ELDER CARE AND

HEALTH MAINTENANCE ORGANIZATIONS

by

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> Life affords no higher pleasure that of surmounting difficulties, passing from one step of success to another, forming new wishes, and seeing them gratified. He that labors in any great or laudable undertaking has his fatigues first supported by hope, and afterwards rewarded by joy . . . strive with difficulties, and to conquer them, is the highest human felicity.
>
> ------*Samuel Johnson*

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ABSTRACT

The purpose of this project was to increase understanding of the role health maintenance organizations play in maintaining independence in the elderly. To accomplish this purpose, four specific steps were taken. First, identification of an optimal set of service through a comprehensive literature review lead to the development of an interview schedule. Second, services existing in the delivery of acute and chronic care provided to elders through two HMOs, one local and one remotely based, were explored with the interview schedule. Third, the information gained through the exploration of services offered by the HMOs was compared to the optimal set of conditions. The comparison lead to the identification of strengths and deficits in both service models. Fourth, based upon analysis of service deficits, recommendations were made on how current care delivery could be enhanced.

Both HMOs interviewed were locked into a reimbursement system based on episodic and acute care illness. The current mode of health care delivery does not provide adequate activities of daily living (ADL) and independent activities of daily living assistance (IADL) for Montana's frail elders. Future nursing efforts should be centered around the development of an outcome based reimbursement system in which ADL and IADL support are valued as core components that assist elderly clients to maintain independence at home.

CHAPTER 1

PROJECT BACKGROUND

One cannot deny that the era of health care reform has brought changes to health care healthcare delivery. These changes have influenced all aspects of elder health care delivery. My clinical experiences centered around acute care, home health and long term care. The exposures I experienced at these different levels of care lead me to believe that many elderly clients have unmet needs. Furthermore, these unmet needs were not always being satisfied by acute care facilities or home health. Many elderly clients may not meet the criteria developed by Medicare/Medicaid to receive services needed for maintenance of independence. Elders who do not meet the specific criteria of home health may "fall through the cracks" and be left up to their own resources. Additionally, many of the financial, social and community resources that address the issues of aging clients may be limited and inadequate. Spouses and other family members may not be available to provide the assistance that clients need. Many elderly clients are widowed, while other members of their families are geographically distant. This can leave elderly clients vulnerable and without a support system.

When family members are not available to provide support and assistance, elderly persons become increasingly dependent upon outside and often unfamiliar resources. If elderly clients are unsuccessful in accessing these resources, their ability to remain independent in their own home may be threatened. At this point, elderly clients may face

premature nursing home placement. Most elderly individuals wish to remain independent rather than enter a nursing home (Ebersole & Hess, 1998).

Loss of independence frequently parallels multiple chronic diseases and disabilities. On the biologic level, there is variability in the regulation of homeostasis, organ system reserve, immunologic responsiveness, and body composition (NIH Consensus Development Conference, 1991). Some physiological and social changes in elders cannot be avoided and are a part of the developmental process.

Advancing age is also accompanied by the loss of important social support systems due to the death of a spouse, retirement or relocation of residence. Elderly persons also may face multiple losses related to isolation, withdrawal from activity, and a decline in general state of wellness. Nursing is challenged to help meet the needs of elders and assist them in attaining and maintaining their optimal level of wellness, independence, and self esteem. Part of the challenge to health care providers is meeting the needs of the elders in an era of cost containment.

The continuing escalation of health care cost and changing population demographics are demanding that changes are made in provision of health care (Scott & Rantz, 1997). Cox (1997) suggested that by the year 2010 the youth population will decline and the nation's average age will rapidly increase. "There will be fewer workers to support retired persons receiving social security benefits: only two workers per retiree in 2035, compared with 18 workers per retiree in 1950" (Hodgkinson, 1995, as cited in Cox, 1997, p. 110). Nursing cannot assume that clients have ready access to health care

and must become increasingly imaginative in providing care. Health Maintenance Organizations are addressing some of the needs of the senior care market.

Health Maintenance Organizations (HMO) have been delivering care to people in the United States for decades. These organizations and other forms of managed care have clearly defined population bases, where services are provided based upon clients' ability to pay a predetermined yearly premium. For elders, the vast majority of senior care plans concentrate on service delivery and coverage of acute care services (Durham, 1994). This concentration on acute care leaves an obvious lack of focus on the maintenance and well being of elders who frequently experience chronic illness.

An increaseing elderly population will exert tremendous pressure on managed care to develop and maintain system performance indicators that monitor each enrollee. Health Maintenance Organizations that survive the competitive milieu of the 1990's and beyond will be those who deliver a broad range of cost-effective acute and chronic care services to a diverse population, including the elderly (Durham, 1994).

Purpose

The purpose of this project is to increase understanding of the role HMOs play in maintaining elder clients in Montana. Primary care providers, whether they be advanced practice nurses, physicians or physician assistants, must have a working knowledge of available services, ability to access these services, and barriers to these services. Without knowledge of available services that assist elders in maintenance of independence and

barriers to these services, the primary care providers' ability to deliver holistic care is limited.

To accomplish the above purpose, four specific steps were taken. The first step was a comprehensive literature review to identify an optimal set of services or group of conditions that help maintain independence of elders in the community. Secondly, services existing in the delivery of acute and chronic care provided to elders through two HMOs, one local (Managed Care Corporation) and one remotely based (Geriatric Health Care Plan) were explored. Fictitious names were utilized to protect the companies. Then, the information gained through this exploration of services offered through the local and distant HMOs was compared with the optimal set of services identified in step one. This information assisted in identification of the missing critical elements of an optimal set of services that help elders maintain independence. Last, upon completing examination of available services and service deficits, recommendations were made on how current care delivery can be enhanced and delivered in a more effective manner.

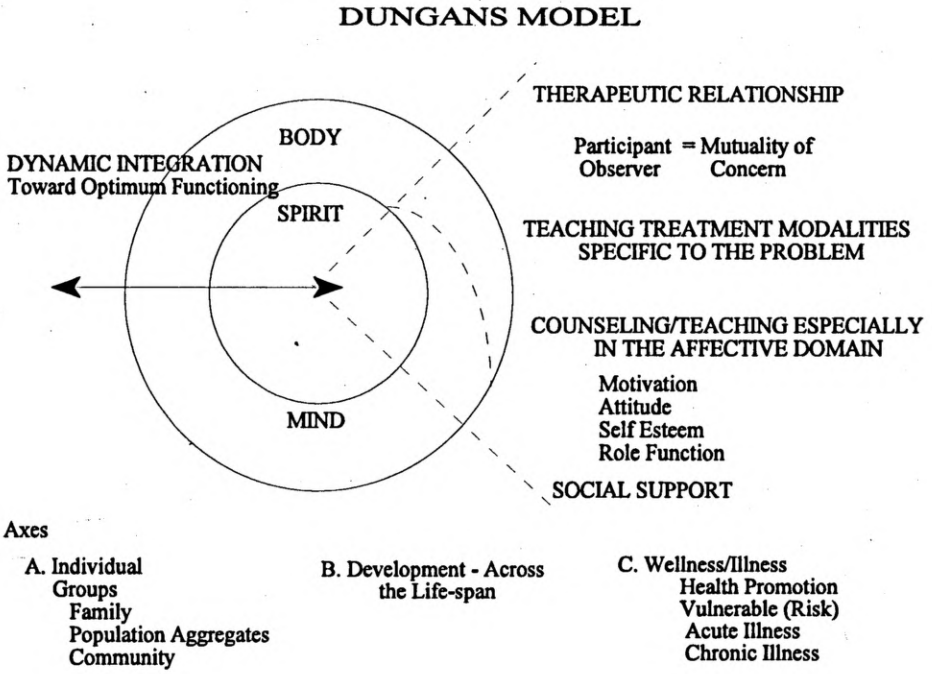
Conceptual Framework

To provide a structure to examine conditions that assist elders in maintenance of optimal wellness and independence, Dungan's Model of Dynamic Integration was selected (see figure 1). This model is compatible with the concepts of independence, wellness, and long-term life style management. First published in 1991, the model has been utilized as the foundation for a number of nursing management protocols in a variety of settings (Dungan, Brown, & Ramsey, 1996).

Alterations in lifestyle may be necessary to deal with chronic illness and the physiological changes associated with aging. If clients are not given adequate multidisciplinary support at the onset of a disease process, they may become dependent. Dungan et al. (1996) approaches humans from a three dimensional approach:

> This three dimensional concept views individuals and groups (families and/or support systems) as an open interactive system of body, mind, and spirit. Facets of the protocol are designed to offer support and promote integration and balance which are conveyed as well-being or health. (Lamm, Dungan & Hiromoto, 1991, p. 182)

Figure 1. Dungan's Model



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The assumption was made that unless needs are met in all three dimensions, achievement of independent functioning was compromised. Two concentric circles and a connecting arc represent body, mind and spirit of the individual. The circle moves along a continuum toward optimum functioning. The therapeutic wedge represents a time when the individual may need assistance to achieve optimum functioning, and touches all three dimensions of body, mind and spirit (see figure 1).

The model must be considered along the three axes seen across the bottom of the model. The axes are interventions that are directed at either individuals, families or larger groups at any stage of development and at any point along the well/illness continuum. Many elders are in a stage of declining family from the time of the departure of the last offspring until one or both spouse die (Duvall, 1977, as cited in Dungan et al., 1996). This can be a time of inadequate social support, and the population of concern, the elderly, represent a group at high risk for institutionalization.

The importance of therapeutic relationships within the context of the nursing process has stood the test of time. Orlando (1990, as cited in Dungan et al., 1996), operationalized the concept of therapeutic relationship within the context of the nursing process. Communication, active listening and presence are the central elements of a therapeutic relationship.

> The interactive wedge of Dungan's therapeutic relationships are composed of (a) teaching treatment modalities specific to the problem, (b) counseling and teaching especially in the affective domain which include motivation, attitude, self-esteem and role function, and (c) social support (Dungan, Brown & Ramsey, 1996, p. 1187).

Teaching is usually started in the acute care setting or at the entry point into the health care system. Education is a key factor in client adjustment to the adverse effects caused by illness. Educational information given to clients must respond to the need to know and be reinforced as anxiety of the acute episode gives way to the pragmatics of day-to-day management (Johnson & Lauver, 1989, as cited in Lamm et al., 1991). Matching learning preference and cognitive ability increases success, along with negotiation and contracting attainable goals. The strategies promote self motivation and are powerful tools toward achieving independence.

Counseling approaches use the mind-body connection and recruit the life-force of the spirit in the healing process. Intervention is designed to encourage the client and family in health-seeking behaviors that will go beyond the confines of the current illness to sustain well-being over time. Chronic illness can affect self esteem and role functioning, and the client may experience an alteration in the body-mind-spirit connection. "Hope is one of the most universal needs of clients and their families" (Molter, 1979, as cited in Lamm et al., 1991, p. 184). Spiritual counseling can be a powerful means to generate hope and a realization of meaning in human suffering (Watson, 1985, as cited in Lamm et al., 1991).

Social support can reduce the stress and negative outcomes associated with illness. Deficient social support has a deleterious effect on health and life style management. Social support is embodied by reciprocal interpersonal relationships that enhance security, provide mutual respect, and positive feelings (Jennings, 1987, as cited in Lamm et al., 1991). Within the context of health care, this social support is usually

reserved for family members. Norbeck (1988, as cited in Lamm et al., 1991) recognizes that when the social matrix is sparse, surrogate support must be provided. Support is augmented by professionals, paraprofessionals, or groups of people with shared life experiences. Family interdependence is seen in the need for emotional, informational, and instrumental support. Family members must be included in crisis prevention, managing therapeutic regimen, controlling symptoms, adjustment to disruption, overcoming social isolation and finding financial resources (Strauss & Glaser, 1988, as cited in Lamm et al., 1991).

Each portion of Dungan's model is situation specific and depends upon the assessment and critical judgement of the case manager. The case manager utilizes diagnostic abilities to monitor the responses of the client and associated care givers and sets priorities related to pacing their progress toward independent functioning. Directing the timing and coordination of the efforts of the multi-disciplinary team is one of the most important functions of the case manager. The coordination of the multi disciplinary team facilitates conservation of health care resources. Conservation of health care resources can be achieved by using the most effective member of the team, including family and/or paraprofessional to meet the client care needs at any point in time.

> The goals of Dungan's Model of Dynamic Integration are to (a) promote more independent functioning, (b) enhance the client's sense of self-worth and competence in management of lifestyle to maintain health, (c) increase the client's perception of quality of life, (d) increase the patient's quality of life, (e) empower clients by giving them better choices in relation to managing their health, (f) reduce the tendency to relapse into an acute care problem, and (g) reduce catastrophic intervention within the last few days of life (Lamm et al., 1991, p. 184).

"Pacing" for quality of life is critical to long-term management as elder's and their families may have limited energy reserves. Energy reserves must be utilized efficiently to deal with problems as they emerge. As clients/families are prepared and accept independent functioning, professional augmentation is gradually withdrawn until only a maintenance level of interaction with the health care delivery system is needed (Lamm et al., 1991). If elders are informed of possible adjustment difficulties they will be more likely to share concerns in a timely manner.

In summary, Dungan's model views individuals within the dimensions of body, mind, and spirit involved in a dynamic relationship with optimum independent functioning. When this balance is disturbed by illness, a need for long-term lifestyle changes is imposed, and requires an approach that facilitates the restoration of dynamic integration (Lamm et al., 1991). Restoration can be accomplished by addressing the needs in all three areas in the context of personal development. Timing is of critical importance because energy is limited and must be utilized efficiently to handle problems as they emerge. The protocol of nursing care modalities (Appendix B) for the Dungan's model encompasses (a) "direct care", (b) "teaching or cognitive domain", (c) "counseling or affective domain", (d) "spiritual domain", (e) "social support", and (f) "augmented social support" (Dungan et al., 1996, p. 1187).

Significance to Nursing

The aging of America underlines a need for health care to address continuum based care, particulary of the chronically ill elder population. The Department of Human

and Health Services predicts that by the year 2020, seven million Americans will be older than 85 years of age (Scott & Rantz, 1997). Aging can lead to increased dependency and prevalence of chronic disease. Increasing dependency and chronic illness are generating significant drains upon limited health care resources; this situation demands that we find new more efficient approaches to the issues surrounding elder care.

The resulting burden of change will be borne by both the health care system and the families of the elderly and chronically ill. Many believe that home health care will meet the needs of the elderly outside institutional walls. However, if criteria for episodic based care are not met, an early discharge from home health often takes place, frequently resulting in gaps in care for the elder population. Elders, their family members, and care providers may experience frustration, potential difficulties, and compromising circumstances in managing independent care. Elderly persons have long term needs and exist in a fragile balance between wellness and acute hospitalization. Nursing support of self management skills is the key to continuum based care of the aged. Older individuals need information regarding health promotion, disease prevention, alternatives to treatment, and consequences of their lifestyle choices.

Nursing is challenged to take an active role in finding a way to provide comprehensive care for seniors and their families. Integration of primary medical services, case management, counseling for patients and families, educational programs, and organization of social support services are necessary components of health care that can assist elderly clients and their families in maintenance of independence and achievement of optimal wellness.

Nurse practitioners have a diverse knowledge base and experience that crosses many boundaries in the health care setting; they are an invaluable asset to providing quality driven and holistic based care. Geriatric nurse practitioners can provide quality cost-effective health care to elderly people with acute and chronic conditions (Keister & Blixen, 1998).

CHAPTER 2

LITERATURE REVIEW

There will be an increasing number of older Americans in the future. Becoming older is accompanied by a multitude of physiological and social changes. The increasing number of older Americans will generate significant financial drains on health care resources and create limitation in meeting the needs of an aging population. Members of this population want to remain independent in their own homes rather than depend on others.

To accomplish the purpose of the project, the literature review covered the (a) definition of frailty and some functional assessment tools used to evaluate frailty (b) factors that limit and enhance the elderly in maintenance of independence and, (c) defining characteristics of HMOs including a brief commentary on the origin of HMOs, and (d) the role of case management in elder care delivery. Since HMOs seek reimbursement through Medicare the literature review covers components of Medicare use and information on home health and case management utilization in the provision of HMOs services.

Definition of Frailty

Frailty is a term commonly used to describe aging persons who are tenuously able to carry out the important practical and social activities of daily living. Frailty has also

been described as a reduced physiologic reserve associated with increased susceptibility to disability (Ebersole & Hess, 1998). Reduced physiologic reserve in mechanical performance, energy metabolism, neurological and sensory control are components of frailty, and are often the cause of physiologic loss. Physiologic loss can be low grade or rapid. Low grade physiologic loss can result from a sedentary life style. Rapid physiologic loss can be attributed to acute insults (illness, injuries, or major life events) which result in periods of limited activity and bed rest. Frailty involves a complex interaction of factors that block recovery from rapid physiologic loss.

> To some extent frailty could be prevented. Approaches to prevent the development of frailty are (a) the periodic monitoring of key physiologic indicators of frailty, (b) the prevention of acute and subacute episodes of physiologic loss, (c) the prediction of episodes of physiologic loss and the reduction of frailty prior to the loss, and (d) the removal of obstacles to recovery once physiologic loss has occurred (Ebersole & Hess, 1998, p. 555).

Frailty in older persons can be related to several domains of functioning. Guralnik and Simonsick (1993) define these domains of functioning as physical, cognitive, emotional, sensory, and social functioning. While frailty in older persons may be related to poor functioning in one or more of these domains, physiological loss and cognitive dysfunction have the greatest impact on the overall burden of disability. Emotional problems and loss of sensory function can also contribute to disability. Impaired social functioning, as well as adverse environmental features, reflect the impact of frailty within all domains of functioning.

Methods and instruments used to estimate physical disability cannot completely distinguish physical functioning from the other domains of functioning (Guralnik &

Simonsick, 1993). For example, the inability to perform self care activities such as dressing and bathing may result from physical, cognitive, and/or sensory dysfunction.

Measuring Frailty

Guralnik and Simonsick (1993) indicated that physical frailty and disability are defined and measured in a variety of ways. Prevalence of frailty and disability vary according to the kinds of items used to define disability and dysfunction. There exists no one set of Activities of Daily Living (ADL), Independent Activities of Daily Living (IADL) or some combination of these measures that are most appropriate for defining disability. Activities of Daily Living are defined as basic self care activities such as bathing, dressing, transferring from bed to chair, using the toilet, and eating. Independent Activities of Daily Living are designated as tasks considered necessary for independent living in the community, but are more difficult and complex than the self care activities represented by ADLs. Some examples of IADLs are cooking, shopping, laundry, and travel. Appropriate measurement of disability and dysfunction through use of IADLs and ADLs tools can provide a great deal of important information on the health status, health care and service needs of the older client.

The first report of the development of the ADL assessment score was in 1963 by Sidney Katz and his associates in the Journal of the American Medical Association (Gealey, 1997). Katz and his colleagues saw a need to measure function in the elderly. They developed a measure to evaluate activities that people perform universally and habitually. The tool, Index of Activities of Daily Living, measures six different functions:

bathing, dressing, toileting, transfer, continence and feeding. Functional decline begins with loss of the most complex components while the least complex components are retained the longest. For example, elders may be unable to manage money or self medicate and still be independent with activities such as feeding or toileting. Katz described his tool as a standardized measure of biological and social function. The Katz Index of ADLs is a well developed and utilized tool.

Nagi (1965, as cited in Spector & Flesisham, 1992) developed a conceptual framework for the development of measures to gage functional disability. This framework makes important distinctions between functional limitations, disability and impairments. Functional limitations refer to performance at the level of the whole organism, such as walking or reaching. Disability refers to limitations in performance of social roles and tasks in the context of the socio-cultural and physical environment. Impairments are anatomical, physical, or mental abnormalities or losses in one physical system, such as a missing limb or brain damage.

Nagi's framework of disability refers to the social result of interaction between disease, physical impairments and functional limitations. As an example, difficulty in reaching is a functional limitation. This may or may not lead to a problem with activities associated with dressing or preparing meals. By comparison, difficulty in independent bathing is a disability because bathing is an important activity, such that failure to perform this activity may have adverse implications for personal health and the performance of important social roles.

In 1969, Lawton and Brody (as cited in Guralnik & Simonsick, 1993) felt a need to develop a more comprehensive tool and expanded the ADL list to include activities such as transferring, walking, housekeeping, laundry, means of transportation and the ability or lack thereof to self medicate. This tool is called the Independent Activities of Daily Living (IADL). Family resources and social interaction need to be evaluated when assessing the elders' ability to remain independent.

In 1978, the Older Adults Resources and Services (OARS) scale was developed at Duke University (Badger, 1992). In addition to measuring ADLs and IADLs, it obtains information about family structure such as marital status, living companions, frequency of family visits, contact with friends, availability of a confidant, satisfaction with their social interaction pattern and the availability of someone to help if the individual becomes sick or disabled. When the scale is administered to a person in an institution, different questions are substituted for the standard items that apply to a more independent individual.

Chronic illness often affects every aspect of life, and living with chronic illness requires ongoing adaptation (Badger, 1992). Previous research has found that chronic illness is highly correlated with depression, and subsequent higher disability, poorer functioning, and higher morbidity. Depression in the elderly can be measured through the use of assessment tools such as the Geriatric Depression Scale (GDS) (Dreyfus, 1988). However, there are no specific tools to measure the often idiosyncratic presentation of the depressed elderly. While the use of the tool such as the GDS cannot substitute for a diagnostic interview, it can be helpful to facilitate assessment of depression.

Factors That Limit and Enhance Independence

The majority of elders hope to maintain independence as long as possible. Independence is frequently used as a synonym for autonomy (Davies, Laker & Ellis, 1997). It is, perhaps, more appropriately viewed as one contributing factor to personal autonomy. Davies et al. indicate that autonomy is defined as an exercise of self determination and goal orientated behavior. This behavior can potentially be threatened by a variety of circumstances, real or symbolic, intrinsic or external to the person. Hertz (1993, as cited in Davies et al., 1997) stated there are three defining attributes of autonomy: (a) voluntariness, (b) individuality, and (c) self direction. From this definition and these attributes one could derive that the notion of autonomy is multidimensional and context dependent.

The ability to be independent or autonomous is frequently associated with physical functioning and ability to perform ADLs. One's understanding of independence can be enhanced by considering the notion of dependency. Dependency usually implies a degree of inequality between the dependant and the depended upon. Elders are frequently dependent in some or all of these dimensions (Davies et al., 1997).

The most appropriate nursing actions to enable the older client to be independent should be context-dependent. What is appropriate in an acute hospital setting may differ from what is appropriate in a long term care setting. When broad concepts such as independence are broken down into precise dimensions (maintaining individuality and respecting dignity), these dimensions require identification of objective indicators to be

meaningful (Davies et al., 1997). After reviewing empirical studies which have attempted to measure the quality of nursing care for elderly in a range of care settings, they found these more objective indicators recurred repeatedly:

> (a) implementation of systems of care delivery which promote comprehensive individualized assessment and multi-disciplinary care planning, (b) attempts to encourage patients to participate in decisions about their care, (c) patterns of communication which avoid exerting power and control over the patients, and (d) attempts to modify the environment to promote autonomy and independence and minimize risk. (p. 411).

Factors that limit and enhance independence of the elderly in various contexts include chronic illness, poor functional abilities and mobility, falls, incontinence, social isolation, depression, and cognitive impairment. The first factor that limits independence to be discussed is chronic illness

Chronic Illness

Chronic illness is a factor which can be inherent or occur as a result of imposed lifestyles and environmental hazzards (Ebersole & Hess, 1998). Elders with one or more chronic illnesses can be supported toward the maintenance of health and wellness by utilizing a holistic philosophy that incorporates efforts directed at self care and self esteem. The aged and their support systems (family, friends, and care givers) need to reorganize their thinking concerning the manifestations of chronic illness. Physical manifestations of chronic illness should not be the sole determining factor in the establishment of the elder's state of wellness or health.

Chronic pain is often associated with chronic illness and health problems, disability, loss of independence and reduced quality of life. In addition, many elderly

clients with complaints of chronic pain may also exhibit signs and symptoms of depression. Herr & Mobily (1992) conducted a study of 69 elderly subjects who had experienced back pain for at least three months. Completed instruments in the study included the Beck Depression Inventory Tool and the West Haven-Yale Multidimensional Pain Inventory. The latter instrument included overall life interference, life control and severity of pain. No significant differences were found between groups for severity of pain reported or total hours per day in pain. However, the depressed elderly group demonstrated significantly (a) greater overall interference in life activities, (b) perception of less control over their life, (c) greater disability, and (d) greater emotional response to living with pain. These findings support the association of chronic pain and depression in the elderly.

Treating chronic pain can be complicated; health care professionals need to recognize that psychological factors are often involved in the development and continuation of chronic pain. Health care professionals must understand the underlying factors and relationships between pain, depression and chronic illness in elderly persons.

Functional Abilities and Mobility

Another factor interfering with maintenance of independence is inability to perform some IADL activities. Successful performance of IADL activities through integration of physical, social and cognitive skills are fundamental to maintaining noninstitutional living arrangements (Short & Leon, 1990, as cited in Whittle & Goldenberg., 1996). Lawton (1985, as cited in Whittle & Goldgerg, 1996) stated that the

level of IADL dependence is an outcome of the interaction between biological, behavioral competence and environmental demands. Independent activities of daily living dependency increases as behavioral and biological competence decreases, assuming environmental demands remain constant.

Whittle and Goldenberg (1996) conducted a descriptive correlational study to examine the relationships between functional health status and the performance of IADLs in a group of non-institutionalized elderly. A demographic questionnaire and two instruments were used in this study, the Multidimensional Functional Assessment Questionnaire/Instrumental Activities of Daily Living Scale (MFAQ/IADL) and the Health Status Questionnaire (HSQ).

The findings revealed that as health perception, physical function, and social function declined, IADL dependency increased. The IADLs that significantly correlated with functional health status were transportation, shopping, and housekeeping. Significant relationships were also found between health status scores and the number of IADL dependencies experienced. Independent activities of daily living dependencies were significantly associated with limited physical functioning, role function, social functioning, energy reserves and a decreased health perception. Functional health status of elderly persons determines how well they meet their environmental demands (Short & Leon, 1991, cited in Whittle & Goldenberg, 1996). A negative perception of health can cause elders to cease attempts to perform more physically challenging IADLs. Some elders are willing to accept a dependent state rather then pursue strategies to maintain independence. In contrast, positive health perception can be associated with better social

functioning, better mental health, emotional well-being, higher energy levels, and fewer role limitations attributed to emotional health problems.

Dungan et al. (1996) conducted a descriptive study which measured the outcomes of a health maintenance program which included exercise, health teaching and group participation on physical and mental well-being in a sample of frail elderly clients living independently. The results of the study revealed that promotion of regular exercise, socialization, self-help strategies and teaching had a positive outcome on the physical and mental health of the sample of frail elderly. All measurements, even those that did not show statistical significance, demonstrated a move toward improved physical and mental well being, and therefore more successful performance of IADL activities.

In summary, improved physical functioning, social functioning and health maintenance activities can assist the frail elderly in improved health perception and maintenance of independence. One must keep in mind that onset of falls in elderly clients may result in a decline in their functional health status.

Falls

Falls are a common complication for many elders whether they live independently in the community, or in a hospital or nursing home. Falls are defined as an unplanned slip to the floor, whether or not injury was sustained. Morse, Tylko and Dixion (1995, as cited in Benson & Lursardi, 1996), define falls as an event in which the patient comes to rest on the floor.

Milar (1996) states that many factors play a part in determining a patient's risk of falling. These factors can be divided into two categories, exogenous and endogenous. Exogenous factors are factors in the environment that stimulate falls such as poor lighting, slippery floors, cluttered passage routes, or unstable furniture. Endogenous factors arise from within the elderly client and are more difficult to identify; examples include sensory deficits, a history of falls, sex of patient, certain medications, age, medical history and gait. Elderly clients who experience fear and embarrassment of falling (fallaphobia) may decrease their mobility and, in doing so, run the risk of increased dependence and the complications of inactivity.

Benson and Lusardi (1995) conducted a literature review of 24 different research studies to evaluate the factors that increase the fall risks in the elderly. Altered mental status was cited as an antecedent to falls in 20 of the 24 articles reviewed.

> Identified characteristics or indicators of altered mental status included (a) impaired judgment, (b) disorientation, (c) memory loss, (d) confusion, (e) depression, (f) restlessness, (g) sedation, (h) inability to make purposeful decisions, (i) emotional upset, (j) loss of significant other, (k) anxiety, (l) grief, (m) hallucinations, (n) recent loss of consciousness, (o) attitude (resistant, belligerent, combative, fearful), (p) forgetful, (q) agitated, (r) impaired decision-making ability, (s) inability to follow verbal commands, (t) uncooperative behavior, and (u) cognitive impairment (p. 333).

Despite inconsistencies in definition and measurement of altered mental status the majority of the articles reviewed found a positive relationship between the antecedent of altered mental status and fall risk. Sensory/perceptual alteration was cited in 20 out of 24 articles in the literature review as an antecedent to falls; however, few described how sensory or perceptual deficit were measured (Benson & Lacerta, 1995).

> The defining attributes of sensory/perceptual alteration were (a) poor vision, (b) impaired hearing, (c) impaired speech, (d) impaired color vision, (e) changes in kinesthetic or position sense, and (d) dizziness (p. 334).

Altered mobility had the strongest linkage as an antecedent to the concept of falls (Benson & Lusardi, 1996). Twenty-two of 24 articles described a positive correlation between altered mobility and falls; however, few studies described the criteria to evaluate altered mobility. The defining attributes of altered physical mobility were (a) unsteady gait, (b) lower extremity strength, (c) ability to transfer, (d) paralysis, and (e) use of assistive devices for ambulation.

Silvertome and Tideiksaar (1996, as cited in Luukinen, Koski, Kivela, & Laippala, 1996) suggested a relationship between falling and the development of urinary incontinence from urinary urgency. The next factor discussed is incontinence.

Incontinence

Incontinence or loss of ability to control the elimination of urine or feces on an occasional or a consistent basis, causes embarrassment and extensive cost socially and economically. Urinary incontinence is seen more frequently among women than men at all ages, but both men and women show an increase in urinary incontinence with advancing age. Muscles and tissues atrophy as individuals age, and circulatory and central nervous system function also declines. Luft and Virheas-Nichols (1997) identified that

> levator ani muscle groups, which forms the pelvic floor that support the bladder and maintains pressure within the urethra, loses bulk and strength. The bladder shrinks in capacity; within the bladder muscle elastin is replaced with collagen, thereby, reducing bladder elasticity and contractility. Men experience

> prostatic enlargement with age, which results in urethral constriction and can impede bladder emptying. (p. 67)

Nazarko (1997) identified five factors relating to the individual that influence the continence status: (a) functional abilities, (b) degree of mental impairment, (c) impaired psychological state, (d) existing disease, and (e) medications. Ebersole & Hess (1998) state that as persons age, altered drug metabolism, nutritional and fluid status, poly-pharmacy, and altered compliance result in a three to four times higher rate of adverse drug reactions.

Luft and Virheas-Nichols (1997) identified six specific risk factors associated with urinary incontinence. They included (a) age, (b) menopause, (c) diabetes, (d) hysterectomy, (e) stroke, and (f) obesity. Two identified risk factors are inevitable -- aging and menopause. Obesity, hysterectomy, stroke and diabetes may be preventable and are considered modifiable factors. Luft and Virheas-Nichols suggested that counseling must include information about the risk of developing incontinence. Patients with multiple risk factors may be well advised to address those factors that are changeable to lower overall risk (for example, an obese patient with a hysterectomy may be more motivated to lose weight). Will concerns about developing incontinence motivate elderly to adhere to lifestyle changes or influence their decision-making about health care options? The answer is unpredictable; however, Luft and Virheas-Nichols think elders need to be given full information about incontinence and the risk factors for developing this problem. The next factor to be discussed is social isolation.

Social Isolation

The relationship between social support and health promoting behaviors, well-being, self-esteem, and even mortality has been well established (Luggen & Rini, 1995). Schank (1992, as cited in Luggen & Rini, 1995) discovered through research that social functioning with support may prevent physical and psychological deterioration.

Luggen and Rini (1995) conducted a study of 62 elderly men and women living in private homes and apartments, government housing and assisted living retirement centers. The population of elders were 65 years or older from a large metropolitan city; and their socioeconomic status varied widely. Data was collected using the Lubben Social Network Scale. It contains six sections (a) family networks, (b) friends networks, (c) confidant relationships, (d) helping others, (e) living arrangements, and (f) community networks. The study results supported the idea that as people age, the risk for social isolation increases. Variables that increased the risk of isolation were childlessness, female, widowed, economics, low educational factors, instability of residence, decreased sensory acuity, lack of participation in social groups and infrequent contact with friends and family. Screening of risk factors for isolation and developing interventions to prevent isolation can assist elders in maintenance of independence.

Advancing age is accompanied by loss of important social support systems due to the death of a spouse or siblings, retirement, or relocation of residence (US Department of Human Resources, 1991). Depression in late life occurs in the context of numerous social, developmental and biological diversities.

Depression

Depression is a common syndrome in the medically ill elderly (Dreyfus, 1988). The symptoms of depression may result in decreased functional ability for the elderly patient. What are some of the losses that make the elderly so prone to depression? Depression in late life coexist with multiple chronic diseases, limited physical mobility, musculoskeletal pain, impaired endurance, sensory loss (visual and hearing), loneliness, social isolation, role attrition, financial concerns, and loss of spouse, friends and siblings. These conditions create psychosocial concerns, medical and physiological burdens and functional disabilities that can be directly attributed to the pathogenesis of depressive syndrome (Stewart-Chaisson, 1985). Presence of depression can negatively affect the quality of life and is a risk factor to maintaining independence in elders.

Butler, Cohen, Lewis, Simmons-Clemmons, and Sunderland (1997) identified several risk factors for depression. They include (a) recent loss, (b) living alone, (c) co-morbidities (hypertension, stroke, and cognitive deficits), and (d) drug interactions. Warning signs of depression include weight loss, sleep problems, feelings of guilt or worthlessness, loss of interest in sexual relations, and changes in activities of daily living.

The diagnosis of depression is often missed. Some elderly persons often do not mention feeling depressed, or they tend to underestimate their symptoms of depression. Many tend to believe that depression is normal because of losses they may be experiencing (Simmions-Clemmons, 1997, as cited in Butler et al., 1997). Depression may also be overlooked because of cognitive deficits and the elders' inability to express what they are feeling.

Persons aged 65 and older have the highest rate of suicide among all Americans (Cohen, 1997, as cited in Butler et al., 1997). Blazer (1997, as cited in Butler et al., 1997) at Duke University compared the differences between young depressed and older depressed patients. The only difference he discovered was that elders talk about suicide less, but they do it more often. Therefore, it is extremely important to confront a potential suicide as directly as possible. Brief office visits may not provide the opportunity to gather the necessary data to diagnose depression. Also, referrals to psychiatrists are unlikely if patients do not have the proper insurance or their care is covered by an HMO (Simmons-Clemmons, as cited in Butler et al., 1997).

Cognitive Impairment

Along with the physical and mental changes of aging, loss of independence, autonomy and personal control can occur. Several authors have made a distinction between autonomy and decision-making (Agich, 1990, as cited in Rice, Beck & Stevenson, 1997). When elders choose to have others make decisions for them they are exercising choice and autonomy even though they themselves are not participating in the decision-making process (Laing, 1991, as cited in Rice et al., 1997). Personal autonomy or choice, therefore, has a higher order value then actual decision-making.

Delirium is a syndrome of marked global disturbances in cognition that develops over a short period of time (hours to days) and exhibits fluctuations in the degree of cognitive impairment. Reversible dementia is a cognitive disorder that can be treated effectively to restore normal or nearly normal intellectual function. Depression, alcohol,

and drug toxicity are the most common reversible causes. Nonreversible dementia is an acquired syndrome of progressive decline that erodes intellectual abilities. It causes cognitive and functional deterioration and leads to impairment of social and occupational functioning. Alzheimer's disease and vascular disease account for most cases of nonreversible dementia.

Cognitive impairment of Senile dementia of the Alzheimer type (SAT) is a health problem of complex etiology. The course of this disease varies from person to person, unlike other mental impairments, and the progression is from mild to severe. Symptoms may take anywhere from a year to more than a decade to become evident. Hall (1994) described four stages of functional loss with dementing illness (a) forgetfulness, (b) confusion, (c) ambulatory dementia, and (d) end stage. The first stage of forgetfulness may appear as a slow process of deterioration, first impairing only short term memory and concentration. This stage eventually progresses to impaired long term memory loss, changing values, conviction and personality. Elders may be able to maintain independence early in the diagnosis of SAT; however, later on their independence may become impaired.

In the second stage of functional loss, elders may experience increasing difficulty with money management, legal decisions, occupation, transportation, driving, home maintenance, housekeeping, shopping and cooking (Hall,1994). There can be withdrawal from complex social groups as elders have increasing difficulty functioning in environments other than the home. It may be necessary to place them in adult day care or

residential level care because of compromised safety and the inability to manage maintenance tasks.

The third stage presents as ambulatory dementia and functional losses begin to occur in basic ADLs (Hall, 1994). Elders begin to withdraw from social contacts, and becomes increasingly self-absorbed. Affect remains flat and they appear to be unaware of losses. Their ability to reason and recognize others and plan for safety are impaired; dependence on caregivers increases.

The final stage of functional loss is evident when elders no longer ambulate and have little purposeful activity (Hall, 1994). Consistent recognition of caregiver, family members and body parts is generally absent. Problems associated with immobility, such as skin breakdown, contracture, urinary tract infections and pneumonia are common.

Nurses have a responsibility of providing caregivers with the necessary tools and support essential to the task of caring for the person with dementia. Research has provided evidence that if persons with dementia are given the opportunity to remain involved with their environment, increased alertness and active participation will result (Kelly, 1994). Respite care is an essential service both for caregivers and for people with dementia. Respite care may meet the needs of the caregiver and elders, allowing elders to stay in their home environment. This could be manifestation of choice and autonomy even though caregivers are making the decisions for the elderly persons..

Health Maintenance Organizations

History of HMOs

During the 1930s and 1940s slow growth of prepaid group practice plans occurred. It has been speculated the reason for this slow growth was due to resistance from independent practitioners and fee-for-service providers who feared loss of economic benefits under a competitive model (Drew, 1990). Then during the late 1960s and 1970s HMOs emerged as a major movement in response to rising health care costs. Labor unions were influential in assisting with the development of HMOs as they, in cooperation with management, searched for ways to provide more affordable health care to their members.

A familiarity with the health care environment prior to the HMO Act of 1973 is necessary to understand the present aggressive strategies and attempts at health care cost reduction. There was little government regulation of health care cost prior to the 1965 Medicare and Medicaid Amendments to the Social Security Act (Drew, 1990). Health care was regulated by supply and demand. The federal government's desire to control health care costs and commitment to broaden access by underwriting health care through Medicare and Medicaid increased the expense and demand for services to all sectors of the population (Falkson, 1980, as cited in Drew, 1990). Healthcare reform initiatives were being sought by the Federal government in response to dwindling resources and the expanding health care budget. A special legislative committee spent months reviewing

the problems of health care and made the following recommendations: (a) increase the Federal government's support in the formation of comprehensive prepaid group practice corporations in order to stimulate competition, (b) enhance the efficiency of the health care system, (c) improve the quality of care received by the enrollees, and (d) increase accessability to health services (Warden & Wagner, 1986, as cited in Drew, 1990). The speculations were that competition, prepaid fees, waste reduction, pooled resources, preventive and outpatient care would decrease the cost of health care (Wagner & Wagner, 1986, as cited in Drew, 1990). Hence, HMOs earned federal endorsement as an alternative to the fee-for-service structure and the 1973 HMO Act was passed.

"The HMO Act of 1973 created loans and grants to help establish HMOs, specified voluntary contracted enrollment standards, developed guidelines for federal qualifications and defined the burdens of financial risk" (Drew, 1990, p. 146). Health Maintenance Organization proponents felt the rules were too restrictive and relaxation of these rules was accomplished through strong lobbying efforts during the late 1970s and 1980s.

Regulatory issues impacting HMOs were the "equal contribution rule." The equal contribution rule required that employers of twenty-five or more persons offer health care benefits to employees to make equal dollar contribution to indemnity insurance and HMO premiums (Drew, 1990). Employers considered this a constraint to their power to control cost of employee benefits. Another regulatory issue thought to create problems for HMOs was the "community rating rule." This rule speculates that healthier, younger employees would choose to enroll in community-rated HMOs, leaving the higher-cost

segment of the work force in the fee-for-service plan. This wa referred to as biased selection, and was thought to contribute to rate setting problems and projected cost-risk budget harmony.

Health Maintenance Organizations

Health maintenance organizations (HMOs) are defined as organized systems for providing comprehensive prepaid health care (Durham, 1994). They have five basic attributes: (a) provide care in a defined geographic area, (b) provide or ensure delivery of an agreed-upon set of basic and supplemental health maintenance and treatment services, (c) provide care to a voluntarily enrolled group of persons, (d) require their enrollees to use the services of designated providers and (e) receive reimbursement through a predetermined, fixed, periodic payment made by the enrollee without regard to the degree of service provided.

Four HMO models are currently in use: (a) independent practice association (IPA), (b) group practice or HMOs which provide care at one or more sites, (c) HMOs that deliver services at one or more central locations through their own physicians who are employees of the plan and (d) network models whereby HMOs contract with one or more medical groups or IPAs to deliver care to its members (Drew, 1990). Many HMOs today are concerned about viability, accountability, financial solvency as well as efforts to determine the cost and access advantages or disadvantages of competition in the health care industry.

Health Maintenance Organizations and Medicare

In 1965 through the Older Americans Act (OAA), the federal government guaranteed that older persons would have access to mainstream medical care or the best possible physical and mental health care which science can make available without regard to economic status. For the seventeen years following the enactment of the OAA, Medicare reimbursed only care that was provided according to its original intent, fee-for-service (Rueben, 1997).

The Medicare-Risk Program, initiated in 1982 under the Tax Equity and Fiscal Responsibility Act, allowed older persons the option of enrolling in a HMO while continuing to receive Medicare benefits (Reuben,1997). This program dispensed fixed capitated fees based on local fee-for-services adjusted per capita cost, which were reimbursed by the government at 95%. Hence these arrangements have been termed "at risk" contracts. The HMO agreed to accept all financial risks incurred while caring for the beneficiary. The 95% reimbursement allowed benefits beyond those provided by fee-for-service Medicare such as pharmacy, vision care and hearing aids. These benefits, associated with the lack of policy premium charge and low co-payments, have made enrollment in HMOs very popular to the elderly. "Enrollment in Medicare risk contract health plans have risen from 1.7 million in 1992 to approximately four million elderly persons in October, 1996" (Reuben, 1997, p. 643).

Considering the potential to offer additional services at lower cost, HMOs could certainly be considered a better option than the traditional fee for service. However, the story is more complicated than would be expected. There has been a tendency for HMOs

with at-risk contracts to enroll healthier, older persons while excluding the frail elderly (Reuben, 1997). This may leave the burden of caring for the frail elderly (who incur high health care expenditures) to the private sector or fee-for-service Medicare.

The struggle to deliver holistic, cost effective and quality care is a difficult one to say the least. One way to deliver cost effective and quality care to the elderly was through case management. Health maintenance organizations frequently use case management services to provide comprehensive management of the enrollees' health plan.

Case Management

"Case management is defined as a systematic process coordinated by one individual in assessing, planning, coordinating, evaluating, referring, and monitoring multiple, interdisciplinary services to meet the need of a client" (Parker, Quinn,Vielb, McKinley, Polich, Detzner, & Korn, 1992, p. 54). Capitman (1986, as cited in Gerber, 1994) defined case management as an administrative service that directs client movement through a series of phased involvements with the long term care system. The case manager is the trained professional who assists clients and families in locating and coordinating services.

Halamandaris (1990, as cited in Gerber, 1994) believed that case management organizational models contained two potentially contradictory terms: fiscal management and clinical management. Fiscal management related to case management as a mechanism for resource allocation for persons with specific eligibilities and/or insurance policy limits. It is associated with third-party health care coverage for long-term disabled

or elderly clients considered high-risk and costly to the system. Clinical management is defined as the kinds of medical, nursing or social services that are in the best interest of clients.

Hospitals offered case management to enhance the delivery of medical care, extend their mission of community service provision and attract new users (MacAdam, 1989, as cited in Gerber, 1994). Case management services are commonly provided by a geriatric assessment team, a core group consisting of a nurse case manager, primary care provider, physical therapist, and a social worker. Leath and Thatcher (1991, as cited in Gerber, 1994) believed that a team approach is particulary useful for older clients, because elders often have multiple problems with causes that cross multiple disciplinary lines. A portion of assessment cost of the geriatric team are often covered by Medicare or third-party insurance.

Case management can be an effective link to health care and social services which are necessary to assist elders in maintenance of independence. The advanced practice nurse case manager clinical interventions are directed toward enhancing clients' and their families toward self-care skills by helping them access appropriate health care services and community resources.

Case Management Models

The literature review revealed two examples of successful case management in relation to care of frail elderly clients. The first is St. Mary's Hospital located in Tucson, Arizona and the second is the On Lok Model in San Francisco.

Carondelet St. Mary's nursing division manages the care of seniors and medically disabled under a per-capita system (Ethridge, 1991). The enrollment within the health care plan was 15,000 members. The Professional Nurse Case Manager (PNCM) facilitated appropriate client movement among services. A PNCM screened all enrollees who enter a hospital each day. After clients have been admitted, referrals to appropriate services are made immediately. An interview with the clients and their families is usually sufficient to identify the possible necessary support after discharge. For assignment to a PNCM, one of these criteria must be experienced:

> (a) the client has a physiological imbalance, (b) the client may be emotionally challenged, (c) the client has no social support system, (d) the client has a care giver with a knowledge deficit, (e) the client only qualifies for home health for a short period of time, but needs private services, homemaker and/or respite services to remain independent, or (f) the client consistently utilized the emergency room or hospital for immediate health care needs (Ethridge, 1991, p. 24).

The PNCMs communicated with hospital acute care nurses, discharge planners, primary care providers, and other health care professionals (Ethridge, 1991). Fifteen Community Health Centers in the Tucson area were the key to the cost effectiveness of this nursing HMO. These community health centers operated through collaboration with volunteers, PNCM and Geriatric Nurse Practitioners, who provide direct services to the individuals served. The purpose of the community health centers is to assist individuals in attaining a healthier lifestyle. Health promotion, prevention and monitoring of illness, and referrals were the key function of the practitioners. They accomplished this through health assessments, counseling, education and screening. Patients are referred by physicians, case managers or neighbors. The HMO cut by one third the number of inpatient days

experienced per 1,000 enrollees. This saved an average cost of $900 per day or about $300,000 for every 1,000 enrollees. This private nursing case management program is still in operation.

The second successful example of case management started in 1983 is the On Lok Model (Kane, Hillston, & Miller, 1992). The On Lok Model was a community based provider of comprehensive care started in San Francisco's China Town. On Lok utilizes adult day health center/clinics, a low income housing unit and a single room occupancy residence in which nursing assistance can be provided. The goals were to provide to frail elders with care that improved or maintained their functional independence, enabling them to avoid institutional care and remain at home, and to do so at the same or less cost as other traditional long-term care programs (Kane et al., 1992). Six underlying principles provided structure for the On Lok Model:

1. The program focused on impaired and frail elders who require ongoing care for the rest of their lives. This care is considered a high cost, long term care with few alternatives to institutionalization.

2. Community residence of elders was a requirement of participation the program.

3. Comprehensive medical, restorative, social and supportive services were important components of this model. All acute and long term care options are used to respond to this population's multiple problems.

4. Service integration through consolidation and multi disciplinary team approach assisted in management and provision of care to the frail elders.

5. Integrated funding was essential to the model. Resources from Medicare, Medicaid, and private individuals was pooled to provide services. Use of funds was not subjected to usual payment restrictions. For example, preventive care, not usually allowable under Medicare, was provided by On Lok.

6. The providers of care assumed financial risk. The provider organization managed risk, that is, monitored clients, services, and costs and readily adapted to change. Anask (1990) stated:

> On Lok consolidates, rather than brokers service delivery. In a brokerage system, the professional team assesses the client's needs, develops a treatment plan, and then arranges or mediates the care either directly or through a case manager for other providers to deliver care". (p. 73)

On Lok consolidated these extensive services with a multi-disciplinary team approach (Anask, 1990). The On Lok multi-disciplinary team included (a) physician or nurse practitioner, (b) registered nurses, (c) occupational and physical therapist, (d) dietitian, (e) day health center supervisor, (f) recreation therapist, (g) social worker, (h) health worker, and (I) a driver. The team assessed participants needs, formulated a treatment plan, directly delivered most services or managed the care by contracted providers, monitored the treatment plan and adjusted the plan as indicated. Acute episodes were decreased by monitoring clients' medical and social conditions such as blood pressure screening, nutritional intake, medication compliance, skin breakdown, anticipating risks like falls and psychosocial problems. Education and retraining in mobility and ADLs strengthened clients' functional independence and decreased the need for supervision and assistive support.

On Lok was one of the few providers with risk-based financing for an exclusive nursing home certifiable population (Kane et al., 1992). Risk-based financing meant that the provider who offered prepaid care for a set premium was "at risk" because it must provide care within the premium funds available. Financing of On Lok included the Robert Wood Johnson Foundation, Medicare, Medicaid, and private pay individuals who made capitate (per person) payments based on their cost responsibility in the fee-for-service system (Ansak, 1990). The On Lok program used a single, higher Medicare cost adjustment that more accurately reflects clients' frailty and use of services. In 1989-1990 Medicare payed On Lok $790 per participant each month. Medicaid rate portions of On Lok capitation rate was arranged privately, but fewer than one percent of enrollees were completely private-pay. Individuals who entered the program as private-pay quickly "spend-down" their assets and became eligible for Medicaid. The core of the On Lok approach was capitation and the assumption of risk by the sponsoring organization.

Program of All-inclusive Care for the Elderly (PACE)

Congress made the On Lok program financing and service demonstration a permanent program in 1985 (Ansak, 1990). On Lok received an extended waiver that approved limited replication of the On Lok Model through Medicare and Medicaid financing referred to as the Program of All-inclusive Care for the Elderly (PACE). Sites were started in 1990 in Massachusetts, New York, South Carolina, Wisconsin, Illinois, Texas, Colorado, and Oregon. The most important necessity for the replication sites was the need to obtain sufficient start-up funds. The Robert Wood Johnson Foundation

granted close to $700,000 to six of the eight sites with a requirement that each site generate matching funds of $300,000.

Kane et al. (1992) evaluated the lessons learned from the PACE project of 1990 in Massachusetts, New York, South Carolina, Wisconsin, Illinois, Texas, and Oregon. The replication sites' viability were endangered by slower than expected census growth. When fee-for-service dollars are limited, it is even more critical that there be a large enough pool of people being served to maximize these limited dollars and to spread the significant fixed costs across all enrollees. Internal and external marketing strategies may be the key to overcoming slow census growth.

Another vital issue centered around building and retaining PACE teams having strong clinical skills and the ability to work in a multidisciplinary setting. Kane et al. (1992) recommended special attention to finding acceptable management arrangements that clearly define lines of authority and responsibility. Close attention was taken to recruit physicians and nurse practitioners who could practice to a standard with which they were comfortable while taking risks necessary to maintain the clients in the community. A background in geriatric and community health care were important.

Kane et al. (1992) also recognized a need to develop the equitable patient mix in terms of acuity and dementia. Mixing of cognitively impaired clients with those who were not impaired created more staffing needs for adult day health centers. Also, the PACE replication sites did not have the housing component, a predominant part of the On Lok activity. This was attributed to the fact that housing lies outside the services routinely

covered under Medicare/Medicaid and efforts to create innovative housing options required mobilization of other sources of support.

Summary

In summary, there is a great need to face the needs of elderly clients. The disparity between the rich and the poor in the United States plays a major role in access to care elders may receive. Many are on fixed incomes and live at poverty level, resulting in limited access to health care services. They are prone to chronic illness related to the aging process. These factors are creating a demand on an already stressed health care system. The health care delivery system may need to be restructured within continuing financial constraints to work collaboratively with families and elders from all economic levels while providing affordable health care. Programs that provide a geriatric team management approach may be the answer to accomplish delivery of holistic care in a cost-effective manner. The two case management models deserve careful attention in the use of creativity in providing long term care for frail elders.

CHAPTER 3

METHODS

The purpose of this project was to increase understanding of the role HMOs play in maintaining elderly clients in Montana communities. This chapter describes the methods used to implement the project. Using the information gleaned from the literature review and the conceptual framework, an interview schedule was developed. The interview schedule was then used as an evaluation tool to assess the role of two HMOs, one local and one remotely based, in maintaining the elderly in their respective communities. The structural framework of the HMOs and the persons interviewed at these agencies is described. Since Medicare is considered the primary payment source of both HMOs, a brief description of basic Medicare benefits Part A, Part B and Medicare supplemental policies is provided in Appendix B.

Development of the Interview Schedule

The interview schedule was developed to identify an optimal set of services or group of conditions that help elderly persons maintain independence. The first seven interview questions were descriptive in nature. The interview requested information about characteristics of the enrollees, the criteria used to define elderly persons, whether enrollees are denied services when they are not considered cost effective, the role and duties of the case manager and the educational requirements of the case managers.

The next set of questions, eight through 13, were based on Dungan's (1996) Model of Dynamic Integration. These questions asked specific information about health maintenance, preventive health educational and health promotion programs, and social support services to the family and client.

The third set of questions, 14 through 22, are based on Dungan's (1991) approach to transition of modalities of care (see Appendix B). These questions focused on clients with extended care needs, the protocols when clients face placement in a semi-acute or long term care facility, and the provision of mental health services. Alternative healing modalities and case managers' follow-up with elderly enrollees and families were also investigated. The last question, number 23, addressed any issues that may have been neglected and allowed additional comments by individuals who represented the HMOs.

Agencies Interviewed

Two Montana agencies were interviewed, Managed Care Corporation (MCC) and Geriatric Health Care Plan (GHCP). All interviews with MCC except for one occurred over the phone, while an onsite interview occurred with the director of the Geriatric Health Care Plan (GHCP).

Local HMO

Initial contact was initiated with Managed Care Corporation (MCC) in Missoula, Montana through a telephone interview with their marking representative. The marketing representative in Missoula referred my inquiries to the director of marketing and

individual sales in Helena. This telephone interview aided in the information gathering process; however, further inquiry was necessary to obtain additional information sought. The director of marketing and individual sales in Helena suggested information would be available through Vocational Case Management (VCM) in Missoula. A face-to face interview with a nurse case manager and the director of nursing at VCM resulted in gathering of a portion of the information needed. The interview with VCM lead to a telephone interview with the long term care coordinator at Long Term Care Management (LTCM) in New York. Long Term Care Management directs case management of Medicare supplemental policies, long term and nursing home policies for MCC.

Managed Care Corporation was a private non-profit insurance company and is considered a Preferred Provider Organization (PPO). A PPO is a system in which the payer negotiates lower prices with participating physicians, nurse practitioners, and hospitals. Enrollees who seek care from a participating provider received 90% to 100% reimbursement of their provider's cost. Enrollees seeking care outside the participating provider network received reimbursement at 80% of their cost. The provider network is extensive and included many providers in various location throughout the state.

Managed Care Corporation offered case management services through two vehicles, VCM and LTCM. Vocational Case Management provided services to enrollees locally. Long Term Care Management provided case management services for enrollees whose benefit package encompassed Medicare, Medicare supplemental policies, long term care and nursing home policies (see Appendix E). Vocational Case Management

referred inquires concerning Medicare, Medicare supplemental policies, long term care and nursing home insurance to the long term care coordinator at LTCM.

A primary function of Long Term Care Management was that of an underwriter and case manager. The function of an underwriter was to assess the financial risk to the insurance company of enrolling an applicant by determining eligibility for insurance benefits. The local agent submitted the enrollees' applications to LTCM in New York. Phone history interview was done by the medical underwriting department at LTCM in New York. The underwriter evaluated the enrollees' current functional and cognitive abilities, past medical history and current medical condition. The medical underwriter made the underwriting decision. Then, the local insurance agent received notification of acceptance or denial of the underwriter, and delivered the policies to enrollees. Case management services are provided on the local level through local participating providers of MCC.

Distant HMO

A second agency, the Geriatric Health Care Plan (GHCP) in Billings was contacted for interviewing. The face-to-face interview occurred with the registered nurse case manager and the Director of the Geriatric Medicine Program. The Geriatric Health Care Plan was a Medicare HMO demonstration project. The program's stated goal was to provide a comprehensive case management system that assures enrollees' health care needs are coordinated in an efficient manner. The contract and program continuance was renewed on a yearly basis with Medicare. To participate in the plan enrollees turned over

their Medicare Part A and Part B benefits to GHCP and incurred no additional expense for basic coverage. If their health care needs exceeded the limits of basic Medicare benefits, enrollees receive additional services at cost or reduced cost. Geriatric Health Care Plan was considered a PPO. Enrollees are limited to the services of physicians, nurse practitioners and hospitals contracted through GHCP.

Geriatric Health Care Plan did not deny care to enrollees for any pre-existing medical conditions; therefore, many of their clients are from an "adverse selection" or "at risk population." This health care plan assumed financial risk for these elderly persons and did not have "life time benefit" restrictions. The program used several services at community outreach centers and the local hospital in the Billings area. They included (a) acute care and transitional care units, (b) community senior centers, (c) the outpatient rehabilitation departments, (d) senior living centers which include nursing homes, personal care and independent living centers, (e) a women's health clinic, and (f) a specialty clinic with services in cardiology, internal medicine, neurology, oncology, rheumatology, urology, and endocrinology. Additional services offered were (a) educational programs, (b) exercise programs, (c) health screening and foot care clinics, (d) a medical alert system, (e) senior resource library, (f) counseling for patients and families, and (g) functional assessment for seniors. These services were coordinated by a comprehensive case management system that assures the enrollee's health care needs are met.

Plan for Analysis

Information obtained from the interviews with the local and distant HMO's is given in Chapter 4. Comparison of the two HMOs and discussion of the findings are in Chapter 5.

CHAPTER 4

INTERVIEW OUTCOMES

Interviews with the local and distant HMOs were based on 23 questions derived from the literature review and Dungan's Model of Dynamic Integration. This chapter contains the responses from the interviews conducted with the local HMO (MCC) and distant HMO (GHCP).

Question 1

How many elderly enrollees are served by the program? Can you clarify what criteria you use to define elders?

MCC: MCC insured 17,000 elders through their Medicare supplemental policies, long term care, and nursing home policies. The criteria used to define elders was persons sixty-five years of age or greater.

GHCP: GHCP insured 26,000 elders through their program. All enrollees in GHCP were Medicare eligible. The majority of their clients were 80 years of age or older and had complicated health care needs.

Question 2

What is the number of enrollees who have supplemental insurance policies, long term care, or nursing home insurance in addition to basic Medicare benefits?

MCC: The 17,000 enrollees are covered under Medicare supplemental, long term care and nursing home policies.

GHCP: The comprehensive plan at GHCP was designed to meet almost all medical and hospital costs by administering the enrollees' Medicare benefits. It was a requirement that enrollees stay on Medicare and continue to pay the Part B premium to remain eligible for benefits at GHCP. Geriatric Health Care Plan encouraged enrollees to drop other insurance policies including the Medicare supplemental policies (excluding basic benefit).

Question 3

What is the expense to the enrollees for participation in your program?

MCC: The cost to enrollees included any supplemental Medicare (excluding basic benefit), long term care and nursing home policies purchased through MCC. The benefits covered depended on which policies enrollees have purchased.

GHCP: The cost to enrollees at GHCP was basic Medicare Part B ($43.80 per month) plus $40.00 per month regardless of health status. Enrollees received 100% hospital coverage, co-paid $10.00 for doctor visits, and received worldwide emergency coverage, limited prescription drug coverage, vision, hearing, prevention and wellness benefits. Small co-payments were required for hearing exams, routine physicals, eye exams and walk-in clinic visits.

Questions 4 and 5

Do you ever turn down elderly enrollees whose health care needs may not be considered cost effective?

Would you describe what criteria are used to define an enrollee whose medical condition is considered financially burdensome?

MCC: Clients could purchase Medicare supplemental policies. However, clients considered "at risk" were denied access to enrollment in the long term care and nursing home policies offered through MCC. They were denied services when they had a pre-existing condition such as (a) liver cirrhosis, (b) Parkinson's disease, (c) multiple sclerosis, (d) Lou Gehrig's disease, (e) Alzheimer's disease, (f) renal failure, (g) myasthenia gravis, (h) pancreatitis, (I) multiple strokes, (j) organic brain syndrome, (k) chronic, severe anxiety disorder, (l) ataxia, (m) symptomatic cardiomyopathy, (n) cor- pulmonale, (o) diabetes with associated stroke, TIA or heart failure and (p) any condition requiring ongoing dialysis.

GHCP: Enrollees enrolled at GHCP unless they were in a Medicare hospice program or had end-stage kidney disease. Chronic disease states or physical disabilities had no bearing on eligibility. Enrollees of GHCP must have lived in Yellowstone, Carbon, Stillwater and Bighorn Counties.

Questions 6 and 7

Would you explain the specific role and duties of a case manager at MCC and GHCP in relation to the elderly client?

What are the educational requirements for a case manager?

MCC: Elderly clients were managed through LTCM in New York who were the primary underwriters. Local underwriting and case management functions were fulfilled by a regional long term coordinators and case managers in Helena. All case managers made assessments over the phone and interfaced with local agencies to provide care to clients and their families and review past medical records. These case managers appraised risk and determined the clients' access to services and benefits. All case managers at LTCM were baccalaureate prepared social workers and registered nurses.

GHCP: Case managers at GHCP were in geographical proximity and coordinated care with physicians, social workers and physical therapists. There was involvement of the case manager with the families. The stated goal was to assist elderly enrollees and their families to maintain independence and wellness. The case managers at GHCP were baccalaureate prepared registered nurses.

Questions 8, 9, 10 and 11

Questions 8 through 11 are concerned with the agencies focus on health maintenance, educational programs, preventive health measures, health promotion, and health counseling.

Do you offer educational programs such as diabetic management, cardiac rehabilitation, or exercise programs? How do you identify who is eligible for these services? Would you provide some examples?

Do you offer educational programs that focus on preventive health and health

promotion ? If so, how do you identify who is eligible for these services? Would you give some examples?

Do you provide health counseling services? If so, how do you identify who is eligible for these services? Would you give some examples of health counseling services you offer such as social workers?

Do you offer social support services for the enrollee and family in the maintenance of independent living? Would you give some examples of these social support services?

MCC: With the exception of limited health counseling offered by the local case managers, these services were not available to the clients.

GHCP: GHCP offered regularly scheduled educational programs that included (a) self-care for health problems such as joint pain, headaches or digestive problems, (b) tips on staying healthy including fitness, nutrition, stress and relaxation, mental wellness, and (c) maintenance of independence. Clinics offered at local senior centers focused on exercise, foot care, and health screening. Counseling services were available through social workers for patients and families that covered psychosocial issues of aging such as death of a spouse or transition to a new residence.

Question 12

Are ADLs and IADL services ever carried out by professional or paraprofessionals such as CNA's, health care aides, or transport aides?

MCC: For persons with the long-term care policies, MCC provided home health aide services, personal care attendants, and homemaker services. Such services included (a) providing assistance with simple health care tasks, (b) performing ADLs, (c) managing medications, (d) doing simple household repairs, (e) preparing meals, (f) doing laundry, and (h) performing other incidental household tasks that do not require the services of a trained aide or attendant. Respite services, adult day care centers, hospice, home health services and assisted living facilities were also offered in the long term care policy. The benefits of this policy were provided for two to three years until clients have exhausted their life time benefit. Clients must then seek other forms of assistance.

GHCP: Enrollees were provided the services of home health nursing, aides, personal care attendants, assistance with ADL's, and medication management as long as clients met the eligibility criteria of the current Medicare guidelines. If enrollees did not meet the criteria or their health care needs exceeded that of current Medicare guidelines, it was necessary for families or enrollees to provide these services with their own resources. Case managers and social workers assisted enrollees and their family members in seeking the help needed.

Question 13

Do you accept clients with chronic illness who have need for a wide range of extensive health care services? Are there specific eligibility requirements?

MCC: Eligibility requirements for the use of the long-term care and nursing home policy at MCC stated that enrollees could be excluded for a number of chronic

illnesses and preexisiting conditions. Qualified services for enrollees having nursing home and long term care policy were skilled care, intermediate care, and custodial care. Benefits were available in assisted living facilities for skilled, intermediate and custodial care. Skilled care refered to care provided by professionals such as registered nurses or physical therapists. Intermediate care was defined as skilled care on an intermittent basis, while custodial care meets personal care needs. Custodial care was not intended to restore health or the ability to function. Adult day care, respite care and hospice care were also included in the definition of qualified long-term care.

GHCP: GHCP provided 100% coverage for a skilled nursing facility for 250 days per calender year per Medicare guidelines. These services included a semi-private room, meals, and drugs that are furnished by the nursing facility. After the 250 days clients were expected to pay for the nursing home expenses out-of-pocket. When clients finances were depleted, they became eligible for Medicaid.

In addition, GHCP provided 100% home health coverage without co-payment; included in this coverage were intermittent care, skilled care, occupational therapy, speech and physical therapy for unlimited visits that followed Medicare guidelines.

Question 14

How do you manage clients with chronic illness who have need for wide ranging and comprehensive health care services? Are there specific eligibility requirements?

MCC: The primary underwriter (LTCM) in New York negotiated case management services through their regional long term coordinators and case managers in Helena. Regional long term coordinators and case managers directed client care through their contact with local agencies. The underwriters at LTCM agree on cost of care with doctors, hospitals, and home health agencies at the local level where enrollees resided. Many contracted care providers at the community level also had their own case management services. Communication then occurred between the case managers of the contracted care providers, at the local level, and the LTCM coordinators and case mangers in Helena.

GHCP: Geriatric Health Care Plan provided case management at the community level and did not utilize the services of intermediaries. Case managers at GHCP had direct contact with enrollees, their supporting family members, and primary care providers and their supporting staff, such as the physical therapists and social workers. Weekly case conferences were held to provide continuity of care.

Questions 15 and 16

What are the triggers for nursing home placement or institutionalization of an elderly enrollees?

What services do you see as important in helping the elder maintain optimum functioning?

MCC: Triggers for nursing home placement at MCC included the inability to perform, without substantial assistance from another individual, at least two designated

ADLs for a period of at least 90 days. Activities of daily living as defined by the current policy were (a) bathing, (b) continence, (c) dressing, (d) eating, (f) toileting, and (g) transferring. The clients must also have been assessed by a licensed health care practitioner as requiring substantial supervision to protect themselves from threats to health and safety due to severe cognitive impairment.

Managed Care Corporation viewed home health benefits, custodial care, intermediate care and adult day care as important factors in assisting the elder in maintenance of independence.

GHCP: The triggers for nursing home placement at GHCP were the same to those identified by MCC. Geriatric Health Care Plan viewed home health benefits, custodial care, intermediate care, and adult day care as important factors in assisting the elder in maintenance of independence.

GHCP valued the benefits of health promotion for the enrollees and families, as well as support of the family members caring for elder clients as important factors in the maintenance of independence.

Question 17

What is the protocol when clients face placement in an extended care or semi-acute care facility but wish to remain at home?

MCC: Case workers assisted clients and families in care planning which involved helping them navigate the health care system to coordinate services in the most appropriate way. If the clients' efforts at maintaining independence were unsuccessful,

they and their families are assisted in evaluation of further resources or placement in a skilled nursing facility.

GHCP: The protocol at GHCP was similar to that at MCC. Clients and their families were encouraged to maintain a higher level of self care through an aggressive health maintainence education program. Family involvement and home health services were encouraged before assisted living or nursing home placement was considered. Home health services were restricted to those provided under current Medicare guidelines.

Question 18

What is the protocol when considering nursing home placement and what is the role of MCC and GHCP?

MCC: As previously stated, when efforts to maintain independence failed, clients and their families potentially were faced with assisted living or nursing home placement. Clients must have a self care deficit in at least two ADLs to qualify for nursing home placement. At that time, if the clients have purchased nursing home or long term care policies they may use the benefits of that policy in addition to the traditional Medicare benefits. A referral to the nursing home and subsequent visits was made by a nurse practitioner or physician.

GHCP: The protocol at GHCP was similar to that at MCC. Their stated policy was to maintain the clients' independence at home as long as possible. Utilization of family assistance, home health services, or movement of clients to an assisted living

facility were attempted before nursing home placement. Case managers and social workers assisted enrollees and their families using the same procedure as MCC for nursing home placement.

Question 19

Do you provide mental health services? What are the specific eligibility requirements? Would you give some examples?

MCC: After the long term care and nursing home policies have been purchased, depression can be treated for up to twelve months and manic depression for twenty-four months. In addition, they provided coverage if the client was newly diagnosed with Alzheimers disease or related degenerative and dementing illnesses. Coverage was contingent upon documentation by a physician that the client was severely cognitively impaired requiring substantial supervision. The benefits were subject to the purchased policies' lifetime elimination period limitations as are other benefits.

GHCP: GHCP covered 50% of outpatient mental health care that was Medicare approved. Medicare Part B covered the services of practitioners such as clinical psychologists, clinical social workers, and nurse practitioners. The visits must be deemed medically necessary for treatment by a health care professional. Inpatient care had 100% coverage for a 190-day life-time limitation in Medicare certified psychiatric facilities as authorized by the health care professionals.

Question 20

Do you provide coverage for alternative healing modalities such as chiropractic services, massage therapy, spiritual counseling or Challis of Repose?

MCC: Managed Care Corporation did not fund alternative healing modalities at this time.

GHCP: Geriatric Health Care Plan provided chiropractic services with an attached $10.00 co-payment. No other alternative healing modalities were provided.

Questions 21 and 22

Would you describe how the case managers handle follow-up with elderly enrollees and families to evaluate their coping abilities with acute and chronic problems?

How are clients and/or families involved or consulted in regard to the plan of care/or care regime for elderly clients?

MCC: Enrollees and families are consulted by contracted case managers on the local level. This information was then relayed to the regional coordinators and case managers in Helena. The primary underwriters in New York, through their regional representatives, delegated administration of services and benefits to the enrollees.

GHCP: The case managers at GHCP were located in the community and had direct contact with enrollees and their families. Care conferences were conducted weekly with all involved services to coordinate and provide the enrollees with comprehensive care. Families were consulted in regard to the plan of care for enrollees by the case managers at GHCP.

Question 23

Can you think of any other questions that I have not addressed or issues that you see as important that I have neglected?

MCC and GHCP: Managed Care Corporation and GHCP thought that I had covered the services offered at their respective companies throughly.

Discussion of the results of the interviews are found in Chapter 5. Recommendations that would enhance delivery of elder care at MCC were also made.

CHAPTER 5

EVALUATION OF INTERVIEW AND RECOMMENDATIONS

The purpose of the project was to increase understanding of the role HMOs played in maintaining elders in Montana. Data collected from the literature review, Dungan's Model of Dynamic Integration and two successful case management models assisted in the identification of an optimal set of services that promote independence in elders. With an optimal set of services in mind, a questionnaire was developed. It was administered to a local and a remotely based HMO through telephone and face-to-face interviews. The remotely based HMO (GHCP) was chosen for its similarity to the two successful case management models identified in the literature review.

Exploration and comparison of the two HMOs revealed individual strengths and deficits in both service models. This analysis identified several differences in care delivery between these systems.

Differences

Five major differences were noted in the care delivery methods between the two agencies. The identified differences were (a) the cost of enrollment to the elder, (b) the efficacy of case management and quality of follow up with the enrollee and family, (c) the criteria used to define eligibility and exclusion from the policies, (d) the management of enrollees with chronic conditions that required a wide range of extensive health care

services, and (e) anticipatory guidance and planning for the enrollee and family. Each of the identified differences were described in the following sections.

Managed Care Corporation deficits

Cost of enrollment

The cost to the MCC enrollee included the purchase of any supplemental Medicare (excluding the basic benefit), long term care and nursing home policies. The benefits covered depended on which policies enrolles decided to purchase. The cost of these policies could be prohibitive to elderly persons on a limited budget.

Efficacy of case management and follow up with the enrollee and family

The MCC case management system was limited by the fact that the case managers function as underwriters. An underwriter in New York dictated care delivery on the community level in Montana based on identified risk criteria. The case managers in Helena could initially have face-to-face contact with enrollees; however, this might be the extent of personal contact after the policy had been established. Case managers in Helena interfaced with local hospitals, home health agencies and care givers. If the community agency did not provide on-site case management services, enrollees' needs could be inadequately evaluated.

Criteria used to define eligibility and exclusion from the policy

When financially able elderly clients were classified "at risk," they could be denied access to purchasing MCC's long term and nursing home policies. Ironically, the very conditions that put them in an "at risk" category, could preclude them from purchasing the needed policies. The long term policies could also exclude elderly individuals with preexisting mental health disorders such as Alzheimers and substance abuse problems.

Clients who purchased the long-term care and nursing home policies did not receive benefits for a period of time after the effective date of the policy. There was a six-month waiting period before MCC became responsible for enrollees' health. This six-month waiting period could create difficulty for the elder in need of immediate assistance.

Management of enrollees with chronic conditions with extensive health care needs

Social support benefits in the MCC policy were deficient when analyzed in light of Dungan's Model of Dynamic Integration. Family members were not included in crisis prevention, and there was little attention given to the adjustment and disruption that chronic illness can play in the lives of elders.

The long term care and nursing home policies offered a wide variety of augmented social support services; however, these benefits were limited in total maximum benefit they would pay over the length of the policy. The limitations in benefits were commonly referred to as "total lifetime benefits." Many chronic conditions create needs in elders that extend well beyond the limits of the policies. These benefits were expressed as

circumscribed benefit periods of one, two, three or more years creating a situation in which individuals ran out of needed coverage. Elders were then faced with the prospect of being unable to meet their health care needs, thereby increasing the risk of becoming dangerously compromised at home, and increasing the potential for early institutionalization.

The anticipatory guidance and planning for the enrollee and family

The long term and nursing home policies did not offer basic counseling or spiritual counseling services for elders or their family members to assist them in dealing with such problems as transition to a new residence, loss of spouse, or depression.

Geriatric Health Care Plan deficits

Cost of enrollment

Geriatric Health Care Plan had a limitation on the provision of coverage for skilled nursing facility benefits of 250 days per calender year. This would be inadequate if the enrollees health care needs exceeded the 250 day allocation.

Management of enrollees with chronic conditions with extensive health care needs

One of the major deficits of the policy at GHCP was inability to provide home care benefits beyond the current Medicare guidelines. Current Medicare guidelines for home care are restricted to a set of predetermined reimbursable services which do not adequately meet the needs of the frail elders. If enrollees were unable to access support with ADL and IADL management, they could be unable to maintain independence.

In addition, there was a 190-day life-time benefit limitation of care in a Medicare certified psychiatric facility. Geriatric Health Care Plan covered 50% of outpatient mental health care that was Medicare approved. This could be inadequate coverage for some frail elders.

Analysis of differences and deficits of two service models

Managed Care Corporation and GHCP both provided basic services to elders through the traditional medical model of care delivery. Managed Care Corporation was a profit driven insurance company that often ignored measures that would assist frail elders in the maintenance of independence. Geriatric Health Care Plan is a Medicare demonstration project that delivered care in a more cost effective and benevolent manner; however, it still followed the medical model of care delivery. The central issue is that frequently frail elders require assistance in ADLs and IADLs to maintain independence. Both MCC and GHCP base home health services on guidelines that are locked into a reimbursement system that is based on episodic, acute care illness. Elderly persons who did not meet specific criteria for home health services were left to their own resources. They could be forced into institutional care if family members or additional resources were not available to provide the necessary assistance.

The current mode of health care delivery at MCC and GHCP did not meet the needs of Montana's frail elders. Therefore, I recommend a change from the current mode of care delivery to a system focused on identification and delivery of a network of supportive services geared toward nursing efforts and assistance with ADLs and IADLs.

To be effective, the model would need to integrate techniques that will help families and their elderly family member identify ways to meet self care needs that maintain and promote independence. Future efforts need to focus on the development of a financially viable model of health care delivery that focuses on supportive in-home services. The success of such a system is critically linked to the structure of the reimbursement system embraced by third party payers.

Conclusion

My clinical experiences in acute care, long term care and home health lead me to believe that many frail elders' health care needs were not being satisfied by the current model of health care delivery. Elders who did not meet the specific criteria for in-home assistance with ADLs and IADLs through current reimbursement guidelines were dangerously compromised and at increased risk for early institutionalization. Therefore, the purpose of this project was to increase my understanding of the role HMO's play in maintaining elder clients in Montana. To accomplish this purpose, I first identified an optimal set of services or group of conditions to help maintain the independence of elders through a comprehensive literature review and selection of a conceptual framework. Based on these sources an interview schedule was developed. A local (MCC) and a distant HMO (GHCP) were interviewed. The distant HMO was similar to two case management models identified as successfully serving their elderly clients.

I found that both MCC and GHCP based home services on guidelines that are locked into a reimbursement system based on episodic or acute care illness. Elderly

persons who did not meet the specific criteria for home health services were left up to their own resources. The current mode of health care delivery does not provide adequate ADL and IADL assistance for Montana's or the nation's frail elders. In light of the findings an area for further nursing scholarship and political activity is the development of an outcome based reimbursement structure in which nursing services and ADL and IADL support are valued as the core components which assist elder clients to maintain their independence at home.

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APPENDICES

APPENDIX A

Dungan's Model To Approach Transition
Nursing Modalities of Care

DUNGAN'S MODEL TO APPROACH TRANSITION

Nursing Modalities of Care

DIRECT CARE: This phase embraces

- Health-promotion care as well as disease prevention protocols.
- The relatively short-term care or management of care in acute situations.
- Extended care in chronic illness and ageing.

TEACHING OR COGNITIVE DOMAIN

- Identifies specific health care needs related to unique situations.
- Should be initiated during the direct-care phase.
- Teaching revolves around what the client needs to know about becoming independent.

COUNSELING OR AFFECTIVE DOMAIN

- Cognitive reappraisal - - - threat to challenge
- Role change - - - family negotiation; illness role, health-seeking role, care-giver role, co-dependency issues.
- Energy management - - - finite energy for all dimensions.
- Self concept - - - sexuality and body image.
- Re-framing world view - - - Accommodate cultural beliefs to necessities of life style change manage vulnerability.
- Validation therapy.
- Grieving losses.
- Strengths and effective coping skills.

ALTERNATIVE HEALING MODALITIES OR SPIRITUAL DOMAIN

- Spiritual counseling.
- Meaning of experience.
- Realistic hope.
- Therapeutic touch.
- Music therapy.

SOCIAL SUPPORT

- Family resources - - - teaching the family skills and altitudes about maintenance.
- Reintegration and return to relative independence.
- Teaching appropriate assertiveness and use of family system.

AUGMENTED SOCIAL SUPPORT

- Short-term professional care during transition.
- Intermittent professional care.
- Case management.
- Community resources for client and care giver - - - referral.
- Teaching appropriate assertiveness to use augmented services.

Source: Dungan, Brown, & Ramsey, (1996)

APPENDIX B

Basic Medicare Benefits

BASIC MEDICARE BENEFITS

Medicare is a federal health insurance program for people over 65 years of age or certain people with disabilities under age 65. Individuals with end-stage renal disease and those with permanent kidney failure who require dialysis or a transplant are Medicare eligible.

The basic Medicare benefit is the traditional pay-per-visit agreement with two parts, Part A (hospital insurance) and Part B (medical insurance) (see Table 1 row 1) . Enrollees may go to any health care provider or hospital that accepts Medicare. A deductible is required of enrollees before Medicare begins payment. The deductible must be paid prior to the benefit period for Medicare Part A. Medicare Part B requires a one time per year deductible of $100.00.

Co-insurance is the percent of Medicare approved charge the enrollee pays after Part A and Part B deductibles are met. Medicare routinely pays 80% and enrollee are left with the remaining 20% co-insurance fee.

Medicare Part A

Part A is premium free for elders or spouses who paid Medicare taxes while working. Elders are eligible for premium-free Part A if they meet the following criteria:

- The elderly person is 65 years or older.
- The elderly person is receiving retirement or eligible for retirement benefits from Social Security or the Railroad Retirement Board.
- The elderly person is under 65, has received Railroad Retirement disability benefits for the prescribed time, and meets the Social Security Act disability requirements.

- If the elderly person is under 65 and received Social Security disability benefits for 24 months.
- If the elderly person or spouse had Medicare-covered government employment.
- If the elderly person is under 65 and has End Stage Renal Disease.

The benefit period for Part A is activated the day enrollee enters the hospital. Hospitalization must precede entry into the benefit period, and is terminated when enrollees have not received hospital inpatient, or SNF care for 60 days. Enrollees have the benefit of 60 lifetime reserve days that can be used only once. Medicare will pay all covered costs for these reserve days except for the daily 20% coinsurance.

Part A pays for hospital costs which include a semi-private room, meals, general nursing, and other hospital services and supplies. Skilled nursing facility care is also provided with the constraint that enrollees must be admitted to the SNF directly from the hospital. The SNF benefits include a semi-private room, skilled nursing, and rehabilitative services.

Home health and hospice care are provided under Part A benefits. Benefits for home health care include (a) intermittent skilled nursing care, (b) physical therapy, (c) occupational therapy, (d) speech therapy, (e) home health aide services, and (f) some durable medical equipment (such as wheelchairs, hospital beds, oxygen and walkers). Hospice care offers pain and symptom relief and supportive services for the terminally ill. Administration of blood products from a hospital or SNF during a covered stay are also a benefit of Part A coverage.

Medicare Part B

Part B Medicare benefits are offered to enrollees at specific enrollment times such as a hospital stay or designated enrollment window. To acquire Part B benefits enrollees must pay a $100.00 deductible once each year. Part B covers medical expenses (a) doctor's services, (b) inpatient and outpatient medical and surgical services and supplies, (c) physical therapy, (d) occupational therapy, (e) speech therapy, (f) diagnostic tests, and (g) durable medical equipment. Clinical laboratory services and home health care (under certain conditions) are also provided under Part B. The home health benefits include (a) intermittent skilled care, (b) home health aide services, (c) durable medical equipment, and (d) supplies.

Outpatient hospital services needed to find or treat an illness or injury are covered. Part B also pays for (a) x-rays, (b) speech language pathology services, (c) artificial limbs and eyes, (d) arm, leg, back and neck braces, (e) kidney dialysis and transplant, (f) heart, lung and liver transplants in a Medicare approved facility, under limited circumstances, (g) emergency care, (h) limited chiropractic services, (I) medical supplies such as ostomy bags, and surgical dressings, (j) breast prostheses following a mastectomy, (k) ambulance services, (l) services of psychologists, social workers, and nurse practitioners, (m) one pair of eye glasses after cataract surgery and (n) preventive services. Preventive services offered by Part B include (a) a yearly screening mammogram, (b) yearly pap smear and pelvic examination, (c) colo-rectal cancer screening, and (d) bone mass measurement, (e) diabetes monitoring which covers test strips, lancets and self-management training, and (f) flu, pneumococcal and hepatitis B vaccination.

Medicare supplement policies

Medicare supplemental policies can be sold in 10 standardized plans which include Plan A, basic benefits covered under Medicare Part A and Part B. Elders in Montana can select from supplemental plans C, F, or J (see Table 1, columns B-J, row 2-9, p. 74). Enrollees select and pay for the standardized Medicare supplemental policy that best meets their health care needs. The cost of each policy is individualized depending on the amount of benefits offered to the client. The Medicare supplemental policies cover acute care needs and additional physician expenses not covered under basic Medicare benefits. A basic description of Plans A (basic benefit), C, F, and J follow.

Plan A (Basic Benefit)

- Provides coverage for Part A with a co-insurance amount ($192 per day in 1999) for days 61 through 90 of a hospital stay in each Medicare benefit period.
- Provides coverage for the Part A with a co-insurance amount for days 91-150 of a hospital stay ($384 per day in 1999) for each of Medicare's 60 lifetime reserve days that may only be used once.
- After all Medicare hospital benefits are exhausted, coverage for 100% of the Medicare Part A eligible hospital expenses. Coverage is limited to a maximum of 365 days of additional inpatient hospital care during the enrollees' lifetime. Enrollees may be responsible for payment when supplemental hospital benefits are exhausted.
- Provides coverage under Medicare Parts A and B for the cost of the first 3 pints of blood or equivalent quantities of packed red blood cells per calendar year.
- Provides coverage for the coinsurance amount for Part B services (generally 20% of Medicare-approved amount) after $100 annual deductible is met.

Plan C

- Provides all the basic benefits of Plan A plus:
- Coverage for the Medicare Part A inpatient deductible ($768 per benefits period in 1999)
- Coverage for the skilled nursing facility co-insurance amount ($96 per day, for days 21-100 per benefit period, in 1999).
- Coverage for Medicare Part B deductible ($100 per calendar year, in 1999).
- Provides 80% for medically necessary emergency care in a foreign country, after a $250 deductible.

Plan F

- Provides all the basic benefits of Plan A and the benefits of Plan C plus :
- Coverage for 100% of Medicare Part B excess charges.

Plan J

- Provide all the basic benefits of Plan A and benefits of Plan F plus:
- Coverage for at-home recovery. The at-home recovery benefit pays up to $1600 per year for short-term, at home assistance with ADLs for those recovering from an illness, injury or surgery.
- Coverage for preventive medical care. The preventive medical care benefit pays up to $120 per year for things like physicals, serum cholesterol screening, hearing test, diabetes screening and thyroid function test.
- Coverage for 50% of the costs of prescription drugs up to a maximum of $3000 per year after the $250 per year deductible is met (extended prescription drug benefit).

Table 1. Standardized Medicare Supplement Plans

A	B	C	D	E	F	G	H	I	J
Basic Benefit	Basic Benefit	Basic Benefit	Basic Benefit	Basic Benefit	Basic Benefit	Basic Benefit	Basic Benefit	Basic Benefit	Basic Benefit
		Skilled Care Co-insurance	Skilled Care Co-insurance	Skilled Care Co-insurance	Skilled Care Co-insurance	Skilled Care Co-insurance	Skilled Care Co-insurance	Skilled Care Co-insurance	Skilled Care Co-insurance
	Part A Deductible	Part A Deductible	Part A Deductible	Part A Deductible	Part A Deductible	Part A Deductible	Part A Deductible	Part A Deductible	Part A Deductible
		Part B Deductible			Part B Deductible				Part B Deductible
					Part B Excess (100%)	Part B Excess (80%)		Part B Excess (100%)	Part B Excess (100%)
		Foreign Travel Emerge-ency	Foreign Travel Emerge-ency	Foreign Travel Emerge-ency	Foreign Travel Emerge-ency	Foreign Travel Emerg-ency	Foreign Travel Emerg-ency	Foreign Travel Emerg-ency	Foreign Travel Emerg-ency
			Home Recovery			Home Recovery		Home Recovery	Home Recovery
							Basic coverage of prescripc Drug	Basic coverage of prescript Drugs	Extended coverage of Prescript Drugs
				Preventive Care					Preventive Care

Source: Health Care Financing Administration (1999)

APPENDIX C

Request/Permission to Reproduce

JOYCE M DUNGAN., RN., MSN., EdD.
1160 Wortman Road,
Evansville, IN. 47725-1044
Phone (812 867-5747

July 14, 1999

Dianna M. Roberts
5162 East Side Hwy.
Stevensville, Mt. 59870

Dear Dianna,

I am pleased that you would like to use the **Dungan Model of Dynamic Integration** as the conceptual framework for your professional project with "Elder Care and Health Maintenance Organizations." I'm sorry to be tardy with my response but we were on vacation when your request arrived and it just reached me last week.

I have included a copy of the model that appeared in **Nursing Diagnosis** in case you have not been able to locate it. I also have sent you a list of unpublished definitions that may help you to better describe the concepts and relationships inherent in the model. I have copies of other references if any of then would be useful to you.

I have retired from teaching but am very interested in hearing from those of you who are using the model in you practice. Please send me a copy of your completed project if possible. Good luck with your continued education and nursing career.

If you have questions, I may be reached at the phone number above or by e-mail at jdungan@sigecom.net.

Sincerely,

Dr. Joyce Dungan