THE EFFECTS OF AGE, SEX, AND CLASS STRATIFICATION ON THE USE OF HEALTH CARE SERVICES AMONG OLDER ADULTS IN THE UNITED KINGDOM

Holly R. Carter, MPH, MPhil, MSSW, BSW

Dissertation Prepared for the Degree of

DOCTOR OF PHILOSOPHY

UNIVERSITY OF NORTH TEXAS

December 1999

.

APPROVED:

Susan Brown Eve, Major Professor
David Williamson, Minor Professor
Daniel Rodeheaver, Committee Member
Dianna Torrez, Committee Member
Richard Lusky, Committee Member
Dale Yeatts, Chair of the Department of Sociology
David Hartman, Dean of the School of Community Service
C. Neal Tate, Dean of the Robert B. Toulouse School of Graduate Studies

Carter, Holly R., The Effects of Age, Sex, and Class Stratification and the Use of Health Care Services among Older Adults in the United Kingdom. Doctor of Philosophy (Sociology), December 1999, 366 pp., 94 tables, bibliography, 60 titles.

As the population ages, providing health services for the growing number of older people will become an increasingly difficult problem. In countries where the health services are provided by the government, these problems are involved with complicated issues of finance and ethics. This is the case of the National Health Service, the government institution providing health care for the citizens of the United Kingdom. Knowing what social factors influence health care usage can be a link to match usage and funding.

Literature has shown that health care utilization can be predicted by social factors, as well as the medical model, and from this orientation social variables were drawn from the 1994 General Household Survey. Social factors were analyzed to determine relationships that exist between certain types of health care use and these factors. Age, sex, and class, the three main factors shown in literature to affect usage, were then analyzed to determine if services are allocated on the basis of these factors or the basis of need from illness and disability.

Results of the study show that of the predisposing variables, age, sex, and class, are associated with most types of health care use. From the enabling variables, both source of income and visits from friends and relatives are associated with most types of health care. Of the illness determinants, disability, limiting illness, restricted activity days and eyesight difficulty were all related to health care use.

When intervening control variables were introduced, the intervening control variables of difficulty with activities of daily living and difficulty with instrumental activities of daily living had an explanatory effect on the use of home help, district nursing, consultations with a general practitioner at home, consultations with a general practitioner at a surgery or health clinic, and inpatient stays. These services were offered more according to need than the factors of age, sex, and class.

ACKNOWLEDGEMENTS

I wish to thank both my committee and my family for their support in helping me finish this dissertation. The unending support of my major professor, Dr. Susan Eve, made this impossible task a reality. I also wish to acknowledge my appreciation to the other members of my committee who played a major role in bringing this project to completion. I wish to acknowledge all of my friends who struggled through this project with me. Finally, I want to thank my family for never having limits on their support and love, especially my father who is my inspiration.

TABLE OF CONTENTS

LIST OF TABLES

Table Page

CHAPTER 1

HEALTH SERVICES AND THE ELDERLY

Research Interest

The area I am interested in is health service utilization and the elderly. This study will use data from the 1995 General Household Survey from the United Kingdom to test a model comprised of variables that I believe will have an effect on this utilization. I will look at measures of utilization from the United Kingdom such as visits to the physician, home visits from the physician, inpatient hospitalization, outpatient services used, district nurse usage, and the use of home help.

I will present a summary of the health care system in the United Kingdom, the National Health Service, and its history. Next the Anderson and Newman health care predictor model will be reviewed followed by the model that will be used in this research. Following this, I will reconsider the variables in this model and research showing their relevance to health care and the elderly. Finally my research question and hypotheses will be presented.

Problem Statement and Background

The focus of this review is the aging population in the United Kingdom, comprised of England, Scotland, Wales, and Northern Ireland. In 1993 there were 57,970,200 people in total in the United Kingdom. The over 65 population was 8.7 million, or 15.7% of the population of Great Britain. (Lassey, Lassey, & Links, 1996).

In the United Kingdom the fastest growing sector of the population is the eighty and over age group. By 2030, one third of the British population will be of pensionable age. It is projected that the majority of these pensioners will live alone, be widowed, or live in an institutionalized setting (Raleigh, 1997).

The National Health Service is the Government funded body that provides health services to citizens of the United Kingdom. The elderly disproportionately use these services. Those 65 and older are the largest category of patients served by the NHS. They also occupy 46% of acute hospital beds. More health care pounds are spent on this cohort while they make up less than 20% of the population (Lassey, Lassey, & Jinks, 1996).

This creates a clear problem. In a system that is publicly funded, such as the National Health Service, what is the best way to deal with the elderly population and their increased need for health care services? The NHS has been addressing problems such as these with restructuring in the health care system and continued changes in delivery and focus. Even with the continued government restructuring, the problem persists. It is necessary to address the problem in ways other than making general practitioners and health service providers responsible for higher yield out of the same resources.

An understanding of how the elderly population uses services may provide answers to the question of intervention. If a better and more thorough understanding of what factors influence usage of health services could be found, then perhaps the system could include these factors in calculating health service provision. The only way to accurately predict usage, and then funding of health services, is to have good models to

project what this usage will look like. Through national surveys the demographics of this population are well known, so the task is then to apply these factors to explain if and how they predict health service utilization.

Proposal

This project will first describe the National Health Service, from its precursors to its inception in 1948. The major political scenarios that lead to the development of the system and then to the changes that have molded the NHS into what it is today. The most radical change in the National Health Service came from political movements in the 1980's and the reign of Margaret Thatcher as Prime Minister. This will provide a backdrop to how the system currently operates.

The theoretical proposal by Andersen and Newman to predict health service utilization from social factors will then be considered. This framework is the guide for the research to be conducted. Using the factors that Andersen and Newman identified, the elderly population will be examined. Andersen and Newman's model has factors that have been correlated to health service usage independently. Past research from the United Kingdom will be presented that validate these factors as predictor variables.

The model will then be tested on data gathered by the General Household Survey in the United Kingdom in 1994-1995, to see if in a system that is not hindered by access to all (at least theoretically) the model will predict health care utilization. Opening doors for future research and funding considerations for the National Health Service.

HEALTH CARE IN THE UNITED KINGDOM

History of the National Health Service

Provision of health services for the poor in the United Kingdom was the norm from the time of Elizabeth I. In 1601the Act for Relief of the Poore was initiated and was left basically intact until the National Health Service came to fruition in 1948. The original law enabled those who could not afford health care the ability to have this service state funded. In 1834 this law was amended to include a means test, leaving the individual responsible for costs if they had any financial resources. The other amendment was that those who were eligible for the assistance and did not work were required to live in “workhouses” and those who were disabled lived in “poorhouses”. The other possibility was that a person’s family came to their assistance.

The state did have stringent rules that those who received this assistance must abide by. Some examples of this were separation of families, silence at mealtimes, and no use of tabacco or alcohol. Some individuals even felt that these rules were so strict that they refused assistance.

Despite these shortcomings, this system was effective in providing shelter and health care for the poor. This system was efficient until the cholera epidemic in 1866. In an effort to keep the disease from spreading Sick Asylum Districts were formed. These provided places for the indigent patients to be served, but eventually the disease effected so many that they were used for all patients.

For those who did not meet the government guidelines, charity organizations provided care. This included hospitals built for those who could not afford care, and

charity societies stepped in to help the working class poor. Friendly Societies were groups of people who were employed in the same field. These societies were joined by workers and helped pay member's medical expenses. The drawback of these societies was that they generally excluded women and children and only covered skilled workers. By the 1911 National Health Insurance Act, these societies were almost bankrupt, not foreseeing the increasing life spans of their members. It was, however, partly their influence that pushed legislation forward.

The 1911 National Health Insurance Act provided services for low and lower middle income workers in the UK. The financing scheme of the legislation included a four pence contribution from the worker, a three pense tax on the employer, and a two pense contribution from the state. This provided medical treatment for the workers who contributed and cash benefits if the worker became sick or disabled. As time marched on, more and more people were covered under this plan. Along with the poor-law relief, a significant number of the population was receiving aid for their medical expenses. There were also discrepancies in services. Businesses and trade groups would screen out bad risks, as the funding came from their taxes. This left the poor to rely on the relief law and continuously be unemployed.

Physicians were not satisfied with this agreement either. Their salaries were not rising at the same levels as other workers and there was little incentive to be efficient or provide care. The payment was the same fee no matter what the service rendered, thus the physician had no incentive to do extra work to cure a patient. Physicians were also

charged with making sick time official for workers, so often queues formed to be excused from work.

Problems like these plagued the British population and doubts about the system were forming. It came down to the conclusion that either a system that included all people had to formed or the private system had to be expanded. The only factor that had enabled the system to run during most of these decades was contributions from the government during war times to provide hospital beds to the wounded military, in essence many of the United Kingdom's health care systems were already relying on the government for financial security. However, this system could not last forever and it was in this political climate the NHS was born (Klein, 1995).

The confusion between benefits, distribution of services, lack of charitable donations, and a failing array of government services drove legislation to look at two options. Either the United Kingdom could move to a government insurance scheme or move to a public health service. The first option sees health care as a privilege, that those who could afford more coverage or had more income could have more services. While the later proposes that the provision of services for all would benefit everyone and that health care is a right. The public, the government, and the British Medical Association agreed that health care was a right and in 1948 the National Health Service was initiated (Klein, 1995).

The National Health Service Today

Throughout the life span of the NHS, the system has constantly changed. Government intervention is continual, looking at new methods to solve the same

dilemma, and determining how to make the best use of the moneys available. In the 1970's the NHS was organized into Regional Health Authorities and District Health Authorities. These groups were tasked with planning in order to address regional differences in service needs. Some of these tasks included planning of clinical services, allocating funding, monitoring performances, and supervising Family Health Service Agencies. The districts generally served 250,000 to 350,000 citizens and about 600 hospital beds. At this time General Practitioners were paid on a reimbursement formula based on previous service use.

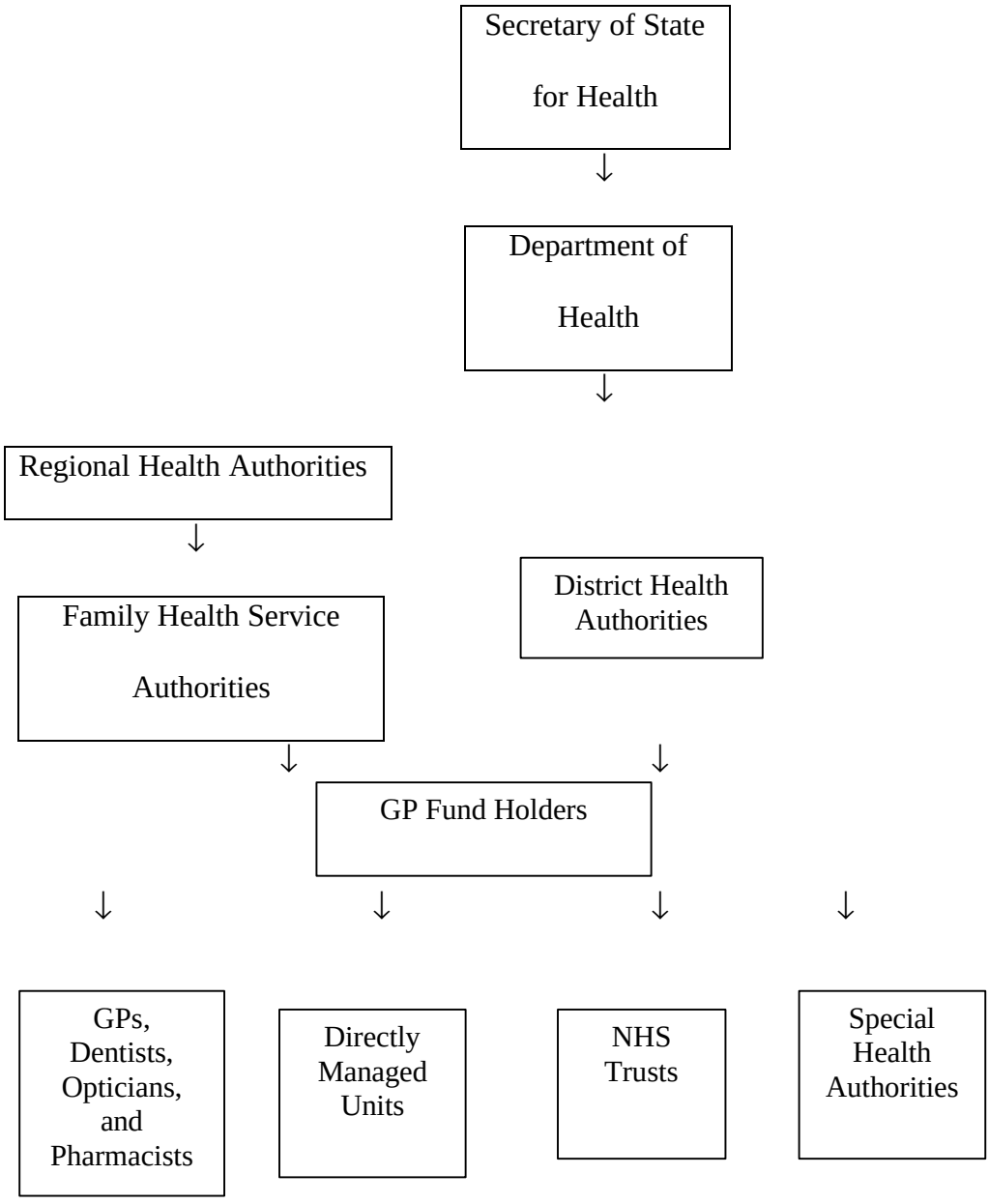
In 1979, with direction from Margaret Thatcher, the primary care system in Britain once again changed. Research completed by Enthoven in 1985 provided the catalyst for change that the system needed to finalize plans. The general practitioner becomes both the purchaser and provider in this new system. As a purchaser the general practitioner, either as an independent or with a group, receives a budget from which they must purchase drugs, diagnostic tests, and treatments for their patients. On a fixed budget the general practitioner must compare the best ways to allocate funds across the patient load. This system also leaves the general practitioner as a purchaser of hospital goods. Contracts are often developed between the physicians and the hospitals for the most efficient usage of funds. In this sense, once again, the physician is now the purchaser of health care goods for his/ her client load, instead of being a supplier for the government. Obvious comparisons between this model and the rapidly emerging Health Maintenance Organization model in the United States are often made (Taylor, 1994).

The 1990 National Health Service and Community Care Act was the biggest upheaval even known to the NHS. It was during the Thatcher administration when health care was a heavily debated subject. The Labour Party held a strong commitment to public ownership and central financing of government services. It was during this time that other government services had been successfully privatized, such as British Telecom, and the same ideology was proposed for the NHS.

Radical change in the NHS was proposed in a series of white papers. The main ideas in these papers were that the NHS become "1) more businesslike, 2) address the problem of growth in public expenditures, and 3) initiate internal market forces within the NHS (Lassey, Lassey, & Jinks, 1996, P. 223)." Hospitals would be run by self-governing trusts and the district health authorities would be the purchasers of services for their districts. This would set up a system of competition between hospitals and GP providers by separating these provider purchaser roles.

General practitioners rapidly formed General Practitioner Fund Holders to purchase these services. Services such as hospital services, pharmaceuticals, visiting health and district nursing services, dietetic, and chiropody were purchasables. The budget was based on the amounts used in the past, but to ensure that no one patient uses excessive funds, the fund holders are only responsible for the first 5000 pounds worth of care for a patient (Lassey, Lassey, and Jinks, 1996).

Model of NHS after 1990 Reforms (Lassey, Lassey, & Jinks, 1996, P. 223)



The General Practitioner plays a powerful role in the NHS. The system is arranged where every British citizen enrolls with a general practitioner, which is always the patient's first contact with the medical system. If a patient needs to see a specialist,

the referral is made by this general practitioner. General practitioners are paid on a capitation basis for their services. Physicians working in hospitals are paid on a salaried basis. However, each of these providers can earn additional income by providing services for maternity treatment, treatment for temporary residents, training of assistants, and treatment of the elderly. Approximately one half of their income comes from contracts through the Family Practice Council, the other half comes from private work and extra services. These primary care providers treat patients on an outpatient basis and they can refer patient for hospital services. Once the patient is hospitalized, the care is then transferred to a hospital physician.

The hospital system works in somewhat the same fashion. The NHS Trusts provide specialty services for the General Practitioner Fund Holders. Under the auspices of the NHS Trust are consultants, hospital care, and ancillary services, which GP's can refer their patients to. These trusts have the ability to develop capital schemes, they own their facilities, have the ability to dispose of assets, acquire new technology or services, and determine their management structures (Wolper, 1995).

Although most of the care provided in the United Kingdom is free to the patient, there are a few services that require the patient to render payment. These include the extra costs for private rooms, a surcharge for prescriptions outside of the hospital, and there is a co-pay for dental care and eyeglasses. The specialty care in the United Kingdom is rationed through long waiting lists, and there is limited new technology available; however, the United Kingdom spends far less on health care than the United States. In the 1980's the United Kingdom spent approximately 6% of its gross domestic

product on health care, a figure that the United States has not seen for health care spending since 1965. It is also important to note that even though specialty services are rationed and technology is limited, the morbidity and mortality rates are equal to the United States.

Future of the NHS

There are various perceptions of how the radical reforms of the 1990's affected the NHS. Some believe that it was the only direction that the NHS could take to survive, and some say that it was the beginning of the end of the system. Improvement in patient care can be shown through more patients being treated in the same amount of time, NHS Trust hospitals outperform private hospitals by 16%, waiting lists and waiting times for patients have been decreased, and an overall improvement in the quality of care. Skeptics attribute these changes to the better record keeping systems provided by an allowance to update record keeping systems, the additional funding given to implement the NHS reforms, or that the system may have shown these improvements regardless of drastic changes (Lassey, Lassey, & Jinks, 1996). The reforms have generated much controversy and literature, but eventually only time will tell if the system improves as dramatically as the changes.

THEORECTICAL PERSPECTIVE

The major theoretical underpinnings used in this research are structural, using the theories of social stratification and structural lag. The first is described in detail by Kingsley Davis in 1942 in his article in American Sociological Review, A Conceptual Analysis of Stratification.

Kingsley Davis describes the need for social stratification in a later article still addressing the same subject as follows: “the main necessity explaining the universal presence of stratification is precisely the requirement faced by an society of placing and motivating individuals in the social structure” (Davis, 194, p. 242). In order to place people in this social structure, Davis uses a multitude of labels for these places. These include position, station, and stratum. Position being “a place in a given social structure (Davis, 1942, p.309)”,where there are two types of positions. The first being status defined as, “a position in the general institutionalized system (Davis, 1942, p.309”), and the second in office, “a position in a deliberately created organization (Davis, 1942, p.309).” Station is “a cluster of positions which may be combined in one individual and recognized as so combined in a great many cases (Davis, 1942, p.310).” Stratum is the final label and means, “a mass of persons in a given society enjoying roughly the same station (Davis, 1942, p.310).”

These places in the structure are further defined through their prestige, esteem, and rank. Prestige is defined by Kingsley as, “the invidious value attached to any given status or office, or combination of them (p.310).” Esteem is “the invidious value attached to any given role or combination of roles (p.310), and rank is related to the actual structure as it is defined as, “a rung in a prestige scale (p.310).”

Kingsley relates all of these qualities into not only our place in a structure, but also to the motivating of our actions, which are generally either to move up in terms of rank or to fulfill the needs of the position which we are in. In order to move up in rank, one must

either do so by ascription, for example aging into a new rank in society, or by achievement, where one does so based on some merit.

Kingsley also argues that each of these roles and stations mold our personalities. The position itself has a certain expectation of the way a person must act in order to be maintained in the strata. It is these expectations which then motivate people to take on "role personalities." They are combinations of all the roles we occupy and determine proper actions involved with different circumstances.

It is this brief overview of Kingsley's ideas that society is necessarily divided so that different roles can be maintained and strata differentiated. This type of rigid structure then either allows people to move within it or stay at a certain place and support it. The structure served to motivate those in it in order to keep them working to maintain it.

It is from this viewpoint that Matilda White Riley, Robert Kahn, and Anne Forner (1994) take on the issue of structural lag. They argue that not only is this structure real, but its unchanging nature is a reason for some of the problems seen today. It is the lack of change in this structure that is not compatible with the rapid social change we have seen today. The problem being that opportunities may not exist for those who have reached another strata not because the people were not able to handle these demands, but because the structure did not leave room for them.

This concept can be applied to all ages, but the focus of this research is the elderly. The application of these principles to the strata of the elderly has come to be known as age stratification. As people age they enter the role of elderly and the

expectations that come with it. Retirement, illness, and eventually death are often seen as major components of aging. Many authors have attacked the perspective that older people can not longer be effective in the work force (Henretta, 1994; Kohli, 1994; and McNaught, 1994). Other authors have also tried to discredit the idea that the elderly are expected to be ill, an idea that was put forth by the Department of Health and Human Services in 1988 when they simply stated that older Americans are in poorer health and use more health services.

Although it can be argued as correct when speaking in generalities, researchers started looking at factors that contribute to older Americans use of more health care services, such as demographic and social factors. One of these researchers was Ron Andersen, who started developing models to explain health care behavior in 1968.

Andersen is quoted defending this orientation as follows: " Theoretically, use of health services can be viewed simply as another form of human behavior. Consequently, the sociologist can study utilization using the theory and methods he might employ to study voting behavior or work role behavior. It might be argued that health and illness behavior are unique among the various types of social behavior because of the importance of the seemingly "non-social" variables of biology and disease. However Zola (1964, p.17) points out that, "It is not merely that there are social psychological factors in illness but that illness is a social and psychological phenomenon. It cannot be understood or have some meaning without reference to a social context" (p.3).

It was from this orientation that Andersen has attempted to build models of health care utilization. He proposed that some people had a greater propensity to use health care

services than others, factors that eventually fell under the label of predisposing factors. Some argue that these predisposing factors, largely structural in nature, can be traced to the work of Durkheim in Suicide and The Division of Labor in Society.

The next step after foreseeing that some people may simply use more health care is to determine their ability to purchase or fund this care and to obtain this care. This takes into account the resources of a person or family and the geography of health care delivery. These variables came to be labeled as enabling, or the second factor considered when a person uses health care.

It is not only important if a person is predisposed to use health care and can afford it, but also whether or not they believe that they need these services. This is of consequence as the third part of Andersen's model to predict usage. The need factors take into account if a person believes they need medical treatment due to the severity of symptoms but the reaction of the ill person and their family to this need.

Health Care Utilization and Prediction

In response to the increasing uncertainty on the supply and demand of medical services, there have been many attempts to create models that will give projections. The idea is it may be possible to know what factors most accurately predict how people use health care and then the health care system could respond to the predicted need. Andersen and Newman (1973) developed one such model to examine factors that may contribute to the utilization of health care. Anderson and Newman developed this model to examine health care in the United States and to respond to the future of medical care in a private system. They state that there are two main reasons for looking at health care in

this way. First of which is the growing belief in the United States that all people deserve health care regardless of their ability to pay, and secondly the belief that certain populations receive inferior treatment. These include age categories, ethnic minorities and rural versus urban health services.

In Andersen and Newman's analysis of health care services, a considerable amount of attention is given to the health services system, as it is an analysis of the private system in the United States. The concerns voiced regarding this issue may be similar to those in a socialized system. Andersen and Newman are concerned about the amount of health care consumed and the ratios in the population regarding who is utilizing these services. Also considered are the geographic distribution of services and the availability of technology. While all of these become important in a private system, where the obviousness of inequality in healthcare is highlighted, the same factors remain obstacles in a socialized system, where the government becomes involved in these dilemmas.

The most important aspects in the model are the individual factors that contribute to a persons use of health care services. Although the societal expectations of a person certainly help determine the amount of health care used, as well as the availability of these services, it is the individual who consumes this care. Andersen and Newman have divided this into three categories, predisposing determinants, enabling determinants, and illness determinants.

Individual Factors Influencing Health Care Utilisation

PREDISPOSING ENABLING ILLNESS LEVEL

Demographic	Family	Perceived
age	income	disability
sex	health insurance	symptoms
marital status	type of regular source	diagnoses
past illness	access to regular source	general state

Social Structure	Community	Evaluated
education	ratio of health personnel	symptoms
race	and facilities to the	diagnoses
occupation	population	
family size	price of health services	
ethnicity	region of country	
religion	urban-rural character	
residential mobility		

Beliefs
Values concerning health and
illness
Attitudes toward health services
Knowledge about disease

(Andersen and Newman, 1973, p.107).

The predisposing variables come from past research on demographics of people who consume more health care. These variables have been shown in prior research to contribute to an increased health care utilization pattern. The social structure variables can be measured through the proxies set out in the category. These show that the social conditions under which an individual lives and the life styles they chose might contribute to use of health care. Individual beliefs about health care also influence this behavior. If a person does not believe that traditional health care will be effective, he may chose not to seek care immediately.

The enabling variables contribute in a definitive way. Although a person may be predisposed to use health care through demographic variables, if enabling components do not make it possible to seek health care, less care will be consumed. In some cases, as with private health insurance, a socialized system would alleviate some of the barriers.

Illness level contributes as person must deem themselves ill enough to seek health care from a formal system. Illness level is both the diagnosed illness from a physician or medical personnel and the level of illness experienced subjectively by an individual. The number of disabled worker or the amount of sick leave taken gives measurement of these factors to employers each year.

Andersen and Newman see this model as having several important policy implications. These include the potential for intervention to be aimed at those most likely to use health care, increasing the possibility that preventive care could be offered rather than intervention at the time when an illness is both expensive and more difficult to treat. They also call for an alteration in some of the components that either compel people to

seek care or to delay this care, which in a private system is generally monetary. They predict that there could be intervention to control health care usage in every part of the model except the variable of illness level.

From this design, I have created the model that will be tested in this research. The categories that the variables are in remain the same, but the enabling factors become considerably fewer. This is because utilization in the NHS should not depend on a person's ability to pay for services or insurance coverage.

Model to be Tested

Predisposing	Enabling	Illness	Utilization
Age	Income Source	IADLs	Physician Use
Sex	Family Support	ADLs	at surgery
Marital Status		Restricted Activity	at home
Education		days	specialist
Social Class		Limiting Illness	Inpatient Use
Region of the country		Disability	District Nurse Use
Race/Ethnicity			Home Help Use
			Outpatient Use

Problems with Utilization Studies

Mechanic (1979) takes on the task of explaining this in an early article, published around the time when many studies were using the Andersen-Newman model to try this type of prediction. He states, "…multivariate studies involving large samples and powerful statistical techniques find such factors, to the extent that they are included,

relatively unimportant (Mechanic, 1979, p.387)." Two suggested reasons for this are either that the researchers have "exaggerated" the importance of types of predictors, especially the social predictors and organizational variables, which social scientists and economists study, or that there are conceptual problems. These could include the way concepts are measured, the data collection, or the analyses.

Mechanic claims that Andersen and coworkers were never actually able to explain a great deal of variance, even in large studies and cites a study with 11,822 respondents. With this large data set only between 16% to 25% of the variance cold be explained, and these are often accounted for by self-reported health status or self-reported need for help. Mechanic goes on to look at research from numerous authors, some reviewed in this report (Andersen and Aday 1976, Kohn and White, 1976, Wolinsky, 1978, Hershey et al, 1975) and has drawn the same conclusion, very little variance is explained by this type of research. The variables that consistently explain variation are having a regular source of health care and self perceived health status.

Problems with Data and the Elderly

Literature points to problems in using large data sets to sample elderly people, because this population is more likely to be institutionalized and also the most common measures for the working population may not be representative for elderly people.

Sara Arber (1993) discusses some of the problems with using this type of data when researching the elderly population. The research that Arber has done on the elderly has often used this type of large data set and the methodological issues that she has identified are relevant to this research also.

Arber proposes that research on elderly people has two main concerns, (1) health selection and (2) how to measure the class of elderly people (Arber, 1993, p.35). The issue of health selection includes the factors of selective survival and selective institutionalization. Selective survival deals with the issue that once the higher survival rates of women are eliminated, the remaining individuals may not be representative of their age group. The individuals will be fitter and have less morbidity than those who have not survived. An example of this is race in the United States. Since it is less likely that African American individuals will live to old age, when comparisons are made with white elderly, the African American population appears to be healthier. This can be attributed to the fact that older African Americans are the fittest of their age group, while the large group of white elderly have a wide range of health statuses (Jackson & Perry, 1989).

Research has also shown that men in manual jobs have poorer health and lower life expectancies, which would make it less likely that this class group would be selected when sampling the elderly. These types of selection problems, proposes Arber, actually minimize the differences found when doing inequality studies on the elderly population. If the inequalities are still shown to be significant, even with the selection bias, the differences may actually be greater than calculated.

Selective institutionalization also creates difficulties when representing the elderly population. Those who are institutionalized are often left out of surveys and data collection. The person's ability to stay at home is contingent on either his/her ability to stay alone or to have assistance with care. Women are more likely to be widowed and

live longer; there is also a greater possibility that women will be institutionalized. Arber (1991) found in Britain that after age 85, 20% of women are in an institution compared to 12% of men.

The second issue is measurement of the social class of elderly people. For elderly people, especially men, the measure is generally the last job that was held. This could be a considerable number of years since retirement, so may not be a reliable measure of present class. The measure becomes more problematic for women. The measure used is often based on the husband's last job, but in some cases it refers to the woman's last job. Despite this confusion, it is also likely that most elderly women are widowed, which would make it invalid to use the husband's last occupation. If the measure is then changed to the women's last occupation, this too may not be accurate. Many women of this era did not work after marriage and approximately 6% have never worked. Using these measures for social class may not accurately reflect the social standings of women. Arber proposes that new measures be created through variables such as income, housing tenure, and assets to more accurately construct a variable that would more accurately reflect a true social status. Although she does suggest using this new measure, Arber continues to examine data using the Registrar General's classification system.

VARIABLES IN THE MODEL

Predisposing Factors: Age

The elderly population have unique characteristics, such as the gender ratios, marital status, and economic problems, which are not found in other age groups. Elderly is generally considered to be over the age of 65, traditionally because of the age of

retirement. However, it is important to remember that the category of elderly spans approximately 35 years. The oldest old and the newly retired, while both are often lumped into a group of elderly people, are very different populations. The working, family, and retirement conditions when the oldest old entered the latter portion of life were drastically different from conditions for those turning 65 today (Williams, 1989).

A study by Bury and Holme (1991) looked at Life After Ninety. A random sample of those over age 90 was taken from England and Wales, with a target of interviewing 260 individuals. For the actual study there were 93 women and 90 men interviewed. Findings on the demographics of the group reflected past research, including an imbalance of sexes with more women still living at this age, and most widowed. Most people interviewed belonged to the class three social class using the Registrar General's classification. Over 40% of those interviewed lived alone and most in private households. The study then went on to use measures for quality of life and dependency. Bury and Holme conclude that there is a great variety of circumstance, even in the years between age 90 and the centurions interviewed and that only more research will help create a true picture of elderly people.

Gender

One unique attribute of the elderly population is the large percentage of women. It appears that at every age the number of female deaths are fewer than males, leading to the speculation that women have benefited more from measures to reduce mortality. This disproportionate ratio is the most pronounced when considering the oldest old, those over 85. A 1980 census showed that in the age cohort of 65 to 69, there were 80 males for

every 100 females; however in the over 85's there were only 44 males for every 100 males. This ratio continually becomes weighted towards women when calculated for age cohorts within the oldest old (Raithwaike, 1985). In the United Kingdom in 1991, the life expectancy of women was 78.8 years, which was five years longer than for males.

Women have a higher rate of self-reported health problems and are more likely to report illnesses than men. These factors attribute to the conclusion that women generally suffer more pain throughout their lifetime because of menstruation, pregnancy, and menopause. (Baggott, 1994).

A report published by the Royal College of Physicians predicted these trends in the disproportionate number of women in old age. The report drew attention to the fact that the elderly population was not increasing but their increasing need for medical services. The goals of this report were to develop a plan that would address these issues and suggest measures to "sustain independence, to offer alternative residential accommodation, and to provide hospital accommodation. (To those) in need of skilled medical or nursing care" (Royal College of Physicians, 1963).

A study by Arber and Ginn (1993) looked at gender inequalities in health in later life. Data was taken from the General Household Surveys from 1985 to 1987. This provided a sample of 11,000 elderly people. Two measures of health were taken from the General Household Survey, self reported health status and functional disability. These were then correlated with class and material circumstances. Class was measured in the conventional class structure used in the United Kingdom and material circumstances were constructed through the variables owning a car, renting or owning your home, and

income data. The findings from this study indicated that elderly women self report worse health than men and report more functional disability than men. Elderly people who live in better financial situations report significantly better health than those in less affluent circumstances.

Marital Status

The nature of the ratios of men and women as they age make it obvious that the marital statuses would also be affected. While most elderly men are married and tend to remarry if their spouse dies, most elderly women are widows. Of the oldest old, only one in twelve is estimated to be married. Other cohorts are more likely to be widowed, and men are more likely to be married as they generally marry someone younger than themselves (Raithwaike, 1985).

Living arrangements for elderly people once again is contingent on gender division and the effects it has on marital status. Males are more likely to be married and are also more likely to live in a family household. As age increases, women become more likely to live alone or with relatives. The percentage of males in nursing homes is still much lower than females. It is estimated in 1980 that 19 percent of females in the oldest old group and two percent of males in the group aged 65 to 69 were in nursing homes, while 22 percent of the oldest old females were institutionalized (Raithwaike, 1985).

Kavanaugh and Knapp (1998) examined elderly people in institutions, a number that accounts for 563,000 elderly in the United Kingdom in 1995. To do this, they examined the survey of disability among adults in communal establishments by the Office of Population Censuses and Surveys, taken in 1986 and projected to today. The

authors used data for those aged 65 and older who had no mental handicap, making a sample size of 3050 subjects. Personal interviews were conducted with 1004 subjects, 589 were interviewed with staff present, and 1456 subjects could not be interviewed and information was gathered from staff alone.

Logistic regression was used to find factors that affected General Practitioner utilization. Most residents had consulted a GP at the residence and the median times visited was four, but 10% of residents had more than 20 consults. Although those in private and voluntary nursing homes consulted GPs significantly more, the type of accommodation itself was not associated with higher GP consultation. Also severity of a resident's disability was associated with increased consultation. Overall, the most association was found in severity of disability and residence in a private and voluntary nursing home, which also used the greatest amount of actual GP time per visit.

Some of this association may be accounted for by the drastic decline in NHS beds and local authority homes. The authors estimate that these NHS beds declined 70% between 1986 and 1996. During this time there was also a dramatic increase in private long term care facilities in the UK (Kavanagh & Knapp, 1998).

Education and Social Class

The educational status of elderly people has continued to improve from the 1970's forward. There has been an increase in the number of elderly people who have had some high school education and have finished high school. In the 1970's it was also estimated that the poverty rate of the elderly population was double that of unretired age individuals. In the United States, Government intervention brought these rates down to

the same level as the unretired by increasing federal benefits for elderly people (Raithwaike, 1985).

The aged and retired are often treated as one group; however, this age cohort generally covers a span of 35 years. While research often appears to conclude that the aged's economic situation has improved, there is a need to consider these findings by age cohorts within the elderly. From the 1980 decennial population survey in the United States, there is a decline in income for those in the oldest old age group. Those over 85 received approximately 36 percent fewer in benefits for health care than other retired groups, which is seen as a result of the lower wages paid when the oldest old were still of working age. The oldest old also receive more Medicare benefits for the health care than the other age cohorts do. This means a 77 percent cost increase between the age cohorts 65 to 69 and those aged 80 and older (Torrey, 1985).

The increase in the number of years that people live has contributed to the decline in income and assets because a person's retirement savings now have to last longer than ever. Suffering the most are the oldest old. Estimates state that this group is twice as likely to be in poverty than the 65 to 69 age cohort. There are two plausible reasons for this. Either income declines with age or the younger old have earned better retirement benefits. This explanation would also suffice to explain why the older elderly people have fewer assets, because they are required as a supplement to income in later years. If the second hypothesis is true, that retirement benefits continue to improve, then there may be some hope for increased economic status in the future (Atkins, 1985).

Wilson (1993) interviewed 100 households with residents over the age 75 present in each household in a north London borough. She found that an individual's financial level influenced their lifestyle and comfort greatly. Elderly people who could afford "help" privately perceived this positively and as a source of autonomy. Findings also included that the interviewees frowned upon state support, above the provision of medical care. Perhaps this is because the respondents were alive before the National Health Service provided free care. The individuals interviewed desired to remain independent and were very resourceful in accomplishing this, even on limited funds. The possibility of a wider gap opening between the poorer elderly people and the wealthier elderly is a possibility when considering the new health legislation for more community services started in the early 1990s. The author warns of this as the elderly prefer to remain as independent and autonomous as possible.

Region of the Country

The National Health Service in Scotland

Although the National Health Service covers all of Britain, there are differences in the services for each part of the United Kingdom. In Scotland, there is more money spent per person than in England and Wales. The average spent per person in Scotland is 504 pounds versus 444 pounds in the other two countries. There are two reasons for this, one is that the population in Scotland is smaller than the other portions of the United Kingdom. Secondly, there are more physicians per person in Scotland. There are 94 physicians per one thousand people in Scotland while England and Wales have 81 per

one thousand. This leaves the average General Practitioner with a 20% smaller patient list.

The structure of the health system is also different in Scotland because it has its own legislature. The Scottish Health Services Planning Council provides greater centralization of services. There is also another level of middle management in Scotland called the Common Service Agency. This agency is the main administrative body for the fifteen local Health Boards, which are responsible for the planning and integration of health services.

The National Health Service in Wales

The administration of the National Health Service in Wales is only slightly different from that of England. The main reason for this is the small population of Wales, only 2.85 million people. The predominant difference is that in the Welsh office, the Secretary of State is the National Health Service Director and answers directly to the British Parliament.

The National Health Service in Northern Ireland

The National Health Service in Northern Ireland is modeled on the British system, but there area few differences. The Secretary of State for Northern Ireland is responsible for the National Health Service. The health districts in Ireland have fewer responsibilities because services are completed by the Central Service Agency, which is similar to the Family Health Service Authority in England. Ireland spends 25% more on health care than the rest of the United Kingdom, attributed to the high number of health care workers in Ireland (Lassey, Lassey, and Jinks, 1996).

Race and Ethnicity

The majority of people living in the United Kingdom, 93%, describe themselves as "white". This has remained unchanged since the 1983 General Household Survey added a question of ethnicity. Of this majority, 96% were born in the United Kingdom. Other largely represented ethnicity's are Pakistani, Indian, and Bangladeshi. Of these other ethnicities only around 50% (53%, 49%, and 43% respectively) report being born in the United Kingdom (OPCS, 1996).

Enabling Factors: Private Insurance

As citizens of Britain, a National Health Service is available to provide healthcare. These services are funded through a general taxation, healthcare then becomes a part of the budget of the British government and is allocated to the NHS. Although there has been discussion of either implementing a specific health tax or fees for services, these are contrary to the fundamental idea of healthcare availability for all, regardless of ability to pay.

Although the NHS is widely seen as a model of health care to be studied and imitated, there has been a growing sector of the population who have supplemented these services with private insurance. In 1979, 4.9% of the UK population was covered by private insurance, while in 1996 an estimated 13.6% of the UK's population will be covered through private insurance, and driving the expenditures for the insured in the UK to over two billion pounds. There are many ideas why there has been such rapid growth in the consumption of private insurance. Among these are dissatisfaction with the NHS, while others see this as a move to receive services that the NHS does not offer, such as

elective or cosmetic surgery and alternative medical practices. These figures could also represent a portion of the elderly obtaining care or long term residency (Holliday, 1995).

Social Support

Literature in both the United Kingdom and the United States supports the link between social support and health status. This link has been shown by Lowenthal and Haven (1968) to affect psychiatric illness. Bowling and Charlton (1987) showed a positive connection between social support and adjustment to widowhood, and Bowling (1991) reviewed literature that supported the modifying effect of social support on illness.

Bowling and Farquar (1991) sampled elderly people in inner London and in Essex. The respondents were given a check list for various physical symptoms and if they had reported these symptoms to the physician. Functional status was measured using the Townsend Activity of Daily Living scale. Social support was measured using the social network scale. Results showed that dissatisfaction with the frequency of social contacts was a powerful predictor of health status.

Nelson (1993) used American data from the National Center for Health Statistics. He used the Andersen Newman framework to examine the variables of age, gender, race, education, employment, income, insurance coverage, telephone ownership, city size, activities of daily living, instrumental activities of daily living, and perceived health status. A social support scale was made from the questions regarding phone contacts or visits with friends and relatives, church attendance, and living arrangements. Health measures included visits to physicians and hospitals.

Results of the research included findings that social support has a significant effect on both measures of health care utilization. The largest effect was church attendance. Those who did not attend a church used health care services more.

Choi (1996) looked at data from the National Health Interview Survey conducted in the United States. Health care measures were the number of activities of daily living and instrumental activities of daily living that a person had difficulty performing. The number of days confined to bed, physician visits, hospitalization in the past twelve months and a self-assessment of health.

Social interaction was assessed from a scale that was comprised of the following measures. If a person had talked with friends or relatives, gotten together with friends or relatives, attended church, done volunteer activities, level of satisfaction with current activities, and if someone was available to care for them if they were ill for a week or for a month.

One finding was that persons marital status was significant to the number of activities of daily living they could perform with difficulty and the number of hospitalizations. The other relationship found was that social interaction was positively correlated with self-assessed health status.

Potts et al (1992) conducted a panel survey of health and health care of elderly people in a health maintenance organization. They considered health behaviors including intake of red meat, taking vitamins and minerals, exercising, smoking, excess drinking, and coffee and tea consumption. Social support was measured through the Luben Social

Networks scale, which measures the frequency of contacts with family members, and the number of family members that a person feels close to.

The research showed that more social support meant that a person was more likely to endorse health benefits. The higher the social support the more likely a person is to engage in preventive health behaviors, and the more social support available the more likely it is that a person will limit red meat, take vitamins and minerals, and exercise.

Illness Factors: Activities of Daily Living

Activities of daily living indexes are measures of the ability levels of individuals to do certain life tasks. Katz et al developed the index most commonly used in 1970, almost thirty years ago. This index includes bathing ability, ability to dress oneself, transferring, ability to toilet oneself, continence, and ability to feed oneself. Many indexes have been made since this original, and all generally tend to include life skills that would indicate an individual's level of disability (Skelkey et al, 1999). These indexes tend to be scored between zero for independence and one for dependence. The scores are then added to create a disability score.

There have been many studies done to test the accuracy of these measures. One common problem with this type of measure is that the scores are self-reported. Fried et al (1996) studied these self-reports and determined that the elderly tend to underestimate their level of disability. This was especially true for those with beginning disabilities. It is thought that perhaps these disabilities start slowly and are not recognized or acknowledged by the respondent. In a study by Keller et al (1993) individuals were

asked to report if they needed “help from another person” in completing a task. Many responded that they needed assistance in the shower. When face to face interviews were conducted it was discovered that many people considered a shower stool “help from another person” and had mistakenly answered the question.

In response to this problem many researchers have tied self reported scales with actual physical ability tests. This allows not only the self-reported assessment of physical abilities but testing by nursing or therapists to determine a level of functioning. It is thought that most elderly people overestimate their level of disability when compared to objective tests (Bennett, 1999).

Instrumental Activities of Daily Living

Instrumental Activities of Daily Living are measures of functional abilities and are generally measures of one’s abilities to cook, shop, and manage finances. These and other activities that allow a person to cope with his or her environment fall into this category. Generally these assessments are made from either a patient or family report of ability to do these activities and are scaled to reflect the level of difficulty with the task.

A score of zero means that a person can complete it without any difficulty or advice, or if it is a task that is rarely done it can be done again with little or no practice. A score of one states that a person can do the task with little or no difficulty but it is now more difficult than it used to be, or if it is an activity that is never done it would be difficult to start now. A two means that the task requires frequent advice or assistance that was not needed before. A three reflects that another person has had to take over this task completely for the person (Karagiozis et al., 1998).

Disability

Lyon et al (1997) looked at disability and health status of the elderly using data taken from three districts in England and Wales that participated in the European study of health and social care. They were conducting preliminary data analysis to investigate certain variables, such as disability. In this context disability was measured by the abbreviated mental test, which is a ten item test of cognitive function. For the three districts the percentage of those who were found to be disabled according to the test were very small, 8.6%, 8.7% and 5.3%.

Dining et al (1998) studied individuals 75 and over in Cambridge, England for a six year longitudinal study of disability. The individuals were asked to self rate physical and depressive symptoms. These were then made into a scale of disability. Findings at the six year follow up showed that 70% of the respondents rated their health as "good" or "very good", even when they had a high rate of reported physical symptoms. There was a relationship between increasing age and increasing physical symptoms, and the increased physical or depressive symptoms made the probability of receiving community care higher.

Utilization: Health Care

The area of health and the elderly population is one of the most pertinent issues to medical sociology. In most industrialized countries, where health care for the elderly people is federally funded, the impact of the increases in numbers of elderly will have many consequences. The fact that the elderly cohort continually gets larger and older means that they will consume more health care. Elderly people require more assistance

with normal daily activities such as walking and cleaning. Elderly people require more hospital care, have more surgeries, and also require more institutionalized care (Raithwaike, 1985).

The area of health and the elderly is also important because research has shown that the health care needs of elderly people are quantitatively and qualitatively different from those of the young. Some of the reasons that elderly people have different health care needs come from the inevitabilities of aging. These include the vast variability in physiological changes, the accumulation of diseases over time, the pattern of individual health care use, and the severity of the diseases that a person may develop. There are also some diseases that are simply more prevalent amongst elderly people and the oldest old. These include such maladies as memory failure, falls, hypertension, incontinence, and polypharmacy. These point to the need for medical care that is individualized, ethical, and promotion of health as well as quality acute care. There is also the need for funding of research and training for health care to respond to the needs of elderly people (Minaker & Rowe, 1985).

Elderly people use more health care than younger members of the population (Holliday, 1995). On average, patients over the age of 65 require three home visits from a general practitioner every year, while other age groups generally require only one home visit every two years (British Medical Association). Those over 65 also require two to three times the number of general practitioner consultations a year than younger patients. Some of these increases can be accounted for by the chronic and degenerative nature of diseases in the elderly (Richards, 1998).

Table 1

Age by Pounds Spent for Health Care

Age Group	Pounds used in health care from 1989 to 1990
0 to 64 years	100 to 200 pounds per person
65 to 75 years	500 pounds per person
75 to 85 years	1015 pounds per person
85+ years	1875 pounds per person

Elderly people also consume more health care pounds than any other age group, with the exception of the very young. From 1989 to 1990 spending per head jumped from one to two hundred pounds a year for ages 0 to 64 to five hundred pounds per person in the age bracket 65 to 74. One thousand and fifteen pounds per person for those aged 75 to 84, and for the 85+ age group spending jumped to one thousand eight hundred and seventy five pounds per person (Holliday, 1995).

In 1990-1991, 16% of the population was aged 65 and older and this group was directed 40% of the allocated funds for Hospital and Community Health Service spending. This group also took 40% of the local authority social service spending for the same time frame. It is estimated that the cost of care for those aged 85 and older will be four thousand pounds, or 15 times the amount spent on working individuals (Ranade, 1997).

Estimates of the aging population have already forced the government to consider the future of the NHS. The Thatcher administration was concerned that the rise in senile

dementia would overwhelm the health service and that it was necessary for a larger role to be played by private health provision. In 1990 the NHS and Community Care Act forced a "mixed economy of care." The elderly and their ever growing numbers have caused the concern at every level of government, as well as becoming a scapegoat population to blame some of the rationing imperatives (Ranade, 1997).

MacClean (1989) reviewed a study of elderly people at the Scottish border. The sample was taken from medical record reviews from GP records, a questionnaire, and interviews. Findings from the study included various demographic information regarding the groups studied and information on their health care utilization.

Results included the following: Although 47% of these people surveyed had not seen their GPs in the last three months, the GPs still carried the largest responsibilities for both the physical care of patients and also determined social service needs. The ailments most often recorded were rheumatism, psychological symptoms, and cardio vascular diseases, and those suffering from these ailments were often correlated with social isolation and depression. There was also a correlation between these symptoms and gender (women being more likely to be depressed) and a negative correlation when individuals were in an institution. It is also estimated that 70% of the respondents had a condition that severely affected their lives but it was not recorded in their medical records. These included problems such as eyesight difficulties, hearing problems, and difficulty walking independently (MacClean, 1989).

RESEARCH QUESTION

Knowing that past research has shown these factors to influence a person's usage of health care, and that models have been constructed to try and predict this, I am intested in developing a model to test data collected in the United Kingdom. This will help me describe health care utilization among an elderly population in the United Kingdom.

One of the major problems with using this model on data from the United States is limited access to services for some. No matter what the condition or need for care, there simply may not be access to appropriate medical channels. In the case of the United Kingdom, there is, at least in theory, access to medical care for all regardless of ability to pay. This would eliminate factors that generally affect usage and leave room for more of the social variables to play a role.

I am proposing to describe health care utilization in the United Kingdom by testing factors from the model I designed. The following hypotheses are to be tested.

HYPOTHESES

1. Age: Age increases the use of inpatient hospital services and physician services in surgery. Specialist care will decrease as age increases. Use of home visits, district nurses, and home helpers will increase as age increases.
2. Sex. Women will use more health care services than men.
3. Marital Status: Married people will use services less than others (widowed, divorced, single).
4. Class: The lower the class, the more services will be used.
5. Race/ Ethnicity: Those who define themselves as white will use more health care than

other ethnicities.

6. Region of the Country: Those outside of England will use more health care than those in England.
7. Income: Those with income from private sources will use less health care than those who receive state benefits.
8. Family Support: The more family support one receives the less health care he/she will use.
9. ADLS/IADLS: Those who can complete fewer ADLS/IADLS will use more health care than those who can complete all ADLs/IADLs.
10. Disability: Those with more disability will use more health care than those with fewer disabilities.

CHAPTER 2

METHODOLOGY

Data

The data for this research comes from the 1994-1995 General Household Survey. This data set is a large sample that is selected to be representative of the United Kingdom. The Office of Population Censuses and Surveys, Social Survey Division, conducted the survey from April 1994 to March 1995, the yearlong nature of the survey is to eliminate seasonal biases. The survey is conducted on private households in the United Kingdom and data is collected from face to face interviews. The households are selected randomly using the Post code Address File. There are about 13,000 households selected and all individuals in that household aged 16 and over are interviewed. The 1994-1995 survey interviewed 23,622 individuals in total aged 16 and over, of these 3630 individuals were aged 65 and older. According to Arber there is a possibility that the elderly are underrepresented because they may be ill or in hospital at the time of the interview.

Analysis

The data from the individual survey were sorted by age and then the respondents aged 65 and older were extracted. Then the predictor variables were kept for analysis. Using the SPSS package, the data were analyzed for frequencies. Then

frequencies, scaling, and cross tabulations were used to determine the importance of each factor in the prediction of health services utilization.

Model of Variables

Predisposing	Enabling
Age	Income Source
Sex	Visits from friends and relatives
Marital Status	
Education	
Social Class	
Ethnicity	
Region of Country	

Illness	Utilization
Activities of Daily Living	Home Help Used
Do climbing jobs	Nurses Used
Clean windows	NHS Physician
Assistance with outdoor mobility	at surgery
Ability to walk down road alone	at home
Wash face and hands	specialist
Dress and undress self	in patient stay
Ability to feed self	outpatient stay
Ability to bathe/wash self	
Ability to get in and out of bed	
Ability to get around the house	
Manage wheelchair by self	
Instrumental Activities of Daily Living	
Ability to make a cup of tea	
Ability to prepare a snack	
Ability to cook main meal	
Ability to wash and dry dishes	
Ability to open bottles and jars	
Vacuum on own	
Ability to deal with personal affairs	

Disability

Eyesight problems

Limiting Long Standing Illness
Restricted Activity Days

Individual Determinants

Table 2

Individual Determinants

Individual Determinants	General Household Survey
Age	What is your age in years?
Sex	Gender
Marital Status	What is your marital status?
Education	What is your highest educational qualification?
Social Status	Social Class (Registrar Generals Classification)
Ethnic Origin	What is your ethnic origin?
Country of Birth	England, Scotland, Wales, Northern Ireland

All cases aged 65 and older were selected out of the original data set and then analyzed for their frequencies. Some of the variables had to be collapsed in order to have a more equal distribution of cases. This is especially true due to the decreasing number of respondents as age continued to increase.

Age

The age variable was collapsed from each single age to three categories. These were ages 65-74, 75-84, and 85 and older. Sixty percent of the respondents fell into the age category 65- 74. In the age group 75-84, there were approximately thirty percent of the respondents. Those in the age group 85 and older were nine percent of the sample.

Table 3

Frequency of Age

Individual Determinants	General Household Survey	Frequency
Age	65 to 75 years	60.1%
	75 to 85 years	30.7%
	85+ years	9.2%

Gender

The gender division of the sample was 58.5 % women and the remaining 41.5% men. Males were coded 0 and women were coded 1.

Table 4

Frequency of Gender

Individual Determinants	General Household Survey	Frequency
Gender	Male	41.5%
	Female	58.5%

Marital Status

Marital status originally had seven choices: married, cohabitation, same sex cohabitation, single, widowed, separated, or divorced. These seven were collapsed into two categories. Either living with someone, made up of those who were married or cohabiting, or living alone, the variable constructed from the remaining categories. Those living with another person comprised 52.8% of the sample while those living alone were the remaining 47.2%.

Table 5

Frequency of Marital Status

Individual Determinants	General Household Survey	Frequency
Marital Status	Living with another	52.8%
	Living alone	47.2%

Education

Almost sixty three percent of all those surveyed had no qualifications, from our equivalent to high school graduate to higher educational qualifications. Other categories with significant percentages include those who completed an internship (6.1%) and those with a first degree (4.2%). The variable education was recoded into those with no qualifications and those with qualifications.

Table 6

Frequency of Education

Individual Determinants	General Household Survey	Frequency
Educational Qualification	No Qualifications	62.7%
	Qualifications	37.3%

Social Class

The social class variable was left as the registrar general's classification system. This system is comprised of five categories, which are assigned based on your occupational status. The highest category is I for professional groups, followed by II for managerial groups, III is divided into skilled manual labor and skilled non-manual labor, Iv is for partly skilled groups, and V is for unskilled laborers (Whitehead, 1992). Those individuals who had never worked, had an inaccurate past work description, or were in the armed forces (11 respondents) were labeled as missing. These missing variables made up 4.1% of the overall sample. Those in social class I comprise 2.8% of the sample. Those in class II were 20.5% of the respondents. Class IIIN was 24.2% and IIIM were 22.2% of individuals. Individuals in class IV made up 18.9% of respondents, and class V was 11.5%.

Table 7

Frequency of Social Class

Individual Determinants	General Household Survey	Frequency
Registrar General's Social Class	I	2.8%

Determination		
	II	20.5%
	IIIN	24.2%
	IIIM	22.2%
	IV	18,9%
	V	11.5%

Ethnic Origin

Ethnic origin was primarily made up of respondents who considered themselves "white". Ninety-eight and a half percent of all respondents answered this. The remaining 1.5% of respondents were then recoded into a second variable.

Table 8

Frequency of Ethnic Origin

Individual Determinants	General Household Survey	Frequency
Ethnic Origin	White	98.5%
	Non-white	1.5%

Country of Birth

The variable country of birth contained a large group of categories. The majority of the sample was taken in England, contributing 78.3% of the information. The variable was then collapsed into "Other UK and Ireland", made of Scotland, Wales, Channel Islands and Isle of Man, Northern Ireland, and the Republic of Ireland. This category

comprised 17.1% of the individual surveyed. The remaining individuals were put into a remaining classification, which made up 4.7% of the sample.

Table 9

Frequency of Country of Birth

Individual Determinants	General Household Survey	Frequency
Country of Birth	England	78.3%
	Other	17.1%

Enabling Determinants

Table 10

Enabling Determinants

Enabling Determinants	General Household Survey
Income	Source of Income
Contact with Friends of Relatives	How many times did you have contact with friends or relatives in the past month

Income

The source of income variable was divided into those receiving benefits from the state and those receiving benefits from other sources, such as employment, occupational pensions, rent, other regular payments and investments. Those who reported no income (4 respondents) were placed with those receiving state benefits.

Table 11

Frequency of Income

Enabling Determinants	General Household Survey	Frequency
Source of Income	State benefits	46.7%
	Private Benefits	47.8%

Contact with Friends or Relatives

Almost twenty four percent of those surveyed reported no contact with friends or relatives in the past month. Fifty percent did have at least one contact within the past month. Nineteen and a half percent had contact with friends or relatives two to three times a week, and 2.6% had contact daily or nearly.

Table 12

Frequency of Contact with Friends and Relatives

Enabling Determinants	General Household Survey	Frequencies
Contact with friends or relatives	None in the past month	23.6%
	At least once last month	50%
	2 to 3 times per week	20.4%
	Daily or nearly	2.7%

Table 13

Illness Determinants

Illness Determinants	General Household Survey
Activities of Daily Living	Climbing jobs
	Clean Windows
	Assistance with outdoor mobility
	Ability to walk down the road
	Wash face and hands
	Dress and undress self
	Ability to feed self
	Ability to bathe/wash self
	Ability to get in and out of bed
Instrumental Activities of Daily Living	Ability to make a cup of tea
	Ability to prepare a snack
	Ability to cook
	Ability to cook main meal
	Ability to wash and dry dishes
	Ability to open bottles and jars
	Vacuum on own
	Ability to deal with personal affairs
Disability	Eyesight problems

Limiting Long-standing Illness
Restricted Activity Days

Frequencies of Activities of Daily Living

Of those activities under the category activities of daily living the following frequencies were shown. Sixty eight percent of those surveyed reported that they could do climbing jobs. Seventy seven percent said that they could clean windows. Eighty-three and a half percent reported not needing assistance with outdoor mobility. Eighty-three and a half percent stated that they could walk down the road alone. Ninety five percent reported that they could wash their own hands and face. Ninety two point eight percent were able to dress themselves with no help. Ninety five percent could feed themselves. Eighty eight percent could bathe and wash themselves. Ninety six percent of respondents stated that they could get out of bed themselves. Ninety six percent also responded that they could get around the house by themselves.

Table 14

Frequencies of Activities of Daily Living

Illness Determinants	General Household Survey	Frequency Able to Complete Task
Activities of Daily Living	Climbing jobs	68.4%
	Clean Windows	77%
	Assistance with outdoor mobility	83.5%
	Ability to walk down the road	83.5%

	Wash face and hands	95.3%
	Dress and undress self	92.8%
	Ability to feed self	95.1%
	Ability to bathe/wash self	91.9%
	Ability to get in and out of bed	95.6%

Frequencies of Instrumental Activities of Daily Living

Of those activities under the category instrumental activities of daily living the following frequencies were shown: Ninety four percent of those surveyed reported that they could make a cup of tea. Almost ninety four percent stated that they could prepare a snack for themselves. Almost ninety one percent responded that they could cook a main meal. Ninety five percent reported that they could wash and dry dishes. Almost eight six percent responded that they could open bottles and jars. Eighty six percent reported that they could vacuum on their own. Eighty nine percent stated that they could deal with their own personal affairs.

Table 15

Frequencies of Instrumental Activities of Daily Living

Illness Determinants	General Household Survey	Frequency Able to Complete Task
Instrumental Activities of Daily Living	Ability to make a cup of tea	94.4%
	Ability to prepare a snack	93.7%

	Ability to cook main meal	90.8%
	Ability to wash and dry dishes	93.6%
	Ability to open bottles and jars	85.8%
	Vacuum on own	86.4%
	Ability to deal with personal affairs	89.1%

Frequency of Disability Determinants

Of those activities under the category disability determinants the following frequencies were shown: Only 6.5% of respondents stated that they had no difficulty with their eyesight with or without their glasses.

Table 16

Frequencies of those with Eyesight Difficulty

Illness Determinants	General Household Survey	Percent with no Difficulty
Disability: Eyesight Problems	Not difficult with or without glasses	6.5%

Frequencies of Long Standing Illness and Restricted Activities

Of those surveyed, forty percent reported no long-standing illness. Forty two percent stated that they had a long-standing illness, but it was not limiting, and the remaining 16.7% stated that they had a long-standing illness that was also limiting.

Table 17

Frequency of Long Standing Illness

Illness Determinants	General Household Survey	Frequencies Reported
Long Standing Illness	No long standing illness	40.8%
	Long standing illness but not limiting	42%
	Long standing illness that is limiting	16.8%

Frequency of Restricted Activity Days

Seventy nine percent of all respondents said that they had no restricted activity days in the past two weeks. Eight percent had one to thirteen days and the remaining 12.3% had a full fortnight of restricted activities.

Table 18

Frequency of Restricted Activity Days

Illness Determinants	General Household Survey	Frequency
Restricted Activity Days	No days in past fortnight	79.4%
	1 to 13 days in past fortnight	8.2%
	Full fortnight of restricted activities	12.3%

Table 19

Utilization Determinants

Utilization Determinants	General Household Survey
	Home Help
	District Nurses
NHS Services	NHS GP at surgery
	NHS GP at home
	NHS Specialist
	Outpatient Visits
	Inpatient Stays

Health Care Utilization

The variables for health care utilization were also analyzes for frequencies. In the majority of all cases the most frequent response was no contact with the health care system.

Home Help

Of those surveyed, 92.3% had not used any home help in the past month. Three percent of the sample had home help once a week, 2.1% had home help two to three times a week, and 1.6% had help daily. Those who had used this help were recoded into one category.

Table 20

Frequency of Home Help Use

Utilization Determinants	General Household Survey	Frequency
Home Help Usage in the Past Month	Had used the service	7.7%
	Had not used the service	92.3%

District Nurse Usage

Ninety percent of respondents stated that they had not used district nurse services in the past month. Almost six percent stated that they used this service.

Table 21

Frequency of District Nurse Use

Utilization Determinants	General Household Survey	Frequency
District Nurse Usage	Did use District Nurses in past month	90.1%
	Did not use district nurses in past month	5.6%

GP Visit at Surgery or Health Center

When elderly people were asked if they had visited their GP at surgery/clinic or a health center in the past two weeks, 85.2% had not in both cases. Almost 13% had one visit in the past two weeks, and 1.3% had two visits. Less than 3 of respondents had more than two visits in the past two weeks.

Table 22

Frequency of NHS GP Visits as a Surgery

Utilization Determinants	General Household Survey	Frequency
Visits to GP at surgery	No Visits in past two weeks	85.2%
	One Visit	12.7%
	Two Visits or more	1.6%

GP Home Consultation

For the variables having a GP home consultation in the past two weeks, 95.7% of the respondents had not had this type of service, leaving 3.7% who had a home visit in the past two weeks.

Table 23

Frequency of NHS GP Visit at Home

Utilization Determinants	General Household Survey	Frequency
NHS GP Home Visit	Had Home visit in past two weeks	3.7%
	Had not had home visit	95.7%

Specialist Consultation

When respondents were asked if they had a specialists consultation in the past two weeks or the past year, 98.9% had not had this type of service. Those who had either one

or two specialist consults in the past two weeks or past year made up .6% of the sampled population.

Table 24

Frequency of NHS Specialist Consultations

Utilization Determinants	General Household Survey	Frequency
Consulted an NHS Specialist in the past two weeks	Had not consulted a specialist in the past two weeks	98.9%
	Had consulted a specialist in past two weeks	.6%

Inpatient Hospital Stays

The number of inpatient stays a person has had was only available for the last year. Eighty-five and a half percent of those questioned had no inpatient stays. One to seven nights in the hospital accounted for 7.2% of the population surveyed. Eight or more nights comprised 7.2%of respondents.

Table 25

Frequency of Inpatient Stays

Utilization Determinants	General Household Survey	Frequency
Hospital Inpatient Stays	Had not had an inpatient stay in the past year	85.6%
	One to seven nights	7.2%
	Eight or more nights	7.2%

Outpatient Visits

Approximately seventy eight percent of people surveyed had no outpatient visits in the past year. Close to seventeen of those interviewed had one or two outpatient visit in the past year. Three or more outpatient visits completed 5.1% of the sample.

Table 26

Frequency of Outpatient Visits

Utilization Determinants	General Household Survey	Frequency
Outpatient Visits	No outpatient visits	77.7%
	One to two visits	16.8%
	Three or more visits	5.1%

Scaling of Disability

The variables that were included as the measures if activities of daily living and instrumental activities of daily living were scored and calculated into two scales of disability. The variables were first recoded to indicate the level of function. A code of zero indicates that the individual can complete the task with no assistance. A code of one indicates that the person needs some assistance to complete the task, and a code of two means that the individual needs complete assistance with the task. The following table indicates the variables included and their individual scales.

Table 27

Scale of Disability

Variable	Code 0	Code 1	Code 2
Climbing jobs	Can climb	Cannot climb	
Cleaning Windows	Can clean windows	Cannot clean windows	
Outdoor Mobility	On own	Only with help	Not at all
Walking down a road	Can walk down road	Cannot walk down road	
Washing hands/face	Assumed able/ on own	With Help	Not at all
Dress and undress self	Assumed able/ on own	With help	Not at all
Feed self	Assumed able/ on own	With help	Not at all
Bathe/wash self	Can bathe/ wash self	Cannot bathe/wash self	
Get in and out of bed	Can get in/out of bed	Cannot get in/out of bed	
Get around the house	Can get around the house	Cannot get around the house	
Make a cup of tea	Can make tea	Cannot make tea	
Prepare snack	Can prepare snack	Cannot prepare snack	
Cook main meal	Can cook main meal	Cannot cook main meal	
Wash/dry dishes	Can wash dishes	Cannot wash dishes	
Open bottles and jars	Can do task	Cannot do task	
Vacuum on own	Can vacuum	Cannot vacuum	
Deal with personal affairs	Can deal with personal affairs	Cannot deal with personal affairs	

These variable codes were then calculated by adding them for each individual. The results are the scale of disability created to give an overall picture of an individual's ability to function. The higher the score the more tasks that the individual has difficulty completing alone or needs total assistance.

Scores ranged from zero to forty-six. The majority of the individuals scored zero (67%), indicating no disability on the items comprising the scale. Any report of a disability was collapsed into the second category of "disability". This made the remaining 32.9% of the sample.

Table 28

Frequency of Disability Scale

Score	Frequency
No Disability	67%
Disability	32.9%

Statistical Procedures

Once the data were recoded into the frequencies described above, cross tabulations, chi square statistics, and gamma scores were run to determine statistical significance. All of these tables are presented in appendix a. These procedures are described below.

Cross tabulations

The data were analyzed using cross tabulations between the independent variables including the predisposing, enabling, and illness categories and the dependent variables of health care utilization.

Chi Square

Chi-square will be used as the statistic of significance in this study. Chi-square requires the assumptions that the variables are of nominal scale or higher and are two independent random samples. Chi-square is a statistical procedure that determines if the expected number of responses if the null hypothesis is true are significantly statistically different from the observed number. This helps to determine the value of chi square needed to establish significance at a particular level of probability, or if the results are due to sampling error. The significance level used in the research was .05 or less.

Gamma

The level of association that will be used to measure the strength of association between the independent and the dependent variables is gamma. Gamma requires the assumptions that the independent and dependent variables are measured on the ordinal level. When gamma is 0 when the variables are independent, and gamma is 1 when all observations are concentrated in the upper left to lower right diagonal of the table (Norusis, 1993). The intermediate values of gamma are expressed as follows:

Value	Relationship
+.70 or higher	A very strong positive association
+.50 to +.69	A substantial positive association

+.30 to +.49	A moderate positive association
+.10 to +.29	A low positive association
+.01 to +.09	A negligible positive association
.00	No association
-.01 to -.09	A negligible negative association
-.10 to -.29	A low negative association
-.30 to -.49	A low moderate association
-.50 to -.69	A substantial negative association
-.70 or lower	A very strong negative association

(Davis, 1971, p.49).

CHAPTER 3

RESULTS

Table 29

Summary Table of Gamma and Significance

Independent Variables	Dependent Variables						
	Home Help	District Nursing	GP at Home	GP at Surgery	Specialist	Outpatient	Inpatient
Age	.644**	.608**	.425**	-.130*	.045	-.002	.077*
Sex	.327**	.265**	.201*	.081	.137	.004	-.014**
Marital Status	-.200	.255	.075	.113	-1.00	-.011	-.583
Education	-.730**	-.163	-.053	-.187*	.253	.065	.009
Social Class	.172*	.146	.150*	-.029	-.049	.028	.014
Ethnicity	-.200	-.431	.204	-.019	-1.00	-.246	.235
Region of Country	-.356	.299	-.180	.065	-1.00	.025	-.018
Visits from friends and relatives	-.516**	-.528**	-.526**	.055	-.101	-.088*	-.174**

Income Source	-.289**	-.305**	-.245**	.043	-.377	.000*	.008
ADL Scale	.818**	.767**	.736**	.036	.391*	.395**	.463**
IADL Scale	.759**	.743**	.655**	-.114	.392	.339**	.423**
Eyesight Difficulty	.321*	.367*	.039	-.183	.287	-.237	.000
Limiting Illness	.190**	.213**	.175**	.159**	.334*	.275**	.177**
Restricted Activity Days	.316**	.463**	.697**	.282**	.321	.425**	.478**

* Significant at the .05 level **Significant at the .01 level

In this chapter I will examine the bi-variate relationships between the predisposing factors, enabling factors, and the illness factors and the use of health care services. I will discuss the bi-variate relationships first by each type of health care utilization, testing the hypotheses from Chapter one. Then I will look at the stratification variables of age, sex, and class to see their association with the dependent variables of health care utilization. Once these relationships have been established, the intervening control variables of illness will be introduced to determine if the relationship between health care use and the stratification variables is explained by the illness factor. Following this discussion, tables for the relationships will be presented. Only significant relationships will be presented in this chapter and additional results can be found in appendix A.

Results of Cross Tabulations:

Home Help Use

For the dependent variable home help use, the independent variables age, gender, education, income source, visits from friends and relatives, ADL and IADL disability scale, restricted activity days, eyesight difficulty, and limiting illness were significant. This confirms hypothesis number 1, use of home visits will increase as age increases, hypothesis 2, women will use more health care services than men, hypothesis 7, those with income from a private source will use less health care, hypothesis 8, the more family support a person receives the fewer health care he/she will use, hypothesis 9, those with more difficulty in ADLS/IADLS will use more services, and hypothesis 10, those with more disability will use more health care services.

Age has a strong positive association with home help use, shown in table 31, with a gamma of .644. The older respondents were the more home help they used. These results were significant at the .001 level.

Table 32 shows a moderate positive association between gender and home health usage, with a gamma of .372. Females were more likely to use home help services than men, shown by 4.6% of males using home help and 8.5% of females using home help. The results were significant at the .0001 level.

Education has a very strong negative association with home help use, with a gamma of -.730 shown in table . Those with qualifications are less likely to use this service. Only .5% of those with qualifications used home help compared to 3.3% of those without qualifications. This was significant at the .004 level.

Table 34 shows a substantial negative relationship between home help use and visits from friends and relatives with a gamma of -.516. Those who had daily visits from friends were four times less likely to use home help, 4.1% of those with daily visitors used home help while 16.1% of those without a visit in the past month used home help. These results were significant at the .0001 level.

Income source had a low negative association with home help use, with a gamma of -.289 shown in table 35. Of those who received state benefits, 8.8% used home care and 5% if those receiving private benefits using this type of care. The results were significant at the .0001 level.

Both ADL and IADL Disability was substantially positively related to home help use, with an ADL gamma of .818 and an IADL gamma of .759. This was significant at the .0001 level.

Eyesight difficulty displayed a low negative association with home help use, with a gamma of .321. Those with eyesight difficult were almost twice as likely to use home help, 11.5% of the sampled population, than those without difficulty, 6.8% of the sampled population. The results were significant at the .026 level.

Table 39 shows limiting illness and home help usage to have a low positive relationship, with a gamma of .190. Of those with a limiting illness, 11.9% used home help compared to only 3.6% of those without an illness. The results were significant at the .0001 level.

Table 40 shows that restricted activity days are moderately associated with home help use with a gamma of .316. A two fold increase can be seen in those with no restricted activity days, where only 6% reported using home help, and those with fourteen or more restricted activity days, where 13.5% used home help. The results were significant at the .0001 level.

The independent variables of marital status, social class, ethnic origin, and country of birth were not significant.

District Nurse Use

For the dependent variable district nurse use, the independent variables of age, gender, income source, visits from friends and relatives, disability, restricted activity days, eyesight difficulty, and limiting illness were significant. This confirms hypothesis

number 1, use of services will increase as age increases, hypothesis 2, women will use more health care services than men, hypothesis 7, those with income from a private source will use less health care, hypothesis 8, the more family support a person receives the fewer health care he/she will use, hypothesis 9, those with more difficulty in ADLS/IADLS will use more services, and hypothesis 10, those with more disability will use more health care services.

Table 41 shows age to have a substantial positive effect on district nurse use, with a gamma of .608. Of those in the age group of 85 and older 19% used district nurse services, while only 2.6% of those aged 65 to 74 and 8.7% of those aged 75 to 84 used this service. The results were significant at the .0001 level.

Gender has a low positive association with district nurse use, with a gamma of .265, shown in Table 42. Females are more likely to use district nurses than males, 7.1% used this service compared to 4.2% of males. These results are significant at the .0001 level.

Visits from friends and relatives shows a substantial negative relationship with district nurse use. Of those who did not have a visit from friends or relatives in the past month 13.4% used district nursing. Of those who were visited daily only 2.6% used this service. The results were significant at the .0001 level.

Table 44 illustrates a low moderate negative association between income source and district nurse use, with a gamma of -.305. Almost twice as many respondents receiving state benefits used district nursing. These results were significant at the .0001 level.

ADL and IADL disability was again a powerful predictor of district nurse usage, showing a substantial positive association with an ADL gamma of .767 and an IADL gamma of .743. The results were significant at the .0001 level.

Eyesight difficulty was moderately positively associated with district nurse use, with a gamma of .367. Almost twice as many people who reported difficulty (11.5%) used the service as those who reported no difficulty. The results were significant at the .013 level.

Table 48 demonstrates the low positive association of limiting illness with district nurse use. Of those with a limiting illness, 10.2% used this service compared to 2.8% and 2.9% of people who did not have a limiting illness. The results were significant at the .0001 level.

Restricted activity days showed a moderate positive association with district nurse use, with a gamma of .463, shown in table 49. Of those with fourteen or more restricted activity days 15.3% used district nursing, while 6% of those with one to seven restricted days used the services, and only 4.5% of those with no disability used the service. The results were significant at the .0001 level.

The independent variables of marital status, education, social class, ethnic origin, and country of birth were not significant.

Consultation with a NHS GP at Home

For the dependent variable Consultations with a NHS GP at home, the independent variables age, gender, social class, income source, visits from friends and relatives, disability, restricted activity days, and limiting illness were significant. This confirms

hypothesis number 1, use of services will increase as age increases; hypothesis 2, women will use more health care services than men; hypothesis 4, the lower social classes will use more health care services; hypothesis 7, those with income from a private source will use less health care; hypothesis 8, the more family support a person receives the fewer health care he/she will use; hypothesis 9, those with more difficulty in ADLS/IADLS will use more services; and hypothesis 10, those with more disability will use more health care services.

Age was moderately positively associated with consultations with a GP at home, with a gamma of .425, shown on table 50. As age increased, the number of visits to the home also increased. For those aged 65 to 74, 2.4% had one of these visits, compared to the 85 and older age group where 10.6% had a home visit. The findings were significant at the .0001 level.

Table 51 shows gender to have a low positive association with home visits, with a gamma of .201. This means that women were more likely to have a home visit by a general practitioner than men were. The results were significant at the .028 level.

Table 52 shows social class to have a low positive association with general practitioner home consultations, with a gamma of .150. The higher social class respondents were in the more likely they were to have a home visit. The results were significant at the .024 level.

Visits from friends and relatives showed a substantial negative association with home general practitioner visits, with a gamma of -.526. The more visits that respondents had from friends and relatives the less likely they were to have a home visit. For those

who had not had a visit in the past month 7.9% had a home visit, considerably more when compared to those who had visits daily, where only 1.3% of respondents had this type of service. The results were significant at the .0001 level.

Table 54 showed a low negative association between income source and general practitioner home visits, with a gamma of -.245. Those with income from private sources were less likely to have used this service. The results were significant at the .008 level.

Both ADL and IADL disability showed a very strong positive relationship with General practitioner home visits, with an ADL gamma of .736 and an IADL gamma of .655. The results were significant at the .0001 level.

Limiting illness showed a low positive association with home visits, with a gamma of .175. Of those with a limiting illness, 6.3% used this service, compared to 2% of those without a limiting illness. The results were significant at the .0001 level.

Table 58 shows restricted activity days to have a substantial positive association with general practitioner home visits, with a gamma of .697. of those with no restricted activity days, 1.9% used a home visit, of those with 1 to 13 restricted activity days, 8.4% used a home visit, and of those with 14 or more restricted activity days, 13.1% used this service. The results were significant at the .0001 level.

The independent variables of marital status, education, ethnic origin, country of birth, and eyesight difficulty were not significant.

Consultations with a NHS GP at Surgery

For the dependent variable of consultations with a NHS GP at surgery in the past two weeks, the independent variables age, education, restricted activity days, and limiting

illness were significant. This confirms hypothesis number 1, use of services will increase as age increases, and hypothesis 10, those with more disability will use more health care services.

Age and general practitioner visits at surgery show a low negative association. As a person ages, they are less likely to have seen a general practitioner at surgery. Fifteen and a half percent of those aged 65 to 74 had used this service compared to only 8.8% of those aged 85 and older. The results were significant at the .004 level.

Table 60 shows a low negative association between consultants at surgery and education, with a gamma of .-187. Those with no qualifications were more likely than those with qualifications to visit a general practitioner at surgery. These results were significant at the .040 level.

Table 61 shows limiting illness to have a low positive association with surgery visits, with a gamma of .159. Those with a limiting illness were more likely to have seen a physician at surgery than those without a limiting illness. The results were significant at the .0001 level.

Restricted activity days show a low positive association with visits to the general practitioner at surgery, with a gamma of .282. Results of the cross tabulations show that of those with 1 to 13 days restricted 24% used this service. This was more visits than those with no restricted days, where 12.5% used the service, and those with 14 or more restricted days, where 19.8% saw a physician at surgery. The results were significant at the .0001 level.

The independent variables of gender, marital status, social class, ethnic origin, country of birth, visits from friends or relatives, income, disability and eyesight difficulty were not significant.

Consultations with a NHS Specialist

For the dependent variable of consultations with an NHS specialist, the independent variables of disability and limiting illness to be significant. This confirms hypothesis 10, those with more disability will use more health care services.

Table 63 shows a moderate positive association between ADL disability and consultations with a NHS Specialist in the past two weeks, with a gamma of .391. Those with a disability were more likely to consult a specialist. These results are significant at the .038 level.

Limiting illness is also has a moderate positive association with consultation's with an NHS Specialist in the past two weeks, with a gamma of .334, shown on table 64. Those with a limiting illness are more likely to have seen specialist. These results are significant at the .029 level.

The other independent variables of age, gender, marital status, education, social class, ethnic origin, country of birth, visits from friends and relatives, income source. Restricted activity days, and eyesight difficulty were not significant.

Number of Outpatient Visits

For the dependent variable number of outpatient visits, the independent variables of visits from friends and relatives, income source, disability, restricted activity days, and limiting illness were significant. This confirms hypothesis 8, the more family support a

person receives the fewer health care services he/she will use, and hypothesis 10, those with more disability will use more health care services.

Table 65 shows a negligible negative association between visits form friends and relatives and number of outpatient visits, with a gamma of -.088. Meaning that as the number of visits from friends and relatives increases the visits from friends and relatives decrease. These results are significant at the .032 level.

Income source and number of outpatient visits show no relationship on table 66, with a gamma of .000. The findings are significant at the .0001 level, with the number of outpatient visits decreasing slightly for those who receive private benefits.

Tables 67 and 68 show a moderate positive association between both ADL and IADL disability and outpatient visits, with an ADL gamma of .395 and an IADL gamma of .339. These results are significant at the .0001 level.

Limiting illness has a low positive relationship with outpatient visits, with a gamma of .275, shown by table 69. Of those with no limiting illness, 10.3% used one to two outpatient visits and 1.8% used three or more. Of those with an illness that was not limiting 15.3% used one to two visits and 4% had three or more. And of those with a limiting illness, 23.7% used one to two visits and 8.9% used three or more. This represents a 50% increase from those with no illness for one or two visits and an almost three fold increase in three visits or more. These results were significant at the .0001 level.

Restricted activity days are moderately positively associated with outpatient visits, with a gamma of .425, shown in table 70. As restricted activity days increase, so

does outpatient service use. Of those with one to thirteen restricted activity days, 22.2% used one to two visits and 6.7% used three or more. Of those with fourteen or more days restricted activity, 28.2% had one to two visits and 13.7% had three or more. Compared to those with no restricted activity days, where 14.5% used one to two visits, this represents an increase of almost 50% for those with restricted activity. And of those with no disability, only 3.7% used three or more days, over a three-fold decrease from those with restricted activity days. These results were significant at the .0001 level.

Other independent variables that were not significant were age, gender, marital status, education, social class, ethnic origin, country of birth, and eyesight difficulty.

Number of Nights in the Hospital

For the dependent variable number of nights in the hospital, the independent variables age, social class, visits from friends and relatives, disability, restricted activity days, and limiting illness were significant. This confirms hypothesis number 1, use of health care services will increase as age increases, hypothesis 4, lower class will use more health care services, hypothesis 8, the more family support a person receives the fewer health care he/she will use, and hypothesis 10, those with more disability will use more health care services.

As age increased the number of nights spent in the hospital also increased. The gamma of .077 showed only a negligible positive relationship, and the significance was at the .028 level. As seen on table 71 hospital stays of eight or more days rise from 6% in the population aged 65 to 74 to 12.3% in the over 85 population, a gain of almost 50%.

As social class increased so did the number of hospital stays, but the association was only a negligible positive one, shown in table 72. The results were significant at the .0001 level.

Table 73 shows the relationship between visits from friends and relatives and hospital stays. The gamma of -.174 shows a low negative association, meaning that the more visits a person receives the less likely they are to be in the hospital. Of those who had visits daily or nearly only 3.5% were in the hospital eight or more days, while those who had not received a visit in the past month had 11.2% in the hospital for eight or more days. The findings were significant at the .0001 level.

Tables 74 and 75 illustrate the relationship between ADL and IADL disability and nights in the hospital. These have a moderate positive relationship with an ADL gamma of .463 and an IADL gamma of .423. The results were significant at the .0001 level.

Table 76 shows a low positive association between limiting illness and nights in the hospital, with a gamma of .177. A person with a limiting illness used more nights in the hospital than those without one. Of those with a limiting illness 9.3% used one to seven nights in the hospital and 11.7% used eight or more nights. Of those with no illness, 5.5% used one to seven nights and only 3.8% used eight or more nights. These results are significant tat the .0001 level.

Restricted activity days had a moderate positive association with nights in the hospital, with a gamma of .478, as shown on table 77. Of those who reported one to thirteen days of restricted activity, 22.2% had used one to seven nights in the hospital and of those with one to thirteen days of disability only 6.7% used eight or more days. Those

with 14 or more restricted activity days 28.2% used one to seven nights in the hospital. These numbers drop when eight or more nights in the hospital are reported while 13.7% of those with 14 or more restricted activity days used hospital services. These findings were significant at the .0001 level.

The other independent variables of gender, marital status, education, ethnic origin, country of birth, income source, and eyesight difficulty were not significant.

Summary

The first analysis of the data was bi-variate relationships and the measures of gamma and chi-square were used. When these bi-variate relationships were examined, many of the hypotheses were accepted. Table 30 shows a summary of which of these hypotheses were accepted and which were rejected.

Of the predisposing variables, the independent variable of age was associated with home help use, district nursing use, consultations with a GP at home, consultations with a GP at surgery, and inpatient visits. Sex was associated with home help use, district nurse use, and consultations with a GP at home. Marital status was not associated with any dependent variable. Education was associated with home help use and consultations with a GP at surgery. Social class was associated with inpatient use. Ethnicity and region of the country were not associated with any dependent variables.

Of the enabling variables, income source was associated with home help use, district nurse use, consultations with a GP at home, and outpatient visits. Visits from

friends and relatives was associated with home help use, district nurse use, consultations with a GP at home, Consultations with a specialist, outpatient visits, and inpatient visits.

Of the illness variables, the ADL scale was associated with home help use, district nurse use, consultations with a GP at home, consultations with a specialist, outpatient visits and inpatient visits. The IADL scale was associated with home help use, district nurse use, consultations with a GP at home, outpatient visits, and inpatient visits. Eyesight difficulty was associated with home help use and district nurse use. Limiting illness was associated with home help use, district nurse use, consultations with a GP at home, consultations with a GP at surgery, consultations with a specialist, outpatient visits, and inpatient visits. Restricted activity days was associated with home help use, district nurse use, consultations with a GP at home, consultations with a GP at surgery, outpatient visits, and inpatient visits.

These bi-variate relationships support not only the hypotheses but also what literature has shown about the relationship between social factors and health care use. These also lead to the next analysis where the relationships between age, sex, and class are examined for their relationship to utilization.

Table 30

Summary of Accepted and Rejected Hypotheses

Independent Variables	Dependent Variables						
	Home Help	District Nursing	GP at Home	GP at Surgery	Specialist	Outpatient	Inpatient
Age	Accepted	Accepted	Accepted	Accepted	Rejected	Rejected	Accepted
Sex	Accepted	Accepted	Accepted	Rejected	Rejected	Rejected	Rejected
Marital Status	Rejected	Rejected	Rejected	Rejected	Rejected	Rejected	Rejected
Education	Accepted	Rejected	Rejected	Accepted	Rejected	Rejected	Rejected
Social Class	Rejected	Rejected	Rejected	Rejected	Rejected	Rejected	Accepted
Ethnicity	Rejected	Rejected	Rejected	Rejected	Rejected	Rejected	Rejected
Region of Country	Rejected	Rejected	Rejected	Rejected	Rejected	Rejected	Rejected
Income Source	Accepted	Accepted	Accepted	Rejected	Rejected	Accepted	Rejected
Visits from friends and relatives	Accepted	Accepted	Accepted	Rejected	Rejected	Accepted	Accepted
ADL Scale	Accepted	Accepted	Accepted	Rejected	Accepted	Accepted	Accepted

IADL Scale	Accepted	Accepted	Accepted	Rejected	Rejected	Accepted	Accepted
Eyesight Difficulty	Accepted	Accepted	Rejected	Rejected	Rejected	Rejected	Rejected
Limiting Illness	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted
Restricted Activity Days	Accepted	Accepted	Accepted	Accepted	Rejected	Accepted	Accepted

Table 31

Age and Use of Home Help

	Used Home Help in Last Month				
			Not used	Used	Total
Age	65 to 74	Count	2042	59	2101
		Row Percent	97.2%	2.8%	100%
	75 to 84	Count	959	110	1069
		Row Percent	89.7%	10.3%	100%
	85+	Count	234	73	307
		Row Percent	76.2%	23.8%	100%
		Total	3235	242	3477
Gamma	.644				
Chi Square	.001*				
Significance					

Table 32

Gender and Use of Home Help

	If used Home Help in past month				
			Not Used	Used	Total
Gender	Male	Count	1375	66	1441
		Row Percent	95.4%	4.6%	100%
	Female	Count	1860	176	2036
		Row Percent	91.4%	8.6%	100%
		Total	3235	242	3477
Gamma	.327				
Chi Square	.0001*				
Significance					

Table 33

Education and Use of Home Help

			If used Home Help in past month		
			Not Used	Used	Total
Education	No Qualifications	Count	624	21	645
		Row Percent	96.7%	3.3%	100%
	Qualifications	Count	380	2	382
		Row Percent	99.5%	.5%	100%
		Total	1004	23	1027
Gamma	-.730				
Chi Square Significance		.004*			

Table 34

Visits from Friends and relatives and Use of Home Health

			If used home help in past month		
			Not used	Used	Total
Visits from Friends or Relatives	Not in the last month	Count	774	149	923
		Row Percent	83.9%	16.1%	100%
	Last Month	Count	656	29	685
		Row Percent	95.8%	4.2%	100%
	2 to 3 times a week	Count	1362	45	1407
		Row Percent	96.8%	4.2%	100%
	Daily or nearly	Count	439	19	458
		Row Percent	95.9%	4.1%	100%
		Total	3231	242	3473
Gamma	-.516				
Chi-Square Significance	.0001*				

Table 35

Income Source and Use of Home Health

	If used home help in past month				
			Not used	Used	Total
Income	State	Count	1539	148	1687
	Benefits	Row Percent	91.2%	8.8%	100%
	Private	Count	1621	86	17.7
	Benefits	Row Percent	95%	5%	100%
		Total	3160	234	3394
Gamma	-.289				
Chi Square	.0001*				
Significance					

Table 36

ADLS and Use of Home Help

		ADL Difficulty			
		None	Low	High	Total
Not Used	Count	2308	372	541	3221
	Row Percent	71.7%	11.5%	16.8%	100%
Used	Count	39	31	169	239
	Row Percent	16.3%	13%	70.7%	100%
	Total	2347	403	710	3460
Gamma	.818				
Chi Square Significance		.0001*			

Table 37

IADLs and Use of Home Help

		IADL Difficulty			
		None	Low	High	Total
Not Used	Count	2733	302	190	3225
	Row Percent	84.7%	9.4%	5.9%	100%
Used	Count	95	60	86	241
	Row Percent	39.4%	24.9%	35.7%	100%
	Total	2828	362	276	3466
Gamma	.759				
Chi Square Significance		.0001*			

Table 38

Eyesight Difficulty and Use of Home Health

			If used home help in past month		
			Not used	Used	Total
Eyesight	Difficulty	Count	92	13	105
		Row Percent	88.5%	11.5%	100%
	No	Count	3140	228	3368
	Difficulty	Row Percent	93.2%	6.8%	100%
		Total	3232	241	3473
Gamma	.321				
Chi Square	.026*				
Significance					

Table 39

Limiting Illness and Use of Home Health

			If used home help in past month		
			Not used	Used	Total
Limiting Illness	Neither	Count	1384	52	1463
		Row Percent	96.4%	3.6%	100%
	Illness but not limiting	Count	1268	171	1439
		Row Percent	88.1%	11.9%	100%
	Limiting Illness	Count	581	19	600
		Row Percent	96.8%	3.2%	100%
		Total	3233	242	3475
Gamma	.190				
Chi Square Significance	.0001*				

Table 40

Restricted Activity Days and Use of Home Help

			If used home help in past month		
			Not used	Used	Total
Restricted Activity Days	None	Count	2611	166	2777
		Row Percent	94%	6%	100%
	1-13	Count	265	20	285
		Row Percent	93%	7%	100%
	14+	Count	351	55	406
		Row Percent	86.5%	13.5%	100%
		Total	3227	241	3468
Gamma	.316				
Chi Square Significance	.0001*				

Table 41

Age and Use of District Nurses

	Used District Nurses in Last Month				
			Not Used	Used	Total
Age	65 to 74	Count	2047	54	2101
		Row Percent	97.4%	2.6%	100%
	75 to 84	Count	976	93	1069
		Row Percent	91.3%	8.7%	100%
	85+	Count	248	58	306
		Row Percent	81%	19%	100%
		Total	3271	205	3476
Gamma	.608				
Chi Square	.0001*				
Significance					

Table 42

Gender and Use of District Nurses

	If used District Nurse in Past Month				
			Not Used	Used	Total
Gender	Male	Count	1380	61	1441
		Row Percent	95.8%	4.2%	100%
	Female	Count	1891	144	2035
		Row Percent	92.9%	7.1%	100%
		Total	3271	205	3476
Gamma	.2685				
Chi Square Significance	.0001*				

Table 43

Visits from Friends and relatives and Use of District Nurse

	If used district nurse in past month				
			Not used	Used	Total
Visits from Friends or Relatives	Not in the last month	Count	798	124	922
		Row Percent	86.6%	13.4%	100%
	Last Month	Count	657	28	685
		Row Percent	95.9%	4.1%	100%
	2 to 3 times a week	Count	1366	41	1407
		Row Percent	97.1%	2.9%	100%
	Daily or nearly	Count	446	12	458
		Row Percent	97.4%	2.6%	100%
		Total	3267	205	3472
Gamma	-.528				
Chi-Square Significance	.0001*				

Table 44

Income and Use of District Nurse

	If used district nurse in past month				
			Not used	Used	Total
Income	State	Count	1559	127	1686
	Benefits	Row Percent	92.5%	7.5%	100%
	Private	Count	1636	71	1707
	Benefits	Row Percent	95.8%	4.2%	100%
		Total	3195	198	3393
Gamma	-.305				
Chi Square	.0001*				
Significance					

Table 45

ADLS and Use of District Nursing

		ADL Difficulty			
		None	Low	High	Total
Not Used	Count	2304	378	574	3256
	Row Percent	70.8%	11.6%	17.6%	100%
Used	Count	43	25	135	203
	Row Percent	21.2%	12.3%	66.5%	100%
	Total	2347	403	709	3459
Gamma	.767				
Chi Square Significance		.0001*			

Table 46

IADLs and Use of District Nursing

		IADL Difficulty			
		None	Low	High	Total
Not Used	Count	2743	322	196	3261
	Row Percent	84.1%	9.9%	6.0%	100%
Used	Count	85	40	79	204
	Row Percent	41.7%	19.6%	38.7%	100%
	Total	2828	362	275	3465
Gamma	.743				
Chi Square Significance		.0001*			

Table 47

Eyesight Difficulty and Use of District Nurse

			If used district nurse in past month		
			Not used	Used	Total
Eyesight	Difficulty	Count	92	12	104
		Row Percent	88.5%	11.5%	100%
	No Difficulty	Count	3176	192	3368
		Row Percent	94.3%	5.7%	100%
		Total	3268	204	3472
Gamma	.367				
Chi Square Significance	.013*				

Table 48

Limiting Illness and Use of District Nurse

			If used district nurse in past month		
			Not used	Used	Total
Limiting Illness	Neither	Count	1395	41	1436
		Row Percent	97.1%	2.9%	100%
	Illness but not limiting	Count	1291	147	1438
		Row Percent	89.8%	10.2%	100%
	Limiting Illness	Count	583	17	600
		Row Percent	97.2%	2.8%	100%
		Total	3269	205	3474
Gamma	.213				
Chi Square Significance	.0001*				

Table 49

Restricted Activity Days and Use of District Nurse

			If used district nurse in past month		
			Not used	Used	Total
Restricted Activity Days	None	Count	2650	126	2776
		Row Percent	95.5%	4.5%	100%
	1-13	Count	268	17	285
		Row Percent	94%	6%	100%
	14+	Count	344	62	406
		Row Percent	84.7%	15.3%	100%
		Total	3262	205	3467
Gamma	.463				
Chi Square Significance	.0001*				

Table 50

Age and Consultations to a NHS GP at home

	If Consulted an NHS GP at home in the past two weeks				
			Not Consulted	Consulted	Total
Age	65 to 74	Count	2199	53	2172
		Row Percent	97.6%	2.4%	100%
	75 to 84	Count	1059	48	1107
		Row Percent	95.7%	4.3%	100%
	85+	Count	296	35	331
		Row Percent	89.4%	10.6%	100%
		Total	3474	136	3610
Gamma	.425				
Chi Square	.0001*				
Significance					

Table 51

Gender and Consultations by a NHS GP at home

			If Consulted an NHS GP at home in the past two weeks		
			Not Consulted	Consulted	Total
Gender	Male	Count	1453	44	1497
		Row Percent	97.1%	2.9%	100%
	Female	Count	2021	92	2113
		Row Percent	95.6%	4.4%	100%
		Total	3474	136	3610
Gamma	.201				
Chi Square	.028*				
Significance					

Table 52

Social Class and Consultations with a NHS GP at home

			If Consulted an NHS GP at home in the past two weeks		
			Not Consulted	Consulted	Total
Social Class	V	Count	377	21	398
		Row Percent	94.7%	5.3%	100%
	IV	Count	629	28	657
		Row Percent	95.7%	4.3%	100%
	IIN	Count	826	16	842
		Row Percent	98.1%	1.9%	100%
	IIM	Count	737	34	771
		Row Percent	95.6%	4.4%	100%
	II	Count	685	26	711
		Row Percent	96.3%	3.7%	100%
	I	Count	94	2	96
		Row Percent	97.9%	2.1%	100%
		Total	3348	127	3475
Gamma	.150				
Chi Square Significance		.024*			

Table 53

Visits from Friends and Relatives and Consultations with a NHS GP at Home

			If Consulted an NHS GP at home in the past two weeks		
			Not Consulted	Consulted	Total
Visits from Friends or Relatives	Not in the last month	Count	846	73	919
		Row Percent	92.1%	7.9%	100%
	Last Month	Count	662	23	685
		Row Percent	96.6%	3.4%	100%
	2 to 3 times a week	Count	1380	24	1404
		Row Percent	98.3%	1.7%	100%
	Daily or nearly	Count	452	6	458
		Row Percent	98.7%	1.3%	100%
		Total	3340	126	3466
Gamma	-.526				
Chi Square Significance		.0001*			

Table 54

Income and Consultations with a NHS GP at Home

			If Consulted an NHS GP at home in the past two weeks		
			Not Consulted	Consulted	Total
Income	State Benefits	Count	1615	75	1690
		Row Percent	95.6%	4.4%	100%
	Private Benefits	Count	1670	47	1717
		Row Percent	97.3%	2.7%	100%
		Total	3285	122	3407
Gamma	-.245				
Chi Square Significance	.008*				

Table 55

ADLS and Consultations with a GP at home

		ADL Difficulty			
		None	Low	High	Total
Not Used	Count	2314	390	625	3329
	Row Percent	69.5%	11.7%	18.8%	100%
Used	Count	30	12	82	124
	Row Percent	24.2%	9.7%	66.1%	100%
	Total	2344	402	707	3453
Gamma	.736				
Chi Square Significance		.0001*			

Table 56

IADLs and Consultations with a GP at home

		IADL Difficulty			
		None	Low	High	Total
Not Used	Count	2763	338	234	3335
	Row Percent	82.8%	10.1%	7%	100%
Used	Count	60	23	41	124
	Row Percent	48.4%	18.5%	33.1%	100%
	Total	2823	361	275	3459
Gamma	.655				
Chi Square Significance		.0001*			

Table 57

Limiting Illness and Consultations by a NHS GP at Home

			If Consulted an NHS GP at home in the past two weeks		
			Not Consulted	Consulted	Total
Limiting Illness	Neither	Count	1449	30	1479
		Row Percent	98%	2.0%	100%
	Illness but not limiting	Count	1425	96	1521
		Row Percent	93.7%	6.3%	100%
	Limiting Illness	Count	596	10	606
		Row Percent	98.3%	1.7%	100%
		Total	3470	136	3606
Gamma	.175				
Chi Square Significance		.0001*			

Table 58

Restricted Activity Days and Consultations with an NHS GP at Home

			If Consulted an NHS GP at home in the past two weeks		
			Not Consulted	Consulted	Total
Restricted Activity Days	None	Count	2809	53	2862
		Row Percent	98.1%	1.9%	100%
	1 to 13	Count	271	25	296
		Row Percent	91.6%	8.4%	100%
	14	Count	386	58	444
		Row Percent	86.9%	13.1%	100%
		Total	3466	136	36.2
Gamma	.697				
Chi Square Significance		.0001*			

Table 59

Age and Consultations with a NHS GP at Surgery or Health Center

			If Consulted an NHS GP at a surgery or health center in the past two weeks		
			Not Consulted	Consulted	Total
Age	65 to 74	Count	1835	337	2172
		Row Percent	84.5%	15.5%	100%
	75 to 84	Count	954	153	1107
		Row Percent	86.2%	13.8%	100%
	85+	Count	302	29	331
		Row Percent	91.2%	8.8%	100%
		Total	3091	519	3610
Gamma	-.130				
Chi Square	.004*				
Significance					

Table 60

Education and Consultations with a NHS GP at Surgery

			If Consulted an NHS GP at a surgery or health center in the past two weeks		
			Not Consulted	Consulted	Total
Education	No Qualifications	Count	536	113	649
		Row Percent	82.6%	17.4%	100%
	Qualifications	Count	339	49	388
		Row Percent	87.4%	12.6%	100%
		Total	875	162	1037
Gamma	-.187				
Chi Square Significance		.040*			

Table 61

Limiting Illness and NHS GP Consultations at a Surgery

			If Consulted an NHS GP at a surgery/ health center in the past two weeks		
			Not Consulted	Consulted	Total
Limiting Illness	Neither	Count	1323	156	1479
		Row Percent	89.5%	10.5%	100%
	Illness but not limiting	Count	1240	281	1521
		Row Percent	81.5%	18.5%	100%
	Limiting Illness	Count	524	82	606
		Row Percent	86.5%	13.5%	100%
		Total	3087	519	3606
Gamma	.159				
Chi Square Significance		.0001*			

Table 62

Restricted Activity Days and Consultations with a NHS GP at Surgery

			If Consulted an NHS GP at a surgery/ health center in the past two weeks		
			Not Consulted	Consulted	Total
Restricted Activity Days	None	Count	2503	359	2862
		Row Percent	87.5%	12.5%	100%
	1-13	Count	225	71	296
		Row Percent	76%	24%	100%
	14+	Count	356	88	444
		Row Percent	80.2%	19.8%	100%
		Total	3084	518	3602
Gamma	.282				
Chi Square Significance	.0001*				

Table 63

ADLS and Consultations with a specialist

		ADL Difficulty			
		None	Low	High	Total
Not Used	Count	2336	397	701	3434
	Row Percent	68%	11.6%	20.4%	100%
Used	Count	8	5	6	19
	Row Percent	42.1%	26.3%	31.6%	100%
	Total	2344	402	707	3453
Gamma	.391				
Chi Square Significance		.038*			

Table 64

Limiting Illness and Consultations with a NHS Specialist

			If Consulted an NHS specialist in the past two weeks		
			Not Consulted	Consulted	Total
Limiting Illness	Neither	Count	1476	3	1479
		Row Percent	99.8%	.2%	100%
	Illness but not limiting	Count	1507	14	1521
		Row Percent	99.1%	.9%	100%
	Limiting Illness	Count	603	3	606
		Row Percent	99.5%	.5%	100%
		Total	3586	20	3606
Gamma	.334				
Chi Square Significance		.029*			

Table 65

Visits from Friends and Relatives and Outpatient Visits

			Number of Outpatient Visits			
			None	One to Two	Three or more	Total
Visits from Friends or Relatives	Not in the last month	Count	682	182	56	920
		Row Percent	74.1%	19.8%	6.1%	100%
	Last Month	Count	542	114	29	685
		Row Percent	79.1%	16.6%	4.2%	100%
	2 to 3 times a week	Count	1116	225	65	1406
		Row Percent	79.4%	16%	4.6%	100%
	Daily or nearly	Count	368	64	26	458
		Row Percent	80.3%	14%	5.7%	100%
		Total	2708	585	176	3469
Gamma	.-.088					
Chi-Square Significance		.032*				

Table 66

Income Source and Outpatient Visits

	Number of Outpatient Visits					
			None	One to Two	Three or more	Total
Income	State Benefits	Count	1327	258	107	1692
		Row Percent	78.4%	15.2%	6.3%	100%
	Private Benefits	Count	1337	317	64	1718
		Row Percent	77.8%	18.5%	3.7%	100%
		Total	2664	575	171	3410
Gamma	.000					
Chi Square	.0001*					
Significance						

Table 67

ADLS and Outpatient Visits

		ADL Difficulty			
		None	Low	High	Total
Not Used	Count	1952	301	447	2700
	Row Percent	72.3%	11.1%	16.6%	100%
Used	Count	394	102	260	756
	Row Percent	52.1%	13.5%	34.4%	100%
	Total	2346	403	707	3456
Gamma	.395				
Chi Square Significance		.0001*			

Table 68

IADLs and Outpatient Visits

		IADL Difficulty			
		None	Low	High	Total
Not Used	Count	2284	244	179	2707
	Row Percent	84.4%	9%	6.6%	100%
Used	Count	543	117	95	755
	Row Percent	71.9%	15.5%	12.6%	100%
	Total	2827	361	274	3462
Gamma	.339				
Chi Square Significance		.0001*			

Table 69

Limiting Illness and Outpatient Visits

			Number of Outpatient Visits			
			None	One to Two	Three or more	Total
Limiting Illness	Neither	Count	1300	153	27	1480
		Row Percent	87.8%	10.3%	1.8%	100%
	Illness but not limiting	Count	1026	361	135	1522
		Row Percent	67.4%	23.7%	8.9%	100%
	Limiting Illness	Count	490	93	24	607
		Row Percent	80.7%	15.3%	4%	100%
		Total	2816	607	186	3609
Gamma	.275					
Chi Square Significance	.0001*					

Table 70

Restricted Activity Days and Outpatient Visits

			Number of Outpatient Visits			
			None	One to Two	Three or more	Total
Restricted Activity Days	None	Count	2344	414	105	2863
		Row Percent	81.9%	14.5%	3.7%	100%
	1-13	Count	211	66	20	297
		Row Percent	71%	22.2%	6.7%	100%
	14	Count	258	125	61	444
		Row Percent	58.1%	28.2%	13.7%	100%
		Total	2813	605	186	3604
Gamma	.425					
Chi Square Significance	.0001*					

Table 71

Age and Inpatient Visits

	Number of Nights in the Hospital					
			None	One to Seven	Eight or More	Total
Age	65 to 74	Count	1918	133	131	2182
		Row Percent	87.9%	6.1%	6%	100%
	75 to 84	Count	917	110	87	1114
		Row Percent	82.3%	9.9%	7.8%	100%
	85+	Count	272	20	41	333
		Row Percent	81.7%	6%	12.3%	100%
		Total	3107	263	259	3629
Gamma	.077					
Chi Square	.028*					
Significance						

Table 72

Social Class and Inpatient Visits

			Number of Nights in the Hospital			
			None	One to Seven	More than Eight	Total
Social Class	V	Count	339	26	34	399
		Row Percent	85%	6.5%	8.5	100%
	IV	Count	557	44	56	657
		Row Percent	84.8%	6.7%	8.5	100%
	IIN	Count	763	38	42	843
		Row Percent	90.5%	4.5%	5	100%
	IIM	Count	657	59	56	772
		Row Percent	85.1%	7.6%	7.3	100%
	II	Count	591	76	48	715
		Row Percent	82.7%	10.6%	6.7	100%
	I	Count	82	10	4	96
		Row Percent	85.4%	10.4%	4.2%	100%
		Total	2989	253	240	3482
Gamma	-.014					
Chi-Square Significance		.0001*				

Table 73

Visits from Friends and Relatives and Inpatient Visits

			Number of nights in the Hospital			
			None	One to Seven	Eight or More	Total
Visits from Friends or Relatives	Not in the last month	Count	754	66	103	923
		Row Percent	81.7%	7.2%	11.2%	100%
	Last Month	Count	593	58	34	685
		Row Percent	86.6%	8.5%	5%	100%
	2 to 3 times a week	Count	1240	90	77	1407
		Row Percent	88.1%	6.4%	5.5%	100%
	Daily or nearly	Count	407	34	16	457
		Row Percent	89.1%	7.4%	3.5%	100%
		Total	2994	248	230	3472
Gamma	-.174					
Chi-Square Significance		.0001*				

Table 74

ADLS and Inpatient Visits

		ADL Difficulty			
		None	Low	High	Total
Not Used	Count	2129	330	525	2984
	Row Percent	71.3%	11.1%	17.6%	100%
Used	Count	217	73	185	475
	Row Percent	45.7%	15.4%	38.9%	100%
	Total	2346	403	710	3459
Gamma	.463				
Chi Square Significance		.0001*			

Table 75

IADLs and Inpatient Visits

		IADL Difficulty			
		None	Low	High	Total
Not Used	Count	2506	287	194	2987
	Row Percent	83.9%	9.6%	6.5%	100%
Used	Count	321	75	82	478
	Row Percent	67.2%	15.7%	17.2%	100%
	Total	2827	362	276	3465
Gamma	.423				
Chi Square Significance		.0001*			

Table 76

Limiting Illness and Inpatient Visits

			Number of nights in the Hospital			
			None	One to Seven	Eight or More	Total
Limiting Illness	Neither	Count	1343	81	56	1480
		Row Percent	90.7%	5.5%	3.8%	100%
	Illness but not limiting	Count	1205	142	178	1525
		Row Percent	79%	9.3%	11.7%	100%
	Limiting Illness	Count	543	40	25	608
		Row Percent	89.3%	6.6%	4.1%	100%
		Total	3091	263	259	3613
Gamma	.177					
Chi Square Significance	.0001*					

Table 77

Restricted Activity Days and Inpatient Visits

			Number of nights in the Hospital			
			None	One to Seven	Eight or More	Total
Restricted Activity Days	None	Count	2547	173	145	2865
		Row Percent	88.9%	6%	5.1%	100%
	1-13	Count	211	66	20	297
		Row Percent	71%	22.2%	6.7%	100%
	14	Count	258	125	61	444
		Row Percent	58.1%	28.2%	13.7%	100%
		Total	2813	605	186	3604
Gamma	.478					
Chi Square Significance	.0001*					

Intervening Control Variables: Methodology

Once the relationships between the independent and dependent variables were established, control variables were introduced to determine how illness affects use of health care services. The model used was devised by Davis (1971) using gamma and is for nominal/ordinal level data. In the model, the effects of an intervening control variable can be established for the relationship between an independent and dependent variable.

With this methodology, six outcomes are possible (see table 78) . The first is that there is no relationship between the independent and dependent variable with or without the intervening control variable. Second is that the intervening control variable is an explanation. The independent and dependent variables that are correlated in a zero order correlation will no longer be so with the introduction of this intervening control variable. In this case the relationship completely disappears. Third is that the intervening control variable will have no effect. The independent and dependent variables will continue to be correlated even with the introduction of the intervening control variable. Suppression is the fourth possibility. This is when the intervening control variables masks the true relationship between the independent and dependent variable. The twilight zone is the fifth possibility. This is when the intervening control variable may or may not offer an explanation. The zero order correlation is not completely controlled by the intervening control variable, nor is it an absence of effect. The final possibility is specification. This is when the intervening control must be specified in order to specify the relationship between the independent and dependent variables.

Table 78

Possible Outcomes of the Davis Model

	Zero Order Gamma	Partial Gamma	Conditional Gamma
No Effect	Negligible	Negligible	Negligible
Explanation	Non Negligible	Non Negligible	
Spurious	Non Negligible	Non Negligible	
Suppression	Negligible	Non Negligible	Non Negligible
Twilight	Non Negligible	Non Negligible but at least .10 units smaller than the zero order	
Specifier			At least one is non-negligible and two are at least .10 units different from one another

Values for Gamma

Value	Relationship
.70 or higher	A very strong association
.50 to . 69	A substantial association
.30 to . 49	A moderate association
.10 to . 29	A low association
.01 to . 09	A negligible association
.00	No association

These values can be positive or negative.

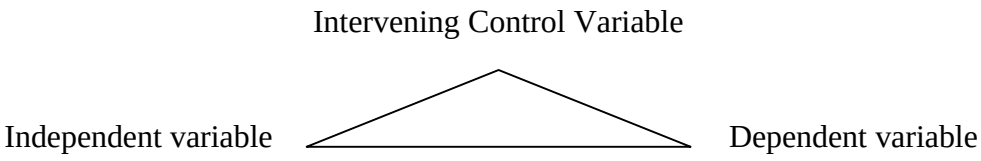
(Davis, 1971, p.49).

For this analysis, the independent variables used were age, gender, and social class. Gender remained the same as measured previously; age was divided into those 65 to 74, 75 to 84 and 85 or older. Social class was divided into two categories, the first made of classes V, VI, and IIIN, and the second made of classes IIIM, II, and I. The control variables were limiting long-standing illness, restricted activity days, ADL disability and IADL disability. Limiting illness remained three categories of no illness, illness that is not limiting, and limiting long-standing illness. Restricted activity days were measured by either having these days or not having restricted days. Disability was measured through two scales one of ADLs and IADLs. The variables comprising activities of daily living are as follows: The ability to do climbing jobs, ability to clean windows, assistance with outdoor mobility, ability to walk down the road, ability to wash hands and face, ability to dress and undress self, ability to feed self, ability to bathe self,

and ability to get in and out of bed. The variables making up the scale of instrumental activities of daily living are as follows: The ability to make a cup of tea, ability to prepare a snack, ability to cook a main meal, ability to wash and dry dishes, ability to open jars and bottles, ability to vacuum, and ability to deal with personal affairs. These were divided into no disability, low disability and high disability.

The relationship was then tested between the independent variables (age, gender, and class) and the dependent variables of health care utilization (Table 82). There were no significant gamma scores for any measures of specialist consultation or outpatient visits therefore these variables were excluded(see Appendix A). Next, the independent and control variables were tested (Table 83). Lastly, the dependent variables and the control variables were tested (Table 84). If all three had significant gamma scores over .10 they were retained for further analysis. This is illustrated in the diagram below. For these remaining relationships, partial gammas were calculated.

.



Limiting Illness, Restricted Activity days, and IADLs were not correlated on all three measures and were no longer used. Additionally, specialist consultations, outpatient visits, and inpatient visits were also not correlated and were not used. The remaining health care utilization variables home help, district nursing, consultations with a general practitioner at home, and consultations with a general practitioner at surgery were kept, as well as the ADL scale as a measure of disability.

Hypotheses: Control Variables

1. Age: The relationship between age and use of health care services is due to increasing illness with age which increases the need for health services, i.e. illness level is at least a partial explanation of the relationship between age and use of health care services.
2. Gender: The relationship between gender and use of health care services is due to women using more services than men, women generally report higher illness levels than men. Illness level is at least a partial explanation of the relationship between gender and use of health care services.
3. Class: The relationship between class and use of health care services is due to lower classes having poorer health, which increases the need for health services along class lines, i.e. illness level is at least a partial explanation of the relationship between class and use of health care services.

Results of Intervening Control Variables

Age and ADL Scale

The relationship between age and health care use was tested with the ADL scale as the intervening control variable. This tested the following hypothesis: The relationship between age and use of health care services is due to increasing illness with age which increases the need for health services, i.e. illness level is at least a partial explanation of the relationship between age and use of health care services.

Table 79

Age and Dependent Variables Controlled by ADL Difficulty

Independent Variable	Zero Order Gamma	Conditional Gamma			Partial Order Gamma
Difficulty		No	Low	High	
Age and home help by adl scale	.644*	.579*	.607*	.353*	.522
Age and district nursing by adl scale	.608*	. 653*	.310	.306*	.544
Age and GP at home by adl scale	.425*	.450*	.374*	.006	.255
Age and GP at surgery by adl scale	-.130*	-.061	-.167	-.261*	-.083

When the partial gammas were calculated, age and home health saw a .064 reduction when controlled for the amount of difficulty with activities of daily living. Age and district nursing had a .17 reduction when ADL disability was controlled. Age and consultation with a general practitioner at home was reduced .047. This means that illness did help explain the relationship between district nurse use and age.

Gender and ADL Scale

The relationship between gender and health care use was tested with the ADL scale as the intervening control variable. This tested the following hypothesis: The relationship between gender and use of health care services is due to women using more services than men, women generally report higher illness levels than men. Illness level is

at least a partial explanation of the relationship between gender and use of health care services.

Table 80

Gender and Dependent Variables Controlled by ADL Difficulty

Independent Variable	Zero Order Gamma	Conditional Gamma			Partial Order Gamma
		No Difficulty	Low	High	
Sex and home help by adl scale	.327*	-.251	-.006	.336*	.004
Sex and district nursing by adl scale	.265*	.143	.280	.023	.105
Sex and GP at home by adl scale	.201*	-.004	.045	.057	.020

In table 80, gender was related to the ADL scale with a gamma of .299. There were also relationships between the control variable and home help, district nursing, and consultation with a general practitioner at home, so these partial gammas were calculated. The relationship between gender and home help was reduced by .323 when difficulties with ADLs were controlled. Gender and district nursing also reduced .16 when ADL difficulty was controlled. The relationship between gender and consultations with a general practitioner at home dropped .80 when ADL difficulty was controlled for. These were all significant reductions with the introduction of the control variable. Meaning that

for all three health care services illness factors help to explain the different uses by the different genders.

Social Class and ADL Scale

The relationship between social class and health care use was tested with the ADL scale as the intervening control variable. This tested the following hypothesis: The relationship between class and use of health care services is due to lower classes having poorer health, which increases the need for health services along class lines, i.e. illness level is at least a partial explanation of the relationship between class and use of health care services.

Table 81

Social Class and Dependent Variables Controlled by ADL Difficulty

Independent Variable	Zero Order Gamma	Conditional Gamma		Partial Order Gamma	
		No	Low Difficulty	High	
Class and home help by adl scale	.202*	-.068	.006	-.061	-.060
Class and district nursing by adl scale	.186*	.060	-.153	-.050	.007
Class and GP at home by adl scale	.269*	-.283	-.370	-.035	-.195

Class and the ADL scale were significantly related (-.247*), so partial gammas were calculated for home help, district nursing, and general practitioner consultations at

home (table 81). The relationship between class and home help was reduced .140 when ADL difficulty was controlled. Class and district nursing was reduced by .180 with the control variable, and consultations with a general practitioner was reduced .07. For the variables of home help use and district nurse use the illness factor was an explanation for different levels of use by different social classes.

Summary

In the final analysis, intervening control variables were introduced to determine if the health care services of home help, district nurse, and consultaions with a GP at home were used because of age, sex, and class differences or because of differences in levels of ADL difficulty. These analyses showed that the intervening control variable of ADL difficulty did have an explanatory effect, meaning that the use of some services could be explained by the amount of illness not solely age, sex, or class.

Although the intervening control variable did have some effect, when the distributions are considered many of those with the most disability still do not receive services, with only around 20% in some cases of the most disabled receiving care. Why those who are most disabled do not receive more care would make for interesting further multivariate analyses in order to determine what other factors are important in the most disabled receiving services.

Table 82

Independent Variables by Dependent Variables: Gamma and Significance

	Age	Sex	Class
	Gamma	Gamma	Gamma
Home Help Use	.644*	.327*	.202*
District Nurse Use	.608*	.265*	.186*
GP at home	.425*	.201*	.269*
GP at Surgery	-.130*	.081	-.069
Specialist	.045	.137	-.151
Outpatient	.002	.003	.040
Inpatient	.200*	-.025	.007

*Significant at the .05 level

Table 83

Independent Variables by Intervening Control Variables

	Age	Sex	Social Class
	Gamma	Gamma	Gamma
Limiting illness	.053*	.028	-.063*
IADL Scale	.444*	.383*	-.256*
ADL Scale	.508*	.299*	-.247*
Restricted Activity Days	.076	.166*	-.031

* significant at the .05 level

Table 84

Dependent Variables by Intervening Control Variables

	IADL	ADLS	Limiting Illness	Restricted Activity
	Gamma	Gamma	Gamma	Gamma
Home Help	.759*	.818*	.190*	.314*
District Nurse	.743*	.767*	.213*	.462*
GP Visit at Home	.655*	.736*	.175*	.740*
GP at Surgery	-.114	.036	.159*	.312*
Specialist	.392	.391*	.334*	.353
Outpatient Visit	.339*	.395*	.280*	.447*
Inpatient Visit	.423*	.463*	.181*	.502*

Table 85

Age by Home Help by ADL Difficulty

			Home Help Use		
			Not Used	Used	Total
No Difficulty	65-74	Count	1627	15	1642
		Row Percent	99.1%	.8%	100%
	75-84	Count	590	16	606
		Row Percent	97.4%	2.6%	100%
	85+	Count	91	8	99
		Row Percent	91.9%	8.1%	100%
	Total		2308	39	2347
Low Difficulty	65-74	Count	186	4	190
		Row Percent	97.9%	2.1%	100%
	75-84	Count	149	20	169
		Row Percent	88.2%	11.8%	100%
	85+	Count	37	7	44
		Row Percent	84.1%	15.9%	100%
High Difficulty	65-74	Count	223	38	261
		Row Percent	85.4%	14.6%	100%
	75-84	Count	214	74	288
		Row Percent	74.3%	25.7%	100%

85+	Count	104	57	161
	Row Percent	64.6%	35.4%	100%
Total		541	169	710

Gamma None=.579, Low=.607, High=.353

Chi Square Significance None=.000*, Low=.000*, High=.000*

Table 86

Age by District Nurse Use by ADL Difficulty

			District Nurse Use		
			Not Used	Used	Total
No Difficulty	65-74	Count	1628	14	1642
		Row Percent	99.1%	.9%	100%
	75-84	Count	587	19	606
		Row Percent	96.9%	3.1%	100%
	85+	Count	89	10	99
		Row Percent	89.9%	10.1%	100%
	Total		2304	43	2347
Low Difficulty	65-74	Count	183	7	190
		Row Percent	96.3%	3.7%	100%
	75-84	Count	154	15	169
		Row Percent	91.1%	8.9%	100%
	85+	Count	41	3	44
		Row Percent	93.2%	6.8%	100%
		Total	378	25	403
High Difficulty	65-74	Count	229	32	261
		Row Percent	79.5%	20.5%	100%
	75-84	Count	229	59	288
		Row Percent	79.5%	20.5%	100%

	85+	Count	116	44	160
		Row Percent	72.5%	27.5%	100%
	Total		574	135	709

Gamma None=.653, Low=.310, High=.306

Chi Square Significance None=.000*, Low=.124, High=.000*

Table 87

Age by Consultations with a GP at Home by ADL Difficulty

			Home Consultations		
			Not Used	Used	Total
No Difficulty	65-74	Count	1626	14	1640
		Row Percent	99.1%	.9%	100%
	75-84	Count	593	12	605
		Row Percent	98%	2%	100%
	85+	Count	95	4	99
		Row Percent	96%	4%	100%
	Total		2314	30	2344
Low Difficulty	65-74	Count	186	4	190
		Row Percent	97.9%	2.4%	100%
	75-84	Count	164	4	168
		Row Percent	97.6%	2.4%	100%
	85+	Count	40	4	44
		Row Percent	90.9%	9.1%	100%
	Total		390	12	402
High Difficulty	65-74	Count	229	32	261
		Row Percent	87.7%	12.3%	100%

	75-84	Count	258	29	287
		Row Percent	89.9%	10.1%	100%
	85+	Count	138	21	159
		Row Percent	86.8%	13.2%	100%
	Total		625	82	707

Gamma None=.450, Low=.374, High=.006

Chi Square Significance None-.00*, Low=.041*, High=.566

Table 88

Gender by Home Help by ADL Difficulty

			Home Help Use		
			Not Used	Used	Total
No Difficulty	Male	Count	1067	23	1090
		Row Percent	97.9%	2.1%	100%
	Female	Count	1241	16	1257
		Row Percent	98.7%	1.3%	100%
	Total		2308	39	2347
Low Difficulty	Male	Count	131	11	142
		Row Percent	92.3%	7.7%	100%
	Female	Count	241	20	261
		Row Percent	92.3%	7.7%	100%
	Total		372	31	403
High Difficulty	Male	Count	173	32	205
		Row Percent	84.4%	15.6%	100%
	Female	Count	368	137	505
		Row Percent	72.9%	27.1%	100%
	Total		541	169	710
Gamma- None	-.251	Gamma- Low	-.006	Gamma- High	.336
Chi Square Significance		.114			

Table 89

Gender by District Nurse Use by ADL Difficulty

			District Nurse Use		
			Not Used	Used	Total
No Difficulty	Male	Count	1073	17	1090
		Row Percent	98.4%	1.6%	100%
	Female	Count	1231	26	1257
		Row Percent	97.9%	2.1%	100%
	Total		2304	43	2347
Low Difficulty	Male	Count	136	6	142
		Row Percent	95.8%	4.2%	100%
	Female	Count	242	19	261
		Row Percent	92.7%	7.3%	100%
	Total		378	25	403
High Difficulty	Male	Count	167	38	205
		Row Percent	81.5%	18.5%	100%
	Female	Count	407	97	504
		Row Percent	80.8%	19.2%	100%
	Total		574	135	709
Gamma- None	.143	Gamma- Low	.280	Gamma- High	.023
Chi Square Significance	None=.359, Low=.225, High=.827				

Table 90

Gender by Consultations with a GP at Home by ADL Difficulty

			Home Consultations		
			Not Used	Used	Total
No Difficulty	Male	Count	1075	14	1089
		Row Percent	98.7%	1.3%	100%
	Female	Count	1239	16	1255
		Row Percent	98.7%	1.3%	100%
	Total		2314	30	2344
Low Difficulty	Male	Count	138	4	142
		Row Percent	97.2%	2.8%	100%
	Female	Count	252	8	260
		Row Percent	96.9%	3.1%	100%
	Total		390	12	402
High Difficulty	Male	Count	182	22	204
		Row Percent	89.2%	10.8%	100%
	Female	Count	443	60	503
		Row Percent	88.1%	11.9%	100%
	Total		625	82	707
Gamma- None	-.004	Gamma- Low	.045	Gamma- High	.057
Chi Square Significance	None=.982, Low=.884, High=.667				

Table 91

Social Class by Home Help by ADL Difficulty

			Home Help Use			
			Not Used	Used	Total	
No Difficulty	I, II, IIIM	Count	1080	20	1100	
		Row Percent	98.2%	1.8%	100%	
	IIIN, IV, V	Count	1176	19	1195	
		Row Percent	98.4%	1.6%	100%	
	Total		2256	39	2295	
Low Difficulty	I, II, IIIM	Count	209	18	227	
		Row Percent	92.1%	7.9%	100%	
	IIIN, IV, V	Count	149	13	162	
		Row Percent	92%	8%	100%	
		Total	358	31	389	
High Difficulty	I, II, IIIM	Count	309	104	413	
		Row Percent	74.8%	25.2%	100%	
	IIIN, IV, V	Count	188	56	244	
		Row Percent	77%	23%	100%	
	Total		497	160	657	
Gamma-None	-.068	Gamma-Low	.006	Gamma-	High	-.061
Chi Square Significance None=.673, Low=.973, High=.520						

Table 92

Social Class by District Nurse Use by ADL Difficulty

			District Nurse Use			
			Not Used	Used	Total	
No Difficulty	I, II, IIIM	Count	1082	18	1100	
		Row Percent	98.4%	1.6%	100%	
	IIIN, IV, V	Count	1173	22	1195	
		Row Percent	98.2%	1.8%	100%	
	Total		2255	40	2295	
Low Difficulty	I, II, IIIM	Count	212	15	227	
		Row Percent	93.4%	6.6%	100%	
	IIIN, IV, V	Count	154	8	162	
		Row Percent	95.1%	4.9%	100%	
		Total	366	23	389	
High Difficulty	I, II, IIIM	Count	334	79	413	
		Row Percent	80.9%	19.1%	100%	
	IIIN, IV, V	Count	201	43	244	
		Row Percent	82.4%	17.6%	100%	
	Total		535	122	657	
Gamma- None	.060	Gamma-Low	-.153	Gamma-	High	-.050
Chi Square Significance None=.708, Low=.491, High=.623						

Table 93

Social Class by Consultations with a GP at Home by ADL Difficulty

			Home Consultations			
			Not Used	Used	Total	
No Difficulty	I, II, IIIM	Count	1081	18	1099	
		Row Percent	98.4%	1.6%	100%	
	IIIN, IV, V	Count	1182	11	1193	
		Row Percent	99.1%	.9%	100%	
	Total		2263	29	2292	
Low Difficulty	I, II, IIIM	Count	218	99	227	
		Row Percent	96%	4%	100%	
	IIIN, IV, V	Count	158	3	161	
		Row Percent	98.1%	1.9%	100%	
		Total	376	12	388	
High Difficulty	I, II, IIIM	Count	364	49	413	
		Row Percent	88.1%	11.9%	100%	
	IIIN, IV, V	Count	215	27	242	
		Row Percent	88.8%	11.2%	100%	
	Total		579	76	655	
Gamma-None	-.283	Gamma-Low	-.370	Gamma-	High	-.035
Chi-Square Significance None=.126, Low=.239, High=.785						

CHAPTER 4

SUMMARY AND CONCLUSIONS

Variables from the General Household Survey, collected in 1994-1995 in the United Kingdom, were selected to match a model developed by Andersen and Newman (1972). Andersen has developed a model comprised of social factors that he believes will predict health care usage. These factors have been shown to be related to health care utilization in both the United Kingdom and the United States.

These factors are divided into three categories, predisposing, enabling, and illness factors. Variables from the general Household Survey were chosen for these measures. In the predisposing category variables that were selected were age, gender, marital status, social class, education, ethnicity, and country of birth. The enabling factors were source of income and visits from friends and relatives. Illness determinants were restricted activity days, if have a limiting long standing illness, a scale calculated from various measures of difficulty with activities of daily living (adls) and instrumental activities of daily living (iadls) to determine if these difficulties were present, and difficulty with eyesight. Health care utilization was represented by seeing a general practitioner at home, seeing a general practitioner at a surgery (clinic) or health center, consulting an NHS specialist, using home help services, using district nurse services, having an outpatient visit, and having an inpatient visit.

Table 94

Summary of Relationships between Independent and Dependent Variables

Independent Variables	Dependent Variables						
	Home Help	District Nursing	GP at Home	GP at Surgery	Specialist	Outpatient	Inpatient
Age	*	*	*	*			*
Sex	*	*	*				
Marital Status							
Education	*			*			
Social Class	*		*				*
Ethnicity							
Region of Country							
Income Source	*	*	*				
Visits from friends and relatives	*	*	*				*
ADL Scale	*	*	*		*	*	*

IADL Scale	*	*	*			*	*
Eyesight Difficulty	*	*					
Limiting Illness	*	*	*	*	*	*	*
Restricted Activity Days	*	*	*	*		*	*

Analysis of the relationships between the predisposing, enabling, and illness measures to the illness variables to the health care utilization measures showed many relationships. Among these, age, gender, social class, visits from friends and relatives, restricted activity, limiting illness, and difficulties with adls and iadls were generally associated with the use of health care. Some variables that were not associated in this research, but in previous research, such as education, country of birth, and ethnicity, lacked sufficient variability in this data. Most respondents to the General Household Survey used were white (98%) and English. The data on education was also poorly distributed for those who had little or no education.

Age was very strongly associated with seeing a general practitioner at home, using home help, and district nurse use. The older people were the more likely they were to have used this service. This was also true for inpatient visits, but the association was not as strong. The older people were the less likely it was that they had seen a general practitioner at a surgery (clinic) or health center.

Women were more likely to have seen a general practitioner at home, use district nurse services, and have home help. The use of these types of care was moderately associated with gender.

Social class is also associated with the same three types of utilization as gender, consultations with a general practitioner at home, use of district nurse services, and use of home help. People in lower social classes use more of these services. Social class and consultation with a general practitioner at home had the strongest association with social class of the three significant measures.

Education was associated with home help use, and consultations with a GP at surgery. Those with less education were more likely to use these services. Marital status was not associated with any type of health care usage. Ethnicity and country of birth were also not associated with any type of health care use. This was perhaps due to the lack of variety in the data on these variables.

Source of income, either public or private, was associated with home help use, district nurse use, consultations with a general practitioner at home, and outpatient stays. In all cases, utilization was significantly higher from those who received public funds. The other enabling variable, visits from friends and relatives was associated with home help use, district nurse use, consultations with a general practitioner at home, outpatient stays and inpatient stays. This association was that those who had fewer visits from friends and relatives used more of these services.

The level of disability, measured on the disability scale created of activities of daily living and instrumental activities of daily living, was associated with every types of health care use but consultations with a general practitioner at surgery. Those with disabilities in performing these activities of daily living used more service, and the association was especially strong for home help use, district nurse use, and consultations with a general practitioner at home.

Eyesight difficulty was associated with the use of home help, and district nursing. Those with greater problems with eyesight used these services more. Those who reported greater difficulty used more of these services. Long standing illness was associated with every type of health care utilization. Those whose illness was both

limiting and long standing used every type of service more. The association was strongest for consultation with a specialist, a measure that many variables were not associated with.

Restricted Activity days were associated with every measure of health care utilization except consolations with a specialist. The association was the strongest for consulting a general practitioner in the home, but all other measures showed a strong relationship between those who had the most restricted activity and use of health care services.

After these relationships had been tested to determine which factors were associated by which types of utilization, a second analysis was conducted. This analysis was done to determine if those using services did so because of their age, gender and social class solely or because they were indeed more ill. If health care services were equally distributed, one would expect age, sex, and class differences to be due to the health of the older person.

In this analysis age, gender, and social class were used as indicators of stratification based on age, sex, and class. In order to measure illness a scale with ADL difficulty measures was used. The only dependent variables that were correlated with the ADL disability index and the control variables were home help, district nurse, and consultations with a GP at surgery.

This was true for age and home help use. The association between the two, older people used more home help, is partially explained by difficulties with activities of daily living. Age and the use of general practitioner services in the home is also partially

explained by level of difficulty with adls, as is age and consultations with a general practitioner at surgery or health center, and age and inpatient stays. In these cases older age is not the sole determinant in the use of these services, but age and having difficulty with an activity of daily living gives more of an explanation. The same is true for age and seeing a general practitioner at a surgery age and inpatient stay. These variables are controlled for by difficulty with instrumental activities of daily living, meaning that the two variables together, age and iadl difficulty, give a more accurate understanding of use.

Gender and its association with some types of utilization are greatly explained through difficulties with activities of daily living and difficulties with activities of daily living. Gender and home help were associated in the first analysis, with women using more of these services than men, but this relationship completely disappears when difficulties with adls is controlled. The same relationship weakens significantly when the iadl measure is introduced, meaning that increased home help use is due to level of disability rather than gender. The associations between gender and district nurse use and gender and consultations with a general practitioner in the home also show a considerable drop when adl difficulty is introduced as a control. These findings show that these three services are allocated more on need, shown by increases illness level, than by gender alone.

Social class and home help use, and social class and district nurse use were controlled by difficulties with activities of daily living. When the illness factor was introduced, the relationship was reduced significantly. In the initial analyses, lower social classes were more likely to use health care services, but in these two cases services

are shown to be used by those who have a higher level of difficulty with their activity of daily living.

CONCLUSIONS

From its inception in 1948 to its present state, the National Health Service has pledged to offer care based on need and need alone. No other factor should have a stronger influence than need. Often called the architect of the NHS, Minister of health Aneurin Bevan is quoted as saying that, "Poverty must not be a disadvantage nor wealth an advantage in health care". Although this principle is held up as a hallmark of the institution research, such as the Black Report, indicates that the poor still experience barriers to accessing health and social services that they need.

This research serves to further this cause of finding inequalities in distribution of services in the National Health Service. Social factors have been shown to be associated with the use of these services, some of these social factors had more of an influence on usage than did the actual illness factors when they were controlled for. These factors may be a part of what the department of health should consider in its ongoing quest to save the National Health Service and make it equitable.

This research is also intended to test the Andersen and Newman model on data from the United Kingdom, where barriers to health care should theoretically not exist. When the model was developed in the United States one of the reasons for this was to move to a system where health care was more accessible for all. The enabling variables are crucial in analyzing health care utilization in the United States, where a source of income and insurance is needed to access health care. The purpose of this study was to

use the model in a health care system for all to determine if the social factors in the model are still associated with health care use.

My research found that use of health care services is differentially accessible by older people of different ages, sexes, and social classes. However, I found these differences to be substantially explained by poor health for those services that the NHS emphasizes for older people, i.e. community care. These services are home helps, district nurses, and consultations with GPs at home.

Limitations of the Study

In this study these variables, such as age, gender and social class are associated with health care use. Andersen and Newman's model does have a predictive power for health care utilization in both types of systems. The shortcoming of this analysis for testing the model is that the General Household Survey does not include a self assessed measure of health, which has consistently been shown to be most influential in the prediction of health care utilization.

Policy Implications

This summary reinforces that the governing body of the National Health Service recognizes these inequalities and is working towards making the National Health Service more equitable for all. Many believe that some of these equalities came out of the legislation from the Conservative party of Margaret Thatcher that was intended to save the NHS by implementing market forces (Baggot, 1998). It was from this reform that the pressure to use funds fewer funds to cover more services lead to this inequality that must be considered today.

The Thatcher years of Government and the rule of the Conservative Party changed the National Health Service forever. Most of the reforms of these years were aimed at making the National Health Service more businesslike. Lawmakers of this party gave little credence to the argument that health can be determined and affected by ones social environment. The conservative government held the conviction that the individual is responsible for their own health and that the National Health Service eliminates certain groups from not having access to health care. During these years, research continually showed that the National Health Service was plagued with inequity, but the administration held fast to the ideas of making the health service more businesslike.

When the labor party took control of the government, one of the major challenges was to work within the newly organized National Health Service and create change that would deal with these inequities. The Labor party believed that the one's social environment was a powerful determinant of health, showed by the party's commitment to social issues, such as poor housing and the environment. Reforms to the National Health Service in the 1990s have been directed towards the goal of actually making a system that is more equitable.

In the latest White Paper titled Saving Lines: Our Healthier Nation (1999), some of these points are highlighted in the following executive summary: "We want to: improve the health of everyone and the health of the worst off in particular. Good health is fundamental to all our lives. But too many people are ill for much of their lives die too young from preventable illness... To achieve better health for everyone and especially for the worst off we are: putting in more money: £21 billion for the NHS alone to help secure

a healthier population, tackling smoking as the single biggest preventable cause of poor health, integrating Government, and local government, work to improve health stressing health improvement as a key role for the NHS, pressing for high health standards for all, not just the privileged few.

In securing better health, we reject the old arguments of the past. We believe that: the social, economic and environmental factors tending towards poor health are potent. People can make individual decisions about their and their families' health which can make a difference. We want to see a new balance in which people, communities and Government works together in partnership to improve health. Our drive for better health is in line with a background of real improvement in health: people live longer and healthier lives life expectancy is now 80 for women and 75 for men many infectious diseases of the past - such as cholera, diphtheria and polio -have been brought under control death in childbirth is now rare.

Communities can tackle poor health, which springs too from a range of wider, community factors - including poverty, low wages, unemployment, poor education, sub-standard housing, crime and disorder and a polluted environment. Health inequality is widespread: the most disadvantaged have suffered most from poor health. The Government is addressing inequality with a range of initiatives on education, welfare-to-work, housing, neighborhoods, transport and the environment which will help improve health.

We want to see healthier people in a healthier country. People improving their own health supported by communities working through local organizations against a

backdrop of action by the Government. We want to see everyone take the opportunity of better health - now, and for the future. (The Executive Summary, Department of Health, 1999)"

The policy implications of the study support what the Labor Government is moving to accomplish. Changing the social environments as a means to create healthier populations, and also the challenge to provide need-centered care, is at the forefront of this mission. The government needs measures of how it is doing on these initiative, as well as information on where the shortcomings are. Once these are established, the tasks of making the health service work according to need to be accelerated.

The National Health Service is estimated to be the best know British establishment next to the Monarchy. While public opinion has always remained strong in favor of the service, an underlying problem of making an equitable service has existed. Throughout the entire five-decade life span of the service there have been numerous enquiries that have shown this goal of accomplishing equality to be far from a reality. The service suffered even further when the Thatcher administration attempted to make it more businesslike and, in the opinion of many, threw out the idea of equality in favor of free market.

Research is the only means that the government and the citizens have to quantify that these inequalities do exist. Without this type of research, the shortcomings of the service can only be anecdotal, which does not often inspire legislative change. To come closer to the goals at the outset of the service, the movement toward a comprehensive service, based on need and not ability to pay, research such as this must

provide those who are under served a voice. This voice will help legislators when they attempt to keep the fifty-year-old patient, known as the National Health Service, alive and well.

APPENDIX A: TABLES OF NON SIGNIFICANT FINDINGS

Dependent Variables: Home Help

Table A1

Marital Status by Home Help Usage in the Past Month

			If used Home Help in past month		
			Not Used	Used	Total
Marital Status	Married	Count	3215	241	3456
		Row Percent	93%	7%	100%
	Single	Count	20	1	21
		Row Percent	95.2%	4.8%	100%
		Total	3235	242	3477
Gamma	-.200				
Chi Square	.691				
Significance					

Table A2

Social Class by Home Help Usage in the Past Month

			If used Home Help in past month		
			Not Used	Used	Total
Social Class	V	Count	342	39	
		Row Percent	89.8%	10.2%	
	IV	Count	576	53	629
		Row Percent	91.6%	8.4%	100%
	IIN	Count	777	49	826
		Row Percent	94.1%	5.9%	100%
	IIM	Count	686	51	737
		Row Percent	93.1%	6.9%	100%
	II	Count	651	39	690
		Row Percent	94.3%	5.7%	100%
	I	Count	92	2	94
		Row Percent	97.9%	2.1%	100%
		Total	3124	233	3357
Gamma	-.172				
Chi-Square	.172				
Significance					

Table A3

Ethnic Origin by Home Help Usage in the Past Month

			Used Home Help in Last Month		
			Not Used	Used	Total
Ethnic Origin	White	Count	3189	240	3429
		Row Percent	93%	7%	100%
	Other	Count	28	1	29
		Row Percent	96.6%	.4%	100%
		Total	3217	241	3458
Gamma	-.356				
Chi Square	.445				
Significance					

Table A4

Country of Birth by Home Help Usage in the Past Month

			If used home help in past month		
			Not used	Used	Total
Country of Birth	UK	Count	3036	233	3269
		Row Percent	92.9%	7.1%	100%
	Non-UK	Count	106	6	112
		Row Percent	94.6%	5.4%	100%
		Total	3142	239	3381
Gamma	-151				
Chi Square	.472				
Significance					

Dependent Variable: District Nurse Use

Table A5

Marital Status by District Nurse Usage

			If used District Nurse in Last Month		
			Not Used	Used	Total
Marital Status	Married	Count	3252	203	3455
		Row Percent	93%	7%	100%
	Single	Count	19	2	21
		Row Percent	90.5%	9.5%	100%
		Total	3271	205	3476
Gamma	.255				
Chi Square	.479				
Significance					

Table A6

Education by District Nurse Usage in the Past Month

			If used District Nurse in Last Month		
			Not Used	Used	Total
Education	No Qualifications	Count	631	14	645
		Row Percent	97.8%	2.2%	100%
	Qualifications	Count	376	6	382
		Row Percent	98.4%	1.6%	100%
		Total	1007	20	1027
Gamma	-.163				
Chi Square Significance		.501			

Table A7

Social Class by District Nurse Usage in the Past Month

			If used District Nurse in Last Month		
			Not Used	Used	Total
Social Class	V	Count	351	30	381
		Row Percent	92.1%	7.9%	100%
	IV	Count	593	36	629
		Row Percent	94.3%	5.7%	100%
	IIN	Count	783	43	826
		Row Percent	94.8%	5.2%	100%
	IIM	Count	690	47	737
		Row Percent	93.6%	6.4%	100%
	II	Count	664	26	690
		Row Percent	96.2%	3.8%	100%
	I	Count	90	4	94
		Row Percent	95.7%	4.3%	100%
		Total	3171	186	3357
Gamma	-.146				
Chi-Square	.087				
Significance					

Table A8

Ethnic Origin by District Nurse Usage in the Past Month

			Used District Nurses in Past Month		
			Not Used	Used	Total
Ethnic Origin	White	Count	3227	201	3428
		Row Percent	94.1%	5.9%	100%
	Other	Count	26	3	29
		Row Percent	89.7%	10.3%	100%
		Total	3253	204	3457
Gamma	.299				
Chi Square	.308				
Significance					

Table A9

Country of Birth by District Nurse Usage in Past Month

			If used district nurse in past month		
			Not used	Used	Total
Country of Birth	UK	Count	3072	196	3268
		Row Percent	94%	6%	100%
	Non-UK	Count	107	5	112
		Row Percent	95.5%	4.5%	100%
		Total	3179	201	3380
Gamma	-154				
Chi Square	.500				
Significance					

Dependent Variable: GP at Home

Table A10

Marital Status by Consultations with an NHS GP at Home in Past Two Weeks

			If Consulted an NHS GP at home in the past two weeks		
			Not Consulted	Consulted	Total
Marital Status	Married	Count	3452	135	3587
		Row Percent	96.2%	3.8%	100%
	Single	Count	22	1	23
		Row Percent	95.7%	4.3%	100%
		Total	3474	136	3610
Gamma	.075				
Chi Square	.883				
Significance					

Table A11

Education by Consultations with an NHS GP at Home in the Past Two Weeks

			If Consulted an NHS GP at home in the past two weeks		
			Not Consulted	Consulted	Total
Education	No Qualifications	Count	636	13	649
		Row Percent	98%	2%	100%
	Qualifications	Count	381	7	388
		Row Percent	98.2%	1.8%	100%
		Total	1017	20	1037
Gamma	.-.053				
Chi Square Significance		.822			

Table A12

Ethnic Origin by Consultations with an NHS GP at Home in the Past Two Weeks

			If Consulted an NHS GP at home in the past two weeks		
			Not Consulted	Consulted	Total
Ethnic Origin	White	Count	3419	133	3552
		Row Percent	96.3%	3.7%	100%
	Other	Count	34	2	36
		Row Percent	94.4%	5.6%	100%
		Total	3453	135	3588
Gamma	.204				
Chi Square	.570				
Significance					

Table A13

Country of Birth by Consultations by an NHS GP at Home in the Past Two Weeks

			If Consulted an NHS GP at home in the past two weeks		
			Not Consulted	Consulted	Total
Country of Birth	UK	Count	3260	128	3388
		Row Percent	96.2%	3.8%	100%
	Non-UK	Count	110	3	113
		Row Percent	97.3%	2.7%	100%
		Total	3370	131	3501
Gamma	-180				
Chi Square	.536				
Significance					

Table A14

Eyesight Difficulty by Consultations with an NHS GP at Home in the Past Two Weeks

			If Consulted an NHS GP at home in the past two weeks		
			Not Consulted	Consulted	Total
Eyesight	Difficulty	Count	100	4	104
		Row Percent	96.2%	3.8%	100%
	No Difficulty	Count	3242	120	3362
		Row Percent	96.4%	3.6%	100%
		Total	3342	124	3466
Gamma	.039				
Chi Square	.881				
Significance					

Dependent Variable: GP at Surgery

Table A15

Gender by Consultations with a NHS GP at Surgery in the Past Two Weeks

			If Consulted an NHS GP at a surgery or health center in the past two weeks		
			Not Consulted	Consulted	Total
Gender	Male	Count	1299	198	1497
		Row Percent	86.8%	13.2%	100%
	Female	Count	1792	321	2113
		Row Percent	84.8%	15.2%	100%
		Total	3091	519	3610
Gamma	.081				
Chi Square	.097				
Significance					

Table A16

Marital Status by Consultations with an NHS GP at Surgery in the Past Two Weeks

			If Consulted an NHS GP at a surgery or health center in the past two weeks		
			Not Consulted	Consulted	Total
Marital Status	Married	Count	3072	515	3587
		Row Percent	85.6%	14.4%	100%
	Single	Count	19	4	23
		Row Percent	82.6%	17.4%	100%
		Total	3091	519	3610
Gamma	.113				
Chi Square	.679				
Significance					

Table A17

Social Class by Consultations with an NHS GP at Surgery in the Past Two Weeks

			If Consulted an NHS GP at a surgery or health center in the past two weeks		
			Not Consulted	Consulted	Total
Social Class	V	Count	342	56	
		Row Percent	85.9%	14.1%	
	IV	Count	554	103	657
		Row Percent	84.3%	15.7%	100%
	IIN	Count	715	127	842
		Row Percent	84.9%	15.1%	100%
	IIM	Count	680	91	771
		Row Percent	88.2%	11.8%	100%
	II	Count	600	111	711
		Row Percent	84.4%	15.6%	100%
	I	Count	80	16	96
		Row Percent	83.3%	16.7%	100%
		Total	2971	504	3475
Gamma	.029				
Chi-Square	.250				
Significance					

Table A18

Ethnic Origin by Consultation with an NHS GP at Surgery in the Past Two Weeks

			If Consulted an NHS GP at a surgery or health center in the past two weeks		
			Not Consulted	Consulted	Total
Ethnic Origin	White	Count	3042	510	3552
		Row Percent	85.6%	14.4%	100%
	Other	Count	31	5	36
		Row Percent	86.1%	13.9%	100%
		Total	3073	515	3588
Gamma	-.019				
Chi Square	.936				
Significance					

Table A19

Country of Birth by Consultations with an NHS GP at Surgery in the Past Two Weeks

			If Consulted an NHS GP at a surgery/ health center in the past two weeks		
			Not Consulted	Consulted	Total
Country of Birth	UK	Count	2905	483	3388
		Row Percent	85.7%	14.3%	100%
	Non-UK	Count	95	18	113
		Row Percent	84.1%	15.9%	100%
		Total	3000	501	3501
Gamma	.065				
Chi Square	.617				
Significance					

Table A20

Visits from Friends or Relatives by Consultation with an NHS GP at Surgery in the Past Two Weeks

			If Consulted an NHS GP at a surgery/ health centre in the past two weeks		
			Not Consulted	Consulted	Total
Visits from Friends or Relatives	Not in the last month	Count	804	115	919
		Row Percentage	87.5%	12.5%	100%
	Last Month	Count	581	104	685
		Row Percentage	84.8%	15.2%	100%
	2-3 Times per week	Count	1188	216	1404
		Row Percentage	84.6%	15.4%	100%
	Daily	Count	391	67	458
		Row Percentage	85.4%	14.6%	100%
		Total	2964	502	3466
Gamma	.055				
Chi-Square Significance		.253			

Table A21

Income by Consultations by an NHS GP at Surgery in the Past Two Weeks

			If Consulted an NHS GP at a surgery/ health center in the past two weeks		
			Not Consulted	Consulted	Total
Income	State Benefits	Count	1455	235	1690
		Row Percent	86.1%	13.9%	100%
	Private Benefits	Count	1460	257	1717
		Row Percent	85%	15%	100%
		Total	2915	492	3407
Gamma	.377				
Chi Square	.378				
Significance					

Table A22

Consultations with a GP at surgery and ADLS

		ADL Difficulty			
		None	Low	High	Total
Not Used	Count	2014	330	607	2951
	Row Percent	68.2%	11.2%	20.6%	100%
Used	Count	330	72	100	502
	Row Percent	65.7%	14.3%	19.9%	100%
	Total	2344	402	707	3453
Gamma	.036				
Chi Square		.125			
Significance					

Table A23

Eyesight by Consultations with an NHS GP at Surgery in the Past Two Weeks

			If Consulted an NHS GP at a surgery/ health center in the past two weeks		
			Not Consulted	Consulted	Total
Eyesight	Difficulties	Count	93	11	104
		Row Percent	89.4%	10.6%	100%
	No Difficulty	Count	2870	492	3362
		Row Percent	85.4%	14.6%	100%
		Total	2963	503	3466
Gamma	-.183				
Chi Square	.247				
Significance					

Dependent Variable: NHS Specialist

Table A24

Age by Consultations with a NHS Specialist in the Past Two Weeks

			If Consulted an NHS specialist in the past two weeks		
			Not Consulted	Consulted	Total
Age	65 to 74	Count	2160	12	2172
		Row Percent	99.4%	.6%	100%
	75 to 84	Count	1102	5	1107
		Row Percent	99.5%	.5%	100%
	85+	Count	328	3	331
		Row Percent	99.1%	.9%	100%
		Total	3590	20	3610
Gamma	.045				
Chi Square	.620				
Significance					

Table A25

Gender by Consultations with a NHS Specialist in the Past Two Weeks

			If Consulted an NHS specialist in the past two weeks		
			Not Consulted	Consulted	Total
Gender	Male	Count	1490	7	1497
		Row Percent	99.5%	.5%	100%
	Female	Count	2100	13	2113
		Row Percent	99.4%	.6%	100%
		Total	3590	20	3610
Gamma	.137				
Chi Square	.556				
Significance					

Table A26

Marital Status by Consultations with an NHS Specialist in the Past Two Weeks

			If Consulted an NHS specialist in the past two weeks		
			Not Consulted	Consulted	Total
Marital Status	Married	Count	3567	20	3587
		Row Percent	99.4%	.6%	100%
	Single	Count	23	0	23
		Row Percent	100%	0%	100%
		Total	3590	20	3610
Gamma	-1.00				
Chi Square	.720				
Significance					

Table A27

Education by Consultations with an NHS Specialist in the Past Two Weeks

			If Consulted an NHS specialist in the past two weeks		
			Not Consulted	Consulted	Total
Education	No Qualifications	Count	646	3	649
		Row Percent	99.5%	.5%	100%
	Qualifications	Count	385	3	388
		Row Percent	99.2%	.8%	100%
		Total	1031	6	1037
Gamma	.253				
Chi Square Significance		.523			

Table A28

Social Class by Consultations with a NHS Specialist in the Past Two Weeks

			If Consulted an NHS specialist in the past two weeks		
			Not Consulted	Consulted	Total
Social Class	V	Count	395	3	398
		Row Percent	99.2%	.8%	100%
	IV	Count	654	3	657
		Row Percent	99.5%	.5%	100%
	IIN	Count	836	6	842
		Row Percent	99.3%	.7%	100%
	IIM	Count	768	3	771
		Row Percent	99.6%	.4%	100%
	II	Count	707	4	711
		Row Percent	99.4%	.6%	100%
	I	Count	95	1	96
		Row Percent	99%	1%	100%
		Total	3455	20	3475
Gamma	.049				
Chi-Square	.914				
Significance					

Table A29

Ethnic Origin by Consultations with an NHS Specialist in the Past Two Weeks

			If Consulted an NHS specialist in the past two weeks		
			Not Consulted	Consulted	Total
Ethnic Origin	White	Count	3532	20	3552
		Row Percent	99.4%	.6%	100%
	Other	Count	36	0	36
		Row Percent	100%	0%	100%
		Total	3568	20	3588
Gamma	-1.00				
Chi Square	.652				
Significance					

Table A30

Country of Birth by Consultations with an NHS Specialist in the Past Two Weeks

			If Consulted an NHS specialist in the past two weeks		
			Not Consulted	Consulted	Total
Country of Birth	UK	Count	3370	18	3388
		Row Percent	99.5%	.5%	100%
	Non-UK	Count	113	0	113
		Row Percent	100%	0%	100%
		Total	3483	18	3501
Gamma	-1.00				
Chi Square	.437				
Significance					

Table A31

Visits from Friends or Relatives by Consultations with an NHS Specialist in the Past Two Weeks

			If Consulted an NHS specialist in the past two weeks		
			Not Consulted	Consulted	Total
Visits from Friends or Relatives	Not in the past month	Count	912	7	919
		Row Percentage	99.2%	.8%	100%
	Last Month	Count	682	3	685
		Row Percentage	99.6%	.4%	100%
	2 to3 times a week	Count	1398	6	1404
		Row Percentage	99.6%	.4%	100%
	Daily	Count	455	3	458
		Row Percentage	99.3%	.7%	100%
		Total	3447	19	3466
Gamma	.601				
Chi-Square Significance		.707			

Table A32

Income by Consultation with a NHS Specialist in the Past Two Weeks

			If Consulted an NHS specialist in the past two weeks		
			Not Consulted	Consulted	Total
Income	State Benefits	Count	1677	13	1690
		Row Percent	99.2%	.8%	100%
	Private Benefits	Count	1711	6	1717
		Row Percent	99.7%	.3%	100%
		Total	3388	19	3407
Gamma	-.377				
Chi Square	.100				
Significance					

Table A33

Restricted Activity Days by Consultation with an NHS Specialist in the Past Two Weeks

			If Consulted an NHS specialist in the past two weeks		
			Not Consulted	Consulted	Total
Restricted Activity Days	None	Count	2849	13	2862
		Row Percent	99.5%	.5%	100%
	1-13	Count	293	3	296
		Row Percent	99%	1%	100%
	14+	Count	440	4	444
		Row Percent	99.1%	.9%	100%
		Total	3582	20	3602
Gamma	.321				
Chi Square Significance		.270			

Table A34

Eyesight Difficulty by Consultations with an NHS Specialist in the Past Two Weeks

			If Consulted an NHS specialist in the past two weeks		
			Not Consulted	Consulted	Total
Eyesight	Difficulty	Count	103	1	104
		Row Percent	99%	1%	100%
	No Difficulty	Count	3344	18	3362
		Row Percent	99.5%	.5%	100%
		Total	3447	19	3466
Gamma	.287				
Chi Square	.562				
Significance					

Dependent Variable: Outpatient Visits

Table A35

Age by Number of Outpatient Visits

	Number of Outpatient Visits					
			None	One to Two	Three or More	Total
Age	65 to 74	Count	1700	356	116	2172
		Row Percent	78.3%	16.4%	5.3%	100%
	75 to 84	Count	849	200	59	1108
		Row Percent	76.6%	18.1%	5.3%	100%
	85+	Count	270	52	11	333
		Row Percent	81.1%	15.6%	3.3%	100%
		Total	2819	608	186	3613
Gamma	-.002					
Chi Square	.326					
Significance						

Table A36

Gender By Outpatient Visits

	Number of Outpatient Visits					
			None	One or two	Three or more	Total
Gender	Male	Count	1169	252	76	1497
		Row Percent	78.1%	16.8%	5.1%	100%
	Female	Count	1650	356	110	2116
		Row Percent	78%	16.8%	5.2%	100%
		Total	2819	608	186	3613
Gamma	.004					
Chi Square	.987					
Significance						

Table A37

Marital Status by Number of Outpatient Visits

			Number of Outpatient Visits			
			None	One or two	Three or more	Total
Marital Status	Married	Count	2801	604	185	3590
		Row Percent	78%	16.8%	5.2%	100%
	Single	Count	18	4	1	23
		Row Percent	78.3%	17.4%	4.3%	100%
		Total	2819	608	186	3613
Gamma	-.011					
Chi Square	.983					
Significance						

Table A38

Education by Number of Outpatient Visits

			Number of Outpatient Visits			
			None	One or two	Three or more	Total
Education	No Qualifications	Count	509	111	30	650
		Row Percent	78.3%	17.1%	4.6%	100%
	Qualifications	Count	295	71	22	388
		Row Percent	76%	18.3%	5.7%	100%
		Total	804	182	52	1038
Gamma	.065					
Chi Square Significance		.635				

Table A39

Social Class by Outpatient Visits

			Number of Outpatient Visits			
			None	One or two	Three or more	Total
Social Class	V	Count	315	62	19	396
		Row Percent	79.5%	15.7%	4.8%	100%
	IV	Count	514	109	35	658
		Row Percent	78.1%	16.6%	5.3%	100%
	IIN	Count	645	150	47	842
		Row Percent	76.6%	17.8%	5.6%	100%
	IIM	Count	580	140	51	771
		Row Percent	75.2%	18.2%	6.6%	100%
	II	Count	569	117	28	714
		Row Percent	79.7%	16.4%	3.9%	100%
	I	Count	84	12	0	96
		Row Percent	87.5%	12.5%	0%	100%
		Total	2707	590	180	3477
Gamma	-.028					
Chi-Square	.105					
Significance						

Table A40

Ethnic Origin by Outpatient Visits

			Number of Outpatient Visits			
			None	One to Two	Three or More	Total
Ethnic Origin	White	Count	2771	600	184	3555
		Row Percent	77.9%	16.9%	5.2%	100%
	Other	Count	31	3	2	36
		Row Percent	86.1%	8.3%	5.6%	100%
		Total				
Gamma	-.246					
Chi Square	.394					
Significance						

Table A41

Country of Birth by Number of Outpatient Visits

			Number of Outpatient Visits			
			None	One to Two	Three or more	Total
Country of Birth	UK	Count	2642	573	175	3390
		Row Percent	77.9%	16.9%	5.2%	100%
	Non-UK	Count	88	19	7	114
		Row Percent	77.2%	16.7%	6.1%	100%
		Total	2730	592	182	3504
Gamma	.025					
Chi Square	.898					
Significance						

Table A42

Eyesight Difficulty by Number of Nights in the Hospital

			Number of nights in the Hospital			
			None	One to Seven	Eight or More	Total
Eyesight	Difficulty	Count	91	4	10	105
		Row Percent	86.7%	3.8%	9.5%	100%
	No Difficulty	Count	2903	244	220	3367
		Row Percent	86.2%	7.2%	6.5%	100%
		Total	2994	248	230	3472
Gamma	.430					
Chi Square	.295					
Significance						

Dependent Variable: Nights in the Hospital

Table A43

Gender by Number of Nights in the Hospital

			Number of Nights in the Hospital			
			None	One to Seven	More than Eight	Total
Gender	Male	Count	1283	122	100	1505
		Row Percent	85.2%	8.1%	6.6%	100%
	Female	Count	1824	141	159	2124
		Row Percent	85.9%	6.6%	7.5%	100%
		Total	3107	263	259	3629
Gamma	-.018					
Chi Square	.171					
Significance						

Table A44

Marital Status by Number of Nights in the Hospital

			Number of Nights in the Hospital			
			None	One to Seven	More than Eight	Total
Marital Status	Married	Count	3085	262	259	3606
		Row Percent	85.6%	7.3%	7.2%	100%
	Single	Count	22	1	0	23
		Row Percent	95.7%	4.3%	0%	100%
		Total	3107	263	259	3629
Gamma	-.583					
Chi Square	.334					
Significance						

Table A45

Education by Number of Nights in the Hospital

			Number of Nights in the Hospital			
			None	1 to 7	More than 8	Total
Education	No Qualifications	Count	578	36	37	651
		Row Percent	88.8%	5.5%	5.7%	100%
	Qualifications	Count	343	29	16	388
		Row Percent	88.4%	7.5%	4.1%	100%
		Total	921	65	53	1039
Gamma	.009					
Chi Square Significance		.268				

Table A46

Ethnic Origin by Number of Nights in the Hospital

			Number of Nights in the Hospital			
			None	One to Seven	Eight or more	Total
Ethnic Origin	White	Count	3058	257	256	3571
		Row Percent	85.6%	7.2%	7.2%	100%
	Other	Count	28	5	3	36
		Row Percent	77.8%	13.9%	8.3%	100%
		Total	3086	262	259	3607
Gamma	.235					
Chi Square	.283					
Significance						

Table A47

Country of Birth by Nights in the Hospital

			Number of nights in the Hospital			
			None	One to Seven	Eight or More	Total
Country of Birth	UK	Count	2642	247	247	3406
		Row Percent	77.9%	16.9%	5.2%	100%
	Non-UK	Count	88	19	7	114
		Row Percent	77.2%	16.7%	6.1%	100%
		Total	2730	592	182	3504
Gamma	-.018					
Chi Square	.990					
Significance						

Table A48

Income by Nights in the Hospital

			Number of nights in the Hospital			
			None	One to Seven	Eight or More	Total
Income	State Benefits	Count	1463	115	115	1693
		Row Percent	86.4%	6.8%	6.8%	100%
	Private Benefits	Count	1482	126	112	1720
		Row Percent	86.2%	7.3%	6.5%	100%
		Total	2945	241	227	3413
Gamma	.008					
Chi Square	.798					
Significance						

Table A49

Eyesight Difficulty by Number of Outpatient Visits

			Number of Outpatient Visits			
			None	One to Two	Three or more	Total
Eyesight	Difficulty	Count	89	15	1	105
		Row Percent	84.8%	14.3%	1%	100%
	No Difficulty	Count	2620	569	175	3364
		Row Percent	77.9%	16.9%	5.2%	100%
		Total	2709	584	176	3469
Gamma	.000					
Chi Square	.216					
Significance						

Independent Variables by Control Variables

Table A50

Age by Limiting Long Standing Illness

		Long standing Illness			
		None	Non-limiting Illness	Limiting Illness	Total
65-74	Count	948	841	383	2172
	Row Percent	43.6%	38.7%	17.6%	100%
75-84	Count	406	509	194	1109
	Row percent	36.6%	45.9%	17.5%	100%
85+	Count	126	176	31	333
	Row Percent	37.8%	52.9%	9.3%	100%
	Total	1480	1526	608	3614
Gamma	.053				
Chi Square Significance		.000*			

Table A51

Age by Restricted Activity

		Restricted Activity		
		None	Some	Total
65-74	Count	1749	422	2171
	Row Percent	80.6%	19.4%	100%
75-84	Count	859	246	1105
	Row Percent	77.7%	22.3%	100%
85+	Count	258	74	332
	Row Percent	77.7%	22.3%	100%
	Total	2866	742	3608
Gamma	.076			
Chi Square Significance		.120		

Table A52

Age by ADL Scale

		Difficulty with ADLS			
		None	Low	High	Total
65-74	Count	1642	190	261	2093
	Row Percent	78.5%	9.1%	12.5%	100%
75-84	Count	606	169	288	1063
	Row Percent	57%	15.9%	27.1%	100%
85+	Count	99	44	161	304
	Row Percent	32.6%	14.5%	53%	100%
	Total	2347	403	710	3460
Gamma	.508				
Chi Square Significance		.000*			

Table A53

Age by IADL Scale

		Difficulty with IADLS			
		None	Low	High	Total
65-74	Count	1837	161	100	2098
	Row Percent	87.6%	7.7%	4.8%	100%
75-84	Count	826	135	104	1065
	Row Percent	77.6%	12.7%	9.8%	100%
85+	Count	165	66	72	303
	Row Percent	54.5%	21.8%	23.8%	100%
	Total	2828	362	276	3466
Gamma	.444				
Chi Square Significance		.000*			

Table A54

Gender by Limiting Long Standing Illness

		Long standing Illness			
		None	Non-limiting Illness	Limiting Illness	Total
Male	Count	634	609	255	1498
	Row Percent	42.3%	40.7%	17%	100%
Female	Count	846	917	353	2116
	Row percent	40%	43.3%	16.7%	100%
	Total	1480	1526	608	3614
Gamma	.028				
Chi Square Significance		.255			

Table A55

Gender by Restricted Activity

		Restricted Activity		
		None	Some	Total
Males	Count	1236	261	1497
	Row Percent	86.2%	17.4%	100%
Females	Count	1630	481	2111
	Row Percent	77.2%	22.8%	100%
	Total	2866	742	3608
Gamma	.166			
Chi Square Significance		.000*		

Table A56

Gender by ADL Scale

		Difficulty with ADLS			
		None	Low	High	Total
Males	Count	1090	142	205	1437
	Row Percent	75.9%	9.9%	14.3%	100%
Females	Count	1257	261	505	2023
	Row Percent	62.1%	12.9%	25%	100%
	Total	2347	403	710	3460
Gamma	.299				
Chi Square Significance		.000*			

Table A57

Gender by IADL Scale

		Difficulty with IADLS			
		None	Low	High	Total
Males	Count	1272	92	73	1437
	Row Percent	88.5%	6.4%	5.1%	100%
Females	Count	1556	270	203	2029
	Row Percent	76.7%	13.3%	10%	100%
	Total	2828	362	276	3466
Gamma	.383				
Chi Square Significance		.000*			

Table A58

Social Class by Limiting Long Standing Illness

		Long standing Illness			
		None	Non-limiting Illness	Limiting Illness	Total
V-IIIN	Count	701	826	299	1826
	Row Percent	38.4%	45.2%	16.4%	100%
IIIM-I	Count	732	623	297	1652
	Row percent	44.3%	37.7%	18%	100%
	Total	1433	1443	596	3478
Gamma	-.063				
Chi Square Significance		.000*			

Table A59

Social Class by Restricted Activity

		Restricted Activity		
		None	Some	Total
V-IIIN	Count	1441	380	1821
	Row Percent	79.1%	20.9%	100%
IIIM-I	Count	1323	328	1651
	Row Percent	80.1%	19.9%	100%
	Total	2764	708	3472
Gamma	-.031			
Chi Square Significance		.465		

Table A60

Social Class by ADL Scale

		Difficulty with ADLS			
		None	Low	High	Total
V-IIIN	Count	1100	227	413	1740
	Row Percent	63.2%	13%	23.7%	100%
IIIM-I	Count	1195	162	244	1601
	Row Percent	74.6%	10.1%	15.2%	100%
	Total	2295	389	657	3341
Gamma	-.247				
Chi Square Significance		.000*			

Table A61

Social Class by IADL Scale

		Difficulty with IADLS			
		None	Low	High	Total
V-IIIN	Count	1373	202	167	1742
	Row Percent	78.8%	11.6%	9.6%	100%
IIM-I	Count	1387	139	80	1606
	Row Percent	86.4%	8.7%	5.0%	100%
	Total	2760	341	247	3348
Gamma	-.256				
Chi Square Significance		.000*			

Dependent Variables by Control Variables

Table A62

Home Help and Limiting Illness

		Limiting Illness			
		None	Illness but not limiting	Limiting Illness	Total
Not Used	Count	1348	1268	581	3233
	Row Percent	42.8%	39.2%	18%	100%
Used	Count	52	171	19	242
	Row Percent	21.5%	70.7%	7.9%	100%
	Total	1436	1439	600	3475
Gamma	.190				
Chi Square Significance		.000*			

Table A63

Home Help and Restricted Activity

		Restricted Activity		
		None	Some	Total
Not Used	Count	2611	616	3227
	Row Percent	80.9%	19.1%	100%
Used	Count	166	75	241
	Row Percent	68.9%	31.1%	100%
	Total	2777	691	3468
Gamma	.314			
Chi Square Significance		.000*		

Table A64

Home Help and ADLS

		ADL Difficulty			
		None	Low	High	Total
Not Used	Count	2308	372	541	3221
	Row Percent	71.7%	11.5%	16.8%	100%
Used	Count	39	31	169	239
	Row Percent	16.3%	13%	70.7%	100%
	Total	2347	403	710	3460
Gamma	.818				
Chi Square Significance		.000*			

Table A65

Home Help and IADLS

		IADL Difficulty			
		None	Low	High	Total
Not Used	Count	2733	302	190	3225
	Row Percent	84.7%	9.4%	5.9%	100%
Used	Count	95	60	86	241
	Row Percent	39.4%	24.9%	35.7%	100%
	Total	2828	362	276	3466
Gamma	.759				
Chi Square Significance		.000*			

Table A66

District Nursing and Limiting Illness

		Limiting Illness			
		None	Illness but not limiting	Limiting Illness	Total
Not Used	Count	1395	1291	583	3269
	Row Percent	42.7%	39.5%	17.8%	100%
Used	Count	41	147	17	205
	Row Percent	20%	71.7%	8.3%	100%
	Total	1436	1438	600	3474
Gamma	.213				
Chi Square Significance		.000*			

Table A67

District nursing and Restricted Activity

		Restricted Activity		
		None	Some	Total
Not Used	Count	2650	612	3262
	Row Percent	81.2%	18.8%	100%
Used	Count	126	79	205
	Row Percent	61.5%	38.5%	100%
	Total	2776	691	3467
Gamma	.462			
Chi Square Significance		.000*		

Table A68

District Nursing and ADLS

		ADL Difficulty			
		None	Low	High	Total
Not Used	Count	2304	378	574	3256
	Row Percent	70.8%	11.6%	17.6%	100%
Used	Count	43	25	135	203
	Row Percent	21.2%	12.3%	66.5%	100%
	Total	2347	403	709	3459
Gamma	.767				
Chi Square Significance		.000*			

Table A69

District Nursing and IADLS

		IADL Difficulty			
		None	Low	High	Total
Not Used	Count	2743	322	196	3261
	Row Percent	84.1%	9.9%	6.0%	100%
Used	Count	85	40	79	204
	Row Percent	41.7%	19.6%	38.7%	100%
	Total	2828	362	275	3465
Gamma	.743				
Chi Square Significance		.000*			

Table A70

Consultations with a GP at home and Limiting Illness

		Limiting Illness			
		None	Illness but not limiting	Limiting Illness	Total
Not Used	Count	1449	1425	596	3470
	Row Percent	41.8%	41.1%	17.2%	100%
Used	Count	30	96	10	136
	Row Percent	22.1%	70.6%	7.4%	100%
	Total	1479	1521	606	3606
Gamma	.175				
Chi Square Significance		.000*			

Table A71

Consultations with a GP at home and Restricted Activity

		Restricted Activity		
		None	Some	Total
Not Used	Count	2809	657	3466
	Row	81%	19%	100%
	Percent			
Used	Count	53	83	136
	Row	39%	61%	100%
	Percent			
	Total	2862	740	3602
Gamma	.740			
Chi Square		.000*		
Significance				

Table A72

Consultations with a GP at home and ADLS

		ADL Difficulty			
		None	Low	High	Total
Not Used	Count	2314	390	625	3329
	Row Percent	69.5%	11.7%	18.8%	100%
Used	Count	30	12	82	124
	Row Percent	24.2%	9.7%	66.1%	100%
	Total	2344	402	707	3453
Gamma	.736				
Chi Square Significance		.000*			

Table A73

Consultations with a GP at home and IADLS

		IADL Difficulty			
		None	Low	High	Total
Not Used	Count	2763	338	234	3335
	Row Percent	82.8%	10.1%	7%	100%
Used	Count	60	23	41	124
	Row Percent	48.4%	18.5%	33.1%	100%
	Total	2823	361	275	3459
Gamma	.655				
Chi Square Significance		.000*			

Table A74

Consultations with a GP at surgery and Limiting Illness

		Limiting Illness			
		None	Illness but not limiting	Limiting Illness	Total
Not Used	Count	1323	1240	524	3087
	Row Percent	42.9%	40.2%	17%	100%
Used	Count	156	281	82	519
	Row Percent	30.1%	54.1%	15.8%	100%
	Total	1479	1521	606	3606
Gamma	.159				
Chi Square Significance		.000*			

Table A75

Consultations with a GP at surgery and Restricted Activity

		Restricted Activity		
		None	Some	Total
Not Used	Count	2503	581	3084
	Row Percent	81.2%	18.8%	100%
Used	Count	359	159	518
	Row Percent	69.3%	30.7%	100%
	Total	2862	740	3602
Gamma	.312			
Chi Square Significance		.000*		

Table A76

Consultations with a GP at surgery and ADLS

		ADL Difficulty			
		None	Low	High	Total
Not Used	Count	2014	330	607	2951
	Row Percent	68.2%	11.2%	20.6%	100%
Used	Count	330	72	100	502
	Row Percent	65.7%	14.3%	19.9%	100%
	Total	2344	402	707	3453
Gamma	.036				
Chi Square		.125			
Significance					

Table A77

Consultations with a GP at surgery and IADLS

		IADL Difficulty			
		None	Low	High	Total
Not Used	Count	2399	315	243	2957
	Row Percent	81.1%	10.7%	8.2%	100%
Used	Count	424	46	32	502
	Row Percent	84.5%	9.2%	6.4%	100%
	Total	2823	361	275	3459
Gamma	-.114				
Chi Square		.189			
Significance					

Table A78

Consultations with a specialist and Limiting Illness

		Limiting Illness			
		None	Illness but not limiting	Limiting Illness	Total
Not Used	Count	1476	1507	603	3586
	Row Percent	41.2%	42%	16.8%	100%
Used	Count	3	14	3	20
	Row Percent	15%	70%	15%	100%
	Total	1479	1521	606	3606
Gamma	.334				
Chi Square Significance		.029*			

Table A79

Consultations with a specialist and Restricted Activity

		Restricted Activity		
		None	Some	Total
Not Used	Count	2849	733	3582
	Row Percent	79.5%	20.5%	100%
Used	Count	13	7	20
	Row Percent	65%	35%	100%
	Total	2862	740	3602
Gamma	.353			
Chi Square		.109		
Significance				

Table A80

Consultations with a specialist and ADLS

		ADL Difficulty			
		None	Low	High	Total
Not Used	Count	2336	397	701	3434
	Row Percent	68%	11.6%	20.4%	100%
Used	Count	8	5	6	19
	Row Percent	42.1%	26.3%	31.6%	100%
	Total	2344	402	707	3453
Gamma	.391				
Chi Square Significance		.038*			

Table A81

Consultations with a specialist and IADLS

		IADL Difficulty			
		None	Low	High	Total
Not Used	Count	2811	356	273	3440
	Row Percent	81.7%	10.3%	7.9%	100%
Used	Count	12	5	2	19
	Row Percent	63.2%	26.3%	10.5%	100%
	Total	2823	361	275	3459
Gamma	.392				
Chi Square		.062			
Significance					

Table A82

Outpatient Visits and Limiting Illness

		Limiting Illness			
		None	Illness but not limiting	Limiting Illness	Total
Not Used	Count	1300	1026	490	2816
	Row Percent	46.2%	36.4%	17.4%	100%
Used	Count	180	496	117	793
	Row Percent	22.7%	62.5%	14.8%	100%
	Total	1480	1522	607	3609
Gamma	.280				
Chi Square Significance		.000*			

Table A83

Outpatient Visits and Restricted Activity

		Restricted Activity		
		None	Some	Total
Not Used	Count	2344	469	2813
	Row Percent	83.3%	16.7%	100%
Used	Count	519	272	791
	Row Percent	65.6%	34.4%	100%
	Total	2863	741	3604
Gamma	.447			
Chi Square Significance		.000*		

Table A84

Outpatient Visits and ADLS

		ADL Difficulty			
		None	Low	High	Total
Not Used	Count	1952	301	447	2700
	Row Percent	72.3%	11.1%	16.6%	100%
Used	Count	394	102	260	756
	Row Percent	52.1%	13.5%	34.4%	100%
	Total	2346	403	707	3456
Gamma	.395				
Chi Square Significance		.000*			

Table A85

Outpatient Visits and IADLS

		IADL Difficulty			
		None	Low	High	Total
Not Used	Count	2284	244	179	2707
	Row Percent	84.4%	9%	6.6%	100%
Used	Count	543	117	95	755
	Row Percent	71.9%	15.5%	12.6%	100%
	Total	2827	361	274	3462
Gamma	.339				
Chi Square Significance		.000*			

Table A86

Inpatient Visits and Limiting Illness

		Limiting Illness			
		None	Illness but not limiting	Limiting Illness	Total
Not Used	Count	1343	1205	543	3091
	Row Percent	43.4%	39%	17.6%	100%
Used	Count	137	320	65	522
	Row Percent	26.2%	61.3%	12.5%	100%
	Total	1480	1525	608	3613
Gamma	.181				
Chi Square Significance		.000*			

Table A87

Inpatient Visits and Restricted Activity

		Restricted Activity		
		None	Some	Total
Not Used	Count	2547	539	3086
	Row Percent	82.5%	17.5%	100%
Used	Count	318	203	521
	Row Percent	61%	39%	100%
	Total	2865	742	3607
Gamma	.502			
Chi Square Significance		.000*		

Table A88

Inpatient Visits and ADLS

		ADL Difficulty			
		None	Low	High	Total
Not Used	Count	2129	330	525	2984
	Row Percent	71.3%	11.1%	17.6%	100%
Used	Count	217	73	185	475
	Row Percent	45.7%	15.4%	38.9%	100%
	Total	2346	403	710	3459
Gamma	.463				
Chi Square Significance		.000*			

Table A89

Inpatient Visits and IADLS

		IADL Difficulty			
		None	Low	High	Total
Not Used	Count	2506	287	194	2987
	Row Percent	83.9%	9.6%	6.5%	100%
Used	Count	321	75	82	478
	Row Percent	67.2%	15.7%	17.2%	100%
	Total	2827	362	276	3465
Gamma	.423				
Chi Square Significance		.000*			

Independent Variables by Intervening Control Variables by Dependent Variables

Age

Table A90

Age by Home Help by Limiting Illness

			Home Help Use		
			Not Used	Used	Total
No Illness	65-74	Count	909	7	916
		Row Percent	99.2%	.8%	100%
	75-84	Count	374	24	398
		Row Percent	94%	6%	100%
	85+	Count	101	21	122
		Row Percent	82.8%	17.2%	100%
	Total		1384	52	1436
Illness but not limiting	65-74	Count	755	51	806
		Row Percent	93.7%	6.3%	100%
	75-84	Count	404	74	478
		Row Percent	84.5%	15.5%	100%
	85+	Count	109	46	155
		Row Percent	70.3%	29.7%	100%
		Total	1268	171	1439
Limiting Illness	65-74	Count	377	1	378
		Row Percent	99.7%	.3%	100%

	75-84	Count	180	12	192
		Row Percent	93.8%	6.3%	100%
	85+	Count	24	6	30
		Row Percent	80%	20%	100%
	Total		581	19	600

Gamma None=.789, Illness=.523, Limiting Illness=.882

Chi Square Significance None=.000*, Illness=.000*, Limiting Illness=.000*

Table A91

Age by District Nurse Use by Limiting Illness

			District Nurse Use		
			Not Used	Used	Total
No illness	65-74	Count	909	7	916
		Row Percent	99.2%	.8%	100%
	75-84	Count	381	17	398
		Row Percent	95.7%	4.3%	100%
	85+	Count	105	17	122
		Row Percent	86.1%	13.9%	100%
	Total		1395	41	1436
Illness but not liming	65-74	Count	763	43	806
		Row Percent	94.7%	5.3%	100%
	75-84	Count	412	66	478
		Row Percent	86.2%	13.8%	100%
	85+	Count	116	38	154
		Row Percent	75.3%	24.7%	100%
Limiting Illness	65-74	Count	374	4	378
		Row Percent	98.9%	1.1%	100%
	75-84	Count	182	10	192
		Row Percent	94.8%	5.2%	100%
	85+	Count	27	3	30

	Row Percent	90%	10%	100%
Total		583	17	600

Gamma None=.756, Illness=.516, Limiting Illness=.660

Chi Square Significance None=.000*, Illness=.000*, Limiting Illness=.001*

Table A92

Age by Consultations with a GP at Home by Liming Illness

			Home Consultations		
			Not Used	Used	Total
No Illness	65-74	Count	943	5	948
		Row Percent	99.5%	.5%	100%
	75-84	Count	390	15	405
		Row Percent	96.3%	3.7%	100%
	85+	Count	116	10	126
		Row Percent	92.1%	7.9%	100%
	Total		1449	30	1479
Illness but not limiting	65-74	Count	796	43	839
		Row Percent	94.9%	5.1%	100%
	75-84	Count	479	29	508
		Row Percent	94.3%	5.7%	100%
	85+	Count	150	24	174
		Row Percent	86.2%	13.8%	100%
Limiting Illness	65-74	Count	377	5	382
		Row Percent	98.7%	1.3%	100%
	75-84	Count	189	4	193
		Row Percent	97.9%	2.1%	100%
	85+	Count	30	1	31

	Row Percent	96.8%	3.2%	100%
Total		596	10	606

Gamma None=.731, Illness=.262, Limiting Illness=.261

Chi Square Significance None=.000*, Illnes=.000*, Limiting Illness=.619

Table A93

Age by Consultations by a GP at Surgery by Limiting Illness

			GP Surgery Consultations		
			Not Used	Used	Total
No Illness	65-74	Count	839	109	948
		Row Percent	88.5%	11.5%	100%
	75-84	Count	369	36	405
		Row Percent	91.1%	8.9%	100%
	85+	Count	115	11	126
		Row Percent	91.3%	8.7%	100%
	Total		1323	156	1479
Illness but not limiting	65-74	Count	658	181	839
		Row Percent	78.4%	21.6%	100%
	75-84	Count	424	84	508
		Row Percent	83.5%	16.5%	100%
	85+	Count	158	16	174
		Row Percent	90.8%	9.2%	100%
Limiting Illness	65-74	Count	335	47	382
		Row Percent	87.7%	12.3%	100%
	75-84	Count	160	33	193
		Row Percent	82.9%	17.1%	100%
	85+	Count	29	2	31

	Row Percent	93.5%	6.5%	100%
Total		524	82	606

Gamma None=-.134. Illness=-.241, Limiting Illness=.101

Chi Square Significance None=.282, Illness=.000*, Limiting Illness=.141

Table A94

Age by Specialist Consultations by Limiting Illness

			Specialist Consultations		
			Not Used	Used	Total
No Illness	65-74	Count	945	3	948
		Row Percent	99.7%	.3%	100%
	75-84	Count	405	0	405
		Row Percent	100%	0%	100%
	85+	Count	126	0	126
		Row Percent	100%	0%	100%
	Total		1476	3	1479
Illness but not limiting	65-74	Count	831	8	839
		Row Percent	99%	1%	100%
	75-84	Count	504	4	508
		Row Percent	99.2%	.8%	100%
	85+	Count	172	2	174
		Row Percent	98.9%	1.1%	100%
	Total		1507	14	1521
Limiting Illness	65-74	Count	381	1	382
		Row Percent	99.7%	.3%	100%
	75-84	Count	192	1	193
		Row Percent	99.5%	.5%	100%

	85+	Count	30	1	31
		Row Percent	96.8%	3.2%	100%
	Total		603	3	606

Gamma None=-1.0, llness=-.008, Limiting Illness=.582

Chi Square Significance None=.431, Illness=.901, Limiting Illness=.077

Table A95

Age by Outpatient Visits by Limiting Illness

	Outpatient Visits		Not Used	Used	Total
No Illness	65-74	Count	844	104	948
		Row Percent	89%	11%	100%
	75-84	Count	345	61	406
		Row Percent	85%	15%	100%
	85+	Count	111	15	126
		Row Percent	88.1%	11.9%	100%
	Total		1300	180	1480
Illness but not limiting	65-74	Count	551	288	839
		Row Percent	65.7%	32.3%	100%
	75-84	Count	343	164	507
		Row Percent	67.7%	32.3%	100%
	85+	Count	132	44	176
		Row Percent	75%	25%	100%
Limiting Illness	65-74	Count	302	80	382
		Row Percent	79.1%	20.9%	100%
	75-84	Count	161	33	194
		Row Percent	83%	17%	100%
	85+	Count	27	4	31
		Row Percent	87.1%	12.9%	100%

Total	490	117	607

Gamma None=102, Illness=.041*, Limiting Illness=.140

Chi Square Significance None=.112, Illness=.056, Limiting Illness=.345

Table A96

Age by Inpatient Visits by Limiting Illness

			Inpatient Visits		
			Not Used	Used	Total
No Illness	65-74	Count	872	76	948
		Row Percent	92%	8%	100%
	75-84	Count	360	46	406
		Row Percent	88.7%	11.1%	100%
	85+	Count	111	15	126
		Row Percent	88.1%	11.9%	100%
	Total		1343	137	1480
Illness but not limiting	65-74	Count	685	156	841
		Row Percent	81.5%	18.5%	100%
	75-84	Count	387	122	509
		Row Percent	76%	24%	100%
	85+	Count	133	42	175
		Row Percent	1205	320	1525
Limiting Illness	65-74	Count	351	32	383
		Row Percent	91.6%	8.4%	100%
	75-84	Count	165	29	194
		Row Percent	85.1%	12.9%	100%
	85+	Count	27	4	31

	Row Percent	87.1%	12.9%	100%
Total		543	65	608

Gamma None=.178, Illness=.138, Limiting Illness=.277

Chi Square Significance None=.088, Illness=.035*, Limiting Illness=.049*

Table A97

Age by Home Help by Restricted Activity

			Home Help Use		
			Not Used	Used	Total
No restricted Activity	65-74	Count	1662	37	1699
		Row Percent	97.8%	2.2%	100%
	75-84	Count	760	77	837
		Row Percent	90.8%	9.2%	100%
	85+	Count	2611	166	2777
		Row Percent	78.4%	21.6%	100%
	Total		2611	166	2777
Restricted Activity	65-74	Count	377	22	399
		Row Percent	94.5%	5.5%	100%
	75-84	Count	195	32	227
		Row Percent	85.9%	14.1%	100%
	85+	Count	44	21	65
		Row Percent	67.7%	32.3%	100%
	Total		616	75	691
Gamma- No Restrictions		.673	Gamma- Restrictions		.566
Chi Square Significance		.000*			

Table A98

Age by District Nurse by Restricted Activity

			District Nurse Use		
			Not Used	Used	Total
No restricted Activity	65-74	Count	1667	32	1699
		Row Percent	98.1%	1.9%	100%
	75-84	Count	782	55	837
		Row Percent	93.4%	6.6%	100%
	85+	Count	201	39	240
		Row Percent	95.5%	4.5%	100%
	Total		2650	126	2776
Restricted Activity	65-74	Count	377	22	399
		Row Percent	94.5%	5.5%	100%
	75-84	Count	189	38	227
		Row Percent	83.3%	16.7%	100%
	85+	Count	46	19	65
		Row Percent	70.8%	29.2%	100%
	Total		612	79	691
Gamma- No Restrictions		.630	Gamma- Restrictions		.568
Chi Square Significance		.000*			

Table A99

Age by Consultations by a GP at home by Restricted Activity

			Home Consultations		
			Not Used	Used	Total
No restricted Activity	65-74	Count	1738	10	1748
		Row Percent	99.4%	.6%	100%
	75-84	Count	832	26	858
		Row Percent	97%	3%	100%
	85+	Count	239	17	256
		Row Percent	93.4%	6.6%	100%
	Total		2809	53	2862
Restricted Activity	65-74	Count	378	43	421
		Row Percent	89.9%	10.2%	100%
	75-84	Count	223	22	245
		Row Percent	91%	9%	100%
	85+	Count	56	18	74
		Row Percent	75.7%	24.3%	100%
	Total		657	83	740
Gamma- No Restrictions		.680	Gamma- Restrictions		.182
Chi Square Significance		.000*			

Table A100

Age by Consultations with a GP at Surgery by Restricted Activity

			Surgery Consultations		
			Not Used	Used	Total
No restricted Activity	65-74	Count	1519	229	1748
		Row Percent	86.9%	13.1%	100%
	75-84	Count	748	110	858
		Row Percent	87.2%	12.8%	100%
	85+	Count	236	20	256
		Row Percent	92.2%	7.8%	100%
	Total		2503	359	2862
Restricted Activity	65-74	Count	314	107	421
		Row Percent	74.6%	25.4%	100%
	75-84	Count	202	43	245
		Row Percent	82.4%	17.6%	100%
	85+	Count	65	9	74
		Row Percent	87.8%	12.2%	100%
	Total		581	159	740
Gamma- No Restrictions		-.084	Gamma- Restrictions		-.267
Chi Square Significance		.056			

Table A101

Age by Specialist Consultations by Restricted Activity

			Specialist Use		
			Not Used	Used	Total
No restricted Activity	65-74	Count	1741	7	1748
		Row Percent	99.6%	.4%	100%
	75-84	Count	855	3	858
		Row Percent	99.7%	.3%	100%
	85+	Count	253	3	256
		Row Percent	98.8%	1.2%	100%
	Total		2849	13	2862
Restricted Activity	65-74	Count	416	5	421
		Row Percent	98.8%	1.2%	100%
	75-84	Count	243	2	245
		Row Percent	99.2%	.8%	100%
	85+	Count	74	0	74
		Row Percent	100%	0%	100%
	Total		733	7	740
Gamma- No Restrictions		.209	Gamma- Restrictions		-.351
Chi Square Significance		.198			

Table A102

Age by Outpatient Visits by Restricted Activity

			Outpatient Visits		
			Not Used	Used	Total
No restricted Activity	65-74	Count	1438	309	1747
		Row Percent	82.3%	17.7%	100%
	75-84	Count	688	170	858
		Row Percent	80.2%	19.8%	100%
	85+	Count	218	40	258
		Row Percent	84.5%	15.5%	100%
	Total		2344	519	2863
Restricted Activity	65-74	Count	259	163	422
		Row Percent	61.4%	38.6%	100%
	75-84	Count	158	87	245
		Row Percent	64.5%	35.5%	100%
	85+	Count	52	22	74
		Row Percent	70.3%	29.7%	100%
	Total		469	272	741
Gamma- No Restrictions		.019	Gamma- Restrictions		-.100
Chi Square Significance		.216			

Table A103

Age by Inpatient Visits by Restricted Activity

			Inpatient Visits		
			Not Used	Used	Total
No restricted Activity	65-74	Count	1587	162	1749
		Row Percent	90.7%	9.3%	100%
	75-84	Count	739	120	859
		Row Percent	86%	14%	100%
	85+	Count	221	36	257
		Row Percent	86%	14%	100%
	Total		2547	318	2865
Restricted Activity	65-74	Count	320	102	422
		Row Percent	75.8%	24.2%	100%
	75-84	Count	169	77	246
		Row Percent	68.7%	31.3%	100%
	85+	Count	50	24	74
		Row Percent	67.7%	32.4%	100%
	Total		539	203	742
Gamma- No Restrictions		.202	Gamma- Restrictions		.163
Chi Square Significance		.000*			

Table A104

Age by Home Help by ADL Difficulty

			Home Help Use		
			Not Used	Used	Total
No Difficulty	65-74	Count	1627	15	1642
		Row Percent	99.1%	.8%	100%
	75-84	Count	590	16	606
		Row Percent	97.4%	2.6%	100%
	85+	Count	91	8	99
		Row Percent	91.9%	8.1%	100%
	Total		2308	39	2347
Low Difficulty	65-74	Count	186	4	190
		Row Percent	97.9%	2.1%	100%
	75-84	Count	149	20	169
		Row Percent	88.2%	11.8%	100%
	85+	Count	37	7	44
		Row Percent	84.1%	15.9%	100%
High Difficulty	65-74	Count	223	38	261
		Row Percent	85.4%	14.6%	100%
	75-84	Count	214	74	288
		Row Percent	74.3%	25.7%	100%
	85+	Count	104	57	161

	Row Percent	64.6%	35.4%	100%
Total		541	169	710

Gamma None=.579, Low=.607, High=.353

Chi Square Significance None=.000*, Low=.000*, High=.000*

Table A105

Age by District Nurse Use by ADL Difficulty

			District Nurse Use		
			Not Used	Used	Total
No Difficulty	65-74	Count	1628	14	1642
		Row Percent	99.1%	.9%	100%
	75-84	Count	587	19	606
		Row Percent	96.9%	3.1%	100%
	85+	Count	89	10	99
		Row Percent	89.9%	10.1%	100%
	Total		2304	43	2347
Low Difficulty	65-74	Count	183	7	190
		Row Percent	96.3%	3.7%	100%
	75-84	Count	154	15	169
		Row Percent	91.1%	8.9%	100%
	85+	Count	41	3	44
		Row Percent	93.2%	6.8%	100%
		Total	378	25	403
High Difficulty	65-74	Count	229	32	261
		Row Percent	79.5%	20.5%	100%
	75-84	Count	229	59	288
		Row Percent	79.5%	20.5%	100%

	85+	Count	116	44	160
		Row Percent	72.5%	27.5%	100%
	Total		574	135	709

Gamma None=.653, Low=.310, High=.306

Chi Square Significance None=.000*, Low=.124, High=.000*

Table A106

Age by Consultations with a GP at Home by ADL Difficulty

			Home Consultations		
			Not Used	Used	Total
No Difficulty	65-74	Count	1626	14	1640
		Row Percent	99.1%	.9%	100%
	75-84	Count	593	12	605
		Row Percent	98%	2%	100%
	85+	Count	95	4	99
		Row Percent	96%	4%	100%
	Total		2314	30	2344
Low Difficulty	65-74	Count	186	4	190
		Row Percent	97.9%	2.4%	100%
	75-84	Count	164	4	168
		Row Percent	97.6%	2.4%	100%
	85+	Count	40	4	44
		Row Percent	90.9%	9.1%	100%
	Total		390	12	402
High Difficulty	65-74	Count	229	32	261
		Row Percent	87.7%	12.3%	100%
	75-84	Count	258	29	287
		Row Percent	89.9%	10.1%	100%

	85+	Count	138	21	159
		Row Percent	86.8%	13.2%	100%
	Total		625	82	707

Gamma None=.450, Low=.374, High=.006

Chi Square Significance None-.00*, Low=.041*, High=.566

Table A107

Age by Consultations by a GP at Surgery by ADL Difficulty

			GP Surgery Consultations		
			Not Used	Used	Total
No Difficulty	65-74	Count	1402	238	1640
		Row Percent	85.5%	14.5%	100%
	75-84	Count	528	77	605
		Row Percent	87.3%	12.7%	100%
	85+	Count	84	15	99
		Row Percent	84.8%	15.2%	100%
	Total		2014	330	2344
Low Difficulty	65-74	Count	151	39	190
		Row Percent	79.5%	20.5%	100%
	75-84	Count	137	31	168
		Row Percent	81.5%	18.5%	100%
	85+	Count	42	2	44
		Row Percent	95.5%	4.5%	100%
	Total		330	72	402
High Difficulty	65-74	Count	213	48	261
		Row Percent	81.6%	18.4%	100%
	75-84	Count	246	41	287
		Row Percent	85.7%	14.3%	100%

	85+	Count	148	11	159
		Row Percent	93.1%	6.9%	100%
	Total		607	100	707

Gamma None=-.053, Low= -.223, High= -.289

Chi Square Significance None=.532, Low=.044*, High=.005*

Table A108

Age by Specialist Consultations by ADL Difficulty

			Specialist Consultations		
			Not Used	Used	Total
No Difficulty	65-74	Count	1635	5	1640
		Row Percent	99.7%	.3%	100%
	75-84	Count	603	2	605
		Row Percent	99.7%	.3%	100%
	85+	Count	98	1	99
		Row Percent	99%	1%	100%
	Total		2336	8	2344
Low Difficulty	65-74	Count	186	4	190
		Row Percent	97.9%	2.1%	100%
	75-84	Count	167	1	168
		Row Percent	99.4%	.6%	100%
	85+	Count	44	0	44
		Row Percent	100%	0%	100%
	Total		397	5	402
High Difficulty	65-74	Count	259	2	261
		Row Percent	99.2%	.8%	100%
	75-84	Count	285	2	287
		Row Percent	99.3%	.7%	100%

	85+	Count	157	2	159
		Row Percent	98.7%	1.3%	100%
	Total		701	6	707

Gamma None=.196, Low= -.654, High= .146

Chi Square Significance None= .505, Low= .320, High= .812

Table A109

Age by Outpatient Visits by ADL Difficulty

			Outpatient Visits		
			Not Used	Used	Total
No Difficulty	65-74	Count	1366	275	1641
		Row Percent	83.2%	16.8%	100%
	75-84	Count	500	106	606
		Row Percent	82.5%	17.5%	100%
	85+	Count	86	13	99
		Row Percent	86.9%	13.1%	100%
	Total		1952	394	2346
Low Difficulty	65-74	Count	141	49	190
		Row Percent	74.2%	25.8%	100%
	75-84	Count	127	42	169
		Row Percent	75.1%	24.9%	100%
	85+	Count	33	11	44
		Row Percent	75%	25%	100%
	Total		301	102	403
High Difficulty	65-74	Count	133	127	260
		Row Percent	51.2%	48.8%	100%
	75-84	Count	126	35	161
		Row Percent	78.3%	21.7%	100%

	85+	Count	126	35	161
		Row Percent	78.3%	21.7%	100%
	Total		447	260	707

Gamma None =-.004, Low= -.020, High = -.365

Chi Square Significance None= .559, Low= .978, High= .000*

Table A110

Age by Inpatient Visits by ADL Difficulty

			Inpatient Visits		
			Not Used	Used	Total
No Difficulty	65-74	Count	1503	139	1642
		Row Percent	91.5%	8.5%	100%
	75-84	Count	537	69	606
		Row Percent	88.6%	11.4%	100%
	85+	Count	89	9	98
		Row Percent	90.8%	9.2%	100%
	Total		2129	217	2346
Low Difficulty	65-74	Count	159	31	190
		Row Percent	83.7%	16.3%	100%
	75-84	Count	131	38	169
		Row Percent	77.5%	22.5%	100%
	85+	Count	40	4	44
		Row Percent	90.9%	9.1%	100%
	Total		330	73	403
High Difficulty	65-74	Count	188	73	261
		Row Percent	72%	28%	100%
	75-84	Count	216	72	288
		Row Percent	75%	25%	100%

	85+	Count	121	40	161
		Row Percent	75.2%	24.8%	100%
	Total		525	185	710

Gamma None= .134, Low= .027, High = -.057

Chi Square Significance None= .105, Low= .082, High= .675

Table A111

Age by Home Help by IADL Difficulty

			Home Help Use		
			Not Used	Used	Total
No Difficulty	65-74	Count	1813	24	1837
		Row Percent	98.7%	1.3%	100%
	75-84	Count	783	43	826
		Row Percent	94.8%	5.2%	100%
	85+	Count	137	28	165
		Row Percent	83%	17%	100%
	Total		2733	95	2828
Low Difficulty	65-74	Count	148	13	161
		Row Percent	91.9%	8.1%	100%
	75-84	Count	106	29	135
		Row Percent	78.5%	21.5%	100%
	85+	Count	48	18	66
		Row Percent	72.7%	27.3%	100%
High Difficulty	65-74	Count	78	22	100
		Row Percent	78%	22%	100%
	75-84	Count	66	38	104
		Row Percent	63.5%	36.5%	100%
	85+	Count	46	26	72

	Row Percent	63.9%	36.1%	100%
Total		190	86	276

Gamma None= .687, Low= .446, High= .229

Chi Square Significance None= .000*, Low= .000*, High= .046*

Table A112

Age by District Nurse Use by IADL Difficulty

			District Nurse Use		
			Not Used	Used	Total
No Difficulty	65-74	Count	1812	25	1837
		Row Percent	98.6%	1.4%	100%
	75-84	Count	784	42	826
		Row Percent	94.9%	5.1%	100%
	85+	Count	147	18	165
		Row Percent	89.1%	10.9%	100%
	Total		2743	85	2828
Low Difficulty	65-74	Count	152	9	161
		Row Percent	94.4%	5.6%	100%
	75-84	Count	119	16	135
		Row Percent	88.1%	11.9%	100%
	85+	Count	51	15	66
		Row Percent	77.3%	22.7%	100%
	Total		322	40	362
High Difficulty	65-74	Count	80	20	100
		Row Percent	80%	20%	100%
	75-84	Count	69	35	104
		Row Percent	66.3%	33.7%	100%

	85+	Count	47	24	71
		Row Percent	66.2%	338%	100%
	Total		196	79	275

Gamma None= .613, Low= .469, High= .233

Chi Square Significance None= .000*, Low= .001*, High= .054

Table A113

Age by Consultations with a GP at Home by IADL Difficulty

			Home Consultations		
			Not Used	Used	Total
No Difficulty	65-74	Count	1807	28	1835
		Row Percent	98.5%	1.5%	100%
	75-84	Count	802	21	823
		Row Percent	97.4%	2.6%	100%
	85+	Count	154	11	165
		Row Percent	93.3%	6.7%	100%
	Total		2763	60	2823
Low Difficulty	65-74	Count	155	6	161
		Row Percent	96.3%	3.7%	100%
	75-84	Count	126	9	135
		Row Percent	93.3%	6.7%	100%
	85+	Count	57	8	65
		Row Percent	87.7%	12.3%	100%
	Total		338	23	361
High Difficulty	65-74	Count	84	16	100
		Row Percent	84%	16%	100%
	75-84	Count	89	15	104
		Row Percent	85.6%	14.4%	100%

	85+	Count	61	10	71
		Row Percent	85.9%	14.1%	100%
	Total		234	41	275

Gamma None= .379, Low= .387, High= -.052

Chi Square Significance None= .000*, Low= .056, High= .927

Table A114

Age by Consultations by a GP at Surgery by IADL Difficulty

			GP Surgery Consultations		
			Not Used	Used	Total
No Difficulty	65-74	Count	1549	286	1835
		Row Percent	84.4%	15.6%	100%
	75-84	Count	704	119	823
		Row Percent	85.5%	14.5%	100%
	85+	Count	146	19	165
		Row Percent	88.5%	11.5%	100%
	Total		2399	4247	2823
Low Difficulty	65-74	Count	137	24	161
		Row Percent	85.1%	14.9%	100%
	75-84	Count	116	19	135
		Row Percent	85.9%	14.1%	100%
	85+	Count	62	3	65
		Row Percent	95.4%	4.6%	100%
	Total		315	46	361
High Difficulty	65-74	Count	85	15	100
		Row Percent	85%	15%	100%
	75-84	Count	93	11	104
		Row Percent	89.4%	10.6%	100%

	85+	Count	65	6	71
		Row Percent	91.5%	8.5%	100%
	Total		243	32	275

Gamma None= -.068, Low= -.237, High= -.213

Chi Square Significance None= .324, Low= .093, High= .384

Table A115

Age by Specialist Consultations by IADL Difficulty

			Specialist Consultations		
			Not Used	Used	Total
No Difficulty	65-74	Count	1827	8	1835
		Row Percent	99.6%	.4%	100%
	75-84	Count	820	3	823
		Row Percent	99.6%	.4%	100%
	85+	Count	164	1	165
		Row Percent	99.4%	.6%	100%
	Total		2811	12	2823
Low Difficulty	65-74	Count	159	2	161
		Row Percent	98.8%	1.2%	100%
	75-84	Count	133	2	135
		Row Percent	98.5%	1.5%	100%
	85+	Count	64	1	65
		Row Percent	98.5%	1.5%	100%
	Total		356	5	361
High Difficulty	65-74	Count	99	1	100
		Row Percent	99%	1%	100%
	75-84	Count	104	0	104
		Row Percent	100%	0%	100%

	85+	Count	70	1	71
		Row Percent	98.6%	1.4%	100%
	Total		273	2	275

Gamma None= -.014, Low= .078, High= .077

Chi Square Significance None= .903, Low= .978, High= .517

Table A116

Age by Outpatient Visits by IADL Difficulty

			Outpatient Visits		
			Not Used	Used	Total
No Difficulty	65-74	Count	1485	351	1836
		Row Percent	80.9%	19.1%	100%
	75-84	Count	661	165	826
		Row Percent	80%	20%	100%
	85+	Count	138	27	165
		Row Percent	83.6%	16.4%	100%
	Total		2284	543	2827
Low Difficulty	65-74	Count	112	49	161
		Row Percent	69.6%	30.4%	100%
	75-84	Count	86	48	134
		Row Percent	64.2%	35.8%	100%
	85+	Count	46	20	66
		Row Percent	69.7%	30.3%	100%
	Total		244	117	361
High Difficulty	65-74	Count	48	51	99
		Row Percent	48.5%	51.5%	100%
	75-84	Count	70	33	103
		Row Percent	68%	32%	100%

	85+	Count	61	11	72
		Row Percent	84.7%	15.3%	100%
	Total		179	95	274

Gamma None= .000, Low= .037, High= -.502

Chi Square Significance None= .553, Low= .568, High=.000*

Table A117

Age by Inpatient Visits by IADL Difficulty

			Inpatient Visits		
			Not Used	Used	Total
No Difficulty	65-74	Count	1650	187	1837
		Row Percent	89.8%	10.25	100%
	75-84	Count	711	115	826
		Row Percent	86.1%	13.9%	100%
	85+	Count	145	19	164
		Row Percent	88.4%	11.6%	100%
	Total		2506	321	2827
Low Difficulty	65-74	Count	135	26	161
		Row Percent	83.9%	16.1%	100%
	75-84	Count	102	33	135
		Row Percent	75.6%	24.4%	100%
	85+	Count	50	16	66
		Row Percent	75.8%	24.2%	100%
	Total		287	75	362
High Difficulty	65-74	Count	68	32	100
		Row Percent	68%	32%	100%
	75-84	Count	72	32	104
		Row Percent	69.2%	30.8%	100%

	85+	Count	54	18	72
		Row Percent	75%	25%	100%
	Total		194	82	276

Gamma None= .141, Low= .191, High= -.102

Chi Square Significance None= .019*, Low= .158, High= .585

Gender

Table A118

Gender by Home Help by Limiting Illness

	Home Help		Not Used	Used	Total
No Illness	Male	Count	593	15	608
		Row Percent	97.5%	2.5%	100%
	Female	Count	791	37	828
		Row Percent	95.5%	4.5%	100%
	Total		1384	52	1436
Illness but not limiting	Male	Count	537	47	584
		Row Percent	92%	8%	100%
	Female	Count	731	124	855
		Row Percent	85.5%	14.5%	100%
		Total	1268	171	1439
Limiting Illness	Male	Count	245	4	249
		Row Percent	98.4%	1.6%	100%
	Female	Count	336	15	351
		Row Percent	95.7%	4.3%	100%
	Total		581	19	600

Gamma None= .298, Illness= .319, Limiting Illness= .464

Chi Square Significance None= .045*, Illness= .000*, Limiting Illness= .066

Table A119

Gender by District Nurse Use by Limiting Illness

			District Nurse Use		
			Not Used	Used	Total
No illness	Male	Count	596	12	608
		Row Percent	98%	2%	100%
	Female	Count	799	29	828
		Row Percent	96.5%	3.5%	100%
	Total		1395	41	1436
Illness but not liming	Male	Count	540	44	1436
		Row Percent	92.5%	7.5%	100%
	Female	Count	751	103	854
		Row Percent	87.9%	12.1%	100%
		Total	1291	147	1438
Limiting Illness	Male	Count	244	5	249
		Row Percent	98%	2%	100%
	Female	Count	339	12	351
		Row Percent	96.6%	3.4%	100%
	Total		583	17	600

Gamma None= .286, Illness= .255, Limiting Illness= .267

Chi Square Significance None= .086, Illness= .005*, Limiting Illness= .305

Table A120

Gender by Consultations with a GP at Home by Liming Illness

			Home Consultations		
			Not Used	Used	Total
No Illness	Male	Count	624	10	634
		Row Percent	98.4%	1.6%	100%
	Female	Count	825	20	845
		Row Percent	97.6%	2.4%	100%
	Total		1449	30	1479
Illness but not limiting	Male	Count	576	32	608
		Row Percent	94.7%	5.3%	100%
	Female	Count	849	64	913
		Row Percent	93%	7%	100%
		Total	1425	96	1521
Limiting Illness	Male	Count	252	2	254
		Row Percent	99.2%	.8%	100%
	Female	Count	344	8	352
		Row Percent	97.7%	2.3%	100%
	Total		596	10	606

Gamma None= .204, Illness= .151, Limiting Illness= .491

Chi Square Significance None= .286, Illness= .170, Limiting Illness= .157

Table A121

Gender by Consultations by a GP at Surgery by Limiting Illness

			GP Surgery Consultations		
			Not Used	Used	Total
No Illness	Male	Count	575	59	634
		Row Percent	90.7%	9.3%	100%
	Female	Count	748	97	845
		Row Percent	88.5%	11.5%	100%
	Total		1323	156	1479
Illness but not limiting	Male	Count	501	107	608
		Row Percent	82.4%	17.6%	100%
	Female	Count	739	174	913
		Row Percent	80.9%	19.1%	100%
		Total	1240	281	1521
Limiting Illness	Male	Count	222	32	254
		Row Percent	87.4%	12.6%	100%
	Female	Count	302	50	352
		Row Percent	85.8%	14.2%	100%
	Total		524	82	606

Gamma None= .117, Illness= .049, Limiting Illness= .069

Chi Square Significance None= .178, Illness= .473, Limiting Illness= .568

Table A122

Gender by Specialist Consultations by Limiting Illness

			Specialist Consultations		
			Not Used	Used	Total
No Illness	Male	Count	633	1	634
		Row Percent	99.8%	.2%	100%
	Female	Count	843	2	845
		Row Percent	99.8%	.2%	100%
	Total		1476	3	1479
Illness but not limiting	Male	Count	604	4	608
		Row Percent	99.3%	.7%	100%
	Female	Count	903	10	913
		Row Percent	98.9%	1.1%	100%
		Total	1507	14	1521
Limiting Illness	Male	Count	252	2	254
		Row Percent	99.2%	.8%	100%
	Female	Count	351	1	352
		Row Percent	99.7%	.3%	100%
	Total		603	3	606

Gamma None= .201, Illness= .2582, Limiting Illness= -.472

Chi Square Significance None= .738, Illness= .382, Limiting Illness= .384

Table A123

Gender by Outpatient Visits by Limiting Illness

			Outpatient Visits		
			Not Used	Used	Total
No Illness	Male	Count	556	78	634
		Row Percent	87.7%	12.3%	100%
	Female	Count	744	102	846
		Row Percent	87.9%	12.1%	100%
	Total		1300	180	1480
Illness but not limiting	Male	Count	409	199	608
		Row Percent	67.3%	32.7%	100%
	Female	Count	617	297	914
		Row Percent	67.5%	32.5%	100%
		Total	1026	496	1522
Limiting Illness	Male	Count	203	51	254
		Row Percent	79.9%	20%	100%
	Female	Count	287	66	353
		Row Percent	81.3%	18.7%	100%
	Total		490	117	607

Gamma None= -.012, Illness= -.005, Limiting Illness= -.044

Chi Square Significance None= .886, Illness= .923, Limiting Illness= .670

Table A124

Gender by Inpatient Visits by Limiting Illness

			Inpatient Visits		
			Not Used	Used	Total
No Illness	Male	Count	574	60	634
		Row Percent	90.5%	9.5%	100%
	Female	Count	769	77	846
		Row Percent	90.9%	9.1%	100%
	Total		1343	137	1480
Illness but not limiting	Male	Count	477	132	609
		Row Percent	78.3%	21.7%	100%
	Female	Count	728	188	916
		Row Percent	79.5%	20.5%	100%
		Total	1205	320	1525
Limiting Illness	Male	Count	225	30	255
		Row Percent	88.2%	11.8%	100%
	Female	Count	318	35	353
		Row Percent	90.1%	9.9%	100%
	Total		543	65	608

Gamma None= -.021, Illness= -.035, Limiting Illness= -.096

Chi Square Significance None= .812, Illness= .589, Limiting Illness= .466

Table A125

Gender by Home Help by Restricted Activity

			Home Help Use		
			Not Used	Used	Total
No restricted Activity	Male	Count	1149	49	1198
		Row Percent	95.9%	4.1%	100%
	Female	Count	1462	117	1579
		Row Percent	92.6%	7.4%	100%
	Total		2611	166	2777
Restricted Activity	Male	Count	224	17	241
		Row Percent	92.9%	7.1%	100%
	Female	Count	392	58	450
		Row Percent	87.1%	12.9%	100%
	Total		616	75	691
Gamma- No Restrictions		.305	Gamma- Restrictions		.322
Chi Square Significance		.000*			

Table A126

Gender by District Nurse by Restricted Activity

			District Nurse Use		
			Not Used	Used	Total
No restricted Activity	Male	Count	1155	43	1198
		Row Percent	96.4%	3.6%	100%
	Female	Count	1495	83	1578
		Row Percent	94.7%	5.3%	100%
	Total		2650	126	2776
Restricted Activity	Male	Count	223	18	241
		Row Percent	92.5%	7.5%	100%
	Female	Count	389	61	450
		Row Percent	86.4%	13.6%	100%
	Total		612	79	691
Gamma- No Restrictions		.197	Gamma- Restrictions		.320
Chi Square Significance		.036*			

Table A127

Gender by Consultations by a GP at home by Restricted Activity

			Home Consultations		
			Not Used	Used	Total
No restricted Activity	Male	Count	1217	17	1234
		Row Percent	98.6%	1.4%	100%
	Female	Count	1592	36	2862
		Row Percent	97.8%	2.2%	100%
	Total		2809	53	2862
Restricted Activity	Male	Count	234	27	261
		Row Percent	89.7%	10.3%	100%
	Female	Count	423	56	479
		Row Percent	88.3%	11.7%	100%
	Total		657	83	740
Gamma- No Restrictions		.236	Gamma- Restrictions		.069
Chi Square Significance		.101			

Table A128

Gender by Consultations with a GP at Surgery by Restricted Activity

			Surgery Consultations		
			Not Used	Used	Total
No restricted Activity	Male	Count	1094	140	1234
		Row Percent	88.7%	11.3%	100%
	Female	Count	1409	219	1628
		Row Percent	86.5%	13.5%	100%
	Total		2503	359	2862
Restricted Activity	Male	Count	204	57	261
		Row Percent	78.2%	21.8%	100%
	Female	Count	377	102	479
		Row Percent	78.7%	21.3%	100%
	Total		581	159	740
Gamma- No Restrictions		.097	Gamma- Restrictions		-.016
Chi Square Significance		.092			

Table A129

Gender by Specialist Consultations by Restricted Activity

			Specialist Use		
			Not Used	Used	Total
No restricted Activity	Male	Count	1228	6	1234
		Row Percent	99.5%	.5%	100%
	Female	Count	1621	7	1628
		Row Percent	99.6%	.4%	100%
	Total		2849	13	2862
Restricted Activity	Male	Count	260	1	261
		Row Percent	99.6%	.4%	100%
	Female	Count	473	6	479
		Row Percent	98.7%	1.3%	100%
	Total		733	7	740
Gamma- No Restrictions		-.062	Gamma- Restrictions		.535
Chi Square Significance		.825			

Table A130

Gender by Outpatient Visits by Restricted Activity

			Outpatient Visits		
			Not Used	Used	Total
No restricted Activity	Male	Count	1008	226	1234
		Row Percent	81.7%	18.3%	100%
	Female	Count	1336	293	1629
		Row Percent	82%	18%	100%
	Total		2344	519	2863
Restricted Activity	Male	Count	159	102	261
		Row Percent	60.9%	39.1%	100%
	Female	Count	310	170	480
		Row Percent	64.6%	35.4%	100%
	Total		469	272	741
Gamma- No Restrictions		-.011	Gamma- Restrictions		-.078
Chi Square Significance		.822			

Table A131

Gender by Inpatient Visits by Restricted Activity

			Inpatient Visits		
			Not Used	Used	Total
No restricted Activity	Male	Count	1088	148	1236
		Row Percent	88%	12%	100%
	Female	Count	1459	170	1629
		Row Percent	89.6%	10.4%	100%
	Total		2547	318	2865
Restricted Activity	Male	Count	187	74	261
		Row Percent	71.6%	28.4%	100%
	Female	Count	352	129	481
		Row Percent	73.2%	26.8%	100%
	Total		539	203	742
Gamma- No Restrictions		-.077	Gamma- Restrictions		-.038
Chi Square Significance		.194			

Table A132

Gender by Home Help by ADL Difficulty

			Home Help Use		
			Not Used	Used	Total
No Difficulty	Male	Count	1067	23	1090
		Row Percent	97.9%	2.1%	100%
	Female	Count	1241	16	1257
		Row Percent	98.7%	1.3%	100%
	Total		2308	39	2347
Low Difficulty	Male	Count	131	11	142
		Row Percent	92.3%	7.7%	100%
	Female	Count	241	20	261
		Row Percent	92.3%	7.7%	100%
	Total		372	31	403
High Difficulty	Male	Count	173	32	205
		Row Percent	84.4%	15.6%	100%
	Female	Count	368	137	505
		Row Percent	72.9%	27.1%	100%
	Total		541	169	710
Gamma- None	-.251	Gamma- Low	-.006	Gamma- High	.336
Chi Square Significance		.114			

Table A133

Gender by District Nurse Use by ADL Difficulty

			District Nurse Use		
			Not Used	Used	Total
No Difficulty	Male	Count	1073	17	1090
		Row Percent	98.4%	1.6%	100%
	Female	Count	1231	26	1257
		Row Percent	97.9%	2.1%	100%
	Total		2304	43	2347
Low Difficulty	Male	Count	136	6	142
		Row Percent	95.8%	4.2%	100%
	Female	Count	242	19	261
		Row Percent	92.7%	7.3%	100%
	Total		378	25	403
High Difficulty	Male	Count	167	38	205
		Row Percent	81.5%	18.5%	100%
	Female	Count	407	97	504
		Row Percent	80.8%	19.2%	100%
	Total		574	135	709
Gamma- None	.143	Gamma- Low	.280	Gamma- High	.023
Chi Square Significance	None=.359, Low=.225, High=.827				

Table A134

Gender by Consultations with a GP at Home by ADL Difficulty

			Home Consultations		
			Not Used	Used	Total
No Difficulty	Male	Count	1075	14	1089
		Row Percent	98.7%	1.3%	100%
	Female	Count	1239	16	1255
		Row Percent	98.7%	1.3%	100%
	Total		2314	30	2344
Low Difficulty	Male	Count	138	4	142
		Row Percent	97.2%	2.8%	100%
	Female	Count	252	8	260
		Row Percent	96.9%	3.1%	100%
	Total		390	12	402
High Difficulty	Male	Count	182	22	204
		Row Percent	89.2%	10.8%	100%
	Female	Count	443	60	503
		Row Percent	88.1%	11.9%	100%
	Total		625	82	707
Gamma- None	-.004	Gamma- Low	.045	Gamma- High	.057
Chi Square Significance	None=.982, Low=.884, High=.667				

Table A135

Gender by Consultations by a GP at Surgery by ADL Difficulty

			GP Surgery Consultations			
			Not Used	Used	Total	
No Difficulty	Male	Count	954	135	1089	
		Row Percent	87.6%	12.4%	100%	
	Female	Count	1060	195	1255	
		Row Percent	84.5%	15.5%	100%	
	Total		2014	330	2344	
Low Difficulty	Male	Count	115	27	142	
		Row Percent	81%	19%	100%	
	Female	Count	215	45	260	
		Row Percent	82.7%	17.3%	100%	
	Total		330	72	402	
High Difficulty	Male	Count	173	31	204	
		Row Percent	84.8%	15.2%	100%	
	Female	Count	434	69	503	
		Row Percent	86.3%	13.7%	100%	
	Total		607	100	707	
Gamma- None	.130	Gamma- Low	-.057	Gamma	High	-.060
Chi Square Significance	None= .029*, Low=.670, High=.609					

Table A136

Gender by Specialist Consultations by ADL Difficulty

			Specialist Consultations			
			Not Used	Used	Total	
No Difficulty	Male	Count	1085	4	1089	
		Row Percent	99.6%	.4%	100%	
	Female	Count	1251	4	1255	
		Row Percent	99.7%	.3%	100%	
	Total		2336	8	2344	
Low Difficulty	Male	Count	140	2	142	
		Row Percent	98.6%	1.4%	100%	
	Female	Count	257	3	260	
		Row Percent	98.8%	1.2%	100%	
	Total		397	5	402	
High Difficulty	Male	Count	204	0	204	
		Row Percent	100%	0%	100%	
	Female	Count	497	6	503	
		Row Percent	98.8%	1.2%	100%	
	Total		701	6	707	
Gamma- None	-.071	Gamma-Low	-.101	Gamma	High	.117
Chi Square Significance	None= .841, Low=.826, High=.117					

Table A137

Gender by Outpatient Visits by ADL Difficulty

			Outpatient Visits			
			Not Used	Used	Total	
No Difficulty	Male	Count	898	191	1089	
		Row Percent	82.5%	17.5%	100%	
	Female	Count	1054	203	1257	
		Row Percent	83.9%	16.1%	100%	
	Total		1952	394	2346	
Low Difficulty	Male	Count	108	34	142	
		Row Percent	76.1%	23.9%	100%	
	Female	Count	193	68	261	
		Row Percent	73.9%	26.1%	100%	
	Total		301	102	403	
High Difficulty	Male	Count	123	81	204	
		Row Percent	60.3%	39.7%	100%	
	Female	Count	324	179	503	
		Row Percent	64.4%	35.6%	100%	
	Total		447	260	707	
Gamma- None	-.050	Gamma-Low	.056	Gamma-	High	-.088
Chi Square Significance	None= .369, Low=.642, High=.303					

Table A138

Gender by Inpatient Visits by ADL Difficulty

			Inpatient Visits			
			Not Used	Used	Total	
No Difficulty	Male	Count	974	116	1090	
		Row Percent	89.4%	10.6%	100%	
	Female	Count	1155	101	1256	
		Row Percent	92%	8%	100%	
	Total		2129	217	2346	
Low Difficulty	Male	Count	113	29	142	
		Row Percent	79.6%	20.4%	100%	
	Female	Count	217	44	261	
		Row Percent	83.1%	16.9%	100%	
	Total		330	73	403	
High Difficulty	Male	Count	140	65	205	
		Row Percent	68.3%	31.7%	100%	
	Female	Count	385	120	505	
		Row Percent	76.2%	23.8%	100%	
	Total		525	185	710	
Gamma- None	-.153	Gamma- Low	-.117	Gamma-	High	-.197
Chi Square Significance	None= .030*, Low= .375, High= .029*					

Table A139

Gender by Home Help by IADL Difficulty

			Home Help Use		
			Not Used	Used	Total
No Difficulty	Male	Count	1237	35	1272
		Row Percent	97.2%	2.8%	100%
	Female	Count	1496	60	1556
		Row Percent	96.1%	3.9%	100%
	Total		2733	95	2828
Low Difficulty	Male	Count	79	13	92
		Row Percent	85.9%	14.1%	100%
	Female	Count	223	47	270
		Row Percent	82.6%	17.4%	100%
	Total		302	60	362
High Difficulty	Male	Count	56	17	73
		Row Percent	76.7%	23.3%	100%
	Female	Count	134	69	203
		Row Percent	66%	34%	100%
	Total		190	86	276
Gamma- None	.173	Gamma- Low	.123	Gamma- High	.258
Chi Square Significance		.105			

Table A140

Gender by District Nurse Use by IADL Difficulty

			District Nurse Use		
			Not Used	Used	Total
No Difficulty	Male	Count	1244	28	1272
		Row Percent	97.8%	2.2%	100%
	Female	Count	1499	57	1556
		Row Percent	96.3%	3.7%	100%
	Total		2743	85	2828
Low Difficulty	Male	Count	81	11	92
		Row Percent	88%	12%	100%
	Female	Count	241	29	270
		Row Percent	89.3%	10.7%	100%
		Total	322	40	362
High Difficulty	Male	Count	51	22	73
		Row Percent	69.9%	30.1%	100%
	Female	Count	145	57	202
		Row Percent	71.8%	28.2%	100%
	Total		196	79	275
Gamma- None	.256	Gamma- Low	-.060	Gamma- High	-.046
Chi Square Significance	None=.024*, Low=.748, High=.756				

Table A141

Gender by Consultations with a GP at Home by IADL Difficulty

			Home Consultations		
			Not Used	Used	Total
No Difficulty	Male	Count	1250	21	1271
		Row Percent	98.3%	1.7%	100%
	Female	Count	1513	39	1552
		Row Percent	97.5%	2.5%	100%
	Total		2763	60	2823
Low Difficulty	Male	Count	83	8	91
		Row Percent	91.2%	8.8%	100%
	Female	Count	255	15	270
		Row Percent	94.4%	5.6%	100%
	Total		338	23	361
High Difficulty	Male	Count	62	11	73
		Row Percent	84.9%	15.1%	100%
	Female	Count	172	30	202
		Row Percent	85.1%	14.9%	100%
	Total		234	41	275
Gamma- None	.211	Gamma- Low	-.242	Gamma- High	-.009
Chi Square Significance	None=.115, Low=.274, High=.964				

Table A142

Gender by Consultations by a GP at Surgery by IADL Difficulty

			GP Surgery Consultations		
			Not Used	Used	Total
No Difficulty	Male	Count	1101	170	1271
		Row Percent	86.6%	13.4%	100%
	Female	Count	1298	254	1552
		Row Percent	83.6%	16.4%	100%
	Total		2399	424	2823
Low Difficulty	Male	Count	78	13	91
		Row Percent	85.7%	14.3%	100%
	Female	Count	237	33	270
		Row Percent	87.8%	12.2%	100%
	Total		315	46	361
High Difficulty	Male	Count	63	10	73
		Row Percent	86.3%	13.7%	100%
	Female	Count	180	22	202
		Row Percent	89.1%	10.9%	100%
	Total	243	32	275	
Gamma- None	.118	Gamma- Low	-.090	Gamma High	-.130
Chi Square Significance None=.027*, Low=.610, High .521					

Table A143

Gender by Specialist Consultations by IADL Difficulty

			Specialist Consultations			
			Not Used	Used	Total	
No Difficulty	Male	Count	1266	5	1271	
		Row Percent	99.6%	.4%	100%	
	Female	Count	1545	7	1552	
		Row Percent	99.5%	.5%	100%	
	Total		2811	12	2823	
Low Difficulty	Male	Count	90	1	91	
		Row Percent	98.9%	1.1%	100%	
	Female	Count	266	4	270	
		Row Percent	98.5%	1.5%	100%	
	Total		356	5	361	
High Difficulty	Male	Count	73	0	73	
		Row Percent	100%	0%	100%	
	Female	Count	200	2	202	
		Row Percent	99%	1%	100%	
	Total		273	2	275	
Gamma- None	.069	Gamma-Low	.150	Gamma-	High	1.0
Chi Square Significance None= .815, Low=.787, High=.394						

Table A144

Gender by Outpatient Visits by IADL Difficulty

			Outpatient Visits			
			Not Used	Used	Total	
No Difficulty	Male	Count	1024	247	1271	
		Row Percent	80.6%	19.4%	100%	
	Female	Count	1260	296	1556	
		Row Percent	81%	19%	100%	
	Total		2284	543	2827	
Low Difficulty	Male	Count	58	33	91	
		Row Percent	63.7%	36.3%	100%	
	Female	Count	186	84	270	
		Row Percent	68.9%	31.1%	100%	
	Total		244	117	361	
High Difficulty	Male	Count	47	26	73	
		Row Percent	64.4%	35.6%	100%	
	Female	Count	132	69	201	
		Row Percent	65.7%	34.3%	100%	
	Total		179	95	274	
Gamma-None	-.013	Gamma-Low	-.115	Gamma-	High	-.028
Chi Square Significance	None= .783, Low= .364, High=.843					

Table A145

Gender by Inpatient Visits by IADL Difficulty

			Inpatient Visits			
			Not Used	Used	Total	
No Difficulty	Male	Count	1110	162	1272	
		Row Percent	87.3%	12.7%	100%	
	Female	Count	1396	159	1555	
		Row Percent	89.9%	10.2%	100%	
	Total		2506	321	2827	
Low Difficulty	Male	Count	64	28	92	
		Row Percent	69.6%	30.4%	100%	
	Female	Count	223	47	270	
		Row Percent	82.6%	17.4%	100%	
	Total		223	47	270	
High Difficulty	Male	Count	51	22	73	
		Row Percent	69.9%	30.1%	100%	
	Female	Count	143	60	203	
		Row Percent	70.4%	29.6%	100%	
	Total		194	82	276	
Gamma-None	-.123	Gamma- Low	-.350	Gamma-	High	-.014
Chi Square Significance	None=.036*, Low=.008*, High=.926					

Social Class

Table A146

Social Class by Home Help by Limiting Illness

	Home Help Use		Not Used	Used	Total
No Illness	I, II, IIIM	Count	699	20	719
		Row Percent	97.2%	2.8%	100%
	IIIN, IV, V	Count	644	31	675
		Row Percent	95.4%	4.6%	100%
	Total		1343	51	1394
Illness but not limiting	I, II, IIIN	Count	532	63	595
		Row Percent	89.4%	10.6%	100%
	IIIM, IV, V	Count	678	100	778
		Row Percent	87.1%	12.9%	100%
		Total	1210	163	1373
Limiting Illness	I, II, IIIM	Count	288	7	295
		Row Percent	97.6%	2.4%	100%
	IIIN, IV, V	Count	281	12	293
		Row Percent	95.9%	4.1%	100%
	Total		569	19	588

Gamma None=.254, Illness=.109, Limiting Illness=.275

Chi Square Significance None=.072, Illness=.198, Limiting Illess=.238

Table A147

Social Class by District Nurse Use by Limiting Illness

	District Nurse		Not Used	Used	Total
No Illness	I, II, IIIM	Count	703	16	719
		Row Percent	97.8%	2.2%	100%
	IIIN, IV, V	Count	654	21	675
		Row Percent	96.9%	3.1%	100%
	Total		1357	37	1394
Illness but not	I, II, IIIN	Count	543	52	595
limiting		Row Percent	91.3%	2.7%	100%
	IIIM, IV, V	Count	697	81	778
		Row Percent	89.6%	10.4%	100%
		Total	1240	133	1373
Limiting Illness	I, II, IIIM	Count	290	5	295
		Row Percent	98.3%	1.7%	100%
	IIIN, IV, V	Count	282	11	293
		Row Percent	96.2%	3.8%	100%
	Total		572	16	588

Gamma None=.170, Illness=.096, Liming Illness=.387

Chi Square Significance None=.304, Illness=.299, Limiting Illness=.125

Table A148

Social Class by Consultations with a GP at Home by Liming Illness

	GP at Home		Not Used	Used	Total
No Illness	I, II, IIIM	Count	720	11	731
		Row Percent	98.5%	1.5%	100%
	IIIN, IV, V	Count	683	18	701
		Row Percent	97.4%	2.6%	100%
	Total		1403	29	1432
Illness but not	I, II, IIIN	Count	591	30	621
limiting		Row Percent	95.2%	4.8%	100%
	IIIM, IV, V	Count	766	58	824
		Row Percent	93%	7%	100%
		Total	1357	88	1445
Limiting Illness	I, II, IIIM	Count	292	3	295
		Row Percent	99%	1%	100%
	IIIN, IV, V	Count	292	7	299
		Row Percent	98.3%	1.7%	100%
	Total		584	10	594

Gamma None=.180, Illness=.197, Limiting Illness=.400

Chi Square Significance None=.153, Illness=.082, Limiting Illness=.210

Table A149

Social Class by Consultations by a GP at Surgery by Limiting Illness

	GP at Surgery		Not Used	Used	Total
No Illness	I, II, IIIM	Count	649	82	731
		Row Percent	88.8%	11.2%	100%
	IIIN, IV, V	Count	630	71	701
		Row Percent	89.9%	10.1%	100%
	Total		1279	153	1432
Illness but not limiting	I, II, IIIN	Count	493	128	621
		Row Percent	79.4%	20.6%	100%
	IIIM, IV, V	Count	681	143	824
		Row Percent	82.6%	17.4%	100%
		Total	1174	271	1445
Limiting Illness	I, II, IIIM	Count	251	44	295
		Row Percent	85.1%	14.9%	100%
	IIIN, IV, V	Count	263	36	299
		Row Percent	88%	12%	100%
	Total		514	80	594

Gamma None=-.057, Illness=-.106, Limiting Illness=-.123

Chi Square Significance None=.505, Illness=.116, Limiting Illness=.305

Table A150

Social Class by Specialist Consultations by Limiting Illness

	Specialist Consultations		Not Used	Used	Total
No Illness	I, II, IIIM	Count	730	1	731
		Row Percent	99.9%	.1%	100%
	IIIN, IV, V	Count	699	2	701
		Row Percent	99.7%	.3%	100%
	Total		1429	3	1432
Illness but not	I, II, IIIN	Count	612	9	621
limiting		Row Percent	98.6%	.2%	100%
	IIIM, IV, V	Count	819	5	824
		Row Percent	99.4%	.6%	100%
		Total	1431	14	1445
Limiting Illness	I, II, IIIM	Count	294	1	295
		Row Percent	99.7%	.3%	100%
	IIIN, IV, V	Count	297	2	299
		Row Percent	99.3%	.7%	100%
	Total		591	3	594

Gamma None=.352, Illness=-.413, Limiting Illness=.329

Chi Square Significance None=.539, Illness=.106, Limiting Illness=.571

Table A151

Social Class by Outpatient Visits by Limiting Illness

	Outpatient Visits		Not Used	Used	Total	
No Illness	I, II, IIIM	Count	643	89	732	
		Row Percent	87.8%	12.2%	100%	
	IIIN, IV, V	Count	613	88	701	
		Row Percent	87.4%	12.6%	100%	
	Total		1256	177	1433	
Illness but not	I, II, IIIN	Count	415	207	622	
limiting		Row Percent	66.7%	33.3%	100%	
	IIIM, IV, V	Count	554	269	823	
		Row Percent	67.3%	32.7%	100%	
		Total	969	476	1445	
Limiting Illness	I, II, IIIM	Count	239	57	296	
		Row Percent	80.7%	19.3%	100%	
	IIIN, IV, V	Count	240	59	299	
		Row Percent	80.3%	19.7%	100%	
	Total		479	116	595	
Gamma-None	.018	Gamma-Illness	-.013	Gamma-Limiting Illness		.015

Chi Square Significance None=.820, Illness=.812, Limiting Illness=.884

Table A152

Social Class by Inpatient Visits by Limiting Illness

	Inpatient Visits		Not Used	Used	Total
No Illness	I, II, IIIM	Count	668	64	732
		Row Percent	91.3%	8.7%	100%
	IIIN, IV, V	Count	634	67	701
		Row Percent	90.4%	9.6%	100%
	Total		1302	131	1433
Illness but not	I, II, IIIN	Count	501	122	623
limiting		Row Percent	80.4%	19.6%	100%
	IIIM, IV, V	Count	649	176	825
		Row Percent	78.7%	21.3%	100%
		Total	1150	298	1448
Limiting Illness	I, II, IIIM	Count	265	32	297
		Row Percent	89.2%	10.8%	100%
	IIIN, IV, V	Count	267	32	299
		Row Percent	89.3%	10.7%	100%
	Total		532	64	596

Gamma None=.049, Illness=.054, Limiting Illness=-.004

Chi Square Significance None=.593, Illness=.415, Limiting Illness=.977

Table A153

Social Class by Home Help by Restricted Activity

			Home Help Use		
			Not Used	Used	Total
No restricted Activity	I, II, IIIM	Count	1233	64	1297
		Row Percent	95.1%	4.9%	100%
	IIIN, IV, V	Count	1293	97	1390
		Row Percent	93%	7%	100%
	Total		2526	161	2687
Restricted Activity	I, II, IIIM	Count	284	26	310
		Row Percent	91.6%	8.4%	100%
	IIIN, IV, V	Count	306	45	351
		Row Percent	87.2%	12.8%	100%
	Total		590	71	661
Gamma- No Restrictions		.182	Gamma- Restrictions		.233
Chi Square Significance		.026*			

Table A154

Social Class by District Nurse by Restricted Activity

			District Nurse Use		
			Not Used	Used	Total
No restricted Activity	I, II, IIIM	Count	1254	43	1297
		Row Percent	96.7%	3.3%	100%
	IIIN, IV, V	Count	1318	72	1390
		Row Percent	94.8%	5.2%	100%
	Total		2572	115	2687
Restricted Activity	I, II, IIIM	Count	280	30	310
		Row Percent	90.3%	9.7%	100%
	IIIN, IV, V	Count	310	41	351
		Row Percent	89.3%	11.7%	100%
	Total	590	71	661	
Gamma- No Restrictions		.229	Gamma- Restrictions		.105
Chi Square Significance		.017*			

Table A155

Social Class by Consultations by a GP at home by Restricted Activity

			Home Consultations		
			Not Used	Used	Total
No restricted Activity	I, II, IIIM	Count	1304	16	1320
		Row Percent	98.8%	1.2%	100%
	IIIN, IV, V	Count	1406	35	1441
		Row Percent	97.6%	2.4%	100%
	Total		2710	51	2761
Restricted Activity	I, II, IIIM	Count	299	28	327
		Row Percent	91.4%	8.6%	100%
	IIIN, IV, V	Count	331	48	379
		Row Percent	87.3%	12.7%	100%
	Total	630	76	706	
Gamma- No Restrictions		.340	Gamma- Restrictions		.215
Chi Square Significance		.018*			

Table A156

Social Class by Consultations with a GP at Surgery by Restricted Activity

			Surgery Consultations		
			Not Used	Used	Total
No restricted Activity	I, II, IIIM	Count	1142	178	1320
		Row Percent	86.5%	13.5%	100%
	IIIN, IV, V	Count	1272	169	1441
		Row Percent	88.3%	11.7%	100%
	Total		2414	347	2761
Restricted Activity	I, II, IIIM	Count	251	76	327
		Row Percent	76.8%	23.2%	100%
	IIIN, IV, V	Count	299	80	379
		Row Percent	77.9%	21.1%	100%
	Total		550	156	706
Gamma- No Restrictions		-.080	Gamma- Restrictions		-.062
Chi Square Significance		.164			

Table A157

Social Class by Specialist Consultations by Restricted Activity

			Specialist Use		
			Not Used	Used	Total
No restricted Activity	I, II, IIIM	Count	1315	5	1320
		Row Percent	99.6%	.4%	100%
	IIIN, IV, V	Count	1433	8	1441
		Row Percent	99.4%	.6%	100%
	Total		2748	13	2761
Restricted Activity	I, II, IIIM	Count	321	6	327
		Row Percent	98.2%	1.8%	100%
	IIIN, IV, V	Count	378	1	379
		Row Percent	99.7%	.3%	100%
	Total		699	7	706
Gamma- No Restrictions		.190	Gamma- Restrictions		-.752
Chi Square Significance		.499			

Table A158

Social Class by Outpatient Visits by Restricted Activity

			Outpatient Visits		
			Not Used	Used	Total
No restricted Activity	I, II, IIIM	Count	1084	237	1321
		Row Percent	82.1%	17.9%	100%
	IIIN, IV, V	Count	1171	269	1440
		Row Percent	81.3%	18.7%	100%
	Total		2255	506	2761
Restricted Activity	I, II, IIIM	Count	213	115	328
		Row Percent	64.9%	35.1%	100%
	IIIN, IV, V	Count	233	146	379
		Row Percent	61.5%	38.5%	100%
	Total		446	261	707
Gamma- No Restrictions		.025	Gamma- Restrictions		.074
Chi Square Significance		.616			

Table A159

Social Class by Inpatient Visits by Restricted Activity

			Inpatient Visits		
			Not Used	Used	Total
No restricted Activity	I, II, IIIM	Count	1183	140	1323
		Row Percent	89.4%	10.6 %	100%
	IIIN, IV, V	Count	1278	162	1440
		Row Percent	88.8%	11.3 %	100%
	Total		2461	302	2763
Restricted Activity	I, II, IIIM	Count	250	78	328
		Row Percent	76.2%	23.8 %	100%
	IIIN, IV, V	Count	268	112	380
		Row Percent	70.5%	29.5 %	100%
	Total		518	190	708
Gamma- Restrictions		.034	Gamma- No Restrictions		.145
Chi Square Significance		.574			

Table A160

Social Class by Home Help by ADL Difficulty

			Home Help Use			
			Not Used	Used	Total	
No Difficulty	I, II, IIIM	Count	1080	20	1100	
		Row Percent	98.2%	1.8%	100%	
	IIIN, IV, V	Count	1176	19	1195	
		Row Percent	98.4%	1.6%	100%	
	Total		2256	39	2295	
Low Difficulty	I, II, IIIM	Count	209	18	227	
		Row Percent	92.1%	7.9%	100%	
	IIIN, IV, V	Count	149	13	162	
		Row Percent	92%	8%	100%	
		Total	358	31	389	
High Difficulty	I, II, IIIM	Count	309	104	413	
		Row Percent	74.8%	25.2%	100%	
	IIIN, IV, V	Count	188	56	244	
		Row Percent	77%	23%	100%	
	Total		497	160	657	
Gamma-None	-.068	Gamma-Low	.006	Gamma-	High	-.061
Chi Square Significance None=.673, Low=.973, High=.520						

Table A161

Social Class by District Nurse Use by ADL Difficulty

			District Nurse Use			
			Not Used	Used	Total	
No Difficulty	I, II, IIIM	Count	1082	18	1100	
		Row Percent	98.4%	1.6%	100%	
	IIIN, IV, V	Count	1173	22	1195	
		Row Percent	98.2%	1.8%	100%	
	Total		2255	40	2295	
Low Difficulty	I, II, IIIM	Count	212	15	227	
		Row Percent	93.4%	6.6%	100%	
	IIIN, IV, V	Count	154	8	162	
		Row Percent	95.1%	4.9%	100%	
		Total	366	23	389	
High Difficulty	I, II, IIIM	Count	334	79	413	
		Row Percent	80.9%	19.1%	100%	
	IIIN, IV, V	Count	201	43	244	
		Row Percent	82.4%	17.6%	100%	
	Total		535	122	657	
Gamma- None	.060	Gamma-Low	-.153	Gamma-	High	-.050
Chi Square Significance None=.708, Low=.491, High=.623						

Table A162

Social Class by Consultations with a GP at Home by ADL Difficulty

			Home Consultations			
			Not Used	Used	Total	
No Difficulty	I, II, IIIM	Count	1081	18	1099	
		Row Percent	98.4%	1.6%	100%	
	IIIN, IV, V	Count	1182	11	1193	
		Row Percent	99.1%	.9%	100%	
	Total		2263	29	2292	
Low Difficulty	I, II, IIIM	Count	218	99	227	
		Row Percent	96%	4%	100%	
	IIIN, IV, V	Count	158	3	161	
		Row Percent	98.1%	1.9%	100%	
		Total	376	12	388	
High Difficulty	I, II, IIIM	Count	364	49	413	
		Row Percent	88.1%	11.9%	100%	
	IIIN, IV, V	Count	215	27	242	
		Row Percent	88.8%	11.2%	100%	
	Total		579	76	655	
Gamma-None	-.283	Gamma-Low	-.370	Gamma-	High	-.035
Chi-Square Significance None=.126, Low=.239, High=.785						

Table A163

Social Class by Consultations by a GP at Surgery by ADL Difficulty

			GP Surgery Consultations			
			Not Used	Used	Total	
No Difficulty	I, II, IIIM	Count	953	146	1099	
		Row Percent	86.7%	13.3%	100%	
	IIIN, IV, V	Count	1015	178	1193	
		Row Percent	85.1%	14.9%	100%	
	Total		1968	324	2292	
Low Difficulty	I, II, IIIM	Count	191	36	227	
		Row Percent	84.1%	15.9%	100%	
	IIIN, IV, V	Count	125	36	161	
		Row Percent	77.6%	22.4%	100%	
		Total	316	72	388	
High Difficulty	I, II, IIIM	Count	355	58	413	
		Row Percent	86%	14%	100%	
	IIIN, IV, V	Count	208	34	242	
		Row Percent	86%	14%	100%	
	Total		563	92	655	
Gamma-None	.067	Gamma-Low	.209	Gamma-	High	.000
Chi Square Significance None=.262, Low=.105, High=.998						

Table A164

Social Class by Specialist Consultations by ADL Difficulty

			Specialist Consultations			
			Not Used	Used	Total	
No Difficulty	I, II, IIIM	Count	1095	4	1099	
		Row Percent	99.6%	.4%	100%	
	IIIN, IV, V	Count	1189	4	1193	
		Row Percent	99.7%	.3%	100%	
	Total		2284	8	2292	
Low Difficulty	I, II, IIIM	Count	224	3	227	
		Row Percent	98.7%	1.3%	100%	
	IIIN, IV, V	Count	159	2	161	
		Row Percent	98.8%	1.2%	100%	
		Total	383	5	388	
High Difficulty	I, II, IIIM	Count	411	2	413	
		Row Percent	99.5%	.5%	100%	
	IIIN, IV, V	Count	238	4	242	
		Row Percent	98.3%	1.7%	100%	
	Total		649	6	655	
Gamma-None	-.041	Gamma-Low	-.031	Gamma-	High	.551
Chi Square Significance None=.907, Low=.946, High=.130						

Table A165

Social Class by Outpatient Visits by ADL Difficulty

			Outpatient Visits			
			Not Used	Used	Total	
No Difficulty	I, II, IIIM	Count	910	190	1100	
		Row Percent	82.7%	17.3%	100%	
	IIIN, IV, V	Count	996	198	1194	
		Row Percent	83.4%	16.6%	100%	
	Total		1906	388	2294	
Low Difficulty	I, II, IIIM	Count	181	46	227	
		Row Percent	79.7%	20.3%	100%	
	IIIN, IV, V	Count	108	54	162	
		Row Percent	66.7%	33.3%	100%	
		Total	289	100	389	
High Difficulty	I, II, IIIM	Count	257	154	411	
		Row Percent	62.5%	37.5%	100%	
	IIIN, IV, V	Count	151	92	243	
		Row Percent	62.1%	37.9%	100%	
	Total		408	246	654	
Gamma-None	-.025	Gamma-Low	.326	Gamma	High	.008
Chi Square Significance None=.660, Low=.004*, High=.921						

Table A166

Social Class by Inpatient Visits by ADL Difficulty

			Inpatient Visits			
			Not Used	Used	Total	
No Difficulty	I, II, IIIM	Count	1006	93	1099	
		Row Percent	91.5%	8.5%	100%	
	IIIN, IV, V	Count	1077	118	1195	
		Row Percent	90.1%	9.9%	100%	
	Total		2083	211	2294	
Low Difficulty	I, II, IIIM	Count	188	39	227	
		Row Percent	82.8%	17.2%	100%	
	IIIN, IV, V	Count	130	32	162	
		Row Percent	80.2%	19.8%	100%	
		Total	318	71	389	
High Difficulty	I, II, IIIM	Count	296	117	413	
		Row Percent	71.7%	28.3%	100%	
	IIIN, IV, V	Count	191	53	244	
		Row Percent	78.3%	21.7%	100%	
	Total		487	170	657	
Gamma-None	.085	Gamma-Low	.085	Gamma-	High	-.175
Chi Square Significance None=.242, Low=.517, High=.062						

Table A167

Social Class by Home Help by IADL Difficulty

			Home Help Use			
			Not Used	Used	Total	
No Difficulty	I, II, IIIM	Count	1318	55	1373	
		Row Percent	96%	4%	100%	
	IIIN, IV, V	Count	1348	39	1387	
		Row Percent	97.2%	2.8%	100%	
	Total		2666	94	2760	
Low Difficulty	I, II, IIIM	Count	165	37	202	
		Row Percent	81.7%	18.3%	100%	
	IIIN, IV, V	Count	116	23	139	
		Row Percent	81.7%	18.3%	100%	
		Total	281	60	341	
High Difficulty	I, II, IIIM	Count	116	51	167	
		Row Percent	69.5%	30.5%	100%	
	IIIN, IV, V	Count	53	27	80	
		Row Percent	66.3%	33.8%	100%	
	Total		169	78	247	
Gamma-None	-.181	Gamma-Low	-.061	Gamma-	High	.074
Chi Square Significance None=.084, Low=.673, High=.611						

Table A168

Social Class by District Nurse Use by IADL Difficulty

			District Nurse Use			
			Not Used	Used	Total	
No Difficulty	I, II, IIIM	Count	1325	48	1373	
		Row Percent	96.5%	3.5%	100%	
	IIIN, IV, V	Count	1355	32	1387	
		Row Percent	97.7%	2.3%	100%	
	Total		2680	80	2760	
Low Difficulty	I, II, IIIM	Count	183	19	202	
		Row Percent	90.6%	9.4%	100%	
	IIIN, IV, V	Count	120	19	139	
		Row Percent	86.3%	13.7%	100%	
		Total	303	38	341	
High Difficulty	I, II, IIIM	Count	121	46	167	
		Row Percent	72.5%	27.5%	100%	
	IIIN, IV, V	Count	58	22	80	
		Row Percent	72.5%	27.5%	100%	
	Total		179	68	247	
Gamma-None	-.211	Gamma-Low	.208	Gamma-	High	-.001
Chi Square Significance None=.063, Low=.219, High=.994						

Table A169

Social Class by Consultations with a GP at Home by IADL Difficulty

			Home Consultations			
			Not Used	Used	Total	
No Difficulty	I, II, IIIM	Count	1336	36	1372	
		Row Percent	97.4%	2.6%	100%	
	IIIN, IV, V	Count	1360	23	1383	
		Row Percent	98.3%	1.7%	100%	
	Total		2696	59	2755	
Low Difficulty	I, II, IIIM	Count	188	14	202	
		Row Percent	93.1%	6.9%	100%	
	IIIN, IV, V	Count	130	8	138	
		Row Percent	94.2%	5.8%	100%	
		Total	318	22	340	
High Difficulty	I, II, IIIM	Count	141	26	167	
		Row Percent	84.4%	15.6%	100%	
	IIIN, IV, V	Count	70	10	80	
		Row Percent	87.5%	12.5%	100%	
	Total		211	36	247	
Gamma-None	-.229	Gamma-Low	-.095	Gamma-	High	-.127
Chi Square Significance None=.082, Low=.677, High=.522						

Table A170

Social Class by Consultations by a GP at Surgery by IADL Difficulty

			GP Surgery Consultations			
			Not Used	Used	Total	
No Difficulty	I, II, IIIM	Count	1179	193	1372	
		Row Percent	85.9%	14.1%	100%	
	IIIN, IV, V	Count	1162	221	1383	
		Row Percent	84%	16%	100%	
	Total		2341	414	2755	
Low Difficulty	I, II, IIIM	Count	175	27	202	
		Row Percent	86.6%	13.4%	100%	
	IIIN, IV, V	Count	120	18	138	
		Row Percent	87%	13%	100%	
		Total	295	45	340	
High Difficulty	I, II, IIIM	Count	147	20	167	
		Row Percent	86.8%	13.2%	100%	
	IIIN, IV, V	Count	71	9	80	
		Row Percent	88.8%	11.2%	100%	
	Total		218	29	247	
Gamma-None	.075	Gamma-Low	-.014	Gamma-	High	-.035
Chi Square Significance None-=.160, Low=.931, High=.868						

Table A171

Social Class by Specialist Consultations by IADL Difficulty

			Specialist Consultations			
			Not Used	Used	Total	
No Difficulty	I, II, IIIM	Count	1366	6	1372	
		Row Percent	99.6%	.4%	100%	
	IIIN, IV, V	Count	1377	6	1383	
		Row Percent	99.6%	.4%	100%	
	Total		2743	12	2755	
Low Difficulty	I, II, IIIM	Count	201	1	202	
		Row Percent	99.5%	.5%	100%	
	IIIN, IV, V	Count	134	4	138	
		Row Percent	97.1%	2.9%	100%	
		Total	335	5	340	
High Difficulty	I, II, IIIM	Count	165	2	167	
		Row Percent	98.8%	1.2%	100%	
	IIIN, IV, V	Count	80	0	80	
		Row Percent	100%	0%	100%	
	Total		245	2	247	
Gamma-None	-.004	Gamma-Low	.714	Gamma-	High	-1.0
Chi Square Significance None=.989, Low=.071, High=.326						

Table A172

Social Class by Outpatient Visits by IADL Difficulty

			Outpatient Visits			
			Not Used	Used	Total	
No Difficulty	I, II, IIIM	Count	1106	267	1373	
		Row Percent	80.6%	19.4%	100%	
	IIIN, IV, V	Count	1122	264	1386	
		Row Percent	81%	19%	100%	
	Total		2228	531	2759	
Low Difficulty	I, II, IIIM	Count	141	61	202	
		Row Percent	69.7%	30.2%	100%	
	IIIN, IV, V	Count	83	55	138	
		Row Percent	60.1%	39.9%	100%	
		Total	224	116	340	
High Difficulty	I, II, IIIM	Count	105	60	165	
		Row Percent	63.6%	36.4%	100%	
	IIIN, IV, V	Count	54	26	80	
		Row Percent	67.5%	32.5%	100%	
	Total		159	86	245	
Gamma-None	-.013	Gamma-Low	.210	Gamma-	High	-.085
Chi Square Significance None=.790, Low=.065, High=.552						

Table A173

Social Class by Inpatient Visits by IADL Difficulty

			Inpatient Visits			
			Not Used	Used	Total	
No Difficulty	I, II, IIIM	Count	1224	148	1372	
		Row Percent	89.2%	10.8%	100%	
	IIIN, IV, V	Count	1223	164	1387	
		Row Percent	88.2%	11.8%	100%	
	Total		2447	312	2759	
Low Difficulty	I, II, IIIM	Count	150	52	202	
		Row Percent	74.3%	25.7%	100%	
	IIIN, IV, V	Count	119	20	139	
		Row Percent	85.6%	14.4%	100%	
		Total	269	72	341	
High Difficulty	I, II, IIIM	Count	116	51	167	
		Row Percent	69.5%	30.5%	100%	
	IIIN, IV, V	Count	60	20	80	
		Row Percent	75%	25%	100%	
	Total		176	71	247	
Gamma-None	.052	Gamma-Low	-.347	Gamma-	High	-.138
Chi Square Significance None=.390, Low=.012*, High.368						

BIBLIOGRAPHY

Andersen, R. (1968). A behavioral model of families' use of health services. Chicago: Center for Health Administration.

Andersen, R. & Aday, L. (1975). Development of indices of access to medical care. Ann Arbor: Health Administration Press.

Andersen R., & Newman, J. (1973). Societal and individual determinants of medical care utilization in the United States. Mibank Quarterly.

Arber, S., & Evandrou, M. (1993). Aging, independence, and the life course. London: Jessica Kingsley Publishers.

Arber, S., & Ginn, J. (1993). Gender and inequalities in health in later life. Social Science and Medicine, 36, 1.

Arber, S., & Ginn, J. (1991). Gender and later life: A sociological analysis of Resources and restraints. London: Sage.

Atkins,G. (1985). The economic status of the oldest old. Milbank Memorial Fund Quarterly: Health and Society, 63, 1.

Baggott, R. (1994). Health and health care in Britain. New York: St. Martin's Press.

Bennett, J. (1999). Activities of daily living: Old fashioned or still useful? Journal of Gerontological Nursing, 25, 22-29.

Bowling, A. (1991). Measuring health status. Milton Keynes: Open University Press.

Bowling, A., & Charlton, J. (1987). Risk factors for mortality after bereavement: A logistic regression analysis. JR Coll General Practice, 37, 551-554.

Bowling, A., & Farquhar, M. (1991). Associations with social networks, social support, health status and psychiatric morbidity in three samples of elderly people. Social Psychiatry and Psychiatric Epidemiology, 26, 115-126.

British Medical Association (1985). Medicine in old age. London: British Medical Association.

Bury, M.,& Holme, A. (1991). Life after ninety. London: Routledge.

Choi, N. (1996). The never married and divorced elderly: Comparison of economic and health status, social support, and living arrangements. Journal of Gerontological Social Work, 26, 3.

Davis, J. (1971). Elementary survey analysis. New Jersey: Prentice Hall.

Davis, K. (1942). A conceptual analysis of stratification. American Sociological Review, 7, 242-249.

Department of Health (1999). Saving lives: Our healthier nation. London: The Stationary Office.

Department of Health and Human Services. (1988). Health, United States, 1988. (DHHS Publication No. 88-1232). Washington D.C. Government Printing Office.

Dinning, T., Chi, L., Brayne, C., Huppert, F., Paykel, E., & O'Conner, D. (1998). Changes in self rated health, disability and contact with services in a very elderly cohort: A six-year follow up study. Age and Aging, 27, 23-33.

Durkheim, E. (1996). Suicide and birth rate: A study in moral statistics. Ottowa:Barclay Johnson.

Durkheim, E. (1965). Division of Labor in Society. New York: Free Press.

Fried, L., Bandeen-Roche, K., Williamson, J., Prasada-Rao, P., Chee, E., Tepper, S., & Rubin, G. (1996). Functional decline in older adults: Expanding methods of ascertainment. Journal of Gerontology: Medical Sciences, 51A(5), M206-M214.

Henretta, J. (1994). Uniformity and diversity: Life course instiltutionalization and late life work exit. The Sociological Quarterly, 33, 265-279.

Hershey, J., Luft, H., & Gianaris, J. (1975). Making sense out of utilization data. Medical Care, 13, 838-854.

Holliday, I. (1995). The NHS transformed: A guide to the health reforms. Manchester: Baseline Books Company.

Jackson, J., & Perry, C. (1989). Physical health conditions of middle aged and aged blacks. Aging and Health: Perspectives on Gender, Race, Ethnicity and Class. Markides, K. Ed. Newbury Park:Sage.

Karagiozis,H., Gray, S., Sacco, J., Shapiro, M., & Kawas, C. (1998). The direct assessment of functional abilities (DAFA): A comparison to an indirect measure of instrumental activities of daily living. The Gerontologist, 38, 113-121.

Katz, S., Down, T., Cash, H., & et al. (1970). Progress in the development of the index of activities of daily living. The Gerontologist, 10, 20-30.

Kavanagh, S., & Knapp, M. (1998). The impact on general practitioners of the changing balance of care for elderly people living in institutions. British Medical Journal, 317, 322-327.

Keller, D., Kovar, M., Jobe, J., & Branch, L. (1993). Problems eliciting elders' reports of functional status. Journal of Aging and Health, 5, 306-318.

Klein, R. (1995). The new politics of the NHS. London: Longman.

Kohn, R., & White, K. (eds). (1976). Health care: An international study: Report of the World Health Organization/ international collaborative study of medical care utilization. London: Oxford University Press.

Kohli, M. (1994). Retirment and the moral economy: A historical interpretation of the German case. Journal of Aging Studies, 1, 125-144.

Lassey, M., Lassey, W., & Jinks, M. (1996). Health care systems around the world: Characteristics, issues, reforms. New Jersey: Prentice Hall.

Lowenthal, M., & Haven, C. (1968). Interaction and adaptation: Intimacy as a critical variable. American Sociological Review, 33, 20-30.

Lyons, R., Crome, P., Monaghan, S., Killalea, D., & Daley, J. (1997). Health status and disability among elderly people in three UK districts. Age and Aging, 26, 203-209.

MacClean, U. (1989). Dependent territories: The frail elderly and community care. London: Nuffield Provincial Hospitals Trust.

McNaught,W., Barth, M., & Henderson, P. (1994). Older Americans: Willing and able to work. In Munnell, A. (Ed). Retirement and public policy. Dubuque, IA: Hunt Publishing Company.

Mechanic, D. (1979). Correlates of physician utilization: Why do major multivariate studies of physician utilization find trivial psycho social and organizational effect? Journal of Health and Social Behavior, 20, 387-396.

Minaker, K.,& Rowe, J. (1985). Health and disease among the oldest old: A clinical perspective. Milbank Memorial Fund Quarterly: Health and Society, 63, 1.

Nelson, M. (1993). Race, gender and the effects of social supports on the use of health services by elderly individuals. International Journal of Aging and Human Development, 37, 227-246.

Norusis, M. (1993). SPSS for windows: Base system user's guide. Chicago: SPSS, Inc.

OPCS (1996). Living in Britain: Results of the 1994 General Household Survey. London: HMSO.

OPCS (1995). General Household Survey. London: HMSO.

Potts, M., & Hurwicz, M. (1992). Social support, health promotive beliefs, and preventative health behaviors among the elderly. Journal of Applied Gerontology, 11, 425.

Raithwaike,I. (1985). A demographic portrait of the oldest old. Milbank Memorial Fund Quarterly: Health and Society, 63, 1.

Raleigh, S. (1997). The demographic timebomb. British Medical Journal, 315, 442-443.

Ranade, W. (1997). A future for the NHS: Health care for the millennium. London: Longman.

Richards, T. (1998). Aging Costs. British Medical Journal, 317, 896-900.

Royal College of Physicians (1963). The care of the elderly in Scotland. Royal College of Physicians: Edinburgh.

Skelkey, M., & Wallace, M. (1999). Katz index of independence in activities of daily living. Journal of Gerontological Nursing, 25, 8-9.

Taylor, R. (1994). International convergence in health care systems: Lessons from and for the USA. In Eve, Havens, & Ingman (Eds) The Canadian Health Care System: Lessons for the United States. Lanham: University Press of America, Inc.

Torrey, B. (1985). Sharing increasing costs on declining income: The visible dilemma of the invisible aged. Milbank Memorial Fund Quarterly: Health and Society, 63, 1.

Whitehead, M. (1992). The health divide. London: Penguin Books.

Williams , I. (1989). Caring for elderly people in the community. London: Chapman & Hall.

Wilson, G. (1993). Money and independence in old age. Aging, independence and the life course. Arber, S., & Evandrou, M. eds. London: Jessica Kingsley Publishers.

Wolinsky, F. (1990). Health and health behavior among elderly Americans. New York: Springer.

Wolinsky,F., Mosely, R., & Coe, R. (1986). A cohort analysis of the use of health services by elderly Americans. Journal of Health and Social Behavior, 27, 209-219.

Wolper, L. (ed.). (1995). Health care administration: Principles, practices, structure, and delivery. Maryland: Aspen Publishers.