# An Integrated Conceptual Model of Quality of Life for Older Adults Based on a Synthesis of the Literature

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**Abstract** Quality of life is fast becoming a standard of measure of long-term care and gerontological service outcomes. Although the issue of quality of life has been of increasing interest in the field of aging, there has been little agreement as to the clarity and definition of the concept and how to measure it, especially as it relates to older adults. Presented here is a comprehensive, integrated model of quality of life that was developed by synthesizing existing constructs within the literature into six major life domains—(1) social well-being, (2) physical well-being, (3) psychological well-being, (4) cognitive well-being, (5) spiritual well-being, and (6) environmental well-being. Consistent with a general systems framework, this holistic model expands the predominant Health-Related Quality of Life constructs to incorporate non-physical aspects of well-being. Each of these domains was broken down into several dimensions in an effort to operationalize the concept of quality of life so that it can have some common standard of useful measurement. These major life domains and indicators are important factors in determining the perceptions of quality of life of older adults. Understanding what constitutes quality of life and how to measure it comprehensively has significant implications for social policy and practice in the field of aging.

**Keywords** Quality of life · Older adults · Quality of life measurement

#### Introduction

With the unprecedented rapid rate of growth of the aging population in the United States, quality of life is fast becoming a standard of measure of long-term care and gerontological service outcomes as well as cost-effectiveness analyses

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(Becker et al. 1995; Brink 1997; Hill 2001; Keigher et al. 2000; Lamb 2001; Noelker and Harel 2001; U.S. Department of Health and Human Services 2001). According to Farquhar (1994), measuring the quality of life of older adults will be an "increasingly urgent and worthwhile task because of the growing pressure on health, social, and economic resources which this population group [will] generate [in the coming decades]" (p. 142). As the number of older people increases, there will be an increase in the demand for both formal and informal provisions of long-term care and support that are cost neutral and that maximize quality of life (Brink 1997; Bury and Holme 1990; Eng et al. 1997; Hill 2001; Kane 2001; Keigher et al. 2000; Lamb 2001; Lehman et al. 1991). Therefore, understanding what constitutes quality of life and how to measure it comprehensively from multiple perspectives, across settings, and over time is essential to the future long-term care and support of older adults.

Concepts of quality of life, life satisfaction, successful aging, generativity and the like emerged in the realms of medicine, health, and social sciences in the 1950's. Although the issue of quality of life has been of increasing interest in the field of aging, there has been little agreement as to the clarity and definition of the concept and how to measure it, especially as it relates to older adults (Baker and Intagliata 1982; Bond 1999; Farquhar 1995; Fisher 1992, 1995; Franks 1996; Galambos 1997; Kane 2001; Lamb 2001; Lassey and Lassey 2001; Raphael et al. 1997). Franks (1996) stated that "[q]uality of life is a variable that researchers refer to with great frequency, define with considerably different terminology, and measure with great difficulty" (p. 21). Quality of life is a multidimensional concept that may be measured across different domains, albeit, domains which have no clear or fixed boundaries (Bond 1999; Marinelli and Plummer 1999; Raphael et al. 1997; Steiner et al. 1996). As Bond (1999) pointed out,

[t]here is little agreement about what constitutes the individual "domains" of quality of life; about the standard for each "domain" which would reflect a low or high quality of life; or who determines the relevance of each "domain" to the individual. (p. 566)

Yet, several overlapping life domains have been identified in the literature and promoted as appropriate assessment measures of quality of life.

This paper discusses the existence of various quality of life constructs presented in the literature that can be applied to older adults. By consolidating these constructs, an integrated model of quality of life was developed and is presented here that consists of six major life domains—(1) social well-being, (2) physical well-being, (3) psychological well-being, (4) cognitive well-being, (5) spiritual well-being, and (6) environmental well-being. Included in this comprehensive model are indicators of each quality of life domain. The hope is that having an all-inclusive framework to view the dynamic elements of quality of life will help professionals be better able to measure perceptions from different perspectives and to avoid limiting quality of life assessment to one dimension of well-being [e.g., physical well-being or Health Related Quality of Life (HRQoL)]. Moreover, having a common model may ensure consistent interpretations and applications of quality of life assessment measures.

The concept of quality of life of older people can be viewed holistically from the perspective of general systems theory. General systems theory emphasizes the



importance of the interactions between people and various systems or components of systems—or the interrelationships between internal and external forces (e.g., social, physical, psychological, cognitive, spiritual, environmental) that impact on human behavior, life circumstances, and quality of life (Hooyman and Kiyak 1999; Lawton 1982; Rubenstein et al. 2000; Zastrow and Kirst-Ashman 1994). General systems theory highlights change and development within systems over time. Different components of systems constantly interface; what happens to one part of a system affects every other part. In terms of quality of life, perceptions are directly linked to the dynamic aspects of social systems at the micro (e.g., individual, family) and macro (e.g., community) levels. Whether something good or bad happens, it affects individuals and their lives on multiple levels. For example, if a person experiences a loss of a loved one (a part of their social system), this will inevitably affect their psychological well-being; the person may also experience grief and depression. In turn, this may affect someone's physical functioning or health if their sleep is disrupted or eating habits change. Another example might be if someone receives a large inheritance that increases their financial status, someone may be able to afford a nicer home or live in a safer neighborhood or have better access to community resources (environmental well-being).

#### Quality of Life Review: Limitations of Measurements

Several measurement instruments have been developed to assess quality of life among older people. The life domains of social well-being, physical well-being, psychological well-being, cognitive well-being, spiritual well-being, and environmental well-being as well as their indicators are common and consistently included to some extent in many of these existing measurement instruments. However, there are several limitations to the measurement of quality of life, including, (a) restricting measurement to one model (e.g., HRQoL) (Baker and Intagliata 1982; Baxter and Shetterly 1998; Bond 1999; Bury and Holme 1990; Cairl et al. 1999, Capitman et al. 1997; Coons and Mace 1996; Farquhar 1994, 1995; Galambos 1997; Gamroth et al. 1995; Livingston et al. 1998; Marinelli and Plummer 1999; Noelker and Harel 2001; Osberg et al. 1987; Raphael et al. 1997), (b) limiting inquiries of quality of life ratings to a single source (e.g., perspective of a clinical provider) (Becker et al. 1993, 1995; Cairl et al. 1999; Diaz and Mercier 1996; Diaz et al. 1999; Kane 2001; Kane and Kane 2001; Rabiner et al. 1997), and (c) evaluating quality of life among older people with disabilities/mental health issues such as dementia or Alzheimer's disease (Albert et al. 1996, 1997; Atchley 1991; Bond 1999; Raphael et al. 1997). Baker and Intagliata (1982) identified additional problems with measuring quality of life that include insensitivity of quality of life measures, lack of data on normal fluctuations of mood states, limited norms of target populations, and the need for more consumer perspectives of quality of life. Because of these limitations, it may be useful to assess quality of life of older adults from a holistic point of view—one that targets multiple dimensions of a person and his/her life, such as those included in the six major life domains and indicators of each domain, as well as targeting perceptions from multiple sources, such as older individuals as well as family members or friends and primary providers of care.



Several problems with existing quality of life measurement instruments have been identified: (a) the lack of consensual quality of life definitions or constructs and domains being measured, (b) the lack of rationale for using a particular measurement scale, (c) the lack of use of summary measures, and (d) the lack of in-depth investigations into client perceptions of relevant importance of various components of quality of life. Further, accurate comparisons between populations (e.g., disabled adults, older adults, children) and methods (e.g., interview, observation, selfadministered survey) are also problematic in the measurement of quality of life. Another issue not fully addressed in the literature is distinguishing between measurements of similar or related concepts, such as successful aging, healthrelated quality of life, quality of extended life, life satisfaction, and generativity. Are these concepts interchangeable or are they different dimensions of the same concept (Fisher 1992, 1995; Lamb 2001)? Measurement instruments vary widely in concept, construction, design, and content. Given these problems, measurement tools cannot always be compared directly with each other (Baker and Intagliata 1982; Farquhar 1994, 1995; Lamb 2001; Slevin et al. 1988). All of these limitations interfere with the usefulness and validation of measurement instruments (Fisher 1995; Kane and Kane 2001; Lamb 2001; Slevin et al. 1988).

Although there are a great number of quality of life measurement instruments, the majority of the quality of life measures revealed are based on a medical or health perspective (HRQoL) that tends to focus mostly on physical or medical status and wellbeing and functional abilities. These HRQoL indicators do not usually include social or interpsychic states of well-being or economic and social position of individuals in society (Baxter and Shetterly 1998; Bond 1999; Cairl et al. 1999; Farquhar 1994, 1995; Galambos 1997; Livingston et al. 1998; Marinelli and Plummer 1999; Noelker and Harel 2001; Osberg et al. 1987; Raphael et al. 1997; Steiner et al. 1996). This HRQoL perspective is based on the belief that science and technology alone will improve human life and the quality of human life. Looking at quality of life from only a physiological perspective is limiting in that it loses sight of the individual as a person and focuses only on the physical condition of the person and the needs that the condition provokes (Bond 1999; Farquhar 1994; Gamroth et al. 1995; Kane 2001; Kane and Kane 2001; Osberg et al. 1987). Noelker and Harel (2001) argued that medical models of quality of life measurement have failed to respond to the social dimension of health and well-being. More specifically, social meanings and the social context of quality of life, competing definitions of the situation, social roles and networks, and individual lifestyles shape outcomes of physical health as well as perceptions of quality of life. HRQoL measurements limit the ability to obtain a complete assessment of quality of life. Furthermore, despite efforts to do so, no instruments measuring health-related quality of life have been validated in an older population (Livingston et al. 1998).

Looking only at psychological perspectives of quality of life can also be limiting. Psychological models of measuring quality of life may also ignore the external economic, political, and social realities that affect older people. It could undermine the meaning and subjective interpretations of an individual's quality of life (Bond 1999). This model alone may also neglect the interactions between physiological and psychological states of well-being.

Difficulty also arises in evaluating social well-being separately because of differing expectations of older adults, the care provider, and societal standards.



Differences in expectations derive from a person's upbringing, cultural values, life experiences, and the like. In addition, responding to individual differences and choices is challenging and requires recognition of individual needs and preferences. Further, it is necessary for there to be an accommodation for the possible physical and cognitive changes occurring within older individuals (Bury and Holme 1990; Capitman et al. 1997; Coons and Mace 1996; Farquhar 1994).

Rabiner et al. (1997) purported that the level of satisfaction with care, programs, and services is an important contributor to an older person's perception of quality of life. These levels of satisfaction are not often of primary focus. When perspectives of older adults themselves are not taken into account, assessments may be biased toward the care provider's or evaluator's perspective, and the evaluation of services will be incomplete or inaccurate. Without explicit evaluations by older recipients of services, the determination of the adequacy, appropriateness, and overall quality of service will be left in the hands of service providers and managers, many of whom will have different perceptions of the quality of care ultimately provided and its impact on older adults' quality of life. Unless assessments from older people are directly incorporated into service program evaluations, insufficient, inadequate, or substandard quality of these services may result that lead to lower levels of quality of life (Cairl et al. 1999; Kane 2001; Kane and Kane 2001; Rabiner et al. 1997). Comparing perceptions of program satisfaction and quality of life of older adults as well as caregivers and providers would likely elicit more comprehensive assessments of the effectiveness and efficiency of a program and/or services received by an older adult and would give some indication of the quality of life of older individuals.

Given these limitations to the measurement of quality of life, a better, more comprehensive assessment method would promote a wider, holistic approach and recognize that factors in life—other than physical health or one specific life domain impact on life quality, particularly among older adults (Baxter and Shetterly 1998; Becker 1995, 1998; Becker et al. 1993; Bond 1999; Cairl et al. 1999; Diaz and Mercier 1996; Diaz et al. 1999; Marinelli and Plummer 1999; Steiner et al. 1996). Expanding the view of HROoL to include physical health, psychological health, social health, and the like would give a more complete picture of the health and well-being of individuals. Quality of life measurements that incorporate both medical and social indicators of quality of life with interpsychic well-being would be most accurate and thorough. In addition, the combination of subjective interpretations of well-being (qualitative measures) as well as objective measures of functioning (quantitative data) would make for a strong assessment of quality of life of older adults (Baker and Intagliata 1982; Baxter and Shetterly 1998; Cairl et al. 1999; Farquhar 1994, 1995; Galambos 1997; George 1998; Kane 2001; Kane and Kane 2001; Lassey and Lassey 2001; Lawton 1982; Livingston et al. 1998; Osberg et al. 1987; Raphael et al. 1997; Rubenstein et al. 2000; Slevin et al. 1988; Steiner et al. 1996).

#### Quality of Life Review: Underlying Principles and Key Concepts

There is great overlap among quality of life definitions and concepts. Therefore, two key principles of quality of life identified by Bond (1999) and supported by Marinelli and Plummer (1999) may be useful when defining and operationalizing



this concept: (1) factors and criteria that define a good quality of life for older people apply equally to people from other age groups; (2) the experience of being an older person in contemporary society is determined as much by economic and social factors as by biological or individual characteristics. These underlying principles suggest including multiple factors to determine an individual's quality of life.

Keeping these key principles in mind, it is important to have some standards or ideas about what constitutes a positive or negative quality of life (Baxter and Shetterly 1998; Farquhar 1995; Galambos 1997; George 1998; Kane 2001; Raphael et al. 1997). This is especially important as professional charges and mission statements of organizations serving older adults frequently emphasize *improving* quality of life or well-being for the populations they serve. Farquhar (1995) stated that,

most people will agree that quality of life is an aim for both the individual and for groups of individuals. However, this assumes that the term "quality of life," or even the concept of "quality," refers only to a positive state, rather than simply "a state." When we talk of someone's quality of life we are not simply talking about the good things in their lives, but the bad things too; descriptions [center] on the nature of peoples' lives, and the ability to maintain or even improve the quality of their lives. (p. 1439)

Knowing what to promote and what to avoid in pursuit of optimal perceptions of quality of life are important pieces of information for older adults, their family members, and practitioners across disciplines. Kane (2001) added that quality of life domains should be measured in their negative and positive forms. She went on to say that it is worthwhile to accentuate the positive and "sadly narrow to define quality as the *absence* of negative outcomes" (p. 297). Baker and Intagliata (1982) also postulated that it is important to determine which positive experiences contribute to life satisfaction and negative experiences to distress. Distinguishing between a positive or negative quality of life is also crucial to the construction and administration of measurement instruments for quality of life and in the discussion of quality of life indicators. Ideas about what quality of life means and how to identify it are important in developing a common understanding of quality of life and measuring it across the lifespan, especially in old age.

Another angle to consider, as argued by George (1998) and others (Baker and Intagliata 1982; Lassey and Lassey 2001; Lawton 1982; Rubenstein et al. 2000), is that quality of life has both objective and subjective components. The degree to which the individual meets the demands of the environment is an objective phenomenon, whereas perceptions of well-being are subjective. Quality of life perceptions depend on characteristics unique to an individual as well as his/her experiences with the objective environment or external conditions.

Perceptions of well-being or quality of life can be assessed on different levels and from different perspectives. Incorporating differing views about what is important to determining quality of life may help measurements to be less biased toward any one perspective. Most efforts to measure quality of life rely on information from a single source. Usually, either a care recipient or a clinical provider of care is questioned, but rarely both. Even less often, significant others involved in an older person's care and support, such as family members, close friends, caregivers, or others, are queried (Becker 1995, 1998; Becker et al. 1993, 1995; Cairl et al. 1999; Diamond and Becker



1999; Diaz and Mercier 1996; Diaz et al. 1999; Mercier et al. 1998; Sainfort et al. 1996; Slevin et al. 1988). Slevin et al. (1988) found that physicians could not adequately measure patients' quality of life. Quality of life has many subjective elements and doctors lacked the knowledge of patients' feelings and therefore, were not able to evaluate quality of life accurately. Becker et al. (1993) found that clinicians were more likely to evaluate some quality of life factors more negatively than clients, but they reported more similarly on other factors. Abels et al. (1994) found that older adults reported a higher level of quality of life than other sources of evaluators. However, Rodgers et al. (1988) found that self-reports of older individuals may be less valid than younger people's responses. Kane and Kane (2001) as well as Peak and Sinclair (2002) argued that lending voice to older individuals and their family members is the only legitimate source of information on quality of life of older adults. Based on these findings regarding various raters, eliciting responses from multiple perspectives about the quality of life of an older person may help to supplement his/ her responses and provide deeper insights into his/her actual status (Abels et al. 1994; Becker 1995, 1998; Becker et al. 1993, 1995; Cairl et al. 1999; Diamond and Becker 1999; Diaz and Mercier 1996; Diaz et al. 1999; Mercier et al. 1998; Peak and Sinclair 2002; Rodgers et al. 1988; Sainfort et al. 1996; Slevin et al. 1988).

Given this information, it is necessary to recognize the importance of individuals' perceptions of quality of life. This observation is consistent with several authors. For example, the World Health Organization's Task Force on Quality of Life (1993) cited in Mercier et al. (1998) stated that an individual's perception of quality of life is based on "position[s] in life in the context of the culture and value systems...as well as in relation to...goals, expectations, standards, and concerns" (p. 487). According to Farquhar (1995), "people's perceptions, however uninformed they may be, are real and people act on the basis of them" (p. 1440). Perceptions of quality of life are subjective and vary with every person as different people value different things (Farquhar 1994; Lassey and Lassey 2001). Donabedian (1966) cited in Rabiner et al. (1997) claimed that "achieving and producing health and satisfaction, as defined for its individual members by a particular society or subculture, is the ultimate validator of [his/her] quality of care [and therefore, quality of life]" (p. 46). Paying attention to perceptions of older adults as well as significant others and care providers across multiple domains of life and possibly over time would likely elicit more reliable, valid, and comprehensive assessments of quality of life of older adults (Abels et al. 1994; Becker 1995, 1998; Becker et al. 1993, 1995; Cairl et al. 1999; Diamond and Becker 1999; Diaz and Mercier 1996; Diaz et al. 1999; George 1998; Lawton 1982; Peak and Sinclair 2002; Rabiner et al. 1997; Rodgers et al. 1988; Rubenstein et al. 2000; Sainfort et al. 1996).

#### **Quality of Life Review: Definitions**

Several definitions of quality of life have been offered in the literature. Here, several definitions are described along with a broad overview of general inclusions or factors that are believed to influence or shape quality of life states. These definitions and constructs seem to be representative of the published dominant views of quality of life.



Marinelli and Plummer (1999) proposed a model of quality of life comprised of six interactive and dynamic dimensions: physical; emotional; social; intellectual; spiritual; and environmental. The physical dimension includes such factors as physical fitness, flexibility, endurance, and muscle strength as well as the ability to accomplish activities of daily living. The emotional dimension relates to feelings and a state of satisfaction with family, friends, and daily life situations. It includes the degree to which one is able to cope with stress, remain flexible, and compromise to manage conflict. Sharing companionship, communication, mutual obligations with others, and having a sense of belonging are included in the social dimension. The ability to process information, clarify values and beliefs, and exercise decisionmaking capabilities make up factors of the intellectual dimension. The spiritual dimension refers to the relationship to other living things and a deeper understanding of the meaning of life. Lastly, the environmental dimension consists not only of the safety and cleanliness of surroundings but also of such factors as access to health care, availability of care, and financial resources. The authors referred to these dimensions of quality of life as the "Rubik's Cube" of well-being—a metaphor to describe the idea that when movement or change occurs in one dimension, all other dimensions are affected. Their conclusions stem from their investigation of how exercise affects all six dimensions and contributed to total quality of life within the context of healthy aging.

Galambos (1997) defined quality of life as being associated with a goodness of life related to an individual's perceived psychological, spiritual, sociocultural, biological, and environmental well-being. Similarly, Gentile (1991) suggested that psychological, sociological, spiritual, and environmental factors were determinants of quality of life. Expanding upon these factors, both authors equated quality of life with adequate income and material possessions, good physical health and quality of care, psychological rewards such as feelings of self-worth and self-esteem, and social factors such as relationships with others, and communication.

Raphael et al. (1997) defined quality of life as the degree to which a person enjoys the important possibilities of his/her life. The "enjoyment of important possibilities" pertains to experiencing satisfaction or pleasure and the possession or attainment of something. It is relevant to one's sense of being or who he or she is, the person's fit with his or her environment, and the activities one carries out on a daily basis to achieve personal goals, hopes, and aspirations. Similarly, Farquhar (1995) referred to quality of life as the degree of satisfaction people have about different aspects of their lives. It can be related to the extent to which people characterize their existence depending on the amount of pleasure and level of satisfaction they experience.

Many authors claim that quality of life is best represented by health-related characteristics. Health-related quality of life reflects a personal sense of physical and mental health and the ability to react to factors in the physical and social environments (Hill 2001). Schipper et al. (1990) cited in Rosenberg and Holden (1997) suggested that quality of life is characterized by

the functional effect of an illness and its consequent therapy upon a patient, as perceived by the patient. Four broad domains contribute to the overall effect: physical and occupational function; psychologic state; social interaction, and



somatic sensation. This definition is based on the premise that the goal of medicine is to make the morbidity and mortality of a particular disease disappear. We seek to take away the disease and its consequences, and leave the patient as if untouched by the illness. (p. 13)

Health is commonly considered one of the most important determinants of overall life quality (Baker and Intagliata 1982; Bond 1999; Cairl et al. 1999; Hill 2001; Kane and Kane 2001; Marinelli and Plummer 1999; McDowell and Newell 1987; Rosenberg and Holden 1997).

Several factors associated with quality of life of older people have also been identified by Atchley (1991). They include: freedom of choice, maximum control over one's life, and involvement in decision making; recognition of individuality; right to privacy and fostering of human dignity; continuity with the past and continuation of normal social roles; stimulating environment; age-appropriate opportunities and activities; sense of connectedness between home, neighborhood, and community; and opportunities for enjoyment, fun, humor, and creativity.

Kane (2001) identified eleven aspects of quality of life: sense of safety, security, and order; physical comfort; enjoyment; meaningful activity; relationships; functional competence; dignity; privacy; autonomy/choice; individuality; and spiritual well-being. She expressed each aspect of quality of life as an outcome experienced by an individual rather than by the structural features or processes thought to be associated with the outcomes.

Keigher et al. (2000) discussed five domains that affect quality of life perceptions of older adults: independence; participation; care; self-fulfillment; and dignity. Independence pertains to the basic rights of individuals, including resources for basic living and safety needs. Participation refers to the inclusion and social integration of older adults into mainstream society. Care refers to health, social, and legal needs being met. Self-fulfillment is indicative of the level of stimulation and challenges an older person experiences. Finally, dignity refers to individual respect, the ability to live free from abuse, and having personal control as well as being afforded dignity in death.

Lassey and Lassey (2001) articulated the following factors that contribute to quality of life of older people: physical and mental capacity; physical and mental well-being; a sense of belonging; love; self-esteem; personal adjustment within a social group; a sense of autonomy; opportunity for intimacy and sexuality; freedom from prejudice; the pleasures of a satisfying lifestyle; availability of health care as needed; a satisfying home and community; and financial security. They expanded on these notions of quality of life and identified several basic priorities for achieving quality of life among older people:

- freedom and choice should be optimized—older individuals ought to have substantial control over their lifestyle in later life
- older individuals should receive ongoing informal support in the context of family and community whenever possible
- every older person should have ready access to health care, mental health care, and long-term health care at modest personal cost
- older individuals and couples should have good housing that fits their needs—in a pleasant community setting with required services close at hand



 disabled older individuals unable to manage in a private home should have access to residence in supportive homelike environments as close to family and friends as possible

- basic income support should be universally available and adequate to meet primary needs and insure a good quality of life
- lifestyle choices should allow older individuals to continue working if they wish, remain active in community and society, enjoy retirement and leisure, and achieve their potential for a high-quality later life

According to these authors, if any of these attributes are negative or unrealized, then quality of life is less than optimal.

Becker et al. (1993) (supported by future works from Becker et al. 1995; Becker 1998; Diaz and Mercier 1996; Diaz et al. 1999; and Diamond and Becker 1999) defined quality of life as someone's feeling of well-being according to the satisfaction or dissatisfaction with the dimensions of life that he/she considers the most important. This quality of life definition was based on nine dimensions: general life satisfaction; activities and occupations; psychological well-being; physical health; social relations/support; economics; activities of daily living; symptoms; and goal attainment. General life satisfaction refers to overall satisfaction with such issues as living environment, housing, food, clothing, and mental health services. Activities and occupations focus on day-to-day activities related to work, school, or day programming. The dimension of psychological well-being incorporates assessments of negative and positive affect. Symptoms pertain to outlooks on both mental health and functional abilities. Physical health measures various indicators of physical health, such as illness and pain. The dimension of social relations/support includes social skills, frequency and type of social contact, and amount of support from social relationships. Money focuses on economic aspects of quality of life, including adequacy of financial support and satisfaction with the amount of control one has over his/her financial resources. Activities of daily living include functional status in accomplishing independent living tasks such as meal preparation, laundry, running errands, and personal hygiene. The final dimension of goal attainment refers to personal mental health treatment goals and the achievement of these goals.

As seen with these definitions, quality of life is a fluid concept and has several interpretations. Consistent with general systems theory, there is a great amount of interrelatedness among these definitions of quality of life. For example, a person who suffers from a stroke (physical condition) may be limited in socializing or communicating with others (social status). Or, disabilities brought on by the stroke (physical condition) may lead to a state of depression or may impact on the person's self-concept (psychological well-being). A person with Alzheimer's disease (physical condition) may experience diminished thinking abilities or memory problems (cognitive well-being). Another example may be that of caregiving which cuts across all major life domains. The quality of caregiving influences an older person's interactions with the community (social well-being), emotional reassurance and satisfaction with services (psychological well-being), and levels of functioning (physical well-being). Thus, the factors associated with the definitions of quality of life are often interconnected.



From these definitions, however, common themes have been identified. Elements of quality of life described in these definitions can be used as indicators of major life domains that are important factors to consider in determining the quality of life of older adults.

## Quality of Life: A Synthesized Model

In an effort to merge these various definitions and minimize discrepancies, a comprehensive model of quality of life is presented here that was constructed by synthesizing the definitions and descriptions of quality of life discussed above into six major life domains: (1) social well-being, (2) physical well-being, (3) psychological well-being, (4) cognitive well-being, (5) spiritual well-being, and (6) environmental well-being. Indicators are also described that help to operationalize each major life domain. This synthesis of the literature is summarized in the matrix presented in Table 1, which distinguishes between commonalities and differences in definitions and key determinants of quality of life as described by various authors published in the literature. This synthesis involved an in-depth review of these different conceptualizations of quality of life and how these concepts have been operationalized. Table 1 shows a summary of major definitions and common aspects of quality of life organized under the six major life domains. It also identifies which author(s) included which concepts in their conceptualization of quality of life. This synthesis of ideas about quality of life created an integrated model that essentially captures all of the key notions into one common framework.

Within the context of the underlying key principles and general concepts of quality of life discussed above, these major life domains and indicators derived from the literature and described below are important factors in determining the perceptions of quality of life of older adults from multiple sources. The importance of these notions of quality of life is that they help to explain why objective factors of people's lives are highly associated with subjective perceptions of well-being and life experiences (George 1998; Lassey and Lassey 2001), which is consistent with general systems theory. Some domains are more developed than others. Some indicators are emphasized more strongly than others as factors of quality of life. Significant gaps in the literature may account for the imbalance of attention placed on certain life domains. Or, the lack of distinction between some life domains may limit or minimize their explanations.

#### Domain #1: Social Well-being

Having a role in society with linkages to a social network is important for individual quality of life (Brink 1997). A social model of quality of life focuses on the way that people interpret their own experiences with aging and the meaning that their situation has for them at a given point in time in their lives. Taking into consideration such things as the political and social environment, material resources, and most importantly, the meanings that individuals attach to situations and events in their lives, are key factors in this quality of life social model (Baxter and Shetterly 1998; Bond 1999; Bury and Holme 1990; McDowell and Newell 1987).



 Table 1
 Synthesis of quality of life: Development of six major life domains using definitions and indicators presented by various authors in the literature

Quality of Life Indicators	Authors A					
	Albert et al. 1997	Atchley 1991	Baxter and Shetterly 1998	Becker et al. 1993, 1995	Bond 1999	Brink 1997
Domain 1: Social well-being						
Sociocultural/socioeconomic/class status			X		X	X
Political environment			X		X	X
Adequate income/wealth/financial status/economic factors			X X	X	X X	X X
Standard of living/lifestyle  Material possessions/resources/supports/circumstances; possession			X		X	X
or attainment of tangible things			71		71	21
Social relationships/support/contact/interactions/networks/communications			X	X	X	X
Daily activities/recreation/leisure; opportunities for fun, humor,		X	X	X		
enjoyment, and creativity; age appropriate activities Continuity of past with continuation of social roles		X				
Sense of connectedness between home, neighborhood, and community;		X	X			
contact with statutory/voluntary organizations; community interactions		21	71			
Time and energy of caregiver; commitment/flexibility of caregiver; the way care is given; interaction/relationship between caregiver and care recipient; compatibility; balance of power; boundary maintenance	X	X	X		X	
Inside-out/outside-in activities						
Sense of belonging			X		X	X
Domain 2: Physical well-being						
Biological/physical well-being; medical status				X	X	
Personal hygiene/grooming/clothing/appearance				X	X	
Nutrition				X	X	
Exercise/physical fitness Illness/disease/injury/disability				X	X X	
Medications/side effects				Λ	Λ	
Life-threatening/non-life-threatening conditions						
Somatic sensation; Pain and discomfort				X	X	
Occupational function; level of physical functioning ability (activities of daily living/instrumental activities of daily living)				X	X	
Levels and amount of care/support; continuity of care; technical and interpersonal care/support		X				
Effectiveness of care—capacity to provide good care/stabilize/maintain	X	X				
or improve functioning Skill/appropriateness and timeliness of care	X					
Accessibility of care/services	X					
Domain 3: Psychological well-being						
Emotional/mental health				X		
Feelings/emotions/affect/mood/morale/attitude				X	X	
Coping abilities; Levels of stress						X
Self-worth/self-esteem/self-concept/sense of being			**			
Enjoyment/pleasure/happiness Life satisfaction/level of life acceptance		X X	X X	X	X X	X X
Satisfaction with programs/services/care/setting		Λ	Λ	Λ	Λ	Λ
Dignity		X				
Achievement of personal goals, hopes, aspirations				X	X	
Freedom/acceptance of choice/control over life/autonomy/independence		X		X	X	
Individuality/personality		X			X	
Domain 4: Spiritual well-being						
Personal values/morals/beliefs Standards of conduct; day-to-day choices; moral decisions						
Religious affiliation/involvement			X		X	X
Human drive; sense of life's purpose			71		71	21
Sense of wholeness/completeness						
Adherence to religious practices/traditions/customs			X		X	X
Faith/belief in "higher power"						
Domain 5: Cognitive well-being						
Thinking processes/management skills						
Memory/learning/concentration Decision-making/problem-solving/judgment/logic		X			X	
Domain 6: Environmental well-being		Λ			Λ	
Living arrangements/housing conditions/accessibility					X	X
Privacy/confidentiality	X	X				
Stimulating environment		X	X		X	
Personalization/familiarity; "hominess" of surroundings						
Cleanliness/sanitary conditions						
Safety					X	X



					Authors D-Ka							
Bury and Holme 1990	Capitman et al. 1997	Carroll 1998	Chappell 1996	Coons and Mace 1996	Dorfman 1995	Elkins et al. 1997	Eustis et al. 1993	Frisch et al. 1992	Farquhar, 1994, 1995	Galambos 1997		
v								X		X		
X					X			X				
X												
X					X X			X X				
								X				
X	X						X		X			
								X				
				X						X		
					X							
	X						X		X			
	X											
			X							X		
								X X	X X	X X		
								Λ	Λ	A		
							X			X X		
X				X		X	7.			A		
X		X X		X		X		X		X		
		X X						X		X X		
		А		X						A		
										X		
X X										X		
Λ										X X		
X												



Table 1 (continued)

Quality of Life Indicators	Authors D				
	Gentile 1991	George 1998	Glass 1991	Kane 1998	Kane 2001
Domain 1: Social well-being					
Sociocultural/socioeconomic/class status					
Political environment Adequate income/wealth/financial status/economic factors	X				
Standard of living/lifestyle	Λ				
Material possessions/resources/supports/circumstances; possession	X				
or attainment of tangible things					
Social relationships/support/contact/interactions/networks/communications	X		X	X	X
Daily activities/recreation/leisure; opportunities for fun, humor, enjoyment, and creativity; age appropriate activities				X	X
Continuity of past with continuation of social roles					
Sense of connectedness between home, neighborhood, and community;					
contact with statutory/voluntary organizations; community interactions					
Time and energy of caregiver; commitment/flexibility of caregiver; the	X		X		
way care is given; interaction/relationship between caregiver and care recipient; compatibility; balance of power; boundary maintenance					
Inside-out/outside-in activities			X		
Sense of belonging					
Domain 2: Physical well-being					
Biological/physical well-being; medical status	X			X	
Personal hygiene/grooming/clothing/appearance					
Nutrition			X		
Exercise/physical fitness Illness/disease/injury/disability					
Medications/side effects					
Life-threatening/non-life-threatening conditions					
Somatic sensation; Pain and discomfort				X	X
Occupational function; level of physical functioning ability (activities				X	X
of daily living/instrumental activities of daily living)					
Levels and amount of care/support; continuity of care; technical and			X		
interpersonal care/support  Effectiveness of care—capacity to provide good care/stabilize/maintain			X		
or improve functioning			74		
Skill/appropriateness and timeliness of care			X		
Accessibility of care/services			X		
Domain 3: Psychological well-being	**				
Emotional/mental health	X	X		v	
Feelings/emotions/affect/mood/morale/attitude Coping abilities; Levels of stress		A		X	
Self-worth/self-esteem/self-concept/sense of being	X				
Enjoyment/pleasure/happiness		X	X		X
Life satisfaction/level of life acceptance		X	X		
Satisfaction with programs/services/care/setting				X	
Dignity					X
Achievement of personal goals, hopes, aspirations		**	**		
Freedom/acceptance of choice/control over life/autonomy/independence		X	X		X
Individuality/personality  Domain 4: Spiritual well-being		X			X
Personal values/morals/beliefs					
Standards of conduct; day-to-day choices; moral decisions					
Religious affiliation/involvement					X
Human drive; sense of life's purpose					
Sense of wholeness/completeness					
Adherence to religious practices/traditions/customs					
Faith/belief in "higher power"					
Domain 5: Cognitive well-being Thinking processes/management skills				X	
Memory/learning/concentration				Λ	
Decision-making/problem-solving/judgment/logic		X		X	
Domain 6: Environmental well-being					
Living arrangements/housing conditions/accessibility			X		
Privacy/confidentiality			X		X
Stimulating environment			X		
			X		
Personalization/familiarity; "hominess" of surroundings Cleanliness/sanitary conditions			X		



	Authors Ke–W									
Keigher et al. 2000	Lassey and Lassey 2001	Livingston et al. 1998	Marinelli & Plummer 1999	McDowell & Newell 1987	Moberg 1990	Schipper et al. 1990	Rabiner et al. 1997	Raphael et al. 1997	Wan & Ferraro 1991	Wong 1998
								X		
	X		X					X		
	X			X				X		
	X X		X			X		X X		
X X	X							X X		
Λ	X							Λ		
	X		X					X		
	X	X X		X		X				
		X X	X							
				X		X		X		
						X				
									X	
							X		X	
	X		X						X	
	X					X		X		
	v	X	X					X		
	X X	X X		X X				X X X		
X				••			X		X	
X X	X	X		X				X	X	
			X		X X					X
			X		X			X		Λ
					X			X		
					X			X		
			X X					X X		
	X		А					Λ		
X								X X		
X	X		X							
X			X							



Indicators of social well-being generally include a sense of belonging and social environmental factors such as recreation and leisure/social activities, contact with statutory and voluntary organizations, community interactions, and family and social networks/relationships and support, including affection, positive interaction, socialization, psychosocial support, informational support, and emotional support/reassurance (Atchley 1991; Baxter and Shetterly 1998; Becker et al. 1993; Bond 1999; Brink 1997; Capitman et al. 1997; Frisch et al. 1992; Glass 1991; Kane 1998, 2001; Keigher et al. 2000; Lassey and Lassey 2001; Marinelli and Plummer 1999; Raphael et al. 1997). The size and composition of social networks, the quantity of social contact, and the quality of support provided are variables influencing social well-being (Albert et al. 1997; Baxter and Shetterly 1998; Becker et al. 1993; Bury and Holme 1990; Kane 2001; Lassey and Lassey 2001; Marinelli and Plummer 1999). In regard to social relationships, Kane (2001) argued that relationships make life worth living, whether they are relationships of love, friendship, or even of enmity and rivalry.

Glass (1991) distinguished between "inside—out activities" and "outside—in activities" when referring to community interactions. Inside—out activities maintain the older person's interactions with his or her community by occasionally helping him/her get out of the house (e.g., shopping, banking, church). Outside—in activities bring socialization or community interactions into the home (e.g., clergy visits, family visits, neighbors mowing the lawn or shoveling snow). Social well-being may also be indicated by socioeconomic factors such as age, gender, race/ethnicity, religion, class, income and wealth, tangible/material supports, and overall standard of living/lifestyle (Baxter and Shetterly 1998; Bond 1999; Brink 1997; Frisch et al. 1992; Keigher et al. 2000; Lassey and Lassey 2001; Raphael et al. 1997).

The social network of an individual affects one's ability to cope with the challenges presented by life experiences. For example, continuous relations without choice within confined spaces (e.g., traditional nursing home setting) can result in conflict. Being isolated or lacking any social stimulation at all also does not promote social coping skills (Brink 1997). Social support is associated with quality of life in one's day to day living in the absence of stress and in times of stress with more support related to enhanced well-being (Chappell 1996; Marinelli and Plummer 1999). It's possible that certain types of support may be beneficial while others may be harmful; different types of support may be more effective for different people and different situations (Baxter and Shetterly 1998; Chappell 1996).

Eustis et al. (1993) suggested that the quality of the relationship between the caregiver and the care recipient is an important indicator of social well-being. They discussed several components of a quality relationship including, compatibility, communication, balance of power, boundary maintenance, commitment, and flexibility. These traits may pertain to the personality and interactions between the caregiver and the care recipient, which is often affected by the length of the relationship and the time and energy put in by the caregiver (Atchley 1991; Bond 1999; Capitman et al. 1997; Eustis et al. 1993; Glass 1991).

#### Domain #2: Physical Well-being

According to Raphael et al. (1997), physical well-being may encompass physical health, personal hygiene, nutrition, exercise, grooming, clothing, and general



appearance. The biological or medical model of well-being primarily focuses on the physical condition and functioning level of an individual. It is generally referred to as health-related quality of life (HRQoL). HRQoL refers to those life areas affected by health status or that can be affected by a health care intervention (Baker and Intagliata 1982; Bond 1999; Livingston et al. 1998; Osberg et al. 1987). HRQoL mostly focuses on the effects of illness and disability (Baker and Intagliata 1982; Becker et al. 1993; Osberg et al. 1987; Raphael et al. 1997). HRQoL may be extended to refer to satisfaction with health status and health care. Sometimes, access to medical care and adequacy or continuity of care are also considered (Kane 2001; Lassey and Lassey 2001; Wan and Ferraro 1991).

Bond (1999), building on factors discussed by Kane (1998) and others, also discussed the relevance of health status and clinical characteristics on quality of life. Health status characteristics refer to physical well-being (e.g., illness, injury, disease, disability), pain and discomfort, functional ability (e.g., activities of daily living such as bathing, eating, toileting; instrumental activities of daily living such as cooking, cleaning, managing money), level of caregiving (e.g., come-and-go help, 24-hour care), and mental health (e.g., depression, dementia, psychosis). Clinical characteristics include diagnosis, prognosis, symptoms, medication and side effects (Bond 1999; Becker et al. 1993; Kane 1998; Lassey and Lassey 2001). Kane (2001) added the component of physical comfort, including being free from experiences of shortness of breath, nausea, constipation, joint pain, and the like as well as being comfortable in terms of body temperature and body position.

Dorfman (1995) discussed two major sets of health conditions that affect quality of life: (1) potentially life-threatening conditions (e.g., cardiovascular diseases, cerebrovascular diseases, pulmonary diseases, endocrine diseases, and cancer), and (2) generally non-life-threatening conditions (e.g., vision and hearing impairments, problems with incontinence, and musculoskeletal conditions). She looked at how these health conditions affected health, activities, finances, and social interactions of older people. Four hypotheses concerning the effects of health conditions on life satisfaction and quality of life were evaluated in Dorfman's study. These hypotheses were: (1) Life-threatening health conditions are stronger and more frequent predictors of dissatisfaction with health than non-life-threatening conditions. The more serious the threat to life, the more dissatisfied older people are with their health; (2) Life-threatening and non-life-threatening health conditions are equally strong and frequent predictors of dissatisfaction with activities. Non-life-threatening health conditions may limit activities as much as life-threatening conditions; (3) Life-threatening and non-life-threatening health conditions are equally strong and frequent predictors of dissatisfaction with finances; and (4) Non-life-threatening health conditions are stronger and more frequent predictors of dissatisfaction with social interactions than life-threatening health conditions. The study generally concluded that the presence of life-threatening and non-life-threatening health conditions can result in serious limitations of lifestyle that affect overall quality of life.

Physical well-being is also related to caregiver intervention or a caregiver's capacity to provide good care in addition to the way the care is given. This might include technical care (e.g., medication administration, bathing, and dressing), the extent to which the plan of care is effective (e.g., the satisfaction of stabilizing,



maintaining, or improving a person's level of short-term and long-term functioning, health, and well-being), and the skill and appropriateness of medical and physical care, including receiving appropriate care in a timely manner and not receiving unnecessary care, physician involvement, and preventing or postponing nursing home placement (Albert et al. 1997; Atchley 1991; Bury and Holme 1990; Glass 1991; Kane 1998).

#### Domain #3: Psychological Well-being

A person's psychological health and adjustment, including emotional and mental health, feelings, and evaluations concerning the self, such as self-esteem and self-concept, constitutes psychological well-being (Becker et al. 1993; Gamroth et al. 1995; Lassey and Lassey 2001; Marinelli and Plummer 1999; Raphael et al. 1997). Steiner et al. (1996) purport that psychological well-being consists of both vitality and the capacity to identify and draw upon internal and external resources in the face of stressful situations. It includes tangible support, affection, positive interaction, informational support, and emotional support.

Bond (1999) described three defining factors of psychological well-being: personal autonomy, subjective satisfaction, and personality. Personal autonomy refers to such things as the ability to make choices, ability to exercise control, and the ability to compromise and negotiate one's own environment and accept choices. This is consistent with interpretations by several other authors who emphasize fostering autonomy and choice as well as respecting confidentiality, privacy, dignity, and human rights (Albert et al. 1997; Becker et al. 1993; Bury and Holme 1990; Gamroth et al. 1995; Kane 1998, 2001; Keigher et al. 2000; Lassey and Lassey 2001; Marinelli and Plummer 1999). Subjective satisfaction refers to global quality of life as assessed by individuals. Personality factors include an individual's morale, mood, affect, and attitude. Also important are life satisfaction/level of life acceptance, happiness, extent to which goals were achieved, and level of satisfaction with care, support, programs, and services (Becker et al. 1993; Bond 1999; George 1998; Kane 1998; Keigher et al. 2000; Lassey and Lassey 2001; Livingston et al. 1998; Marinelli and Plummer 1999; Wan and Ferraro 1991).

Although traditional psychological approaches to quality of life generally adhere to the biomedical or physiological model (i.e., HRQoL), the psychological perspective views people as individuals and treats them as human beings foremost (Bond 1999; Kane 2001; Noelker and Harel 2001). According to Bond (1999),

[b]y focusing on personhood, the paradigm reminds us that all individuals are unique and have an absolute value. But individuals do not function in isolation, they also have relations with others; all human life is interdependent and interconnected...personhood should be defined by feelings, emotion, and the ability to live in relationships. (p. 564)

The psychological model of quality of life holds that there is much that can be done to improve the quality of life of older people while waiting for advances in medicine and technology to add its contributions to health-related quality of life (Bond 1999; Marinelli and Plummer 1999).



#### Domain #4: Spiritual Well-being

Spiritual well-being refers to the affirmation of life in a relationship with God, self, community, and environment that nurtures and celebrates wholeness (Moberg 1990). It includes one's personal values or morals, standards of conduct, and spiritual beliefs (Moberg 1990; Raphael et al. 1997). Spirituality and religiosity are related subjects, but generally not considered to be the same thing. Spirituality has been depicted as the human drive for meaning and a sense of purpose in life (Carroll 1998; Marinelli and Plummer 1999). It may provide a sense of connectedness; it describes a way of being and experiencing that comes about through awareness of a transcendent dimension and is characterized by certain identifiable values in regard to self, others, nature, and life (Elkins et al. 1988; Marinelli and Plummer 1999). Religion, on the other hand, is often viewed as involving a set of organized institutionalized beliefs and social functions as a means of spiritual expression and experience (Carroll 1998). It may include a person's religious affiliation or involvement, faith or belief in a "higher power," or adherence to religious practices and traditions (e.g., celebrating special occasions like Christmas, Shabbat, Ramadan, Passover; complying with dietary regimens such as avoidance of caffeine or alcohol, vegetarian, Kosher). The interplay between spirituality and religion may be that they affect how people live and how they die; they may affect moral decisions as well as day-to-day choices (Wong 1998). For older individuals, spirituality, including religiosity, may play an increasingly important role in determining quality of life, especially toward the end of life (Elkins et al. 1988; Kane 2001; Raphael et al. 1997; Wong 1998).

# Domain #5: Cognitive Well-being

Cognitive well-being involves the thinking processes and management skills of the mind, such as memory and concentration. It includes intellectual capacity and the ability to make decisions and judgments that are reasonable and based on logical/rational thought processes. Cognitive well-being can be determined by one's ability to manage money, perform on a job, or to learn a new skill. It includes the abilities to think through concepts, problem-solve, and follow through with tasks as well as having opportunities to be creative (Galambos 1997; George 1998; Kane 1998; Marinelli and Plummer 1999).

#### Domain #6: Environmental Well-being

Bond (1999) identified several components of environment related to quality of life including the standard of housing or institutional living arrangements, control over physical environment, and access to facilities such as shops, public transportation, and leisure providers. Brink (1997) claimed that housing is a key factor for the quality of life of an individual from birth to death. Therefore, it is essential that homes be safe, secure, usable, accommodating, comfortable, clean/sanitary, affordable, and offer a satisfactory level of privacy. Neighborhood safety is also important for the minimization of vulnerability to crime (Brink 1997; Galambos 1997; Glass 1991; Kane 2001; Marinelli and Plummer 1999).



Glass (1991) talked about the physical environment or the setting or surroundings where most of the caregiving takes place. It includes general considerations for safety, cleanliness, and sanitation as well as the presentation and level of stimulation in the environment and the level of personalization or "hominess" of the atmosphere (Glass 1991; Keigher et al. 2000; Lassey and Lassey 2001; Marinelli and Plummer 1999).

These domains or aspects and characteristics of life suggest a comprehensive way of viewing and constructing the concept of quality of life. As is inherent to general systems theory, there is great interplay between these life domains and their indicators. This overlap is a reflection of the complexity of the term "quality of life" as well as the complexity and multidimensionality of human beings.

## Summary

Although not exhaustive, this analysis presented a comprehensive review of the literature on representative quality of life constructs. Special emphasis was placed on quality of life as it pertains to older adults. Quality of life is a difficult and complex idea to define and characterize in a uniform way. Addressing these conceptual issues and the ensuing challenges of measuring quality of life is essential in the context of long-term care and support for older adults.

Several definitions and conceptualizations of quality of life drawn from the literature have been discussed. Common themes centered on things that make people happy or satisfied with their current life situation, past life experiences, and hopefulness for satisfaction with future life circumstances. Multiple factors influence the quality of life people experience. These factors were synthesized into six main domains of life: (1) social well-being, (2) physical well-being, (3) psychological well-being, (4) cognitive well-being, (5) spiritual well-being, and (6) environmental well-being.

Each of these domains was broken down into several dimensions in an effort to operationalize the concept of quality of life so that it can have some common standard of useful measurement. Some examples of indicators include: social supports, such as family and friends, which are indicators of *social well-being* as one dimension of quality of life; health status and functional ability, such as the absence or presence of disability, which are indicators of the *physical well-being* dimension of quality of life; self-esteem or level of life acceptance, which are signs of *psychological well-being*; judgment and thinking skills, which are indicators of *cognitive well-being*; religiosity, such as identifying with an organized religion or practicing religious traditions like Christmas, or personal values and morals, are indicators of *spiritual well-being* as another dimension of quality of life; and living arrangement such as one's own home or an institution, and appearance and safety of surroundings, which are indicators of the *environmental well-being* dimension of quality of life.

Some of these quality of life components overlap and impact on each other. There is no set boundary where one dimension ends and the next begins. No prioritization of importance has been established for these quality of life dimensions in this writing, although other authors have made attempts to prioritize quality of life measures. This review of the literature was an effort to integrate dominant quality of life themes into a useful concept for older adults. Looking at these major life



domains and indicators of each domain will help in understanding the concept of quality of life with the older adult population across the continuum of care levels.

In light of the increasing numbers of older people in need of long-term care and supportive services, it is anticipated that competition among service providers for older adults will also increase for care that promotes high quality of life. In order to identify services and care environments that maximize quality of life for older adults, it is necessary to understand what quality of life means and how to most effectively measure it. Finding a way to measure the six major life domains presented here is essential to the development and improvement of existing and forming services across the continuum of care for older adults.

## **Implications**

Having a clear and comprehensive definition of quality of life has significant implications for social policy and practice in the field of aging. Being charged with preserving or even improving the quality of life for older adults, healthcare and human service professionals, need to learn better ways to measure and address quality of life issues. Understanding what constitutes a positive or negative quality of life and what indicators are important determining factors of quality of life perceptions is essential to the development of effective and successful long-term care programs, services, and interventions for older adults.

Viewing health and well-being from a holistic perspective, including physical, psychological, social, cognitive, spiritual, and environmental functioning, rather than looking at only one facet of health and well-being, provides a means for improving individuals' lives through care plans, health-promotion activities, and community development. In addition, quality of life is often used as a basis for making decisions of best interest on behalf of incapacitated older adults, particularly by surrogate decision makers such as powers of attorney, guardians, or conservators.

Assessment within acceptable quality of life domains can serve as an indicator of needs and gaps in services. Identifying things that enhance quality of life along with things that reduce it from multiple perspectives can help gerontological social workers and other healthcare and human service professionals to better address the needs of older adults. It may also guide program evaluation and, in effect, improve existing services. Although quality of life is difficult to measure, it is important because a great many aspects of the lives of older adults are affected by service policy or programming changes (Kane 2001; Kane and Kane 2001; Raphael et al. 1997). As the demographic composition of the United States changes and the needs of older adults change, services will need to be modified in order to accommodate those needs and preferences in a way that optimizes societal and individual perspectives of quality of life.

#### References

Abels, R. R., Gift, H. C., & Ory, M. C. (1994). Aging and quality of life. New York: Springer.
Albert, S. M., Del Castillo-Castaneda, C., Sano, M., Jacobs, D. M., Marder, K., Bell, K., et al. (1996).
Quality of life in patients with Alzheimer's disease as reported by patient proxies. Journal of the American Geriatrics Society, 44(11), 1342–1347.



Albert, S. M., Marks, J., Barrett, V., & Gurland, B. (1997). Home health care and quality of life of patients with Alzheimer's disease. *American Journal of Preventive Medicine*, 13(6), 63–68.

- Atchley, S. (1991). A time-ordered, systems approach to quality of assurance in long-term care. *The Journal of Applied Gerontology, 10*(1), 19–34.
- Baker, F., & Intagliata, J. (1982). Quality of life in the evaluation of community support systems. Evaluation Program Planning, 5, 66–79.
- Baxter, J., & Shetterly, S. M. (1998). Social network factors associated with perceived quality of life. *Journal of Aging & Health*, 10(3), 287–311.
- Becker, M. (1995). Quality of life instruments for severe chronic mental illness: implications for pharmacotherapy. *PharmacoEconomics*, 7(3), 229–237.
- Becker, M. (1998). A U.S. experience: Consumer responsive quality of life measurement. *Canadian Journal of Community Mental Health*, 3, 41–52.
- Becker, M., Diamond, R., & Sainfort, F. (1993). A new patient focused index for measuring quality of life in persons with severe and persistent mental illness. *Quality of Life Research*, 2, 239–251.
- Becker, M., Shaw, B., & Reib, L. (1995). Quality of life assessment manual. Madison: University of Wisconsin.
- Bond, J. (1999). Quality of life for people with dementia: approaches to the challenge of measurement. *Ageing and Society*, 19, 561–579.
- Brink, S. (1997). (Winter/Spring) The greying of our communities worldwide. Ageing International, 13–31.
- Bury, M., & Holme, A. (1990). Quality of life and social support in the very old. *Journal of Aging Studies*, 4(4), 345–357.
- Cairl, R. E., Schonfeld, L., Becker, M., & Oakley, M. (1999). The Florida quality of life and care (QLAC) assessment system project (Report to the Florida Agency for Health Care Administration). Tampa, FL: University of South Florida Medical School, Suncoast Gerontology Center.
- Capitman, J., Abrahams, R., & Ritter, G. (1997). Measuring the adequacy of home care for frail elders. *The Gerontologist*, 17(1), 303–313.
- Carroll, M. M. (1998). Social work's conceptualization of spirituality. Social Thought, 18(2), 1-3.
- Chappell, N. L. (1996). Editorial. Canadian Journal on Aging, 15(3), 341-345.
- Coons, D., & Mace, N. (1996). *Quality of life in long-term care*. New York: Hawthorn,
- Diamond, R., & Becker, M. (1999). The Wisconsin Quality of Life Index: a multidimensional model for measuring quality of life. *Journal of Clinical Psychology*, 60(Suppl. 3), 29–31.
- Diaz, P., & Mercier, C. (1996). An evaluation of the Wisconsin Quality of Life Questionnaires for clinical application and research in Canada. *Quality of Life Newsletter*, 16(2), 11–12.
- Diaz, P., Mercier, C., Hachey, R., Caron, J., & Boyer, G. (1999). An evaluation of psychometric properties of the client's questionnaire of the Wisconsin Quality of Life Index-Canadian version (CaW-QLI). *Quality of Life Research*, 8, 509–514.
- Dorfman, L. T. (1995). Health conditions and perceived quality of life in retirement. Health and Social Work, 20(3), 192–199.
- Elkins, D. N., Hedstrom, L. J., Hughes, L. L., Leaf, J. A., & Saunders, C. (1988). Toward a humanistic-phenomenological spirituality: Definition, description, and measurement. *Journal of Humanistic Psychology*, 28, 5–18.
- Eng, C., Pedulla, J., Eleazer, P., McCann, R., & Fox, N. (1997). Program of all-inclusive care for the older adults (PACE): An innovative model of integrated geriatric care and financing. *Journal of the American Geriatric Society*, 45, 223–232.
- Eustis, N., Kane, R., & Fischer, L. (1993). Home care quality and the home care worker: beyond quality assurance as usual. *The Gerontologist*, 33(1), 64–73.
- Farquhar, M. (1994). Quality of life in older people. Advances in Medical Sociology, 5, 139-158.
- Farquhar, M. (1995). Elderly people's definitions of quality of life. *Social Science and Medicine*, 41(10), 1439–1446.
- Fisher, B. J. (1992). Successful aging and life satisfaction: a pilot study for conceptual clarification. *Journal of Aging Studies*, 6(2), 191–202.
- Fisher, B. J. (1995). Successful aging, life satisfaction, and generativity in later life. *International Journal of Aging and Human Development*, 41(3), 239–250.
- Franks, J. S. (1996). Residents in long-term care: A case-controlled study of individuals in nursing homes and assisted living in Washington state. Doctoral dissertation, University of Washington, Seattle.
- Frisch, M. B., Cornell, J., Villanueva, M., & Retzlaff, P. J. (1992). Clinical validation of the Quality of Life Inventory: a measure of life satisfaction for use in treatment planning and outcome assessment. *Psychological Assessment*, 4(1), 92–101.



- Galambos, C. M. (1997). Quality of life for the elder: a reality or an illusion? *Journal of Gerontological Social Work*, 27(3), 27–44.
- Gamroth, L. M., Semradek, J., & Tornquist, E. M. (1995). Enhancing autonomy in long-term care: Concepts and strategies. New York: Springer.
- Gentile, K. M. (1991). A review of the literature on interventions and quality of life in the frail elderly. In J. E. Bireen, J. C. Rowe, J. E. Lubben & D. E. Deutchman (Eds.), *The concept and management of quality of life in the frail elderly* (pp. 75–86). San Diego, CA: Harcourt Brace Janovich.
- George, L. K. (1998). Dignity and quality of life in old age. Journal of Gerontological Social Work, 29(2/3), 39–52.
- Glass, A. (1991). Nursing home quality: a framework for analysis. The Journal of Applied Gerontology, 10(1), 5–18.
- Hill, R. (2001). (November). Linking quality of home and community-based care and quality of life in frail older adults. Paper presented at the 54th annual scientific meeting of the Gerontological Society of America, Chicago.
- Hooyman, N., & Kiyak, H. A. (1999). Social gerontology: A multidisciplinary perspective. Needham Heights, MA: Allyn & Bacon.
- Kane, R. L. (1998). Assuring quality in nursing home care. Journal of the American Geriatrics Society, 46, 232–237.
- Kane, R. A. (2001). Long-term care and a good quality of life: bringing them closer together. The Gerontologist, 41(3), 293–304.
- Kane, R. L., & Kane, R. A. (2001). Emerging issues in chronic care. In R. H. Binstock & L. K. George (Eds.), *Handbook of aging and the social sciences* (5th ed., pp. 25–39). San Diego, CA: Academic.
- Keigher, S. M., Fortune, A. E., & Witkin, S. L. (2000). *Aging and social work*. Washington, DC: National Association of Social Workers.
- Lamb, G. S. (2001). Assessing quality across the care continuum. In L. S. Noelker & Z. Harel (Eds.), Linking quality of long-term care and quality of life (pp. 27–41). New York: Springer.
- Lassey, W. R., & Lassey, M. L. (2001). *Quality of life for older people: An international perspective*. Upper Saddle River, NJ: Prentice Hall.
- Lawton, M. P. (1982). Aging and the environment: Theoretical approaches. New York: Springer.
- Lehman, A. F., Slaughter, J. G., & Myers, C. P. (1991). Quality of life in alternative residential settings. *Psychiatric Quarterly*, 62(1), 35–47.
- Livingston, G., Watkin, V., Manela, M., Rosser, R., & Katona, C. (1998). Quality of life in older people. *Aging and Mental Health*, 2(1), 20–23.
- Marinelli, R. D., & Plummer, O. K. (1999). Healthy aging: beyond exercise. Activities, Adaptation & Aging, 23(4), 1–11.
- McDowell, I., & Newell, C. (1987). Measuring health: A guide to rating scales and questionnaires. New York: Oxford University Press.
- Mercier, C., Peladeau, N., & Tempier, R. (1998). Age, gender, and quality of life. *Community Mental Health Journal*, 34(5), 487–499.
- Moberg, D. O. (1990). Spiritual maturity and wholeness in the later years. In J. J. Seeber (Ed.), *Spiritual maturity in the later years* (pp. 175–191). New York: Haworth.
- Noelker, L. S., & Harel, Z. (2001). Humanizing long-term care: Forging a link between quality of care and quality of life. In L. S. Noelker & Z. Harel (Eds.), *Linking quality of long-term care and quality of life* (pp. 3–26). New York: Springer.
- Osberg, J. S., McGinnis, G. E., DeJong, G., & Seward, M. L. (1987). Life satisfaction and quality of life among disabled elderly adults. *Journal of Gerontology*, 42(2), 228–230.
- Peak, T., & Sinclair, V. (2002). Using customer satisfaction surveys to improve quality of care in nursing homes. *Health and Social Work, 27*(1), 75–79.
- Rabiner, D. J., Arcury, T. A., Howard, H. A., & Copeland, K. A. (1997). The perceived availability, quality, and cost of long-term care services in America. *Journal of Aging & Social Policy*, 9(3), 43–66.
- Raphael, D., Brown, I., Renwick, R., & Rootman, I. (1997). Quality of life: what are the implications for health promotion? *American Journal of Health and Behavior*, 21(2), 118–128.
- Rodgers, W. L., Herzog, A. R., & Andrews, F. M. (1988). Interviewing older adults: validity of self-reports of satisfaction. *Psychology and Aging*, 3(3), 264–272.
- Rosenberg, G., & Holden, G. (1997). The role of social work in improving quality of life in the community. *Social Work in Health Care*, 25(1/2), 9–22.
- Rubenstein, R. L., Moss, M., & Kleban, M. H. (2000). *The many dimensions of aging*. New York: Springer.



Sainfort, F., Becker, M., & Diamond, R. (1996). Judgments of quality of life of individuals with severe mental disorders: client self-report versus provider perspectives. *American Journal of Psychiatry*, 153 (4), 497–502.

- Slevin, M. L., Plant, H., Lynch, D., Drinkwater, J., & Gregory, W. M. (1988). Who should measure quality of life, the doctor or the patient? *British Journal of Cancer*, 57, 109–112.
- Steiner, A., Raube, K., Stuck, A. E., Aronow, H. U., Draper, D., Rubenstein, L. A., et al. (1996). Measuring psychosocial aspects of well-being in older community residents: performance of four short scales. *The Gerontologist*, 36(1), 54–62.
- U.S. Department of Health and Human Services. (2001). A profile of older Americans: 2001. Washington, DC: Administration on Aging.
- Wan, T., & Ferraro, K. (1991). Assessing the impacts of community-based health care policies and programs for older adults. The Journal of Applied Gerontology, 10(1), 35–52.
- Wong, P. T. P. (1998). Spirituality, meaning, and successful aging. In P. T. Wong & P. S. Fry (Eds.), The human quest for meaning: A handbook of psychological research and clinical applications (pp. 359– 394). Mahwah, NJ: Erlbaum.
- Zastrow, C., & Kirst-Ashman, K. K. (1994). *Understanding human behavior and the social environment*. Chicago: Nelson-Hall Publishers.

