



# NCLEX-RN 2016

PERFORMANCE OF  
NOVA SCOTIA GRADUATES



College of

**REGISTERED NURSES  
OF NOVA SCOTIA**

Setting the Standard for Care.

# CONTENTS

- Introduction ..... 3
- Who is included in this report..... 3
- Attempts..... 3
- Cohorts ..... 3
- NCLEX-RN pass rate by cohort ..... 3
- 2016 cohort pass rate by the end of 2016 ..... 3
- 2015 cohort pass rate by the end of 2016 ..... 4
- 2015 and 2016 cohorts’ pass rates by attempt..... 4
- NCLEX-RN duration statistics..... 5
- NCLEX-RN test plan performance ..... 6

## INTRODUCTION

### Who is included in this report

This report provides statistics on the performance of graduates of Nova Scotia nursing education programs who wrote the NCLEX-RN in 2015 and 2016 as a part of their registration/licensure application process with a provincial or territorial Registered Nurse (RN) regulator in Canada. These writers are referred to as “Nova Scotia graduates” throughout the report.

This report does not include any Nova Scotia graduates who applied for licensure/registration outside of Canada.

### Attempts

The report only includes graduates’ attempts on the NCLEX-RN; any attempts at the previous nursing regulators’ exam in years prior to 2015 are not included.

### Cohorts

For the purposes of reporting, the Nova Scotia graduates were separated into two cohorts based on the year in which they wrote the NCLEX-RN for the first time:

1. **2015 cohort:** those who wrote the NCLEX-RN in 2015 for the first time
2. **2016 cohort:** those who wrote the NCLEX-RN in 2016 for the first time

By introducing the concept of cohorts, a group of writers can be followed every year in which they make new attempts. Table 1 shows how many Nova Scotia graduates in each cohort attempted the exam at least once in 2015 and 2016.

**TABLE 1. 2015 AND 2016 COHORTS WRITING IN 2015 AND 2016**

	2015 EXAM YEAR	2016 EXAM YEAR
2015 cohort	393	40
2016 cohort	-	382

In 2015, 393 Nova Scotia graduates wrote the NCLEX-RN for the first time and thus belong to the 2015 cohort. Of those who did not pass the exam in 2015, 40 wrote again in 2016.

In 2016, 382 graduates wrote the exam for the first time, and are considered part of the 2016 cohort.

## NCLEX-RN PASS RATE BY COHORT

### 2016 cohort pass rate by the end of 2016

Of the 382 Nova Scotia graduates in the 2016 cohort (who wrote the NCLEX-RN for the first time in 2016), 89% had passed it by the end of 2016 after one or more attempts (see

Table 2). This is referred to as the 2016 **year-end NCLEX-RN pass rate** of the 2016 cohort.

**TABLE 2. YEAR-END NCLEX-RN PASS RATE OF THE 2016 COHORT**

2016 cohort	PASSED	FAILED	TOTAL WRITERS	YEAR-END PASS RATE
By the end of 2016:	340	42	382	89.0%

## 2015 cohort pass rate by the end of 2016

Of the 393 Nova Scotia graduates in the 2015 cohort (who wrote NCLEX-RN for the first time in 2015), 89.1% passed by the end of 2015 after one or more attempts (see Table 3). Of the 43 graduates in the 2015 cohort who did not pass the exam in 2015, 40 attempted the exam again in 2016. Of this group, 80% passed by 2016's year-end. Ultimately, by the end of 2016, 97.2% of the 2015 cohort had passed the exam. The remainder who had not yet passed by the end of 2016, may still be able to attempt the exam in 2017 or subsequent years.

**TABLE 3. YEAR-END NCLEX-RN PASS RATE OF THE 2015 COHORT**

<i>2015 cohort writing in:</i>	PASSED	FAILED	TOTAL WRITERS	YEAR-END PASS RATE
2015	350	43	393	89.1%
2016	32	8	40	80.0%
By the end of 2016:	382	11	393	97.2%

The percentage of the 2016 cohort who had passed by the end of 2016 (89%) was only 0.1 percentage points lower than that of the 2015 cohort by the end of their first year of writing in 2015 (89.1%). Looking at the cumulative results of 2015 cohort after two years of writing, 97.2% have passed and only 2.8% have not yet passed.

## 2015 and 2016 cohorts' pass rates by attempt

The NCLEX-RN results can also be reviewed to see how successful each cohort was on each attempt (see Table 4). Of the 382 graduates in the 2016 cohort, 77.5% passed on their first attempt, which was a 1.7-percentage point higher pass rate when compared to the 2015 cohort's first-attempt pass rate of 75.8%.

**TABLE 4. NCLEX-RN PASS RATES BY ATTEMPT AND BY COHORT (AS OF THE END OF 2016)**

	2015 COHORT		2016 COHORT	
	TOTAL WRITERS	ATTEMPT PASS RATE	TOTAL WRITERS	ATTEMPT PASS RATE
Passed on first attempt	393	75.8%	382	77.5%
Passed on second attempt	93	62.4%	76	52.6%
Passed on third attempt	33	57.6%	9	44.4%
Passed after additional attempts	12	58.3%	0	-

## NCLEX-RN DURATION STATISTICS

Writers of the NCLEX-RN answer between 75 and 265 questions. For most writers, the computer program will stop asking questions once the program has calculated with 95% certainty that the writer is clearly above or below the passing standard.<sup>1</sup>

With computer-adaptive tests (CATs), the number of questions an exam writer answered and how long it took them to complete the exam show how quickly the writer demonstrated whether they met the required level of competence (the passing standard).

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**TABLE 5. EXAM DURATION STATISTICS: FIRST NCLEX-RN ATTEMPT BY COHORT**

<i>First attempt</i>	COHORT	BY WRITERS WHO PASSED	BY WRITERS WHO FAILED	BY ALL WRITERS
<i>Average number of questions answered</i>	2016	113	171	126
	2015	122	160	131
<i>% of writers answering minimum number of questions</i>	2016	54.4%	16.3%	45.8%
	2015	48.0%	27.4%	43.0%
<i>% of writers answering maximum number of questions</i>	2016	9.8%	30.2%	14.4%
	2015	13.1%	33.7%	18.1%
<i>Average exam duration</i>	2016	1 hr 57 min	2 hr 48 min	2 hr 8 min
	2015	2 hr 18 min	2 hr 49 min	2 hr 25 min
<i>Number of graduates taking first attempt in (for reference)</i>	2016	296	86	382
	2015	298	95	393

*Number of questions: minimum of 75 and maximum of 265  
Maximum test time: 6 hours*

Successful first-attempt writers in the 2016 cohort were able to demonstrate their competence with a fewer number of questions: an average of 113, which is closer to the minimum number of questions a writer could receive (75) than it is to the maximum number (265).

For the 2016 cohort, 54.4% of the 296 Nova Scotia graduates who were successful on their first attempt answered only 75 questions. This means they were able to demonstrate the required level of competence after answering the minimum number of questions. Of writers who were not successful on their first attempt, 16.3% needed only a minimum number of questions to demonstrate that they did not meet the required level of competence. This is an improvement compared to the 2015 cohort, when 27.4% of first-attempt writers failed with a minimum number of questions.

The proportion answering the maximum number of questions reflects how many graduates were close to the passing standard at the end of their exam. Of the 296 Nova Scotia graduates in the 2016 cohort who passed on their first attempt, only 9.8% passed by a small margin, as they had to answer the maximum number of questions in order to demonstrate their competency.

<sup>1</sup> See “How a pass or fail is determined” section in the NCLEX-RN 2016: Canadian Results report for more information

Of the 86 Nova Scotia graduates in the 2016 cohort who were not successful on their first attempt, 30.2% answered the maximum number of questions (265). In other words, they were close to meeting the passing standard by the end of the test.

## NCLEX-RN TEST PLAN PERFORMANCE

Each writer of the NCLEX-RN must answer questions across four major categories (with two of the categories having sub-categories for a total of eight topic areas) all of which are based on patient needs. The content for these question topics is referred to as the test plan<sup>2</sup>. To pass the NCLEX-RN, the exam writer must perform above the passing standard, which is set at 0.00 logits<sup>3</sup>. The longer bars indicate better performance.

The overall test plan performance of the first-attempt writers of the 2016 cohort was on average 0.37 logits above the passing standard. It was also 0.07 logits above the first-attempt 2015 cohort average and 0.05 logits below the first-attempt national average in 2016.

Compared to the passing standard, Nova Scotia graduates in the 2016 cohort performed best on the *Management of Care* test plan category (0.45 logits above the passing standard)<sup>4</sup>.

**Management of Care** tests the competency of nursing care related to providing and directing nursing care that enhances the care delivery setting to protect clients and health care personnel<sup>0</sup>

The lowest average 2016 cohort logit was 0.28 on the Physiological Adaptation test plan category.

**Physiological Adaptation** tests the competency of nursing care related to managing and providing care for clients with acute, chronic or life-threatening physical health conditions.

Figure 1 shows how well an average Nova Scotia graduate taking the NCLEX-RN examination for the first time in 2016 and 2015 performed overall and on each test plan category.

The average first-attempt performance of Nova Scotia graduates can be compared against the passing standard, each test plan category and cohort (based on the year of writers' first attempt). The longer bars indicate better performance.

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<sup>2</sup> For more information, see "Topics covered on the exam" section in the NCLEX-RN 2016: Canadian Results report

<sup>3</sup> For more information, see "How a pass or fail is determined" and "What is a logit?" in the NCLEX-RN 2016: Canadian Results report.

<sup>4</sup> For more information on each test plan category, see "Topics covered on the exam" in the report NCLEX-RN 2016: Canadian Results.

FIGURE 1.

Average test plan category performance of Nova Scotia graduates on their first NCLEX-RN attempt in 2016 (compared to the average national performance and its provincial performance in 2015)

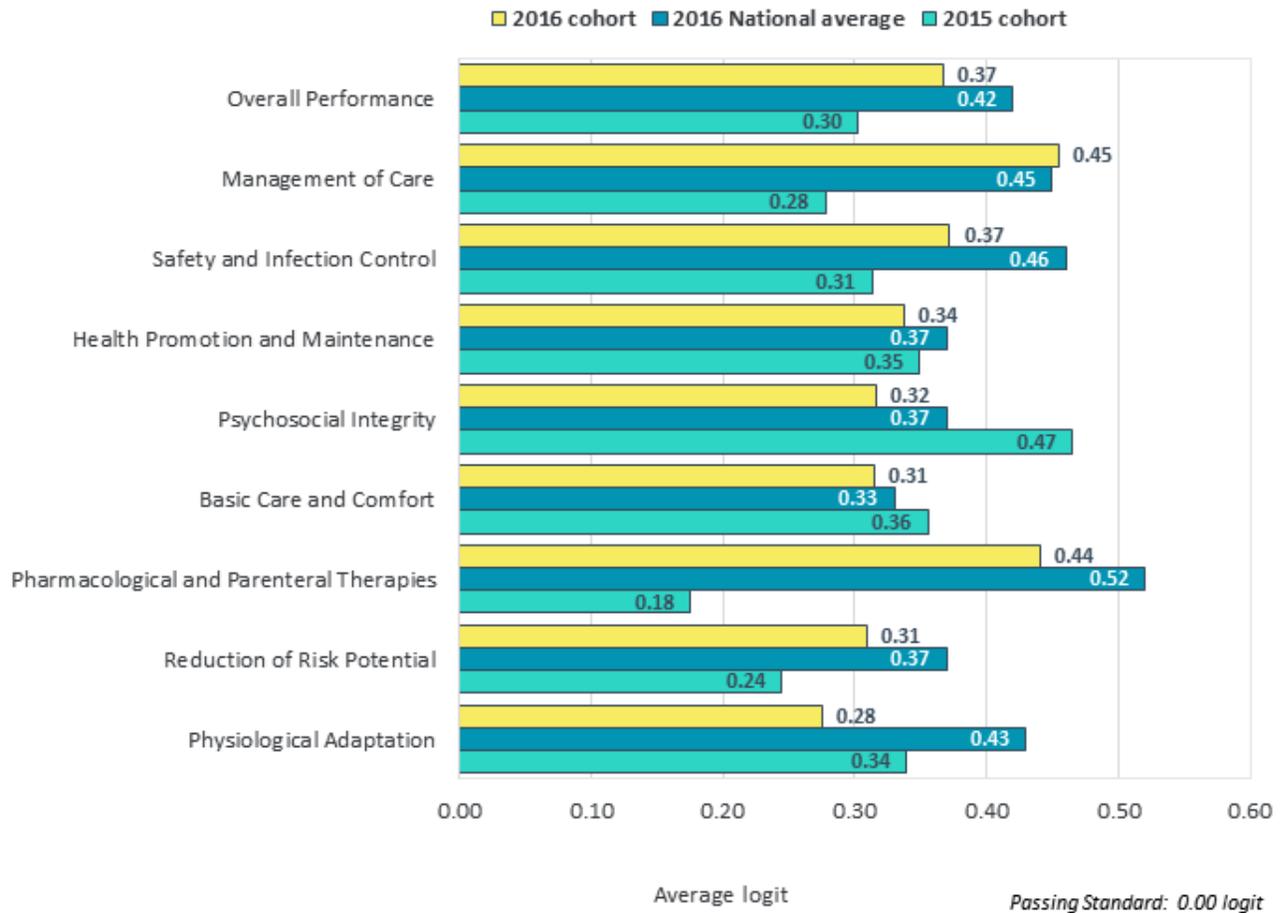
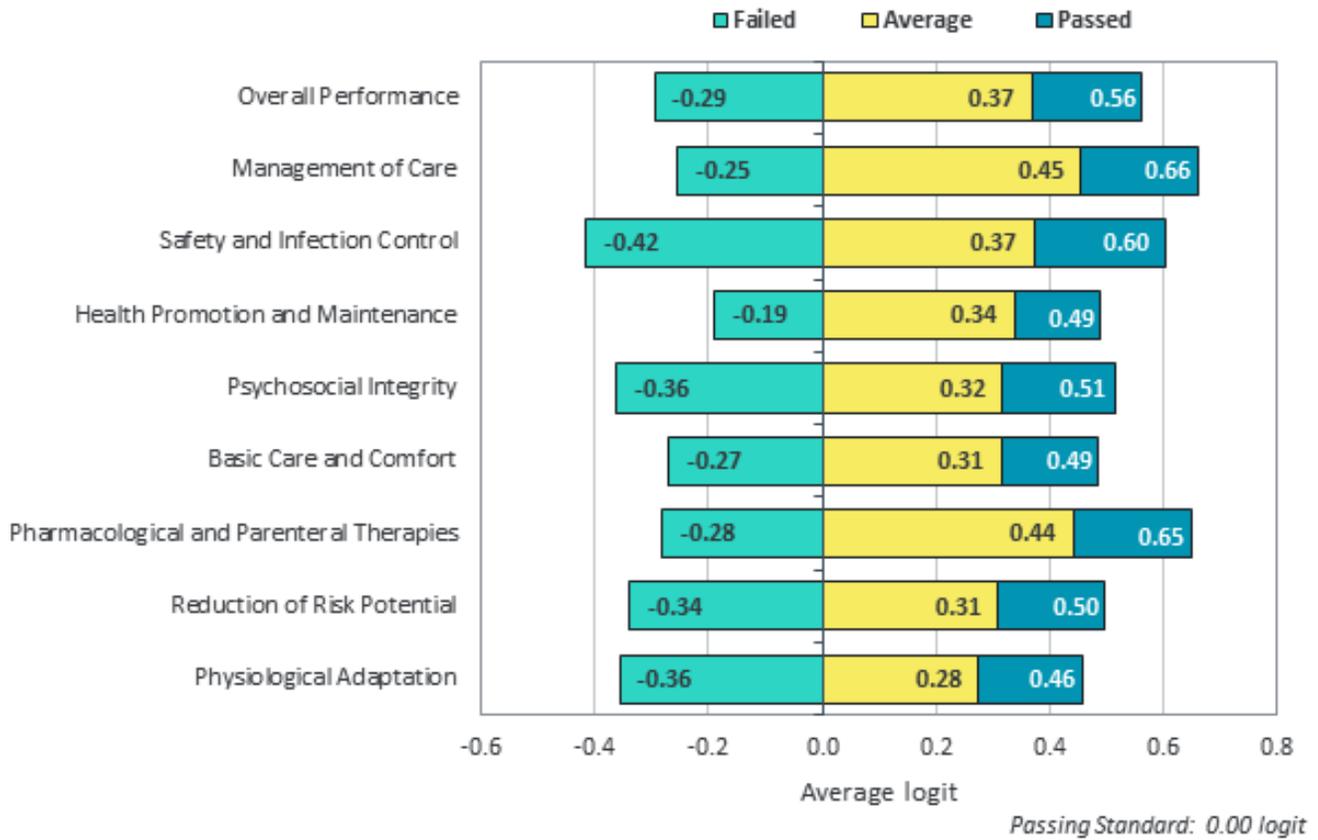


Figure 2 presents the same information as Figure 1, but with the average first-attempt performance of the 2016 cohort broken down by the exam result: graduates who passed the exam, who failed the exam and overall first-time writers in 2016 (for reference).

The further the bar is to the right of the passing standard (0.00 logits), the better the average performance was. For those writers who were not successful, the further the bar is from the left of the passing standard, the worse their average performance was.

FIGURE 2.

Average test plan category performance of Nova Scotia graduates on their first NCLEX-RN attempt in 2016 (presented separately for those who passed and those who failed)



A positive skew is noticeable in the Management of Care test plan category. The positive skew (where data tends to cluster on the right side) represents a higher average passing performance and, in particular, higher performance for those who failed (e.g., -0.25 logit is closer to a passing standard of 0.00 logit, than for example, -0.42). This test plan category was also the highest performing for those who passed (0.66 logits above the passing standard).

On average, those who were not successful on their first attempt had the lowest performance on Safety and Infection Control test category (-0.42 logits away from the passing standard). However, those who passed had the third-highest performance on this category (0.60 logits).

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