark achieved</p> <p>1. Lower benchmark to 80% due to low N 2. Continue to monitor</p>

COMMUNITY COLLEGE OF PHILADELPHIA
DIAGNOSTIC MEDICAL IMAGING PROGRAM
ASSESSMENT PLAN 2005-2006

GOAL	OUTCOMES/BENCHMARK	EVALUATION METHOD	RESULT/OUTCOME	ACTION
To graduate students who demonstrate effective professional conduct, communication skills, critical thinking and problem-solving skills.	90% of employer surveys returned will indicate graduate performance as average or above .	Employer surveys Question 6 EVEN YEARS/OCT.	Oct. 2004 91% (N=11) 1 felt below avg.	Benchmark met. Continue to monitor carefully
	The average monthly clinical evaluations performed by staff radiographer will be at least 65 points in 1 st semester and 80 points thereafter	Monthly clinical staff radiographer evaluations ANNUALLY/MAY	CI 2005 Level I FI 75 Sp 87.5 Level II FI 91.9% Sp 93.8% CI 2006 Level I FI 75.2% Sp 85.9%	Benchmark met. Continue to monitor
	The average monthly evaluations performed by clinical staff radiographers will show average or above average performance in appearance, attendance, interpersonal relations, accountability and empathy to patients.	Monthly clinical staff radiographer evaluations ANNUALLY/MAY	CI 2005 Level II 100% CI 2006 Level I 100%	Benchmark met. Continue to monitor.
	The average clinical ed. grade of each class will be at least 80%	Clinical performance grades ANNUALLY/MAY	CI 2005 Level I FI 88.9 Sp 91.5 Level II FI 88.4% Sp 94.02% CI 2006 Level I FI 87.2% Sp 90.9%	Benchmark met. Continue to monitor.
	90% of graduating students will note these skills listed in the goal are not weaknesses in the faculty exit interview survey.	Exit interview Strength/weakness ANNUALLY/JUNE	CI 2005 100%	Benchmark met. Continue to monitor.

COMMUNITY COLLEGE OF PHILADELPHIA
 DIAGNOSTIC MEDICAL IMAGING PROGRAM
 ASSESSMENT PLAN JULY, 2006-JULY, 2007

MISSION STATEMENT: The Diagnostic Medical Imaging Program prepares the individual in the judicious use of ionizing radiation in both diagnostic radiographic and fluoroscopic procedures. This is accomplished by the application of knowledge in anatomy, physiology, and osteology; in the skillful positioning of the client/patient; the selection of correct technical factors; the proper handling and manipulation of radiation producing equipment; the utilization of accepted radiation protection procedures; and the processing of the image in preparation for diagnostic interpretation.

Goal 1: To graduate students as entry-level radiographers with the knowledge and skills to competently and safely perform radiographic procedures.

Outcome	Assessment Tool(s)	Benchmark	Schedule	Responsibility	Result	Action
1.1 Students will possess knowledge of routine procedures.	1.1a Clinical comps	1.1a Students will achieve \geq 75% average	1.1a Sem. III and VI	1.1a Clinical Faculty, Clinical Coordinator and Program Director	1.1a Sem VI 93% Sem. III	1.1a Continue to monitor. Need to review forms. Set up 3 yr rotational review.
	1.1b Lab COE simulations	1.1b Students will achieve \geq 75% average	1.1b Sem. II and VI	1.1b Faculty	1.1b Sem II 90% Sem VI 100%	1.1b Benchmark met. Tool developed to increase communication among faculty. Review ongoing.
1.2 Students will demonstrate quality patient care.	1.2a Patient care comps Pt. transfer Asepsis Venipuncture	1.2a Students will achieve \geq 85% average	1.2a Sem II and III	1.2a Faculty Program director	1.2a Sem II Asepsis 100% Sem III Venipuncture	1.2a Consider rotating review of results
	1.2b Clinical comps	1.2b Students will achieve \geq 85% average	1.2b Sem II and VI	1.2b Faculty Program Director	1.2b Sem I Pt transfer 90% Sem VI Sterile Technique 100%	1.2b Continue to review these in clinical

**COMMUNITY COLLEGE OF PHILADELPHIA
DIAGNOSTIC MEDICAL IMAGING
ASSESSMENT PLAN JULY, 2006 – JULY, 2007**

Outcome	Assessment Tool(s)	Benchmark	Schedule	Responsibility	Result	Action
1.3 Students will demonstrate radiation protection to patients, selves and others.	1.3a Clinical comps.	1.3a Students will achieve ≥ 2.5 points	1.3a Sem III and VI	1.3a Faculty Program Director	1.3a Sem III Sem. VI 100%	1.3a Must watch carefully in clinical setting and continue to monitor. 1.3b Always monitored in lab during COEs.
	1.3b Lab COE simulations	1.3b Students will achieve a ≥ 2 points	1.3 b Sem II and VI	1.3b Faculty	1.3b Sem. II 100% Sem. VI 100%	

Goal 2: To graduate students who demonstrate effective communication skills, critical thinking and problem solving skills.

Outcome	Assessment Tool(s)	Benchmark	Schedule	Responsibility	Result	Action
2.1 Students will demonstrate effective communication skills	2.1 Film evaluation cases Pathology group projects	2.1 $\geq 80\%$ average in 1 st year projects	2.1 Sem. II and III	2.1 Faculty Program Director	2.1 Sem. II 85% Sem. III	2.1 Develop new tools and assess in future.
2.2 Students will perform non-routine exams (critical thinking)	2.2 Mobile comps Trauma comps	2.2 $\geq 80\%$ average on clinical comps.	2.2 Sem III and VI	2.2 Clinical Faculty Clinical Coordinator Program Director	2.2 Sem. III Sem. VI 95%	2.2 Benchmark met. Consider adding Peds in future.
2.3 Students will identify diagnostic quality images and correct non-quality images accordingly.	2.3 Film evaluations	2.3 Average score of $\geq 80\%$ in 1 st year and $\geq 95\%$ in second year.	2.3 Sem. III and VI	2.3 Clinical Faculty Clinical Coordinator Program Director	2.3 Sem. III Sem. VI 96%	2.3 Continue to monitor

**COMMUNITY COLLEGE OF PHILADELPHIA
DIAGNOSTIC MEDICAL IMAGING
ASSESSMENT PLAN JULY, 2006 – JULY, 2007**

Goal 3: To graduate students who demonstrate importance of life-long learning and professionalism.

Outcome	Assessment Tool(s)	Benchmark	Schedule	Responsibility	Result	Action
3.1 Graduates will indicate membership in a professional organization	3.1 Alumnae Survey Item 16	3.1 Responding graduates will indicate membership in ASRT or Phila.SRT	3.1 Annually in February	3.1 Program Director	3.1	3.1
3.2 Students/graduates will demonstrate professionalism in clinical settings.	3.2 Monthly clinical evaluation by clinical staff radiographers	3.2 Monthly evaluation ≥ 65 point average in 1 st yr and ≥ 80 point average thereafter	3.2 Sem. III and VI	3.2 Clinical Faculty Clinical Coordinator	3.2 Sem. III Sem. VI 96%	3.2 Continue to monitor

**COMMUNITY COLLEGE OF PHILADELPHIA
DIAGNOSTIC MEDICAL IMAGING
ASSESSMENT PLAN JULY, 2006 – JULY, 2007**

Goal 4: To fulfill the community's need for nationally certified radiographers.

Outcome	Assessment Tool(s)	Benchmark	Schedule	Responsibility	Result	Action
4.1 Credentialing examination	4.1 ARRT results	4.1 90% of graduates who take the ARRT will pass	4.1 Annually in October	4.1 Program Director	4.1 07/2006 100% pass on 1 st attempt	4.1 Benchmark met.
4.2 Job placement rate.	4.2 Alumnae Survey Item 1 and 12	4.2 90% surveys returned will indicate employment or advanced ed within 6 months of graduation	4.2 Annually in February	4.2 Program Director	4.2	4.2
4.3 Program completion rate	4.3 Program completion data	4.3 Retention ≥ 60%	4.3 Annually as necessary	4.3 Program Director	4.3 Cl of 06 61% retention Cl of 07 70% retention	4.3 Cl of 06 68% until 2 left for pregnancy. Returned in SP 07. Reviewed reasons others left. Personal, finances, health. 18% attrition (grades.) Cl of 07 8 WD for grades, 4 returned in Cl of 08.
4.4 Graduate satisfaction	4.4 Student exit interview Alumnae Survey comment	4.4 Majority of students responding will record satisfaction.	4.4 Annually in June Annually in February	4.4 Program Director	4.4 5/06 Exit interview	4.4 Comments generally good. Breaks between classes due to lack of classrooms.

**COMMUNITY COLLEGE OF PHILADELPHIA
DIAGNOSTIC MEDICAL IMAGING
ASSESSMENT PLAN JULY, 2006 – JULY, 2007**

Outcome	Assessment Tool(s)	Benchmark	Schedule	Responsibility	Result	Action
4.5 Employer satisfaction	4.5 Employer Survey Item 1-6	4.5 90% of employers responding will rate graduates as average or above.	4.5 Alternate years in October (even years)	4.5 Program Director	4.5 10/2006 100%	4.5 Met. Suggest using phone interviews of known employers.

Sem II = FI 1st year Sem VI=FI 2nd year

Sem III= Sp 1st year Sem VII=Sp 2nd year

**COMMUNITY COLLEGE OF PHILADELPHIA
DIAGNOSTIC MEDICAL IMAGING
ASSESSMENT PLAN JULY, 2007 – JULY, 2008**

MISSION STATEMENT: The Diagnostic Medical Imaging Program prepares the individual in the judicious use of ionizing radiation in both diagnostic radiographic and fluoroscopic procedures. This is accomplished by the application of knowledge in anatomy, physiology, and osteology; in the skillful positioning of the client/patient; the selection of correct technical factors; the proper handling and manipulation of radiation producing equipment; the utilization of accepted radiation protection procedures; and the processing of the image in preparation for diagnostic interpretation.

Goal 1: To graduate students as entry-level radiographers with the knowledge and skills to competently and safely perform radiographic procedures.

Outcome	Assessment Tool(s)	Benchmark	Schedule/Responsible Party	Result	Action
Students will possess knowledge of routine procedures.	Clinical comps	Students will achieve $\geq 75\%$ average	Spring – Level I , II Clinical Faculty, Clinical Coordinator and Program Director	Sp Level II 100% Sp. Level I 99%	1 student had 74. The student later dropped out for medical reasons before the end of the semester.
	Lab COE simulations	Students will achieve $\geq 75\%$ average	Fall Level I, II Faculty	Fall Level I 100% Fall Level II 100%	Benchmark was met but results troubling. 7/21 students needed to repeat one view. 9/14 students needed to repeat a view. Mainly due to sloppiness and lack of attention to detail.

**COMMUNITY COLLEGE OF PHILADELPHIA
DIAGNOSTIC MEDICAL IMAGING
ASSESSMENT PLAN JULY, 2007 – JULY, 2008**

Goal 1: To graduate students as entry-level radiographers with the knowledge and skills to competently and safely perform radiographic procedures.

Outcome	Assessment Tool(s)	Benchmark	Schedule/Responsible Party	Result	Action
Students will demonstrate quality patient care.	Patient care comps Pt. transfer Asepsis Venipuncture	Students will achieve $\geq 85\%$ average	Fall Level I Spring Level I Faculty Program director	Fall Level I Asepsis 100% Pt transfer 100% Spring Level I Venipuncture 100%	MONITOR CAREFULLY 21/21 completed 12/21 completed in Fall 18/18 completed by 5/1 Benchmark met but difficult to complete assessment of pt. transfer in Fall semester due to staff not moving the patient off stretcher. Seems to be a trend. 18/18 completed
	Clinical comps	Students will achieve $\geq 85\%$ average	Fall Level I Fall Level II Faculty Program Director	Level I Level II Sterile Tech. 100%	MONITOR CAREFULLY 13/14 completed
Students will demonstrate radiation protection to patients, selves and others.	Clinical comps. (Item 6 on form)	Students will achieve ≥ 2.5 points	Fall Level II Spring Level I	Level II 55% Level I 90%	MONITOR Results unacceptable 10/18 Level II students had points taken off . 9 proj. were either not shielded or shield in field. At start of spring, PD had conference with Level II students.
	Lab COE simulations (Item 15 on form)	Students will achieve a ≥ 2 points	Fall Level I and II	Level I 33% Level II 33%	MONITOR Results unacceptable 7/21 stud. lost points. 6/18 stud. lost points.

**COMMUNITY COLLEGE OF PHILADELPHIA
DIAGNOSTIC MEDICAL IMAGING
ASSESSMENT PLAN JULY, 2007 – JULY, 2008**

Goal 2: To graduate students who demonstrate effective communication skills, critical thinking and problem solving skills.

Outcome	Assessment Tool(s)	Benchmark	Schedule/Responsible Party	Result	Action
Students will demonstrate effective communication skills	Film evaluation cases Pathology group projects	≥80% average in 1 st year projects	Fall and Spring Level I Faculty Program Director	Fall clinical 21/21 Path 21/21 Spring clinical 18/18 Path 18/18	Take no action Monitor. First time collected data on Pathology.
Students will perform non-routine exams (critical thinking)	Mobile comps Trauma comps	≥ 80% average on clinical comps.	Summer I Level I Fall Level II Clinical Faculty Clinical Coordinator Program Director	Level I mobile 100% Level II mobile 100% trauma 100%	Take no action Monitor This is first time we moved portable assessment to summer for Level I and the first time we are assessing trauma for Level II
Students will identify diagnostic quality images and correct non-quality images accordingly.	Film evaluations	Average score of ≥ 80% in 1 st year and ≥95% in second year.	Fall Level II Spring Level I Clinical Faculty Clinical Coordinator Program Director	Level II 100% Level I 100%	Take no action Monitor

**COMMUNITY COLLEGE OF PHILADELPHIA
DIAGNOSTIC MEDICAL IMAGING
ASSESSMENT PLAN JULY, 2007 – JULY, 2008**

Goal 3: To graduate students who demonstrate importance of life-long learning and professionalism.

Outcome	Assessment Tool(s)	Benchmark	Schedule/Responsible Party	Result	Action
Graduates will indicate membership in a professional organization	Alumnae Survey Item 16	Responding graduates will indicate membership in ASRT or Phila.SRT	Annually in February Program Director	N=10 ASRT 8 PhilaSRT 2	Continue to encourage participation
Students/graduates will demonstrate professionalism in clinical settings.	Monthly clinical evaluation by clinical staff radiographers	Monthly evaluation \geq 65 point average in 1 st yr and \geq 80 point average thereafter	Spring Level I Fall Level II Clinical Faculty Clinical Coordinator	Level I 100% Level II 100%	Develop new forms for next cycle. Advisory Committee and faculty deem the present evaluation form is inadequate. New form to be put out on trial in SS II with formal adoption by Fall 2008

**COMMUNITY COLLEGE OF PHILADELPHIA
DIAGNOSTIC MEDICAL IMAGING
ASSESSMENT PLAN JULY, 2007 – JULY, 2008**

Goal 4: To fulfill the community's need for nationally certified radiographers.

Outcome	Assessment Tool(s)	Benchmark	Schedule/Responsible Party	Result	Action
Credentialing examination	ARRT results	90% of graduates who take the ARRT will pass	Annually in October Program Director	Cl of 07 100%	Performed beyond expectations
Job placement rate.	Alumnae Survey Item 1 and 12	90% surveys returned will indicate employment or advanced ed within 6 months of graduation	Annually in February Program Director	N=10 Before grad =5 Within 6 mo =5	Continue to monitor
Program completion rate	Program completion data	Retention ≥ 60%	Annually as necessary Program Director	Cl of 2008 Retention 50%	Class exceptionally hard-hit by personal problems during 1 st year. Continue to monitor.
Graduate satisfaction	Student exit interview Alumnae Survey comment	Majority of students responding will record satisfaction.	Annually in June Annually in February Program Director	N=10 100% responded yes	Continue to monitor
Employer satisfaction	Employer Survey Item 1-6	90% of employers responding will rate graduates as average or above.	Alternate years in October (even years) Program Director	Not done in odd years	Will be provided in next assessment.

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DIAGNOSTIC MEDICAL IMAGING
ASSESSMENT PLAN 2008-2009**

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Goal 1: To graduate students as entry-level radiographers with the knowledge and skills to competently and safely perform radiographic procedures.

Outcome	Assessment Tool(s)	Benchmark	Schedule/Responsible Party	Result	Action
Students will possess knowledge of routine procedures.	Lab COE simulations	Students will achieve $\geq 75\%$ average	Fall Level I Fall Level II Faculty	Level I 13 proj failed Level II 4 proj.failed/4 students	10 students failed one proj. & did repeat 1 student failed 4 proj. and was dropped at end of semester 4 students failed one proj. Continue to monitor but results not surprising
	Lab COE simulations (Item 15 on form)	Students will achieve a ≥ 2 points	Fall Level I Fall Level II Faculty	Level I 24/24 Level II 17/17	Students clearly seem to know what the proper procedure is.

**COMMUNITY COLLEGE OF PHILADELPHIA
DIAGNOSTIC MEDICAL IMAGING
ASSESSMENT PLAN 2008-2009**

Goal 1: To graduate students as entry-level radiographers with the knowledge and skills to competently and safely perform radiographic procedures.

Outcome	Assessment Tool(s)	Benchmark	Schedule/Responsible Party	Result	Action
Students will possess knowledge of routine procedures.	Clinical comps	Students will achieve \geq 75% average	Fall Level II Spring Level I Spring Level II Clinical Faculty, Clinical Coordinator	Level II 17/17 Level I 12/12 Level II 17/17	Continue to monitor. Revised data reporting forms
	Lab COE simulations	Students will achieve \geq 75% average	Fall Level I Fall Level II Faculty	Level I 13 proj failed Level II 4 proj.failed/4 students	10 students failed one proj. & did repeat 1 student failed 4 proj. and was dropped at end of semester 4 students failed one proj. Continue to monitor but results not surprising
Students will demonstrate quality patient care.	Patient care comps Pt. transfer Asepsis Venipuncture	Students will achieve \geq 85% average	Fall Level I Spring Level I Faculty	Asepsis 22/22 Pt transfer 19/22. No opportunity on 3 students Venipuncture 12/12	2 students had to repeat comp. and did comply. Discussed at Advisory Committee meeting the problems we are noting in obtaining the pt. transfer comp. Those students who were not assessed on pt. transfer in Fall were completed in Spring. Faculty to consider changing rubric.

**COMMUNITY COLLEGE OF PHILADELPHIA
DIAGNOSTIC MEDICAL IMAGING
ASSESSMENT PLAN 2008-2009**

Goal 1: To graduate students as entry-level radiographers with the knowledge and skills to competently and safely perform radiographic procedures.

Outcome	Assessment Tool(s)	Benchmark	Schedule/Responsible Party	Result	Action
Students will demonstrate quality patient care	Clinical comps	Students will achieve $\geq 85\%$ average	Fall Level II Clinical Faculty Clinical Coordinator	Level II Sterile Tech. 11/17 completed in Fall Other 5 completed in Spring	Some students need to be pushed into doing the comp. Faculty must be persistent. Sometimes there is difficulty getting all students rotated through IR in one semester. We need to be flexible in this case. Continue to monitor and check results.
Students will demonstrate radiation protection to patients, selves and others.	Clinical comps. (Item 6 on form)	Students will achieve ≥ 2.5 points	Spring Level I Spring Level II Clinical Faculty Clinical Coordinator	Level I 83% are achieving Level II 93% are achieving (Using no. observations correct/ total no. observations)	Students are following the lead of the staff technologists. They use collimation appropriately but on portables, they forget aprons. Faculty does not feel they can compromise on this issue. May also lose points due to repeat exam. Repeats due to positioning of pt. or misplaced shield. Advisory Com. and faculty think this is important to keep assessing.
	Lab COE simulations (Item 15 on form)	Students will achieve ≥ 2 points	Fall Level I Fall Level II Faculty	Level I 24/24 Level II 17/17	Students clearly seem to know what the proper procedure is.

**COMMUNITY COLLEGE OF PHILADELPHIA
DIAGNOSTIC MEDICAL IMAGING
ASSESSMENT PLAN 2008-2009**

Goal 2: To graduate students who demonstrate effective communication skills, critical thinking and problem solving skills.

Outcome	Assessment Tool(s)	Benchmark	Schedule/Responsible Party	Result	Action
Students will demonstrate effective communication skills	Film evaluation cases Pathology group projects	≥80% average in 1 st year projects	Fall Level I Spring Level I Faculty Program Director	22/22 in clinical 22/22 in Path but weakness in oral communication 12/12	This may be a problem in the 1 st semester. Watch for improvement. Class dynamic changes. This group lacks creativity. Likes to get all info from internet. Look to new ideas like a poster session for coming year.
	Mobile comps Trauma comps	≥ 80% average on clinical comps.	Summer I Level I Mobile Comps Fall Level II Mobile and trauma Clinical Faculty Clinical Coordinator Program Director	Level I 50% completed Level II 60% completed	Not all students had the opportunity to perform. Will continue to observe. Due to IR and CT rotations, all students didn't have opportunity to perform, however, remaining 40% completed in SS I.
Students will identify diagnostic quality images and correct non-quality images accordingly.	Film evaluations	Average score of ≥ 80% in 1 st year and ≥95% in second year.	Spring Level I Spring Level II Clinical Faculty Clinical Coordinator Program Director	Level I 12/12 Level II 17/17	Students performing without notes and communication improving. But Level I still lack creativity at bringing anything out of the ordinary.

**COMMUNITY COLLEGE OF PHILADELPHIA
DIAGNOSTIC MEDICAL IMAGING
ASSESSMENT PLAN 2008-2009**

Goal 3: To graduate students who demonstrate importance of life-long learning and professionalism.

Outcome	Assessment Tool(s)	Benchmark	Schedule/Responsible Party	Result	Action
Graduates will indicate membership in a professional organization	Alumnae Survey Item 16	Responding graduates will indicate membership in ASRT or Phila.SRT	Annually in February Program Director	75% report affirmative	Sent 13 8 responses
Students/graduates will demonstrate professionalism in clinical settings.	Monthly clinical evaluation by clinical staff radiographers	Monthly evaluation \geq 80 point average	Fall Level II Spring Level I Clinical Faculty Clinical Coordinator	Level II 17/17 Level I 12/12	New clinical evaluation form warranted change in benchmark. Feedback on new eval. good.

**COMMUNITY COLLEGE OF PHILADELPHIA
DIAGNOSTIC MEDICAL IMAGING
ASSESSMENT PLAN 2008-2009**

Goal 4: To fulfill the community's need for nationally certified radiographers.

Outcome	Assessment Tool(s)	Benchmark	Schedule/Responsible Party	Result	Action
Credentialing examination	ARRT results	90% of graduates who take the ARRT will pass	Annually in October Program Director	100%	14 th consecutive year of no failure on first attempt
Job placement rate.	Alumnae Survey Item 1 and 12	90% surveys returned will indicate employment or advanced ed within 6 months of graduation	Annually in February Program Director	100% employed 2 additionally doing advanced ed.	Keep monitoring. Economy has not hit yet.
Program completion rate	Program completion data	Retention ≥ 60%	Annually as necessary Program Director	CL 2009 began with 24 71% retention CL 2010 began with 25 48% retention	1 student from this original class is returning in Fall 09 4 students from this original class are returning Fall 09 A review of the reasons for this attrition rate does not reveal anything unusual. Goals, grades and personal problems top the list.
Graduate satisfaction	Student exit interview Alumnae Survey comment	Majority of students responding will record satisfaction.	Annually in June Annually in February Program Director	17/17 8/8	Graduates and soon to be graduates seem to be extremely satisfied.
Employer satisfaction	Employer Survey Item 1-6	90% of employers responding will rate graduates as average or above.	Alternate years in October (even years) Program Director	100%	Very poor response. 11 sent and only 4 responses. Discussed at Advisory Com. meeting. Suggestion to do this every year and to ask for voluntary signature in order to track who has not responded and send a second time.

**COMMUNITY COLLEGE OF PHILADELPHIA
DIAGNOSTIC MEDICAL IMAGING
ASSESSMENT PLAN 2009-2010**

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Goal 1: To graduate students as entry-level radiographers with the knowledge and skills to competently and safely perform radiographic procedures.

Outcome	Assessment Tool(s)	Benchmark	Schedule/Responsible Party	Result	Action
Students will possess knowledge of routine procedures	Clinical comps	Students will achieve $\geq 75\%$ average	Fall Level II Spring Level I Spring Level II Clinical Faculty Clinical Coordinator	Level II 13/13 Level I 16/19 Level II 11/13	1 student failed 3 view, others failed 1 or 2 2 student failed SMV and/or AP axial facial bones
	LAB COE simulations	Students will achieve $\geq 75\%$ average	Fall Level I Fall Level II Faculty	Level I – 24 students performed 28 views (672 views) 3.7% repeat rate. 2 students failed 4 views and had grades lowered. Level II – 13 students performed 19 views (247 views) 0.8% repeat reate	Repeats were CXR and probably attributed to 1 st COEs. Also later in semester when working in bucky after doing TT extremities.

**COMMUNITY COLLEGE OF PHILADELPHIA
DIAGNOSTIC MEDICAL IMAGING
ASSESSMENT PLAN 2009-2010**

Goal 1: To graduate students as entry-level radiographers with the knowledge and skills to competently and safely perform radiographic procedures.

Outcome	Assessment Tool(s)	Benchmark	Schedule/Responsible Party	Result	Action
Students will demonstrate quality patient care.	Patient care comps Pt. transfer Asepsis Venipuncture	Students will achieve \geq 85% average	Fall Level I Spring Level I Faculty	Asepsis 24/24 Pt transfer 24/24 Venipuncture 19/19	The change in the rubric helped get this taken care of on schedule.
	Clinical comps	Students will achieve \geq 85% average	Fall Level II Clinical Faculty Clinical Coordinator	Level II Sterile Tech. 13/13	Faculty persistent to get this done.
Students will demonstrate radiation protection to patients, selves and others.	Clinical comps. (Item 6 on form)	Students will achieve \geq 2.5 points	Spring Level I Spring Level II Clinical Faculty Clinical Coordinator	Level I 133/153 Level II 137/245 (Using no. observations correct/ total no. observations)	20 students had less than 2.5 8 students had less than 2.5
	Lab COE simulations (Item 15 on form)	Students will achieve a \geq 2 points	Fall Level I Fall Level II Faculty	Level I 6/24 students lost points for collimation or shielding Level II 3/13 students lost points for shield position	This was in the first semester and some students were dropped at the end of fall. Once again it is because they get sloppy in clinical and don't pay attention to details. Discuss with Advisory Committee and faculty.

**COMMUNITY COLLEGE OF PHILADELPHIA
DIAGNOSTIC MEDICAL IMAGING
ASSESSMENT PLAN 2009-2010**

Goal 2: To graduate students who demonstrate effective communication skills, critical thinking and problem solving skills.

Outcome	Assessment Tool(s)	Benchmark	Schedule/Responsible Party	Result	Action
Students will demonstrate effective communication skills	Film evaluation cases Pathology group projects	≥80% average in 1 st year projects	Fall Level I Spring Level I Faculty Program Director	Level I 24/24 Pronunciation problems on med. terms was noted	This was noted after students had tutoring on terms. They still had difficulty. Did not result in less than 80% grade. Note: Next year the assessment tool should include one assessment from 1 st year and one from 2 nd year. We will keep DMI 181 project and add the capstone science project in 2 nd year.
	Mobile comps Trauma comps	≥ 80% average on clinical comps.	Summer I Level I Mobile Comps Fall Level II Mobile and trauma Clinical Faculty Clinical Coordinator Program Director	Level I 7/18 Level II Mobile 9/13 Trauma 4/13	All completed with 90-95 points All grades greater than 80%
Students will identify diagnostic quality images and correct non-quality images accordingly.	Film evaluations	Average score of ≥ 80% in 1 st year and ≥95% in second year.	Spring Level I Spring Level II Clinical Faculty Clinical Coordinator Program Director	Level I 19/19 Level II 13/13	Benchmark achieved

**COMMUNITY COLLEGE OF PHILADELPHIA
DIAGNOSTIC MEDICAL IMAGING
ASSESSMENT PLAN 2009-2010**

Goal 3: To graduate students who demonstrate importance of life-long learning and professionalism.

Outcome	Assessment Tool(s)	Benchmark	Schedule/Responsible Party	Result	Action
Graduates will indicate membership in a professional organization	Alumnae Survey Item 16	Responding graduates will indicate membership in ASRT or Phila.SRT	Annually in February Program Director	8 of 13 responses (Class of 2009)	61.5% are members. Will try to improve this with competition awards.
Students/graduates will demonstrate professionalism in clinical settings.	Monthly clinical evaluation by clinical staff radiographers Employer survey Item 6	Monthly evaluation \geq 80 point average Employer will score 3 or higher	Fall Level II Spring Level I Clinical Faculty Clinical Coordinator Program Director	Level II 13/13 Level I 17/19 1 averaged 79.3 1 averaged 61.6 7 surveys sent/5 returned All 5 score greater than 3	71% response

**COMMUNITY COLLEGE OF PHILADELPHIA
DIAGNOSTIC MEDICAL IMAGING
ASSESSMENT PLAN 2009-2010**

Goal 4: To fulfill the community's need for nationally certified radiographers.

Outcome	Assessment Tool(s)	Benchmark	Schedule/Responsible Party	Result	Action
Credentialing examination	ARRT results	90% of graduates who take the ARRT will pass	Annually in October Program Director	17/17 passed 1 st attempt (Class of 2009)	Still surpassing National mean score
Job placement rate.	Alumnae Survey Item 1 and 12	90% surveys returned will indicate employment or advanced ed within 6 months of graduation	Annually in February Program Director	13/17 responses 11 indicated employed 3 FT/8 PT (Class of 2009)	85% employment rate Economy had a bearing.
Program completion rate	Program completion data	Retention ≥ 50%	Annually as necessary Program Director	17/26 = 65% retention	Some years better than others. Trying to keep above 50%
Graduate satisfaction	Student exit interview Alumnae Survey comment	Majority of students responding will record satisfaction.	Annually in June Annually in February Program Director	17/17 satisfied at exit interview 13/17 responded all satisfied	76% response.
Employer satisfaction	Employer Survey Item 1-6	90% of employers responding will rate graduates as average or above.	Annually in March to see if response rate improves Program Director	Sent 7 surveys, 5 returned 5/5 score average or above	71% response

**COMMUNITY COLLEGE OF PHILADELPHIA
DIAGNOSTIC MEDICAL IMAGING
ASSESSMENT PLAN 2010-2011**

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Goal 1: To graduate students as entry-level radiographers with the knowledge and skills to competently and safely perform radiographic procedures.

Outcome	Assessment Tool(s)	Benchmark	Schedule/Responsible Party	Result	Action
	Lab COE simulations (Item 15 on form)	Students will achieve a ≥ 2 points	Fall Level I Fall Level II Faculty	Level I 528/532 Level II 333/342	1 shield over anatomy, 2 no shield, 1 no info. 4 no shield, 3 incorrect use, 2 no info

**COMMUNITY COLLEGE OF PHILADELPHIA
DIAGNOSTIC MEDICAL IMAGING
ASSESSMENT PLAN 2010-2011**

Goal 1: To graduate students as entry-level radiographers with the knowledge and skills to competently and safely perform radiographic procedures.

Outcome	Assessment Tool(s)	Benchmark	Schedule/Responsible Party	Result	Action
Students will demonstrate quality patient care.	Clinical comps	Students will achieve $\geq 85\%$ average	Fall Level II Clinical Faculty Clinical Coordinator	Level II Sterile Tech 18/18	
Students will demonstrate radiation protection to patients, selves and others.	Clinical comps. (Item 6 on form)	Students will achieve ≥ 2.5 points	Spring Level I Spring Level II Clinical Faculty Clinical Coordinator	Level I 171/187 Level II 168/178 (Using no. observations correct/ total no. observations)	16 times 10 times
	Lab COE simulations (Item 15 on form)	Students will achieve a ≥ 2 points	Fall Level I Fall Level II Faculty	Level I 528/532 Level II 333/342	1 shield over anatomy, 2 no shield, 1 no info. 4 no shield, 3 incorrect use, 2 no info

**COMMUNITY COLLEGE OF PHILADELPHIA
DIAGNOSTIC MEDICAL IMAGING
ASSESSMENT PLAN 2010-2011**

Goal 2: To graduate students who demonstrate effective communication skills, critical thinking and problem solving skills.

Outcome	Assessment Tool(s)	Benchmark	Schedule/Responsible Party	Result	Action
Students will demonstrate effective communication skills	Film evaluation cases Pathology group projects Capstone science project	≥80% average in 1 st year projects	Fall Level I Spring Level II Faculty Program Director	Level I 20/20 Pathology 20/20 18/18	Comment????? Co-curricular activity with DH and CLT
	Mobile comps Trauma comps	≥ 80% average on clinical comps.	Summer I Level I Mobile Comps Fall Level II Mobile and trauma Clinical Faculty Clinical Coordinator Program Director	Level I 9/12 completed Level II 9/18 mobile 5/18 trauma	All scored above 80 points
Students will identify diagnostic quality images and correct non-quality images accordingly.	Film evaluations	Average score of ≥ 80% in 1 st year and ≥95% in second year.	Spring Level I Spring Level II Clinical Faculty Clinical Coordinator Program Director	Level I 16/17 Level II 18/18	

**COMMUNITY COLLEGE OF PHILADELPHIA
DIAGNOSTIC MEDICAL IMAGING
ASSESSMENT PLAN 2010-2011**

Goal 3: To graduate students who demonstrate importance of life-long learning and professionalism.

Outcome	Assessment Tool(s)	Benchmark	Schedule/Responsible Party	Result	Action
Graduates will indicate membership in a professional organization	Alumnae Survey Item 16	Responding graduates will indicate membership in ASRT or Phila.SRT	Annually in February Program Director	8/12 66%	Sent 13 and received 12 responses
Students/graduates will demonstrate professionalism in clinical settings.	Monthly clinical evaluation by clinical staff radiographers Employer survey Item 6	Monthly evaluation \geq 80 point average Employer will score 3 or higher	Fall Level II Spring Level I Clinical Faculty Clinical Coordinator Program Director	Level II 16/18 Level I 8/17 3/3 100%	3 of these were readmit students

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ASSESSMENT PLAN 2010-2011**

Goal 4: To fulfill the community's need for nationally certified radiographers.

Outcome	Assessment Tool(s)	Benchmark	Schedule/Responsible Party	Result	Action
Credentialing examination	ARRT results	90% of graduates who take the ARRT will pass	Annually in October Program Director	13/13 100% on 1 st attempt	
Job placement rate	Alumnae Survey Item 1 and 12	90% surveys returned will indicate employment or advanced ed within 6 months of graduation	Annually in February Program Director	11/12 employed 1 unemployed and not in AP classes 92% employed	13 graduates and 12 responded.
Program completion rate	Program completion data	Retention ≥ 50%	Annually as necessary Program Director	In Fall 2010 42 students in DMI In Spring 2011 35 students in DMI 83% retention in Program CI of 2011 = 58% retention CI of 2012 = 71% retention	
Graduate satisfaction	Student exit interview Alumnae Survey comment	Majority of students responding will record satisfaction.	Annually in June Annually in February Program Director	100%	.
Employer satisfaction	Employer Survey Item 1-6	90% of employers responding will rate graduates as average or above.	Annually in March to see if response rate improves Program Director	3/3 100%	Sent 5 and received 3 responses Next yr. will try to send employer survey to the graduates to give directly to employer.

APPENDIX B
QUALITY-VIABILITY INDEX REPORT

Community College of Philadelphia

Academic Affairs

PROGRAM PERFORMANCE INDICATORS

Program: Diagnostic Medical Imaging

Date October 25, 2010

Quality Indicators	SCORE						Comments
	4	3	2	1	0	NA	
Student Learning Outcomes	X						
Professional Development-Full Time Faculty	X						
Faculty Evaluation	X						
Faculty Engagement	X						
Accreditation	X						
Facility Oversight	X						
Program Alliances	X						
Academic Program Innovation		X					
Strategic Planning	X						

Community College of Philadelphia

Academic Affairs

PROGRAM PERFORMANCE INDICATORS

Viability Indicators	SCORE						Comments
	4	3	2	1	0	NA	
Documented Need	X						
Enrollment		X					DMI is a 2 year curriculum and retention is tracked on that basis. Students can drop out and return once. Capacity is determined by the number of clinical seats available each year and is not reflected in the number of seats the college assigns to the sections.
Cost to Operate			X				
Benefit		X					
Fall to Fall Retention				X			Retention = Class of 2010 48%; Class of 2009 71%; Class of 2008 50%; Class of 2007 70%; Class of 2006 61%; Class of 2005 79%
Fall to Spring Retention			X				
Graduation Rates	X						90% to 100% of the DMI students who make it to the second year will complete the program with a degree and 100% pass the national examination of the ARRT.
Transfer Rates							Omit for Fall 2010.
Employment							Omit for Fall 2010.
Degrees Awarded			X				

APPENDIX C

ADVISORY COMMITTEE (2011-2012)

**COMMUNITY COLLEGE OF PHILADELPHIA
DIAGNOSTIC MEDICAL IMAGING PROGRAM
ADVISORY COMMITTEE
2011-2012**

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AdvisoryList 2011-2012DMI file