



NBPME Reports

The National Board of Podiatric Medical Examiners Newsletter

2007 ANNUAL REPORT OF EXAMINATION PERFORMANCE DATA NBPME PARTS I AND II

The 2006 independent audit of the NBPME examinations recommended that NBPME resume the sharing of examination performance data with its constituents and the public (Independent Audit of NBPME 2006, General Recommendations, p. 6). This report provides data showing the historical average examination performance and pass rates for Parts I and II from 2004 through 2007, the reliability of the 2007 tests and their passing scores, and the 2007 performance of the first time candidates in each of the main content areas of Parts I and II.

Parts I and II History

National Mean Scaled Score

<u>Year</u>	<u>Part I</u>	<u>Part II</u>
2004	79.8	80.9
2005	79.7	79.5
2006	79.1	79.1
2007	79.2	79.3

National Passing Data

<u>Year</u>	<u>Part I</u>	<u>Part II</u>
2004	82%	84%
2005	83%	80%
2006	81%	80%
2007	81%	79%

Mean Scaled Score by Graduation Class

<u>Graduation Class</u>	<u>Part I</u>	<u>Part II</u>
2005	76.2	79.5
2006	79.8	79.1
2007	79.7	79.3

Reliability Data

Part I

	<i>(Alpha)</i>	<i>(Subkoviak)</i>
July, 2004	0.90	0.89
July, 2005	0.87	0.88
July, 2006	0.85	0.87
July, 2007	0.87	0.87

Reliability Data - (continued)**Part II**

	(Alpha)	(Subkoviak)
March, 2004	0.81	0.88
March, 2005	0.84	0.81
March, 2006	0.81	0.86
March, 2007	0.83	0.86

Alpha shows the amount of score reliability due to content sampling. *Alpha* estimates greater than 0.70 have been stated to be acceptable (Cortina, 1993) in tests used in applied settings such as the NPBME Part I examinations. Examining the displays following this explanation means that the domain of tested content is sampled consistently by the examination; this reliability estimate is a function of both item and examinee variability.

Subkoviak's PF r_{it} shows the consistency with which examinees were placed into passing and failing categories. It shows the amount of consistency in classifying candidates to pass/fail categories as if those same people were permitted to test twice on the same test-with all things considered equal (i.e., they didn't improve due to practice effects).

Cortina, J.M. (1993). What is Coefficient alpha? An examination of theory and applications. Journal of Applied Psychology, 78 (1,) 98-104.

Subkoviak, M.J. (1976). Estimating the Reliability from a Single Administration of a Criterion Referenced Test. Journal of Educational Measurement, 13, 263-276.

Subkoviak, M.J. (1988). A Practitioner's Guide to Computation and Interpretation of Reliability Indices for Mastery Tests. Journal of Educational Measurement, 25, 47-55.

March 2007**Part II - Clinical Science
First-Time Candidate Performance****Overall Test Performance**

Total (First-Time) Candidates	319
Scaled Score Mean	79.26
Scaled Score Standard Deviation	5.59
Scaled Minimum Score Obtained	58
Scaled Maximum Score Obtained	90
Raw SEM	4.79
Scaled SEM	2.30

Pass/Fail Performance (First-Time Candidates)

Pass	251	79%
Fail	68	21%

March 2007 Part II - Clinical Science - (continued)**Items per Area in Part II Clinical Science**

Medicine	38
Radiology	30
Orthopedics, Biomechanics, and Sports Medicine	30
Anesthesia and Surgery	37
Community Health, Jurisprudence, and Research	15

**Diagnostic Scaled Subscore Information Per Area Part II
(First-Time Candidates)**

Scaled Score	Medicine		Radiology		Orthopedics, Biomechanics, and Sports Medicine		Anesthesia and Surgery		Community Health, Jurisprudence, and Research	
	38 items (25% of test)		30 items (20% of test)		30 items (20% of test)		37 items (25% of test)		15 items (10% of test)	
	N	%	N	%	N	%	N	%	N	%
2*	250	78.4	266	83.4	258	80.9	249	78.1	251	78.7
1*	69	21.6	53	16.6	61	19.1	70	21.9	68	21.3
Mean	1.78		1.83		1.81		1.78		1.79	
Std. Dev.	0.41		0.37		0.39		0.41		0.41	
Median	1.862		1.900		1.882		1.859		1.865	

*Diagnostics: '2' indicates performance at or above the level of minimum competence.

'1' indicates performance below the level of minimum competence.

Diagnostic Information by Subscore. This section provides subscore statistics (on a scale of 1 to 2) for each of the content areas. A score of '1' indicates that the performance is below the level of minimum competence. A score of '2' indicates that the performance is at or above the level of minimum competence. For content areas where the mean and the median are below 1.5, the content areas could be considered to be an area of weakness. On score reports, the subscores are only reported to failing candidates, and their primary purpose is to inform failing candidates as to the areas that caused them to fail and to urge them to study the indicated areas. The use of these subscores for school program evaluation is cautioned.

July 2007**Part I - Basic Science
First-Time Candidate Performance****Overall Test Performance**

Total (First-Time) Candidates	429
Scaled Score Mean	79.16
Scaled Score Standard Deviation	5.31
Scaled Minimum Score Obtained	61
Scaled Maximum Score Obtained	90
Raw SEM	4.98
Scaled SEM	1.89

July 2007 Part I - Basic Science - (continued)**Pass/Fail Performance (First-Time Candidates)**

Pass	349	81%
Fail	80	19%

Items per Area in Part I Basic Science

General Anatomy	15
Lower Extremity	30
Biochemistry	15
Physiology	23
Microbiology	23
Pathology	22
Pharmacology	22

**Diagnostic Scaled Subscore Information Per Area Part I
(First-Time Candidates)**

Scaled Score	General Anatomy		Lower Extremity Anatomy		Biochemistry		Physiology		Medical Microbiology And Immunology		Pathology		Pharmacology	
	15 Items (10% of test)		30 Items (20% of test)		15 Items (10% of test)		23 Items (15% of test)		23 Items (15% of test)		22 Items (15% of test)		22 Items (15% of test)	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
2*	315	73.4	347	80.9	332	77.4	334	77.9	325	75.8	336	78.3	362	84.4
1*	114	26.6	82	19.1	97	22.6	95	22.1	104	24.2	93	21.7	67	15.6
Mean	1.73		1.81		1.77		1.78		1.76		1.78		1.84	
Std. Dev.	0.44		0.39		0.42		0.42		0.43		0.41		0.36	
Median	1.819		1.882		1.854		1.858		1.840		1.862		1.907	

*Diagnostics: '2' indicates performance at or above the level of minimum competence.
'1' indicates performance below the level of minimum competence.

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