

# FY2013 DEPARTMENTAL ANNUAL REPORT OF CONTINUOUS IMPROVEMENT

## Department of Allied Health Fort Hays State University

### I. DEPARTMENTAL OVERVIEW

The Allied Health Department provides students with the opportunity for careers in Medical Diagnostic Imaging to include radiologic technology, bone densitometry, cardiovascular-interventional technology, computed tomography, diagnostic medical sonography, magnetic resonance imaging, leadership and management, and mammography. The department offers the following degree options: an Associate of Science in Radiologic Technology (RT), a Baccalaureate of Science in Medical Diagnostic Imaging (MDI), or a Baccalaureate of Science in Medical Diagnostic Imaging with an emphasis in Diagnostic Medical Sonography (DMS). Approximately 30 new students are accepted into the RT program each year with an additional 45-50 students being accepted into the MDI programs. The didactic education is provided with seven highly qualified faculty with individual expertise in specific modalities. In addition, over 18 adjunct faculty/ clinical instructors assist with the clinical education at the respective clinical affiliates throughout the state of Kansas, Nebraska, and Colorado. Graduates of the various programs are highly sought out, evident with the 100% graduate job placement of those seeking employment. In addition, several graduates each year pursue advanced health programs beyond the FHSU baccalaureate degree to include radiation therapy, nuclear medicine, physician assistant, medicine, and others.

#### A. Departmental Mission and Vision Statements

The programs offered within the Department of Allied Health are based on the foundation of Fort Hays State University, a liberal arts college, established to meet the needs of the students and communities of western Kansas. One particular community need that is becoming more evident is the lack of imaging professionals in rural areas. To help meet this increasing demand, the department strives to recruit and educate students of outstanding ability to perform this vital role in the health care team.

Through individual instruction, the programs provide excellent instruction, at both the campus and the clinical setting. In the programs, students learn the academic theory on campus and then apply their knowledge in the affiliate clinical education centers with patients under the supervision of qualified hospital staff and physicians. During both aspects of the students' training, special emphasis is given to the need for empathy and compassion for the patients.

The programs are continually evaluated to improve the educational opportunities provided to students and the quality of graduates providing health care in Kansas. By fulfilling its mission, the department improves the quality of health care throughout the state of Kansas.

**B. Departmental Goals, Objectives, and Strategic Priorities**

The Department of Allied Health's goals and strategic priorities have been focused on the growth of the virtual certificate and bachelor degree programs. Specifically, growth continues to be evident within the baccalaureate programs with a 31.5% increase in majors. Evaluating the 4 year averages to this past year's KPIs, it is evident the department has continued steady growth from 2003. The number of new freshmen increased slightly, approximately 4%, and transfers increased by 20% this past year. With regard to the 4-year averages, the number of new freshmen is slightly higher, by 4. With reference to the transfers, the 4-year average is approximately 22, showing this year increase being positive with 6 more than the average. The overall number of undergraduate Allied Health majors increased approximately 11%, compared to 3% last year. Once again, the largest increase was in the MDI majors. When considering a 4-year average of 86, this year demonstrated an increase to 125, nearly a 45% increase compared to the average. The overall SCH production increased significantly by 10% compared to last year and it is anticipated that this number will increase by 10% once fall 2013 numbers are available. When compared to the 4-year average, it has increased approximately 17%. The department faculty has continued to increase efforts in ensuring a progressive approach to implementing current technological advancements. To this end, the department goals, objectives and strategic priorities focus on these components for FY2013 while maintaining the high quality programs that are offered.

The major goal of the department remains to successfully grow a quality distance education curriculum for the BS in MDI and the certificate programs. The target audience continues to be graduates of other radiology programs and practicing technologists who want to pursue further educational goals. A major focus of the department this year is to further expand recruitment efforts. The department will continue to work with the new FHSU tag line/ marketing effort and the Denver center to increase our potential recruits from the state of Colorado. In addition, there will be a focus on the continued quality of the distance education courses.

Another major department goal will be to focus efforts to potentially increase the number of high quality clinical affiliates for the programs. The stability of clinical facilities is uncertain with increased financial constraints and reorganization. This may potentially impact the clinical component of the program and the students assigned to these facilities. It is critical to develop more partnerships/affiliations with additional medical facilities to continue growth of the various programs. The department will need to become innovative in securing these facilities and support through additional OOE funds to support the additional growth.

The Strategic Priorities are included on the Brand Essence Statement of the Allied Health Department contained within Appendix E. In addition, the Affinity diagrams for the department programs are found within Appendix A.

### C. Department Productivity and Distinctive Accomplishments

The productivity of the Department of Allied Health excels in various instructional, service and scholarly activities. The following is a summation of the productivity and distinctive accomplishments in each area:

#### Instructional/Advising Activity:

- In FY 2013, the SCH production increased from 3351 to 3716, approximately 10%. The SCH average over the past 4 years is approximately 3194. The number of first majors increased 2.5% overall this past year, with an overall 17% increase when compared to the four year average. The SCH per FTE this past year was significant at 619. Although the department was extremely successful in increasing production, it was at the cost of one less faculty member and full-time faculty having to cover overload teaching while searching for an open position.
- The department faculty recruitment efforts continue to remain steady in terms of participation in activities. The faculty expended their efforts within recruitment activities through campus activities, attendance at SRPs, and participation in career days with various high schools and junior colleges. The department continues to host an open house during the first week of school for prospective students to visit. The department contacted well over 2000 prospective students throughout Kansas, Nebraska, Missouri, Oklahoma, Arizona, and Colorado for the RT, MDI, on-line MDI, modality certificate, and MDI with emphasis in ultrasound programs.
- The utilization of the tablets and DyKnow software continues to expand within several additional courses within the department. In addition, many faculty attending various CTELT workshops have implemented other interactive teaching tools within their courses both on campus and on-line. These include voicethread, prizi, google docs, and others. Faculty continue to be committed to implementing high quality courses by becoming more knowledgeable in the implementation of the various tools
- FHSU students participated in various activities of the annual Kansas Society of Radiologic Technologists state meeting held in Dodge City, KS in April. The students participated in the Ray Bowl Competition (quiz bowl), in which students compete against other students from radiology programs across Kansas. The FHSU Ray Bowl team consisting of Tiara Stebens, Eric Goetz, Skye Balthazor placed third in the final competition. FHSU Radiology students have placed 1<sup>st</sup>, 10 of the past 13 years and placed 2<sup>nd</sup> in one other year. In addition, Tiara Stebens earned Top Raybowl Score Honors, having the highest score on the written exam competing against 75+ students from all over the state. Students also had the opportunity to enter the essay, scientific exhibit, and radiographic film competitions. FHSU student Drew Hamel received 3<sup>rd</sup> place honors for his poster of "MRI & CT Carotid Imaging within the scientific exhibit competition. Drew Hamel placed 1<sup>st</sup> in the contrast imaging with the lateral rectum. Riley Vanderee placed 2<sup>nd</sup> in the odontoid film competition. Deandra Kaiser placed 3<sup>rd</sup> in the Waters view for the sinus, and it was a sweep within the swimmer view of the shoulder with Booke Maier, Katie Carmichael, and Kaylee Conwell placing 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> respectively. It is evident that the FHSU Allied Health Department was very well represented by outstanding student achievements.

Service/Scholarship Activities:

- Ms. Jennifer Wagner is in the development process as the sole author for an on-line radiography publication.
- Ms. Denise Orth published *One Time Only: Sticking to Safe Injection Practices* in the February/March 2012 issue of the ASRT Scanner.
- Ms. Christa Weigel reviewed chapters for Elsevier Publishing's "Digital Radiography" by Carter & Veale, January 2013
- Ms. Christa Wegiel reviewed a proposal for Jones and Bartlett Learning for a Radiologic Science Project, June 2012
- Dr. Mike Madden continues to serve as a member of the editorial review board of the *Radiologic Technology Journal of the American Society of Radiologic Technologists* and *Association of Educators in Radiologic Sciences Journal*.
- Ms. Katie Fulton successfully completed four courses toward completion of the Master of Science in Instructional Technology.
- Ms. Brenda Hoopingarner invited as Exam Writer for the American Registry of Diagnostic Medical Sonographers (ARDMS) for single physics & instrumentation (SPI) and abdomen/superficial structure examinations.
- Ms. Denise Orth has begun work on the revision process of *The Essentials of Radiologic Science* textbook for Lippincott, Williams, and Wilkins was published in February 2011 and the publisher has been in contact with me to begin the second edition of this radiologic science textbook. The process of writing the second edition will begin in Fall 2012 with an anticipated publication date of February 2015.
- Ms. Christa Weigel gave a presentation and roundtable discussion with Hong Wang and Kim Perez: "Building an Active Learning Community in Online Classrooms: Stories from Early Adopters", April 10, 2012
- Dr. Mike Madden continues to work on the third edition of the *Introduction to Sectional Anatomy and Introduction to Sectional Anatomy Workbook and Board Review Guide*.
- Ms. Christa Weigel served as a reviewer for Association of Radiologic and Imaging Nursing's "Core Curriculum for Radiologic & Imaging Nursing", Breast Imaging Chapter, Fall 2012
- Ms. Katie Fulton & Christa Weigel completed the series to earn the Advising Technology Certificate
- Ms. Denise Orth presented "Are You Up To Standard?" at Kansas Society of Radiologic Technologists 54<sup>th</sup> Educational Symposium Oct. 13, 2012.
- Ms. Christa Weigel appointed to the American Registry of Radiologic Technologists' (ARRT) Mammography Examination Test Writing Committee
- Ms. Christa Weigel serves on the Associate of Educator in Imaging and Radiologic Sciences' (AEIRS) Bylaws Committee
- Ms. Brenda Hoopingarner elected to Board of Directors of the Society of Diagnostic Medical Sonography (SDMS) as Director-At-Large to represent 23,000 + members.
- Ms. Denise Orth is a member of the American Society of Radiologic Technologists (ASRT) CR/DR Task Force which is charged with researching industry practices with computed and digital radiography. The culmination of the task force was a white paper over the research. A special

report of the white paper was published in the September/October 2012 issue of the ASRT publication Radiologic Technology with the full white paper available on the ASRT website.

- Ms. Christa Weigel is the Kansas Society of Radiologic Technologists (KSRT) Professional Development Committee Co-Chair 2012-2013
- Ms. Katie Fulton attended multiple CTELT workshops as a new faculty member to include:  
Attended following CTELT Workshops:
  - “Speed Up Online Course Development with Master Course Shells”
  - “Building Online Communities with Blackboard”
  - “Engaging Online Communities Across Student Populations”
  - “Creating Engaging Content in Blackboard”
  - “Getting Started with Blackboard”
- Ms. Denise Orth serves as the KSRT Educational Development Co-Chair 2012 & 2013 Annual KSRT Convention Co-Chair
- Ms. Denise Orth continues to serve on the Practice Standards Council & is Chair of the Practice Standards Council Limited X-ray Machine Operators subcommittee
- Ms. Denise Orth is the Chair Practice Standards Council Radiography subcommittee
- Ms. Brenda Hoopingarner serves as the SDMS Chair of the Membership Committee & Board Liason for the Continuing Medical Education Committee.

## II. DEPARTMENTAL PERFORMANCE METRICS

### A. Department Performance Indicators

Key Performance Indicator	FY2009	FY2010	FY2011	FY2012	FY2013
<b>Freshmen</b> [20 <sup>TH</sup> DAY FALL SEMESTER, HEADCOUNT]	35	45	47	50	52
Radiologic Technology (AS,305-5207)	32	40	37	30	36
Medical Diagnostic Imaging (BS,305-1225)	3	5	10	20	16
<b>Transfer Students</b> [20 <sup>TH</sup> DAY FALL SEMESTER, HEADCOUNT]	9	32	39	43	41
Radiologic Technology (AS,305-5207)	6	18	20	16	13
Medical Diagnostic Imaging (BS,305-1225)	3	14	19	27	28
<b>Undergraduate (first majors/second majors)</b> [20 <sup>TH</sup> DAY FALL SEMESTER, HEADCOUNT OF FIRST MAJORS, HEADCOUNT OF SECOND MAJORS]	192	224	252	259/71	288/65
Radiologic Technology (AS,305-5207)	157	172	177	164/0	163/0
Medical Diagnostic Imaging (BS,305-1225)	35	52	75	95/71	125/65
<b>Major Retention</b> [20 <sup>TH</sup> DAY FALL SEMESTER, PERCENT OF FR MAJORS RETURNING TO UNIVERSITY]	79.49%	82.86%	83.33%	76.60%	79.59%
<b>Undergraduate Student Credit Hours</b> [TOTAL UNDERGRAD SCH]	3204	3297	3351	3716	
<b>Tenured or Tenure-track Faculty (Headcount)</b> [FTE OCCUPIED FROM POSITION CONTROL]	5	5	5	5	5
<b>Non Tenure-Track Faculty (Headcount)</b> [FTE OCCUPIED FROM POSITION CONTROL]	2	2	2	1	2
<b>Undergraduate Degrees</b> [ UNDERGRAD DEGREES AWARDED]	72	61	67	85	74
Radiologic Technology (AS,305-5207)	30	30	25	32	30
Medical Diagnostic Imaging (BS,305-1225)	42	31	42	53	44
Briefly note 2-3 improvements over the last year prompted from the above enrollment indicators.					
The faculty continued to participate and provide recruitment opportunities throughout the year. The department facebook and webpage information was updated to include recent events, changes/additions to courses available in the on-line fashion, and program information/materials.					
Number of books, book chapters, and <b>refereed</b> articles published [TOTAL NUMBER PUBLISHED]	2	1	6	4	2
Percent of faculty publishing <b>refereed</b> books, chapters, or articles [PERCENT OF FACULTY PUBLISHING FOR FY2008 (FACULTY PUBLISHING/TOTAL FACULTY)]	14%	14%	57%	50%	33%

Key Performance Indicator	FY2009	FY2010	FY2011	FY2012	FY2013
Number of <b>non-refereed</b> articles and presentations [TOTAL NUMBER COMPLETED]	12	9	6	9	2
Percent of faculty publishing <b>non-refereed</b> articles or presentations [PERCENT OF FACULTY COMPLETING (FACULTY PUBLISHING/TOTAL FACULTY)]	71%	57%	57%	100%	33%
Number of scholarly performances and other creative activities [TOTAL NUMBER OF CREATIVE PERFORMANCES]	6	9	5	5	7
Percent of faculty in scholarly performances or other creative activities [PERCENT OF FACULTY IN CREATIVE SCHOLARSHIP (FACULTY PERFORMING CREATIVE ACTIVITY/ TOTAL FACULTY)]	43%	71%	43%	50%	83%
Total number of external grant applications submitted/percent of faculty submitting [TOTAL NUMBER OF EXTERNAL GRANT APPLICATIONS/PERCENT FUNDED]	1/14%	0/0%	0/0%	1/16%	0/0%
Total number of funded external grants/percent of faculty funded [DOLLAR AMOUNT OF EXTERNAL GRANT APPLICATIONS, PERCENT OF FACULTY FUNDED]	1/14%	1/14%	1/14%	1/16%	1/16%
Total number students successfully completing an undergraduate research/creative project [TOTAL NUMBER OF UNDERGRAD STUDENTS COMPLETING, CONTRIBUTING TO, OR PRESENTING A CREATIVE OR SCHOLARLY PROJECT]				11	10
Briefly note 2-3 improvements over the last year prompted from the above scholarly/creative activities indicators.					
[NOTE: Each department MUST report at least two direct measures of student learning outcomes and two indirect measures. Examples of direct measures include: first-time pass rate or average scores on standard exit exam, number of students successfully completing reviewed portfolios. Indirect measures would include student satisfaction, alumni and employer data, or any other perception based data.]					
Direct Outcome 1	100%	100%	100%	97%	94%
Pass rate for ARRT Radiologic Technology Examination					
Direct Outcome 2					
Ratio of <b>FHSU pass rate (%)</b> for ARDMS examinations for Diagnostic Medical Sonography Program/ <b>national pass rate (%)</b> of each ARDMS exam:					
-Abdomen	100/61%	100/64%	100/63%	100%/67%	(pass rates not reported by ARDMS currently)
-OB/GYN	100/74%	100/78%	100/75%	100%/78%	
-Ultrasound Physics	100/56%	100/76%	100/75%	100%/75%	
-Vascular Physics (eliminated at end of 2008)	100/62%	<b>N/A</b>	<b>N/A</b>	N/A	
-Vascular Tech	100/61%	88%/61%	90%/62%	100%/61%	

Key Performance Indicator	FY2009	FY2010	FY2011	FY2012	FY2013
Indirect Indicator 1  RT Clinical preparedness Survey question “how adequately did the program prepare you in the following area: Patient Care”	V-Well-9 Well-12 Adequate-2 Needs improve-1	V-Well-5 Well-17 Adequate-1 Needs improve-0	V-Well-5 Well-17 Adequate-1 Needs improve-0	V-Well-21 Well-6 Adequate-0 Needs improve-0	V-Well-17 Well-10 Adequate-3 Needs improve-0
Indirect Indicator 2  RT Clinical preparedness survey question “how adequately did the program prepare you in the following area: Exposures & technical aspects”	V well-14 Well-8 Adequate-2 Needs Improve-0	V well-13 Well-8 Adequate-2 Needs Improve-0	V well-13 Well-8 Adequate-2 Needs Improve-0	V-Well-20 Well-6 Adequate-1 Needs Improve-0	V-Well-8 Well-14 Adequate-6 Needs Improve-2
Dept senior students’ Level of Academic Challenge <b>[FHSU LAC SCORE, DEPT LAC SCORE]</b>	54.65 55.93	55.9 54.96	56.4 54.74	56.2 51.86	58.5 52.06
Dept senior students’ Active and Collaborative Learning <b>[FHSU ACL SCORE, DEPT ACL SCORE]</b>	45.34 48.72	46.1 57.14	43.9 44.41	44.5 42.21	45.1 44.70
Dept senior students’ Student-Faculty Interaction <b>[FHSU SFI SCORE, DEPT SFI SCORE, N, %]</b>	45.34 65.95	41.0 57.25	38.5 49.21	38.4 48.67	38.6 55.0
Dept senior students’ Enriching Educational Experiences <b>[FHSU EEE SCORE, DEPT EEE SCORE, N, %]</b>	34.72 32.96	34.0 36.97	32.9 37.44	32.7 28.23	34.0 28.66
Dept senior students’ Supportive Campus Environment <b>[FHSU SCE SCORE, DEPT SCE SCORE, N, %]</b>	59.57 47.50	60.3 73.21	60.8 73.55	59.8 65.56	61.9 71.30
Number of NSSE participants <b>[NUMBER OF DEPT SR STUDENTS, PERCENT]</b>	14 22%	19 36%	21 38.2%	11 19.30%	11 19.6%
<p>Briefly note 2-3 improvements over the last year prompted from the above student learning/engagement indicators.</p> <p>Faculty have implemented the use of DyKnow, Voice Thread, and other interactive methods to engage students and provide more critical thinking/clinical scenarios within the classroom, on-line classroom, and laboratory settings. A major change was a more comprehensive clinical based mid-term and final laboratory competency examination. Faculty has also implemented many case study, article, or pathology presentations within the learning environments.</p> <p>[NOTE: Departments may pick up to three key performance indicators they currently measure but are not captured above. These measures could be used to track departmental results on specific yearly goals. Examples might include: number of SRPs attended, number of new freshmen contacted. (These will vary by department based on goals.)]</p>					
Outcome/Indicator 1-Meetings with prospective students through department contacts or admissions scheduled visits (**New outcome/indicator - First year tracking and will replace the existing outcome/indicator 1 below)	N/A	N/A	N/A	N/A	N/A

Key Performance Indicator	FY2009	FY2010	FY2011	FY2012	FY2013
Outcome/Indicator 1-Contact with prospective students through department brochure information requested, mailed & E-mailed	1664	1545	1600	2000	2420
Outcome/Indicator 2 - Faculty attendance/support at Scholarship Recognition Programs/percent of faculty participating	6/7 = 85.7%	6/7 = 85.7%	7/7 = 100%	5/6 = 83.3%	5/6 = 83.3%
	(6 of the 7 faculty attended all SRP programs with awardees attending)	(6 of the 7 faculty attended SRP programs with awardees attending; one SRP not represented by AH)	(7 of the 7 faculty attended SRP programs with awardees attending; one SRP not represented by AH)	(5 of the 6 faculty attended SRP programs with awardees attending; two SRP events not represented by AH)	(5 of the 6 faculty attended SRP programs with awardees attending; one SRP events not represented by AH)
Outcome/Indicator 3 - Student involvement in life long learning/professional development activities at state or national level. Measure the number of students in the RT/MDI programs/% of attendance of student members at the professional meetings/ continuing education.	Total of 71 students in the RT/MDI campus programs/ 55% of attending	Total of 67 students in the RT/MDI campus programs/ 48% of attending	Total of 69 students in the RT/MDI campus programs/ 73% of attending	Total of 68 students in the RT/MDI campus programs/ 68% of attending	Total of 68 students in the RT/MDI campus programs/ 79% of attending
<p>Briefly note 2-3 improvements over the last year prompted from the above indicators. New recruitment and information postcards were developed to market the new on-line BS in MDI and certificate programs. In addition, more recruitment activities were conducted by departmental faculty. All program brochure information was developed into a pdf file that is now sent electronically to new or prospective students. Students are provided information relative to the local, state, and national meetings to encourage participation early in the process.</p>					

**B. Department Quality Initiatives and Results**

FY2013 Quality Initiatives	Results
INITIATIVE NUMBER ONE: Continue the development & implementation of strategies for increased communication with all Allied Health Department alumni.	Continued progress:  To date: Development of AH facebook webpage; increased information dissemination to alumni; Ms. Christa Weigel managing the facebook account; continuing to increase potentials with this media
INITIATIVE NUMBER TWO: Pursue programmatic accreditation with the Joint Review Committee for Diagnostic Medical Sonography (JRCDSMS).	Incomplete/In progress:  Through revised standards, accreditation submission is currently put on hold. Given that we have increased our clinical affiliate numbers, we are required to have a clinical coordinator (Program Director cannot serve in this role with the number of clinical affiliates that we have) that must be

<p>The DMS program faculty will be focusing on developing an action plan and timeline for programmatic accreditation submission for the Diagnostic Medical Sonography Program through the JRCDS.</p>	<p>registered in all modalities. This initiative will remain in progress until clinical coordinator responsibility/requirements is completed. Ms. Jennifer Wagner has successfully completed the physics, abdomen/superficial structures, ob/gyn, and vascular technology examination, earning the credentials RDMS and RVT necessary for the program. Over the course of the next year, the goal is to finalize initiatives within the program and submit the self-study.</p>
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FY2014 Quality Initiatives	Responsible Party, Resources, and Plan
<p>INITIATIVE NUMBER ONE: Continue the development &amp; implementation of strategies for increased communication with all Allied Health Department alumni.</p>	<p>The Allied Health Department will continue to develop and implement strategies for building a stronger association with all of the department alumni. The goal is to continue to develop contact through the AH facebook account. In addition, the goal will be to develop an on-line newsletter or a current news section within the FHSU Allied Health webpage. This will then help to develop more departmental resources including guest speakers, consulting within curriculum development, possible mentoring, additional internship/preceptorship possibilities, and monetary support for scholarships, program expansion, imaging equipment and supplies. Graduate surveys will be evaluated prior to, during, and following this initiative. The department will work with the Alumni Association Office and Endowment. All department faculty, program directors, and the chair will be responsible for this initiative.</p>
<p>INITIATIVE NUMBER TWO: Continue to pursue programmatic accreditation with the Joint Review Committee for Diagnostic Medical Sonography (JRCDS).</p> <p>The DMS program faculty will be focusing on developing an action plan and timeline for programmatic accreditation submission for the Diagnostic Medical Sonography Program through the JRCDS.</p>	<p>DMS faculty will obtain necessary documents from the JRCDS and develop plan of action and timeline for submission of the self-study in pursuit of accreditation of the DMS program. With revised standards, the focus will be to ensure responsibilities/requirement necessary for a clinical coordinator for the program will be completed. With the number of clinical affiliates the program currently serves, the program director cannot concurrently perform in this position. The goal will be to ensure the clinical coordinator is registered within all necessary specialties within the program. All DMS faculty, in conjunction with the director, will complete necessary forms/documents for potential submission when requirements are met.</p>

**C. Institutional Quality Results**

FY2013 University Initiatives	Department Activities/Results
<p>Align Programs and Services with North Central Kansas Technical College (NCKTC)</p>	<p>N/A</p>
<p>Increase Enrollment</p>	<p>The department has implemented many activities to increase enrollment within the Department of Allied Health. Major updates on the distance programs web page, targeted mailings to Kansas and surrounding states radiography programs, more active facebook page, attendance at community health care career events, and by former graduates and current students within the program have all positively influenced the growth within</p>

	<p>the program. Evaluation of the KPIs, annual report data and cognos reports shows the Allied Health Department programs with continued growth. The number of undergraduate majors increased to 288, approximately 11%, with a 4 year average of 255 majors. Compared to 2009, the department has increased the total number of majors by 50%. The major increase in enrollment has been within the BS in Medical Diagnostic Imaging program (both the virtual BS in MDI and the campus emphasis in sonography program).</p>
<p>Improve Persistence and Retention</p>	<p>The Department offers a Principles of Medical Imaging course developed to provide prospective students with a basic knowledge base of the profession. This definitely has helped with students learning what will all be involved prior to the selective admissions processes for the programs. Most recently, the radiography program curricular sequencing has been modified for several reasons. One of the goals was to re-evaluate the offering of radiographic topics in a more sequential manner for knowledge base. In addition, the department has developed a new radiographic anatomy course that is being piloted as a prerequisite course for the radiography program. No data is available at this time, but the goal is to increase the persistence &amp; retention of students both prior to and within the program. Within the MDI program, the offering of more sections of courses at multiple times throughout the year will help in both persistence and retention of students within the MDI program. Additional courses are also being developed and offered within the upcoming year.</p> <p>Again, in evaluating the undergraduate major retention of 20<sup>th</sup> day of the fall semester, there is an increase in the undergraduate majors and SCH. Also, the retention increased from 76 to 79% this past year. However, in evaluating the 4 year average, it has remained fairly steady at an average of 80.6% due largely in part to the selective admission process.</p>
<p>Improve Student Learning</p>	<ul style="list-style-type: none"> <li>*Implementation of critical thinking designed scenarios within the radiographic positioning and ultrasound laboratory sessions. Activities were designed to have students analyze the situation, develop a course or plan of action, and implement the appropriate procedures necessary relative to technical skills, patient care skills, and image evaluation.</li> <li>*Continued implementation of journal writing experiences in both didactic and clinical courses</li> <li>*Encouragement of student manuscript submission during final clinical experiences for state organization competition among all radiography program students throughout the state</li> <li>*Implementation of Blackboard, DyKnow software, VoiceThread and other interactive components within appropriate courses in the programs</li> <li>*Continued Implementation of computerized testing throughout the curriculum for the programs</li> <li>*Continued Web search activities assigned within the curriculum</li> </ul> <p><b>RESULTS:</b></p> <ul style="list-style-type: none"> <li>*From course ratings, students comments reinforced the application of the designed scenarios to help them prior to clinical placement; In addition, from the evaluations completed by students for clinical preparedness, an overwhelming majority of students rate their level as very well and well and comments stress the laboratory assignments and setting enforced the concepts learned within the classroom</li> <li>*Demonstrate improvement in student’s writing abilities by comparing the</li> </ul>

	<p>student’s writing in each semester’s journal assignments – faculty have developed journal assignments to evaluate and provide feedback to the students in sequential semesters with regard to writing abilities; grading rubrics have been implemented within some of the courses to show any changes between semesters</p> <p>*Improve the student’s computer skills for computerized testing in the programs in preparation for all national registry examinations upon graduation; increase the student’s comfort level with taking computerized exams – Faculty have implemented simulated computerized testing in the capstone courses for the RT and sonography program curriculum; In addition, within the sonography curriculum, the simulated computerized testing is implemented in the second year courses</p> <p>*Increase student’s abilities to locate professional society web pages, on-line case reviews, professional journal articles, pathologic related items, and associated health conditions - Numerous faculty have incorporated web-based assignments aimed at increasing students’ abilities to locate and utilize the above with students ratings being 4-5 on the likert scale.</p>
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### III. FY2013 STRATEGY AND OPPORTUNITIES FOR IMPROVEMENT

#### A. Departmental Reflection of Strengths, Needs, Opportunities, and Threats

Current Strengths	Current Needs
<ul style="list-style-type: none"> <li>• Now RT Revised Curriculum</li> <li>• Addition of digital imaging unit in the RT lab</li> <li>• Addition of Sonography machines</li> <li>• New course offerings: Digital Imaging, PACS Administration, Anatomy for Medical Imaging Professionals</li> <li>• Implementation of RT Lab Clinical Preparedness Evaluations</li> <li>• Dedication of faculty to retention (IDS 101)</li> <li>• BS degree</li> <li>• BS degree online</li> <li>• Ultrasound BS degree</li> <li>• Faculty with variety of content specialties</li> <li>• Excellent laboratory facilities; showcases our department very well to prospective students and families</li> <li>• Low Tuition</li> <li>• Small Class Sizes</li> <li>• Course Rigor</li> <li>• Established Sonography curriculum and several years of successful graduates</li> <li>• Program reputation</li> <li>• Multi-modality faculty</li> <li>• Up-to-date facilities</li> <li>• Technology used in many courses</li> <li>• On-line BS degree – growing</li> </ul>	<ul style="list-style-type: none"> <li>• Recruitment</li> <li>• Possibly another faculty member or at least adjunct or part-time</li> <li>• More time for scholarly work</li> <li>• Opportunity for continued growth in MDI online offerings</li> <li>• Improved communication between Program Director, faculty, and CI’s</li> <li>• Addition of clinical sites for program expansion</li> <li>• Lack of consistency among faculty regarding program expectations, policies, and procedures</li> <li>• Education of CI’s regarding program expectations, policies, procedures, and changes</li> <li>• Recruitment</li> <li>• More Scholarly publications</li> <li>• More Summer Courses</li> <li>• 8-Week Block Course Offerings</li> <li>• Addition of C-arm for RT lab</li> <li>• On-line offerings do not have consistent format</li> <li>• More RT program meetings – at least monthly</li> <li>• RT program numbers are decreasing</li> <li>• Variation among faculty course rigor</li> <li>• Expansion of clinical sites for student accommodation</li> <li>• Possibly an additional faculty position to help with continued growth of the on-line MDI</li> </ul>

<ul style="list-style-type: none"> <li>• On-line Certificate programs – growing</li> <li>• Sonography programs growing – more clinical sites added</li> <li>• Majority of faculty tenured</li> <li>• Strong program rigor</li> <li>• New faculty member coming on board</li> <li>• High pass rates on certification exams</li> <li>• High retention rates</li> <li>• Modality diversification of faculty</li> <li>• Proactive faculty in use of Dyknow, VoiceThread, etc, application to the classroom and on-line learning to improve the learning environment</li> <li>• Continued large student applicant pool for programs</li> <li>• Addition of DR system into laboratory will only raise the student knowledge of DR as they transition into clinical.</li> <li>• DR, CR, and FS systems are able to accommodate all types of clinical learning and allow for ARRT and ASRT content specs to be met.</li> <li>• Continued growth of the Sonography program with positive faculty development</li> <li>• Program retention and graduation rates</li> <li>• Program reputation</li> <li>• Have received lots of financial support to help replace dated equipment; i.e. portable x-ray unit and IU22</li> <li>• Great teaching facilities (equipment) which is attractive to students choosing a program</li> <li>• Good job placement rates of graduates</li> <li>• Successful high ARRT pass rate</li> <li>• Established Sonography curriculum and several years of successful graduates</li> <li>• Program reputation</li> <li>• Established on-line MDI B.S. courses</li> <li>• Faculty dedicated to educating young professionals</li> <li>• Have received significant funding to upgrade x-ray lab two.</li> <li>• Simulation mannequin.</li> <li>• Use of voicethread for on-line courses enhances student interaction.</li> <li>• Faculty who continuously strive to improve course offerings with electronic media.</li> <li>• Faculty who are very active in service at all levels.</li> </ul>	<p>offerings and advising</p> <ul style="list-style-type: none"> <li>• Program curriculum review for alignment with ASRT and ARRT</li> <li>• We need funding for additional ultrasound equipment to replace older equipment that may become non-repairable, especially if we want to hold current Ultrasound program enrollment numbers.</li> <li>• X-ray room one needs replaced as it is getting more difficult to repair. R/F room is lacking.</li> <li>• Size of on-line courses is too large to adequately serve the needs of the student. Need to have more sections to keep class size manageable.</li> <li>• Need additional faculty to help cover current course offerings as well as develop additional courses.</li> <li>• Clinical faculty has outdated text books.</li> </ul>
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Future Opportunities	Future Threats
<ul style="list-style-type: none"> <li>• Addition of Cardiac Sonography program</li> <li>• Expansion of the CVIT course work in to VI and CI program coursework to better align with ARRT standards</li> <li>• Expansion of MRI coursework to include a procedures course</li> <li>• Offer Medical Terminology instead of Biology</li> <li>• Expand recruitment into adjoining states</li> <li>• Consider clinical sites in adjoining states</li> <li>• Growing the online B.S. MDI program numbers</li> <li>• Expand sonography program to include Echocardiography</li> <li>• Continue to expand on-line BS degree program – recruit more from other RT programs</li> <li>• Expand clinical sites for Radiography</li> <li>• Look more into offering Medical Terminology rather than Biology department or possibly have our own x-ray/med terminology</li> <li>• Collaborate with other departments in the college to maybe offer health professions associate degree or certificate or possibly a technical writing type course</li> <li>• Add more offerings to the on-line BS degree to offer maybe a PACS/Informatics certificate or any other courses to expand the on-line BS degree</li> <li>• Education requirements for all post-primary ARRT exams starting January 1, 2016</li> <li>• Continued growth in all programs; B.S. online and certificates especially</li> <li>• Restructuring of RT program will provide more time to effectively educate students prior to their clinical rotation.</li> <li>• Develop a medical imaging terminology course.</li> <li>• MRI procedures course.</li> </ul>	<ul style="list-style-type: none"> <li>• Other programs in KS</li> <li>• Inconsistency in course rigor</li> <li>• Geography and other programs utilizing hospitals as clinical sites</li> <li>• State budget</li> <li>• Lack of substantial funding for equipment improvements. It would be nice to obtain grant money, if possible, to purchase equipment and not rely mostly on university funding</li> <li>• Continued support to current clinical affiliates to maintain sites</li> <li>• Market trends and job placement rates</li> <li>• Lack of funding that may impact employee travel, training/education, equipment replacement and/or equipment service contracts</li> <li>• Other programs in state</li> <li>• Other programs in country</li> <li>• Budgets</li> <li>• Geography - location is rural</li> <li>• Dwindling RT program</li> <li>• Losing more RT clinical sites</li> <li>• Other potential programs offering degrees on-line</li> <li>• Market trends and healthcare changes that impact employment</li> <li>• Clinical sites either moving to co-affiliation or change of program affiliation</li> <li>• Loss of clinical sites impacting program(s) enrollment.</li> <li>• Other potential programs offering degrees on-line or new programs that may affect our enrollment.</li> <li>• Lack of funding that may impact employee travel, training/education, equipment replacement and/or equipment service contracts</li> <li>• Not networking enough with clinical sites and surrounding hospitals to understand their needs and how we could better meet them</li> <li>• Job market does not provide enough opportunities for full time jobs for graduates.</li> <li>• Over saturation of job market prevents graduates from using their college degree.</li> <li>• Other on-line bachelor degree programs for radiologic technologists.</li> </ul>

## B. Opportunities for Improvement

Opportunity for Improvement	Resources Required	Expected Result and Completion Date
<p><b><i>Expansion of radiographic laboratory equipment to include R/F</i></b></p> <p>To keep current with technologic advances for student outcomes, it would be a strategic plan to update/replace the older radiographic equipment and replace with a computed/digital radiographic and fluoroscopic unit.</p>	<p>To purchase a new radiographic and fluoroscopic unit. The oldest of the existing radiographic equipment would need to be removed. It is anticipated this would be included with the potential quotes for the new equipment to have the old equipment removed at the time of the newly installed unit.</p>	<p>The program faculty would submit an action plan through strategic planning process for the purchase of a new computed/digital radiographic and fluoroscopic unit in the FY 2014-15. The oldest of the existing equipment would be replaced with the new unit.</p> <ul style="list-style-type: none"> <li>○ Addition of the new radiographic and fluoroscopic unit in FY 2014-15</li> </ul> <p>Provide state-of-the-art facility increasing the quality of graduates from the FHSU Radiography Program</p>
<p><b><i>Development of cardiac sonography concentration</i></b></p> <p>As the Department establishes the general and vascular components of the ultrasound curriculum, a long term goal is to support the addition of a cardiac concentration. The cardiac component would be either a separate or additional track to the current curriculum. This initiative meets the need for formal education within cardiac ultrasound in western Kansas and surrounding regions.</p>	<p>The department would need to hire a Cardiac Ultrasound Program Director, 1 FTE. This individual would develop the curriculum and oversee the program. In addition, it would be necessary to provide current ultrasound faculty with training opportunities and necessary support for continuing education and skills within cardiac sonography. For training purposes, a dedicated cardiac unit and an additional cardiac transducer for a current machine would need to be purchased. This would provide two fully functioning ultrasound units for laboratory sessions for training of cardiac students.</p>	<p>The program faculty would submit an action plan through strategic planning process for 1 FTE and dedicated cardiac ultrasound computed equipment and transducer.</p> <ul style="list-style-type: none"> <li>○ Addition of cardiac concentration to the program beginning with class of 2014-15</li> <li>○ Provide highly qualified cardiac sonographers increasing the quality of health care in Kansas</li> </ul>

**IV. SUPPORTING MATERIALS**

**A. Department Degree Program Affinity Diagram(s)**

See appendix

**B. Department Staffing Plan**

See appendix

**C. Bibliography of Departmental Scholarly Activity**

See appendix

**D. Department Program Assessment Results**

See appendix

**E. Other Departmental Information**

See appendix

**General Parameters**

1. No more than 20 pages, excluding appendix information.
2. Report submitted electronically to Dean, Assistant Provost for Quality Management, and Provost.
3. Note deadlines attached below.

**Annual Timeline for Department Annual Report**

April 1	Final template and Directions distributed to Department Chairs. Selected enrollment data (fall 20 <sup>th</sup> day counts) distributed to Chairs and Deans in the departmental template.
June 1	Student system information (graduates, SCH) delivered to Chairs. Final cutoff date for elements to be considered in the Department's Annual Report.
June 30	Complete Department Annual Report due to Deans, Assistant Provost for Quality Management, and Provost. Submit electronically.
August 15	Completed College Annual Report due to Assistant Provost for Quality Management and Provost.