Oklahoma Board of Nursing 2501 N. Lincoln Boulevard, Suite 207 Oklahoma City, OK 73105 (405) 962-1800

# **NCLEX Pass Rate Task Force Report and Recommendations**

### **Summary of Task Force Activities**

The NCLEX Pass Rate Task Force was formed by the Oklahoma Board of Nursing in response to Goal #1 of the Board's Strategic Plan: "Statewide NCLEX pass rate for first-time writers will meet or exceed the national NCLEX pass rate by 2007". The charge to the task force was to explore issues related to the decreased statewide nursing licensure examination (NCLEX) pass rate and significant factors in determining NCLEX success, and to present recommendations to the Board by the end of FY 2003. The task force met three times in the fall of 2002, and four times in the spring of 2003.

Members of the task force included the following individuals:

Kenda Jezek, Ph.D, RN Nurse administrator, baccalaureate program Nancy Gibson, MS, RN Nursing faculty, baccalaureate program DeAnne Parrott, MS, RN Nurse administrator, associate degree program Renee Lewis, MS, RN Nursing faculty, associate degree program Nurse administrator, practical nursing program Valerie McCartney, MS, RN Patricia Laing-Arie, RN Nursing faculty, practical nursing program Carol Ludlow Nursing student, baccalaureate program Beva Haynes Nursing student, associate degree program Nursing student, practical nursing program Amy Yates Debbie Blanke, Ed.D OK State Regents for Higher Education Lara Skaggs OK Dept. of Career and Technology Education Liz Michael, RN OK Organization of Nurse Executives Darlene Barnard-York, RN OK Organization of Nurse Executives OK Association of Health Care Providers Jeannie Gault, RN Tamara Meadows, RN OK Association of Health Care Providers Jennifer Bays, RN **OK Nurses Association** Cynthia Foust, Ph.D, RN Oklahoma Board of Nursing

In order to carry out its charge, the task force undertook the following activities:

- 1. Reviewed statistics on national, state, and program NCLEX pass rates
- 2. Reviewed rules and policies related to NCLEX pass rate in Oklahoma
- 3. Reviewed reports on initiatives in other states related to NCLEX pass rate
- 4. Reviewed reports of research conducted by NCSBN on NCLEX pass rate
- 5. Reviewed summaries of literature reviews conducted by two task force members on NCLEX pass rate

6. Conducted a survey of state programs related to factors impacting NCLEX pass rate

# Significant Findings on the National Level

#### Review of the Literature

Two members of the task force conducted independent reviews of the literature and shared this information with task force members. These reviews primarily focused on studies of predictors of NCLEX success/failure and efficacy of NCLEX preparation efforts.

The literature reviewed indicated that research has mainly been conducted in baccalaureate nursing programs. There are a number of academic indicators that may be predictive of NCLEX success/failure, including ACT/SAT scores, other pre-entrance examination scores, pre-admission grade point average, nursing course grade point average, scores on NCLEX predictor examinations, and repeats of science or nursing courses. Other psychosocial variables that may predict NCLEX success/failure include number of hours worked per week, English as a second language, ethnic minority status, low motivation scores on standardized assessments, and length of time between graduation and taking the examination.

Less research has been conducted on the efficacy of formal NCLEX preparation efforts. While there is some indication that faculty-led programs to assist students with NCLEX preparation can be effective, the results are often inconclusive. Some studies found that students identified as being at-risk for NCLEX failure are less likely to participate in faculty-led formal preparation efforts. This has also been noted on pass rate reports submitted by Oklahoma programs with a low NCLEX pass rate.

### California Task Force Summary

The task force reviewed a report from the California Board of Nursing NCLEX-RN Task Force, submitted in December 2000. This task force was convened for many of the same reasons as the Oklahoma task force and had similar goals. The task force conducted surveys, interviews, and literature searches, in order to identify factors impacting NCLEX pass rates. Among the factors identified as negatively impacting the pass rate were students' employment hours and family responsibilities, having English as a second language, withdrawing from or failing a science course more than once, graduates' delaying taking the exam five months or more, and limited knowledge by nursing faculty of the NCLEX test plan. In addition, a change in California educational regulations in the early 1990's prevented associate degree programs from establishing supplemental admission criteria. The task force identified this change as having a negative impact on the NCLEX pass rate.

Among the task force's recommendations for NCLEX applicants are early completion of the licensure exam, the use of assessment tests to identify areas of weakness, practice on computerized exams, additional study time, and strengthening English proficiency. Recommendations for nursing faculty and administrative officials include increasing familiarity with the NCLEX test plan, improvement of item-writing skills, evaluation of NCLEX results to identify necessary program changes, requiring English language proficiency testing as a part of

admission requirements, limiting the number of times students can retake prerequisite courses, and adding a synthesis course during the last semester to encourage integration and preparation for the NCLEX. The California task force recommended funding research on identification of high-risk students and on reading comprehension, developing a database of variables related to candidate performance on the NCLEX, and providing monitoring and consultation for programs with low pass rates.

#### NCSBN Research

The task force members reviewed the results of recent research conducted by the National Council of State Boards of Nursing (NCSBN). NCSBN has examined pass rates of candidates who delay taking the examination, trends in NCLEX pass rates, and the performance of repeat testers.

Among the findings of interest are the following:

- Pass rates decrease with increased time between graduation and completion of the examination.
- Repeat candidates and first-time foreign-educated candidates tend to wait the longest to take/re-take the examination and they produce the lowest pass rates.
- Pass rates are lowest between October and December of each year, presumably because this is when there are a higher proportion of candidates testing who graduated in May but have waited to take the exam.
- A large percentage of candidates who repeat the examination will eventually pass, but pass rates decrease with each attempt.

### Significant Findings Related to Oklahoma Nursing Education Programs

#### Statewide NCLEX Pass Rate

The task force reviewed the statewide NCLEX pass rate for the past ten years. From 1999 through 2002, the statewide NCLEX-RN pass rate has been below the national average. Pass rates prior to that time were above the national average in four of the previous six years. The NCLEX-PN pass rate has been above the national average in seven of the last nine years. However, it should be noted that Oklahoma has a significant number of practical nurse equivalency candidates who usually performed quite well on the NCLEX examination. If the results of these candidates are removed from the statistics, the 2002 Oklahoma NCLEX-PN pass rate drops by approximately two percentage points, placing it below the national average.

The NCLEX-RN pass rate dropped to 80.94 percent (%) in calendar year 2000, which is the lowest pass rate experienced in recent years. Since then, it has rebounded, although it is still below the national average.

### Comparison Data Compiled by Task Force

A comparison of the five programs with the highest means on five-year pass rates and the five programs with the lowest means for the same years was reviewed. Program characteristics included in the comparison were source of funding (public vs. private), setting (rural vs. urban), full-time faculty to student ratio, educational level (for RN programs), NLNAC status (PN programs), percent students who represent an ethnic minority, number of graduates, percent of applicants admitted, completion rate, and percent full-time faculty with the lowest allowed educational level. The task force members were unable to identify significant commonalities in characteristics in the low pass rate or the high pass rate groups. The only exception was for NLNAC status. It was noted that none of the practical nursing programs with the lowest pass rates were NLNAC accredited. Three of the five programs with the highest pass rates were NLNAC accredited. The other two were NLNAC accredited until recently, but did not seek reaccredidation.

The task force also reviewed information regarding the number of Oklahoma RN programs with pass rates above the state and national averages for each of the past ten years. Interestingly, in most years, the number of programs with pass rates above the national average has been about the same or more than the number below the national average. In 2001, there were 19 RN programs with pass rates above the national average and only 7 programs below the national average, although the statewide pass rate was below the national average. This may be evidence that Oklahoma programs with low pass rates tend to be very low, pulling down the statewide pass rate.

# Summary of Information from Pass Rate Reports

In reports submitted by nursing education programs with NCLEX pass rates ten percentage points or more below the national average, the following commonalities were noted:

- Some programs do not regularly use accessible sources of data to evaluate the correlation between admission scores, grade point average, NCLEX predictor examination scores, and NCLEX pass rate. This impacts the ability of the program to make informed decisions about changes likely to result in an improvement of their NCLEX pass rate.
- Many programs have only recently begun the use of NCLEX predictor examinations as a requirement of the program. Data on the efficacy of these examinations and on appropriate follow-up plans is limited.
- Grade inflation is a factor leading to a low NCLEX pass rate in some nursing education programs, particularly in programs that allow significant point credit in theory courses for attendance, participation, and completion of assignments.
- Some programs do not identify minimum academic requirements for admission to the program. Instead, a point system may be used to select those who are deemed to be better qualified. While the use of point systems in admission decisions may be appropriate, point systems fail when applicant numbers drop. In cases in which there is a small applicant pool, identifying minimum academic requirements (such as minimum

- scores on standardized pre-entrance examinations) may be necessary to ensure that students admitted have a reasonable chance of success in the program and on the NCLEX examination.
- Student characteristics identified by programs as leading to NCLEX failure include a high number of work hours, family commitments, English as a second language, and low admission points.
- In some cases, problems within the program, such as resignation of the program director, faculty turnover, inexperienced faculty, lack of knowledge regarding the NCLEX examination and/or test development, and increased use of adjunct faculty were noted as having an impact on the NCLEX pass rate.

Nursing education programs tend to take similar actions to address NCLEX pass rate concerns. Actions commonly taken by programs include:

- o Initiating the use of an NCLEX predictor examination as a requirement in the program
- Requiring students to complete NCLEX review, tutoring, or other actions if the predictor examination score is low
- o Increasing the minimum passing grade
- o Providing faculty education in the areas of the NCLEX examination and test development skills
- Changing or increasing admission requirements

# Results of Survey of Nursing Education Programs

In December 2002, a survey was sent to all state nursing education programs to identify the directors' perceptions of factors impacting the NCLEX pass rate and the actions taken by programs to address pass rate. Based on the data obtained from 50 respondents (an 86.2% return rate), the task force noted the following:

- □ The majority of programs have minimum academic requirements for admission; generally based on minimum scores on standardized assessment tests and/or a minimum required grade point average on high school or college courses.
- □ The minimum grade average to earn a "C" in nursing courses tends to be higher than the parent institution's requirement. The majority of respondents require at least a 75% average to pass nursing courses.
- □ Most respondents allow students who fail a course to repeat the course one time, and almost half only allow students to repeat one course in the program. Respondents with a pass rate at or above the national average were slightly more likely to allow students to repeat a course only once and to repeat only one course in the program. A higher number of respondents with a pass rate below the national average had no limit on the number of courses that could be repeated.
- □ Most respondents have established a written policy to identify students at risk for failure in the program or on the NCLEX. The indicators most commonly used are scores earned on nationally-normed examinations designed to predict NCLEX success, grades earned in nursing courses, and repeats of nursing courses. Once the student has been identified as

- at-risk, the majority of respondents will notify the student and require the student to meet with a faculty advisor at least once.
- □ Nearly all respondents report using a standardized NCLEX predictor examination, but only 34.8% require students to earn a certain score on the exam as a requirement for course completion or graduation.
- Student and graduate issues most often identified as negatively impacting pass rate are the number of hours of employment, a limited number of hours spent studying, more family responsibilities, being less academically qualified, and an inadequate amount of time spent preparing for the NCLEX. Respondents with a pass rate below the national average were more likely to note that students spend less time studying.
- No single faculty/program issue was identified by the majority of programs as having a negative impact on the pass rate. Increased faculty turnover was selected most often as a negative factor. Respondents with an NCLEX pass rate below the national average were more likely to identify that administration has pressured the program to maintain capacity enrollment and that faculty spend inadequate time evaluating NCLEX result data and planning program changes based on the data.
- □ The majority of respondents believe that their administrations have been supportive of maintaining high academic standards.
- □ Most respondents report that faculty have received training on test development and instructional techniques.

#### **Recommendations**

### Recommendations for the Oklahoma Board of Nursing

- 1. Clearly articulate and enforce regulations requiring programs to use a systematic program evaluation process to analyze student outcomes on the NCLEX examination and develop appropriate actions based on the analysis.
- 2. Continue to evaluate full-time faculty to student ratios in the classroom and clinical area to determine the relationship between such ratios and student outcomes.
- 3. Ensure that pass rate reports include a thorough analysis of student and program factors impacting success on the NCLEX exam.
- 4. Hold nursing education programs accountable for their NCLEX pass rates. Utilize focus survey visits, warnings and conditional approval status when there is evidence of continued low pass rate and failure to meet educational standards.
- 5. Develop a mechanism to communicate and encourage the use of best practices that promote NCLEX success.
- 6. Utilize the annual report for ongoing evaluation of factors influencing each program's NCLEX results.
- 7. Provide opportunities for faculty development related to the NCLEX examination and curricular resource sharing.
- 8. Require that every program whose pass rate is below the standard provide a pass rate report to the Board, regardless of its size.
- 9. Institute regulations requiring the NCLEX candidate (excluding foreign-educated and other endorsement candidates required to take the exam) to pass the examination within one year of graduation from the program. If the candidate does not take the exam or pass within this time period, the candidate would be required to complete additional education prior to re-testing.

# Recommendations for Nursing Education Programs

- 1. Identify requirements for English language proficiency and develop a plan for continued support of students for whom English is a second language.
- 2. Consider providing part-time program options to allow students to complete their nursing education at a slower pace.
- 3. Use the systematic program evaluation plan to track the correlation of such factors as admission/ACT scores, high school or college GPA, nursing course GPA, other selected student characteristics, repeats of coursework, scores on NCLEX predictor examinations, with results on NCLEX examination.
- 4. Perform a cross-analysis of the curriculum with the detailed NCLEX test plan, in order to ensure essential elements are covered adequately.
- 5. Utilize consultants, including Board staff consultants, as needed in program evaluation and curriculum development.
- 6. Provide continuing education for faculty members on test development and analysis skills.
- 7. Assess students for at-risk status upon admission or early in the program. Implement a plan to assist at-risk students with success in the program and on the NCLEX.

8. Develop and publicize scholarship programs in order to facilitate minimal employment during the time the student is in the nursing education program

# Recommendations for Students and NCLEX Candidates

- 1. Accept responsibility for own success in the program and on the NCLEX examination and become an active participant in the learning process.
- 2. Participate in study and test-taking skill workshops early in the program to facilitate the development of such skills.
- 3. Seek out all available resources to ensure minimum work hours while attending the nursing education program.
- 4. Join a study group early in the program and ensure that the study group time is used effectively.
- 5. Use NCLEX review material and study questions throughout the program to increase own familiarity with the NCLEX examination.
- 6. After graduation, develop a study plan for NCLEX preparation. Use computerized NCLEX practice exams on a regular basis. Practice taking these exams in a campus computer lab to simulate NCLEX testing conditions.
- 7. Take the NCLEX examination as soon as possible after graduation, as studies show that early completion of the NCLEX increases chances of success.

# Recommendations for Employers

- 1. Establish programs that foster success for employees attending nursing education programs. Consider options such as providing full-time benefits for part-time status during the school year, full-time salary for reduced hours, and tuition reimbursement.
- 2. Encourage new graduates employed as nurse technicians/nursing assistants to adequately prepare for the NCLEX exam, through options such as allowing specified work hours for planned study sessions, reimbursement for review courses, and reimbursement for the examination.
- 3. Provide special recognition for employees who pass the NCLEX examination, such as restaurant and movie coupons, employee newsletter notice, or other options.