

# Practice Analysis of ABC Certified Orthotic Fitters



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in Orthotics, Prosthetics & Pedorthics**

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**Table of Contents**

<b>Acknowledgements</b>	<b>iv</b>
<b>Executive Summary</b>	<b>v</b>
<b>Results</b>	<b>vi</b>
<b>Responses</b>	<b>1</b>
<b>Development of Test Specifications</b>	<b>7</b>
<b>Summary and Conclusions</b>	<b>13</b>
<b>Table of Tables</b>	
Table 1: Years of Experience as Orthotic Fitter	1
Table 2: Type of Facility	1
Table 3: Number of Orthotic Fitters at Work Location	2
Table 4: Supervisors	2
Table 5: State of Work Location	2
Table 6: Age Range of Patients	3
Table 7: Pathologies of Patients	3
Table 8: Highest Level of Education Completed	4
Table 9: Orthotic Fitter Education Course Completed	4
Table 10: ABC Credentials Held	5
Table 11: Year CFo Credential Earned	5
Table 12: Career Advancement after Certification	6
Table 13: Other Credential(s) Held	6
Table 14: Gender of Respondents	6
Table 15: Age of Respondents	7
Table 16: Racial/Ethnic Background of Respondents	7
Table 17: Tasks by Pass, Borderline, and Fail Categories	8
Table 18: Frequency Modal Responses for Tasks by Categories	8
Table 19: Knowledge/Skill Importance	9
Table 20: Knowledge/Skill Tim of Acquisition	9
Table 21: Percentage of Task Content Coverage	11
Table 22: Percentage of Knowledge/Skill Content Coverage	11
Table 23: Test Content Recommendations	12
Table 24: Percentage of Time in Each Practice Area	12
Table 25: Domains and Tasks	13
Table 26: Knowledge and Skill Statements	15
Table 27: Test Content Weights	17

## **Acknowledgements**

On behalf of the American Board for Certification in Orthotics, Prosthetics & Pedorthics, Inc. (ABC), I am pleased to present this Practice Analysis of ABC Credentialed Orthotic Fitters. This report describes the contemporary practice of ABC credentialed orthotic fitters practicing in the United States. It represents the culmination of months of planning, execution, data analyses, and writing.

A project of this scale depends on the hard work and commitment of many professionals, and I am pleased to acknowledge their contributions to the final product. We are indebted to the Practice Analysis Task Force for the direction it provided. Its members – Poonam Agrawal, CFO, Michael Hoffman, CFO, Susan Long, CFO, ATC, Meghan Ludwick, CFO, Bharti Mehta, C.Ped., CFO, Danielle Rivera, CFO, Andrew Simpkins, CFO, ATC and Terrell Tate, CO – worked with us diligently throughout the study process.

This project represents a substantial investment of ABC's financial resources and personnel and supports ABC's efforts in continuing to develop exemplary examination programs as well as providing information to primary and continuing education programs. I am grateful to Cathy Carter, Executive Director and Stephen B. Fletcher, CPO, Director of Clinical Resources for their support and guidance during this project as well as Lauren Moran, Program Coordinator who provided excellent support throughout the project.

Larry D. Word, CPO, FAAOP  
President

## Executive Summary

The mission of the American Board for Certification in Orthotics, Prosthetics & Pedorthics (ABC) is to “establish and advocate for the highest patient care and organizational standards in the provision of safe and effective orthotic, prosthetic and pedorthic services.” In order to fulfill its mission by measuring patient care providers’ knowledge and skills through rigorous credentialing programs, ABC requested a Practice Analysis Study from Prometric for the Certified Orthotic Fitter (Cfo) credential.

A Practice Analysis study is designed to obtain descriptive information about the tasks performed on a job and the knowledge needed to adequately perform those tasks. The purpose of the Practice Analysis study was to:

- validate the tasks and knowledge important for orthotic fitters; and,
- develop test specifications for the Cfo certification exam.

### Conduct of the Practice Analysis Study

The Practice Analysis study consisted of several activities: background research, collaboration with subject matter experts to ensure representativeness of the tasks and knowledge statements; survey development; survey dissemination; compilation of survey results; and test specifications development. The successful outcome of the Practice Analysis study depended on the excellent information provided by orthotic fitter professionals.

### Survey Development

Survey research is an effective way to identify the tasks and knowledge that are important for orthotic fitters. The task statements included on the survey covered six domains of practice, as well as 36 knowledge statements and 17 skill statements. The development of the survey was based on a draft of task, knowledge and skill statements developed from a variety of resources, but primarily on the previous Practice Analysis conducted in 2010.

### Survey Content

The survey, disseminated in August of 2018, consisted of six sections. ABC distributed the survey to 1,460 Cfo professionals. As an incentive to complete the survey, participants could enter a drawing to win one of three \$100 Amazon gift cards.

Survey Sections
Section 1: Biographical and Background Questions
Section 2: Task Statements
Section 3: Recommendation for Exam Content
Section 4: Knowledge and Skills
Section 5: Practice Areas and Devices
Section 6: Comments

## Results

### Survey Response

A total of 201 CFo professionals submitted completed surveys. Based on the analysis of survey responses, a representative group of CFo professionals completed the survey in sufficient numbers to meet the requirements for statistical analysis of the results. This is evidenced by review of the responses for each of the background and general information questions as well as confirmation by the Test Specifications Committee.

### Survey Ratings

Participants were asked to rate each task statement by its importance for them in their current position as an orthotic fitter, using a five-point scale (0 = Of no importance to 4 = Very Important). Additionally, participants were asked how frequently they perform the tasks during an average week of work using a five-point scale (0 = Never to 4 = Very often). Participants were asked to rate each knowledge and skill statement by its importance for them in their current position as an orthotic fitter, using the same five-point importance scale (0 = Of no importance to 4 = Very Important). Additionally, participants were asked to specify the time when the knowledge or skill should be required by a credentialed orthotic fitter: Primarily before (= 1) or after (= 2) becoming credentialed, or Not necessary at any time (= 0). Finally, participants were asked to report the percentage of time spent in practice areas (Lower Extremity, Spinal, Upper Extremity, Other) and to rate how frequently they provide each orthotic device using a five-point scale (0 = Never to 4 = Very often).

### Content Coverage

Evidence was provided for the comprehensiveness of the content coverage within the domains. If the task statements within a domain are adequately defined, then it should be judged as being well covered. Respondents indicated that the content within each task domain was well covered, thus supporting the comprehensiveness of the defined domains.

### Test Specifications Development

In November 2018, a Test Specifications Committee convened to review the results of the Practice Analysis and to create the test content outline that will guide the development of the CFo examination.

### Summary

In summary, this study used a multi-method approach to identify the tasks, knowledge and skills that are important to the competent performance of the orthotic fitter job. The Practice Analysis process allowed for input from a representative group of orthotic fitters and was conducted within the guidelines of professionally sound practice. The results of the Practice Analysis can be used by ABC to develop the CFo Exam.

### RESULTS AT A GLANCE

#### WHO COMPLETED THE SURVEY

*A total of 201 responses were used for analysis. 100% of respondents currently hold the CFo credential. 55% work in an O&P clinic. 79% reported “increased responsibility” as a result of becoming an ABC Certified Orthotic Fitter.*

#### TASK IMPORTANCE

*All of the 34 tasks achieved high importance ratings for the overall group.*

#### KNOWLEDGE AND SKILL IMPORTANCE

*All of the 53 knowledge and skill statements achieved high importance ratings for the overall group.*

## RESPONSES

### Survey Responses

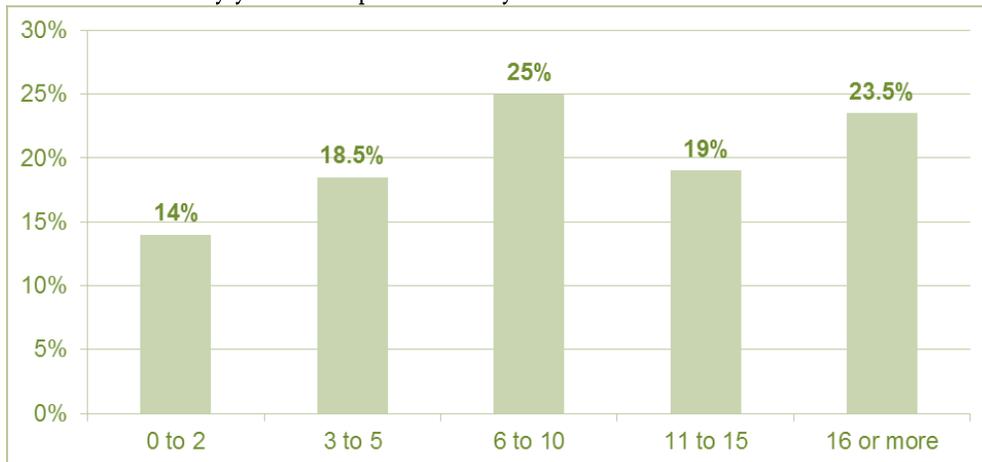
Of the 1,460 individuals invited to take the survey, 201 submitted completed surveys, resulting in a response rate of 14%. All 201 complete responses were useable for analysis.

Based on the analysis of survey responses, a representative group of orthotic fitters completed the survey in sufficient numbers to meet the requirements to conduct statistical analysis. This was evidenced by the distribution of responses for each of the background information questions and was confirmed through discussion with the Committee.

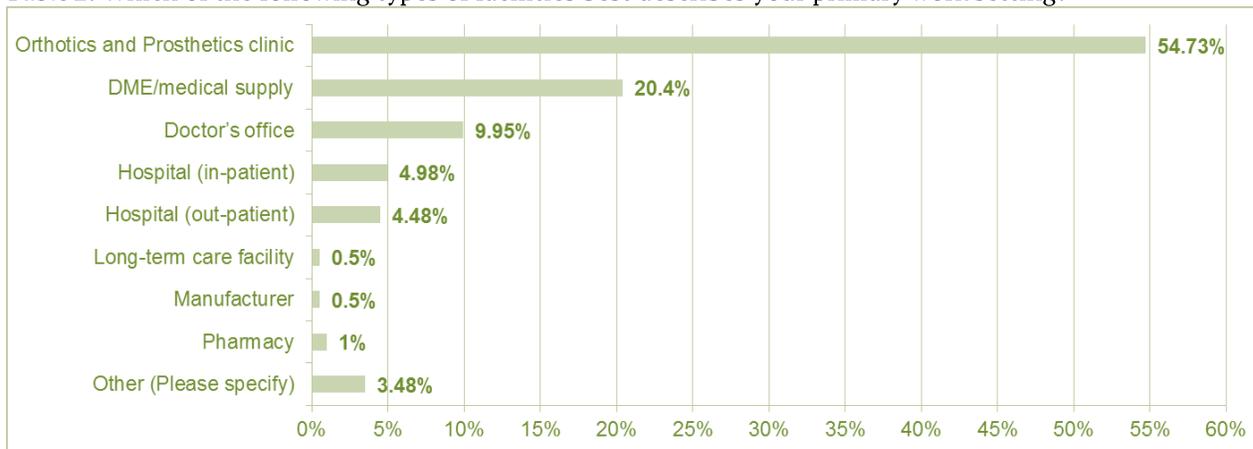
### Demographic Characteristics of Survey Respondents

The profile of survey respondents is below. The results in the figures below reflect the sample size of 201 that was used for analysis.

*Table 1.* How many years of experience do you have as an orthotic fitter?



*Table 2.* Which of the following types of facilities best describes your primary work setting?



*Table 3.* In total, how many orthotic fitters are located at your primary work setting?

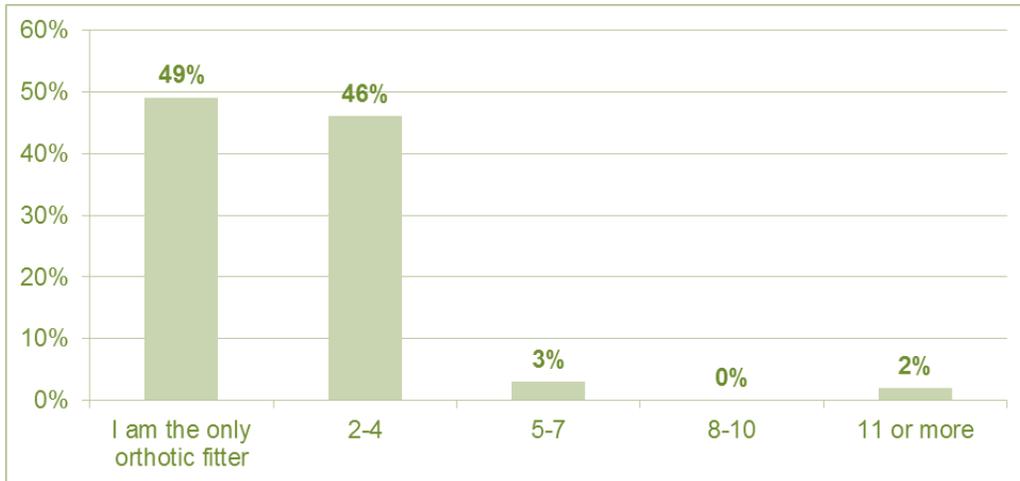


Table 4. Who supervises your clinical work at your facility?

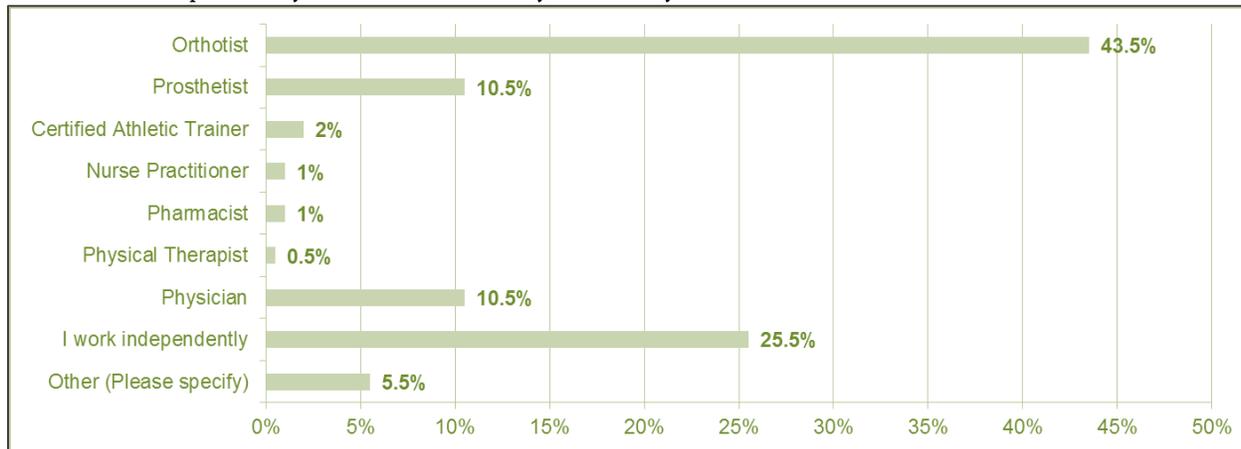
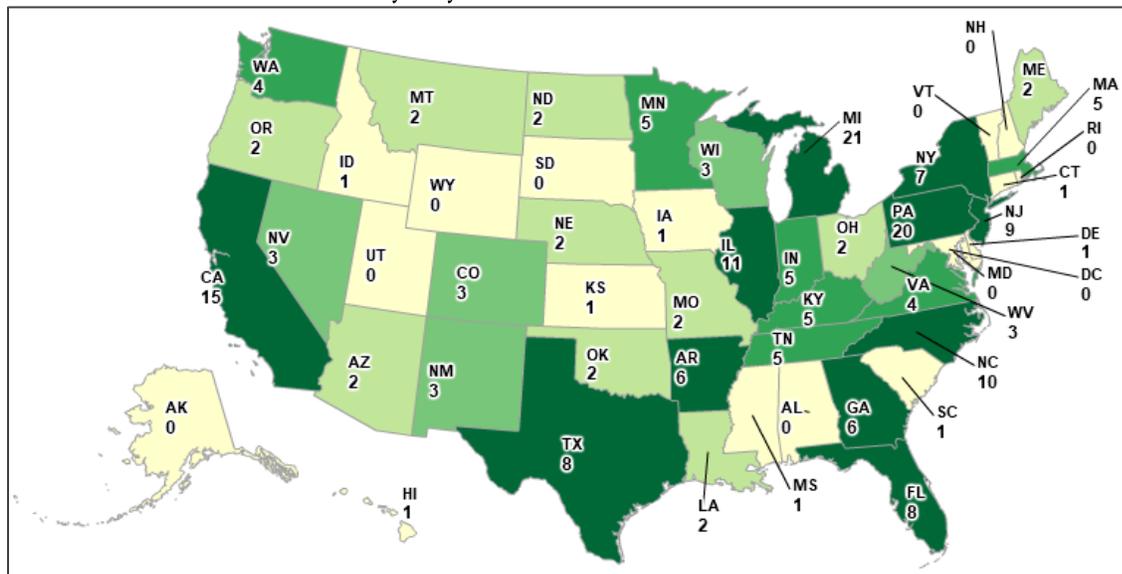


Table 5. In which state or territory do you work?



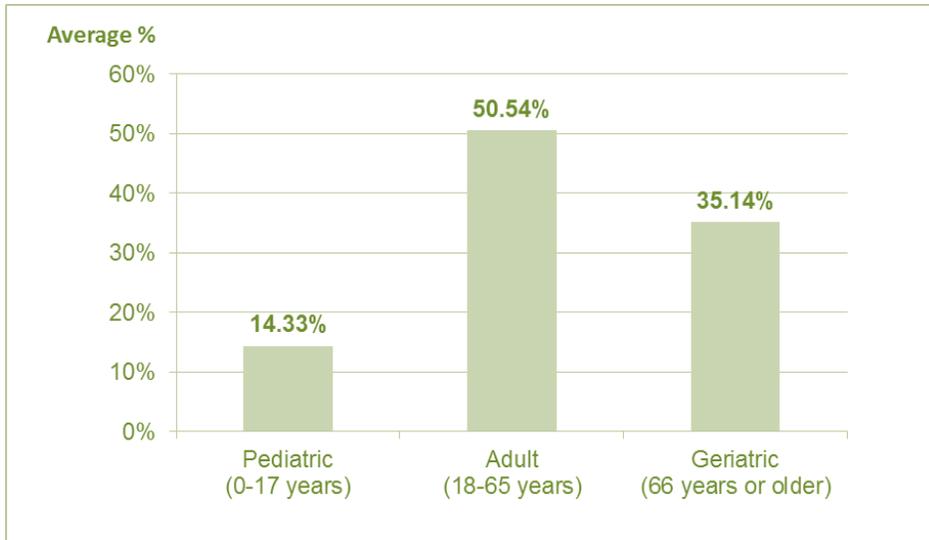


Table 7. During the past year, what percentage of your patients were in each of the following primary pathologies?

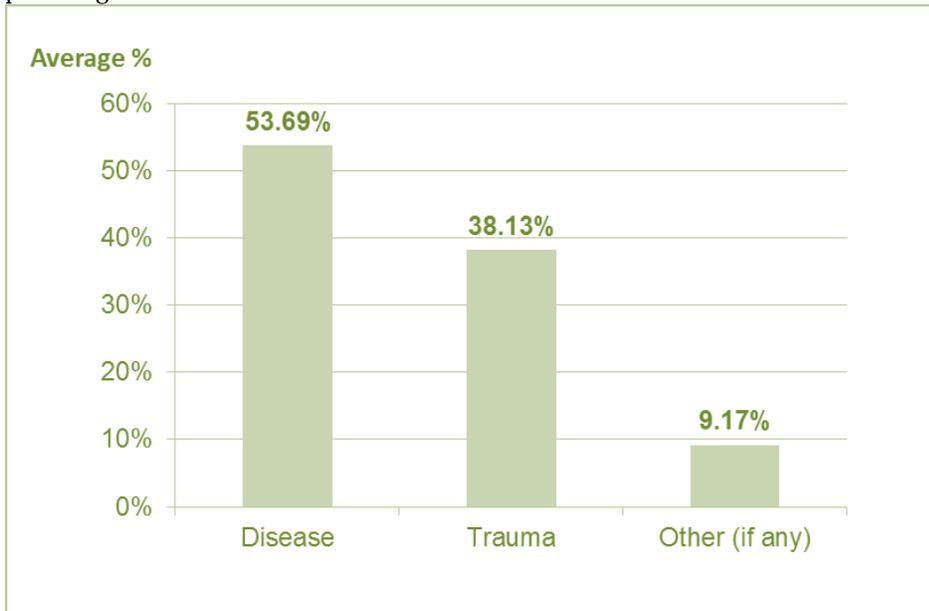


Table 8. What is the highest educational degree/diploma you have earned in any discipline?

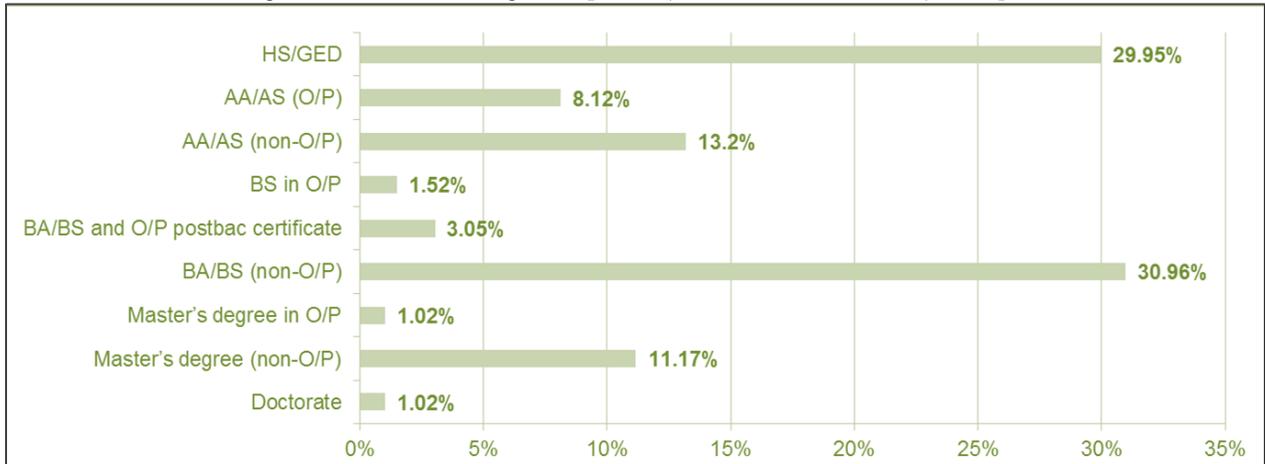
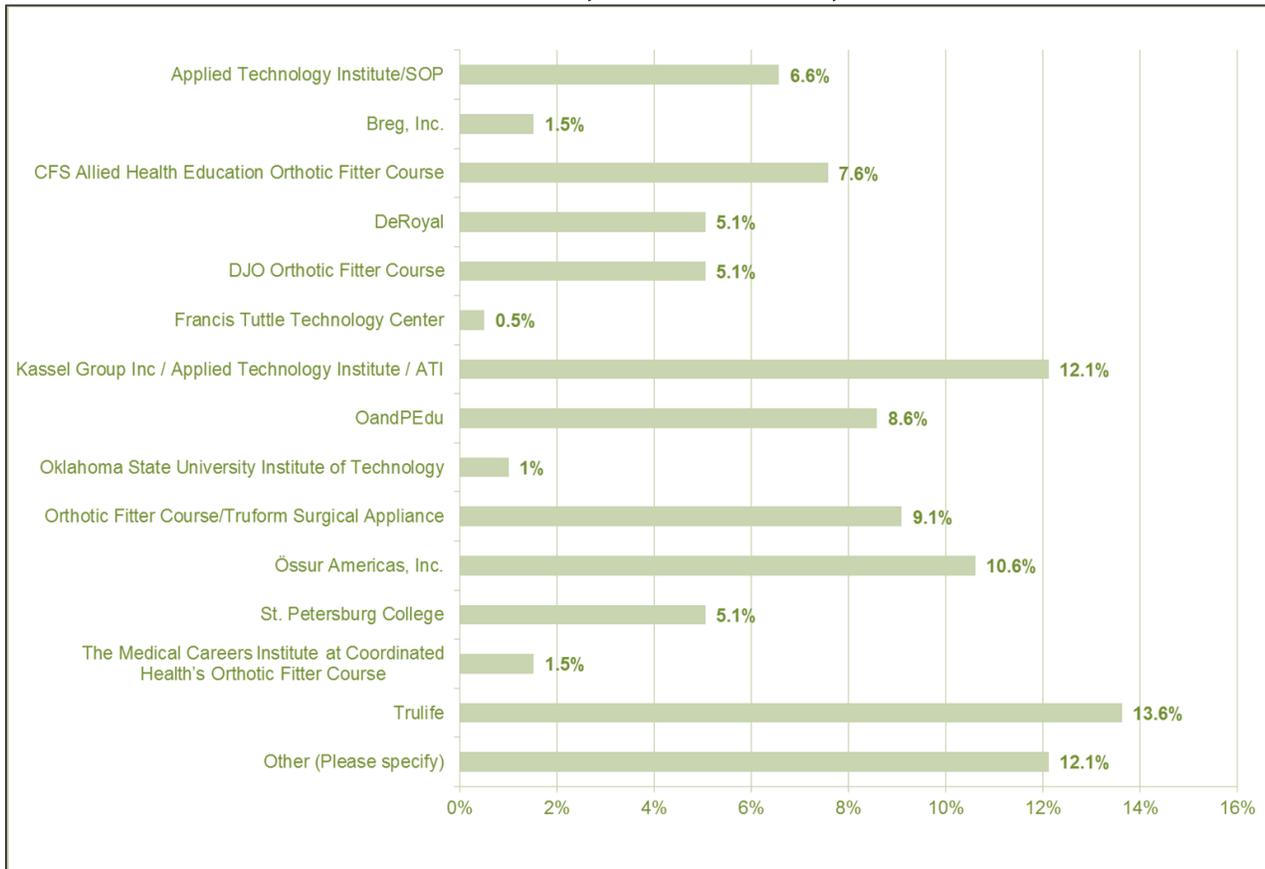
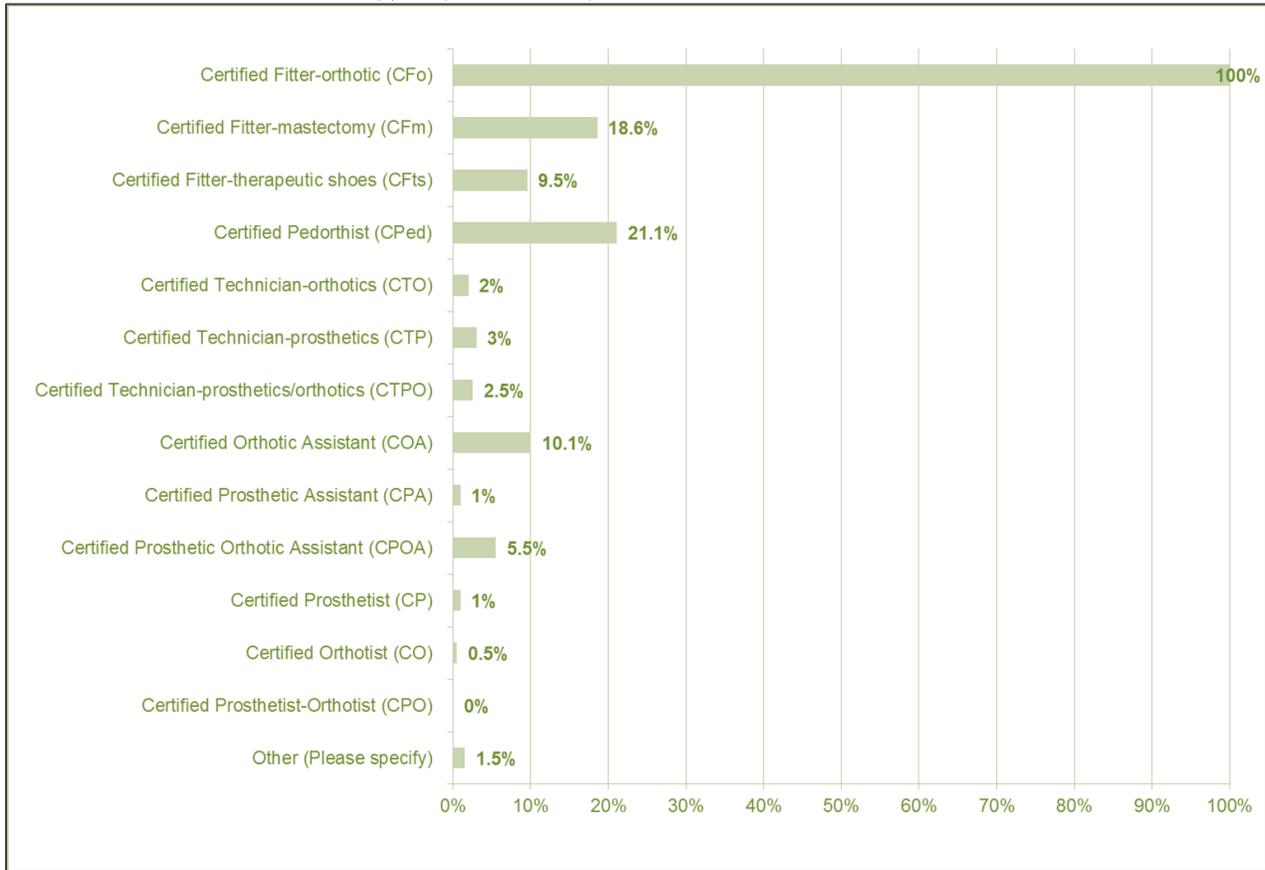


Table 9. What orthotic fitter education course did you attend to obtain your credential?



*Table 10. Which ABC credential(s) do you currently hold?*



*Table 11. In what year did you attain your ABC Certified Orthotic Fitter credential?*



Table 12. How has your career advanced after becoming an ABC Certified Orthotic Fitter?

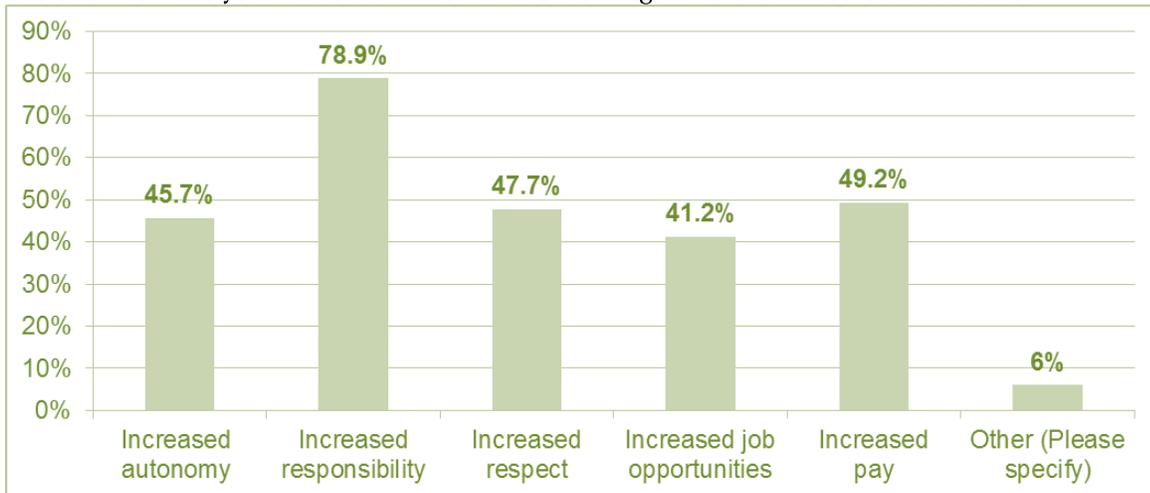


Table 13. Are you also a certified orthotic fitter with BOC?

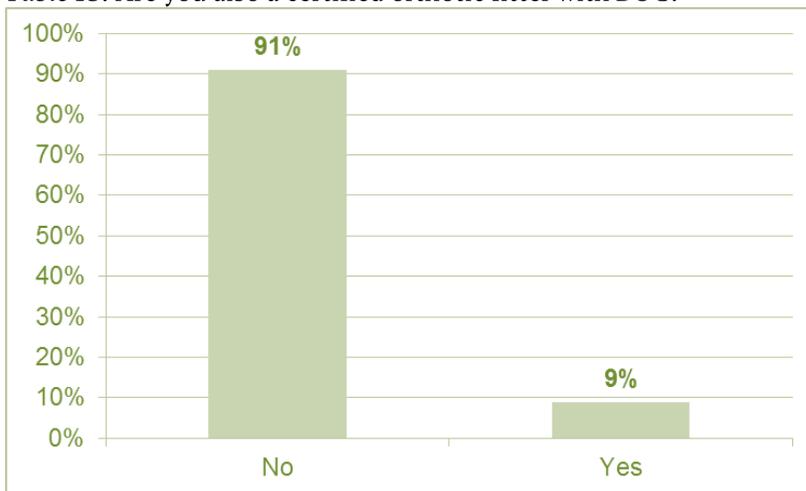
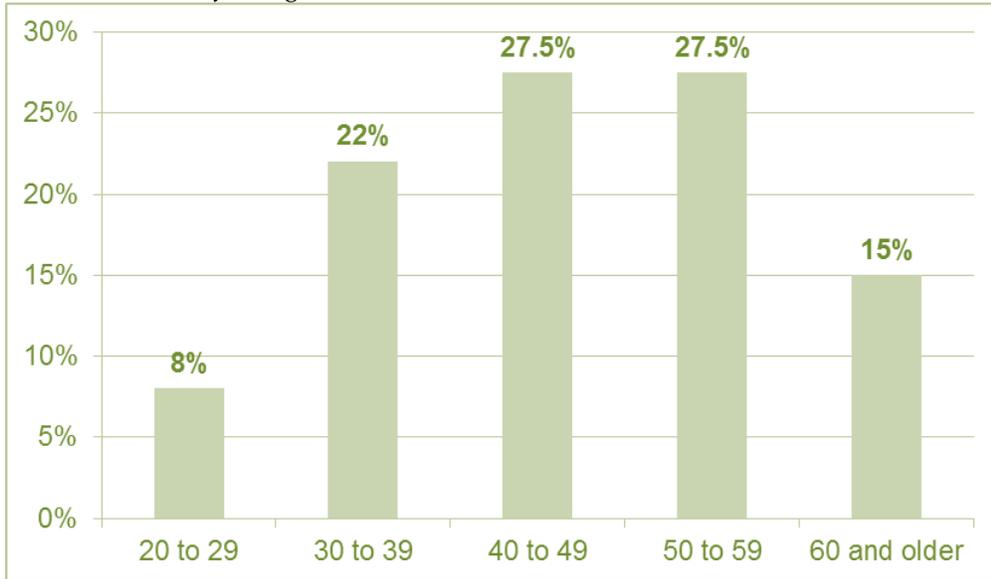


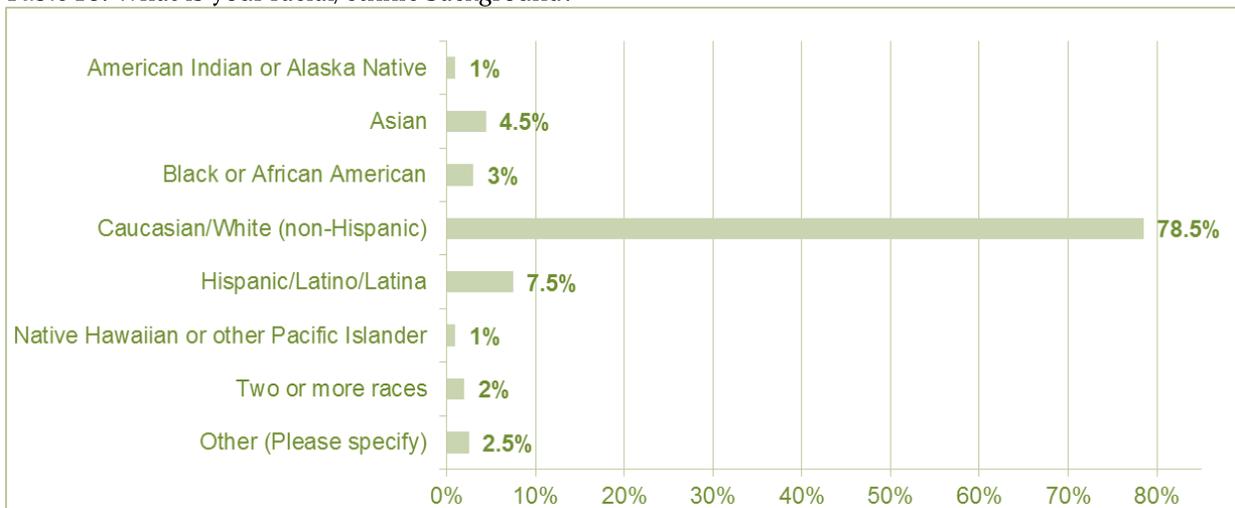
Table 14. What is your gender?



*Table 15. What is your age?*



*Table 16. What is your racial/ethnic background?*



## Task and Knowledge/Skill Overall Ratings

The following provides a summary of survey respondents' ratings of the task and knowledge/skill statements. The survey respondents passed 87 (100%) of the 87 task and knowledge/skill statements.

### Tasks

A total of 34 (100%) of the 34 tasks achieved high importance means. Table 1 shows the delineation of tasks in Pass, Borderline, and Fail categories by domain.

Table 17. *Tasks by Pass, Borderline, and Fail categories*

Task Domains	No. of Task Statements	Pass (Mean 2.50 or Above)	Borderline (Mean 2.40 to 2.49)	Fail (Mean Less than 2.40)
1. Patient Assessment	7	7	0	0
2. Formulation of the Treatment Plan	5	5	0	0
3. Implementation of the Treatment Plan	9	9	0	0
4. Follow-up to the Treatment Plan	7	7	0	0
5. Practice Management	4	4	0	0
6. Promotion of Competency and Enhancement of Professional Practice	2	2	0	0
<b>Total</b>	<b>34</b>	<b>34</b>	<b>0</b>	<b>0</b>
<b>Percentage</b>		<b>100%</b>	<b>0%</b>	<b>0%</b>

Table 18 shows the tasks that were placed in each of the frequency categories from the secondary rating scale by domain. The median and modal responses for this rating scale are provided in Appendix D2.

Table 18. *Frequency Modal Responses for Tasks by Categories*

Task Domains	= 0 Never	1 = Seldom	2 = Occasionally	3 = Often	4 = Very Often
1. Patient Assessment	0	0	0	0	7
2. Formulation of the Treatment Plan	0	0	0	1	4
3. Implementation of the Treatment Plan	0	0	0	0	9
4. Follow-up to the Treatment Plan	0	0	0	0	7
5. Practice Management	0	0	0	0	4
6. Promotion of Competency and Enhancement of Professional Practice	0	1	1	0	0
<b>Total</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>31</b>
<b>Percentage</b>	<b>0.00%</b>	<b>0.03%</b>	<b>0.03%</b>	<b>0.03%</b>	<b>91.18%</b>

### Knowledge and Skills

A total of 53 (100%) of the 53 knowledge and skill statements achieved high importance means. Table 3 shows the knowledge statements placed in Pass, Borderline, and Fail categories.

Table 19. Knowledge/Skill Importance by Pass, Borderline, and Fail categories

Knowledge/Skills	No. of Statements	Pass (Mean 2.50 or Above)	Borderline (Mean 2.40 to 2.49)	Fail (Mean Less than 2.40)
1. Knowledge	36	36	0	0
2. Skills	17	17	0	0
<b>Total</b>	<b>53</b>	<b>53</b>	<b>0</b>	<b>0</b>
<b>Percentage</b>		<b>100%</b>	<b>0.00%</b>	<b>0.00%</b>

The modal results from the other knowledge/skill rating scale, time of acquisition, are in Table 20. These results provided a secondary data point for discussion during the Test Specifications meeting.

Table 20. Knowledge/Skill Time of Acquisition Modal Responses

Knowledge/Skills	No. of Statements	0 = Not necessary	1 = Before Credential	2 = After Credential
1. Knowledge	36	0	33	3
2. Skills	17	0	17	0
<b>Total</b>	<b>53</b>	<b>0</b>	<b>50</b>	<b>3</b>
<b>Percentage</b>		<b>0.00%</b>	<b>94.34%</b>	<b>5.66%</b>

### Subgroup Analysis of Task and Knowledge Ratings

The index of agreement (IOA) is a measure of the extent to which subgroups of respondents agree on which tasks and knowledge/skills are important. Using the mean importance ratings for tasks and knowledge/skills, indices of agreement were computed:

- If the subgroup means are above the critical importance value (mean ratings at or above 2.50), then they agree that the content is important.
- If the subgroup means are below the critical importance value (mean ratings less than 2.50), then the subgroups agree that the content is considered less important.
- By contrast, if one subgroup’s (for example, female) mean ratings are above the critical importance value and another subgroup’s (for example, male) means are below the critical importance value then the subgroups are in disagreement as to whether the content is important.

The index of agreement provides a method of computing the similarity in judgments between groups and is tailored to the purpose of a Practice Analysis study more than the correlation coefficient. Although the correlation coefficient measures the tendency toward agreement along the full range of possible ratings, the agreement index focuses on whether two groups agree that the content should (or should not) be included in an examination.

As one of the major purposes of this Practice Analysis study is to identify appropriate test content, the agreement index provides a statistical method to address this question at the subgroup level. Furthermore, the agreement index requires only 30 respondents per subgroup for computation, whereas

the correlation coefficient requires at least 100 respondents per subgroup to provide a reliable measure of agreement.

An illustrative example for two groups on a survey with 100 knowledge areas shows how to compute the index. If two groups passed the same 96 knowledge areas and failed the same 2 knowledge areas (out of the 100 total knowledge areas in the survey), the consistency index would be computed as  $Agreement = (96 + 2)/100 = 0.98$ . Values of 0.80 or less show less than optimal agreement and therefore additional mean analyses are required.

Agreement coefficients were produced on the following background questions:

- Years of experience as an orthotic fitter
- Primary work setting
- Number of orthotic fitters located at primary work setting

The agreement coefficients were all 1.00 for tasks and 1.00 for the knowledge/skill statements. For questions where the agreement coefficients for all groups were greater than 0.80, no additional mean analysis is required.

### Content Coverage Ratings

The survey participants indicated how well the statements within each of the task domains and knowledge/skills covered important aspects of that area. These responses provide an indication of the comprehensiveness of the survey content.

The five-point rating scale included 1=Very Poorly, 2=Poorly, 3=Adequately, 4=Well, and 5=Very Well. The means and standard deviations for the task and knowledge ratings are provided in Tables 5 and 6. For the task domains, the means ranged from 3.11 to 3.48, and for the knowledge/skill statements ranged from 3.31 to 3.33. These means provide evidence that the tasks and knowledge/skills were covered adequately to well on the survey.

Table 21. Mean, Standard Deviation, and Frequency Distribution Percentage of Task Content Coverage

Task Domain	Content Coverage		
	Mean	SD	Frequency Percentage

			1=Very poorly	2=Poorly	3=Adequately	4=Well	5=Very well
1. Patient Assessment	3.31	0.80	0.50%	0.50%	16.58%	32.16%	50.25%
2. Formulation of the Treatment Plan	3.38	0.73	0.00%	0.00%	15.00%	32.50%	52.50%
3. Implementation of Treatment Plan	3.48	0.71	0.00%	0.00%	12.94%	25.87%	61.19%
4. Follow-up to the Treatment Plan	3.36	0.74	0.00%	0.00%	16.00%	32.50%	51.50%
5. Practice Management	3.39	0.74	0.00%	0.00%	15.08%	30.65%	54.27%
6. Promotion of Competency and Enhancement of Professional Practice	3.11	0.83	0.00%	1.01%	26.63%	33.17%	39.20%

Table 22. Mean, Standard Deviation, and Frequency Distribution Percentage of Knowledge/Skill Content Coverage

Knowledge/Skills	Content Coverage						
	Mean	SD	Frequency Percentage				
			1=Very poorly	2=Poorly	3=Adequately	4=Well	5=Very well
Knowledge	3.33	0.78	0.00%	0.51%	17.68%	30.30%	51.52%
Skills	3.31	0.79	0.00%	0.51%	18.97%	29.74%	50.77%

Survey respondents could write in tasks or knowledge/skills that they believe should be included in the listing of important tasks and knowledge/skills areas. The Test Specifications Committee reviewed the comments to determine whether there were important statements not covered on the survey that should be included in the test specifications.

**Test Content Recommendations**

In survey Section 4: Recommendations for Test Content, participants were asked to assign a percentage weight to each task domain. The sum of percentage weights was required to equal 100. This information guided the Test Specifications Committee in making decisions about how much emphasis the domains should receive on the test content outline. The mean weights across all survey respondents are in Table 23.

Table 23. Survey Respondents’ Test Content Recommendations by Mean Percentages and Standard Deviations

Domain	Mean (%)	SD (%)	Range	
			Minimum	Maximum
1. Patient Assessment	27	12.04	0	75
2. Formulation of the Treatment Plan	20	7.72	0	60

Domain	Mean (%)	SD (%)	Range	
			Minimum	Maximum
3. Implementation of Treatment Plan	24	12.03	0	100
4. Follow-up to the Treatment Plan	14	5.81	0	30
5. Practice Management	13	7.30	0	50
6. Other	1	3.09	0	20

### Practice Area and Device Overall Ratings

Respondents were asked to report the percentage of time they spend in each practice area and to rate how often they provide the listed orthotic devices. Table 24 shows means and standard deviations for ratings of time spent by practice area.

Table 24. Time Spent in Practice Areas by Mean Percentages and Standard Deviations

Practice Area	Mean (%)	SD (%)
1. Lower Extremity	49.47	19.61
2. Spinal	24.94	18.07
3. Upper Extremity	22.12	13.22
4. Other	3.48	11.51

### Write-In Comments

Many survey respondents provided responses to the open-ended questions in Section 6: Comments about expected changes in their job role over the next few years and professional development/continuing education needs.

## DEVELOPMENT OF TEST SPECIFICATIONS

The test specification meeting for the CFo Exam occurred November 9, 2018, in Alexandria, VA. The steps involved in the development of test specifications included the following:

- presentation of the Practice Analysis project and results to the Test Specifications Committee;
- identification of the task and knowledge/skill statements to be included on the CFo test specifications;
- development of the test content weights for the exam; and,
- linkage of task and knowledge/skill statements.

### Presentation of the Practice Analysis Project and Results to the Test Specifications Committee

The first activity involved in the test specification development was to provide the Test Specifications Committee an overview of the Practice Analysis activities that were conducted and to present the results of the study.

### Identification of the Task, Knowledge, and Skill Statements to be Included on the CFo Exam

The Test Specifications Committee reviewed the task and knowledge/skill results to make final recommendations about the areas that should be included on the exam.

The survey results served as the primary source of information used by the Test Specification Committee members to make test content decisions. Recommendations were based on the following criteria:

- the mean task and knowledge/skill importance ratings for all respondents;
- the frequency distribution of ratings for all respondents; and,
- the appropriateness of the content for the examination.

### Tasks Recommended for Inclusion

- A total of 34 of the 34 tasks achieved mean ratings at or above 2.50 (Pass category).
- A total of 28 tasks were recommended by the Test Specification Committee for inclusion on the CFo exam.
- The two tasks in Domain 6. Promotion of Competency and Enhancement of Professional Practice were not intended to be covered and were therefore removed from the test specifications.

Table 25. Domains and Tasks

Domain	Tasks
<b>Domain 1 – Patient Assessment</b>	Review patient’s prescription/referral
	Take a patient history (e.g., previous device use, medical history, physical limitations, activity levels)
	Perform a clinical assessment based on prescription and diagnosis (e.g., skin condition, range of motion, muscle testing, edema)
	Consult with other healthcare professionals and caregivers about patient’s condition
	Communicate to patient and/or caregiver about the assessment findings
	Refer patient, if appropriate, to other healthcare professionals (e.g., orthotist, physician) for intervention beyond orthotic fitter scope of practice
	Inform patient or responsible parties of their financial responsibilities
<b>Domain 2 – Formulation of the Treatment Plan</b>	Formulate treatment goals and expected outcomes (e.g., reduce pain, provide support, increase function, prevent deformity)
	Determine the appropriate device design/materials based on the prescription and assessment findings

Domain	Tasks
	Consult with physician/referral source to modify, if necessary, the original prescription and/or treatment plan
	Develop a plan for patient needs, including patient education and follow-up (e.g., precautions, appropriate use, device hygiene)
<b>Domain 3 – Implementation of the Treatment Plan</b>	Inform patient, family and/or caregivers regarding orthotic treatment plan, including procedure, time involved, and possible risks
	Take appropriate measurements and cross reference measurements to manufacturer’s guidelines
	Consult manufacturer’s device guidelines (e.g., recommended use, limitations, care)
	Fit and assess function of device in sagittal, transverse, and coronal planes
	Ensure that device and components are fit and delivered as prescribed and patient and/or caregiver are able to don/doff device independently as applicable
	Educate patient and/or caregiver about the use/care of the orthosis (e.g., wearing schedules, donning/doffing, hygiene, warranties, follow-up schedule)
	Document treatment to verify delivery, use, care, precautions, and assessment of structural safety
<b>Domain 4 – Follow-up to the Treatment Plan</b>	Determine patient’s compliance (e.g., wearing schedule, proper use and care, patient satisfaction)
	Reassess patient’s treatment goals and expected outcomes (e.g., function, pain reduction, skin condition, general health)
	Determine if changes are needed to the device based on assessment of fit and function
	Modify device based on assessment and inform patient and/or caregiver of changes
	Evaluate results of modifications
	Inspect device for structural safety or excessive wear that may lead to device failure

Domain	Tasks
	Document follow-up care including any modifications to the device
<b>Domain 5 – Practice Management</b>	Comply with federal regulations for the delivery of device within the ABC certified orthotic fitter scope of practice (e.g., Medicare, HIPAA, reimbursement codes, documentation requirements)
	Comply with state regulations for the delivery of device within the orthotic fitter scope of practice (e.g., Medicaid, licensure)
	Utilize procedures for universal/standard precautions and disposal of bio-hazardous materials

**Knowledge/Skills Recommended for Inclusion**

- A total of 53 of the 53 knowledge/skill statements achieved mean ratings at or above 2.50 (Pass category).
- All knowledge/skill statements were recommended for inclusion in the final test specifications.
- 16 knowledge/skill statements were modified for clarity.

Table 26. *Knowledge Statements Modified on the Test Specifications*

<b>Knowledge of:</b>
<ol style="list-style-type: none"> <li>1. General musculoskeletal anatomy, including upper extremity, lower extremity, spine</li> <li>2. Bony landmarks relating to gross musculoskeletal anatomy of upper extremity, lower extremity and spine</li> <li>3. Gross neuroanatomy (e.g., major peripheral nerves of the upper and lower extremity)</li> <li>4. The circulatory system as it relates to prefabricated orthotic care</li> <li>5. Anatomical planes, planes of motion and normal range of motion (ROM)</li> <li>6. Human development and aging, including pediatric, adult and geriatric, as they relate to prefabricated orthotic care</li> <li>7. Medical terminology as it relates to prefabricated orthotic care</li> <li>8. Pathologies including cause and progression (e.g., vascular, neurologic, orthopedic)</li> <li>9. Tissue characteristics (e.g., ulcers, pressure sores, sensation)</li> <li>10. Volumetric changes (e.g., edema, weight gain/loss)</li> <li>11. Biomechanics (e.g., actions of lever arms, application of force systems)</li> <li>12. Normal human locomotion</li> <li>13. Pathological gait</li> <li>14. Assessment techniques (e.g., gait observation, weight bearing status, skin/tissue assessment, manual muscle testing (MMT), pain evaluation, and volumetric assessment)</li> <li>15. Measurement tools and techniques (e.g., tape measurers, ML gauges, goniometers, digital scanners, Brannock device)</li> <li>16. Psychosocial issues of orthotic patients</li> <li>17. Orthotic forms (e.g., assessment, measurement)</li> </ol>

### **Knowledge of:**

18. When to refer the patient to other healthcare providers (e.g., when patient needs are beyond fitters' scope of practice, when patient's health condition(s) require attention by other health care professionals)
19. Prefabricated orthotic design and fitting criteria of orthoses including compression garments (e.g., anatomical/device relationships/selection, device trimlines)
20. Care and maintenance of prefabricated orthoses and compression garments
21. Device warranties
22. Available educational and resource materials (e.g., fitting instructions, manufacturer's guidelines)
23. Safety procedures and standards (e.g., OSHA, SDS)
24. Hand and power tools
25. Device design(s)
26. Material properties
27. When to refer the patient to other healthcare providers based on follow-up assessment findings
28. When to modify the device based on reassessment of fit and function
29. Appropriate documentation procedures
30. Policies and procedures regarding privileged information (e.g., HIPAA)
31. Roles and responsibilities associated with other healthcare professions
32. Reimbursement requirements (e.g., Medicare, Medicaid)
33. Universal/Standard precautions including sterile techniques and infection control
34. Scope of practice of the ABC certified orthotic fitter
35. Scope of practice of other orthotic credentials (e.g., orthotist, pedorthist)
36. Federal and state rules, regulations, and guidelines (e.g., FDA, ADA, licensure)

### **Skill in:**

1. Interpreting referral documents (e.g., prescriptions and authorization for service)
2. Interviewing patients and reviewing patient history
3. Performing physical assessment (e.g., measuring range of motion)
4. Interpreting physical findings (e.g., recognizing skin pressures, dermatological conditions, skeletal deformities)
5. Communicating with referral sources (e.g., physician, nurse, practitioner, therapist)
6. Providing prefabricated orthotic management to patients relative to their diagnosis and condition
7. Measuring for prefabricated orthoses including compression garments (e.g., upper extremity, lower extremity, and spine)
8. Fitting, modifying, and adjusting prefabricated orthoses including compression garments
9. Evaluating fit and function of prefabricated orthoses including compression garments

Skill in:
10. Identifying outcomes as they relate to the treatment goals (e.g., reduction of pain, immobilization, improved gait, improved function)
11. Documentation (e.g., patient notes, billing documentation)
12. Selection of and/or use of materials and components as it relates to prefabricated orthotic treatment
13. Using hand and power tools
14. Use of safety equipment (e.g., personal protective equipment)
15. Modifying prefabrication orthoses in order to restore the optimal fit and function
16. Maintenance and repair of prefabricated orthoses
17. Addressing patient’s activities of daily living (ADL) problems related to prefabricated orthoses including compression garments

**Development of Test Content Weights**

The Test Specifications Committee participated in an exercise that required each member to assign a percentage weight to each of the task domains. Weights were then entered into a spreadsheet and shown to the committee. The committee members were able to compare the test content weights derived from the survey responses to their own estimates. This resulted in a productive discussion among the committee members regarding the optimal percentages for the exam. Table 27 shows the test specifications recommendations including the percentage content.

Table 27. *CFo Test Content Weights Recommended by the Test Specifications Committee*

Task Domains	No. of Statements	% Weight	No. of Questions
1. Patient Assessment	7	30%	33
2. Formulation of the Treatment Plan	5	18%	20
3. Implementation of Treatment Plan	9	30%	33
4. Follow-up to the Treatment Plan	7	12%	13
5. Practice Management	4	10%	11
Total	32	100%	110

**Linkage of Task and Knowledge/Skill Statements**

Linking of tasks and knowledge/skills verifies that each tested knowledge area included on an examination relates to the competent performance of important tasks. As such, linking supports the content validity of the task included in the test specifications. Linking does not require the production of an exhaustive listing; rather, task-knowledge/skill links are developed to ensure that each knowledge area is identified as being related to the performance of at least one, or in most cases several, important tasks.

Linking also provides guidance for item-writing activities. When item writers develop questions for specific task areas, they can have a listing of knowledge and skill areas that relate to the task domains. This provides context for developing examination questions, and assists the item writers in question design.

## SUMMARY AND CONCLUSIONS

The Practice Analysis study for Certified Orthotic Fitters identified task and knowledge/skill statements that are important to the work performed by orthotic fitters. Further, the data collected will guide the development of the test specifications that will be used to develop the examination.

The task and knowledge/skill statements were developed through an iterative process involving the combined efforts of ABC, subject matter experts, and Prometric staff. These statements were entered into a survey format and subjected to verification/refutation through the dissemination of a survey to orthotic fitter professionals. The survey participants were asked to rate the importance of task and knowledge/skill statements.

The results of the study support the following:

- All of the task and knowledge/skill statements that were verified as important through the survey provide the foundation of empirically derived information from which to develop test specifications for the CFo Examination.
- Evidence was provided in this study that the comprehensiveness of the content within the task and knowledge domains was well covered.
- The process utilized and all of the information that resulted from the analysis supported the development of the test specifications.

In summary, the study used a multi-method approach to identify the tasks and knowledge/skills that are important to the work performed by orthotic fitters. The results of the study were used to develop the test specifications for the CFo Examination.