A DESCRIPTION OF
PUBLIC HEALTH NURSING PRACTICE
WITH
THE COMMUNITY-BASED ELDERLY

by

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A Thesis

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CHAPTER I

INTRODUCTION

The concept of disease prevention and the promotion of wellness as a public responsibility can be traced to the earliest days of public health nursing. In 1864, Florence Nightingale wrote, "Preventible disease should be looked on as a social crime" (Montiero, 1984, p. 185). By 1910, urban nursing associations had initiated preventive programs for school children, infants, mothers, and tuberculosis patients. During the 1920's, public health nursing expanded within official agencies and focused on the teaching of preventive health practices (Buehler-Wilkerson, 1985).

In 1980, the Public Health Nursing section of the American Public Health Association produced a position paper describing the goal of public health nursing as: "the improvement of the health of the community by identifying sub-groups (aggregates) within the community population which are at high risk of illness, disability, or premature death and directing resources toward these groups" (American Public Health Association, 1980, p.2).

Thus, the emphasis on preventing disease has increased over the century. However, the focus of preventive efforts has shifted from acute infectious diseases to chronic conditions and disabilities. This change has occurred because improved sanitation and developments in pharmacology

and immunology during the past 40 years have resulted in a dramatic decrease in the incidence of most acute infectious diseases. Simultaneously, the incidence of chronic disease has increased dramatically. The rise may be attributed in part to the increasing number of elderly in the American population, By the year 2000, 20% of the American population will be over 65 years of age, and individuals over the age of 75 will represent 45% of the elderly population (Shortell, 1984). The predominant health problems of this population are associated with chronic disease. Data from the 1980-81 National Health Survey (National Center for Health Statistics, 1983) showed that 60% of the office visits to physicians made by persons 65 years and older were caused by chronic disease problems. Data from this same study indicate that more than four out of five persons 65 and older suffer from at least one chronic disease.

The incidence of chronic disease among the elderly compromises the ability of many elderly individuals to perform Activities of Daily Living (ADL) independently. Data from a 1982 Long Term Care Survey conducted by the Bureau of Census reveal that of the approximately 4.6 million non-institutionalized elderly Americans 65 years of age and older, 18% are limited in their ADL functions (Liu, Manton, & Liu, 1985). Twelve percent are moderately impaired with 1-2 ADL limitations, and 6%, or 850,000, are

severely limited in 5-6 ADL functions but still live in the commmunity.

In addition to possibly limiting the individual's independence in function, chronic disease puts the individual at risk for injury and/or further health deterioration. By affecting an individual's mobility, thought processes, comfort level, communication skills, and/or activity tolerance, chronic disease may put the person at risk for falls, accidents in the home, and/or mistakes with medications. These, in turn, often result in deterioration of overall health status.

If the above complications of chronic disease occur, the individual may require costly institutionalization. Although the elderly comprised only 12% of our population in 1980, they represented 30-60% of all hospitalized persons and accounted for 25% of all health care costs (Abdellah, 1981). Projections to the year 2000 indicate that the aging of the baby boom generation will result in the number of elderly needing long term care in 2000 to be 70% greater than the number in 1979. The bill for long term care in 1979 was $14.8 billion and in today's dollars with costs remaining constant, this bill will be $25.2 billion in 2000 if the percentage of elderly needing long term care remains constant (Brecher & Knickman, 1985).

In an effort to shorten hospital length of stay and decrease institutionalization of any kind, in 1966 Medicare

began funding Home Health Agencies for in-home nursing services. Since then there has been rapid growth in the home health industry. Medicare reimbursement for in-home nursing services is, however, linked directly and exclusively to medically defined episodic acute illness. Public health nursing services which would address the problems of chronic disease and seek to prevent complications and slow deterioration are not defined as skilled nursing by Medicare and are, therefore, not reimbursable. In the absence of reimbursement for these services, community-based long term care has been lacking a public health nursing component. The first step toward formulation of a policy that would include funding for the delivery of public health nursing services to this population is a conceptualization of how these nursing services are related to the needs of the community-based elderly. In order to conceptualize this relationship, public health nurses and health planners need a better understanding of: 1) the treatment, teaching, counseling, and case management activities that characterize the public health nursing practice with this population; 2) the configurations of client characteristics and/or needs associated with a specific level or type of nursing intervention; 3) changes in client status that may trigger a more intensive nursing inolvement; 4) the elderly persons' and their family members' perceptions of their needs; and,

5) the role the primary caregiver may play in the nature and extent of the nursing services provided to the client and this primary caregiver.

I have attempted to answer the research issues raised above through analysis of the client needs and nursing interventions observed in the operation of the Multnomah County Block Nurse Program. This pilot program was initiated to investigate the feasibility of a neighborhood based nursing model for the delivery of public health nursing services to the community-based elderly. Funding was obtained from a private foundation and clients were assessed minimal fees based on their ability to pay. This freed the public health nurse from the constraint of reimbursement guidelines which would dictate the frequency and nature of contact with the client. In the Block Nurse Program, frequency of contact and the content of the interventions arose from public health nursing judgment, clients' and family members' identification of needs, and clients' openness to accepting services. The findings from this study will contribute to a better understanding and conceptualization of the practice of public health nursing that emerges from the interrelationships among these factors. This conceptualization may additionally provide a basis for formulating funding requests for public health nursing services for the community-based elderly.

Literature Review

This literature review contains information about the findings from studies of community based alternative care programs for the elderly and about the research conducted with family members who care for the comunity based elderly. I was unable to find any published studies of programs in this country which incorporated public health nursing services into a community based alternative care program. There are two studies from Scotland and England which examined health programs for the elderly which did include the community nursing services.

Community based alternative care programs

Considerable research has been conducted which examines the costs and feasibility of providing community based services to prolong the time that elderly individuals with health problems can remain in the community setting. Much of this research has suggested an inappropriate over-utilization of nursing homes for the elderly. The 1973-74 national surveys of nursing home patients conducted by the Congressional Budget Office (1977, pp.55-58) estimated that between 7% and 22% of the nursing home residents could be cared for in a less intensive setting.

Numerous community based alternative care programs have been established in the past ten years. The intent of these programs has been to decrease health care costs by delaying or preventing institutionalization through the

increased provision of in-home support services. The in-home services which are increased are typically non-professional homemaking and personal care services. The Weissert Section 222-financed homemaker study is one of the larger studies to examine the outcomes of such a program (Weissert, Wan, Livieratos & Pellegrino, 1980). That study found that homemaker availability increased costs of hospitalization, decreased mortality, had no effect on functional ability, and had an insignificant effect on institutionalization of the elderly. The investigators concluded that homemaker presence resulted in more intensive monitoring of health status and, therefore, increased hospitalization. However, a serious weakness in the study is its lack of information on the type of community based health services available to the clients and the homemakers. For instance, no information is provided as to the availability of public health nursing for in-home assessment, monitoring, and intervention, which might be expected to minimize hospitalization.

Very different results from those of Weissert were reported in two expanded care programs for the elderly in Scotland and Britain, which included a community nursing component. Currie and associates in Scotland reported that the use of Community Nursing Services and Home Help (personal care and homemaking) services in conjunction with medical assessment and interventions significantly decreased

the institutionalization of the elderly (Currie, Burley, Doull, Ravetz, Smith, & Williamson, 1980). This expanded care was found to be economically feasible for the agencies and acceptable to the elderly population.

Gibbins et al. (1982) in Britain conducted a similar study in which expanded services of Home Care and Community Nursing were available to selected elderly patients. Gibbins et al. claimed that this augmented home care plan was a cost effective alternative for hospitalization. The number of physician contacts with patients was reduced, and the quality of life and satisfaction of patients and patients' families were enhanced. The investigators attributed these findings to the availability of home nursing assessments and interventions.

Caregiver support

In addition to the studies which investigate the use of formal support services to maintain the elderly in the community, there is a large body of literature which examines the availability of support to family members who are caring for dependent elderly adults. These studies suggest that the family support "unit" often needs emotional support, patient care education and respite services. Evidence that supports this need was produced in a study by Brody, Poulshock, & Masciocchi (1978). They found that the functional level of the chronically ill and disabled elderly was not as reliable a predictor of placement in institutions

as the presence, or lack of, a personal support system (family or friend). Given this finding, Brody et al. recommended a departure from a service model based on a client-focused medical assessment to a prevention model based on a family-focused assessment of the family's needs for support, teaching, and respite in order to prolong the time the support unit can maintain the elderly person at home.

Treas (1977) analyzed social and demographic changes during this century and confirmed that families were the major source of support for the disabled elderly. She also found that improved medical care, nutrition, and environmental conditions have resulted in an aging of the population so that not only are there more "old old" persons in need of care, but also more "young old" in need of assistance to provide that care. She suggested that programs that address the needs of the elderly and their family care units consider the diminished physical resources of this population of caregivers.

Miller's (1983) work on family support and the elderly identified a need for preventive education and counseling for the family care unit to maintain and strengthen family relationships. She proposed that the stronger bonds between the caregiving unit and the elderly person would better withstand the stress of the deteriorating health and functional status of the elderly person.

Summary

Sangl's (1984) review of the literature on caregiver support concluded that there is sufficient evidence identifying the family as the primary caregiving unit for the non-institutionalized elderly. She cites specifically, however, the need for more detailed research on the processes of caregiving by the caregiving system and on the specific types of programs that would best complement and support the efforts of the family caregiving unit.

In regard to the latter recommendation, the studies from England and Scotland are the only published investigations which examine the role of the public health nurse in programs that support the elderly and their personal support systems. My study has investigated the nature and extent of the role of the public health nurse in a community-based, family-focused program that addressed those needs of both the chronically ill and disabled elderly individuals and the personal support persons assisting them to remain in the home setting in their communities.

Conceptual Framework

The community based elderly who are at risk of institutionalization are the population of concern in this study. My purpose in this investigation has been to describe the relationship between the needs of the community-based elderly and the practice of public health nursing. The important components of this relationship are: (1) the health and social needs of the elderly client, (2) the nature and extent of the elderly client's personal and formal support system; and, (3) the clients' and family members' perception of their needs. I have chosen systems theory to describe the interplay among these components.

Representing the elderly population and their sources of personal and formal support, the models in Figure I and 2 depict the elderly person at home on a continuum of functional independence/dependence over time. This elderly person can be described as an open system striving to achieve and maintain sufficient stability needed to remain in his or her home. This stability is threatened by internal changes in health status of the person and external changes in the personal and formal support systems. Maintenance of this stability is dependent on the nature and degree of changes in health status, the availability and adequacy of compensating external resources (both personal and formal), and the willingness of the client to accept needed assistance.

Chronic disease typically compromises the health status of the elderly population and consequently threatens the stability of the home setting by limiting the elderly person's activity tolerance, sight, mobility, and thinking processes. As deficits in these areas of functioning occur, the person becomes progessively more dependent on his or her support systems.

Figures I and 2 (Continuum of Services Model for the Elderly Person at Home) depict the three stages of successively increasing services to the elderly person as his or her health status deteriorates and needs for services increase. Stage I in the model depicts an individual who is functioning independently. This individual can provide for his or her personal care and homemaking needs independent of assistance from another person. Stage II in the model incorporates the personal support system as a critical element in the maintenance of the elderly person at home. This personal support system may be a spouse, daughter, or neighbor who is assisting the elderly person in homemaking and/or personal care activities.

Movement along the continuum from Stage II to Stage III occurs when the needs of the person exceed the capabilities of the personal support system, and assistance from formal support systems must be obtained to maintain the home as the setting for the elderly person. In this stage, the care has become too physically demanding for an elderly

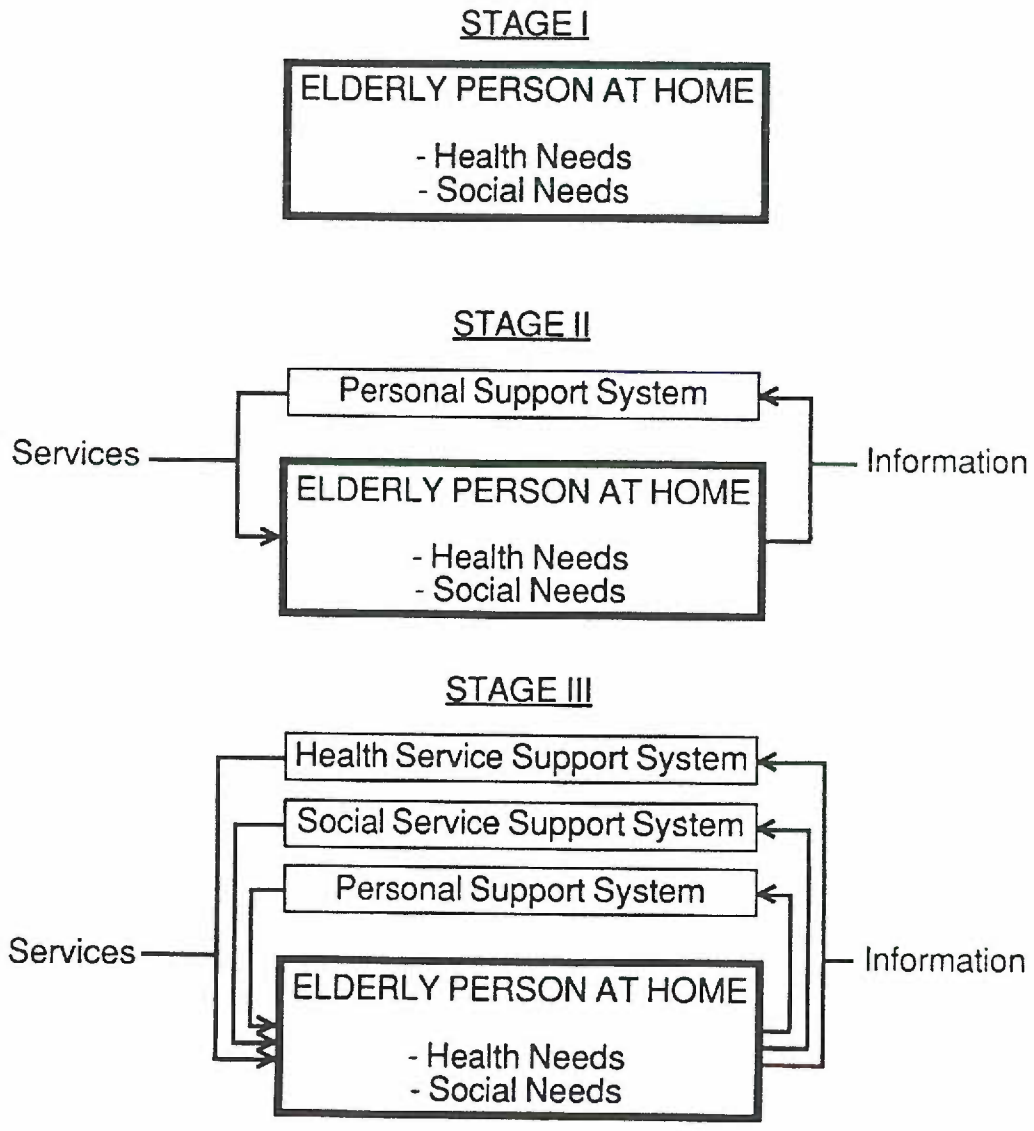

Figure 1: Continuum of services model for the Elderly Person at Home

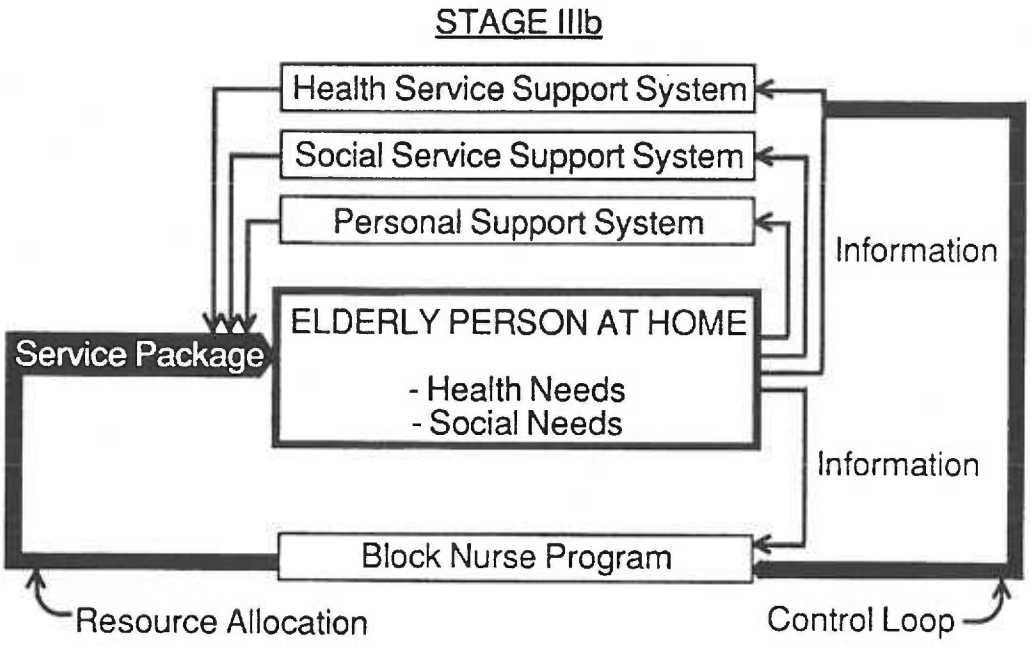

Figure 2: Continuum of services model for the Elderly Person at Home

spouse, health status changes may necessitate professional monitoring, or capabilities of the primary caregiver may have deteriorated. Formal sources of support may include home health nurses, doctors, and/or social workers. While these resources are valuable to the dependent elderly person and his or her personal support system, the structures which fund these services place constraints on the providers' flexibility in meeting client needs. Thus, home health nurses are severely limited in the number of home visits they make, and in the duration of contact they can maintain with the elderly client. As for social workers, the size of their caseload limits the frequency of their contacts with clients, and their educational background limits their ability to make health assessments and appropriate referrals for changes in health status.

Stage III is therefore characterized by: 1) multiple service providers from personal and formal resources; 2) limited ability of social workers to recognize deterioration in health status particularly early in the disease process; 4) little or no preventive health teaching to strengthen or maintain current functional level of the elderly person; and, 5) inadequate contact with client by any one provider to insure timely interventions, e.g., provision of bathing assistance to prevent skin breakdown for a woman who has recently become incontinent.

Stage IIIb incorporates public health nursing interventions. I have identified these interventions as the control loop function in the model. This control loop function consists of: 1) making the most appropriate allocation of personal and formal resources based on professional health and social needs assessments of the elderly client; 2) establishing communication channels among providers; and, 3) maintaining adequate follow up to insure that resource allocation changes as the client's needs change. The result is integration of support services for the elderly individual and a synchronization of the support inputs with the individual's actual needs.

Public health nurses are uniquely qualified to perform this integrative case management/resource allocation function because their knowledge base and professional training spans the spectrum of individual assessments of health and social needs and the complex systems of health and social support elements. This equips them both to make assessments of the elderly person's needs and to establish a linkage between that need and the most appropriate support element in the formal or informal network of support systems. Making assessments of client health and social needs includes: 1) detection of early signs of disease; 2) provision of early treatment interventions in the home setting; 3) monitoring of symptoms of chronic disease; 4) provision of preventive health teaching in the areas of

symptom management, medication use, mobility nutrition, and skin care; 5) provision of teaching and support to the family caregiver to prolong his/her ability to fulfill this role; and 6) provision of ongoing assessments of the need for more or fewer service inputs, e.g., homemaking, personal care, respite, medical evaluation.

The result is a service package for the client and his or her personal support system that reflects the dynamic individualized nature of the client needs. Theoretically, a service package that closely fits the client's needs (fluctuating as these needs change) will be most successful in maintaining the elderly client in the home setting. I have used a sample of cases from the Block Nurse Program to examine the usefulness of this model for interpreting the relationship between public health nursing services and the needs of the community based elderly person.

CHAPTER II

METHODS

Design

The conceptual framework and model for this study propose a dynamic environment of changing needs and changing perceptions within which the relationship between the nurse and the client develops over time. The design of this study's data collection has been structured to capture the process of this developing relationship.

Sample

The population from which the sample for this study was chosen consists of the 66 Block Nurse Program clients who received a minimum of three months of Program service during the time period January 15, 1985, through March 1, 1987. The eligibility criteria for receiving Block Nurse Program services were: age 60 and older, living within the catchment area of the program, and having health and/or functional deficits which put the individual at risk for institutionalization. There are several of these deficits which put the elderly person at risk of institutionalization. First is the presence of chronic disease such as hypertension which may need professional monitoring. Second is the use of medications which need monitoring because of: (a) their intended physiologic effect (i.e., cardiac and anti-hypertensive medications, anti-coagulant medications, and hypoglycemic medications);

or, (b) their possible serious physiological side effects (i.e., Digoxin, Dilantin, potassium wasting diuretics, steroids, anti-inflammatory medications, and antidepressants); or, (c) because of a client history of medication mismanagement. Third is a deficit in thought processes which may limit judgment and problem solving ability and/or may affect behavior (e.g., wandering, severe memory loss). Fourth, compromised mobility which limits access to medical services, and fifth, functional deficits in Activities of Daily Living (dressing, bathing, grooming, eating, and toileting) and/or in Instrumental Activities of Daily Living (housework, shopping, meal preparation) are factors which put the elderly individual at risk of institutionalization.

In order to have a sample representative of the varying degrees of dependency of the Block Nurse Program clients, the three variables of age, gender, and living situation were used to subdivide the population into eight groups (see Figure 3). I have chosen the variables of age and living situation because they affect the progression of the elderly person at home from independence to dependence. According to the conceptual model proposed in this study (Figures 1 and 2), movement in the model from independence in Stage I to subsequent stages of dependency in Stages II and III is a function of: 1) health status and corresponding functional deficits; and, 2) the availability

and adequacy of a personal support system. Age, as reflective of health and functional status, and living situation as reflective of personal support system, are two factors that may be predictive of the placement of the elderly person in the model. Two groups are here distinguished: the young old (60-79) and the old-old (80 and older). Two types of living situation are distinguished: living alone and living with others. Because it is widely reported in the literature and in practice that women (wives and daughters) are typically the caregivers and men (husbands and fathers) are care receivers, gender was chosen as a third factor.

The sample consisted of 16 cases selected from the eight group shown in Figure 3. In order to achieve roughly proportional representation of each group, the 16 cases were randomly selected from each group as follows: one case from each of the groups D and H with Ns of 2 (males 80-99 living alone and males 80-99 living with others); two cases each from groups B, E, F, and G with Ns of 6, 7, 10, and 10 (males 60-79 living alone and females 60-79 living with others, males 60-79 living with others, and females 80-99 living with others); and three cases each from the two groups A and C with Ns of 15 and 14 (females 60-79 living alone, and females 80-99 living alone).

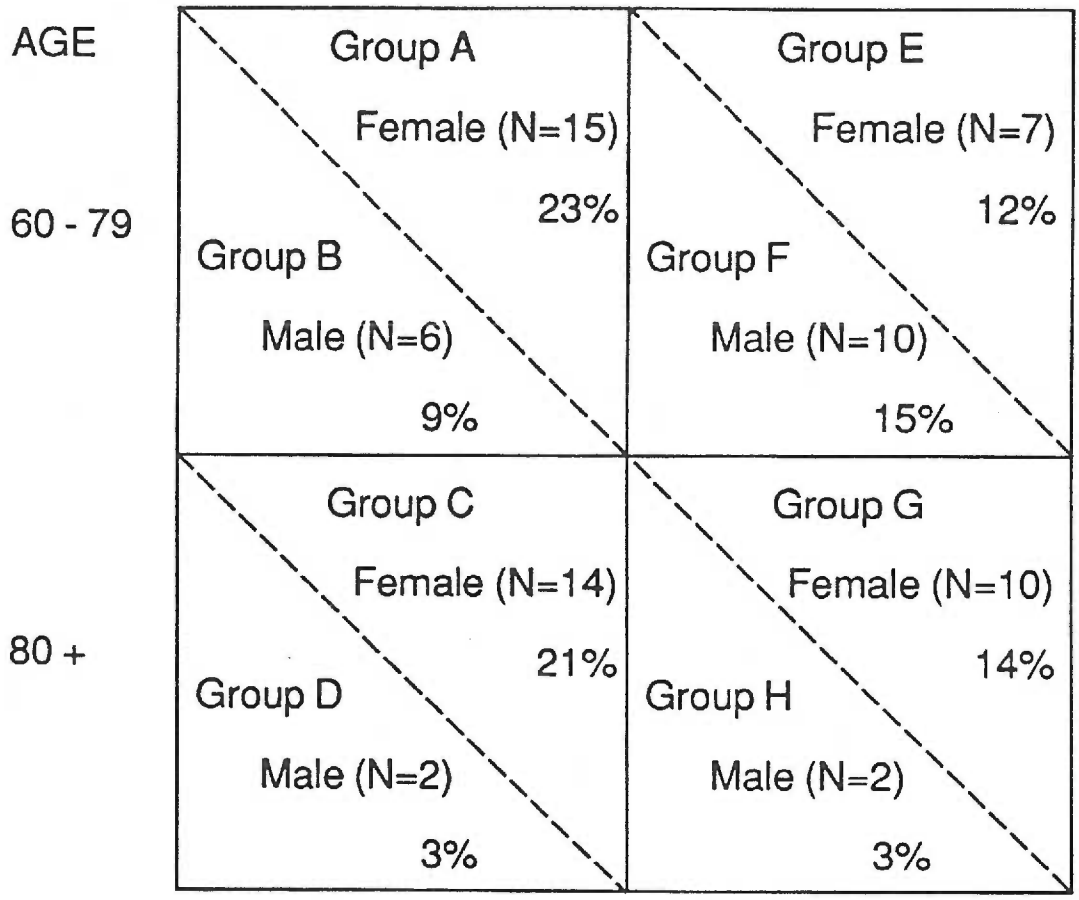

Figure 3

BLOCK NURSE PROGRAM POPULATION BY

Age, Living Situation, and Gender

Data

The data collected from the sample included information needed to describe the relationships between the client characteristics and the nature and extent of the Block Nurse involvement with the client. These data were obtained from the clients' charts. The documentation in the charts was produced by the Primary Block Nurse (program coordinator) and the client's primary nurse who was one of the four On-Call Block Nurses. The Primary Block Nurse conducted the initial home visit with all the clients. The program services were discussed, client needs identified, and a care plan designed before the case was assigned to one of the On-Call nurses who managed the case and produced the remainder of the documentation.

Data Collection Instruments

Three instruments were used in gathering data. First, the Data Collection Form (see Appendix A) is a structured schedule which was used to record information on the following client characteristics: demographics; health status as reflected by the incidence of chronic disease and medicaton usage; use of formal health and social support systems; and personal support systems.

Incorporated also into the Data Collection Form is information about the client's functional status. This information was derived from the Placement Information Base (PIB). All clients accepted into the Block Nurse Program

were routinely evaluated by this instrument. The particular items selected from the PIB to assess functional status for purposes of this study are listed in Appendix B. These items describe the following parameters of functional status: travel, mobility, mental status, Instrumental Activities of Daily Living, and Activities of Daily Living. Each item consists of five levels ranging from independent to dependent function with the given behavior. Each level is a behavioral description of how the individual accomplishes the task, e.g., manages light housekeeping but not heavy work. I identified for each of these items the level at which the client becomes dependent on another person to perform the task. (See Appendix B for levels of dependency on each item) The items on which the client was judged to be dependent were counted to obtain a score which could vary from 0 to 14.

Two additional forms Client Contacts, and Non-Client Contacts On Behalf of Client (see Appendices C and D), were used to describe the content of all phone and in-person contacts between the nurse and the client or members of the client's personal and formal support systems.

Analysis

The purpose of this investigation is to describe public health nursing services for the community based elderly as a function of: 1) the health and social needs of the elderly client, 2) the nature and extent of the elderly client's personal and formal support system and, 3) the client's perception of the public health nurse's capacity to meet his(her) perceived needs. In order to facilitate the analysis of the data, categories of nurse activities in response to client and/or primary support person behaviors have been tentatively identified. These categories are listed on the analytical form entitled Content Analysis (see Appendix C), and consist of: prevention activities of Block Nurse practice, case management activities of Block Nurse practice, client and primary support person perceptions of the Block Nurse and Block Nurse interventions with primary support person. The Content Analysis tool will be used to categorize the data from the Visit Summary Sheet. As data are gathered and analysis proceeds, these categories will be refined as necessary. Client characteristics will be cross-classified with these categories from the Content Analysis tool. The correlations and relationships between these variables will be used to answer the following research questions:

1. What characteristics of the client and/or the nurse client relationship affect the client movement toward full

utilization of public health nursing services? Specific questions with regard to these characteristics include: Are particular configurations of these client characteristics associate with a specific level or type of public health nursing intervention? What public health nurse services are most readily accepted by the client and/or primary support person? What changes in client status trigger a more intensive public health nursing involvement? What role does a primary caregiver play in the nature and extent of public health nursing services provided to the client?

2. What public health nursing activities are related to case management? What client needs is the public health nurse addressing in case management activities for the client? What referrals does the public health nurse turn to in the case management role?

3. Besides monitoring and assessment, what are the prevention activities of the public health nurse? In what areas is teaching provided by the public health nurse to the client and/or the primary support person?

4. Over time, what changes cas be observed in the nurse client relationship?

CHAPTER III

RESULTS AND DISCUSSION:

THE NATURE OF NURSING INTERVENTIONS

Data were collected on 362 contacts from the 16 randomly selected charts, and included 166 home visits, 63 phone calls to the client and/or primary support person, and 133 contacts made on behalf of the client with non-clients.

I have categorized the research questions and my results from this data collection into three areas of inquiry: (1) the nature of the treatment, teaching, counseling, and case management services provided to this population by the public health nurse; (2) selected client characteristics that affect the nature of nursing interventions, e.g., changes in client health status, the presence of a live-in caregiver, and the client and caregiver perceptions of their needs; and, 3) client characteristics that affect the extent of nursing interventions, e.g., health status changes, the presence of a live-in caregiver, client dependency status, the number of client medical diagnoses, the number of client medications, living situation, gender, and age.

This chapter covers the findings and discussion of the first area of inquiry - the nature of the nursing interventions with this population, Chapter IV covers the findings and discussion in the second and third areas with

regard to the client factors which affect the nature and extent of these interventions.

Tables 1 and 2 describe the frequency of particular nursing interventions and the number of clients receiving them. In the course of the 24 month period for which data were collected, the total number of treatment, teaching, counseling and case management interventions was 685. Treatment activities constituted 38% of these interventions, teaching 21%, counseling 16%, and case management 25% (see Table 1). The percentage of clients receiving treatment services in the period was 100%, with 94% of the 16 clients receiving teaching, counseling, and case management services (see Table 2).

Treatment Activities

Treatment activities, which represented 38% of all nursing interventions, included the measurement of blood pressure in 16 cases (100%), the provision of footcare in 10 of the 16 cases (63%), assessment and treatment of skin breakdown in six of 16 cases (38%), and the provision of capillary blood monitoring in three cases (19%) (see Table 2).

Included in the measurement of blood pressure was an assessment of the client's cardiovascular and pulmonary systems. Monitoring of these systems was indicated because cardiac and pulmonary systems are frequently affected by chronic disease and vulnerable to further deterioration

Table 1
Incidence of Nursing Interventions

Nursing Interventions	Number of instances of intervention	Percent of total interventions (N=685)
Treatment		
Blood pressure	166	24%
Footcare	39	6%
Blood glucose	33	5%
Wound care	23	3%
Total	261	38%
Teaching		
Symptom management	46	7%
Medications	38	6%
Mobility	28	4%
Diet	24	3%
Bowel & bladder	9	1%
Total	145	21%
Counseling		
Caregiver support	57	8%
Adjustment to aging	27	4%
Grieving	13	2%
Interpersonal skills	13	2%
Total	110	16%
Case Management		
Referrals		
Medical services	60	9%
Social services	32	5%
Planning	54	8%
Advocacy	23	3%
Total	169	25%
All Interventions	685	100%

Table 2

Number of Clients Receiving Interventions

Nursing Intervention	Number of clients receiving intervention		Percent of total clients receiving intervention (N=16)	
Treatment				
Blood pressure	16		100%	
Footcare	10		63%	
Wound care	6		38%	
Blood glucose	3		19%	
Total		16		100%
Teaching				
Symptom management	13		81%	
Medications	11		69%	
Mobility	9		56%	
Diet	8		50%	
Bowel & bladder	6		38%	
Total		15		94%
Counseling				
Caregiver/family support	9		56%	
Adjustment to aging	7		44%	
Grieving	7		44%	
Interpersonal skills	4		25%	
Total		15		94%
Case Management				
Referrals				
Medical services	15		94%	
Social services	12		75%	
Planning	11		69%	
Advocacy	8		50%	
Total		15		94%

and/or acute disease. The goal of the monitoring is early detection of a change to allow for in-home treatment of the condition as opposed to treatment in a hospital. This monitoring intervention detected changes in the health status in seven of the 16 clients (44%). In each case, the in-home treatment corrected the condition. However, half of the 16 clients experienced cardiovascular changes (N=6) or had falls (N=2) which resulted in their hospitalization during the period of Block Nurse services. These data suggest a need to monitor the status of elderly persons' vital systems, but the data do not clearly show the frequency of monitoring needed to prevent hospitalization.

The high percentage (63%) of the sample population that received footcare indicates the need for this service in the elderly population. Diminished sight and decreased musculoskeletal flexibility limit older persons' ability to provide their own footcare, particularly cutting their own toenails. The resulting ingrown nails and the growth of fungus beneath the nailbeds, together with skin breakdown between the toes cause pain which can significantly limit mobility. The provision of footcare, therefore, helps prevents other, more severe health problems and attendant dependencies.

Teaching and Counseling Services

Teaching and counseling activities occurred in 94% of the sample of 16 cases (see Table 2). The areas covered in

teaching and counseling and the percentages of the sample of 16 clients who received these services are given in Table 2.

Although medication management and teaching represented only 26% of the teaching interventions, nursing interventions in this area made a significant contribution to client management. The total number of different medications taken by the 16 clients was 80, with a mean of 5 and a range of 0 to 12 per client. Of those medications for which monitoring was indicated, the largest group consisted of drugs for treatment of cardiovascular disease. These drugs were classified as cardiac glycosides (N=6), antihypertensives (N=4), potassium depleting diuretics (N=4), and antianginals (N=2). In addition, two clients were on steroids, two were on theophylline, and two were taking prescribed pain killing drugs.

Nursing interventions with medications included monitoring of intended effects and unintended side effects and teaching about use, actions, and potential side effects of drugs. Six clients were identified as having had a history of medication mismanagement whether because of confusion or intentional non-compliance. The nursing interventions with these clients included more intensive monitoring, counseling, and weekly or biweekly prepouring of medications.

Despite the fact that 12 of the 16 clients had seen their physician in the week or month prior to the nursing

observation, nurses identified six clients from this group of 12 who were experiencing negative side effects from their medications and an additional four clients for whom the intended effects were not being achieved.

The frequency of medication-related problems in this sample supports the widely held concern about our limited knowledge of the effect of age on drug distribution, metabolism, and elimination. The high incidence (for 63% of the clients in this sample) of unintended side effects or lack of intended effects from drugs detected by the nurses (despite recent medical evaluation) indicates the need for caution in prescribing drugs for the elderly and the need for frequent professional assessment of potential drug problems in the elderly.

In 14 of the 16 clients, the teaching interventions occurred at the time of the first contact between the nurse and the family. These interventions continued throughout the time the client was receiving services from the nurse and appeared to be closely related to the development of new symptoms or changes in medications. In 13 of the 16 cases, clients or caregivers initiated teaching interventions with their questions to the nurse about an area of concern to them.

In 11 of the 16 cases, counseling was provided by the nurse on the first or second contact. Counseling was provided not only to the client but also to the primary

support persons in over half of the cases. This service is represented in Tables 1 and 2 as "caregiver/family support". Those primary support persons receiving counseling from the nurse were six live-in caregivers and three family members who lived apart from the clients but who gave significant support to the clients.

The relatively high frequency of counseling for caregivers in this sample corresponds with the findings from the caregiver support literature presented earlier in this paper. How the presence of a live-in caregiver affected the nature and extent of the nursing interventions will be discussed in the next chapter.

Given the prevention focus of public health nursing and the needs of this population, the high prevalence of teaching and counseling services is not surprising. The finding that these services were initiated with equal frequency by the nurse and by the client or primary support person was unexpected, as was the finding that teaching and counseling were part of the services provided from the outset of the nurse/client relationship. Before beginning the study, I had thought the content of the nurse/client relationship would be limited to nursing tasks at the outset, and would evolve over time to include teaching and counseling as trust and client comfort level developed. Clearly, openness to these interventions - and perhaps expectations for these services - were present from the

beginning of the relationship. It is important to note that the sample for this study was randomly selected from a pool of individuals who had accepted and received Block Nurse services for at least three months. This selection criteria may have led to the exclusion of those individuals who are less open or less ready for teaching and counseling.

Case Management Activities

I have categorized the case management activities into three areas: 1) referral to existing resources/services, 2) planning with other individuals involved with the case (social workers, physicians, relatives, friends), and 3) advocacy for services or rights which may not be readily available to the client, e.g., the right to remain at home and receive services that make this setting safe and comfortable. Fifty percent of the clients experienced an increase in services as a result of the case management services provided by the nurse. In six of these eight cases, the clients accepted homemaker services, and in five, the clients qualified for Home Health nursing. Other new services were transportation assistance (N=1), more equipment in the home (N=1), and respite (N=1).

Case management activities were analyzed by counting each referral, planning session, or advocacy effort. The results in Tables 1 and 2 show that 94% of the clients received some referral services from the nurse, 69% received planning services, and 50% received advocacy assistance.

The referral activity was divided into referrals for medical evaluation (N=60) and social service referrals (N=32). Physician response to the nursing referral varied. In some instances, the physicians were comfortable with changing the treatment regime on the basis of the nursing assessment. In other cases, the physician requested an office visit by the client. Possible factors that would account for this variation are the length of time since the physician had seen the client, the nature of the symptoms, the need for diagnostic tests, and the physician's comfort with reliance on nursing assessments.

The remaining 35% of the referral activity was to social services such as support groups, homemakers, live-in companions, respite, and transportation. The major portion of this activity was directed toward eight clients who were not receiving case managment services from a Neighborhood House caseworker. Of the remaining eight clients who did received caseworker assistance, five received Home Health Aide/Homemaker services through the Oregon Project Independence (OPI) program which was managed by the Neighborhood House social workers.

The incidence and scope of the referral activity by the nurses indicate the nurses' abilities to make health and social needs assessments and their breadth of knowledge of resources. This is evidence supporting the public health

nursing role of Resource Allocation described in the model presented earlier in this paper.

Planning represented 32% of the case management by the nurses. Planning occurred between the Block Nurse and family members, hospital discharge coordinators, caseworkers, volunteers, physicians, Home Health Agencies, homemakers, and hospital nurses. The focus of this activity was to keep all providers informed of the client's current status so as to best coordinate assistance for the client.

The planning services provided by the nurse are a key component in the Resource Allocation/Control Loop in the model presented in this paper. Keeping communication channels open among all the client's providers is one aspect of this role. Another aspect is anticipating future client needs and allocating resources accordingly. While the nurses were able to establish and maintain communication channels among providers, they could not act as resource allocators for services other than their own. Ideally, the nurse would incorporate service allocation in planning rather than having to act as a client advocate when the needed services were not being provided.

Advocacy on behalf of the client was directed toward physicians, Home Health Agencies, HMO's, and family members. Typically, the nurse was advocating for home based services to facilitate the client's remaining in the home. In six of the 16 cases (44%), the nurse approached the clients'

physicians and the gatekeepers of services for the Health Maintenance Organizations (HMO). In all of these cases, the nurse intervened to obtain services for which the client qualified under Medicare guidelines but was not receiving because the agency or physician did not have current knowledge about the client condition, lacked knowledge about the eligibility criteria for the service, or, in the case of an HMO, was reluctant to provide the service despite awareness of client eligibility for the service. In all cases, the nurse was successful in getting the services provided in the home.

Advocacy conducted with family members consisted of the nurse's speaking for the client's right to remain at home even though the living conditions might not meet the standards of the family members who lived outside the home. Allaying the family's sense of responsibility for maintaining these standards was a major part of this advocacy.

Key elements common to the nurse's advocacy role were identified in all instances of advocacy. First, the nurse's knowledge of the health care system and formal social service system and of the rules of eligibility for services from these systems was critical to the advocacy role. Second, the ability to make a professional assessment of the health problems and communicate these to other medical providers was needed in order to be perceived as a credible

advocate. Third, the respect for nursing judgment held by other providers gave nurses power as advocates that was evident in the success the nurses had in getting needed services to the client.

In the six cases from this study for whom the nurse successfully advocated for Medicare services, the following outcomes occurred: 1) two clients came home from a nursing home, and used Home Health nursing for one month in one case, and Block Nurse services biweekly in the other; 2) one client with terminal disease was able to remain at home and decreased her use of the emergency room; 3) another client was maintained at home with weekly nursing visits to treat skin breakdown; 4) another person's dangerously high blood pressure which could have resulted in a stroke was stabilized after one month of Home Health nursing and, 5) another client received physical therapy to increase mobility and independence in the home.

CHAPTER IV

RESULTS AND DISCUSSION: FACTORS THAT AFFECT THE NATURE AND EXTENT OF NURSING INTERVENTIONS

I have divided this chapter into three sections. The first section describes the effect of selected client characteristics on the nature of the nursing interventions. These client characteristics are: changes in client health status, the presence of a live-in caregiver, and the client and caregiver perceptions of what their needs were. The second section describes the method I used to calculate the extent of nursing involvement (nursing intensity). The third section describes the effect of a second sub-set of client characteristics on the extent of nursing involvement. These client characteristics are: change in client health status, client dependency status, number of medications, number of medical diagnoses, living situation, gender, and age.

Factors that Affect the Nature of Nursing Interventions

Changes in Client Health Status

Ten of the 16 clients (63%) had experienced significant health status changes just prior to accepting Block Nurse Program services. These health changes were: skin breakdown (N=2), respiratory illness (N=2), poorly controlled hypertension (N=1), cardiac arrythmia (N=1), hypoglycemia (N=1), uncontrolled diarrhea (N=1), increased confusion

(N=1), and decreased mobility of unknown cause (N=1). In all of these cases, monitoring and assessment were components of the nursing interventions. Referrals to the physicians were frequent with the nurses reporting symptoms for medical assessment. In all ten cases, the nurse provided teaching to the client or caregiver in medication use, skin treatment, or symptom management. Procedures were part of the nursing intervention in three of the nine cases: capillary blood monitoring (N=2), stool specimen collection (N=1), and predrawing insulin (N=1).

Advocacy was a significant component of the nursing intervention in six of the nine cases. This activity involved numerous phone calls to providers and family members to facilitate the client's return to the home from the nursing home or hospital. In four of these six cases, the client would not have been maintained at home had the nurse not been successful in advocating for support services in this setting.

Sixty three percent of the 16 clients in this sample experienced serious health status changes just prior to involvement with the Block Nurse Program. This finding suggests that a rather fragile health status may characterize the community-based elderly population.

Presence of a Live-in Caregiver

Seven of the 16 clients lived with others; the remaining nine lived alone. For six of the seven clients

living with others, that other person was their caregiver. The seventh client living with others was a caregiver herself. The six clients with live-in caregivers were assessed as dependent in five or more of the 14 behaviors measured by the PIB. All six needed assistance with some aspect of mobility, bathing and/or toileting, and all needed total assistance with IADL's. None of them could be left unattended for more than one hour periods.

The caregivers for these six clients ranged in age from 30 to 77. Their genders were: three females, two males and a male/female couple. None of the six caregivers had ADL dependencies themselves; two of them needed assistance with housework and shopping. Given the client demands on these caregivers, it is not surprising that in these six cases, a significant portion of the nursing interventions were directed to the caregiver. In all six cases, caregiver support represented 50% or more of the counseling provided by the nurse and from 25 to 70% of the teaching and planning interventions were directed to the caregiver. Specifically, these interventions consisted of one-to-one counseling, encouragement to accept more respite and in-home services, planning for needed services, and teaching caregiving and assessment skills.

In addition to the live-in caregivers, nurses provided support to the families and friends of three of the clients who lived alone. Families and friends of these three clients

questions about diet. However, the data also show that those four clients who identified only footcare as needs also received teaching and counseling from the nurses during the first two months of program service.

Calculation of Nursing Intensity

I calculated the extent of nursing intensity in two ways. The first measure was the average number of nursing contacts per month. For this calculation, the total number of nurse contacts with client, family, or others on behalf of the client was divided by the total number of months the client received services from the nurse.

Because some cases appeared to have the most intensive nursing involvement during the initial three months of service, I also calculated the average number of contacts per month for just the first three months of service to each client. These two nursing intensity calculations produced a range of nursing contacts per month from .86 to 9.33. I considered the standards of public health nursing practice in dividing this range into three levels of intensity. I considered low intensity to be less than two contacts monthly (.86 - 1.83), moderate intensity to be two to four contacts (2.0 - 3.5), and high intensity to be more than four contacts (4.67 - 9.33) (see Table 3).

The greater number of clients at the high intensity level for the three month period than for the total service period suggests that nursing involvement with this

Table 3

Level of Nursing Intensity as Measured by Number of Contacts per Month

Level of Nursing Intensity & Range	Number of Clients Experiencing Specified Intensity Over Total Service Time	Over First 3 months
High (4.67-9.33)	3	8
Moderate (2-3.5)	7	4
Low (.86-1.83)	6	4

population is likely to be most intense at the outset of the program. This finding also seems reasonable when considering that all of these eight clients at the high intensity level for the first three months had experienced illness or injury immediately prior to or upon entry into the Program.

I also calculated the intensity of nursing case management provided to the sample over the total number of months in program and during the first three months of service (see Table 4). All referrals, planning exchanges, and case management efforts were summed and divided by the total number of months in the program to get the average number of case management services per month. Again, there appeared to be more intensive case management activity during the early months of service, so I calculated intensity for the first three months to arrive at the average case management activity conducted by the nurse during this period. The range of scores for these two different intensity measures was from 0 to 6 case management activities per month. Using public health nursing practice standards again, I divided this range into three levels of intensity to create a low intensity (0 - 1 case management activities per month), a moderate intensity (2-3 case management activities per month), and a high intensity (4 or more case management activities per month).

Table 4

Nursing Case Management Intensity

Number of Case Management Interventions Per Month	Number of Clients With Specified Intensity Over Total Service Time	Over First 3 Months
High (4 or more)	2	5
Moderate (2-3)	1	4
Low (0-1)	13	7

As with the nursing intensity calculations, there were greater numbers of clients whose scores for the first three months placed them in a higher intensity group than their scores for the total service time. There were four clients whose intensity ratings in the first three months placed them in a higher group than their placement in the total service time calculation. In only one case was the three month case management intensity score less than the total service time intensity. These results indicate that the higher scores for nursing intensity over the first three months were due in part to the more active case management done by the nurse in this period.

The Effect of Client Characteristics on the Extent of Nursing Involvement

Changes in Client Health Status

For those ten clients who experienced health status changes while involved in the Block Nurse Program, the frequency of nurse home visits and/or case management activity increased at the time of their health crises. Eight of the ten were at the high nursing intensity level during the first three months. In these eight cases, the home visit frequency was 3-4 visits per month until the health crisis was resolved (at approximately one month), after which time visits dropped to one per month. The remaining two clients were at the moderate level of nursing intensity for the first three months. One of them received intensive case management (referral and advocacy) services from the nurse over a two day period during this time, and the other whose support system was very strong was adequately managed with biweekly home visits for two months and then monthly home visits.

The question that arises from the finding that 63% of this sample had recently experienced setbacks in their health status is whether any of these individuals could have avoided the discomfort and risk of their worsened health status had the nurse been involved earlier. The apparent difficulty for the nurses is the reluctance of the elderly to accept in-home nursing services for maintenance and

prevention reasons in the absence of severe symptoms of illness.

Client's Living Situation

For both the total service time and the first three month calculations, those seven clients who lived with others were in the high intensity group in greater percentages than the clients who lived alone. Table 5 cross-classifies the clients by living situation and nursing intensity over the first three months of service time. Three of those living alone were in the low nursing intensity group as compared with only one of those living with others. Three of those living alone had moderate nursing intensity compared to one of those living with others, and three of those living alone had high nursing involvement compared with five of those living with others.

Combining the three factors, nursing intensity during the first three months, living situation, and change in client health status, I found that six of the ten who had health status changes lived with others, with five in the high intensity nursing group and one in the moderate intensity group. Of the four clients living alone who experienced health status changes, three were in the high intensity group and one in the moderate. These data suggest that a change in client health status influences the nursing intensity irrespective of living situation.

Table 5

Nursing Intensity First Three Months by Living Situation

Nursing Intensity	Alone	With Others
Low (.86-1.83)	3	1
Moderate (2-3.5)	3	1
High (4.67-9.33)	3	5

There is a possibility, however, that those clients living with caregivers are more likely than those clients living alone to wait until either their health status is at considerable risk and/or their dependency status is quite high before they will accept outside nursing assistance. Those clients living alone may perceive outside nursing services as more attractive because they feel more vulnerable to changes in health and dependency status because they are alone. This is supported by the calculation of the means of client dependency status as measured by the PIB for the two groups, living with others and living alone. The mean number of dependencies for those living with others (N=7) is 9.7, compared to a mean of 4.6 for the dependencies of those clients living alone (N=9).

Client's Dependency Status, Number of Medications and Number of Medical Diagnoses

Calculation of Pearson *r*'s showed no strong correlation between total nursing service intensity and any one of these three client characteristics. The correlation coefficients between number of dependencies as measured by the PIB and the intensity of nursing involvement was .36, and between the number of medical diagnoses and nursing involvement was .38. There was a slightly stronger correlation between the number of medications and nursing intensity, with *r*=.49. These correlation coefficients are

not significant at p = .05. (The Pearson r of .49 is statistically significant at p = .10.)

Gender

Table 6 shows the effect of gender on nursing intensity during the first three months of service time. In this sample of six males and ten females, females generally had a lower level of nursing involvement. Three females were in the low intensity group compared to one of the males; three of the females were in the moderate group compared to one of the males; and four of the females were in the high group compared to four of the males.

One explanation for this apparent higher nursing intensity for the males in this sample may be the higher dependency status on average for the males. The mean of the number of dependencies for the six males in the sample is 7.8 which compares to 6.2 for the ten females in the sample. The difference in dependency status between males and females is even greater when looking at those in the high intensity group. The mean for males in the high intensity group is 9.25, whereas the mean for the females is 6.75. (Also, three of the four males in the high intensity group live with others, compared to two of the four females in this group living with others.)

Table 6

Nursing Intensity First Three Months by Gender

Nursing Intensity	Male	Female
Low (.86-1.83)	1	3
Moderate (2-3.5)	1	3
High (4.67-9.33)	4	4

Age

There was no apparent relationship between age and nursing intensity over total service time (see Table 7).

Table 7

Nursing Intensity First Three Months by Age

Nursing Intensity	Less than 80	80 & older
Low (.86-1.83)	2	2
Moderate (2-3.5)	2	2
High (4.67-9.33)	5	3

CHAPTER V

SUMMARY, CONCLUSIONS, & IMPLICATIONS

Summary

My goals in conducting this study were, 1) to gain a better understanding of the relationship between the health and social needs of the community-based elderly and the practice of public health nursing and, 2) to investigate the effect of selected client characteristics on this relationship. In order to achieve this understanding, I analyzed in depth both the content and the extent of the relationship between 16 elderly clients and their Block Nurses.

Analysis of the content of the nursing services provided to these 16 clients indicates the following activities: 1) hands on nursing care; 2) provision of physical assessments; 3) counseling and teaching of clients and family members; 4) collaboration with other providers and family members to coordinate services for the client; 5) referrals to needed health and social services; and, 6) client advocacy.

I looked at a number of client characteristics and how they may have affected the evolution of the nurse/client relationship. These client characteristics were: client health status changes, presence of a live-in caregiver, client and family perceptions of their needs, client dependency status, number of client medical diagnoses,

number of medications, and client demographics (living situation, gender and age).

The data indicate that changes in client health status are important to the development of the nurse client relationship. A change in client health status appears to be related to the introduction of nursing services, the intensity of nursing services during the first three months, and the content of the nursing interventions. A change in client health status appears to stimulate acceptance of nursing services for some elderly clients and results in a greater case management component than that found with clients not experiencing health status changes.

Presence of a live-in caregiver also appears to influence the content of the nursing interventions in that a considerable portion of the nursing involvement is directed to counseling for the caregiver. There is some evidence in the data that these families also elicit a more intensive nursing involvement than those clients living alone.

Client and family perceptions of what their needs are appear to have some influence on the content of the nursing interventions. Nurses respond to the clients' and families' expressed needs, but also provide teaching, counseling, and case management services that are inherent in the practice of public health nursing even if these services are not requested.

Statistical analysis of client dependency status, number of medical diagnoses, and number of different medications does not indicate that these variables are related to the intensity of nursing involvement.

Of the demographic characteristics, living situation appears to be the most relevant factor and gender the second, in determining the extent of nursing involvement. Those living with others, especially if they were male, received more intensive nursing involvement than those living alone or who were female.

Conclusions

The content analysis of the public health nursing interventions with this population of community-based elderly suggests there are gaps in service needs for this population. These gaps are: 1) the monitoring and treatment of health conditions not covered by Medicare; 2) adequate frequency of assessment of the intended and unintended effects of medications; 3) in-home teaching and counseling for the caregivers who are sustaining the disabled elderly in the community; and 4) advocacy for both the services this population has been entitled to through legislation and for remaining in the home setting.

Further, the content analysis of the case management activities of the nurses suggests a unique competency of public health nurses to conduct assessment and management activities which bridge the health and social needs of this

population, thereby integrating the health and social services.

Client perceptions of needs and verbalization of these needs to the nurses suggests that they perceive the nurse as a source of health information as well as the more traditional view of a nurse as a skilled provider of technical services.

Implications for Research

The findings from this study suggest the need for larger studies and the use of control groups to examine a number of issues. First, the client outcomes and costs of providing public health nursing services to the community-based elderly should be compared to those outcomes and costs of a similar group of elderly who do not have public health nursing services. Variables that should be measured in such a study are: client satisfaction, hospitalization rates, emergency room use, nursing home use, adult foster home use, doctor office visits, doctor home visits, and nurse and social worker home visit and case management time.

Second, more data are needed to predict what frequency of public health nurse contact with the community-based elderly would be adequate in order to significantly decrease incidence of unwanted drug effects, accidents in the home, deterioration of chronic health problems into acute health problems, and caregiver burnout.

Third, data from a larger study are needed to clarify and test the significance of the apparent relationships between client characteristics such as living situation and recent health status changes and the intensity of nursing involvement. These relationships, if verified, should be considered by public health nurses in assigning acuity to referrals and predicting staffing needs.

Implications for Education of Public Health Nurses

Findings from this study also have implications for the educational preparation of public health nurse practitioners. First, the incidence of health status changes in this population suggests that public health nurses should be well trained in the assessment of and treatment activities associated with geriatric health status. This includes knowledge of drugs commonly used to treat chronic disease, competency in cardiovascular/pulmonary assessment, competency in the assessment and treatment of skin conditions, and competency in the provision of footcare.

Second, the finding that 25% of the total nursing interventions were case management activities indicates the need for both clinical and classroom training in this area.

Third, the data indicate that program promotion activities may play a significant role in gaining acceptance of public health nursing services by this population. Public health nurses need training in marketing and

assertiveness to successfully promote their services to the clients as well as the potential payment sources for their services - HMO's, county commissioners, and state and federal officials. Once funded, public health nurse practitioners need the skills to design and implement community outreach programs.

Within Multnomah County, a baccalaureate degree is the minimum level of education required for entry into the practice of public health nursing. Public health departments in some states require a certificate of public health nursing which requires additional training specific to this field of nursing practice. The current single term of public health nursing in Oregon's baccalaureate programs may not be sufficient to prepare a nurse for the multi-dimensional role described in the data from this study, and a certificate or masters level of training may be indicated for achieving clinical competence in this area of nursing practice.

Implications for Practice

Anticipated demographic changes, rapidly escalating health care costs for the elderly, and the current fragmentation of health and social services are stimulating policy makers to explore alternative service delivery models for the elderly population. The findings from this study provide some evidence that a service delivery model which includes the public health nurse as the case manager may

decrease fragmentation of services and address the needs of a population afflicted with chronic disease. Public health nurses have an opportunity to identify their services as critical in the management of the community-based elderly. Conducting research is one avenue for achieving credibility in this role. Perhaps this study will stimulate research to test the hypothesis that the provision of public health nursing services to the community-based elderly will produce cost savings through the reduction of institutionalization of this population.

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APPENDIX A

Data Collection Form

DATA COLLECTION FORM

A. DEMOGRAPHICS.....

1.AGE (at time of first contact with BNP)

2.SEX

1.Male

2.Female

3.LIVING SITUATION

1.Alone

2. Spouse/Relative

3.Paid Provider

4.Foster Home

5.Other:

4.NUMBER IN HOUSEHOLD (including client)

5.CLIENT MONTHLY NET INCOME:

6.Date of initial Block Nurse Program Home Visit:

7.Date of closure or last Home Visit:

months with Program:

Home Visits:

phone contacts with clients:

on behalf of contacts:

B. HEALTH STATUS .....

1.MEDICAL HISTORY
(past 20 years)
(check all that apply)

1 HTN
2 CHF
3 Arthritis
4 Diabetes
5 Thyroid
6 Osteoporosis
7 Renal disease
8 COPD
9 Emphysema
10Cancer
11Parkinsons
12Ulcers
13Alzheimers
14CVA
15Depression
16Other:

17None

2.CLIENT'S CHIEF COMPLAINT:

3.MEDICATION USE
1.Number of Medications:

2.History of medication mismanagemen
Yes No Unknown

3.Medications with commonly occurrin
side effects
Yes No Unknown

4.Medications whose intended side effects need monitoring
Yes No Unknown

C.FUNCTIONAL STATUS (SEE PIB FINDINGS)

D. FORMAL HEALTH SUPPORT SYSTEM.....

1.TYPE OF PROVIDER

1.HMO/PPO

2.PMD

3.Public Health Clinic

4.Other:

2.TYPE OF TRANSPORT TO MD

1. client independent

2. personal support system assist

3. volunteer assist

4. Tri-Met Lift

5. Other:

3.CLIENT STATED BARRIERS TO SEEKING MEDICAL CARE(check all that apply)

1. Financial

2. Questions value

3. Fearful of findings

4. Too much effort

5. No barriers

6. Other:

4.LENGTH OF TIME WITH THIS PROVIDER

Number of months:

5.LAST APPOINTMENT WITH MEDICAL PROVIDER

1. During past week

2. During past month

3. During past year

4. During past 5 years

5. Greater than 5 years since last appt

6.CLIENT STATED LEVEL OF SATISFACTION WITH PROVIDER

1. Not satisfied, wants to change

2. Not particularly satisfied but does not want to change

3. Satisfied

4. Not stated

PIB

I Mobility
- A.
- B.

II IADL
- A.
- B.
- C.
- D.
- E.

III Mental Status
- A.
- B.

IV ADL
- A.
- B.
- C.
- D.

Areas of Dependency	Compensating Service

Homebound Status:

F. Formal Social Support System
(List all that apply)

Source	Code
1 Neighborhood House	_____
2 Meals on Wheels	_____
3 TriMet Lift	_____
4 People Bank	_____
5 Support Group	_____
6 Neighborhood House Senior Center	_____
7 SSD Caseworker	_____
8 OPI	_____
9 Paid Homemaker	_____

Services provided

1 case managment
2 prepared meals
3 transportation
4 respite
5 fuel assistance
6 emotional support
7 social activities
0 no service provided
9 Missing
8 IADL and ADL assist
10 Shopping

G. Personal Support System
(List all that apply)

Source	Code
spouse	_____
other relative	_____
friend	_____
church	_____
pets	_____
other organizations	_____

Services Provided

1 Assist with ADL's
2 Assist with IADL's
3 Emotional support
4 Monitoring
5 Economic
6 Transport
0 No service provided
9 Missing
7 Misc. errands
8 Assist with bills
10 Shopping

H. CHARACTERISTICS OF PRIMARY SUPPORT PERSON (PSP)

*PSP as defined by: person living with client and/or relative or friend managing the services client receives

1. AGE

2. SEX 1. Male

2. Female

3. LIVES WITH CLIENT yes no

4. IF NO ON ITEM #3, NUMBER OF MILES FROM CLIENT:

5. RELATED TO CLIENT: Yes NO

IF SO, SPECIFY:

6. PAID FOR PROVIDING ASSISTANCE TO CLIENT? Yes No

7. IF SO, WHO PROVIDES PAYMENT?

8. STATEMENTS FROM PRIMARY SUPPORT PERSON ABOUT HIS/HER OWN HEALTH:

9. BLOCK NURSE WRITTEN OBSERVATIONS OF THIS SUPPORT PERSON'S PHYSICAL OR MENTAL CHARACTERISTICS WHICH LIMIT HIS(HER) ABILITY TO MEET CLIENT'S NEEDS:

10. THIS SUPPORT PERSON'S STATED CONCERNS ABOUT HIS OR HER RESPONSIBILITY OF PROVIDING PRIMARY SUPPORT FOR CLIENT:

11. OTHER SOURCES OF PAID AND UNPAID SUPPORT FOR THIS PRIMARY SUPPORT PERSON:

	Paid	Unpaid
1. friends		
2. other family		
3. church		
4. HHA services		
5. Homemaker services		
6. pets		
7. volunteer respite		
8. volunteer transport		
9. social worker case management		
10. Other:		

12. OTHER DEMANDS ON THIS SUPPORT PERSON'S ENERGIES:

I. SECONDARY PERSONAL SUPPORT SYSTEM:

1. CLIENT'S RELATIVES AND CLOSE FRIENDS STILL LIVING AND THEIR GEOGRAPHIC DISTANCE FROM CLIENT:

RELATIVE/FRIEND	#MILES FROM CLIENT

2. FREQUENCY AND TYPE OF CONTACT - PHONE VS IN PERSON - WITH CLIENT FOR EACH OF THOSE LISTED IN #1:

APPENDIX B

Placement Information Base Items

Scales selected from Placement Information Base (PIB)
to Assess Functional Status of Clients

I. Mobility

A. Travel
1. Uses transportation properly and appropriately, on own. If a driver, can drive safely.
2. Uses transportation properly and appropriately, with a little help.
3. Uses transportation for both short and long trips with a moderate amount of help.
4. Manages short trips with moderate assistance, but totally dependent on others for long or unusual trips.
5. Totally dependent on help from others when any travel is necessary.

Note: Scale values of 1,2,3 represent independent functioning; Scale values 4 and 5 represent dependency.

B. Mobility without aid of mechanical devices
1. Has no difficulty with mobility and is physically active.
2. Has no difficulty with mobility.
3. Walks or gets around inside, but needs some help outside.
4. Needs assistance with walking.
5. Does not get around without continuous assistance by another person.

Note: Scale values 1,2,3 represent independent functioning; Scale values 4 and 5 represent dependency.

C. Mobility with the aid of mechanical devices
1. Walks or gets around without difficulty both inside and outside.
2. Walks or gets around inside, but needs some help outside.
3. Gets around in immediate living space and needs assistance beyond that.
4. Gets around but neds help to transfer to mobility aid; may or may not need assistance.
5. Does not get around without continuous assistance by another person.

Note: Scales 1 and 2 represent indepedent functioning; Scales 3,4,5 represent dependency.

II. Instrumental Activities of Daily Living

A. Housekeeping
1. Takes complete care of his/her living space and that of others in living situation.
2. Takes care of his/her own living space, both light and heavy work.
3. Consistently manages own light housekeeping, but not heavy work.
4. Does light housekeeping, but inconsistently or inadequately.
5. Does not take care of own living space.

Note: Scales 1,2,3 represent independent functioning; Scales 4 and 5 represent dependency.

B. Shopping
1. Does shopping regularly and properly without assistance.
2. Does shopping with occasional help.
3. Does shopping with frequent help.
4. Always needs assistance from another person to shop.
5. Another person gets all items.
Note: Scales 1 and 2 represent independent functioning; Scales 3,4,5 represent dependency.

C. Preparing Food
1. Prepares all meals
2. Usually prepares all meals.
3. Ability to prepare all meals sometimes restricted.
4. Ability to prepare meals frequently restricted.
5. Does not prepare meals.
Note: Scales 1 and 2 represent independent functioning; Scales 3,4,5 represent dependency.

D. Nutritional habits
1. Diet is highly conducive to good health.
2. Diet is adequate for good health.
3. Diet is not well balanced andy may pose problems for maintaining good health.
4. Diet adversely affects health.
5. Diet has immedicate negative impact on health.
Note: Scales 1,2,3 represent independent functioning; Scales 4 and 5 represent dependency.

E. Eating
1. Feeds self, chews and swallows solid foods without difficulty.
2. Feeds self, chews and swallows solid foods which have beern cut or pureed.
3. Needs assistance with feeding, but chews and swallows solid foods
4. Needs assistance with feeding and has difficulty with chewing or swallowing, even with food cut or pureed. May need to be fed by tube.
5. Must be fed intravenously.
Note: Scale 1 represents independent functioning; Scales 2,3,4,5 represent dependency.

III. Mental status

A. Orientation
1. Can communicate name, residence, and facts bout present X situation accurately and appropriately - fully oriented.
2. Can communicate name and residence, but is vague or unsure about present situation.
3. Can only identify self sometimes or partly.
4. Hardly ever identifies self, or does inaccurately, at least some of the time.
5. Does not identify name and address accurately and appropriately.

Note: Scales 1 and 2 represent independent functioning; Scale 3,4,5 represent dependency.

B. Personal independence and coping skills
1. Accepts change: actively adapts, amkes plans, handles crises will, is confident.
2. Accepting, but needs some help in adapting and making plans and decisions.
3. Actively resistive; refuses to make decisions; consistently negative or hostile.
4. Neutral or passive. Requires regular assurance and/or guidance.
5. Withdrawn, afraid, or insecure; needs near constant support.

Note: Scales 1 and 2 represent independent functioning; Scales 3,4,5 represent dependency.

IV. Activities of Daily Living

A. Grooming and Dressing
1. Grooms and dresses self without any help. Combs hair, does nails, manages buttons, ties shoes, etc.
2. Grooms and dresses self without any help, but must be reminded to do so on some days.
3. Grooms and dresses self without any help, but must always be reminded to.
4. Needs help from another person to do some parts of grooming, or some parts of dressing, such as managing buttons or tying shoes; may or may not need reminding.
5. Needs hnelp from another person to do all of grooming, or all of dressing, or both, and may or may not need reminding.

Note: Scales 1 and 2 represent independent functioning; Scales 3,4,5 represent dependency.

B. Bathing

1. Bathes or showers delf regularly, without reminders and without help for any task including turning the water on and off.
2. Bathes or showers self without any help, but must be reminded at least some fo the time.
3. Bathes or showers self, but must have help with mechanical apparatus.
4. Bathes or showers self, but must have help for physically moving into and out of apparatus.
5. Does not do any part of bathing or showering, requires another person to do everything.

Note: Scales 1 and 2 represent independent functioning; Scales 3,4,5 represent dependency.

C. Using toilet

1. Gets to and from toilet, adjusts clothes, cleans self, etc, without help. without help.
2. Needs help getting to toilet, but needs no other help.
3. Gets to toilet, but needs some help once there.
4. Gets to toiltet, but neeeds total help.
5. Does not use toilet.

Note: Scale 1 represents independent functioning; Scales 2,3,4,5 represent dependency.

D. Continence

1. No accidents, or infrequent accidents; no problems, needs no help or aid.
2. Accidents once or twice a week, or needs help or aid once or twice a week.
3. Accidents three to five times a week, or needs help or aid three to five times a week.
4. Needs assistance regularly (adaily or more frequently) with specific part s of activity.
5. Needs moderate to great assistance. Someone must be present every time to assist with all, or nearly all, parts of the activity.

Note: Scale 1 represents independent functioning; Scales 2,3,4,5 represent dependency.

APPENDIX C

Client Contact Form

CLIENT CONTACT

Client #_____
Contact #_____
Date:_____
HV or pc_____

REASON FOR CONTACT:_____
1. scheduled
2. change in client status
3. transmit information
4. other:

INITIATOR OF CONTACT:_____
1. RN
2. client
3. primary support person (psp)
4. other support system (oss)--specify:
5. other--specify:

PROBLEMS ADDRESSED Problem	Status of Problem (o=old; n=new)	Person Identifying Problem
1.		
2.		
3.		

INTERVENTIONS	Sess.	Req. by	Rcpt.
Procedure/ Screening			
0. None			
1. BP			
2. footcare			
3. CBM			
4. other			
Comments:			
Teaching			
0. None			
1. meds			
2. safety			
3. mobility			
4. diet			
5. urine/bowel			
6. other:			
Comments:			
Psychosocial Care			
0. none			
1. grieving			
2. interpersonal skills			
3. adjustment to aging			
4. other:			
Comments:			

CODE: Session: 0=none, 1=initial, 2=repeat; Requested by: 1=client, 2=psp 3=oss; Recipient: 1=client, 2=psp, 3=client & psp, 4=oss, 5=other

Referral Precipitating Event/Problem	Provider	Service
0. None		
1.		
2.		

CODE: Provider: 1=MD, 2=NH, 3=other; Service: 1=med., 2=transp., 3=food, 4=HC/PC, 5=visitor/respite, 6=other
Comments:

Advocacy Issue:	Target	Goal	Action
0. None			
1.			
2.			
3.			
Comments:			
Other:			
1.			
2.			
3.			

CODE: Target: 1=MD, 2=NH, 3=other
Comments:

Other Abbreviations: HV=home visit; pc=phone call; HC=home care; PC=personal care; trans.=transportation;

APPENDIX D

Non-Client Contact On Behalf of Client

Client#
Contact#
Date:
pc or conf

NON CLIENT CONTACT
ON BEHALF OF CLIENT

1. Communication with:

   1=MD
   2=Other Support System Specify:
   3=Personal Support Person

2. Initiator of contact:

   1=RN
   2=Contact

3. Precipitating event/problem/issue:

4. Purpose of contact:

5. Outcome:

6. F/U indicated: _____Yes _____ No Specify:

AN ABSTRACT OF THE THESIS OF

ANN BREMER

For the MASTER OF SCIENCE IN NURSING

Date of Receiving this Degree: June 12, 1987

TITLE: A DESCRIPTION OF PUBLIC HEALTH NURSING PRACTICE WITH THE COMMUNITY-BASED ELDERLY

Approved: [redacted]

Susan J. Will, R.N., MS, Thesis Advisor

Current Medicare policy does not reimburse for the maintenance and prevention services provided by public health nurses in the management of those community-based elderly who are at risk of institutionalization due to chronic disease and/or functional dependence. Before public health nurses can legitimately expand their practice into the area of maanagement of chronic disease in the elderly, they must develop a better understanding of the relationship between the needs of this population and public health nursing practice.

This study is a first effort to build the desired data base to justify public health nurse involvement with the community-based elderly. It describes the practice of public health nursing with the community based elderly in the Multnomah County (Oregon) Block Nursing Program, a neighborhood-based pilot program for delivery of public health nursing services to this population. The data

produced in the study describe the treatment, teaching, counseling and case management activities in a randomly selected sample of 16 program clients. Specific goals of the study were: (1) an increased understanding of the relationship between the health and social needs of the community-based elderly; and (2) investigation of the effect of particular client characteristics on the nature and extent of nursing interventions.

The data showed that nursing services provided to elderly clients included: 1) hands on nursing care; 2) provision of physical assessments; 3) counseling and teaching of clients and family members; 4) collaboration with other providers and family members to coordinate services for the client; 5) referrals to needed health and social services; and 6) client advocacy.

The data suggest that a change in client health status is the most significant client characteristic that affects the extent of nursing involvement with the client. The introduction of nursing services and a high intensity of nursing services during the first three months were found to be related to a change in client health status.

There were no statistically significant correlations between the intensity of nursing involvement and client dependency status, number of medical diagnoses, and number of different medications. The data indicate that of the demographic characteristics, living with others is the

strongest factor in predicting a high intensity of nursing involvement with the client in the first three months.

The content of nursing interventions appeared to be influenced by the presence of a live-in caregiver and, to a lesser extent, by client and family perceptions of their needs.

Content analysis of the nursing interventions suggests that gaps in services to this population are: 1) the monitoring and treatment of health conditions not covered by Medicare; 2) adequate frequency of assessment of the intended and unintended effects of medications; 3) in-home teaching and counseling for caregivers who are sustaining the disabled elederly in the community; and 4) advocacy for both the services this population has been entitled to through legislation and for remaining in the home setting.

The findings from this study suggest further research is needed with larger populations and the use of control groups to investigate: 1) client outcomes and the costs of providing public health nursing services to the community-based elderly; 2) the frequency of public health nurse contacts with this population required in order to significantly reduce the incidence of unwanted drug effects, accidents in the home, deterioration of chronic health problems into acute health problems and caregiver burnout; and, 3) the significance of the apparent relationship between client characteristics such as living situation and

recent health status changes and the intensity of nursing involvement.