

Reliance on Objective Functional Testing to Identify an Individual's Needs for Home Support Services

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Abstract. *One of the most common categories included in a life care plan is home support services. The purpose of this article is to discuss the benefits of relying on objective functional testing and a home assessment in determining whether or not an individual requires assistance with domestic activities, and, if so, the type and extent of home support required. A case example is provided at the end to illustrate the value of objective functional testing in future care planning.*

Introduction

A life care plan (LCP) is defined as “a dynamic document based upon published standards of practice, comprehensive assessment, data analysis, and research, which provides an organized, concise plan for current and future needs, with associated costs, for individuals who have experienced catastrophic injury or have chronic health problems.” (cited in Reavis, 2002, p. 51).

Common to most life care plans is evaluation of the specific needs of an individual to determine required assistance/support with activities of daily living (Isom & Marini, 2003). One component of activities of daily living (ADL) is home management activities. These are tasks that facilitate self-care and independent living, including meal preparation, cleaning, laundry, child care, yard work, gardening, etc. For clients who are no longer able to perform all of their pre-incident home care activities, a life care plan serves to detail the type, amount, and frequency of required home support services.

When gathering data for the life care plan, it is essential for the life care planner to identify an individual's current and future needs as related to the injury or disability. Practitioners must assure the life care plan is valid and one tool to verify both the objectivity and validity of costly items in the life care plan, such as home support services, is objective functional testing. This article will focus on methods of objectively evaluating the need for home support services for clients reporting limitations with home management activities.

Determining Activity-Related Limitations

Research has shown that pain, disability, and physical impairment do not necessarily correlate (Turk & Rudy, 1991; Waddell & Main, 1994). In complex cases or cases of catastrophic disability, the physician is encouraged to refer patients to medical specialists or other appropriate health care professionals for a comprehensive, objective assessment of their functional abilities and limitations (Kazimirski, 1997). Further, according to the American Medical Association (AMA), combining medical and non-medical information provides improved understanding of the individual's functional abilities (AMA, 2001). Unless an individual's tolerances for specific physical activity factors (i.e., lifting, reaching, bending, crouching, sitting, standing, walking, etc.) have been assessed, it can be difficult, if not impossible to accurately ascertain a client's true functional abilities and limitations.

For diagnoses with wide ranging levels of disability (i.e., soft tissue injury), administering an objective functional assessment can be invaluable in helping predict an individual's future care needs. Similar to the term "disability," activity limitations, a term adopted by the World Health Organization, considers the functional implications of the impairment of body function or body structure (AMA, 2001). As an example, two individuals who have sustained a soft tissue injury to their lower back may have the same or similar diagnoses, but significantly different activity-related limitations, thus affecting their ongoing needs and recommendations for life care planning. In these circumstances, without reliance upon objective functional information, the validity of the life care plan may be compromised.

Critical Components of the Evaluation

For the purpose of determining an individual's home support needs, in addition to reviewing medical and rehabilitation information, it is important to conduct or rely upon information obtained from the following sources: interview with the client, objective functional testing, and a home assessment.

Interview

To understand the client's specific circumstances, there are a number of important details to gather during the clinical interview including: estimates of ability and limitation with ADLs, pre and post-injury domestic roles, current work status, living situation, and a description of the individual's home environment. While a wish list should not be used to determine needs, the client may identify specific personal needs or concerns that warrant consideration (Harris, Henry, Green, & Dodson, 1994). Subjective information is best combined with information from a variety of sources including the medical and rehabilitation records and opinions, objective functional testing, and home review. One of the benefits of a life care plan is to maximize an individual's level of independence and functioning. For tasks the client can no longer perform as a result of the injury or disability, the life care plan can include supports and services to allow these tasks to be done, assuming foundation is established for the services.

Functional Testing

Functional evaluations differ widely with respect to methodology, type and number of

standardized functional tests included in the battery, and measurement of physical effort (King, Tuckwell, & Barrett, 1998). The type and extent of functional testing required for each client can vary considerably. Below outlines some of the factors that assist in determining the extent of functional testing required:

- the individual's medical diagnosis,
- reported level of disability, and
- working status

Along with administering specific functional tests, it is also important to assess the client's level of physical effort during the evaluation. Without full effort, the clinician cannot be sure whether or not observed disability is actual, behavioral, or feigned. A global approach to objectively evaluating physical effort is recommended, which may include such measures as isometric (Stokes, Landrieu, Domangue, & Kunen, 1995), biomechanical (Jay, Lamb, Watson, Young, Fearon, Alday, & Tindall, 2000), biobehavioral (Lechner, Bradbury, & Bradley, 1998), cardiovascular (Jay, Lamb, Watson, Young, Fearon, Alday, & Tindall, 2000), and distraction-based (Waddell & Main, 1998). While detailed explanation of such specific effort tests is beyond the scope of this article, it is important to realize that physical effort testing should be multi-faceted and based upon published research where possible.

If the client provides low physical effort or variable levels of physical effort during testing, the clinician is in a position of not knowing the true extent of any disability which may or may not exist. This can significantly decrease the objectivity and subsequent validity of the cost of care recommendations.

For the purpose of determining an individual's home support needs, the functional evaluation should consider the physical demands associated with the client's reported limitations with home support activities. If a client reports limitations with housecleaning or yard work, their tolerances for the physical demands associated with these activities should be tested. As an example, for an individual who has sustained a back injury, it would be important to assess tolerances such as bending, crouching, kneeling, lifting, carrying, and standing. For an individual who has sustained a catastrophic injury (i.e., spinal cord injury or amputation), functional limitations typically show up more readily during shorter functional assessments. In these cases, while some of the individual's activity-related limitations may be more obvious, without performing some functional testing, the clinician may not be aware of how the individual is able to compensate for some of the limitations and/or how pain affects the client's physical functioning.

For an individual who has sustained a non-catastrophic injury (i.e., soft tissue injury) and perhaps has returned to some form of gainful employment, it is the author's opinion that more extensive functional testing is often required to accurately identify the individual's physical tolerances. Such testing is typically conducted in a clinic setting with access to multiple types of standardized tests. These individuals typically benefit from a full day Functional Capacity Evaluation (FCE), including a battery of tests with established reliability and validity. For individuals with suspected activity tolerance issues, it is important for the clinician to note any change in the client's function as the testing day progresses. Clinicians can retest aspects of function late into a client's testing day to look for any signs of functional decline. In determining whether the client can perform all required activities (domestic and/or work-related), it is important to consider a client's overall activity tolerance both inside and outside the home. For example, for a full time mother who has returned to work, the clinician needs

to determine whether she is physically capable of tolerating full time work, as well as daily child care, meal preparation and housekeeping.

Home Assessment and Home-Based Functional Testing

The level of function and tolerance required by a client to complete home management activities is in part dependent upon their social living situation and the physical parameters (i.e., size and layout) of their home and property. Given these influencing factors, it is important for the clinician to directly review the client's home.

Depending on client diagnosis and background information, the clinician may choose to exclusively evaluate the client within their own home setting, rather than combine this with testing in the clinic. For example, for an individual who has sustained a spinal cord injury and is dependent on equipment for transferring from bed to wheelchair, the evaluation is best conducted in the client's home in order to get a true assessment of their abilities.

If the client has been evaluated in the clinic, in many circumstances it is often still helpful to perform some functional testing in the individual's home. Given that the clinician typically needs to review the home layout and living situation in order to make appropriate and specific recommendations, this portion of the assessment can be easily combined with some home-based functional testing. For example, as the client is showing the clinician around the home, the client's standing, walking, and stair climbing function can be assessed. Additionally, in the home setting, the clinician has opportunity to directly observe the client's ability to participate in actual domestic activities. This allows the clinician to gain a better understanding of how the client's limitations affect functioning within the home environment and identify compensatory methods developed by the individual. Comparison of function can also be made while the client participates in different homemaking activities with similar physical demands (i.e., mopping and vacuuming). If the client has also been assessed in the clinic, consistency of presentation can be further assessed.

Problems that were not apparent in the clinic may surface during the home assessment due to specific issues related to the layout of the house. By conducting a home assessment, the clinician may also be able to suggest alternate ways for the client to perform activities or provision of equipment that may facilitate full or partial independence.

Enhancing the Prediction for Future Assistance

Mooney (2002) writes, "A measurable aspect of disability is function. Evaluation of function will offer greater validity to medical prognosis and status" (p. 1094).

Reliance on objective functional testing serves as a valuable communication tool with treatment providers/medical experts to discuss an individual's future functioning. The clinician can often obtain more specific information from prognostic experts regarding the client's future functioning if they are aware of the individual's current level of functioning. Communicating this information to prognostic experts creates avenues for discussion of how the individual's function may change in later years.

The following case example illustrates the role of functional testing in predicting future home support needs.

Case Example

Mrs. Smith sustained a back and knee injury in a motor vehicle accident. She now reports difficulty carrying out all housekeeping chores she performed without difficulty prior to the accident. She lives with her husband and two children in a two level, 2,000 square foot home. On functional testing, she was limited to lifting and carrying in the 10-15 pound range. She demonstrated the ability to tolerate bending, kneeling and crouching for short periods only. She was able to stand and walk for 45-60 minutes at a time. On the basis of this information, the clinician suggested she receive three (3) hours of housecleaning assistance on a biweekly basis (every two weeks) to accommodate her limitations with heavier housecleaning. Review of the medical opinions identified a prognosis for future development of arthritis. The clinician contacted the orthopedic surgeon who had evaluated Mrs. Smith and made the prognosis to provide available functional information and further discuss the prognoses. With the information based on functional testing, the orthopedic surgeon was able to provide more specific details regarding the extent of functional decline, using the client's current functional status as a baseline. For example, the physician estimated that within 10 years, Mrs. Smith would have increased difficulty kneeling for even short periods and her lifting and carrying tolerance would further decline by approximately one-half from the current level. With this information, the clinician suggested a 50% increase to weekly housecleaning support in 10 years time.

Conclusion

Ensuring that recommended services do not “over-provide” satisfies one of the basic premises in life care planning of helping to maximize an individual's level of independence. In contrast, ensuring that services do not “under-provide” satisfies the goal of enhancing the individual's well being, while reducing potential for symptom aggravation and/or medical complication. To provide a more objective basis to the recommendations for home support services included in a life care plan, practitioners are encouraged to include objective functional testing as part of their clinical protocols. While some life care planning practitioners have the clinical background to perform such testing themselves, others can obtain the information by relying on clinicians who specialize in objective functional testing.

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Jodi Fischer is an Occupational Therapist and Certified Work Capacity Evaluator. She is a qualified expert witness to the Supreme Court of British Columbia in Occupational Therapy, Job Site Analysis, Cost of Future Care, and Work/Functional Capacity Evaluation. She is co-director of Functional Outcomes Rehabilitation Services Inc., a medical-legal consulting firm in Vancouver, B.C., Canada. She has been practicing as an Occupational Therapist for 10 years. Clinical specialties include Life Care Planning (a.k.a. Cost of Future Care Analysis in Canada) and Work/Functional Capacity Evaluation. She guest lectures on the topic of Objective Functional Testing and Life Care Planning for the University of British Columbia.
