

The National Council of State Boards of Nursing, Inc. (NCSBN[®]) conducted a study to examine the relationship between passing the NCLEX[®] examination and the amount of time elapsed between becoming eligible and actually taking the examination. The interval between graduation and examination dates was not used because the graduation date data is self-reported and therefore less likely to be reliable. Instead, the analyses were conducted on the elapsed time between the eligibility and examination dates.

METHODOLOGY

Candidate data from the calendar years 2003-2005 for both registered nurse (RN) and practical nurse (PN) candidates were used for this analysis. For this time period, there were 421,739 RN candidates and 183,540 PN candidates. Candidates were further classified by where they received their nursing education (U.S.-educated or internationally educated) and by their repeater status (first-time or repeat tester). The lag time, which is the number of days between the eligibility date and the actual test date, was used for the following analysis. The lag times were divided into four

quartiles based on the distribution for the overall testing population of both the RN and PN candidate populations.

RN CANDIDATES

Table 1 indicates that longer lag times were associated with lower passing rates. However, the 50% quartile did see a jump, albeit small (1.2%), in the passing rate, from 79.7% in the 25% quartile to 80.9%. Similarly, the passing rates for individual subpopulations, first-time U.S.-educated, repeat U.S.-educated, first-time internationally educated, and repeat internationally educated, are shown

based on the distribution of the overall testing RN population. The table below indicates that all subpopulations exhibit decreasing passing rates with increasing lag time.

It is also interesting to note the number of candidates in these subpopulations by quartiles (see Table 2). With increasing lag time, the volume of first-time U.S.-educated candidates decreased by

Table 1. RN Passing Rates by Quartiles

Quartile	Days	Overall	U.S.-Educated		Internationally Educated	
			First-Time	Repeat	First-Time	Repeat
25%	0 - 21	79.7%	90.1%	60.8%	70.7%	36.3%
50%	22 - 33	80.9%	88.1%	54.9%	66.1%	33.7%
75%	34 - 54	75.2%	85.0%	50.4%	63.6%	31.3%
100%	55 - 365	49.6%	77.0%	39.2%	51.4%	21.8%

Table 2. RN Volume by Subpopulations

Quartile	Days	U.S.-Educated		Internationally Educated	
		First-Time	Repeat	First-Time	Repeat
25%	0 - 21	77,459	24,818	5,589	6,601
50%	22 - 33	80,494	10,621	5,838	4,681
75%	34 - 54	73,151	10,541	10,543	7,678
100%	55 - 365	30,760	15,463	30,777	26,725

60% from the first to the fourth quartile and U.S. repeaters saw a 38% decrease as well. For the other two subpopulations, however, first-time internationally educated and repeat internationally educated candidates show increasing volumes with increasing lag times. In fact, the increases from the first to the fourth quartiles are 451% and 305% respectively.

PN CANDIDATES

Using the same methods to analyze the PN data, results comparable to the RN data were found. These results are shown in Table 3. First-time U.S.-educated candidates' pass rates did slightly increase (0.7%) from the first to second quartiles, while for all other subpopulations and the overall group an increase in lag time was associated with a decrease in passing rates.

There is also a similar trend to that of RN candidates in the volumes of PN candidates testing during the different lag time groups (see Table 4). The reference group (first-time U.S.-educated candidates) saw a 36% decrease in candidates from the first to the fourth quartile. However, the other three groups all saw heavy increases in their volumes with increasing lag time. Repeat U.S.-educated testers increased in volume by 84%, first-time internationally educated volume

increased by 629% and repeat internationally educated volume increased by 902%.

CONCLUSION

It is evident from these analyses that for the overall testing population as well as the subpopulations passing rates tend to decrease with increased time between the date of becoming eligible to sit for the examination and the test date itself. It is also discernible that large volumes of candidates who are repeat testers (both U.S. and internationally educated) and first-time internationally educated candidates are waiting to test longer. It is these groups that are producing the lowest passing rates. Thus these results confirm the anecdotal evidence that member boards and nursing educators have known for some time: candidates should test as soon as they are able.

PERFORMANCE OF REPEAT TESTERS

From the implementation of the computer adaptive testing (CAT) methodology used in the NCLEX examinations through 2005, the passing standard has been raised for both the PN and RN examinations. Increases in the passing standards have generated small decreases in passing rates among all populations: U.S. versus internationally educated, repeater versus first-time test-taker and the overall testing population.

Table 3. PN Passing Rates by Quartiles

Quartile	Days	Overall	U.S.-Educated		Internationally Educated	
			First-Time	Repeat	First-Time	Repeat
25%	0 - 18	87.8%	90.4%	55.1%	69.8%	39.4%
50%	19 - 28	86.8%	91.1%	50.6%	66.4%	38.4%
75%	29 - 46	82.4%	88.3%	46.1%	63.4%	31.4%
100%	47 - 365	60.9%	79.4%	36.4%	44.4%	23.3%

Table 4. PN Volume by Subpopulations

Quartile	Days	U.S.-Educated		Internationally Educated	
		First-Time	Repeat	First-Time	Repeat
25%	0 - 18	41,239	6,122	516	396
50%	19 - 28	39,116	3,905	563	391
75%	29 - 46	39,366	4,851	1,013	711
100%	47 - 365	26,377	11,246	3,761	3,967

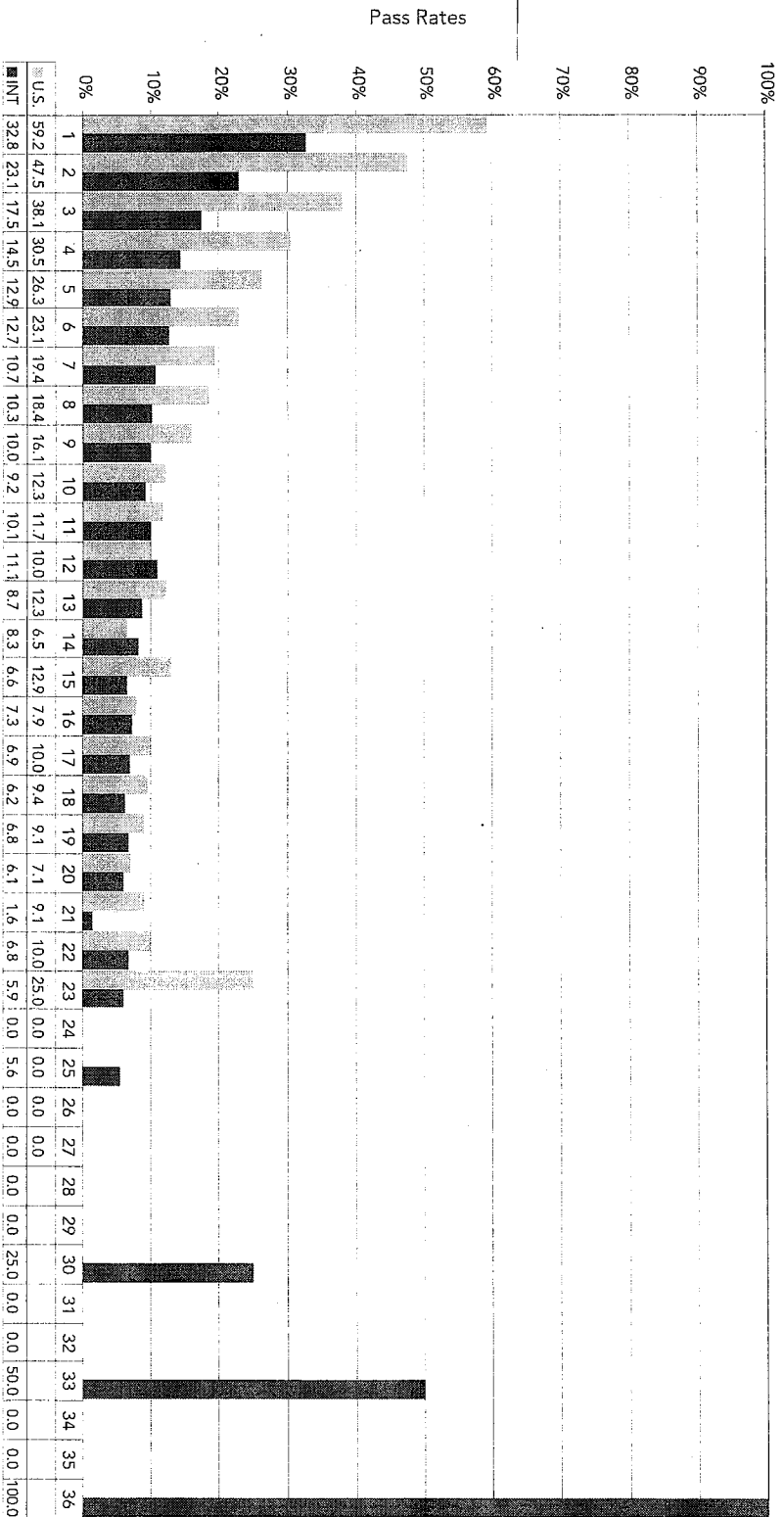
With these decreases in the passing rates, the repeater populations of both the RN and PN candidates taking the examinations continue to grow. Additionally, the volume of examinees continues to increase, which also causes an increase in both the number of individuals who pass and fail. This subpopulation poses some interesting questions, one of which is:

What kind of success do repeaters have in passing the NCLEX examination? In fact, that question spurred an analysis of NCLEX data from April 1994 to December 2005.

It was found that a large proportion of repeating candidates, both RN and PN, do in fact pass their respective examinations. Candidates are more likely to pass in fewer attempts, although a small number of candidates have passed at extreme number of administrations. It is also true that repeating candidates who are educated in the U.S. are far more likely to pass at any given

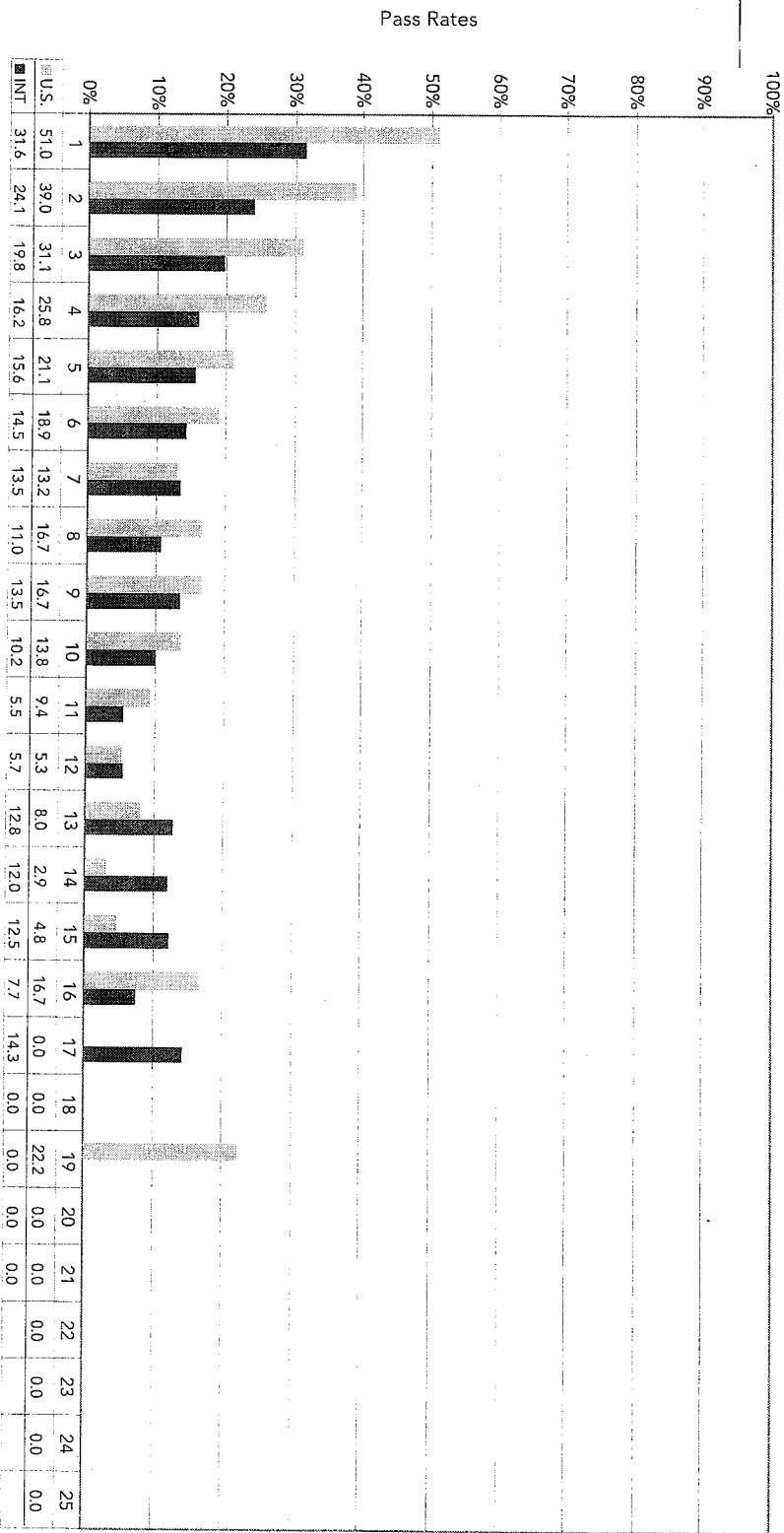
attempt, compared to candidates who are internationally educated. This relationship holds for both RN and PN examinees and can be seen in the accompanying graphs. For additional questions about the performance of repeat candidates on the NCLEX examination, contact Michelle Eich, NCLEX® data integrity associate, at meich@ncsbn.org.

Pass Rates of RN Repeating Candidates, April 1994 - December 2005



Number of Repeats

Pass Rates of PN Repeating Candidates, April 1994 - December 2005



Number of Repeats