

INTERIM INTERPRETIVE GUIDE FOR NEW SEE
(for examinees ON or AFTER 9/1/16)

The NBCRNA launched the NEW Self-Evaluation Examination (SEE) on September 1, 2016. The revisions to the SEE involved:

- Adoption of the National Certification Examination (NCE) content outline for question development
- Reporting scores on the four NCE knowledge domains:
 - Basic Sciences
 - Equipment, Instrumentation and Technology
 - Basic Principles of Anesthesia
 - Advanced Principles of Anesthesia
- Lengthening the examination to 240 total questions with a four-hour time limit

The information contained in this guide is intended to provide assistance in interpreting test takers' scores arising from the new reconfigured SEE. Students and Program Administrators may use these instructions to compare SEE performance using the data tables contained within this guide. **This guide should only be used for interpreting scores from SEE administrations on or after September 1, 2016.**

Please note: this current interpretive guide does not include an entire year's worth of data, but only summarizes performance for the test takers who were administered the new SEE in September 2016. This interpretive guide will be updated intermittently, as additional performance data is accumulated through August 2017.

- Program Administrators:
 - The Program Administrator summary report is in Excel format. The report contains the Person ID, student name, test date, year in program, total scaled score, and content area scaled scores from 1-4. The content areas are described in detail in the test content outline of the *Self-Evaluation Examination (SEE) Candidate Handbook*.
 - The scaled score is listed for the total test and each of the content areas. The scaled score is a transformation of the examinee's demonstrated ability measure. The scaled scores on the SEE range from 300-600.
 - To calculate the average for the SEE total scaled score and each content area score for your students, simply sum the candidate scores for your program, both for the total score and for the content area scores, and divide by the number of candidates for your program.

Refer to the SEE Example of Calculating an Average that appears below.

- o These averages can be compared to the national SEE averages in Table 1 below and to the cumulative percentage tables starting on page 3.

EXAMPLE OF CALCULATING AN AVERAGE

**Report of SEE Takers for Program 0111
Test Dates 7/1/20XX to 7/31/20XX**

Person ID	Last, First	Test Date	Year in Program	Total Score	Score 1	Score 2	Score 3	Score 4
12345	Doe, F	7/13/20XX	1	464	426	460	459	440
67890	Doe, M	7/28/20XX	1	379	411	358	351	404
09876	Jones, F	7/27/20XX	1	350	380	459	321	389
54321	Jones, M	7/28/20XX	1	376	368	357	391	329
Total				1569	1585	1634	1522	1562
Average				392	396	408	380	390

(Average = Total Divided by number of test takers; in this

case 4) The scores reflect the following content areas:

- Score 1 = Basic Sciences
- Score 2 = Equipment, Instrumentation & Technology
- Score 3 = Basic Principles of Anesthesia
- Score 4 = Advanced Principles of Anesthesia

Table 1. Descriptive Statistics for SEE Overall and Domain Scores, September 2016 ONLY

	1 st Year (N=84)		2 nd Year (N=333)		3 rd Year (N=173)		All (N=590)	
	Avg	SD	Avg	SD	Avg	SD	Avg	SD
Basic Sciences	409.1	38.9	403.2	51.4	407.1	56.5	405.2	51.4
Equipment, Instrumentation & Tech.	400.6	41.1	404.5	50.1	409.8	51.0	405.5	49.2
Basic Principles of Anesthesia	397.9	44.3	412.0	53.5	421.7	55.3	412.8	53.2
Advanced Principles of Anesthesia	400.5	44.3	412.5	53.5	414.4	53.1	411.4	52.3
Overall Score	401.0	36.5	407.1	47.7	412.3	49.0	407.8	46.7

- Students:
 - o Compare your scores to the cumulative percentage tables starting on page 3.

CUMULATIVE PERCENTAGE TABLES: SEE

At the top of the following pages, the main headings list each of the content areas and the total test. You can compare your individual or your students' performance with other students for each of these content areas by finding the appropriate heading.

Under each main heading you will see groups of columns with subheadings as in the following example:

Basic Sciences

	Year 1 Cum %	Year 2 Cum %	Year 3&Up Cum %	All Cum %
401-410	45.2	60.1	54.9	56.4
411-420	57.1	66.7	61.8	63.9
421-430	70.2	74.8	65.9	71.5
431-440	79.8	79.3	70.5	76.8
441-450	85.7	83.2	76.9	81.7

To compare a score on "Basic Sciences", locate the column on your Program Administrator report labeled score 1 and find the student's scaled score. If the student's scaled score on this content area was 405, you would look down the first column on the cumulative percentage table for "Basic Sciences" until you found the score range of 401-410. The next column to the right, labeled "Year 1 Cum. %," lists the corresponding cumulative percentage of 45.2 for all 1st year examinees. The 60.1 in the next column is the cumulative percentage for all 2nd year examinees. The 54.9 in the next column is the cumulative percentage for all 3rd year and beyond examinees. The corresponding cumulative percentage of 56.4 for all examinees at that scaled score value is listed in the far right column labeled "All Cum. %." This means that with a scaled score of 405 on "Basic Sciences", your student scored higher or equal to 56.4% of all examinees on that content area.

Students should use these tables in the same manner as Program Administrators in order to interpret their individual SEE performance across the content areas and total test.

Score 1: Basic Sciences

	Year 1 Cum %	Year 2 Cum %	Year 3&Up Cum %	All Cum %
300-310	2.4	2.7	4.0	3.1
311-320	2.4	4.5	4.6	4.2
321-330	2.4	7.2	9.2	7.1
331-340	4.8	9.9	12.1	9.8
341-350	7.1	13.2	14.5	12.7
351-360	8.3	19.5	21.4	18.5
361-370	16.7	27.0	30.1	26.4
371-380	22.6	34.2	35.8	33.1
381-390	33.3	42.3	42.2	41.0
391-400	40.5	52.6	48.0	49.5
401-410	45.2	60.1	54.9	56.4
411-420	57.1	66.7	61.8	63.9
421-430	70.2	74.8	65.9	71.5
431-440	79.8	79.3	70.5	76.8
441-450	85.7	83.2	76.9	81.7
451-460	89.3	86.8	80.3	85.3
461-470	94	88.9	83.8	88.1
471-480	100.0	92.2	88.4	92.2
481-490	100.0	93.7	93.1	94.4
491-500	100.0	94.6	95.4	95.6
501-510	100.0	96.1	95.4	96.4
511-520	100.0	97.6	97.7	98.0
521-530	100.0	98.2	98.3	98.5
531-540	100.0	99.4	99.4	99.5
541-550	100.0	99.4	100.0	99.7
551-560	100.0	99.7	100.0	99.8
561-570	100.0	99.7	100.0	99.8
571-580	100.0	100.0	100.0	100.0
581-590	100.0	100.0	100.0	100.0
591-600	100.0	100.0	100.0	100.0

Score 2: Equipment Instrumentation and Technology

	Year 1 Cum %	Year 2 Cum %	Year 3&Up Cum %	All Cum %
300-310	6.0	3.3	2.9	3.6
311-320	6.0	5.1	3.5	4.7
321-330	8.3	7.8	4.6	6.9
331-340	9.5	11.4	8.1	10.2
341-350	11.9	15.6	13.3	14.4
351-360	14.3	21.9	16.8	19.3
361-370	17.9	26.4	20.2	23.4
371-380	27.4	30.3	27.7	29.2
381-390	38.1	37.2	38.7	37.8
391-400	42.9	45.6	45.7	45.3
401-410	52.4	54.1	53.8	53.7
411-420	65.5	62.5	61.3	62.5
421-430	77.4	70.3	67.1	70.3
431-440	83.3	75.4	71.7	75.4
441-450	91.7	83.2	78.6	83.1
451-460	97.6	87.1	82.1	87.1
461-470	97.6	90.1	87.3	90.3
471-480	98.8	92.5	93.1	93.6
481-490	100.0	95.5	95.4	96.1
491-500	100.0	96.7	96.5	97.1
501-510	100.0	98.5	97.1	98.3
511-520	100.0	99.4	97.1	98.8
521-530	100.0	99.7	98.3	99.3
531-540	100.0	99.7	98.8	99.5
541-550	100.0	100.0	98.8	99.7
551-560	100.0	100.0	99.4	99.8
561-570	100.0	100.0	100.0	100.0
571-580	100.0	100.0	100.0	100.0
581-590	100.0	100.0	100.0	100.0
591-600	100.0	100.0	100.0	100.0

Score 3: Basic Principles of Anesthesia

	Year 1 Cum %	Year 2 Cum %	Year 3&Up Cum %	All Cum %
300-310	1.2	2.7	0.6	1.9
311-320	4.8	3.6	1.7	3.2
321-330	4.8	5.1	2.9	4.4
331-340	7.1	6.6	5.2	6.3
341-350	15.5	9.9	8.1	10.2
351-360	22.6	16.5	12.1	16.1
361-370	31.0	21.6	13.9	20.7
371-380	39.3	29.1	22.0	28.5
381-390	41.7	38.4	28.9	36.1
391-400	51.2	45.0	39.3	44.2
401-410	60.7	52.9	47.4	52.4
411-420	71.4	58.0	56.1	59.3
421-430	76.2	66.1	63.0	66.6
431-440	82.1	73.3	68.2	73.1
441-450	86.9	77.8	72.3	77.5
451-460	89.3	79.6	76.3	80.0
461-470	95.2	84.1	79.8	84.4
471-480	97.6	89.2	82.7	88.5
481-490	97.6	93.4	86.7	92.0
491-500	98.8	94.9	89.6	93.9
501-510	100.0	96.1	93.1	95.8
511-520	100.0	96.7	94.8	96.6
521-530	100.0	97.0	95.4	96.9
531-540	100.0	98.2	97.7	98.3
541-550	100.0	98.8	98.8	99.0
551-560	100.0	99.4	99.4	99.5
561-570	100.0	99.7	99.4	99.7
571-580	100.0	100.0	99.4	99.8
581-590	100.0	100.0	100.0	100.0
591-600	100.0	100.0	100.0	100.0

Score 4: Advanced Principles of Anesthesia

	Year 1 Cum %	Year 2 Cum %	Year 3&Up Cum %	All Cum %
300-310	3.6	1.5	1.7	1.9
311-320	3.6	2.7	1.7	2.5
321-330	6.0	5.1	5.8	5.4
331-340	8.3	8.1	7.5	8.0
341-350	10.7	11.7	10.4	11.2
351-360	20.2	17.1	16.2	17.3
361-370	26.2	22.5	21.4	22.7
371-380	34.5	29.1	29.5	30.0
381-390	38.1	34.5	32.9	34.6
391-400	48.8	44.4	43.4	44.7
401-410	58.3	52.3	51.4	52.9
411-420	67.9	58.9	56.6	59.5
421-430	75.0	66.1	61.8	66.1
431-440	79.8	71.8	69.9	72.4
441-450	88.1	75.4	73.4	76.6
451-460	92.9	82.6	80.3	83.4
461-470	95.2	86.8	82.7	86.8
471-480	96.4	89.2	87.9	89.8
481-490	97.6	91.3	90.2	91.9
491-500	98.8	92.5	94.2	93.9
501-510	98.8	94.6	96.5	95.8
511-520	100.0	96.7	98.3	97.6
521-530	100.0	97.9	98.8	98.5
531-540	100.0	99.1	98.8	99.2
541-550	100.0	99.4	99.4	99.5
551-560	100.0	99.7	100.0	99.8
561-570	100.0	99.7	100.0	99.8
571-580	100.0	99.7	100.0	99.8
581-590	100.0	99.7	100.0	99.8
591-600	100.0	100.0	100.0	100.0

Overall Scaled Score for Total Test

	Year 1 Cum %	Year 2 Cum %	Year 3&Up Cum %	All Cum %
300-310	2.4	1.8	1.2	1.7
311-320	3.6	3.6	1.2	2.9
321-330	4.8	5.4	4.0	4.9
331-340	6.0	6.6	6.9	6.6
341-350	8.3	9.3	8.7	9.0
351-360	11.9	14.4	13.3	13.7
361-370	19.0	21.0	19.1	20.2
371-380	25.0	30.0	28.3	28.8
381-390	35.7	39.3	35.3	37.6
391-400	46.4	49.2	43.9	47.3
401-410	56.0	55.9	54.3	55.4
411-420	66.7	62.2	60.7	62.4
421-430	79.8	70.6	66.5	70.7
431-440	88.1	77.8	71.7	77.5
441-450	95.2	83.2	76.9	83.1
451-460	96.4	86.8	82.1	86.8
461-470	96.4	89.5	85.5	89.3
471-480	100.0	92.5	90.2	92.9
481-490	100.0	93.1	90.2	93.2
491-500	100.0	95.8	94.2	95.9
501-510	100.0	97.3	97.1	97.6
511-520	100.0	98.8	98.8	99.0
521-530	100.0	99.7	100.0	99.8
531-540	100.0	100.0	100.0	100.0
541-550	100.0	100.0	100.0	100.0
551-560	100.0	100.0	100.0	100.0
561-570	100.0	100.0	100.0	100.0
571-580	100.0	100.0	100.0	100.0
581-590	100.0	100.0	100.0	100.0
591-600	100.0	100.0	100.0	100.0