



National Certification for Advanced Practice (NCAP) TEST SPECIFICATIONS REPORT

**Prepared for the:
National Certification Board for Therapeutic Massage & Bodywork**

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TABLE OF CONTENTS

1.0 PURPOSE OF TEST SPECIFICATIONS 4

2.0 TEST SPECIFICATIONS PANEL ANALYSIS OF JOB ANALYSIS SURVEY DATA..... 4

3.0 STEERING GROUP’S PERSPECTIVE ON CONTENT PRIORITIES 6

4.0 PROPOSED TEST SPECIFICATIONS..... 9

5.0 APPENDICES 11

1.0 PURPOSE OF TEST SPECIFICATIONS

Test specifications provide a clear communication to a variety of stakeholders about what content the test covers. They are sometimes called a blueprint, content outline, or examination matrix. The groups who use test specifications include certification candidates, educational programs, employers, and subject matter experts involved in the test development process. Test specifications should guide test question writers by providing them with specifications for test form assembly and inventories of the question pool. Certification testing standards recommend updating test specifications regularly, and sooner if there are significant changes in the profession or testing. Because test specifications have so many audiences and uses, it is imperative that they are developed carefully, based on input from experts in the field. The NCBTMB's NCAP Task Force impaneled a group of experts to interpret job analysis survey results to develop test specifications for the new National Certification for Advanced Practice (NCAP) exam. The panel primarily consisted of Task Force members, but also included representatives from the Board and the NCBTMB Examination Committee. A listing of the NCAP Task Force and the Advanced Certification Test Specifications Panel is included in this report as Appendix A and Appendix B.

2.0 TEST SPECIFICATIONS PANEL ANALYSIS OF JOB ANALYSIS SURVEY DATA

The Advanced Certification Test Specifications Panel began its work after the job analysis data was summarized. NCBTMB held a web meeting that was facilitated by Lynn Webb, representing Pearson VUE. The session began with an overview of the structure of the job analysis survey, which had 68 tasks organized under seven domains of content. Survey respondents provided ratings for the frequency with which they perform each task and the importance of each task to their advanced practice. The average ratings for frequency were multiplied by the average ratings for importance, resulting in %criticality+ ratings for each of the 68 tasks. (Please see Appendix C for an explanation of the job analysis survey ratings.)

The panel also reviewed the distribution of demographic variables from the respondents, and indicated satisfaction that the respondents represented the field demographically. It is worth mentioning that the full data set from the job analysis is not the basis for the test specifications. The survey data were culled to exclude the responses of people who indicated that they would not be eligible for NCAP due to the following instances:

- Are NOT currently free from sanction or permanent revocation from NCBTMB or any regulatory body
- Have NOT completed at least 100 hours of massage/bodywork related continuing education (live or distant)
- Have NOT completed at least 3,000 hours of professional massage
- Indicated NOT passing an entry-level licensure examination for massage/bodywork (not from NCBTMB) AND NOT currently certified in Therapeutic Massage (NCTM) or Therapeutic Massage and Bodywork (NCTMB)

Although the full data set had 9,817 respondents, the culling of those ineligible reduced the data set to 5,944 respondents.

The panel then considered the prioritized list of criticality ratings for the 68 tasks and discussed whether any of the tasks should be deleted from the list based on low ratings. The criticality ratings range from a high of 15.8 to a low of 3.2, so there was much discussion about whether the lower-rated tasks should be dropped from the test specifications. The panel preferred that all 68 tasks be retained for the test

specifications. It was reasoned that even the lower-rated tasks were valuable in describing Advanced Practice. There were no tasks that were approved for deletion based on inability to test within a multiple-choice question framework, although the anticipated difficulties of testing Advanced Practice were discussed.

The panel considered the knowledge ratings from the job analysis survey in the same manner, discussing whether any knowledge statements should be deleted based on low ratings or inability to test in a multiple-choice question framework. It was their preference to retain all 18 knowledge statements.

The panel considered the relative emphases for the seven content domains using two approaches. In the first approach, the weights, or percentage of the test, for the seven content domains would be established through the priority of the mean criticality ratings per tasks within a domain. In this process, the highest weight would be allotted to the content domain of Perform Assessments (19% of test), and the other allotments would be as shown in Table 1.

Table 1. Domain Weights by Criticality Ratings Only

Domain	Mean	% of Test
1. Perform Assessments	14.8	19%
2. Facilitate Treatment Plan Through Critical Thinking	13.5	17%
3. Create Career Longevity	13.1	16%
4. Build Framework for Advanced Career	10.5	13%
5. Create Supportive Environment	13.6	17%
6. Develop Advanced Practice Career	8.5	11%
7. Participate in the Advancement of the Profession	5.5	7%
		100%

Another way to approach the weighting of the content domains would be to acknowledge that some of the domains included more tasks than others. The number of tasks across domains varies from 7 to 14. If we account for the fact that some domains have more tasks than others, then the domains with the larger numbers of tasks would receive more emphasis. In this process, the domain with the most weight is Facilitate Treatment Plan through Critical Thinking, which would be 24% of the test. The weights of the domains considering the number of tasks per domain and criticality ratings are given in Table 2.

Table 2. Domain Weights According to Number of Tasks and Criticality Ratings

Domain	Mean	N Tasks	% of Test
1. Perform Assessments	14.8	7	13%
2. Facilitate Treatment Plan Through Critical Thinking	13.5	14	24%
3. Create Career Longevity	13.1	10	17%
4. Build Framework for Advanced Career	10.5	10	14%
5. Create Supportive Environment	13.6	8	14%
6. Develop Advanced Practice Career	8.5	10	11%
7. Participate in the Advancement of the Profession	5.5	9	7%
		68	100%

The panel discussed the two approaches thoroughly. The approach that considered the number of tasks per domain (Table 2) was selected for recommendation to the NCAP Steering Group, which consists of

exam development staff, NCBTMB exam development volunteers and some members of the NCBTMB Board of Directors.

3.0 STEERING GROUP'S PERSPECTIVE ON CONTENT PRIORITIES

The NCAP Steering Group did not condone the inclusion of tasks that received low criticality ratings, and had concerns about the advanced practice assessment including content that is not performed frequently or considered important by advanced practitioners. The Steering Group recommended a criticality-rating-cutoff of 10.0 in order to focus the NCAP on the advanced practitioner tasks that were rated most highly for frequency and importance. Table 3 shows the prioritized list of tasks from the job analysis results, with the tasks receiving a criticality rating below 10.0 shaded. (Please refer to tables 1 or 2 above for the domain titles.)

Table 3. Tasks in Order of Criticality Ratings

Criticality	Domain	Task
15.80	1	4. Listen to client
15.46	2	12. Remain within scope of practice
15.32	1	1. Interpret client's nonverbal cues
15.17	2	14. Determine parameters for massage related to client tolerance
15.14	1	2. Build rapport
14.95	2	13. Perform massage
14.93	1	6. Assess appropriateness of massage
14.86	5	45. Control the professional space during treatment
14.82	3	25. Set boundaries
14.81	5	42. Apply universal precautions
14.74	5	46. Uphold NCBTMB's Code of Ethics
14.73	1	5. Identify client's goal
14.69	5	49. Respect cultural diversity of clients
14.67	5	47. Uphold NCBTMB's Standards of Practice
14.66	3	31. Practice healthy relationships
14.66	5	48. Respect spiritual diversity of clients
14.63	4	37. Store and protect confidential data
14.50	1	3. Interview client
14.49	2	18. Educate the client
14.16	3	23. Employ ergonomic techniques
14.00	2	16. Adapt treatment protocol
13.92	2	15. Analyze effectiveness of therapeutic process
13.91	5	44. Accommodate special needs of clients
13.86	3	22. Practice biomechanics
13.83	2	9. Analyze appropriateness of therapeutic process
13.77	4	35. Comply with local safety regulations
13.58	3	28. Create work / life balance
13.53	3	27. Honor your own self care needs
13.27	2	8. Interpret client data

Criticality	Domain	Task
13.26	2	11. Obtain informed consent
13.16	2	19. Translate unfamiliar terminology for clients
13.05	3	24. Balance work load and personal finances
12.96	1	7. Perform physical assessments
12.74	2	17. Recognize transference
12.21	2	20. Write progress notes
12.20	4	41. Maintain equipment according to clientsneeds
12.19	6	59. Accept constructive criticism
11.97	2	10. Design outcome-based treatment protocol
11.83	4	40. Provide equipment according to clientsneeds
11.82	4	33. Use reference materials
11.78	3	29. Practice regular self assessment procedures
11.47	3	26. Schedule unstructured time
11.06	4	36. Comply with building codes
10.73	6	50. Remain knowledgeable about current developments in the field
10.60	2	21. Communicate across professional disciplines
10.06	6	57. Receive regular massage and bodywork from a variety of practitioners
9.87	3	30. Cultivate a peer support system
9.86	7	64. Facilitate public awareness of massage and bodywork
9.70	6	52. Read profession-related publications
9.56	4	39. Abide by a policy and procedure manual
8.89	6	54. Network with peers
8.68	4	32. Integrate technology into professional practice
7.79	6	53. Take continuing education classes
7.62	6	58. Implement career advancement strategies
6.90	6	55. Engage in mentoring relationships
6.89	4	34. Design business documents
6.49	5	43. Maintain CPR certification
6.11	7	62. Implement solutions to problems in the profession
5.97	7	65. Teach massage and bodywork
5.96	7	60. Respond to requests from professional organizations (e.g., Calls for Comment, polls)
5.87	7	61. Strategize to solve problems in the profession
5.47	6	51. Attend profession-related conferences
5.31	6	56. Monitor research-related forums
5.17	7	67. Support research in massage and bodywork
4.83	7	63. Volunteer with a professional organization in field
4.46	4	38. Write a policy and procedure manual
3.80	7	68. Engage politically
3.21	7	66. Contribute to massage and bodywork literature

The Steering Group recommended that the Advanced Certification Test Specifications Panel reconsider the notion to include tasks that were not strongly supported by the job analysis results, and also to consider whether or not all the tasks are testable in the multiple-choice format planned for the NCAP. Another conference call was scheduled to discuss the Steering Group's request, and NCBTMB distributed a version of the test specifications that eliminated the tasks that received criticality ratings below 10.0 for review and discussion. Removing the low-rated tasks eliminated Domain 7: Participate in the Advancement of the Profession and most of Domain 6: Develop Advanced Practice Career. The three remaining tasks in Domain 6 were examined by the Steering Group it was determined that these tasks could not be effectively addressed using multiple choice items and were therefore eliminated. The eliminated tasks were; Accept constructive criticism, Remain knowledgeable about current developments in the field, and Receive regular massage and bodywork from a variety of practitioners.

Table 4 shows the proposed revised test specifications.

Table 4

Proposed Test Specifications NCAP

I. Perform assessments (18%)

- A. Interpret client's nonverbal cues
- B. Build rapport
- C. Interview client
- D. Listen to client
- E. Identify client's goal
- F. Assess appropriateness of massage
- G. Perform physical assessments

II. Facilitate treatment plan through critical thinking (31%)

- A. Interpret client data
- B. Analyze appropriateness of therapeutic process
- C. Design outcome-based treatment protocol
- D. Obtain informed consent
- E. Remain within scope of practice
- F. Perform massage
- G. Determine parameters for massage related to client tolerance
- H. Analyze effectiveness of therapeutic process
- I. Adapt treatment protocol
- J. Recognize transference
- K. Educate the client
- L. Translate unfamiliar terminology for clients
- M. Write progress notes
- N. Communicate across professional disciplines

III. Create career longevity (17%)

- A. Practice biomechanics
- B. Employ ergonomic techniques
- C. Balance work load and personal finances
- D. Set boundaries
- E. Schedule unstructured time
- F. Honor your own self care needs
- G. Create work/life balance
- H. Practice regular self assessment procedures
- I. Practice healthy relationships

IV. Build framework for advanced career

(17%)

- A. Use reference materials
- B. Comply with local safety regulations
- C. Comply with building codes
- D. Store and protect confidential data
- E. Provide equipment according to clients' needs
- F. Maintain equipment according to clients' needs

V. Create supportive environment

(17%)

- A. Apply universal precautions
- B. Accommodate special needs of clients
- C. Control the professional space during treatment
- D. Uphold NCBTMB's Code of Ethics
- E. Uphold NCBTMB's Standards of Practice
- F. Respect spiritual diversity of clients
- G. Respect cultural diversity of clients

Because no knowledge areas received low ratings in the job analysis survey, all 18 topics were included. The knowledge required to perform the tasks is relevant to candidates and to content experts working in test development for the NCAP.

The knowledge required for NCAP is as follows:

1. Life sciences
2. Communication skills
3. Problem-solving processes
4. Ethics
5. Professional conduct
6. Scope of practice
7. Standards of practice
8. Massage organizations
9. How to self assess
10. Massage and bodywork modality literacy
11. Research literacy
12. Technology literacy
13. Complementary Alternative Medicine (CAM) literacy
14. Practice settings for massage and bodywork
15. Business skills
16. Products used in practice
17. Assessment skills
18. Touch skills

4.0 PROPOSED TEST SPECIFICATIONS

The test specifications shown in Table 4 (above) were affirmed by the Advanced Certification Test Specifications Panel on March 28, 2011 in a conference call. These test specifications were shared with the full NCAP Task Force on April 1, 2011.

The test specifications shown in Table 4 are now presented for public comment before being granted final approval by the NCAP Task Force. Once approved by the NCAP Task Force, the test specifications will be presented to the NCBTMB Board of Directors and recommendation for adoption.

5.0 APPENDICES

Appendix A NCAP Task Force

Appendix B Advanced Certification Test Specifications Panel

Appendix C Explanation of Ratings from Job Analysis Survey

Appendix A – NCAP Task Force



Meet the Advanced Certification Task Force

Suzanne Costa (Maryland) . 10 years in the field
Highest education achieved: some college
Primary modality: deep tissue/sports massage
Areas of expertise: educator, on-site massage

Jackie Lynne Derby (Michigan) . 14 years in field
Highest education achieved: BA in Health Service Administration (2010)
Primary modality: sports and medical massage
Areas of expertise: sports and medical massage

David Fazzino (Alaska) . 8 years in the field
Highest education achieved: PhD, JD
Primary modality: sports massage
Areas of expertise: educator, Zen Shiatsu, sports massage

Sandy Fritz (Michigan) . 20+ years in the field
Highest education achieved: MS
Primary modality: primarily author/educator
Areas of expertise: educator/school owner, current NCBTMB CE Approved Provider/lecturer, author

Melissa Goldsmith (Washington) . 10 years in the field
Highest education achieved: AFA pursuing BA
Primary modality: Structural Integration, Deep Tissue, Postural Assessment, Stretching, and Sports Massage
Areas of expertise: private practice, small business management and start-up, personal growth facilitator

DarlaJean Griffiths (Florida) . 22 years in the field
Highest education achieved: BA
Primary modality:
Areas of expertise: educator, part time MT, small business owner

Nancy Haller (Washington) . 14 years in field
Highest education achieved: MA
Primary modality: medical massage
Areas of expertise: Feldenkrais, medical massage, animal massage, current NCBTMB CE Approved Provider

Kimberly Hieber

Xavier Johnson (Illinois) . 8 years in the field
Highest education achieved: MA in Divinity
Primary modality: medical massage
Areas of expertise: private practice, massage therapy business start-up, massage for AIDS/HIV/diabetes/cancer, labor massage, orthopedic, sports, education

Eeris Kallil (Colorado) . 22 years in the field
Highest education achieved: High School
Primary modality: medical massage
Areas of expertise: cancer survivor, CE class on massage for cancer recovery, private practice

Bridget Kimsey (Massachusetts, registered member of the U.S. federally recognized Delaware Tribe of Indians) . 14 years in field

Highest education achieved: BFA

Primary modality: yoga teacher, Therapeutic Integrative Massage, energy medicine work

Areas of expertise: Lenape/ First Nations approach to healing, yoga, massage, reiki, energy medicine, aromatherapy

Craig Knowles (Georgia) . 13 years in the field

Highest education achieved: Vo-Tech certificate

Primary modality: medical, sports massage

Areas of expertise: currently sits on NCBTMB's E&S committee, personal trainer, sports massage, medical massage, NMT, educator

Laura Nelson (Alabama) . 12 years in field

Highest education achieved: Masters in Education

Primary modality: deep tissue

Areas of expertise: educator

Pamela Pennington (Oregon) . 10 years in the field

Highest education achieved: some college

Primary modality: medical massage

Areas of expertise: lymphedema massage, medical massage, has 500+ hours towards medical advanced credential

Mary Kathleen Rose (Colorado) . 20+ years in field

Highest education achieved: BA

Primary modality: medical massage

Areas of expertise: hospice, current NCBTMB CE Approved Provider, educator, medical massage

Becky Stoermann-Snelson (Kansas) . 8 years in the field (+ 32 years as RN)

Highest education achieved: BS in Natural Health

Primary modality: pregnancy massage

Areas of expertise: pregnancy massage, educator

Tamela Voorhees (Nevada) . 10 years in the field

Highest education achieved: some college

Primary modality: massage for pain relief

Areas of expertise: educator, massage for pain relief, hot stone massage, volunteer massages

Darrell Webster (Utah) . 10 years in the field

Highest education achieved: some college

Primary modality: NMT

Areas of expertise: educator, NMT, musculoskeletal anatomy, financial background

Kristal Joy Wyatt (Nevada) . 17+ years in the field

Highest education achieved: Associates in Science

Primary modality: massage for pain relief, educator, aromatherapy

Areas of expertise: medical massage, education

Julia Zarcone (California) . 15+ years in the field

Highest education achieved: MA

Primary modality: educator/lecturer/author/Rosen Method

Areas of expertise: Integrative health studies, educator, author

Appendix B – Advanced Certification Test Specifications Panel

***NCBTMB’s Job Analysis Study for ADVANCED CERTIFICATION
Test Specifications Panel for February 2, 2011 Meeting***



Facilitator: Lynn Webb, Ed.D.

NCBTMB’s Advanced Certification Test Specifications Panel

Sandy Fritz
Melissa Goldsmith
Kimberly Hieber
Christopher Jones
Eeris Kallil
Joe Lubow
Laura Nelson
Darrell (Dan) Webster

Elizabeth Langston, CAE



Appendix C – Explanation of Ratings from Job Analysis Survey

Task Ratings

The first content section of the job analysis survey addressed seven major areas or domains of responsibility and 68 tasks therein. For each of the 68 tasks, respondents were asked to make two ratings. First, they indicated how frequently they performed the task in their therapeutic massage and/or bodywork practice. Second, they indicated how important the task is (in any settings and modalities). The directions indicated that some tasks will be performed more frequently than others, and some tasks will be more important than others. Respondents were told that it is possible that a task could be important to their work, but performed infrequently, or performed by someone else (high importance, low frequency). For the frequency ratings, there were four response options:

- Daily or weekly (4)
- Monthly (3)
- Annually (2)
- Never (1)

For the importance ratings, there were four response options:

- Very important (4)
- Important (3)
- Somewhat important (2)
- Not important (1)

Criticality Ratings

Each task's frequency and importance ratings were then multiplied to create a measure of criticality that would reflect both frequency and importance. The two variables counted equally in the calculation of criticality because they both had four scale points. The criticality scale extended from 1 to 16.

Knowledge Ratings

The next content section of the survey addressed the importance of the general areas of knowledge required for advanced practice in therapeutic massage and bodywork. For each of 18 knowledge areas, respondents were asked to make one rating regarding importance. Respondents indicated the importance ratings from four options:

- Very important (4)
- Important (3)
- Somewhat important (2)
- Not important (1)