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Application of Life Care Planning Principles for Seniors Experiencing Catastrophic Injury

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Abstract. *The graying of America has resulted in a burgeoning population of senior adults. According to data by the federal government, the percentage of population older than 83 years of age represented only 0.2% in 1990 and is projected to represent 4% by the year 2040. Senior Americans between 65 and 84 years of age represented approximately 4% of the population in 1990 and 11% of the population in the year 2000 and are projected to represent 17% of the population in 2040. These seniors can and do experience catastrophic accidents that benefit from life care planning assessment and service delivery.*

Introduction

The increased aging of our population has created a need for expanding knowledge about the application of the life care planning process for seniors experiencing a catastrophic injury. This article offers a case study and reviews some of the key elements of the life care plan as applied to senior adults.

Case Study

Take for example the experience of Mrs. Bea Griffin. Mrs. Griffin was an 86-year-old woman living independently with her adult son. Her life was full and productive until she experienced the onset of vertigo. Her son provided transportation to her general practitioner and they learned that she had an inner ear infection. A 10-day regime of antibiotics was prescribed. During this time the son hired a companion to be at home with Mrs. Griffin during his absence due to her continued vertigo. In spite of all good efforts, Mrs. Griffin's vertigo persisted following treatment.

As Mr. Griffin had business travel planned that would take him away from home for a couple weeks, he and his mother agreed that she would be admitted to an assisted living center for two weeks to assure her safety. Three days after admission to assisted living, Mrs. Griffin was left unattended in the shower room. She was dizzy and experienced a fall from the standing position. She was found breathing and unconscious with blood coming out of her nose and right ear. While waiting for transport, she experienced a full seizure and was then emergently transported to a local hospital where she was stabilized with IV fluids and ventilator support. She was later transferred to a trauma center.

Health care providers diagnosed that Mrs. Griffin had experienced a coup-contrecoup injury with a subdural hematoma over the right frontal parietal area and no midline shift. The

neurosurgeon suggested that this should be addressed non-surgically. Her hospital course included complications of a urinary tract infection and pneumonia. Unfortunately, following a lengthy hospitalization, Mrs. Griffin demonstrated cognitive deficits, decreased attention span, and inability to stand or walk. She was transferred to a brain injury treatment program and was unable to tolerate three hours of occupational, physical and speech therapy daily. A life care planner was requested to develop a life care plan, looking at the cost of her future care.

Traumatic Brain Injury

Over 1 million people will suffer traumatic brain injuries (TBIs) this year, resulting in more than 50,000 deaths and 80,000 cases of disability (CNN interactive news report, 1999). The three leading causes of TBI are motor vehicle crashes, violence (mostly from firearms), and falls. According to the Brain Injury Association, the cost of brain injury is estimated to be $48 billion annually (CNN interactive news report, 1999). It is well-known that the likelihood of a fall causing hospitalization increases with age and studies show that seniors have a higher risk of brain injury from falls and men are at a higher risk than women. Specifically, seniors over 75 years of age have the highest exposure (CNN interactive news report, 1999). Life care planners who create a life care plan for senior adults must acknowledge the preexisting affects of aging and develop a road map of care for the caregivers. This effort can ensure that the individual receives consistent, comprehensive, cost effective care to help them function at the highest level possible and avoid complications.

In the United States, more than one of every three persons over age 65 falls each year and two-thirds of those who fall do so again within six months (Hausdorff, Rios, & Edelber, 2001; Hornbrook, Stevens, Wingfield, Hollis, Greenlick, & Ory, 1994). Among people age 65 and older, unintentional falls account for 87% of all fractures treated in emergency departments (Fife & Barancik, 1985), and are the second leading cause of spinal cord and brain injuries (Krus, Black, & Herol, 1984). Data also show that among people age 65 and older, falls are the leading cause of injury deaths and serious injuries and approximately 9,600 older adults died in 1998 from fall-related injuries (Murphy, 2000). The CDC reports that older adults are hospitalized for fall-related injuries five times more often than they are for injuries from other causes (CDC fact sheet, 2004), and of those who fall, 20-30% receive moderate to severe injuries that reduce mobility and independence and increase the risk of premature death (Alexander, Rivara, & Wolfe, 1992). Among seniors with osteoporosis, falls can cause devastating injuries such as hip fractures and other orthopedic injuries. Falls also can have serious psychological consequences. It is acknowledged that aging generally brings anticipated or expected challenges but the complexity of a brain injury often hastens the process and these changes present unanticipated challenges for the caregiver/family. All of this must be considered in the development of an effective life care plan for a senior adult.

While the degree of brain injury may range from concussion to coma, the sequela will impact the family and client in numerous ways and degrees. The sequela of brain injury may affect a person's cognitive, physical, psychological and social well-being. Consequences of brain injury may include difficulties with memory, slowed ability to process information, difficulty in concentrating, seizures, visual disturbance, headaches, fatigue, altered sleep patterns, difficulty in completing tasks without cuing, increased anxiety, and behaviors that may result in harm to self or others.

Home Care/Facility Care

At-Home Residence

Multiple options exist for senior adult living alternatives; however, specific care must be exercised when recommending future care venues in the presence of a brain injury. One option may be to provide 24-hour supervision in the home although the feasibility of this recommendation is based on architectural, community, family and senior acceptance along with caregiver participation.

All fall risk factors must be considered in planning for the care of a senior with a brain injury. A one-story home with decreased safety hazards may be an appropriate setting. An alternative may be residing in a multi-story home if the services needed can be arranged on one floor, preferably the ground floor. External home safety factors such as uneven/slippery surfaces, poor lighting and stairs may impact the feasibility of home placement. Internally, from a fall hazard standpoint, caution must be exercised to assure that there are no scatter rugs, increased lighting is offered, floors are clear of clutter, washers and dryers are on the living level or arranged to be accomplished by the caregiver. A night light next to the bed and a flashlight on the nightstand may provide additional illumination for nighttime bathroom access. Motion detector lights and illuminated light switches may provide timely illumination and assist in preventing accidents. Hardwired smoke detectors and carbon monoxide detectors may be appropriate depending on the home's mechanical system. A limit on the water heater to keep the temperature at 120 degrees or below will decrease the possibility of scalding from extreme hot water.

General safety considerations in the home include providing adequate lighting at the exit, halls, stairways, and pathways. There must be a working telephone with numbers big enough to read (such as a large button telephone or hands-free speaker phone), and it is helpful to have a telephone by the bed with emergency numbers clearly posted. Stairways must have secure handrails on both sides from top to bottom. Covering on stairs must be without damage and steps need to be even to allow sure footing. No items should ever be stored on the stairs as these are easy to create a tripping hazard.

Safety in the bathroom may be addressed with the provision of assist grab bars around the commode and near the tub. A tub bench with hand held shower and nonskid surface in the tub will address the risk of falls while bathing. Nonskid flooring without a bath mat or a skid proof bath mat will assure firm footing.

An additional area of the home that is associated with accidents is the kitchen. The life care planner needs to assess the amount of time a senior with a brain injury will spend in the kitchen given that the brain injury sequela may result in a functional or judgment impairment that requires the caregiver to perform most of the kitchen tasks. Knives need to be secured and knobs on the stove may need to be removed. If the senior is capable of participating in some light food preparation, then an area of the kitchen can be designated as a safe area for those activities. For example, the preparation of cereal or a sandwich can be done without the use of the stove. Designated areas may also have labeled cabinets and clear plastic (not glass) doors to visualize the contents. The flooring in the kitchen should consist of a non-wax surface and no carpeting in the kitchen as this may increase foot traction and cause tripping. Rubber sole, well-fitting low-heeled shoes are essential for the safety of seniors at home.

Assisted Living Residence

Depending on the degree of impairment, the senior's needs may be better met in a structured environment such as assisted living. Not all assisted living centers are equipped to meet the needs of the senior with a brain injury and thus careful screening of the facility and personnel is essential. Care must be taken in the interview process to assure that the staff is familiar with cognitive sequela of a brain injury, including behavior or emotional consequence of the event.

Another alternative for future care may be as a resident in a dedicated brain injury center. Most often than not, the senior may lack a peer group in this setting and the life care planner will need to conduct local research to determine the feasibility and appropriateness of this recommendation.

Projected Evaluations

Seniors with a brain injury will require a team of experts to maintain wellness and forestall complications. A gerontologist usually takes the lead in the general provision of health care supervision while a physiatrist may address the residuals and limitations associated with the brain injury.

Non-Medical Assessments

The life care planner may secure an opinion on adaptive equipment that may increase independence and offer optimum function for the senior in the least restrictive environment. This type of assessment is best done in the environment where the senior lives and the care is to be provided rather than in a clinical setting. With decreased physical agility, the senior may need their bed elevated or lowered to compensate for decreased quadriceps strength. An assist bar next to the bed also may make getting from a reclined to a sitting position easier.

Psychological evaluation by a clinician experienced in working with both brain injury and seniors will assure meaningful recommendations for the family and caregiver. Initial psychological evaluation of the primary family caregiver will allow the development of a plan to decrease stress and manage expectations. Following a catastrophic event, families of previously independent self-sufficient seniors are initially adrift in a sea of medical terminology and often unrealistic expectations. Psychological evaluation of the paid caregiver may afford a better rapport with the family and caregiver while also providing support and education to the caregiver. The experienced caregiver will benefit from an understanding of brain injury and how to arrange and prioritize care to decrease stress. Behavioral triggers may be identified that could be amenable to change and these needs could be addressed in periodic therapeutic interventions by a life skills coach, counselor, or psychologist.

Neuropsychological evaluation of the senior will define the area(s) of deficit and offer a tool to create a course of remediation by treating therapists including speech, occupational or cognitive. While cognitive restoration may be a long process in seniors, the maximum restoration may decrease the long-term or immediate need for care. The neuropsychological evaluation can factor out those deficits related to the TBI versus those related to the "normal" aging process.

Music and recreational therapy assessments may help to identify a structure for the senior's day. Mood and affect may be tempered by non-threatening activities such as singing and dancing and the appropriate avenue of energy expenditure may decrease behavior

management needs. These assessments may not be successfully completed in one visit and the number of visits will be determined by the needs created by a comprehensive treatment plan.

Selection of Caregivers

Selection of a caregiver will best be managed by educating the family about the personality traits necessary to care for a senior with a brain injury. Patience, compassion, humor, flexibility and accountability are all important strengths in the provision of care. Living companion/care providers employed by a home health agency will have completed the security and drug and work history screening via the agency and all payments for services will be made by the agency. This can significantly relieve the family of the task of advertising, interviewing, conducting background checks, bonding, insurance, taxes, and other responsibilities required to privately hire a caregiver. The care provider will essentially be responsible for management of the home, with or without the senior's bill payment responsibility. The family will want to agree on the list of caregiver duties prior to the interview process to avoid conflict, and families are encouraged to develop a job description and discuss their expectations for the caregiver.

Special Considerations

It is acknowledged that the senior's plan of care may be in place by the time a life care planner becomes involved with the case. However, the life care planner may want to engage the services of a geriatric case manager to complete the assessment conjointly to be sure the most appropriate course of action is developed and resources identified before proceeding with a life care plan. This allows a nice segue to geriatric care management services as well.

A geriatric care manager with a strong medical background can help coordinate and complete the projected evaluations. This assessment should look at the current care constellation and identify any areas of need that are not currently being met. The geriatric care manager should have intimate knowledge of community resources and should also have the ability to identify services for adults with brain injury or network with the agencies that provide these services. Further, the geriatric care manager may provide crisis intervention, act as a liaison to family at a distance, review financial, legal and medical issues, and provide consumer education and advocacy while offering counseling and support during the management of the case. As well, the Alzheimer's Association may serve as a valuable resource for future planning.

In the consideration of projected therapeutic treatment, the life care planner will need to evaluate short/long term care, counseling needs, and therapeutic needs. Paramount in this area of consideration is the need of the family, especially the primary caregiver, and the hired caregiver. In the family's experience, the senior may have gone from total independence to exhibiting cognitive deficits without insight, or physical defects that limit his/her participation in care. A common residual in traumatic brain injury is disinhibition and decreased insight which can be alarming to families and will require education and counseling to affect behavior change for the family or senior.

Should the life care plan focus on care in the home, then a second caregiver or a respite provider will need to be identified in the plan to prevent potential burnout and avoid undo burden on the family. Respite needs will be driven by the care recipient and the caregiver but should be a minimum of three weeks annually. This break can be addressed by having the senior evaluated by a respite provider when the need for care is anticipated or completion of the

application and payment of a deposit to secure a scheduled respite opportunity for the caregiver.

The seasoned life care planner will need to assure the correct and current standard of care is in place in regard to legal documents for the senior. Consultation and follow-up with an elder law attorney will assure that any historic documents are valid and appropriate for the senior's change in medical status. Attorney guidance will be necessary to determine the correct power of attorney such as general, limited, durable or springing (Frank, 1999). The life care planner will need to know if a health care proxy or durable health care power of attorney exists as well as other related documents that may be relevant to the senior's life care needs.

Conclusion

In Mrs. Griffin's situation, a return to home was not appropriate due to the residuals of her traumatic brain injury and her increased frailty. Mrs. Griffin lived comfortably for three years following this accident in an assisted living center with the support of a private attendant. She received physical/occupational therapy weekly to regain mobility and upper body strength. She also had a recreational therapist who met with her weekly to play music and work on other creative activities that focused on her old memories. Before her death at age 89, Mrs. Griffin remarked to her son that she never had "so much fun" before the accident. The family expressed satisfaction with the life care plan and took comfort in the life care planner's efforts to build quality of life services into the plan.

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