Program Review
Form for External Review Committee
Instructional

Amarillo College

Form ID
71
Division
Allied Health
Department
Respiratory Care
Program
Respiratory Care
Review Year
2007-2008
Member Names
Division Overview

Program/Department Purpose

State the purpose of the program/department. How is this purpose within the mission of Amarillo College?

Upon completion of the program, the

graduate will be a competent advanced-level respiratory therapist. This goal matches the mission statement of the college in that this program trains students who enhance the quality of life for the population in this service area. Currently, more than 80 - 85% of the Respiratory Therapists in the Amarillo area have graduated from the Respiratory Care (RC) program at Amarillo College.

Does the answer include a purpose statement for the program/department? Does the answer indicate how this program/department is within the mission of Amarillo College?

Acceptable

When was the last time the program's/department's purpose statement was reviewed/revised by faculty and staff in the program/department?

The RC Advisory Committee reviews the program's purpose statement annually. The last review is found in the 4/10/2007

[Advisory Committee Meeting Minutes](#) item #5. This is a Committee for Accreditation of Respiratory Care (CoARC) requirement. The purpose statement is discussed on page 6 of the [CAAHEP *Standard and Guidelines*](#).

Does the answer indicate the last time the program's/department's purpose statement was reviewed/revised by faculty and staff in the program/department? Does the answer indicate how this program/department is within the mission of Amarillo College? within the mission of Amarillo College?

Acceptable

If the program/department offers continuing education credits, how are these courses consistent with the mission of Amarillo College?

The program does not offer continuing education credits at this time.

Does the program/department offer continuing education credits? Does the answer indicate how these courses are consistent with the

mission of Amarillo College?

Acceptable

Does the program have admissions policies?

yes

Where are the policies published?

Admission policies for RC applicants are available at the [RC website](#). Select "Request Information" then click on "Program Information Packet [pdf]". The program information packet is in pdf format and can be quickly downloaded with Adobe Reader.

Are all the locations where the policies are published included in the answer?

Acceptable

Explain how these policies are consistent with the mission of Amarillo College.

To enhance the quality of life within the service community, the RC program must train competent and effective respiratory therapists who provide quality health

care to patients with respiratory complications or diseases. The department's goal is to select the most qualified applicants for the 21 positions available each year. Admission policies are applied consistently to all applicants.

Does the explanation of how the policies are consistent with the mission of Amarillo College appear to be accurate?

Acceptable

Is the program/department accredited?
yes
Which agencies or organizations accredit the department/program?

The Respiratory Care program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP). The accrediting process is administered by the Committee on Accreditation for Respiratory Care (CoARC). Accreditation status can be verified at the CAAHEP website.

Are the complete names of the agencies or organizations which

accredit the department/program cited?
Acceptable
How many years are in the accreditation cycle? 10
How many years are in the accreditation cycle?
Acceptable
When were the accreditations affirmed or granted? The last accreditation was completed in 2002.
When were the accreditations affirmed or granted?
Acceptable
What is the current status of the accreditation? Accredited
Are the current statuses of the accreditations identified (e.g. accredited, in process of renewal, in process of candidacy, other)?
Acceptable

If not required, is the program eligible for accreditation?

Has this program/department sought accreditation even though it is not required (e.g. yes; If no, explain)?

Is this program/discipline required to receive approval from an external agency or organization (other than the Texas Higher Education Coordinating Board) in order to offer courses?
yes
Identify the external approver(s) for the department/program.

CAAHEP does not approve each individual course offered in the curriculum. However, CAAHEP utilizes the oversight of CoARC to define the educational competencies, basic science courses and specific RC content that must be taught in each accredited program. This information is discussed on page 6 of the

[CAAHEP *Standard and Guidelines*](). If a program is not accredited by CAAHEP or does not hold a letter of support, that institution cannot offer a RC curriculum.

IF the program/discipline is required to receive approval from an external agency or organization (other than the Texas Higher Education Coordinating Board) in order to offer courses, was (were) the external approver(s) for the department/program identified?

Acceptable

What approval schedule is required by the external approver(s)?

The program must complete a comprehensive self-study every 10 years. The self-study is reviewed by CoARC and an on-site team visits the program to validate the self-study.

Was the approval schedule required by the external approver(s) identified?

Acceptable

When did the program/department last

receive approval?

The last inspection was in 2001 with full accreditation awarded in 2002.

When did the program/department last receive approval?

Acceptable

Is the reason why the program/department is required to receive this approval clear?

Acceptable

Improvements

Identify at least one example of an improvement/revision which resulted from the annual PET forms for the last five years

The 2004 PET evaluation reviewed graduate participation in the certification examination. Although the graduates were performing well, they would often wait up to a year to take the examination. Effective 2005, all students were required to take the entry level Certified Therapist (CRT) examination within 30 days of expected graduation.

This change is now permanent and it is a part of the graduation requirements. This change has proven to be beneficial and 90% or more of the graduates earn the CRT credential within two weeks of graduation. This change has also improved the number of graduates attempting the registry examinations and the total number of registered therapists per class has increased.

After reviewing at least one example of improvements/revisions that resulted from the annual PET forms for the last five years, determine the extent that this program/department has used the PET forms to make improvements/revisions. Does this meet the minimum expectations for using PET forms to make improvements/revisions to the program/department?

Commendation
The RC program has exhibited excellent follow through in making every effort to get their students to earn the CRT credential.

Identify at least one example of

improvements/revisions which resulted from the last Program Review.

One of the program weaknesses as identified in the 2002 Self Study stated the number of graduates attempting and passing the registry examinations was declining. The trend continued through 2004 when 2/12 (17%) of the graduates attempted the registry examinations and only 2/12 (17%) earned the RRT credential.

In 2004-2005 the RC faculty made a concerted effort to encourage students to complete the registry examinations and earn the RRT credential. In 2005 students were required to take the CRT examination prior to graduation. The rationale for this change was based on the assumption that if the students completed the CRT examination by graduation, they would take the registry examinations earlier and not put them off.

Positive results were noted in 2005 with 10/13 (77%) attempting the registry examinations and 8/13 (67%) receiving the RRT credential. In 2006, 10/15 (67%) attempted the examinations and

9/15 (60%) earned the RRT credential. CoARC sets the threshold or the number of each class earning the RRT credential at 50%. The program's goal for successful completion of the RRT examinations for each class is 70%.

After reviewing at least one example of improvements/revisions that resulted from the last Program Review, determine the extent to which this program/department values the Program Review process to make improvements/revisions.

Acceptable

Identify all the delivery approaches used for courses within this program/department: (Select all that apply.)
traditional classroom,

After reviewing all delivery approaches for courses within this program/department, is this program positioned for growth? Does the committee have recommendations for delivery options which will provide additional growth?

After reviewing at least one example of improvements/revisions that is a response to accomplish a strategy or tactical objective within the Strategic Plan 2010-2015, determine the extent to which this program/department has contributed to the implementation success of the Strategic Plan? Does this department/program understand how it relates to the institution's future based on the Strategic Plan?

Acceptable

Identify at least one example of an improvement/revision that is a response to accomplish a strategy or tactical objective within the Strategic Plan 2010-2015.
Strategy 1.2 Align workforce development training with projected local demands.
Strategy 1.2.2 To meet documented Nursing and Allied Health needs, the College will expand facilities for these programs.

RC students are trained to mechanically ventilate patients in respiratory distress and to make changes to the ventilator based on physiological measurements and the patient's response to therapy. The initial training cannot be taught in the hospital due to the availability of ventilators and the liability of novice students working with critical respiratory patients. Students need time in the equipment and simulation laboratories before they treat critical care patients receiving mechanical ventilation.

By 2004, most of the ventilators owned by the RC program were old (15-20 years). Ventilators had to be retired when they broke down because repair parts are no longer available. A needs assessment was completed in 2004 and indicated that a minimum of four new ventilators was needed to teach basic ventilatory skills to a class of 21 students. Two ventilators were requested in 2005 and two more in 2006. The cost of each ventilator was approximately $14,000 and this price reflects a 50% educational discount for the manufacturer. Total expenditures were

approximately $56,000 but were spread over two years. The purchase of theses four ventilators reflects a significant contribution on the part of the College in its commitment to improve the facilities of the Allied Health programs.

After reviewing at least one example of improvements/revisions that is a response to accomplish a strategy or tactical objective within the Strategic Plan 2010-2015, determine the extent to which this program/department has contributed to the implementation success of the Strategic Plan? Does this department/program understand how it relates to the institution's future based on the Strategic Plan?

Acceptable

Does this Committee have recommendations as to how this program/department may contribute to the implementation of the Strategic Plan?

Acceptable

Provide names and titles of those who determined the process used to assess outcomes of the program and/or courses in the department.

William A. Young, MS, RRT - Program Director
Neil R. Allen, BA, RRT - Director of Clinical Education
Valerie A. Hansen, BS, RRT - Program Instructor

Has the program/department had a broad base of involvement from a majority of faculty and staff with the program/department regarding implementation of student learning outcomes of the program(s) (or department) and courses? What recommendations does the committee have for increasing involvement?

Acceptable

Explain the primary reasons behind the competencies that were selected.

Training student s to become competent respiratory care practitioners requires more than teaching a specific set of facts.

Graduates must apply their knowledge using critical thinking skills, which includes the ability to comprehend, apply, analyze, and evaluate information as it applies to patient care. The development of these skills allows the practitioner to use this knowledge and to provide the therapeutic and diagnostic skills to treat the patient. Finally, the therapist must demonstrate a professional and caring attitude towards the patient, peers, and other professional staff.

The competencies used in the respiratory care program were implemented to measure how well a student gains these skills. Using the cognitive, psychomotor, and affective domains, two or more competencies were selected to measure student development in each domain.

Do the selected competencies appear to be valid?

Acceptable

Identify the primary reasons for the assessment tool(s) selected.

Cognitive Domain: Tools were needed

to assess a student's ability to recall information, to understand and process information, and finally, to make judgments in how best to use the information gained. Although various tools were available, the decision was made to use two written examinations administered close the student's graduation. A summative examination provided by the program is administered to measure the students' knowledge and intellectual skills. The examination measures recall, analysis and application skills a therapist will need o treat and diagnose patients with respiratory diseases.

The second examination is the credentialing examination constructed by the profession's national testing agency, the National Board for Respiratory Care (NBRC). Successful completion of this examination awards the CRT credential and is recognized by each state for licensing purposes. This examination is taken 30 days prior to graduation. The CRT examination is validated by the NBRC. Earning the CRT credential recognizes the fact that the graduate has

gained the entry-level knowledge and intellectual skills to practice Respiratory Care.

Psychomotor Domain: Assessing psychomotor skills requires a different set of tools to measure performance as compared to the cognitive domain. Psychomotor skills are evaluated by clinical instructors each time a student completes a clinical rotation. If a student cannot perform selected procedures correctly, they will fail that rotation. A student must successfully complete each basic skill before advancing to more complex ones. A summative evaluation at the end of clinical training is constructed using the evaluations of each individual rotation.

The second tool to assess psychomotor skills is the employer survey administered one year after a student graduates. Lead therapists are asked to evaluate graduates' work performance. Specific questions inquire about the graduate's level of training, ability to perform therapeutic procedures, and the use of modalities appropriate to the level of training. The employers' response to

these surveys is beneficial and data gathered appears to measure the psychomotor abilities of the graduates.

Affective Domain: The tools used to assess student and graduate behavior and attitudes include evaluations of the clinical rotations by the clinical staff and program faculty and the employers survey given a year after the employee graduates. Instructors evaluate the students' ethical and professional behavior, the ability to function as a health team member, and the ability to communicate effectively. Students are evaluated periodically in the clinic and corrective action is taken as need. Students realize that part of their grade is dependent on a positive attitude and this helps to produce the expected professional behaviors.

The employer survey looks at the affective categories a year after the student graduates. The survey is beneficial because it reflects graduate behaviors as evaluated by the lead therapists one year after the employee graduated. These two tools measure students and graduates' professional

behaviors and how they compare with program and employer expectations.

Will the assessment tool(s) selected provide valid and reliable results?

Commendation
The RC program has done an excellent job of identifying and applying assessment tools.

Evaluate the assessment approaches to date.

Cognitive Domain
Program Summative Evaluation - This tool evaluates the knowledge base of the second year student. The test appears to be effective by providing feedback regarding the strengths and weaknesses of the Respiratory Care curriculum.
NBRC Entry Level (CRT) Examination - This test evaluates the knowledge base of all RC graduates across the country. As a validated examination, it accurately identifies those who have gained the basic knowledge to function as a competent entry-level respiratory therapist. Program graduates have performed well on this examination.

Psychomotor Domain

Summative Evaluation of Clinical Performance - This tool is actually a compilation of all evaluations that a student receives after completing each clinical rotation. Data from these evaluations provides the program with appropriate feedback to assess the level of motor skills. Students with deficiencies can receive remediation prior to failing a clinical course.

Employer Evaluation - This tool evaluates the graduate's psychomotor skills one year after graduation. This survey measures their satisfaction with the level of graduate training. Data from these surveys identifies areas that need improvement and can ultimately lead to curriculum changes.

Affective Domain

Summative Evaluation of Clinical Performance - Clinical instructors evaluate students' affective behavior each day of clinical training. Evaluations are reviewed at the end of each rotation and students are counseled as the need arises. The information provided by the clinical instructors' evaluation provides

the program with appropriate feedback to assess each student's affective behavior. *Employer Evaluation* - Employers evaluate the graduates' affective behavior one year after completion of the program. This survey reflects their satisfaction with the graduates' professional behavior. The value of this assessment tool is the fact that it is performed by the employers who hire the program graduates. If the employer is not satisfied with the graduate's affective behavior, it is reflected in the survey.

Will the assessment approaches(s) selected provide valid and reliable results?

For student or program/course outcome assessments, review the program's/department's five-year graph(s) of quantitative results or provide a brief narrative summary of qualitative results.

A student's knowledge (cognitive domain) is measured by three assessment tools: a comprehensive,

summative program examination, the National Board for Respiratory Care (NBRC) entry level examination (ELE), and the NBRC registry examinations. Students take the NBRC - ELE 30 days before graduation and the NBRC registry examinations are taken after graduation and successful completion of the ELE. A graduate becomes credentialed as a certified respiratory therapist (CRT) after successfully completing the ELE and becomes a registered respiratory therapist (RRT) after successful completion of the registry examinations. The credentialing examinations are administered nation-wide and are validated by the NBRC. Both credentials are recognized by each state and demonstrate that a graduate has the appropriate knowledge base as an entry level or an advance practitioner.

The ELE has been used since 2001 and the program has set a goal that 100% of its graduates will earn the CRT within one year of graduation. The threshold set by the program's national accrediting agency is 80%. The RC program has met its goal every year since 2001 with the

exception of 2006. A student graduating in October one year ago has not passed the ELE and this gives the program a pass rate of 93% (14/15) for 2006. The advanced practitioner examinations leading to the RRT were added to the [2007 PET form](). The national threshold for passing these examinations is 50% but the internal program goal is 70% pass rate for graduates within one year of graduation. The program pass rate is approximately 61% for the first two years; the pass rate does not meet the program's internal goal but does exceed the national requirements.

Graduates are performing well based on accreditation standards but since program goals are set higher, the program is seeking ways to improve overall scores and the number of graduates sitting the registry examinations.

Two assessment tools are used to assess the students/graduates technical proficiency skills (psychomotor domain): summative evaluation of clinical performance and employers' survey of graduate performance. Students are

evaluated at the end of clinical rotations and a portion of this evaluation measures the technical skills performed by the students. Students must pass each clinical rotation in all clinical courses before they can graduate. Outcomes are good and students demonstrate they have gained a mastery of basic respiratory care skills needed in acute care facilities.

The employers' graduate survey is administered one year after the students graduate from the program. Employers are asked to evaluate the clinical proficiency of the graduates. Four areas are evaluated: appropriate clinical skills level, patient assessment, skill level in cardiopulmonary modalities, and the level of training in diagnostic procedures. Using a Likert scale of 1-5 with 5 as "strongly agrees" and 1 as "strongly disagrees", a graduate must score 3 "acceptable" or higher in order to be considered proficient in clinical skills. Results from the clinical proficiency section of the 2006 survey show that 10/11 graduates received a 4 or higher and their employers were satisfied with

the psychomotor skills of RC graduates. Two assessment tools are used to assess the students/graduates behavioral skills (affective domain): summative evaluation of clinical performance and employers' survey of graduate performance. Students are evaluated at the end of clinical rotations and a portion of this evaluation measures the behavioral skills demonstrated by the students. Outcomes are good and students demonstrate the behavioral skills needed to work as a health care team member.

The employers' graduate survey is administered one year after the students graduate from the program. Employers are asked to evaluate the behavioral skills of the graduates using a Likert scale of 1-5 with 5 as "strongly agrees" and 1 as "strongly disagrees". A graduate must score 3 "acceptable" or higher in order to be considered proficient in clinical skills. Results from clinical proficiency section of the 2006 survey show that 10/11 graduates received a 4 or higher from their employers. Employers are satisfied with the

behavioral skills of RC graduates.

Review the program's/department's five-year graph(s) of quantitative results for student or program/course outcome assessments, or provide a brief narrative summary of qualitative results.

Acceptable

What changes have been made in the curricula of the program/department because of the analysis of these results?

There have been no changes to the curriculum based on the performance outcomes. Changes have been made to course content and to the evaluation tools. Clinical evaluations are on-going and changes can be made as problems arise.

Have any changes been made in the curricula because of the analysis of these results?

Acceptable

Review the five-year graph(s) of course completions for the program/department.

Explain any increase or decrease that is more than a one-year anomaly.

The benchmark for course completion is that 85% of all students will earn a grade of "C" or better in courses taken in the RC program. Analysis of the [five-year graph of course completion](#) demonstrates that this score has been met or exceeded each year. Students have averaged 89% for course completions for the past five years. There have been no major increases or decreases during this time.

Does the review of the five-year graph(s) of course completions demonstrate the use of analysis to implement a plan of action for retention? Is the analysis of any increase or decrease that is more than a one-year anomaly accurate?

Acceptable

Provide the program's/department's plan of action for improving any identified problem or results from the implementation of the plan of action.

The program will continue to monitor course completions and action plans will

be created when a problem is discovered.

Will the plan of action likely improve the number of course completers?

Acceptable

Does the program/department provide for alternative methods of awarding credit?
CLEP Advanced Placement

Has the program/department provided for alternative methods of awarding credit? If not, which alternative methods would be recommended?

What approaches are used to assure outcomes are comparable to those expected of students who enrolled and completed the course?

Acceptable

For general education and/or core curriculum required by this program/department, identify the relevant competencies approved by the Academic Affairs Committee (see Catalog section entitled Degrees and Certificates: General Education Competencies).

General Education Requirements

Communication Competency

ENGL 1301: Freshman Composition I

SPCH - any approved course in the College catalog

Social/Behavioral Sciences Competency

PSYC - any approved course in the College catalog

Natural Science/Mathematics Competency

BIOL 2412: Microbiology

BIOL 2401: Human Anatomy and Physiology I

Mathematics - any approved course in the College catalog

Humanities/Fine Arts

Humanities/Fine Arts - any approved course in the College catalog

Have all relevant competencies for general education and/or core curriculum been identified for this program/department? If not, which are obviously a part of this program/department's general education competencies?

Acceptable

Explain how outcomes for the competencies have been assessed and achieved and provide links to the documentation.

The requirement to include general education courses in the RC curriculum is determined by Amarillo College, Texas Higher Education Coordinating Board (THECB), and the Committee for Accreditation of Respiratory Care (CoARC). Competencies for general education courses are measured by the department offering the course and by the College's General Education Competency Committee. Some skills taught in the general education courses are also evaluated in RC courses. Math skills are evaluated in RC courses when students are required to calculate drug dosages, complete physiological math equations, and performing calculations used in ventilator assessments. Written communication skills are assessed when students submit written reports, case studies, and research papers, and complete discussion questions on examinations. Oral communication skills are evaluated when students give oral

patient reports in the clinical setting and case study presentations before physicians, staff, and peers.

Is the explanation of assessment approach(es) for general education competencies (outcomes) thorough? Is the analysis of the results accurate? Have links to documentation which verify the assessment results been included?

Concern
Links have not been included.

Outline a plan for correcting any weaknesses.

No weaknesses have been identified.

If assessment results and analysis are included, is there a plan for correcting any weaknesses included?

Acceptable

Do students/graduates in this program/department have to be certified or licensed?
yes
Review the results for certification/licensure results of the

program/department and/or job placement for the past five years. Explain any increase or decrease that is more than one-year anomaly.

As stated in the 2007 PET form, all graduates attempting the entry-level credentialing examination have passed and have become licensed in Texas or another state. Of all graduates since 2002, one student graduating in 2006 has not attempted the CRT examination at this time. This data also shows that all graduates (100%) have been employed in the respiratory care profession. There are no anomalies in these statistics although there was a small graduating class in 2003.

Provide a plan of action for the identified problem.

Corrective action appears to be working.

IF students/graduates in this program/department have to be certified or licensed, do the results over the past five-years indicate that certification/licensure have been equal to or greater than the average

of the past five-years AND/OR equal to the statewide or national benchmark for this certification/licensure? IF NOT, does the analysis and plan of action appear that the program/department has thoroughly reviewed the problem?

Acceptable

Is the program's/department's plan of action for improving any identified problem or results likely to improve the certification/licensure results? Did program/department explain any increase or decrease that is more than a one-year anomaly? Does the plan correct any weaknesses included? If not, what is missing?

Acceptable

IF the department or program offers one or more technical programs (Associate in Applied Science or Certificates), has the program/department included an explanation of the job placement success during the past five years AND are these results at least equal to the statewide

annual benchmark (90%)?
Is the analysis of any increase or decrease that is more than a one-year anomaly accurate?

The job placement of RC graduates is 100% per class since 2001. Graduates are not having problems finding jobs in this service region. The success of job placement is the result of matching program enrollment with the hospitals' need for registered therapists in this area.

Is the program's/department's plan of action for improving any identified problem or results likely to improve the job placement rate for graduates of the technical program(s)? If not, what is missing?

No plan is required. The program will continue to monitor the needs of the community and make adjustments to meet those needs.

IF the department or program offers one or more technical programs (Associate in Applied Science or Certificates), has the

program/department included an explanation of the job placement success during the past five years? Is the analysis of any increase or decrease that is more than a one-year anomaly accurate?

Acceptable

Is the program's/department's plan of action for improving any identified problem or results likely to improve the job placement rate for graduates of the technical program(s)?

Acceptable

Curricula

Does the program/department have affiliation(s)/agreement(s)/contract(s) with any other entity for the purpose of delivering instructional content?
yes
Review the affiliation(s)/agreement(s)/contract(s), consider Amarillo College's mission, and then make a recommendation to: Provide an analysis of the review.

The current contracts meet the RC

program's need to train students in this field.

If the program/department has affiliation(s)/agreement(s) with any other entity for the purpose of delivering instructional content, do these affiliations/agreements make it clear that Amarillo College maintains the responsibility for controlling all aspects of the educational program? Has the College ensured the quality of the program with these affiliations/agreements? If so, how? What is the schedule for reviewing the quality of these programs? Has the College ensured that programs remain with Amarillo College's mission?

Acceptable

How many curricula changes were approved by the Academic Affairs Committee during the past five years? 3

Which steps in the curricula change process had faculty involvement prior to submitting the curricula proposal(s) to

the Academic Affairs Committee?

The program director reviews curriculum changes with the faculty prior to submission to the RC Advisory Committee. Curriculum changes are then sent to the Academic Affairs Committee for final approval prior to implementation.

Was the departmental faculty involvement documented and broad in representation? If not, what steps within curricula change process should have had more proof of greater departmental faculty involvement? Is the primary responsibility for curricula changes under the control of faculty? Does the program have a qualified faculty member in charge of the program's coordination and curriculum development?

Acceptable

Is any program within the department a technical program (e.g. AAS or certificate)?
yes

When was the last Advisory Committee meeting?

April 9, 2007

Provide a link to the minutes of the last Advisory Committee(s) minutes in the Electronic Archives.

The [minutes](#) for the RC Advisory Committee from 1999 to 2004 are available for review. Select "Minutes", "Advisory Committees", "Allied Health Division", and Respiratory Care". The [minutes](#) for the 2005 to 2007 are also available. Follow the same pathway as described above.

Provide a link to the appropriate committee membership of the Advisory Committee(s) in the Electronic Archives.

[RC Advisory Committee for 2007-2008](#)

If the department offers an AAS and/or certificate, do the minutes of the Advisory Committee prove that the curricula for each program is appropriate to the degree and/or certificate? Has the Advisory Committee been consulted in

designing each degree and certificate? Has the Advisory Committee met at least once a year and been provided ample opportunity to guide the faculty in curricula changes?

Acceptable

Is the membership of the Advisory Committee broad enough to provide the scope of advice necessary for input on curricula? If not, what changes are recommended to the program/department?

Acceptable

Enrollment Data

After receiving the data indicating the number of students enrolled in the program/department, by total students, number of full-time equivalents, and number of completers, determine if there is more than a one-year anomaly.
If so, provide the faculty and staff analysis of their assessment of the problem.

Results of the [five-year enrollment graph](#)

were reviewed for trends. Data from the 2002 and 2003 class should be treated as an anomaly. The class graduating in 2003 started with 8 students and 3 graduated. The low number of starting first year students in 2002 affected the RC student headcount through 2003. Statistics from 2004 through 2006 more accurately reflect the program's traditional enrollment of students per year. After analyzing the information gathered in 2002-2003, the specific reason for a low number of students was never determined. Of the 28 respiratory programs in Texas, several programs reported a decreased enrollment in 2002.

Does the analysis by the faculty and staff of this data address any obvious problems/declining statistics?

Acceptable

Create an action plan for needed improvement and commendation for any dramatic improvement.

An action plan was created and presented to the RC Advisory Committee in the spring of 2003. Marketing

strategies were discussed and hospitals were made aware of the coming shortage of graduates. The community of interest became aware of the low student enrollment and a concerted effort was made by the RC department and hospitals to increase recruiting efforts. The effort to improve enrollment was successful with a full class of 21 students beginning in 2004. Enrollment has been good since 2004 and should be strong due to the need of qualified respiratory therapist in area facilities.

Does the action plan or commendation address the problem addressed within the analysis? Does it appear that implementation of the action plan will resolve the problem and correct the decline?

Acceptable

Does the External Review Committee have any other analysis or recommendations for increasing enrollments based on the program/department's data?

Acceptable

For programs/departments with majors, review the graphs of program majors and the number of new majors by year. Provide an analysis of the program's/department's faculty and staff assessment of the problem and an action plan for needed improvement and commendation for any dramatic improvement.

The results for RC [head count](#) and [contact hours](#) were reviewed for trends. Please see IV. A. 1. above, the 2003 class should be treated as an anomaly.

Does the analysis by the faculty and staff of this data address any obvious problems/declining statistics regarding students enrolled as majors within the program/department? Does the action plan or commendation address the problem addressed within the analysis? Does it appear that implementation of the action plan will resolve the problem and correct the decline? Does the External Review Committee have any other analysis or recommendations for increasing the number of

students majoring in this program/department based on this program's/department's data?

Acceptable

Resources

Review the five-year graph(s) of the student-to-faculty ratio in the program/department.
Explain any increase or decrease that is more than a one-year anomaly.

The [five-year graph of student to faculty ratio](#) was reviewed for trends. Data from the 2002 and 2003 class should be treated as an anomaly. The class graduating in 2003 started with 8 students and only 3 graduated. This was a one-time occurrence although it affected the program for two years. The graph for 2004 to 2006 demonstrates a student/faculty ratio that varies from 14.4 to 15.1 students per faculty member. This is a stable and practical ratio.

Does the analysis by the faculty and staff of this data address any obvious problems/declining statistics

regarding student-to-faculty ratio within this program/department?

Acceptable

Provide an action plan for improvement of any identified problem.

The initial problem of low enrollment for 2002-2003 has been addressed as evident by the enrollments for 2004-2006. The faculty will continue to aggressively market the RC program.

Does the action plan or commendation address the problem addressed within the analysis? Does it appear that implementation of the action plan will resolve the problem and correct the decline? Does the External Review Committee have any other analysis or recommendations regarding student-to-faculty ratio within this program/department?

Acceptable

In the database for [Roster of Instructional Staff](#) (also known as Roster of Faculty), review the credentials of each full-time and part-time faculty

member within the program/department. If any faculty member does not meet the SACS and THECB requirements, evaluate whether additional documentation is significant to grant an exemption.

The credentials for all members of the RC faculty meet the Southern Association of Colleges and Schools (SACS) and The Texas Higher Education Coordinating Board (THECB) requirements.

Identify any faculty teaching a transfer course which, according to the information within the database for [Roster of Instructional Staff](#) (also known as Roster of Faculty) do not meet the requirements of faculty teaching a transfer course and explain the credential problem. Identify any faculty teaching a technical course which, according to the information within the database for [Roster of Instructional Staff](#) (also known as Roster of Faculty) do not meet the requirements of faculty teaching a technical course and explain the credential problem based on SACS requirements and/or THECB requirements. Identify any faculty

teaching a developmental course which, according to the information within the database for **Roster of Instructional Staff** (also known as Roster of Faculty) do not meet the requirements of faculty teaching a developmental course and explain the credential problem.

Acceptable

List the names and the last date for all full-time faculty evaluations based on the schedule indicated in the Faculty Performance Review (FPRP).

William A. Young - last evaluated 2006-07
Neil R. Allen - last evaluated 2005-06
Valerie A. Hansen - last evaluated 2005-06

If any full-time faculty member (or Board-appointed faculty member) has not been completed the Faculty Performance Review (FPRP) within the past two years and is listed in the aforementioned **Roster of Instructional Staff** (also known as Roster of Faculty), identify the

faculty member's name and the date of the last FPRP.

Acceptable

List the names of each part-time faculty and the last date of evaluation by students and supervisor for each course taught.

Not applicable

If any part-time faculty member has not been evaluated by both students and supervisor for each course taught within the past year and is listed in the aforementioned Roster of Instructional Staff (also known as Roster of Faculty), identify the faculty member's name and state the specific problem.

Acceptable

Amarillo College's Board Policy Manual defines each faculty member's academic freedom as "full freedom in the classroom in discussing the subject being taught and to pursue research and publications. However, a faculty member must not attempt to force on students a

personal viewpoint and must at all times allow for diversity of opinion." Has anyone in the program/department filed a grievance for violation of the aforementioned academic freedom?
no

If anyone within the department has filed a grievance for violation of academic freedom based on the definition stated in Amarillo College's Board Policy Manual, briefly describe the violation (excluding personal identifiers) and the total number of violations.

Acceptable

Which of the following library collections/resources/services have been used by faculty, staff and/or students within the past five years? (Select all that apply.)
Circulating collection Electronic journals Interlibrary loan Reference collection Reserve collection

Does it appear that the library collections/resources/services used by the faculty, staff, and/or students within the past five years are

accurate and thorough?

Acceptable

Which two or three collection/resources/services should be improved to support Amarillo College's mission regarding teaching and service?

The library has consistently supported the RC program. The library staff complied a list of texts and periodicals related to RC before the last program inspection in 2001. The library staff has consistently assisted RC students with research assignments, gathering information for abstracts, and locating information on diseases and RC procedures for case presentations. The staff has been available to assist faculty and students when library resources are needed. The process for obtaining copies of journal articles from other holdings outside of the College could be improved. The present process seems slow.

Has the program/department identified which two or three collections/resources/services should be improved to support

Amarillo College's mission regarding teaching and service?

Acceptable

Does your program/department have discipline accreditation?
yes
How has the library participated in this discipline's accreditation?

An on-site inspection team reviews the library facility during each accreditation. There were no library deficiencies noted during the 2001 inspection.

Does the program/department have a discipline accreditation? IF SO, has the library participated in completing the approver's evaluation?

Acceptable

After assessing the strengths and weaknesses of the program's/department's access to technology, what improvements would ensure that students have access and training in the use of technology?

Specific areas where students need

access to RC technology include the application of mechanical ventilators, physiological monitoring by assessing arterial blood gasses (ABG's) and pulmonary function testing, aerosol and humidification devices, oxygen delivery devices, and hyperinflation devices. Assuring that students have appropriate access to RC technology will require modification and improvement in the existing equipment and simulation laboratories. A detailed report is seen in [Facility and Space Needs](#). The equipment laboratory is thirty-three years old and will require extensive remodeling and improvements. The simulation laboratory is at least twenty years old and was originally an addition to a classroom. The lack of adequate storage space for large equipment and beds causes significant clutter and safety issues.

Technology is rapidly advancing and most RC equipment is outdated or obsolete in 8 to 12 years. The RC program has replaced five old or broken ventilators over the past two years with four state-of-the-art adult ventilators. The RC faculty has worked very hard to assure

that students have the equipment they need to develop the necessary skills of a competent RC practitioner. Area hospitals have assisted the program by loaning equipment for student use and the faculty has used this equipment in the laboratory and classroom. The problem with borrowing RC equipment is availability. When hospital census is high, the equipment is in use or on standby and is not available for loan. To assure that RC students have access to technology, the RC program must have a budget sufficient to buy new equipment or to repair or replace older equipment when it no longer works or becomes obsolete.

Student access to technology also requires College funding for ancillary support that includes medical gases to operate RC equipment, fuel cells or sensors for oxygen measuring devices and blood gas analysis, and supplies for the pulmonary function laboratory. Students are required to purchase disposable RC equipment such as oxygen masks, suction kits, tracheostomy kits, artificial airways, and other supplies need

for laboratory exercises when they enter the program. However, the program must have sufficient number of manikins, anatomical models, and lung analogs for clinical simulation exercises.

While the program will continue to accept a assistance from area hospitals and students will continue to purchase equipment kits, funding must continue to support the RC budget at a level that ensures students have access to technology. This combined approach will allow the program to continue to train students using the latest technology in a cost efficient manner.

Does the program's/department's assessment of strengths and weaknesses include ways to improve both students' access to & training in the use of technology?

Acceptable

What improvements would ensure that students use technology?

An improvement of the equipment and simulation laboratory would facilitate the better use of technology but it is

important to note that the RC students do have access to program specific technology and they are using the technology. Please see V. C. 1.

Does the program's /department's answer include improvements that would ensure that students use technology? Are the recommendation(s) of this program/department feasible?

Acceptable

Review program/department operations. Does any operation present the possibility for violations of security, confidentiality, or integrity of student records?
no
What changes need to be made to prevent violations of this nature?

After a review of this program's /department's operations based on this Self-Study and any other information available to this Committee, does any operation present the possibility for violations of security, confidentiality, or integrity of student records? If so,

describe those operations and identify the violation possibility in detail.

Acceptable

What changes need to be made to prevent violations of this nature?

Acceptable

Which support services need to be strengthened to better serve students in this program/department?

An informal survey was given to the RC students and the following comments and frustrations were provided.
1) There are no services in the Allied Health building where students can copy documents. The only copier in the building is off-limits to students. The nearest copy service is in "A" Building or the Library and these buildings are on the opposite side of the West Campus.
2) Students comment that the staff in the Financial Aids department is neither friendly or helpful. Students seeking financial assistance must be persistent in order to be helped. More staff is needed

to handle the student load during peak times.
3) Bookstore text prices are too high and of the students on financial aid have not choice but to use the campus bookstore. The bookstore should consider E-services. Students could go on-line and purchase textbooks with a credit card and have the books mailed to their home. Bookstore staff members are often rude and curt when assisting students. Most students prefer on-line textbook services when available.
4) The staff members in the Registrar office were generally perceived as friendly and helpful but several students commented that there were not enough people when they were there. Lines were long and students had to wait extended lengths of time to be helped.

Explain what aspects of the services need to be strengthened.

See V. D. 1) through 4).

Do the Self-Study recommendations of this program/department for support services that need to be improved appear to be valid?

Acceptable

Describe any indicators or problems that prevent a healthy, safe and secure environment for the students, faculty and staff of this program/department.

The laboratories are too crowded. Please see report for [Facility and Space Needs](). Ancillary support facilities in the Allied Health building appear to be adequate.

Are recommendations to assure a healthy, safe and secure environment for staff and students of this program/department valid? Are any of these recommendation(s) more significant and/or urgent?

Acceptable

Describe any indicators or problems that hamper adequate physical facilities, both on and off campus, to meet the needs of the program/department.

Parking is become a growing annoyance to students and staff. More parking and sidewalks are needed. Parking is usually available on the north side of the campus during peak times but you have to cross

a pasture to reach the Allied Health building.

Do any of the problems or concerns regarding adequate physical facilities appear to be significant and/or urgent? Are there any other needs which this Self-Study didn't cite but are critical based on other information? Which of these needs are most significant and/or urgent?

Acceptable

Budget

Which program/department outcomes have resulted in budget requests to date?

The application and management of mechanical ventilators is covered extensively on the RC credentialing examinations. Although graduates are very successful in passing the CRT examination, careful review of test results indicate that students are marginal or below national average in initiating, evaluating, and recommending changes of mechanical ventilators in the critical care setting. A review of student outcomes related to the use of

mechanical ventilation indicated several areas that needed improvement.

1. The number of ventilators available for use in the equipment laboratory varied from year to year. Program ventilators are aging and are becoming unreliable because parts are no longer available for repair. Older ventilators are being retired when they are no longer repairable. Local hospitals loan the program ventilators but their availability varies depending on the number patients requiring mechanical ventilation in the hospital. If the intensive cares are full, all the ventilators will be in use.

2. The equipment laboratory and simulation laboratory run concurrently. The need for mechanical ventilators in both laboratories adds to the strain when limited numbers are available for student use.

3. The size of the ventilators and lung simulators cause congestion in both equipment and simulation laboratories. Three to four students are assigned to each ventilator for an exercise and the configuration of the laboratories do not provide enough room to work effectively.

4. Support equipment for teaching mechanical ventilation has a limited life expectancy. Oxygen analyzer fuel cells must be replaced yearly. Respirometers, negative inspiratory gauges, and lung analogs must be replaced or repaired frequently. Budget funds are usually adequate but if an instrument is dropped or damaged, funds may not be available for immediate repair or replacement.

The need for additional mechanical ventilators was identified in 2005. Two Resprionics Esprit ventilators were budgeted for and then purchased in the fall of 2005. The following year, two more Respironics Espirt ventilators were added to the program's inventory bringing the total of new ventilators to four in two years. Since 2005 three of the older ventilators have been retired and parts are no longer available for the three remaining older ventilators in service.

Four lung analogs were budgeted this year and have been purchased. These test lungs will assist the students as they setup and change settings on the ventilators.

Have any of this program's/department's outcomes resulted in budget requests to date? If not, why not?
Acceptable
Project the program's/department's strategic initiatives for the next five years based on the program's/department's outcomes. Please see report for [Facility and Space Needs](#).
Has this program/department been able to project strategic initiatives for the next five years based on the program's/department's outcomes? If not, what appears to be blocking this program/department from accomplishing this?
Acceptable
<u>Publications</u>
If the program/department publishes any advertising or recruitment documents (electronic or paper), do the documents accurately represent Amarillo College and the program/department?

yes

If no, explain what is inaccurate.

IF the program/department has published any advertising or recruitment documents (electronic or paper), check at least one copy of each document and determine whether it accurately represents Amarillo College and the office/department?

Acceptable

IF anything appears to be inaccurate, identify the apparent violation.

Acceptable

Does the program/department publish any documents (electronic or paper) with references to SACS accreditation?

no

Are the references in compliance with SACS approved statement?

Which reference is not in compliance?

Describe how you will assure compliance for all references in the future.

IF the program/department has published any document(s) with a reference to SACS accreditation, are

all references consistent with the approved statement? (Approved reference: Amarillo College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award associate degrees. Contact the Commission on Colleges at 1866 Southern Lane Decatur, Georgia 30033-4097 or call 404-679-4500 for questions about the accreditation of Amarillo College.) IF any references are inconsistent, identify all documents with the inconsistent reference(s).

Acceptable

IF the Self-Study did identify the inconsistencies, does the plan for assuring future compliance appear to correct the problem? IF the Self-Study did NOT identify all inconsistencies, what plan does this Committee recommend?

Acceptable

Other

State any additional comments/concerns

which may impact this program/department during the next five years.

The years of service for RC faculty members range from 35 to 25. The faculty is aging and two members will probably retire within the next five years. Both positions will need to be replaced to prevent jeopardizing the program outcomes. The faculty is diverse in their skills and all faculty have clinical assignments.

IF additional comments/concerns were included in the Self-Study regarding items which may impact this program/department during the next five years, what recommendations and/or concerns are warranted? IF NO such items were included in the Self-Study but this Committee feels such comments or concerns are valid, cite them and include any relevant recommendations.

Acceptable