

Job/Practice Statistical Report

Executive Summary

The purpose of this study was to empirically define the job functions associated with the development of life care plans by those health care professionals who advertise such service delivery. The course of this study required the development of the Life Care Planning Task Inventory (LCPTI) that was distributed to 239 rehabilitation case management professionals and health care consultants who currently carry the Certified Life Care Planner (CLCP) credential. The results of the data extrapolated from the LCPTI through the exploratory principal axis factor analysis were the identification of three Job Function Categories (JFC) associated with life care planning service delivery, and included the following:

- 1. Assessment of Client's Medical and Independent Service Needs**
- 2. Vocational Assessment**
- 3. Consultation Services to the Legal Community**

A follow-up Q-sort procedure was necessary as a post-hoc study of non-fitting items to the 3 Job Function Categories. A panel of Certified Life Care Planners was assembled and they rationally-sorted 22 Job Task Items (JTI) that had not been retained in the initial factor analysis into the three identified job functions associated with the development of life care plans. The Job Task Inventory (JTI) evolved from the exploratory principal axis factor analysis and the rational sort procedure, identifying 29 job tasks categorized under the Assessment of Client's Medical and Independent Living Needs category, 6 job tasks were categorized under the Vocational Assessment category, and 10 job tasks were assigned to the Consultation Services to the Legal Community.

The significance of this study is multifaceted in terms of benefits to the life care planning service delivery system. For example, a definitive job analysis has evolved for the professional life care planner, training curriculum can be developed specific to the tasks of the case manager and rehabilitative consultant offering life care planner delivery services as identified in this study, and more importantly, the resulting job task data can be applied to the validation of the Certified Life Care Planner examination.

Introduction

Persons who sustain catastrophic injuries are surviving these events in greater numbers due to the advancement in medical research and resulting treatment modalities, and technological advances that aid in sustaining one's life post-injury. Additionally, prior legislation that includes the Rehabilitation Act of 1973, the Rehabilitation Act of as amended by Public Law 105-220 - 1978, Americans with Disabilities Act (ADA) of 1990 - Public Law 101-336, Social Security Act - Public Law 74-2710, Workforce Investment Act of 1998 - Public Law 105-220 (Rehabilitation Act Amendments of 1998), Carl D. Perkins Vocational and Technical Education Act of 1998 - Public Law 105-332, Developmental Disabilities Assistance and Bill of Rights Act of 2000 - Public Law 106-402, Individuals with Disabilities Education Improvement Act of 2004 - Public Law 108-446, and Assistive Technology Act of 2004 – Public Law (PL) 108-364 just to name a few, have brought the needs and rights of severely disabled individuals to the forefront in all aspects of our communities and our society as a whole (National Collaborative on Workforce and Disability for Youth, 2007).

With the ever increasing focus on the needs of catastrophically disabled persons and the mandates that followed to ensure their needs were being met, nurses and rehabilitation case managers were consulted and retained for case management services by third party benefit providers. These services were for the beneficiaries of third party disability insurance policies and programs in an attempt to assist them with mitigating their damages and achieving as close of a premorbid lifestyle to which they were accustomed as possible. Essentially, what evolved was a litigious cottage industry for rehabilitation case managers that required structure and regulation.

Weed (2004) noted that the original issuance of "...life care plans appeared in a legal publication, ***Damages in Tort Actions***" (Deutsch & Raffa, 1981, cited in Weed, p. 1). This publication established the guidelines for determining damages in civil litigation (Weed, 2004). However, the first instance of life care planning applications for the rehabilitation case manager and the nursing profession was published in the ***Guide to Rehabilitation*** (Deutsch & Sawyer, 1985). Specialized training in the development of life care plans was established from this text, with Dr. P. Deutsch offering the first training event on September 16-17, 1986. Through Dr. Deutsch's and Dr. Sawyer's early publication and through Dr. Deutsch's promotion of life care planning training for case managers and rehabilitation professionals, an alternative service

delivery system evolved that continues to grow and support many case management practices of rehabilitation professionals in the free world. In essence, life care planning is a well established and growing service delivery system in the rehabilitation service industry.

The Commission on Health Care Certification accepted the challenge of developing, validating, and administering the Certified Life Care Planner (CLCP) certification credential in response to the demands from the case managers and rehabilitation professionals for structure and regulation in life care planning service delivery (May & Lubinskas, 2004). Comprehensive training programs in life care planning have evolved to respond to the growing need for life care service delivery and for well-trained health care professionals to provide the services (May & Lubinskas, 2004).

Developing the examination required a review of the existing literature in the life care planning service delivery rehabilitation system. However, May and Lubinskas (2004) noted that there was little literature in the professional journals that addressed life care planning in 1996. The CHCC realized that in order to write test items relevant to life care planning service delivery, there must be established the roles and functions, or job tasks of health care professionals providing life care planning services. More specifically, establishing such criteria enables for validating the CLCP examination process and in establishing accountability for the certifying agency. Accountability is best established by:

1. Defining the service to be monitored
2. Identifying the service providers' roles and functions required to deliver the service
3. Developing a field-tested certification examination
4. Establishing a code of ethics (May & Lubinskas, 2004, p. 767)

The Commission on Health Care Certification established a Research Foundation at Southern Illinois University at Carbondale, Illinois. It is through this research foundation that the CHCC investigated the job/practice tasks of previously certified life care planners in order to validate the current examination. Dr. Michelle Maulsby was selected as the lead investigator, as she requested to participate in this study to satisfy her dissertation requirements for her Doctor of Rehabilitation (Rh.D.) degree. The following is a detailed analysis of the methodology used in securing the data, the development of the survey instrument, and the task ratings.

Methodology

Instrument: The instrument used to survey the active Certified Life Care Planner population was the **Life Care Planning Job Task Inventory (JTI)** instrument. The development of this instrument began with the listing of 75 job task items from existing literature related to life care planning. This group of potential life care planning items was validated for content by a panel of 11 Certified Life Care Planners. The preliminary JTI was sent to these experts and they rated each item on a 5-point Likert-type scale. The results indicated that 56 of the 75 items be retained for further survey. The final 56 job task items were randomly distributed throughout the JTI. The following 6-point scale was used to rate the items:

- ✓ do not perform this task with any persons with whom I develop a LCP
- ✓ perform this task with approximately 1%-10% of those with whom I develop a LCP
- ✓ perform this task with approximately 11-25% of those with whom I develop a LCP
- ✓ perform this task with approximately 26%-50% of those with whom I develop a LCP
- ✓ perform this task with approximately 51%-75% of those with whom I develop a LCP
- ✓ perform this task with more than 75% of those with whom I develop a LCP
- ✓ Nine demographic items were included on the questionnaire.

Participants: The JTI was mailed to 992 individuals, broken down as follows: 193 members of the National Association of Rehabilitation Professionals in the Private Sector (NARPPS [the organization is now the International Association of Rehabilitation Professionals]) Life Care Planning section; 282 members of the NARPPS Forensic section; the 141 graduates of a national, postgraduate educational institute that certifies life care planners for catastrophic case management, and 376 rehabilitation professionals who had expressed interest in becoming certified life care planners to the Commission on Health Care Certification (CHCC). A total of 239 useable questionnaires was returned, for an overall return rate of 25%,

The typical respondent is characterized as Caucasian (90.4%) and female (75.3%); as having a master's degree (43.9%); and being 41-50 years of age (55.296). A total of 55.2% (132) of the respondents indicated that they had an educational background in vocational counseling and 43.1% (103) indicated a nursing background, with less than 2% (4) indicating "other." The majority of the respondents (64.9%) have delivered life care planning services for 8 years or less. Approximately half of the respondents (54.3%) indicated they also

provided case management services after completing the life care planning training. Approximately 43% of the respondents indicated that the two disabling conditions for which they had developed the greatest number of life care plans were traumatic brain injury and spinal cord injury.

Results

To determine the job functions associated with the development of the life care plan, exploratory principal axes factor analysis (SPSS, inc., 1993) was performed on the participants' responses to the JTI. Varimax rotation was used to orthogonally rotate the resulting factor matrix, to maximize the independence between factor groupings (Curton & D'Agostino, 1983). The Scree Test was used to help determine the optimal number of factors to extract; the test suggested a three-factor solution.

The results of the three-factor solution accounted for 31.7% of the total variance. The three factors (job functions) identified were Factor I (Assessing Client's Medical and Independent Living Service Needs), Factor II (Vocational Assessment), and Factor III (Consultant Services to the Legal System). Of the 56 job task items, 34 achieved or exceeded the loading criterion of .40 for retention. Computation of Cronbach's alpha showed relatively high reliability coefficients for each of the three factors (Factor I = .89; Factor II = .89; Factor III = .77).

Factor I contained 20 job task items and included information relating to the need and cost of medical services, adaptive equipment, supplies, occupational therapy, physical therapy; home furnishing needs, and attendant care. Factor II contained six job task items and included information relating to assessing the need for vocational or educational services, evaluating the client's ability to pursue gainful employment, and obtaining the client's work history. Factor III contained eight job task items and included information pertaining to serving as an expert witness and assisting with the development of information for settlement negotiations.

In a follow-up procedure, the remaining 22 items that did not achieve the .40 loading criterion were rationally sorted by an expert panel consisting of 13 rehabilitation professionals who were actually providing life care planning services. These individuals were asked to assign the 22 items among the three job functions identified in the factor solution. For an item to be

considered as associated with one of the job functions, at least 60% of the expert panel had to independently assign that job task to that function. The following results were obtained: 9 items (numbers 8, 10, 11, 12, 18, 29,34, 41, and 42) were added to Factor 1, and 2 items (numbers 7 and 52) were added to Factor III. No job task items met the 60% criterion for Factor II. There were 11 items (numbers 2, 4, 6, 13, 16, 24, 30, 31, 36, 40, and 44) that failed to achieve the 60% or greater agreement criterion for any of the three job functions. **Table I** reports the means and standard deviations for the job task items under each of the three job functions that survived the factor analysis and rational sort process.

Table 1. Item Mean Ratings (M) and Standard Deviations (SD) for Professionals Developing Life Care Plans		
Factor 1: Assessing Client's Medical and Independent Living Service Needs		
	M	SD
9. Determines costs of needed equipment for the client	5.87	0.51
8. Examines the relationship between the client's needs and existing functional capacities	5.93	3.61
29. Lists the medication prescribed for the client	5.86	0.50
11. Reviews all medical records	5.79	0.77
48. Determines costs of needed medical services in the client's life care plan	5.78	0.71
56. Identifies costs of supplies needed weekly/monthly by the client	5.76	0.75
18. Assesses the client's potential for long-term independent functioning	5.75	0.72
37. Determines needed medical supplies	5.75	0.78
10. Determines a feasible support system for the client	5.66	0.78
54. Determines the client's needs for attendant care	5.66	0.80
47. Determines assistive devices needed by the client	5.60	0.85
5. Provides an assessment of the client's potential for self-care	5.55	1.04
26. Specifies cost for physical therapy services	5.55	1.00
14. Identifies the need for physical therapy services	5.55	1.04
35. Reviews current catalogs to determine the costs of assistive devices needed by the client	5.33	1.00
50. Specifies the cost of occupational therapy services	5.32	1.00

Factor I: Assessing Client's Medical and Independent Living Service Needs - Continued		
	M	SD
53. Determines the client's adaptive equipment needs	5.51	0.99
49. Determines the client's need for counseling services	5.51	0.93
25. Identifies the need for occupational therapy	5.36	1.18
15. Specifies costs for maintaining the client's exercise equipment	5.35	1.14
34. Specifies costs for case management services for the client	5.34	1.23
19. Projects associated costs for nonmedical diagnostic evaluations	5.19	1.32
20. Specifies costs for necessary home furnishings	5.16	1.45
1. Determines the client's home furnishing needs	5.11	1.45
42. Assesses the client's recreational equipment needs.	5.05	4.23
22. Identifies the need for nutritional counseling	4.25	1.64
51. Identifies the need for audiological services	4.01	1.79
41. Identifies the need for pharmaceutical counseling	3.94	1.78
12. Identifies the need for musical therapy	2.38	3.58
Factor II: Vocational Assessment		
	M	SD
33. Gathers a work history from the client	5.10	1.50
39. Identifies the need for long-term vocational/educational services	5.09	1.52
Factor II: Vocational Assessment - Continued		
	M	SD
23. Determines the client's ability to pursue gainful employment	4.82	1.70
27. Obtains information on past occupational/educational performance for purposes of vocational planning	4.79	1.67
32. Specifies cost for long-term vocational/educational services for the client	4.76	1.75
Factor III: Consultant Services to the Legal System		
	M	SD
38. Determines costs of needed social services for the client	5.30	1.27
45. Makes referrals for assessments of the client	4.63	1.61
21. Assists with the development of information for settlement purposes	4.16	1.79
17. Serves as an expert witness in a court case for an individual who sustains a catastrophic injury	4.10	1.82

Factor III: Consultant Services to the Legal System - Continued		
	M	SD
46. Consults with a plaintiff attorney to reasonably map out what long-term care services will be needed for a client	4.134	1.77
7. Consults with a defense attorney to reasonably map out what long-term care services will be needed for a client	3.84	4.37
3. Provides information located in the LCP to an official of the court	3.83	1.82
28. Consults an economist for an estimate of the lifetime costs of the LCP	3.65	2.04
43. Recommends other expert witnesses to a client's attorney	3.63	1.78
52. Advises the client's attorney on the cross-examination of opposing counsel's expert witness	3.46	4.36

Discussion

The LCP is a document that comprehensively addresses all of the care needs of a person who sustains a catastrophic injury and provides the referral source with organized charted material. The LCP also facilitates a smooth continuum of care for the patient, allowing for a flow of services across rehabilitation disciplines. Although the primary objective of this study was to identify the job functions of persons who develop life care plans, the CHCC has established base-line criteria on which to base its examination, and more specifically, the examination items. Factor analysis yielded three distinct factors (job functions) associated with the development of the life care plan, which included 1) Assessing Client's Medical and Independent Living Service Needs, 2) Vocational Assessment, and 3) Consultant Services to the Legal System. Thus, item development and content focuses on these three categories of expertise, with the specific job tasks included in the item pool.

Overall, the study results are compatible with the job functions that had previously been identified in the non-empirical literature on the job tasks of the life care planner. For example, Factor I is compatible with the life care plan development job tasks related to "identifying the types and cost of services that will assist the client in maximizing functional capacity" as reported by Gamboa and Hanak (1991). Accordingly, the following items listed under Factor I in Table 1 received the following mean ratings:

- specifies cost for physical therapy services (item 26, $M= 5.55$)
- determines the client's adaptive equipment needs (item 53, $Ma 5.51$)

- determines costs of needed medical services in the client's I.CP (item 48, $M = 5.781$)
- determines the client's need for counseling services (item 49, $M = 5.51$)
- reviews current catalogs to determine the costs of assistive devices needed by the client (item 35, $M = 5.33$)
- projects associated costs for non-medical diagnostic evaluations (e.g., recreational, nutritional) of the client (item 19, $M = 5.19$)

Blackwell et al. (1994) have also hypothesized the job tasks associated with the development of the life care plan. Their medical case management job tasks associated with the development of the life care plan are compatible with the following items within Factor I:

- determines needed medical supplies (item 37, $M = 5.75$)
- determines the client's needs for attendant care (item 54, $M = 5.66$)
- identifies the need for physical therapy services (item 14, $M = 5.55$)

Deutsch and Sawyer (1995) define the vocational assessment job function of the life care planner as "assessing when the patient may be able to engage in rehabilitation, gainful employment, or sheltered employment" (pp. 7.03-7.0-1). Factor II results in this study support this function as a major part of the life care planner's role. For example, life care planning job tasks of this function include the following

- assesses the client's need for vocational services (item 55, $M = 5.111$)
- identifies the need for long-term vocational/educational services (item 39, $M = 5.09$)
- gathers a work history from the client (item 33, $M = 5.10$)

The life care planner often serves as a consultant to those in the legal system. Anchor (1992) suggested that a life care planner consults with both defense and plaintiff attorneys to identify the needs of clients who require long-term care, and recommends to the attorneys additional professionals who can discuss the client's needs as identified in the life care plan. The importance of these job tasks is supported by the tasks found under Factor III in Table I. Some of these job task items include the following:

- assists with the development of information **for settlement** negotiations (item 21, $M= 4.16$)
- consults with a plaintiff attorney to reasonably map out what long-term care services will be needed for a client (item 46, $M= 4.04$).

This study can be viewed as an empirical clarification of LCP development job functions, which is extremely beneficial for training program curriculae development. Knowledge of the life care planning job functions are used to establish a standard job description for people who develop life care plans, and training curriculae can be directly applied to these job data. Additionally, the job analysis is currently used to establish a research-based guide to determine appropriate content for the credentialing examination for life care planners.

The curriculum for life care plan training is dynamic in that many changes in technology and medical treatment preferences require constant review and updating. This job practice analysis empirical evidence of life care planners' job functions, providing those who are involved in training life care planners with a better understanding of the field. Knowledge of specific job functions allows trainers to better determine the competencies needed to carry out those functions. Once those role-based competencies are identified, they serve to guide the design of a curriculum for such training. Any curriculum for life care planning that is based on the results of the current study could be seen as multidisciplinary in nature, because it could be adopted by many professional disciplines to prepare their practitioners to perform life care planning in addition to their other responsibilities.

The results of this study are advantageous to the CHCC's efforts in establishing content validity for the CLCP examination. The job practice analysis data are used to establish the content validity of the CLCP credentialing examination, based upon the extent of correspondence between the focus of the test items and the empirically derived job functions (Shimberg, 1981). The life care planning Job Task Inventory was developed by compiling a list of job tasks from life care planning literature and input from rehabilitation professionals. Although every effort was made to include all life care planning job tasks, it is unlikely that the JTI contained a complete list of tasks. Therefore, while the current study should provide a relatively comprehensive overview of life care planners' job functions, there may remain some undeveloped areas that will have to be addressed by future research.

The sample was composed of rehabilitation professionals involved in life care planning. The listings were assumed to include a representative sample of life care planners. However, the extent to

which these individuals are representative of the entire population under study is unknown. Therefore, the results of this study should only be generalized with caution.

Future research should address the relationship between life care planning job functions and the entity that has retained life care planning services. For example, a rehabilitation professional developing the life care plan is retained by an attorney or an insurance firm. Both the attorney and the insurer have separate purposes for the life care plan. The relationship between these purposes and the life care plan development job Functions should be addressed in future research.

More than half of the respondents (54.3%) indicated that they provided case management services to the client after developing the LCP. Future research should investigate case management job functions after development of the life care plan, These functions could be infused into the content of the current curricula in life care planning.

CLCP Examination Applications

The data resulting from this job practice analysis has enabled the CHCC to design its examination with items that address the three Categories of Expertise. Literature that addresses each of the areas are reviewed and items are developed from each of these expertise areas. Validation of the examination is discussed in Appendix T – Technical Report with Statistics.

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