

**Detailed Assessment Report for
2006-2007 Respiratory Therapy BS**

MISSION

Our mission is to prepare knowledgeable respiratory therapists and future leaders in the profession of respiratory care. We have approximately 100 undergraduate and graduate students.

STUDENT LEARNING OUTCOMES

Outcome/Objective 1:

communication skills both orally and in writing

Full Description:

Students are able to communicate effectively as a member of the healthcare team both orally and in writing.

A Student Learning Outcome? Yes

Associated General Education Outcomes:

- 1: Written Communication--major
- 3: Oral Communication--major

Strategic Plan Initiatives:

- A-2: Undergraduate Experience

Institutional Priorities:

- PRO-3: Quality professional programs
- STU-1: Learning-centered environment that support individual learning

Related Measures:

- M. 1: 1. Case presentations
- M. 2: Capstone course
- M. 11: Employer Survey- Affective
- M. 12: Graduate Survey-Affective

Related Actions:

- A. 3: Graduate Surveys
- A. 4: Employer Surveys

Outcome/Objective 2:

advanced respiratory therapy skills

Full Description:

Students will be able to demonstrate respiratory therapy skills at the advanced registry level.

A Student Learning Outcome? Yes

Associated General Education Outcomes:

- 5: Collaboration--major
- 7: Critical Thinking--major
- 11: Quantitative Skills--major
- 13: Technology--major

Strategic Plan Initiatives:

- A-2: Undergraduate Experience

Institutional Priorities:

- PRO-1: Targeted programs of distinctiveness
- PRO-3: Quality professional programs
- STU-1: Learning-centered environment that support individual learning
- UNI-2: Partnerships that have a positive impact on community

Related Measures:

- M. 3: Mid-Program comprehensive exam
- M. 4: NBRC Entry Level CRT
- M. 5: NBRC Written Registry Exam
- M. 6: NBRC Clinical Simulation Exam
- M. 7: Departmental Exit Exam
- M. 8: Employer Survey-Psychomotor
- M. 9: Graduate Survey-Psychomotor
- M. 10: Summative Psychomotor Evaluation
- M. 14: Entry Level Self Assessment Exam
- M. 15: NBRC Clinical Simulation Exam

Related Actions:

- A. 1: NBRC Written Registry Exam
- A. 2: NBRC Clinical Simulation Exam
- A. 3: Graduate Surveys
- A. 4: Employer Surveys

Outcome/Objective 3:

technical performance of advanced skills

Full Description:

Students will be able to perform proficiently as it relates to patient care and the technical aspects of respiratory care

A Student Learning Outcome? Yes

Associated General Education Outcomes:

- 7: Critical Thinking--major
- 13: Technology--major

Strategic Plan Initiatives:

- A-2: Undergraduate Experience

Institutional Priorities:

- PRO-3: Quality professional programs
- STU-1: Learning-centered environment that support individual learning
- UNI-2: Partnerships that have a positive impact on community

Related Measures:

- M. 8: Employer Survey-Psychomotor
- M. 9: Graduate Survey-Psychomotor
- M. 10: Summative Psychomotor Evaluation

Related Actions:

- A. 2: NBRC Clinical Simulation Exam
- A. 3: Graduate Surveys
- A. 4: Employer Surveys

Outcome/Objective 4:

professional behaviors expected of advanced-level

Full Description:

Students will exhibit professional behaviors as a member of the healthcare team.

A Student Learning Outcome? Yes

Associated General Education Outcomes:

- 4: Oral Communication--core
- 5: Collaboration--major
- 9: Contemporary Issues--major

Strategic Plan Initiatives:

- A-2: Undergraduate Experience

Institutional Priorities:

- PRO-1: Targeted programs of distinctiveness
- PRO-3: Quality professional programs

Related Measures:

- M. 2: Capstone course
- M. 11: Employer Survey- Affective
- M. 12: Graduate Survey-Affective
- M. 13: Summative Affective Evaluation

Related Actions:

- A. 2: NBRC Clinical Simulation Exam
- A. 3: Graduate Surveys
- A. 4: Employer Surveys

Outcome/Objective 5:

use of technology

Full Description:

Students will be able to use technology proficiently as it relates to patient care

A Student Learning Outcome? Yes

Associated General Education Outcomes:

- 7: Critical Thinking--major
- 13: Technology--major

Strategic Plan Initiatives:

- A-2: Undergraduate Experience

Institutional Priorities:

- PRO-1: Targeted programs of distinctiveness
- PRO-3: Quality professional programs
- UNI-2: Partnerships that have a positive impact on community

Related Measures:

- M. 3: Mid-Program comprehensive exam
- M. 4: NBRC Entry Level CRT
- M. 5: NBRC Written Registry Exam
- M. 6: NBRC Clinical Simulation Exam
- M. 7: Departmental Exit Exam
- M. 14: Entry Level Self Assessment Exam
- M. 15: NBRC Clinical Simulation Exam

Related Actions:

- A. 1: NBRC Written Registry Exam
- A. 2: NBRC Clinical Simulation Exam
- A. 3: Graduate Surveys
- A. 4: Employer Surveys

Outcome/Objective 6:

critical thinking skills within respiratory care

Full Description:

To be able to think logically and in meaningful ways so that their actions reflect their critical thinking.

A Student Learning Outcome? Yes

Associated General Education Outcomes:

- 7: Critical Thinking--major

Strategic Plan Initiatives:

- A-2: Undergraduate Experience

Institutional Priorities:

- PRO-1: Targeted programs of distinctiveness
- PRO-2: Excellence in the liberal arts and sciences
- PRO-3: Quality professional programs
- STU-1: Learning-centered environment that support individual learning

Related Measures:

- M. 1: 1. Case presentations
- M. 2: Capstone course
- M. 3: Mid-Program comprehensive exam
- M. 4: NBRC Entry Level CRT
- M. 5: NBRC Written Registry Exam
- M. 6: NBRC Clinical Simulation Exam
- M. 7: Departmental Exit Exam
- M. 8: Employer Survey-Psychomotor
- M. 9: Graduate Survey-Psychomotor
- M. 10: Summative Psychomotor Evaluation
- M. 11: Employer Survey- Affective
- M. 12: Graduate Survey-Affective
- M. 14: Entry Level Self Assessment Exam
- M. 15: NBRC Clinical Simulation Exam

Related Actions:

- A. 1: NBRC Written Registry Exam
- A. 2: NBRC Clinical Simulation Exam
- A. 3: Graduate Surveys

- A. 4: Employer Surveys

MEASURES

Measure 1:

1. Case presentations

Measure Full Description:

All students must successfully orally present a case study to the faculty and students at least once during the clinical seminar as part of their clinical practice.

Related Outcome(s)/Objective(s):

- Obj. 1: communication skills both orally and in writing
- Obj. 6: critical thinking skills within respiratory care

Target Level:

Case presentation scores will average 88% based on standard rubric for the Division.

Findings:

Thirty-nine senior RT students during fall 2006 semester scored from 60 to 79 points for an average of 72 out of 80 possible points with a mean percentage of 90%. During spring 2005, 37 junior RT student scored from 53 to 69 for an average of 63 out of 70 possible points with the mean of 90%.

Target Level Achievement: Met

Further Action Planned? No

Measure 2:

Capstone course

Measure Full Description:

RT 4085 "Professional Trends to Extended Long-term Care" is a writing intensive capstone course that concentrates on a series of reflective assignments designed to allow the senior student to demonstrate their proficient writing skills in respiratory therapy.

Related Outcome(s)/Objective(s):

- Obj. 1: communication skills both orally and in writing
- Obj. 4: professional behaviors expected of advanced-level
- Obj. 6: critical thinking skills within respiratory care

Target Level:

Students should achieve 85% or higher on written and oral assignments

Findings:

Thirty-nine students enrolled in this course with a class average for written assignments of 92%.

Target Level Achievement: Met

Further Action Planned? No

Measure 3:

Mid-Program comprehensive exam

Measure Full Description:

Upon completion of the first year of the respiratory care program, graduates will demonstrate competent understanding of advanced skills. This exam is given at the end of the summer semester via a web-based format.

Related Outcome(s)/Objective(s):

- **Obj. 2:** advanced respiratory therapy skills
- **Obj. 5:** use of technology
- **Obj. 6:** critical thinking skills within respiratory care

Target Level:

A score of 75% or greater

Findings:

Scores ranged from 75 to 92%. Average = 84. All students passed.

Target Level Achievement: Met

Further Action Planned? No

Measure 4:

NBRC Entry Level CRT

Measure Full Description:

All students must successfully complete the National Board for Respiratory Care's (NBRC) Entry Level Exam, and obtain the "Certified Respiratory Therapist" credential to demonstrate cognitive mastery of entry level skills. The exam is given via a web-based format.

Related Outcome(s)/Objective(s):

- **Obj. 2:** advanced respiratory therapy skills
- **Obj. 5:** use of technology
- **Obj. 6:** critical thinking skills within respiratory care

Target Level:

passing score as determined by the NBRC

Findings:

During Spring 2007, seniors in their last semester of the RT curriculum scored 100% (39/39) on the first attempt for the entry level CRT exam.

Target Level Achievement: Met

Further Action Planned? No

Measure 5:

NBRC Written Registry Exam

Measure Full Description:

NBRC Written Registry exam is a measure of cognitive mastery on advanced therapist skills and procedures taken after graduation, and involves predominantly 'application' and 'analysis' items. This is a web-based exam.

Related Outcome(s)/Objective(s):

- **Obj. 2:** advanced respiratory therapy skills
- **Obj. 5:** use of technology
- **Obj. 6:** critical thinking skills within respiratory care

Target Level:

passing score as determined by the NBRC

Findings:

Thirty-seven seniors attempted the exam with 28/37 or 76% passing on the first attempt. With retakes, 33/37 have passed at this point for a 89% pass rate. Percentages may change as the remaining students attempt to successfully pass after graduation.

Target Level Achievement: Partially Met

Further Action Planned? Yes

Measure 6:

NBRC Clinical Simulation Exam

Measure Full Description:

NBRC Clinical Simulation exam is another measure of cognitive mastery on advanced therapist skills and procedures taken after graduation, and involves demonstration of higher-level patient management ability, including therapeutic procedure initiation and modification. This is a web-based exam.

Related Outcome(s)/Objective(s):

- **Obj. 2:** advanced respiratory therapy skills
- **Obj. 5:** use of technology
- **Obj. 6:** critical thinking skills within respiratory care

Target Level:

passing score as determined by the NBRC

Findings:

Fourteen of 36 seniors passed on first attempt for a 39% first-time pass rate. Re-takes bring the total passed to 27 out of 36 for 75% pass rate. These percentages may change as the remaining students attempt to pass the exam.

Target Level Achievement: Partially Met

Further Action Planned? Yes

Measure 7:

Departmental Exit Exam

Measure Full Description:

A cumulative and comprehensive assessment of understanding and minimal competency of content areas in Respiratory Therapy. This is a web-based exam.

Related Outcome(s)/Objective(s):

- **Obj. 2:** advanced respiratory therapy skills
- **Obj. 5:** use of technology
- **Obj. 6:** critical thinking skills within respiratory care

Target Level:

Score of 75% or greater

Findings:

All students passed with a 75% or greater score on either the Written RRT exam as administered by the National Board of Respiratory Care or a Self-assessment version of the same exam administered on campus.

Target Level Achievement: Met

Further Action Planned? No

Measure 8:

Employer Survey-Psychomotor

Measure Full Description:

Following graduation from the program, a nationally standardized survey instrument on students' clinical skills is sent to the graduate's employer.

Related Outcome(s)/Objective(s):

- **Obj. 2:** advanced respiratory therapy skills
- **Obj. 3:** technical performance of advanced skills
- **Obj. 6:** critical thinking skills within respiratory care

Target Level:

For each item, a score of >2 on a 1 to 5 scale is needed to indicate minimal acceptability.

Findings:

Ten (out of possible 39) surveys were completed on-line through the DataArc system and via email. Scores were 82% for the highest value "5" and 16% for the next highest "4".

Target Level Achievement: Met

Further Action Planned? Yes

Measure 9:

Graduate Survey-Psychomotor

Measure Full Description:

Six-month post graduation, graduates are asked to evaluate their satisfaction with the program preparation for performance of clinical skills in Respiratory Therapy. This is obtained through a nationally standardized survey instrument of a graduate's clinical skills.

Related Outcome(s)/Objective(s):

- **Obj. 2:** advanced respiratory therapy skills
- **Obj. 3:** technical performance of advanced skills
- **Obj. 6:** critical thinking skills within respiratory care

Target Level:

For each item, a score of >2 on a 1 to 5 scale is needed to indicate minimal acceptability.

Findings:

Four(out of possible 39) surveys were completed on-line through the DataArc system. Scores were above 3 on scale of 1-5 on all measures.

Target Level Achievement: Partially Met

Further Action Planned? Yes

Measure 10:

Summative Psychomotor Evaluation

Measure Full Description:

For program completion, each student must demonstrate adequate clinical skills as rated by an instructor.

Related Outcome(s)/Objective(s):

- **Obj. 2:** advanced respiratory therapy skills
- **Obj. 3:** technical performance of advanced skills
- **Obj. 6:** critical thinking skills within respiratory care

Target Level:

Grading is Pass/Fail.

Findings:

38/39 senior RT students achieved passing scores in their final clinical externship check-offs. One student received an incomplete due to missed clinical time.

Target Level Achievement: Met

Further Action Planned? No

Measure 11:

Employer Survey- Affective

Measure Full Description:

Following graduation, a nationally standardized survey instrument on students' professional behavior is sent to the graduate's employer.

Related Outcome(s)/Objective(s):

- **Obj. 1:** communication skills both orally and in writing
- **Obj. 4:** professional behaviors expected of advanced-level
- **Obj. 6:** critical thinking skills within respiratory care

Target Level:

For each item, a score of >2 on a 1 to 5 scale is needed to indicate minimal acceptability.

Findings:

Seven (out of possible 39) surveys were completed on-line through the DataArc system. Scores were 82% for the highest value "5" and 16% for the next highest "4".

Target Level Achievement: Partially Met

Further Action Planned? Yes

Measure 12:

Graduate Survey-Affective

Measure Full Description:

Six-months post graduation, students are asked to evaluate their satisfaction with the program preparation for professional behavior in Respiratory Therapy.

Related Outcome(s)/Objective(s):

- **Obj. 1:** communication skills both orally and in writing
- **Obj. 4:** professional behaviors expected of advanced-level
- **Obj. 6:** critical thinking skills within respiratory care

Target Level:

For each item, a score of >2 on a 1 to 5 scale is needed to indicate minimal acceptability.

Findings:

Six (out of possible 39) surveys were completed on-line through the DataArc system. All scores were 3 or higher.

Target Level Achievement: Partially Met

Further Action Planned? Yes

Measure 13:

Summative Affective Evaluation

Measure Full Description:

Each student must demonstrate adequate professional behavior as rated by an instructor prior to graduation.

Related Outcome(s)/Objective(s):

- **Obj. 4:** professional behaviors expected of advanced-level

Target Level:

Grading is Pass/Fail.

Findings:

All affective evaluations for seniors in RT 4052, Clinical Practice V, were rated as satisfactory.

Target Level Achievement: Met

Further Action Planned? No

Measure 14:

Entry Level Self Assessment Exam

Measure Full Description:

Students must complete this exam at the end of fall semester of the senior year, as a formative exercise to prepare for the first phase of the national board exam (Entry Level CRT). This is given in a web-based format.

Related Outcome(s)/Objective(s):

- **Obj. 2:** advanced respiratory therapy skills
- **Obj. 5:** use of technology
- **Obj. 6:** critical thinking skills within respiratory care

Target Level:

This secure exam is given via the Web. Feedback is provided on each content area.

Findings:

All students passed this self assessment exam at the end of fall 2006 in RT 4051 with the passing score established by the NBRC. Scores ranged from 81 to 113 with average = 93.

Target Level Achievement: Met

Further Action Planned? No

Measure 15:

NBRC Clinical Simulation Exam

Measure Full Description:

This exam is a measure of cognitive mastery on advanced therapist skills and procedures taken after graduation. The exam consists of 10 separate patient management problems. The clinical setting and patient situation for each problem are designed to simulate reality and be relevant to the clinical practice of respiratory care. This exam also involves demonstration of higher-level patient management ability, including therapeutic procedure initiation and modification.

Related Outcome(s)/Objective(s):

- **Obj. 2:** advanced respiratory therapy skills
- **Obj. 5:** use of technology
- **Obj. 6:** critical thinking skills within respiratory care

Target Level:

A passing score is required on this exam in addition to that on the Written Registry, to obtain the credential of 'Registered Respiratory Therapist' (RRT).

Findings:

The class of 2007 has 27 of 39 graduates (69%) who earned the RRT credential.

Target Level Achievement: Partially Met

Further Action Planned? Yes

ACTIONS

Action 1:

NBRC Written Registry Exam

Full Description

This is a measure of cognitive mastery on advanced therapist skills and procedures taken just before graduation, and involves predominantly "application" and "analysis" items. The past two years students have been encouraged to take this exam prior to graduation and if successful, the results were used as the program final. Students were given a choice. For this measure, we will follow this for one more year and then make a decision as a faculty if this option should be a requirement for graduation.

Related Objectives:

- **Obj. 2:** advanced respiratory therapy skills
- **Obj. 5:** use of technology
- **Obj. 6:** critical thinking skills within respiratory care

Related Measures:

- **M. 5:** NBRC Written Registry Exam

- [M. 7](#): Departmental Exit Exam

Person/group responsible for the action Faculty of Respiratory Therapy

Target date to implement the action May 2007

Priority Med

Additional resources

Funding to purchase this exam for each student which is \$190 per student.

Action 2:

NBRC Clinical Simulation Exam

Full Description

The NBRC Clinical Simulation exam is another measure of cognitive mastery on advanced therapist skills and procedures. This exam involves demonstration of higher-level patient management ability, including therapeutic procedure initiation and modification. The past two years students have been given the option to take this exam prior to graduation. For this measure, we will follow this for one more year and then make a decision as a faculty if this option should be a requirement for graduation.

Related Objectives:

- [Obj. 2](#): advanced respiratory therapy skills
- [Obj. 3](#): technical performance of advanced skills
- [Obj. 4](#): professional behaviors expected of advanced-level
- [Obj. 5](#): use of technology
- [Obj. 6](#): critical thinking skills within respiratory care

Related Measures:

- [M. 6](#): NBRC Clinical Simulation Exam
- [M. 15](#): NBRC Clinical Simulation Exam

Person/group responsible for the action Faculty of Respiratory Therapy

Target date to implement the action May 2007

Priority Med

Additional resources

Funding to purchase exam for each student at \$200 per student.

Action 3:

Graduate Surveys

Full Description

Six months post graduation graduates are asked to evaluate their satisfaction with the program preparation for performance of clinical skills and professional behavior. DataArc, a web-based system has been used the past 2 years with low response. Emailed copies will be used next year to increase response.

Related Objectives:

- **Obj. 1:** communication skills both orally and in writing
- **Obj. 2:** advanced respiratory therapy skills
- **Obj. 3:** technical performance of advanced skills
- **Obj. 4:** professional behaviors expected of advanced-level
- **Obj. 5:** use of technology
- **Obj. 6:** critical thinking skills within respiratory care

Related Measures:

- **M. 9:** Graduate Survey-Psychomotor
- **M. 12:** Graduate Survey-Affective

Person/group responsible for the action

Program Director (Goodfellow)

Target date to implement the action

Fall 2007

Priority

Med

Action 4:

Employer Surveys

Full Description

Following graduation from the program, nationally standardized survey instruments on students` clinical and professional skills are evaluated. DataArc, a web-based system has been used the past 2 years with low response. Emailed copies will be used next year to increase response.

Related Objectives:

- **Obj. 1:** communication skills both orally and in writing
- **Obj. 2:** advanced respiratory therapy skills
- **Obj. 3:** technical performance of advanced skills
- **Obj. 4:** professional behaviors expected of advanced-level
- **Obj. 5:** use of technology

- [Obj. 6](#): critical thinking skills within respiratory care

Related Measures:

- [M. 8](#): Employer Survey-Psychomotor
- [M. 11](#): Employer Survey- Affective

Person/group responsible for the action Program Director (Goodfellow)

Target date to implement the action Fall 2007

Priority Med

ANALYSIS

Strength

Surveys that were returned either from employers or graduates were very good. In terms of assessing our outcomes or objectives in this regard, the curriculum and clinical practice time provide the necessary rigor to accomplish our goals.

Attention Needed

The DataARc web-based system did not provide the number of returned surveys needed to make an accurate assessment. Letters were sent to employers, graduates, and essential program personal asking that they go on-line to complete the survey, however, a low turnout was seen. As a last resort to increase response rate, we emailed surveys to employers asking their cooperation.