**Program Name:** Physician Assistant,  Department of Physician Assistant Studies  
**Program Chairperson’s Name:** Salvatore Barese  

The program has analyzed data collected across the program continuum for the 2010-2011 academic year that included the newly introduced Graduate Record Examination (GRE), a medical terminology examination, a preparatory board exam (PACKRAT), didactic Grade Point Average (GPA), clinical GPA, and the 2010 board scores. Specific performance in the anatomy/physiology and pharmacology courses were assessed as these courses were deemed to be the most significant challenges for the first year students in the first semester of the program.

The measuring instruments that were used for the assessment include:

1. The Graduate Record Examination was utilized for the first time for the applicants entering in September 2010.
2. Medical Terminology exam – this was the third year the program has used the medical terminology examination. The exam is given during orientation week prior to the start of classes and designed to measure baseline knowledge upon entry into the program. The exam appears to have a remarkable correlation with subsequent exam and course performance.
3. Physician Assistant Clinical Knowledge Rate and Assessment Tool (PACKRAT) provide individual student medical specialty performance, diagnosis and management, cognitive knowledge performance and other feedback. The exam is administered on-line early in the third year of the program, after completion of the didactic phase and for the first time it was given a second time at the end of the clinical year. Both students and the program receive the individual and program performance data to allow for focusing of any necessary remediation. The program also receives comparative data with programs around the country. The program identifies descriptive class data generating a mean and standard deviation (SD). Students at or below one SD are identified as at-risk for poor performance on the national boards.
4. Student Curriculum focus group: As an indirect measure of assessing attitudes about learning in the program a group of students completing their second year (didactic phase) were assembled to meet with the program chair. There were five students selected based on their leadership characteristics, above average performance in the program and their communication skills. The purpose of the meeting was to assemble a focus group that would critically evaluate the entire didactic curriculum from a learner’s perspective and provide suggestions for improvement. The students were informed of the purpose of the meeting and that their participation would be kept confidential. The attached curriculum evaluation document is the result of the focus group’s work. The information has been shared with the program faculty and used to make changes in the program’s curriculum.
5. Exam Master is a commercial product that includes questions and entire examinations.
that are used as a resource for course examinations and board preparation.

6. The didactic and clinical GPAs are used as a measure of the program’s effectiveness at providing the clinical knowledge and skills necessary to meet the goals of the program and to pass the boards.

7. The Physician Assistant National Certifying Examination (PANCE), the PA boards, is an outcome measure utilized by the program. The individual graduate scores, class aggregate scores, pass rate, individual specialty performance, national comparison with the other programs, and other useful information is provided to the program.

The important findings were the following:

1. The GRE was assessed to be a useful objective measure for use in admissions and of future academic performance.

2. Medical Terminology Exam
The medical terminology exam was intended to identify at-risk students for the anatomy and pharmacology courses. The results of the examination proved to have a greater application in early identification of student at-risk for academic problems. The mean score of the exam given to the Class of 2013 was 79 with a SD of 6. Those students with a one SD or greater were identified as at-risk and after one semester four students were put on academic probation and the student with the lowest medical terminology score was dismissed from the program after the first semester due to failing two courses resulting in an extremely low GPA.

3. PACKRAT
An analysis of the Physician Assistant Clinical Knowledge Rating and Assessment Tool (PACKRAT) scores from examinations taken at the beginning of the clinical phase and again at the end of the clinical phase indicated a significant increase in overall score performance, individual specialty performance, and ranking with other programs. The significant improvement in scores between the first and second examination may be attributable to increased use of online testing for end-of-clerkship examinations and the use of Exam Master. There may be additional reasons for the improved scores and further analysis will be carried out. Previous analysis of the PACKRAT scores indicates a correlation with performance on the Physician Assistant National Certifying Examination (PANCE).

4. Student Curriculum Focus Group
The curriculum committee report is presented at a department meeting to discuss the various recommendations. The faculty continues to believe there are benefits to the program from the
student curriculum committee focus group. The focus group provided a much more in depth and beneficial student analysis of the curriculum than is obtained from the NYIT end of course student evaluations (see attached minutes of the student curriculum committee meeting).

5. A comparison with the PANCE data between the classes graduating in 2008, 2009 and 2010 revealed the following:
2008: 21 graduates, mean score 432 with 78 SD, 90% first time pass rate
2009: 37 graduates, mean score 505 with 130 SD, 89% first time pass rate rising to 97% with second time test takers.
2010: 48 graduates, mean score 548 with 122 SD, 94% first time pass rate
The 2008 class was a transition class with a mix of Bachelor and Master students. The class of 2009 was the first fully graduate class. The class of 2010 was the largest graduating class from the program.

6. Students achieving scores well below the class mean on all measures of program performance, generally by one SD or more were identified as at-risk students. An analysis of the class of 2010 indicated that those students more than one standard deviation below the class mean didactic GPA were at high risk for failure on the PANCE. All three board failures supported this observation (see attachment), all three graduates passed the boards on their second attempt. This information has been used to identify at-risk students and provide advisement by faculty. One intervention that appears to have merit is to have senior students use of Exam Master (see below). Continued assessment of this intervention has shown an improvement in end of clerkship examination scores. Whether the use of Exam Master and providing students with two opportunities to take the PACKRAT examination will carry over to improvement in PANCE remains to be seen.

An assessment of achievement of student learning outcomes.

A major outcome for the program is performance on the national boards (PANCE). The program assesses not only the first time pass rate but the mean score for the class; both of these have gone up significantly from the previous year. The mean program score on the PANCE is compared with national data and provides the program with a measure of its efficacy and student learning outcome. The significant improvement in score between the first and second PACKRAT examinations provides some objective evidence of achievement of learning outcomes and a potential indicator for improved board scores.
The faculty believes the following action items may enhance student learning.

1. Continue utilization of Exam Master Increase (an on-line medical testing program that provides immediate feedback to students on the choice of their answers and the reasons for them being right or wrong and has an administrative component to allow questions to be used for course examinations). The program has limited utilization of Exam questions for course examinations to…

2. Continue the use of the medical terminology exam to identify at-risk students and provide early intervention and retention decisions.

3. A review of suggestions made by the student curriculum focus group by the department’s curriculum committee and incorporation of these suggestions into the curriculum as deemed appropriate. A suggestion was made to develop a focus group for the clinical year, this is being considered.

4. Based on the program’s positive experience with using the PACKRAT at both the beginning and end of the clinical phase it will continue this practice.

5. Use of the Graduate Record Examination may provide an additional objective measurement to help identify students that can handle the academic rigor of the program.

Faculty responsible for the action and establish a timeline for completion.

The assessment plan for the next academic year will include.

- PANCE scores, the 2011 graduates are expected to take the exam in the summer of 2011; a report from the certifying agency is sent in early 2012 to the program director. The report is shared with the faculty at department curriculum committee meetings. The student first-time pass rate on the PANCE, the PANCE mean score, the mean score comparison with the national mean are all used by the program for outcomes assessment.

- Standardized tests (PACKRAT, Exam Master) The PACKRAT is purchased by the department and the report is sent to the program director. Dr. Zehra Ahmed has been assigned monitoring the use of and efficacy of Exam Master to enhance student learning in both the didactic and clinical phases. This evaluation is an ongoing process. Students and their faculty advisors utilize the data to prepare individualized study plans for students for the national boards.

- Student curriculum focus group will be repeated with a new student group selected from the second year class in 2012. Dr. Salvatore Baresse will continue to prepare the report from the student focus group meetings and share with the faculty at the department curriculum committee meeting.

- Medical Terminology exam will continue to be used to identify at-risk students and to provide advisement by faculty. Dr. Salvatore Baresse will further revise the exam to enhance its usefulness at identifying at-risk students.
Graduate Record Exam (GRE) will be required for all applicants to the program. This is the second year the program has required the GRE. The GRE has undergone a significant change in the test format and the scoring. The program will continue to assess the GRE for its usefulness at identifying qualified applicants. Dr. Salvatore Barese, Professor Lawrence Herman, Director of PA Admissions, and Suzana Uda-Rebecca, Admissions Coordinator will review the outcome of this newly revised assessment tool and develop plans for its future use.