The International Commission on Health Care Certification

Item Writing Manual for the
Certified Life Care Planner (CLCP) and the
Canadian Certified Life Care Planner
(CCLCP)

Preface

The Commissioners of the Commission on Health Care Certification wish to extend their appreciation of you for agreeing to submit test items for the Certified Life Care Planner examination.   As you review the enclosed material you will find that writing test items for national and international certification exams requires a structured protocol with a focus on item reliability, item validity, and the proper formatting of the stem and the subsequent answer choices.   Additionally, you must remain aware of the 3 areas of expertise identified in Turner, Taylor, Rubin, and May's (2000) research and ensure that the item content you include references one of these 3 expertise areas. The CLCP examination is based on the roles and functions of life care planners identified in Taylor et al. (2000), and all questions should be based on the competencies and sub-competencies identified as comprising the roles and functions of life care planners.

The enclosed material is designed to provide you with some guidelines in writing test items for the Certified Life Care Planner (CLCP) examination. We have attempted to provide you with all of the necessary information that will allow you to develop the skills necessary for writing meaningful and reliable test items. Please feel free to call the CHCC office should you have any questions regarding format or item content structure after reviewing this manual.

Again, we thank you for your interest and willingness to participate in contributing test items for the CLCP examination. We will apply 2 CEU hours towards your certification maintenance for each approved referenced item you submit to the CHCC.

The Commissioners

Introduction

Writing test items is a complex, involved process that requires a research of the literature, a thought process of the item-writer that focuses on what the test item is designed to measure, and of course, patience. The writer may write the item numerous times before it becomes an acceptable item to her or him, and many writers experience the easy flow in which they write during the first 2 or 3 items. However, the writer is soon confronted with trying to address all areas of the life care planning knowledge base that may appear to be somewhat elusive as the writer seems unable to "drift" out of her or his area of expertise. Developing items outside of one's area of expertise that apply to the life care planning service delivery process can be difficult, if not threatening to one's expertise. Justifiably, the literature research is of paramount importance to ensure that item topics remain of a multidiscipline content and without redundancy. More importantly, the writer should have a thorough knowledge of test item construction and the pitfalls to avoid during the item construction process.

This manual is designed to assist you in understanding the item writing process, the type of test items that are available for certification examinations, why multiple-choice items are the most reliable and valid type of items on which to construct an examination, and understanding what to do and what not to do when constructing a test item. This manual is comprised of the following content areas:

1. Objective vs. Subjective Test Items
2. Advantages and Limitation of Test Item Types
3. Anatomy of a Multiple-choice Item
4. Content Areas of the CLCP Examination
5. Specific Guidelines for Writing CLCP Test Items
6. Test-Construction Protocol

You can expect a successful and enjoyable experience with writing items for the CLCP examination as you proceed through the above listed chapters. Just follow each chapter, read it well, and you will be on your way to contributing to your certification agency and the field through a well constructed valid set of test items.

Chapter 1: Objective vs. Subjective Test Items

Test items can be either objective or subjective, whereas objective items can vary in their structure and may include such item-types as sentence completion, multiple-choice, true-false, and matching test items, while subjective test items are primarily essay type items (Duval, 2007). The objectivity of sentence completion, multiple-choice, true-false, and matching test items is found in the relationship of the answer to the item statement, or stem. The examinee is not free to organize and present an original answer, but is limited to the choices provided in the test question. Subjective items, or essay items, allow for the examinee to provide his or her own interpretation of the question and develop an answer using his or her knowledge of the facts (Duvall, 2007). Zimmerman, Sudweeks, Shelley, and Wood (1990) formalized the advantages of each type of test item as illustrated in Table 1.

Table 1 – Comparative Advantages of Each Type of Test Item		
Test Item Element	**Essay Test**	**Objective Test**
Instructional Objectives Measured	Does not measure recall or knowledge of facts efficiently Can measure understanding, application, and other more complex outcomes	May be designed to measure understanding, application, and other more complex outcomes as well as recall.
Item Preparation	Fewer test items; may require less extensive preparation	Requires a relatively large number of test items; necessitates extensive preparation
Sampling of Course Content	Generally, quite limited because a small number of questions (sampling)	Large number of questions permits a broader sampling of course content
Structure of Task	Less structured, but may be influenced by writing ability or by bluffing	Highly structured, but may be subject to guessing
Encouragement to Candidates	Encourages organization, integration, and effective expression of ideas	Encourages development of broad background of knowledge and abilities
Scoring	Time-consuming; requires use of special measures for consistent results	Easily accomplished, with consistent results; usually marked only right or wrong

The CHCC prefers the objective multiple-choice item format because this item-type can be written to evaluate higher levels of learning, such as integrating life care planning literature

from multiple areas of health care disciplines, critically evaluating data, and contrasting and comparing information (Clegg & Cashin, 1986). Additionally, Gross (1980) documented that psychometric research suggests that multiple-choice items are the most reliable and valid of the objective item formats.

The CLCP examination incorporates the multiple-choice item format because it is one format that is scored easily and quickly, and meets the CLCP test objectives well: measuring the candidate's basic knowledge of life care planning service development and delivery. Burton, Sudweeks, Merrill and Wood (2006) stated that the type of item to use is best determined by the test objectives. They documented the following test objectives with the most preferred test-item type illustrated in Table 2.

Table 2 – Objective Test Item Comparison		
Education Objective	**Multiple-choice item OK?**	**Reason (appropriate item type if not Multiple-choice)**
Writes complete sentences	No	Response must be supplied by candidate (Essay)
Identifies errors in life care planning service delivery	Yes	Response may be selected
Expresses own ideas clearly as applied to life care plan development	No	Response must be supplied by candidate (Essay)
States opinions and provides resolution strategies to a panel of examiners	No	Response must be supplied by candidate (Oral)
Identifies life care planning components	Yes	Response may be selected

Thus, the CLCP multiple-choice examination is of the most suitable item format since the test-objective is measured by having the candidate select his or her response from a list of several alternative responses. This is not to say that the CHCC does not administer other types of certification examinations based on varying test-objectives. The CLCP Fellow examination is a combination of oral statements of problem resolution based on case studies in addition to the written multiple-choice examination.

Multiple-choice items are preferred over other item-formats for a variety of reasons. Clegg and Cashin (1986) documented the following reasons as justification for use of the multiple-choice item over any other item format:

1. ***Testing the Breadth of the CLCP Candidate's Learning (Training):*** Multiple-choice items offer the opportunity to sample a greater breadth of learning than do questions that require a lot of writing. Because multiple-choice items take less time to answer, a greater sample of knowledge can be assessed of the candidate through the increased volume of test-items.

2. ***Testing a Variety of Levels of Learning:*** Multiple-choice test items are extremely flexible such that they can test a candidate's ability to think critically as well as solving problems effectively.

Zimmerman et al. (1990) devised a table format identifying the advantages of objective and subjective items. Their conclusions are presented in Table 3.

Table 3 – Advantages of Objective and Subjective Tests		
	Subjective (Essay) Test	**Objective test**
Instructional Objectives Measured	Does not measure recall or knowledge of facts efficiently Can measure understanding, application, and other more complex outcomes	May be designed to measure understanding, application, and other more complex outcomes as well a recall
Item Preparation	Fewer test items; may require less extensive preparation	Requires a relatively large number of test items; necessitates extensive preparation
Sampling of Course Content	Generally, quite limited because a small number of questions	Large number of questions permits a broader sampling of training content
Structure of Task	Less structured, but may be influenced by writing ability or bluffing	Highly structured, but may be subject to guessing
Encouragement to Candidates	Encourages organization, integration, and effective expression of ideas	Encourages development of broad background of knowledge and abilities
Scoring	Time-consuming; requires use of special measures for consistent results	Easily accomplished, with consistent results; usually marked right or wrong

Chapter 2: Advantages and Disadvantages of the Multiple-choice Item

The advantages and disadvantages of the multiple-choice item format are well documented in the literature and are presented in this document to educate the tem-writer as to why multiple-choice items are a favorite format in health care certification examinations. Knowledge of the application and utility advantages of the multiple-choice format assists the item-writer in structuring valid and reliable items that follow specific topical areas in life care planning research on which the CLCP examination is based.   Test reliability through multiple-choice item applications is achieved through the large number of multiple-choice test items that can be developed for a given content area, which provides for a broad coverage of concepts that can be tested consistently (Collins, 2002). Furthermore, multiple-choice test items are less susceptible to guessing than are true-false test items and are able to produce more reliable scores. Multiple-choice test items scoring is concise as compared to essay type items, and because multiple-choice test items are objectively scored they are not susceptible to scorer inconsistencies as are essay questions. More importantly, they are essentially immune to the influence of bluffing and writing ability factors, both of which can lower the reliability of essay test scores (Burton et al., 1991).

Validity is determined by referencing items to specific research content areas identified in the Turner, Taylor, Rubin, and May (2000) role and function study that identified specific categories of expertise and subset skill areas. Burton et al. (1991) noted that validity is established by the multiple-choice item concept that a broader sample of life care planning content can be assessed in a time-limited testing period, and thus the test scores will likely be more representative of the candidate's overall knowledge of life care planning service delivery. Test-validity (not to be confused with "Item Validity") is achieved by surveying a sample of the Certified Life Care Planner population using the Test Validation and Analysis Program (TVAP) (2005).

The advantages of using multiple-choice test items over other item formats focus on their propensity for being versatile, reliable, valid and efficient. Duvall (2007) and Burton et al. (1991) identified the following list of advantages multiple-choice items have over other objective and subjective test items:

- ✓ Versatility in application: This type of test item can be used to measure a variety of life care planning test-objectives, and are adaptable to various levels of

learning outcomes, from single recall of knowledge to more complex levels. The complex levels may include:

- ➢ Analyzing phenomena
- ➢ Applying principles to new situations
- ➢ Comprehending concepts and principles
- ➢ Discriminating between fact and opinion
- ➢ Interpreting cause-and-effect relationships
- ➢ Interpreting charts and graphs
- ➢ Judging the relevance of information
- ➢ Making inferences from given data
- ➢ Solving problems
- ✓ High reliability test scores
- ✓ Scoring efficiency and accuracy
- ✓ Objective measurement of certification candidate achievement or ability
- ✓ A wide sampling of content or objectives
- ✓ Reduced guessing factor when compared to true-false items
- ✓ Different response alternatives which can provide diagnostic feedback

The disadvantages of multiple-choice items do not outweigh the advantages by any means. For example, Burton et al. (1991) noted that versatility of multiple-choice items suffers through the lack of multiple-choice items' adaptability to measuring certain learning outcomes, which include the candidate's articulation of explanations, his or her display thought processes, the candidate's ability to organize personal thoughts, produce original ideas, and to provide examples. These shortcomings focus on more remedial educational settings and objectives, and are not considered essential in the testing of one's knowledge of a service delivery system as applied to one's case management practice. However, Clegg and Cashin (1986) offered more pragmatic examples of how multiple-choice items can be a disadvantage as compared to other test-item formats, which include:

1. Multiple-choice items are open to misinterpretation by candidates who read more into questions than was intended
2. Multiple-choice items may appear too picky to candidates, especially when the items are well constructed

3. Multiple-choice items create anxiety among some certification candidates due to the level of intellectual effort required when choosing the best applied answer among the correct answer and accompanying distractors.

4. Multiple-choice items deny demonstration of knowledge beyond the range of options provided

5. Multiple-choice items are difficult to phrase so that all candidates will have the same interpretation

6. Multiple-choice items take time and skill to construct effectively

7. Multiple-choice items encourage guessing, since one option is correct.

Regardless of the advantages and disadvantages, the multiple-choice test item is the most commonly used type of test item used in educational assessment (Cheung & Bucat, 2002; Collins, 2002). The efficient scoring of the tests as well as the control of any rater-bias when reviewing test-item choices makes this format the optimum choice for the CLCP Examination. A summary of the key advantages and disadvantages of multiple test items are presented in Table 4, as documented by Boker (2007).

Table 4 – Summary of Advantages and Disadvantages of Multiple-choice Test Items		
	Advantages	**Disadvantages**
Multiple-choice	☺ Can measure all levels of candidate's ability ☺ Enables wide sampling of subject content ☺ Quick and easy to score ☺ Enables objective scoring ☺ Can be analyzed for effectiveness	☹ Difficult to construct good items ☹ Item construction is time-consuming ☹ Tendency to measure simple recall ☹ Can be anxiety-provoking

Chapter 3 – Anatomy of a Multiple-choice Test Item

The multiple-choice item contains 3 divisions: 1) the **Item Stem**, 2) the **Correct Answer**, and 3) **Plausible Distracter Answers** (Author, 2006; Somma, 2007). The **item stem** establishes the question or problem to be investigated and answered, while there is only one **correct answer** offered out of the four possible answer choices. The three **plausible distracters** are plausible

incorrect answers to the item stem question, or plausible incorrect words or phrases to complete the item stem statement. The "dissected" multiple-choice item is presented in Figure 1.

Figure 1 – Parts of a Multiple-choice Item

ITEM STEM

An acquired brain injured person experiences the onset of grand-mal seizures, which is another name for:

CORRECT ANSWER

Tonic-clonic seizures

PLAUSIBLE DISTRACTERS

Partial elementary seizures
Partial complex seizures
Petit mal seizures

It is important that all items remain independent of one another, such that a subsequent item's correct answer is not dependent on the previous item's correct answer. Furthermore, terminology used in the items should be of that which is customary in the specific area of life care planning that is examined.

Multiple-choice items can be written in several formats. Burton et al. (1991) and Author (2006) documented several formats of multiple-choice items that included:

1. *Single Correct Answer (Single Items)*: Single items are those that stand-alone and do not depend on multiple-item, scenario-related, background information. The item in Figure 1 is a "single" item. The computerized, online version of the CLCP examination contains only single multiple- choice items. Single items can be expressed either as a complete question or as an incomplete statement. Fill-in-the-blank stems should be avoided. Breaks in the stem unnecessarily impede clarity and can cause confusion (Gross, 1980).

2. *Best Answer*: The best-answer item presents only one correct choice, but the distractors can contain some correct information. This format can be extremely difficult for the candidate taking the exam, and time-consuming as well as

difficult for the item-writer who constructs the item. An example of the Best Answer item is illustrated in Figure 2.

Figure 2 – Best Answer Multiple-choice Item

Partial seizures may follow acquired brain injury, and usually:

      a. Are termed "petit mal" seizures associated with jerking movement of the extremities
      b. Are termed "petit mal" seizures associated with two or more systems
      c. Are termed "petit mal" seizures associated with a loss of consciousness
  *   d. Are termed "petit mal" seizures and are associated with déjà vu experiences

3. *Negative Answer*: This item format is unique because the certification candidate is directed to identify either the alternative that is an incorrect answer, or the alternative that is the worst answer. This format can be applied easily to all of the other formats described herein. An example of this format is illustrated in Figure 3.

Figure 3 – Negative Answer Multiple-choice Item

All of the following are true of Petit mal seizures except:

      a. Petit mal seizures are associated with one system
      b. Petit mal seizures are categorized as either elementary or complex
      c. Petit mal seizures may involve the loss of consciousness
  *   d. Petit mal seizures are generalized seizures that follow grand mal seizures

Negative items for inclusion in the CLCP examination are not accepted. Negative items require a candidate to know an incorrect answer rather than the correct answer, and just because the candidate knows the incorrect answer that does not necessarily mean that he or she knows the correct answer. Additionally, most people have difficulty understanding the meaning of negatively-phrased items. Cheung and Bucat (2002) noted that test candidates often read through the

negative terms such as *not*, *no*, and *least*, and forget to reverse the logic of the relation being tested.

4. ***Multiple Response***: This item format contains two correct answers and two distracters. The candidate is requested to identify the two correct answers.

Figure 4 – Multiple Response Multiple-choice Item

Partial seizures may follow acquired brain injury, and usually:

       *   a. Are termed "petit mal" seizures associated with jerking movement of the extremities
           b. Are termed "petit mal" seizures associated with two or more systems
       *   c. Are termed "petit mal" seizures without a loss of consciousness
           d. Are termed "petit mal" seizures and are associated with déjà vu experiences

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The scoring of this item requires some adjustment in the scoring process. The decision must be made that either the item will be counted as "correct" if only one of the two correct answers is selected (a distracter is selected in the place of the second correct answer), or the item is scored on an all-or-none basis. The disadvantage of scoring the item as 'correct" if only one of the two items is correctly identified is that this candidate receives the same score for the item as a candidate who correctly identified both correct choices. The all-or-nothing method is not a format many computerized scoring software can adjust to, and therefore, this item type is not recommended for multiple-choice testing.

5. ***Combined Response***: The combined response item involves one or more of the alternative answers as being correct, whereas the remaining alternatives serve as distractors. The candidate is directed to identify the correct answer or answers by selecting one of a set of letters, each of which represent a combination of alternatives. Please review the example offered in Figure 5.

Figure 5 – Combined Response Multiple-choice Item

Partial seizures may follow acquired brain injury, and usually:

    1. Are termed "petit mal" seizures associated with jerking movement of the extremities
    2. Are termed "petit mal" seizures associated with one system
    3. Are termed "petit mal" seizures without a loss of consciousness
    4. Are termed "petit mal" seizures and are associated with déjà vu experiences

The correct answer is:

    a. 1, 2, and 3.
    b. 1 and 3.
 * c. 2 and 4.
    d. 4 only.
    e. 1,2,3, and 4

This item-type is not recommended because it shares the disadvantages of all-or-none scoring with the multiple-response variety, and has the added disadvantage of providing clues that help CLCP candidates with only partial knowledge detect the correct combination of alternatives. The above example can be answered correctly if the candidate knows that alternatives 1 and 4 are both correct, and since 1 and 4 are not listed as a combined alternative, deductive reasoning tells us that the correct combination must be "e." Thus, this item-type is not accepted for the CLCP examination.

6. *Scenario Items*: Scenario items require comprehensive thought processes that may require analytical thinking as well as knowledge of specific applications of service delivery regarding the CLCP candidate. This particular item stands alone and contains background information applicable to multiple items. It may contain text, graphics, tables, or formulas, and it describes a situation involving equipment, activities, operations, processes, conditions, or additional context that the CLCP candidate must understand and have a working knowledge in order to answer each scenario correctly. The scenario example is offered in Figure 6.

Bear in mind that a scenario can have as many as 6 scenario items associated with it.

Figure 6 – Example of a Scenario and Related Scenario Items

SCENARIO

A 34 year old male sustained a compression fracture at the L1-3 intervertebral discs. Subsequent surgeries included iliac crest bone graft fusion with Dynalok hardware for internal fixation. The patient is approximately 16 months post surgery with complaints of ongoing and persistent dull, aching and unbearable pain. The leg pain and any radiculopathy have been alleviated. Symptoms have stabilized to where the patient can function at a sedentary exertional demand level, but not in the heavy equipment operator's position he had at the time of the injury. The attending physician has also removed him from any construction industries or trade occupations. The patient is referred for a comprehensive vocational evaluation which includes a psychological screening.

SCENARIO ITEM 1

ITEM STEM: The first step towards placing this person in the most suitable job category is to determine his personality type and his tendency for expressing pain. One of the most relied upon tests designed to generate such information is the:

CORRECT ANSWER   a. Minnesota Multiphasic Personality Inventory

DISTRACTERS
b. Stanford-Binet Intelligence Scale
c. Wechsler Adult Intelligence Scale
d . Edwards Personal Preference Schedule

The scenario item is a good means for requiring the certification candidate to analyze data, to process, and to recall specific information regarding the scenario subject. It encourages an individual to draw from their education, background, and training experiences to answer the item, more so than from their immediate recall or from rote memory. The scenario and the single correct answer multiple-choice item formats are the preferred formats for the CLCP examination.

Chapter 4: Content Areas of the CLCP Examination

Before an item can be generated and written into final form, the item-writer must establish specific objectives that identify knowledge areas within the life care planning service delivery system. These objectives formulate the basis of each item and what the item-writer wishes to measure in terms of the CLCP candidate's knowledge-base. In other words, good test item writing begins with identifying the most important information or skill that is to be assessed of the candidate (Boker, 2007; Burton et al., 1991; Collins, 2002). Establishing objectives in determining what knowledge areas of life care planning service delivery one wishes to test requires a blueprint, or a systematic arrangement of knowledge and skills on which the item is based, and the domains under which life care planning test-items are categorized. Such a blueprint is provided in Table 5 which includes one of the sixteen domains of knowledge required in providing life care planning services and the knowledge and skill subsets as researched by May and MoradiRekabdarkolaee (2000).

Table 5 - Blueprint Item Writing for Certified Life Care Planner Examination CLCP
Domain 4: Litigation Support
Knowledge and Skill Responsibility – 4 These items address the Certified Life Care Planner's consultation role in providing 1) expert opinions, 2) deposition, and 3) witness-stand testimony for disability-related cases in litigation.

Knowledge	Skills
1. Assessment Consultations 2. Settlement Negotiations 3. Expert Witness 4. Long-Term care consultation	1. Add the case to your list of cases for Federal Rules of Evidence purposes, marketing, etc. 2. Assists with the development of information for settlement negotiations for legal representatives 3. Consults with a plaintiff attorney to reasonably map out what long-term care services will be needed for the evaluee

Table 5 – Blueprint Item Writing for Certified Life Care Planner Examination CLCP	
Domain 4: Litigation Support - Continued	
Knowledge	**Skills**
5. Report interpretations 6. Economics consultation 7. Expert Recommendation 8. Court/Deposition examination consultation	4. Add the case to your list of cases for Federal Rules of Evidence purposes, marketing, etc. 5. Assists with the development of information for settlement negotiations for legal representatives 6. Consults with a plaintiff attorney to reasonably map out what long-term care services will be needed for the evaluee 7. Consults with a defense attorney to reasonably map out what long-term care services will be needed for the evaluee 8. Provides information located in the LCP to an official of the court 9. Advises the evaluee's attorney on the cross-examination of opposing counsel's expert witness 10. Recommends other expert witnesses to an evaluee's attorney when appropriate 11. Advises defense attorney on the cross-examination of plaintiff counsel's expert witness 12. Review the plaintiff's plan and develop a rebuttal or comparison plan when consulting with defense attorneys

The blue print is divided into four sections; 1) Domains, 2) Responsibilities, 3) Knowledge, and 4) Skills. Please note that there is only one Domain presented in Table 5. The remaining fifteen Domains are identified in the ***Role and Function Knowledge Domains and Essential Functions (Sub-factors)*** section at the very end of this document. For the purpose of this manual and for the reader's training benefit, item examples focus on **Domain 4 - Litigation Support.** The item-writer is requested to base the submitted items on the knowledge and skills of the 3 responsibilities presented under Domain 4. Additionally, the item-writer is required to categorize each item completed using the following format:

Table 6 – Item Classification Scheme Example

|	
Item Classification	
Domain	4
Responsibility	1
Knowledge/Skill	1/2

An example of a completed item with item classification documentation is presented in Figure 7.

Figure 7 – Item Documentation for Submission to CHCC

PROPOSED ITEM

When determining damages of a client in a personal injury case referred by the plaintiff counsel, the certified life care planner assesses special and general damages. Special damages refer to:

      a. **Pain and suffering (physical and emotional)**
      b. **Loss of function**
      c. **Emotional pain of disfigurement**
   * d. **Medications and treatment supplies**

Reference:
      Klepatsky, A. K. (2003). Principles of evaluating personal injury cases. In Iyer (Ed.), <u>Legal nurse Consulting: Principles *and* Practice</u>, 2nd Edition. Boca Raton: CRC Press, pp. 345-369

Item Classification:

Domain   **1**

Responsibility   **3**

Knowledge/Skill   **1/1**

All of the items will come from Domain 4, so that point is a given. The item-writer may choose which of the three Responsibilities to apply to each respective item, as well as what knowledge and skill the respective multiple-choice item objective includes for assessment. Please note that all items require a reference from the field of literature that can be applied to the life care planning service delivery process. The reference citation is based on the American Psychological Association's (APA) literature citation format, and can be obtained as detailed in Figure 8.

Figure 8 – Publication Manual of the American

Psychological Association, 7ᵗʰ Edition
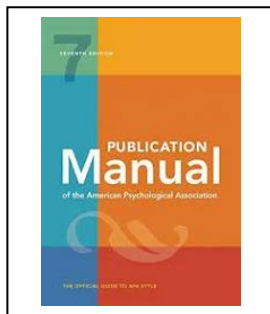
It is easy to "get lost" in the item writing protocol, especially when attempting to identify the Responsibility and the Knowledge and Skill areas that refer to the respective item under development. It is highly recommended that the item writer locate the literature from which he or she wishes to associate the item objective, review the literature, write the stem and document the correct answer. The distracter responses should be developed following the documentation of the correct answer. Once this has been completed, the item-writer should review the Blueprint as presented in Table 5 to determine which Responsibility, Knowledge and Skill base apply to the respective item. It is further recommended that if the item-writer is to submit 10 or more items, it is best that he or she try to disperse items evenly among the three Responsibilities as presented in the Blueprint, Table 5.

The item-writer's primary guide for writing CLCP examination items is well established through the Blueprint of knowledge and skill areas identified in Taylor's et al. (2000) research of life care planners' roles and functions. It is important that the item-writer understand the application of the Responsibilities throughout the alternate-form examinations that are administered online and that are reviewed within the 100 test items. Understanding the application of Responsibilities assists the item-writer with effectively applying items to the three tasks of which the certification candidate should demonstrate when searching for the correct choice among the multiple-choice test items. The three tasks include: 1) **Know Specific Facts**, 2) **Understands Concepts**, and 3) **Applies Principles**.

<u>**Know Specific Facts**</u>: This task is the easiest of the three tasks illustrated in Table 7 below. Facts are identified easily and are derived from many aspects of life care planning, more notably, the disabilities, medical conditions and/or diagnoses that constitute life care plan service delivery. A fact may address medical complications related to any one of the disability groups or

medical conditions that typify the life care planning process, such as, acquired brain injury, amputation, spinal cord injury, burn disorders, and any number of other conditions. Other facts may request a knowledge of characteristics of each of the above mentioned disability groups, or perhaps a treatment or rehabilitative process applied to the acute stage of the disability-type.

Understand Concepts: "Understand concepts" may be applied to various processes utilized in the three Responsibilities illustrated in the Blueprint found in Table 5. For example, **Responsibility 1** - **Assessing Client's Medical and Independent Living Service Needs** may involve the concept of compensatory mechanics and an adjustment in one's weight bearing mechanics and gait-pattern changes resulting from above-knee (AK) versus below-knee (BK) amputation on the individual's lumbar spine. Another concept may address the sensorial changes a person experiences as a result of one's adventitious loss of sight. Regarding **Responsibility 2 – Vocational Assessment**, the item writer may want to establish an item objective for the concept of transferability of skills, the RAPEL Method developed by Weed (2004), as well as the concept of validity and reliability in vocational evaluation and testing. It is obvious that this task-area requires a significant amount of review of the literature and research to effectively develop acceptable multiple-choice test items.

Applies Principles: Not to be confused with the **Understand Concepts** task, applying principles requires a broader reference to various aspects of life care planning service delivery and ancillary services that may evolve as a result of the litigious process and care-plan recommendations. Applying principles may refer to Principles of Professional Conduct (ethics) outlined in the ***CHCC Handbook of Practice Standards and Ethical Guidelines***, or principles of any forensic rehabilitation characteristic that may include the principles of damages, principles of labor market analysis and their application to the care-planning process, and principles of life care plan development.

As noted above, the distribution of the items requiring the application of one of the three tasks should be evenly distributed among the three Responsibilities. However, the ideal concept and the scope of reality never seem to match. The CLCP examination should demonstrate the spread of tasks among the three Responsibilities as illustrated in Table 7.

Table 7 – Ideal Task Distribution Among the Three Responsibilities

Responsibility Content	TASK			Totals
	Knows Specific Facts	Understands Concepts	Applies Principles	
Domain 1 Care Plan Development	30	15	5	50
Domain 3 Vocational Consideration	5	10	5	20
Domain 4 Consultant Services to the Legal System	5	20	5	30
Totals	40	45	15	100

This information is provided to assist the item-writer with better understanding how the 100 items should be dispersed within the whole examination. The point to remember is that the items submitted by the item-writer should be dispersed in ratio to the scheme presented in Table 7 as best as can be achieved. The above Table only *suggests* the optimum distribution of tasks among Responsibilities, and therefore the item-writer should only consider the above scheme as a flexible guideline.

Chapter 5 – Specific Guidelines for Writing CLCP Multiple-choice Items

There are many "Do's and Don'ts" documented in the literature with reference to writing the multiple-choice test item. Boker (2007), Burton et al. (1991), Clegg and Cashin, 1986), Cheung and Bucat (2002), Collins (2002), Devine and Yaghlian (2007), Duvall (2007), Frary (1995), Gross (1980), and Somma (2007) collectively offer over 80 rules for writing multiple-choice items. Due to space limitations and for the convenience of the item-writer, these rules are summarized in a listing format with some item examples offered for clarification.

Stem and Distracter Development

Stem: The stem can be written in either a question or statement format, determined by the item-writer's preference; the CHCC does not hold any preferences for one format over the

other. Gross (1980) suggested that preference to the item-writer is dictated by ease, simplicity, and clarity of wording. Somma (2007) suggested that the Stem part of the item should:

1. Provide sufficient information
2. Avoid extra information
3. Be grammatically correct
4. Avoid clues that help give away answers
5. Avoid negatives and absolutes
6. Avoid second person

Provide sufficient information: The stem is the most important part of the item, and therefore requires the most attention since the subsequent correct answer and distracters are dependent upon the stem's objective. The stem should be written so the certification candidate knows what the focus of the item is, and should contain the main idea of the statement or question. The certification candidate should always know what is being asked in the item after reading the stem; the problem should be able to be identified without a need to review all of the distracters and correct answer.

The item-writer should avoid a stem that begins, "Which of the following is true [or false]?" followed by a collection of unrelated options. Each multiple-choice item should focus on some specific aspect of the Blueprint presented in Table 5. Therefore, "Which of the following is true [or false] with respect to X?" is an acceptable stem, but should be used sparingly in the item pool to be submitted to the CHCC.

POOR EXAMPLE

Which of the following is true?:

* * a. Causation refers to determining resulting damages, whether special or general
   b. A motorized wheel chair is recommended for all spinal cord injuries
   c. Medications and treatment supplies are included in special damages
   d. Pain and suffering (both physical and emotional) are included in special damages

---

ACCEPTABLE EXAMPLE

Which of the following is true regarding *special damages*?:

    a. Causation refers to determining resulting damages, whether *special* or *general*

*   b. Loss of enjoyment of life is applied to *special damages* as well as *general damages*

    c. Medications and treatment supplies are included in *special damages*

    d. Pain and suffering (both physical and emotional) are included in *special damages*

Avoid Extra Information: The stem should be brief (short) and to the point; only the necessary information should be included. The item-writer should avoid writing stems that have a tendency to "teach" to the certification candidate, such as statements that are informative but not necessary in order to select the correct option (Collins, 2002). It is important that superfluous information be excluded as an introduction to a question, which has a tendency to interject trickery or misleading stem information when the certification candidate reviews the four-listed options. In essence, stems should avoid verbosity, extraneous material and "red herrings."

Stems should be structured so that one, and only one option can be substantiated and that option should be indisputably correct. This is not to suggest that clues should be integrated in the stem structure, such as adding key stem verbiage in only the correct option. Rather, the distracters should be consistent in length and wording, and the stem should be free of any clues that may relate to only the correct answer.

Be grammatically correct: What needs to be said is that the item writer should ensure that the sentence structure is grammatically correct and follows common English grammatical rules. Thus, one needs only to turn on the "grammar" check that is included with many of the current word processors' spell checks to ensure that the item's grammar follows common grammatical rules of English. There is nothing more embarrassing than having a certification candidate correct a grammatical error with a note written on the test booklet detailing your grammatical blunder.

Avoid negatives and absolutes: Negatively phrased items require twice as much working memory as positively phrased items (Somma, 2007). Additionally, these items have a

tendency to be referred to as "tricky" in nature, and often the certification candidate spends more time on this type of item than on a properly phrased items. Additionally, the absolute terms "all," "only," "never," "always," "none," and "not" should be avoided at all costs as well as the phrases ""which is not true" and "all of the following except." The examples of poor and acceptable worded stems are presented below.

STEM POOR EXAMPLE

Which of the following is **_not_** considered as *Special Damages* in personal injury cases?"

STEM ACCEPTABLE EXAMPLE

Which of the following best distinguishes between *Special Damages* and *General Damages* in personal injury cases?"

Blank Stems: This item-type has not been approached up to this point in the manual, but is deserving of some review. Cheung and Bucat (2002) noted that the stem may be written as an incomplete statement that needs to be completed by insertion of the correct option into the stem, which is better referred to as "fill-in-the-blank." This is not an unacceptable format, but some issues have arisen through research as cited in Cheung and Bucat (2002). For example, the certification candidate has to retain the stem in short-memory while completing the stem with each option, causing some delay in a timed-test completion and some frustration on the part of the certification candidate. Additionally, test anxiety is noted to be higher with this stem format. If this format is unavoidable, the omission, or "blank" should occur towards the end of the stem rather than in the middle or at the beginning. An example of a blank multiple-choice item format is illustrated in Figure 9.

Figure 9 – Blank Multiple-choice Item Format

> **BLANK STEM FORMAT**
>
> **The client's attorney wishes to know the specific medication needs and treatment supplies that the client will need over the remaining life span. This is one form of establishing _____ .**
>
>   a. **General Damages**
>   * b. **Special Damages**
>   c. **Punitive Damages**
>   d. **Personal Damages**
>
> **Reference:**
>   **Klepatsky, A. K. (2003). Principles of evaluating personal injury cases. In Iyer (Ed.), <u>Legal nurse Consulting: Principles and Practice</u>, 2nd Edition. Boca Raton: CRC Press, pp. 345-369**
>
> **Item Classification:**
>
> **Domain**   **1**
>
> **Responsibility**   **1**
>
> **Knowledge/Skill**   **1/2**

Distractors: Writing distractors is the most challenging aspect of writing multiple-choice items. Basically, distractors are statements that are accurate but do not fully meet the requirements of the problem, and they seem right to the certification candidate (Collins, 2002). Collins (2002 suggested that good distractors evolve by asking questions such as, "What do people usually confuse this entity with?," "What is a common error in interpretation of this finding?" or "What are the common misconceptions in this area?"

The rules for writing distractors mirror those that apply to writing multiple-choice stems. The key components of writing good distractors include but are not limited to the following:

1. Each item should have a minimal of one correct answer and three distractors. The CHCC accepts no less and no more than four options under each stem, although research has shown that three-option items are as effective as four-choice options (Collins, 2002).

2. All choice options or distractors should follow grammatically from the stem and be parallel in grammatical form. This tenet is violated often through the phrasing of the option as it relates directly to the stem. Grammatical cues surface when there is a conflict between the stem and the distractor in terms of verb tense, plural versus singular notation, and consistency in beginning each distractor with either a consonant or vowel. If the stem is in past tense all of the options should be in past tense. If the tense calls for a plural answer, all the options should be plural, and the stem and options should have subject-verb agreement. The following example demonstrates these points.

POOR ITEM

Record review and analysis of the referred client's medical file by the Certified Life Care Planner should include *an*:

    a. **D**etailed note-taking and outlining of all case elements in a timeline
    b. **C**olored highlighting of critical elements of the original medical record
 * c. **A**ssurance that all appropriate pages of the record are present
    d. **A**dvisement of the attorney that a detailed written report is essential

---

Please note that two choice-options begin with a consonant while two of the choice-options begin with vowels. The stem ends in an indefinite article that modifies the noun that begins with a vowel. Thus, the certification candidate knows that choices "a" and "b" are incorrect since the indefinite article of the stem modifies two adjectives that begin with consonants, and therefore can be excluded from the choices. This raises the chance of guessing the correct answer to 50%, thus weakening the item in terms of its validity and by lowering the level of learning required to select the correct answer.

3. Distractors should be related or linked to one another, but independent of one another such that one distractor does not provide a clue to the correct answer. For example, a stem's objective is to test the certification candidate's knowledge regarding the types of damages in personal injury cases. Thus, the item-writer includes information that could address Special Damages, General Damages, and Punitive Damages. While the items are consistent in terms of a "Damages-Type", they are independent of one another by definition and should be worded as such. Please note the example offered in Figure 10.

Figure 10 – Related or Linked Independent Distractors

> The attorney requests that the life care planner identifies the client's costs of travel to and from medical appointments and the need for assistive devices, all of which fall under the category of
>
>   a. Special Damages
>   b. General Damages
>   *c. Personal Damages
>   d. Punitive Damages

All distractors are related and linked to "*damages*," and yet each distractor is independent of the other in terms of its type and its defined characteristics. There is a clear right-answer among the four choice-options, independent of the distractors. Additionally, make sure that the distractors fall into the same category as the correct answer.

4. All distractors should be plausible. The intended answer should be clearly correct to the well-informed certification candidate, while the distractors should be definitely incorrect but plausible to those candidates who may not be so well informed. In other words, the correct answer and subsequent distractors should be homogeneous by nature. If the option consist of statements related to the stem but not to each other, the certification candidate's task becomes unnecessarily confusing. Alternatives that are parallel in content present a clear-cut problem more capable of measuring the attainment of a specific item objective (Burton et al., 1991).

5. All choice-options (i.e., correct answer and three distractors) should be as similar as possible to one another in terms of length and complexity. The tendency of item-writers is to make the correct answer substantially longer than the distractors. Cheung and Bucat (2002) noted that research has indicated that longer-worded options tend to result in higher response rates, whether correct or incorrect.

6. Avoid using "none of the above" or "all of the above" as an option. These phrases are tempting to use because they appear to fit into many items easily, and eliminate the need to develop an option that is similar to the other distractor options, and one that may be difficult to complete at the time due to the nature of the stem. Burton et al. (1991) expressed the weakness of these two distractor-types in tabular form, presented in Table 7

Table 7 – Use of Negatives and Absolutes in Distractors

Alternative	Use	Weakness
"All of the Above"	Correct Answer	Can be identified by noting that two or the other alternatives are correct
	Distractor	Can be eliminated by noting that one of the other alternatives is incorrect
"None of the Above"	Correct Answer	Measures the ability to recognize incorrect answers rather than correct answers
	Distractor	Does not appear plausible to some examinees

7. Spell out all acronyms and avoid using abbreviation. Once the acronym is spelled out, a subsequent reference to the subject can be in the form of its acronym, provided the acronym was first displayed immediately following the name of the referenced entity or organization.

This chapter has attempted to provide the item-writer a guide to writing acceptable items by following a set of rules on what to do and what not to do in the item-development process. This manual is not designed to write the items for the item-writer, nor to provide subject-matter ideas for item content; rather, it is designed to serve as a guide to make the process less difficult, confusing, but certainly rewarding and to improve upon the quality of the CLCP examination items. Admittedly, writing multiple-choice test-items is not easy for the individual who is just learning the process, and it remains to be somewhat of a challenge for the more experienced item-writer. However, through practice and submitting multiple items to the CHCC periodically, the process becomes easier and a preferred method for obtaining continuing educational units (CEU). Given the depth of information provided in this manual, the rules for general item writing, stem development, and general option (distractor) development are presented in Figure 11.

Figure 11 – Multiple-choice Item Writing Rules Check-list

General item-writing (procedure)

1. Use either the best answer or the correct answer format.
2. Avoid the complex multiple-choice format.
3. Format the item vertically, not horizontally.
4. Allow time for editing and revising items.
5. Use correct grammar, punctuation, and spelling.
6. Minimize examinee reading time in phrasing each item.
7. Avoid trick items that mislead or deceive examinees into answering incorrectly.

Stem development

1. State the stem in either question form or completion form.
2. When using the completion format, don't leave a blank for completion in the beginning or middle of the stem.
3. Ensure that the directions in the stem are clear, and that wording lets the examinee know exactly what is being asked.
4. Include only the material needed to make the problem clear. Don't add extraneous information.
5. Word the stem positively; avoid negative phrasing. If an item must be stated negatively, underline or capitalize the negative word.
6. Include the central idea and most of the phrasing in the stem.

General item-writing (content)

1. Base each item on a clearly stated objective or valid skill standard.
2. Focus on a single problem.
3. Keep the vocabulary as simple as possible.
4. Avoid cuing one item with another; keep items independent of one another.
5. Avoid over specific knowledge when developing the item.
6. Avoid textbook, verbatim phrasing when developing the item.
7. Avoid items based on opinions.
8. Develop items that measure higher level thinking.
9. Base items on important aspects of the content area; avoid trivial material.
10. Avoid potentially insensitive content or language.

General option development

1. Include four options.
2. Place options in a logical order, if one exists (e.g., numerical, alphabetical).
3. Keep options independent; options should not be overlapping.
4. Keep all options in an item homogeneous in content.
5. Keep the length of options fairly consistent.
6. Avoid, or use sparingly, the phrase "all of the above."
7. Avoid, or use sparingly, the phrase "none of the above."
8. Avoid the use of the phrase "I don't know."
9. Phrase options positively, not negatively.
10. Avoid distractors that can clue test-wise examinees; for example, avoid clang associations, absurd options, formal prompts, or semantic (overly specific or overly general) clues.
11. Avoid giving clues through the use of faulty grammatical construction. (Grammatical inconsistencies involving "a," or "an," for example, give clues to the correct answer.)
12. Avoid specific determiners, such as "never" and "always."

Figure 11 - Multiple-choice Item Writing Rules Check-list *(continued)*

Correct option development	**Distractor development**
1. Position the correct option so that it appears about the same number of times in each possible position for a set of items. 2. Make sure there is one and only one correct, or clearly best, answer on which experts would agree.	1. Use plausible distractors; avoid illogical distractors. 2. Incorporate common errors of certification candidates in distractors. 3. Use familiar yet incorrect phrases as distractors. 4. Use true statements that do not correctly answer the item. 5. Avoid the use of humor when developing options.

MULTIPLE-CHOICE – SCENARIO ITEM WRITING GUIDELINES

Situation	**Associated Multiple-Choice Items**
1. Provide directions to the student. 2. Provide sufficient information to adequately describe the situation. 3. Use correct grammar, punctuation, and spelling. 4. Base situations on realistic job-related activities. 5. Link each situation to one or more skills/tasks/competencies.	1. Include 3 - 8 multiple-choice items with each scenario. 2. Follow the "Multiple-choice Item Writing Guidelines". 3. Make sure that each item is linked to the situation. 4. Organize the items in a logical sequence.

Chapter 6 – Test-Construction Protocol

Item writing is only a portion of the test construction process, although a major one at that. There are procedures that must be implemented prior to and after the item has been written to be included as part of the examination. The examination construction process begins at the source of item development, that is, the item-writer, and ends with the Item Review Committee. This process includes a review of the item-writers' credentials, the training of the item-writer, the documentation of the acceptance of the items, editing/re-writing of the item in question, the item review process by the Committee, and the field testing of items.

Item-writer Qualifications and Training Curriculum: It is necessary to implement specific qualifications for item-writers in an attempt to ensure the field that the CHCC accepts items for its pool from qualified item writers. The CHCC requests that the individual submitting items is an individual who carries the CLCP credential, is in good standing with the Commission, and undergoes item-writing training using this manual as a writing guide. This is not to say that the item-writer must have experience in writing multiple-choice test items. On the contrary, we ask that the item-writer undergo on-site training using this guide as a basis for developing items. On-site training programs are offered by this Commission twice annually, and the Capital University Law School is licensed to conduct life care planner certification item writing workshops on its campus within their own schedule.

The CLCP item writing training courses are structured on the content of this manual. The following curriculum is offered by the CHCC and any institution it licenses:

1. Pre-Workshop Item Development: The attendee through pre-registration confirmation is instructed to download this manual that is posted on the CHCC web site, and to review it prior to attending the course. The CLCP participant is requested to write 10 items based on the item-writing protocol presented in this manual, and present them to the instructor on a removable disc coupled with a hardcopy of the items.

2. Item Review Discussion Groups: Each participant shares his or her items with the other attendees, and using this manual, each item is reviewed and restructured if necessary. The review of each item is done within the group of participants to which the item-writer is assigned.

3. Knowledge and Skill Area Identification: The skill and knowledge areas of which the items review are identified through a rational sort (Q sort) process by participants who are assigned discussion groups for item reviews.

4. Item-Validation: The goal at the end of the session is to have well-structured items based on the manual applications, and items that have been validated through the Q-sort process.

Documentation of Item Acceptance: Items that are accepted are placed in an electronic file kept on the main office system and backed-up using the online backup program. Additionally, item hardcopies are placed in the respective item-writer CLCP file, and notification of the items acceptance is sent (email or postage mail) to the item-writer, and the allotted CEUs are recorded in his or her file.

Item Editing: Items are edited for appropriate choice of Domains, Knowledge, and Skill areas that were identified in the Turner et al. (2000) Job Practice Role and Function Study. These are presented in the Blueprint illustrated in Figure 5, pages 262-264. The Commissioners assigned to the Item Writing Committee utilize a checklist during their review of each item, and is illustrated in Figure 12.

Item-Writing Check List

                                                                      Yes/No

1. The Domain is clearly identified in the item. _____

2. The item is assigned to the appropriate Domain _____

3. The Knowledge Base is correctly identified _____

4. The Skill Area is correctly identified _____

5. The length and wordiness of the distracters and the correct answer are symmetrical to the stem _____

6. The stem is appropriately worded in stating the problem and with respect to the distracters and correct answer _____

7. The distracters relate appropriately to the stem _____

8. Rules for distractor-types to avoid have been followed _____

9. Item is accepted as is _____

Item Field Testing: Once the items have been developed, submitted to the Item Writing Committee for review, accepted by the Committee, and the item-writer notified of their acceptance, field-testing of the item is engaged as the final step in the test-construction process. The items are added to the item pool which randomly assigns all items in the pool from position 1 to position 100. However, 10 additional items are added to the test that are grouped together and not randomized. These items are numbered 101 – 110. The CLCP candidate is requested to answer all 110 items, and the last 10 items are not counted against the score if answered incorrectly, but are credited towards the number of correct items if they are scored as correct. A frequency study of the number of times the item was scored as correct vs. incorrect is completed, and based on the frequency count, the item is either accepted as is, rewritten, or rejected altogether.

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Role and Function Knowledge Domains and Essential Functions (Sub-factors) - 2022

Factor 1 - Care Plan Development

Subfactor 1 - Initial Interview

14	Obtain HIPAA Release from referral source/injured person
26	Schedule Initial Interview/Home Visit
28	Perform face-to-face interview with injured person
29	During Initial Interview/Home Visit, document current medical condition
30	Document Current Medications During Initial Interview/Home Visit
31	Evaluate through observation or through test cognitive status During Initial Interview/Home Visit
34	Evaluate through observation physical limitations During Initial Interview/Home Visit
35	Assess the need for training in activities of daily living (ADLs) and instrumental activities of daily living (IADLs), such as cooking, shopping, housekeeping, and budgeting
37	Address needs/preferences of the evaluee and/or family
39	During Initial Interview/Home Visit makes notes of potential home barriers and identifies some potential home modification needs
40	During Initial Interview/Home Visit assesses presence of familial support system for the evaluee
41	Interviews immediate family members
42	Identify attitudinal, social, economic, and environmental forces that may present barriers and/or advantages to evaluee's rehabilitation
50	Examines the relationship between the evaluee's needs and existing functional capabilities
52	Assess injured person's potential for long-term independent functioning
53	Assess independent living and adaptive equipment needs.
54	Assess the need for transportation (e.g., adapted/modified vehicle with hand controls)
62	During Initial Interview/Home Visit documents current family members living in and away from residence
205	Conduct a comprehensive interview with the evaluee, his/her family and/or significant other(s), if possible

Subfactor 2- Referral Source Contact

15	Upon receipt of referral, communicate with referral source regarding specific case needs, projected time for LCP completion, and projected fee for completed life care plan
16	Request specific medical records

Subfactor 3 - Cost Analysis

36	If applicable, specifies cost for independent living and adaptive equipment needs for independent function/living
51	Determines costs of needed equipment for the injured person
67	Specifies cost for physical therapy services

68   Specifies the cost of speech therapy services
69   Specifies the cost of occupational services
70   Reviews current catalogs to determine the costs of assistive devices needed by the evaluee
78   Specifies cost for and replacement of orthotics and prosthetics (e.g., braces, ankle/foot orthotics)
80   Specifies cost for projected evaluations (e.g., PT/OT, SLP, individual counseling, family counseling, group counseling, family counseling, group counseling, marital counseling, etc.)
81   Specifies cost for projected therapeutic modalities (e.g., PT, 0T, SLP, individual counseling, family counseling, group counseling, marital counseling, etc.
82   Specifies cost for case management services
83   Projects associated costs for non medical diagnostic evaluations(e.g., recreational, nutritional) for the injured person
86   Specifies cost for architectural renovations for accessibility (e.g., widen doorways, ramp installations)
87   Specifies costs for evaluee's home furnishing needs and accessories (e.g., specialty bed, portable ramps, patient lifts)
90   Specifies cost for health/strength maintenance (e.g., adaptive sports equipment and exercise/strength training)
93   Determines costs of needed social services for the evaluee
108   Determines costs of needed medical services for the evaluee
121   Research pricing of medical recommendations
124   Research services costs and frequencies
161   Reviews current catalogs and web sites to determine the costs of needs and services
162   Provide fair and representative costs relevant to the geographic area or region

Subfactor 4 - Report Writing
47   Upon return to office, summarizes assessment/home visit
48   Maintains log of time and mileage
49   Contact attending physician and medical/rehabilitation providers
109   Documents and summarizes all meetings with medical and rehabilitative providers, and extraneous facilities.
110   Write the report to include a log of all resources contacted
111   Write the report to include a complete chronology of the medical and rehabilitation histories
112   Write the report to include demographic information
114   Write the report to include recommendations based on assessment of evaluee, home visit, review of all medical and rehabilitative records, and communications with medical and rehabilitative team members and providers
115   Present various health care options (facility vs. home care).
117   Write the report to include comorbid conditions
123   Apply knowledge of family dynamics, gender, multicultural, and geographical issues
127   Clearly state the nature of the evaluee's problems for referral to service providers

128   Apply knowledge regarding the types of personal care (e.g., hospital, extended care facility, subacute facility; home, hospice) when developing the life care plan

129   Recognize psychological problems (e.g., depression, suicidal ideation) requiring consultation or referral

138   Prepare case notes and reports using applicable forms and systems in order to document case activities in compliance with standard practices and regulations

142   Total all spreadsheets and check figures for accuracy

143   Finalize the plan and proof it

144   Itemize your bill for services

163   Synthesize assessment information to prioritize care needs and develop the life care plan

164   Compile and interpret evaluee information to maintain a current case record

165   Provide list and date of responses received from life care planning referral sources

166   Select evaluation/assessment instruments and strategies according to their appropriateness and usefulness for a particular client

167   As appropriate, review/utilize current literature, published research and data to provide a foundation for opinions, conclusions and life care planning recommendations

168   Use reliable, dependable, and consistent methodologies for drawing life care planning conclusions

169   Have an adequate amount of medical and other data to form recommendation

178   Address gaps in records and/or life care plan recommendations

186   Consider the impact of aging on disability and function when developing life care planning recommendations

200   As appropriate, rely upon qualified medical and allied health professional opinions when developing the life care plan

Subfactor 5 - Standards of Practice

131   Accept referrals only in the areas of yours or your agency's competency

132   Refrain from inappropriate, distorted or untrue comments about colleagues and/or life care planning training programs

133   Identify one's own biases, strengths, and weaknesses that may affect the development of healthy client relationships

134   Avoid dual/biased relationships, including but not limited to, pre-existing personal relationships with clients, sexual contact with clients, accepting referrals from sources where objectivity can be challenged (such as dating or being married to the referral source, etc.)

135   Be credentialed in your area of expertise that also provides a mechanism for ethics complaint resolution

136   Abide by life care planning-related ethical and legal considerations of case communication and recording (e.g., confidentiality)

137   Consider the worth and dignity of individuals with catastrophic disabilities

139   Monitor to ensure that the life care planning work is performed and that it meets standards and accepted practices

140   Disclose to the evaluee and referral sources what role you are assuming and when or if roles shift

158   Provide progress of life care plan development to retaining party
170   Apply knowledge of clinical pathways, standards of care, practice guidelines
176   When working with pediatric cases, keep abreast of guardian issues for protecting minors or those deemed mentally incompetent
190   Educate parties (e.g., attorneys, evaluees, insurance companies, students, family members) regarding the life care planning process
193   Stay current with the relevant life care planning literature
196   Belong to an organization that reviews life care planning topics and issues, as well as offers continuing education specifically related to the industry
197   Maintain continuing education in areas associated with your life care planning practice

Subfactor 6 - Forensics
148   Serves as an expert witness in court case for an individual who sustains a catastrophic injury or a non-catastrophic injury

Subfactor 7 - Communication Skills
159   Apply interpersonal communication skills (verbal and written) when working with all parties involved in a case

Subfactor 8 - Fee Schedule
187   Establish fee schedules (how much you or your practice charge) for life care planning services to be rendered

Subfactor 9 - Practice Analysis
194   Evaluate one's own practices and compare to ongoing evidence-based practice

Factor 2 - Needs Assessment
56   Determines needed medical supplies
57   Determines a feasible support system for the evaluee if none exists
58   Assess the need for home/attendant/facility care (e.g., personal assistance, nursing care)
59   Determines Assistive Devices needed by the evaluee
60   Determines evaluee's adaptive equipment needs
61   Provides an assessment of the evaluee's potential for self-care
63   Identifies the need for physical therapy services
64   Identifies the need for speech therapy
65   Identifies need for occupational therapy
66   Determines evaluee's need for counseling services (i.e., psychological intervention, licensed professional counselor services, licensed social worker, counseling services
72   Assess the need for wheelchair/mobility needs
73   Assess the need for wheelchair/mobility accessories and maintenance
74   Specifies cost for wheelchair/mobility needs
75   Assess the need for medications and supplies (bowel/bladder supplies, skin care supplies)

76   Assess the need for future routine medical care (e.g., annual evaluations, psychiatry, urology, etc.)

77   Assess the need for and replacement of orthotics and prosthetics (e.g., braces, ankle/foot orthotics)

79   Identifies the need for music therapy

85   Determines evaluee's home furnishings and accessories needs (e.g., specialty bed, portable ramps, patient lifts)

        88   Assesses the evaluee's recreational equipment needs

89   Assess the need for health/strength maintenance (e.g., adaptive sports equipment and exercise/strength training)

91   Identifies the need for nutritional counseling

92   Identifies the need for audiological services

95   Assess the need for case management services

179   Assess the need for projected evaluations (e.g., PT/OT, SLP, individual counseling, family counseling, group counseling, marital counseling, etc.)

180   Assess the need for projected therapeutic modalities (e.g., PT/OT, SLP, individual counseling, family counseling, group counseling, marital counseling, etc.)

181   Assess the need for diagnostic testing/educational assessment (e.g., neuropsychological, educational, medical labs)

Subfactor 1 - Service Recommendation

94   Recommend services that maximize functional capacity and independence for persons with catastrophic disabilities through the aging process

99   Evaluate and select facilities that provide specialized care services for evaluees

130   Include recommendations that are within your area of expertise

Factor 3 - Vocational Consideration

55   During Initial Interview/Home Visit gathers a work history from the evaluee

103   Either personally or through vocational rehabilitation consult referral, identifies the evaluee's need for long-term vocational/educational services

104   Either personally or through vocational consult referral, assesses the evaluee's need for vocational services

105   Either personally or through vocational rehabilitation consult referral, determines the evaluee's ability to pursue gainful employment

106   Either personally or through vocational rehabilitation consult referral, obtains information on past occupational/educational performance for purposes of vocational planning

107   Either personally or through vocational rehabilitation consult referral, specifies cost for long-term vocational/educational services for the injured person

202   Assess the need for short/long-term vocational/educational services

203   Specifies cost for short/long-term vocational/educational services

Subfactor 1 - Economist Consult

152   Consults an economist for an estimate of the lifetime costs of the LCP

Factor 4 - Litigation Support

146   Add the case to your list of cases for Federal Rules of Evidence purposes, marketing, etc.

147   Assists with the development of information for settlement negotiations for legal representatives

149   Consults with a plaintiff attorney to reasonably map out what long-term care services will be needed for the evaluee

150   Consults with a defense attorney to reasonably map out what long-term care services will be needed for the evaluee

151   Provides information located in the LCP to an official of the court

153   Advises the evaluee's attorney on the cross-examination of opposing counsel's expert witness

154   Recommends other expert witnesses to an evaluee's attorney when appropriate

155   Advises defense attorney on the cross-examination of plaintiff counsel's expert witness

156   Review the plaintiff's plan and develop a rebuttal or comparison plan when consulting with defense attorneys

Factor 5 - Knowledge Applications

174   Apply knowledge regarding legal rules (justification for valid entries in a life care plan may vary from state to state

175   Apply knowledge of health care/medical/rehabilitation terminology

182   Apply medical knowledge of potential complications, injury/disease process, including the expected length of recovery and the treatment options available

183   Apply knowledge regarding the interrelationship between medical, psychological, sociological, and behavioral components

184   Apply knowledge of human growth and development as it relates to life care planning

185   Apply knowledge of the existence, strengths and weaknesses of psychological and neuropsychological assessments

Subfactor 1 - Evaluee Interactions

160   Maintain contact with life care planning recipients in an empathetic, respectful, and genuine manner, and encourage participation

Subfactor 2 - Time Management

191   Use effective time management strategies when developing the life care plan

Factor 6 - Marketing

188   Promote and market the field of life care planning

192   Perform life care planning in multiple venues (e.g., personal injury, special needs trust, case management)

198   Obtain regular client feedback regarding the satisfaction with services recommended and suggestions for improvement in a life care plan

Subfactor 1 - Report Writing

71   Specifies costs for maintaining the evaluee's exercise equipment

84   Identifies the need for pharmaceutical counseling

97   Research and investigate the community to identify client-appropriate services for creating and coordinating agency service delivery

113   Write the report to include formatting the report template rather than an office clerical person

119   Write the report to include bibliography

Subfactor 2 - Process Evaluation

199   Perform program evaluations and research functions to document improvements in evaluee outcomes following life care plan development

Factor 7 - Information Sharing

43   Educate evaluee regarding his/her rights under federal and state law

44   Explain the services and limitations of various community resources to evaluees.

45   Apply advocacy, negotiation, and conflict resolution knowledge.

46   Educate evaluees how to facilitate choice and negotiate for needed services

96   Educate life care planning subject in modifying their lifestyles to accommodate functional limitations

Subfactor 1 - Invoicing

145   Send your bill with the report

Factor 8 - Data Collection

33   Observes or requests demonstration of activities of daily living During Initial Interview/Home Visit

38   During Initial Interview/Home Visit evaluates socio-economic status

125   Research literature for standard of care for client for national, regional, and local areas and include in report

Subfactor 1 - Expense Projection

126   Write the report to include bills the evaluee is expected to incur onetime only, monthly, annually, and remaining lifetime

Subfactor 2 - Resource Application

204   Apply financial management knowledge when working with evaluees (e.g., balance checkbook, banking, etc.)

206   Apply risk management knowledge as it relates to life care planning

Factor 9 - Report Preparation

25   Sorts medical records by medical provider(S)

32   Sorts medical records by facility

116   Write the report to include all graphs and tables.

118   Write the report to include category of need tables

Subfactor 1 - Marketing

12   Market LCP services through mailings, e-mail, presentations, etc.

189   Provide information regarding your organization's programs to current and potential referral sources

Factor 10 - Records Request
17   Request educational transcripts
18   Request vocational/employment records
19   Request financial records
21   Request social records if available (i.e., foster care, juvenile detention, adult detention)

Factor 11 - Professional Development
177   Attend conferences/workshops for continuing education to be applied to recertification
195   Attend professional conferences

Factor 12 - Report Writing
120   Write the report to include life expectancy
122   Write the report to include coding for costs
208   Utilize medical coding when developing a life care plan (e.g., CPT, ICD-9/10, HCPIC coder)

Factor 13 - Financial Resources
157   Apply knowledge regarding other funding sources as it relates to legal cases
171   Apply managed care (insurance industry) knowledge when developing life care plans
172   Apply knowledge regarding workers' compensation benefits within the state of injury as it relates to life care planning
173   Keep abreast of the laws, policies, and rule making affecting health care and disability-related rehabilitation service

Factor 14 - File Development

Subfactor 1 - Primary Data Collection
13   Obtain and sign retainer fee agreement from referral source

Subfactor 2 - Secondary Data Collection
20   Request deposition transcripts
27   Monitor evaluee progress and outcomes during the life care planning process
207   Obtain and review day-in-the-life videos of clients when developing a life care plan.

Subfactor 3 – Tertiary Data Collection
201   Have a physician review the life care plan prior to submission to referral source

Factor 15 - Collaboration
98   Makes referrals for assessments of the evaluee
100   Request meeting with treatment/rehabilitation team members
101   Request meeting with medical providers
102   Request meetings with extraneous entities that may include daycare facilities, education facilities, recreational facilities, etc.

Factor 16 - Records Review

22   Review medical records, associated summaries, and all other requested records

23   Review medical records from physicians, nurses, PTs, OTs, and speech therapists to assess the evaluee's medical status

24   Sorts medical records by chronological order

Subfactor 1 - Objectivity

141   Remain objective in your assessments