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Martha Arambel Judice

July 6, 2004
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ABSTRACT

Prescription drugs play an ever increasing role in modern medicine. New medications are improving health outcomes and quality of life while often providing viable options to invasive treatments and hastening recovery for patients. As important as prescription medications are, not everyone has access to them. The newest medications are often the most expensive and millions of Americans, especially elderly and disabled Medicare recipients have inadequate or no insurance coverage for drugs. Nearly one third of all Medicare beneficiaries lack financial prescription assistance and are faced with the difficult decision of omitting or limiting their prescription drug use. Access to information about medication assistance programs tends to be scattered and poorly understood.

The purpose of this project was to develop a pamphlet that would organize the different medication assistance programs into a user friendly format, and guide Medicare recipients to appropriate resources. Programs are available through individual pharmaceutical companies, through private insurers, and through limited state and federal assistance programs. There are multiple factors relating to coverage, utilization and spending for prescription drugs. Different eligibility guidelines for different programs leads to further confusion. Further complicating the problem is the fact that programs are constantly being revised.

Using the gathered information and principles of learning pertaining to development of teaching/learning materials for elders, a tri-fold pamphlet was developed that primary care providers can provide to their elderly clients. Primary care providers need to be aware of the important implications of cost related poor medication adherence. Being knowledgeable of various programs and their required involvement may make the difference between sustained health or devastating illness in their patients.
CHAPTER 1

INTRODUCTION

The cost of prescription medications and the issue of out-of-pocket spending is a concern to many Americans, especially those in their later years. Those who are Medicare eligible may or may not have supplemental insurance to buffer the excessive cost of medications. Even seniors with supplemental insurance are shouldering a significant portion of their annual costs. According to American Association of Retired Persons (AARP, 2002b), nationally, more than one in five people report that they have not filled at least one prescription written by their primary care provider in the past two years due to the medication’s cost. A recent study conducted by the Montana chapter of AARP (2002a), found that 36% of Montana members have instituted cost cutting measures such as taking less medicine than prescribed, delayed filling, or not filling a prescription (AARP, 2002a).

Presently, small steps are being taken in the struggle to assist Medicare recipients with increasing prescription costs. The House and Senate have both been working for several years to craft a final bill addressing this issue but have been plagued with fruitless negotiations and gridlock. Until the year 2003, a comprehensive bill has never made it past negotiations (AARP, 2003b). Now, neither the House nor the Senate are arguing about the need for this addition and have moved forward with an interim plan until a benefit program can be constructed by the year 2006 (Centers for Medicare and Medicaid Services [CMS], 2003b).
The most recent prescription assistance program to be approved through Congress was enacted into law December 8, 2003. According to the Centers for Medicare and Medicaid Services (2003b), the Medicare Prescription Drug Improvement and Modernization Act of 2003, authorizes the implementation of the Medicare Approved Drug Discount Card Program. This discount card, available by May, 2004, is intended to help people until the actual Medicare drug benefit package takes effect on January 1, 2006. This will not only be available to elderly Medicare recipients, but also to Medicare beneficiaries with disabilities.

This is a tremendous movement forward, but there are certain populations of elders who will still be faced with high out-of-pocket expenses. Nationally, the group that tends to suffer the most are those who do not qualify for government assistance because their annual income exceeds $12,123 for single individuals or $16,362 for married couples (AARP, 2003b) but do not make enough to purchase supplemental insurance with a prescription plan.

AARP (2002a), reported that there are approximately 120,000 seniors over the age of 65 living in Montana. Approximately 31,000 of them have incomes under $14,368 a year for an individual. Because of this level of income, this group will not qualify for the new Medicare Prescription card and many in this group will not have enough income or resources to purchase private insurance which offers prescription assistance.
Statement of the Problem

An estimated 80% of retirees use a prescription drug every day (AARP, 2002b). According to the AARP (1999), about 30% of all seniors do not have any kind of drug insurance coverage. Medicare recipients without prescription coverage had to pay on average of $546 out-of-pocket in 1998, compared to $325 for beneficiaries with insurance coverage for outpatient medicines. In other words, beneficiaries without drug coverage paid an average of $33 per prescription compared to $13 for beneficiaries with drug coverage (CMS, 2003b). Rural elders receive a higher proportion of their income from social security, but they receive lower average monthly benefits than those living in urban areas and are more apt to be classified as “poor” or “low” income (Ricketts, 1999).

Remaining as independent as possible, for as long as possible is a primary concern for most elderly (Miller, Zylstra, & Standridge, 2000). For people that face financial hardships, they must make difficult decisions whether to pay for prescriptions, or budget their money to maintain a home. Studies (Tamblyn, et al., 2001; Shulman, Martinez, & Brogan, 1986; Federman, Adams, Ross-Degnan, Soumeral, & Ayanian, 2001) have shown that there is a correlation between poor adherence to medications and adverse events such as emergency room visits, hospitalizations, nursing home admission, and mortality.

Accessing medication assistance programs

Several programs offering medication cost savings are available to the elderly but access to this information is scattered, difficult to access, and at times confusing.
Medication assistance programs are offered through individual pharmaceutical companies, private companies, insurance programs and soon, Medicare. Different agencies such as AARP, the Montana State Office of Aging, senior citizens centers, and local pharmacies can offer information. Primary care providers and their office staff must assist their patients with many of the assistance programs but many do not understand the necessary paperwork nor do they offer their assistance.

The information about medication assistance programs often comes in multiple handouts or reprints, and several of the programs require Internet access. The Pharmaceutical Research and Manufacturers of America prepares an annual directory listing patient assistance programs offered through pharmaceutical companies. The directory for 2002 was 47 pages long with 59 companies listed. Most require extensive initial paperwork and the individuals must meet stringent eligibility criteria.

**Purpose**

The purpose of this project is to develop a pamphlet that incorporates several of the medication assistance programs available to Montana residents who are currently Medicare eligible. By making this pamphlet available in primary care offices, pharmacies and senior citizen centers, knowledge of the availability of these programs will increase.

**Conceptual Model/Theoretical Framework**

**Orem’s Self Care Deficit Theory**

The conceptual framework chosen for this project is Orem’s self care deficit theory. The core of Orem’s philosophy is the belief that man has an innate ability to care
for himself. Self-care may be defined as activities a person initiates and performs on his own behalf in order to maintain life, health, and well being (Anna, Christensen, Hohon, Ord, & Wells, 1978). The nurse’s role in applying this framework is to assist each patient in maximizing their potential for self-care.

Orem’s (1971) original theory is based on the premise that individuals initiate and perform activities on their own behalf to maintain life, health, and well being. The basic orientation to Orem’s framework is that individuals have certain requirements in common to meet basic human needs. Classified as “universal self-care demands” they include air, water, food, activity, rest, elimination, and social interaction. When humans are able to meet these demands, to a large degree, they are considered self sufficient and do not require the assistance of others. If problems arise that interfer with their ability to meet these universal demands, other people need to become involved for assistance and support.

When a deficit in self-care is identified, the nurse prescribes, designs, and provides nursing that relates to the individual’s self-care capabilities. Utilizing Orem’s Nursing System Theory (Gomez & Walks, n.d.), patients are placed in one of three system categories: a wholly compensatory system, partly compensatory system or supportive-educative system. When patients have no active role in the performance of self-care, they are placed in the wholly compensatory system. When patients are capable of performing some self-care but also require the assistance of others, they are placed in the partly compensatory system. Patients in the supportive-educative system are capable of learning and applying the necessary measures to maintain a state of independence.
(Anna et al., 1978). For the purposes of this paper, Orem’s Nursing Systems Theory and the major category of Supportive-Educative System will be utilized due to the strong focus placed on the active role of patients as a participant in care and a collaborative involvement with nursing which emphasizes teaching, counseling, guidance and support.

Promoting self-care with patients requires that the patients become active participants and decision makers. Nurses assist the patients by helping them arrive at informed decisions to assist in developing improved health. According to Orem (1995), this is accomplished in a deliberate, logical manner, a process elucidated in her theory of nursing systems. Her theory proposes that nursing is human action: nursing systems are action systems formed (designed and produced) by nurses through the exercise of their nursing agency for persons with limitations in self-care. Within the developmental requisites, Orem emphasizes the relationship between self-care and the different stages that human beings undergo. These developmental self-care requisites apply across all stages of the life cycle. The first requisite emphasizes the bringing about and maintenance of living conditions that support life processes and promote the processes of development; that is, humans progress toward higher levels of the organization of human structures and toward maturation. The second requires provisions of care either to prevent the occurrence of deleterious effects of conditions that can affect human development or to mitigate or overcome these effects from various conditions.
Although the overall direction is toward increasing ability for self-care, loss of some agency does occur at various times throughout life. Self-care and dependent-care agency naturally increase as a person matures yet as we require more assistance, our inherent, overt potential for development of self-care remains (Fawcett, 1989).

Medication assistance programs are available to medicare beneficiaries, but they require knowledge of their existence, ability to obtain and fill out the forms, and the continual updates necessary to receive future assistance. As stated previously, the provision of care is necessary to prevent the deleterious effects of conditions that can affect human development. When people are forced to self regulate or restrict their prescription medications, the outcome can be devastating. Through the use of printed material with the information necessary to allow people to obtain medications at a reduced cost, we as health care providers are allowing our patients to optimize their health while taking an active role in maintaining their self-care agency.

**Nurse Practitioner Role**

While doctors and patients are communicating more about medications and side effects, there has been no change over the past 16 years in the proportion of doctors and patients who discuss how and when to take medications (AARP, 2002b). As Family Nurse Practitioners, we are uniquely qualified to assist these people to achieve their highest attainable level of self-care. Self care must be learned and it must be performed deliberately with the regulatory requirements of the individuals (Taylor & Renpenning,
1995). These requirements are associated with stages of growth and development throughout the life cycle and environmental influences.

Personal definitions of health are an important link to effective health promotion. This is true of both the young and the old. The link between health promotion and personal definitions of health must be understood so health care professionals can provide information that is relevant and meaningful. A recent (as yet unpublished) study has found that the single most important predictor of whether elderly subjects participated in health promotion activities was whether or not they had been involved in a risk appraisal and risk reduction plan (K. Chafey, personal communication, April 21, 2003).

Nurses’ efforts to enhance health and promote self-care requires attention to not only individual physiologic needs but social and environmental influences. Through health education, primary, secondary and tertiary prevention, we establish a partnership with our patients that will assist them to meet their highest level of self-care. Assisting them to identify economic factors that influence their self-care needs, explaining the fundamentals of Medicare and Medicaid, and staying current on the legal and economic issues, will be essential for providing holistic care. Beyond the individual interaction, we have the opportunity and obligation to act on our patients’ behalf as advocates representing their interests in a larger arena.

Definitions

For the purposes of this project, definitions of several terms will be made available to assist in elucidating the technical and subject specific information. Self-
restriction of medication: Self-restriction is defined as not filling prescriptions, skipping doses, limiting or altering the milligram dose (Steinman, Sands & Covinsky, 2001).

Medicare: Medicare is health insurance offered by the federal government to most people who are 65 and older and to some younger people with disabilities.

Medicaid: Medicaid is a form of health insurance which helps low-income persons of all ages pay for medical care. It also helps people who have extremely high medical bills or need to pay for nursing home care.

Medigap policy: A supplemental insurance policy that helps to pay for some of the costs incurred that are not covered in the original Medicare Program. Medigap insurance is sold by private insurance companies.

Mid-level Provider: Non-physician health care providers who receive specific schooling and training to assess, diagnose, treat, order tests, and prescribe medications. Two main classifications of providers are recognized. A Certified Nurse Practitioner in Montana is capable of independent practice and independent billing of insurance companies or Medicare and Medicaid. A Certified Physician’s Assistant works under the direct and responsible supervision of a practicing licensed physician. Patient billing and third party reimbursement for services can be managed only in an integrated practice arrangement and all reimbursement for his/her services are through the supervising physician (American Academy of Family Physicians, 2004).

Self-care deficit: Patients making decisions about altering medications based on finances, not on the physiologic effects of those alterations.
CHAPTER 2

REVIEW OF LITERATURE

Background and Significance

Current predictions suggest that the number of persons 65 years of age and older, will more than double in the United States during the next 30 years. As a result, this burgeoning elderly population could very well increase from 40 million in 2003 (CMS, 2003a) to approximately 69 million in 2030 (Miller et al., 2000). This increase, combined with the disproportionate rate at which elderly patients require medical resources, presents unique challenges to the primary care provider. As providers, we must assist the elderly with maintaining their independence and functionality while effectively treating their chronic and acute conditions. While this often necessitates the use of expensive medications, we must be cognizant of the ramifications of those expenses.

Self Restriction of Medication

Self-restriction of medications due to prohibitive out of pocket expenses has not been extensively studied. Researchers in two studies (Steinman et al., 2001; Tamblyn et al., 2001), identified that medication restriction is common among seniors particularly among certain vulnerable groups. Included in the vulnerable groups were seniors without prescription coverage, ethnic minorities, and those living at or below poverty level. Tamblyn et al. (2001) indicate that lack of prescription drug coverage for Medicare beneficiaries is associated with lower use of essential medications and may lead to higher rates of adverse outcomes such as hospitalizations and nursing home placement. Findings
from a study conducted by Steinmen et al. (2001) concluded that among seniors with no prescription coverage, self-restriction of prescription medication is common in several vulnerable populations, including ethnic minorities, the poor, the sick and frail, and those with high out of pocket drug costs. The authors were also able to clarify that seniors in these high-risk groups who had partial or full prescription coverage were less likely to restrict the use of their medications.

Those findings parallel the findings in a study conducted by the Montana AARP. This study was conducted during August and September of 2002; members opinions were sought regarding three legislative issues facing all Montanan’s: prescription drug costs, tax reform, and utility rates and regulations. There were 1,178 respondents and almost three-fourths of those members were very concerned about being able to afford prescription drugs in the next two years. Those with annual incomes less than $30,000 were more concerned about being able to afford the cost of needed prescriptions over the next two years than those earning more than $30,000 (52% vs 31%) (AARP, 2002a). Almost three out of ten Montana members ordered their prescriptions by mail or Internet to save money, while 9% of the respondents traveled to another country to purchase their medications (AARP, 2002a).

All of these cost saving methods can have deleterious effects on the individual consumer. Poor adherence can ultimately lead to deterioration of chronic or acute conditions, more frequent hospitalizations, with a resultant increase in out-of-pocket
expenses (Mojtabai & Olfson, 2003). These self limitations can also have serious implications on individuals trying to maintain independent lifestyles.

Mojtabai and Olfson (2003) enrolled 10,413 participants age 65 and older who were enrolled in Medicare in 2000. The purpose of the study was to determine whether medication costs affected adherence and whether this was associated with poorer health and higher rates of hospitalizations. The participants reported several common chronic health conditions. Forty-eight percent reported taking medications for hypertension, 27% for arthritis, 20% for heart disease, 13% for diabetes, (both insulin and oral medications), 6% for psychiatric disorders, and 6% for lung disease. Overall, of the 8,704 beneficiaries using medications for any conditions, 557 (7%) reported cost-related poor adherence. This finding applies and corresponds to the more than two million Medicare beneficiaries nationwide.

The authors of the above study (Mojtabai & Olfson, 2003) identified an association between poor medication adherence with household income and yearly out-of-pocket drug spending. The findings revealed that 20% of recipients living below 100% of the level of poverty reported cost related poor adherence. Participants with cost-related poor adherence were more likely than those without it to perceive their overall health as poor (23% versus 10%) and to have been hospitalized (43% versus 33%). They also were more likely to report that their health got worse over the past two years (44% versus 30%), report worsening hypertension (7% versus 4%), worsening heart disease (21% versus 11%) and worsening arthritis (49% versus 40%). Poor adherence increased as out-
of-pocket expenses rose. As the out-of-pocket expenses reached the $400-$999 per year amount, the elders who altered their prescribed medication rose to 20% (Mojtabai & Olfson, 2003).

Much of the Medicare prescription drug debate has centered on whether to provide benefits to low-income beneficiaries only, or to all beneficiaries. Historically, Medicare has only offered limited prescription assistance to a small subgroup of elderly. Starting in the spring of 2004, elderly people with low incomes will qualify for medication assistance through the federal government. This program will only be available to low-income Medicare recipients and will not benefit other groups (CMS, 2003a).

Medicare and Medicaid Programs

In 1965, the Social Security Act established both Medicare and Medicaid. This proposed health plan was presented as being a prepaid medical insurance plan through Social Security for those without health insurance. Medicare was meant to provide medical care to the elderly regardless of their financial situation while Medicaid was designed to defray expenses for those elderly who could not meet the cost of Medicare contributions or who exhausted their Medicare benefits. At the time of the origination of Medicare and Medicaid, a national survey found that only 56% of those 65 years of age or older had health insurance. Medicare extended health coverage to almost all Americans aged 65 or older and about 19 million beneficiaries enrolled in Medicare in 1965, the first year of the program. Medicaid provided access to health care services for
certain low-income persons but even then, neither program was designed to cover prescription drugs (CMS, 2003a).

Today, Medicare and Medicaid look much different than in 1965, but the idea remains the same. Medicare remains under the direction of the federal government. While broad guidelines are established by the federal government for Medicare, allocation of Medicaid benefits are left to the individual states’ discretion.

**Medicare**

Medicare consists of two parts: Part A is designed as hospital insurance, and Part B covers physician and certain outpatient services with very limited outpatient prescription drug coverage such as eopetin alfa, hemophilia clotting factor and some oral drugs for cancer. Most people do not pay out-of-pocket monthly premiums because those are deducted directly from their monthly Social Security check (CMS, 2003c).

In 1996, Medicare part B supplementary Medical Insurance monthly premiums were $42.50 per month (Ebersole, & Hess, 1998), where as, in the year 2000, the premium increased to $45.50. By the year 2003, the monthly premiums started at $58.70 per month but have been known to run much higher in certain cases depending on when the recipient became eligible. The benefits available are complex and have many exclusions. Each year all Social Security recipients receive a booklet explaining the benefits; the current 2003 guide is 82 pages long (CMS, 2003c).

Prescriptions drugs were not a major issue when Medicare was created 34 years ago. In the 1960's, our understanding of drugs was quite limited and drugs were primarily
designed to treat acute illness (AARP, 2002b). Today, the practice of medicine has been transformed with the advent of new medications. The focus has moved from treatment of acute problems to treatment of the many chronic diseases experienced by the ballooning elderly population. Illnesses such as diabetes, coronary vascular disease or chronic lung diseases require continuous, and/or daily medications.

In one study, mean monthly prescription expenditures for elderly patients were $196 for persons with a single chronic condition (Mueller, Schur, & O’Connell, 1997). For those suffering with three or more chronic conditions, the cost could be as high a $519 per month. Pharmaceutical expenditure for patients dealing with diabetes, emphysema, and heart disease were higher than this average, ranging from $520 to $557 per month in the year 1997. One can only imagine how those costs have escalated in 6 years.

Medicaid

Medicaid is the largest program designed to provide medical and health related services to America’s poorest people. This program came into effect at the same time as Medicare but was designed to be jointly funded by the federal and state governments. The federal government assists state governments with the provision of adequate medical care to eligible needy persons by establishing broad national guidelines. Each state is responsible for establishing its own eligibility standards. Each is also obligated to determine the type, amount, duration, and scope of services, set the rate of payment for services and administer its own program. Thus, Medicaid varies considerably from state
to state (CMS, 2004a). Generally, Medicaid will cover nursing home care and outpatient prescriptions (CMS, 2003c).

Montana’s Medicaid expenses for 1998 were about $340 million. Since Medicaid program costs are shared between federal and state governments on about a two-third, one-third basis, Montana’s contribution to this program was about $101 million. Of the $340 million spent on Medicaid, about $95 million was spent on nursing home care. This represents 28% of the Medicaid expenditures even though nursing home residents represent only 5% of Medicaid recipients (Montana Department of Public Health and Human Services [MDPHHS], 2004).

During the fiscal year of 1998, there were about 98,000 Medicaid recipients in Montana, or about 11% of the states population. Approximately 7,000 of those individuals were over the age of 65 or about 6% of the state’s over-65 population (MDPHHS, 2004).

The financial eligibility criteria is established by each state. For Montana Medicare recipients, there are several Medicaid programs available. Each program has a complicated set of criteria, but the basic requirements state that person’s applying for these benefits are citizens of the United States, are over the age of 65, or are disabled and receiving benefits through the Social Security System (B. Pettybone, personal communication, February 26, 2004).

The eligibility is not based solely on income, but rather a formula which deducts $545 from the monthly income. This monetary value that is left after the $545 is subtracted from the recipients’ monthly income is labeled the incurment or deductible.
Medicaid personnel then look at the total available resources, such as checking or savings accounts, stocks or bonds. The most an individual can have and still qualify is $4000 in resources. The fewer the resources, the more assistance recipients will receive. If Medicare beneficiaries have less than $2000 as an individual or $4000 as a married couple, they can qualify for regular Medicaid which will then pay for any hospital, care provider, and prescriptions not covered by Medicare. Medicare recipients must reapply every month, their resources are re-evaluated monthly. Two other programs are available which provide money to apply toward assisted living, to bring help into the home, or pay for home modification. The most complicated program offers assistance with nursing home payments (B. Pettybone, personal communication, February 26, 2004).

**Medigap policies**

Medicare does not cover the full cost of medical expenses. The portion of the cost that is not covered becomes the responsibility of beneficiaries unless they have additional health care coverage. Several options are available; they are collectively referred to as the Medigap Policies (Medicare Supplement Insurances). Most are outlined in the booklet provided to each recipient annually by the Centers for Medicare and Medicaid Services (CMS, 2003c). Supplemental insurance policies are available through private insurance companies, purchased individually or offered through a previous employers plan, retired military benefits, or Veterans Administration benefits. By law, an insurer selling Medigap coverage, must offer one or more of the ten standardized plans. Three of these, known as plans H, I, and J, include some prescription drug coverage. Generally, the three plans
impose a $250 deductible. They then pay 50% of covered charges up to maximum payment of $1,250 for plans H and I and $3000 for plans J. The private carriers must accept all beneficiaries aged 65 and above during a limited open enrollment that ends 6 months after the beneficiary first qualifies for Medicare (U.S. Department of Health and Human Services [USDHHS], 2000).

Several of the private insurance carriers utilize a pharmacy benefits manager (PBM) to administer their drug benefit plan. Pharmacy Benefits Managers process and pay claims, negotiate drug discounts with manufacturers and retail pharmacies, encourage use of mail-order pharmacies, and take other steps to control drug costs (USDHHS, 2000).

Premiums for the plans with a drug benefit can be substantially more expensive than a standard Medigap policy both because of the cost of the drug benefit itself and because the benefit is likely to attract beneficiaries who incur higher medical expenses (USDHHS, 2000). Only a small minority of elders can afford the additional cost. A study conducted in 1997 looked at the average annual premiums of selected Medigap policies in several cities. Most of the cities were located on either the east or west coast. The annual cost of an average policy in Denver, the closest city to Montana, was $974 without drug coverage and $2589 with an outpatient drug plan (Rice, Graham, & Fox, 1997). This prohibitive cost leaves a vulnerable group of people referred to as the “middle group” (AARP, 2003b) who have too much in total assets to qualify for Medicaid but whose monthly income is too low to afford a Medigap policy with prescription benefits.
Nationally, in the year of 1999, an estimated 13.5 million Medicare beneficiaries, over one third of all Medicare beneficiaries, had no drug coverage at all (AARP, 1999). Almost 45% of beneficiaries without some form of medication plan had incomes at or below 200% of the federal poverty level as compared with 33% of beneficiaries with drug coverage.

In Montana in the year 2000, 137,000 people, both elderly and disabled, were receiving Medicare benefits with 76% of those carrying private supplemental health coverage. Statistics were not available as to how many of those private policies had medication benefits. The median family income for the years 1998-2000 was reported as $33,953 as compared with the national average of $43,423. Montana reported that 10,369 individuals or 9.1% of persons age 65 and older that were not institutionalized had family incomes below the federal poverty level (Administration on Aging, 2000).

**Medicare + choice plans**

A Medicare recipient also has the option of choosing a Medicare + Choice Plan. The recipient receives all the regular Medicare covered programs and if the beneficiary is capable of paying a monthly premium, additional benefits are available. Organizations, often HMO’s, will form a network. The network receives a fixed monthly payment from Medicare to furnish all Medicare covered services. If the organization can furnish these services at a cost less than the Medicare payment, the plan must share the savings with enrollees by providing supplemental benefits such as drug coverage. This drug coverage has considerable geographic variation. In general, where plans are available in rural areas,
they tend to charge higher premiums and offer little or no drug coverage (USDHHS, 2000).

Drug benefits are often administered by a PBM and most plans have an annual cap ranging from $500 to $1000. Some choice plans require co-payments ranging from $5 to $10 per prescription. Higher co-payments are often required for brand name drugs (USDHHS, 2000).

Information pertaining to different Medicare + Choice plans can be easily accessed on the Internet on the Medicare website under Personal Plan Finder. Each geographic area has different plans depending on which providers chose to participate in the plan. In Cascade County, there are 12 separate plans available with additional monthly premiums ranging from $33 to $215 per month. The services range from a choice in physician, outpatient prescription drugs, and routine physical exams. There are no dental or vision services offered in this area (CMS, 2004b).

**Distribution and Pricing of Prescription Drugs**

The process by which drug prices are determined is highly complex, involving numerous interactions and arrangements among manufacturers, retailers, insurers, pharmacies, PBMs, and the consumer. Prices will vary depending on whether the medications are purchased in full by cash customers from a retail pharmacy, whether persons has a medication assistance plan, whether customers qualify for medicaid or Veterans Administration (VA) benefits, or whether they utilize a mail-order pharmacy (USDHHS, 2000).

Cash customer purchase
In 1998, 90% of outpatient prescriptions drugs were obtained through some form of retail pharmacy. Retail pharmacies included independent pharmacies, chains, pharmacies in supermarkets or mass merchandisers or mail-order pharmacies. The percent of purchasers who pay in full at the time of the transaction (referred to as cash customers) has steadily been decreasing. According to a 1999 survey conducted by the U.S. Department of Health and Human Services (2000), 63% of retail prescriptions involved cash customers while 37% involved billing by the pharmacy to third-party payers of Medicaid. By 1998, only 25% of prescriptions were paid for by cash customers. Often, after the purchase, the cash customer files a claim with an insurance company for reimbursement.

The distribution channel for cash customers starts with the sale of the drug to a wholesaler. Manufacturers establish a price that varies by form and strength of the product. Prices also vary by the volume contained by each package. A package of 1000 tablets may cost less than a package containing 500 tablets. Once a generic version becomes available, the equivalent medication may be offered at different prices by different manufacturers. The manufacturers price includes not only the cost to produce the drug, but the manufacturer’s research costs, taxes and profits. Often cost will also reflect the market position of the drug; if the drug is in a new class or is not offered by competitors, the cost will be higher (USDHHS, 2000).

The wholesaler then sells the drug to a retail pharmacy. The cost paid by the retail pharmacy reflects the cost the wholesaler paid plus a 2% to 5% markup. The price the
retail pharmacy pays to the wholesaler is referred to as the average wholesale price (AWP). The third transaction takes place when the retail pharmacy sells the drug to the consumer at a price which includes its cost of acquiring the drug plus a retail markup. This “fixed cost” markup includes the cost of filling a prescription and the rate of turnover of the drugs. This will vary from pharmacy to pharmacy (USDHHS, 2000).

**Insurer and pharmacy benefit manager purchase**

Because PBMs may manage the drug benefit for a large number of individuals, they can negotiate discounts from both the manufacturer and from the retail pharmacy. The discounts and rebates offered by the companies are highly confidential and most information about them is derived from anecdotal information. Discussions of industry experts estimate that the typical Pharmacy Benefit Managers pays the retailers in the range of 13-15% of the AWP. For generic drugs, it tends to be 50-60% below the AWP. This encourages generic substitutes by pharmacists. PBM’s can offer further saving to enrollees by encouraging use of their mail-order pharmacies. Enrollees may pay a lower co-payment when using a mail-order pharmacy, especially for maintenance medications that are taken for chronic conditions. PBM’s also play a role in negotiating discounts for large organizations such as AARP. AARP offers a prescription discount card and reports an average savings of $7.26 per prescription (USDHHS, 2000). The organization also offers
a mail-order prescription service through which they can provide discounts (AARP, 2003a).

**Pricing for Federal Facilities and Agencies**

Prices paid to manufacturers by the VA and other federal agencies such as the Indian Tribal Government are set by the Federal Supply Schedule (FSS). Under the Veterans Health Care Act of 1992, manufacturers must make drugs available to covered entities at the FSS price as a condition of eligibility for medicaid reimbursement. The VA negotiates a price with the manufacturer and that price can be no higher than the lowest contractual price charged by the manufacturer to any non-federal purchaser. This allows the Federal government to purchase a medication for much less than cash customers (USDHHS, 2000).

**Pricing for Medicaid Programs**

Medicaid programs pay the retail pharmacies a fixed price based on the pharmacies acquisition price and the dispensing fees (USDHHS, 2000). Payment by recipients is based on either one dollar per prescription or 5% of what Medicaid would pay. Thus, if a prescription costs $20, the Medicaid recipient would be responsible for $1 of the amount: if the prescription cost is $30, persons will pay $1.50. Several of the more expensive medications are restricted and less expensive medications are substituted. A $200 dollar cost sharing allowance is available for in-patient care. A total cap of $500 is set that includes both prescription costs and in-patient and out-patient care. After that cost sharing cap is reached, Medicaid will pay 100% (MDPHHS, 2004).
Variation in Costs

An example in the variation of cost can be seen with the common antibiotic Cipro 500 milligrams. This antibiotic is used to fight anthrax and other dangerous bacteria. Cash customers will typically pay $5 per pill or $300 for a bottle of 60 pills. Public health facilities purchase the same pill for 43 cents per pill, or $25.80 for a bottle of 60 pills. The manufacturer is able to produce the pill for less than 10 cents (USDHHS, 2000).

Local Assistance

Within the City of Great Falls, there are several agencies that are qualified to assist the elderly in finding prescription assistance programs. Although they all offer basically the same information and assistance, there is little communication between the separate agencies (M. Fasbender, personal communication, December 2, 2003).

The Great Falls Clinic is a group of approximately 112 physicians that offer several sub-specialties. They employ a registered nurse who reviews patients’ prescription assistance needs and enrolls them in different programs. She initiates the first application to the drug companies and then helps the patients with the subsequent quarterly applications. Once a year, she organizes a special fair where several drug company representatives come to assist patients with the formal application process. These services
are limited strictly to patients receiving their care from a Great Falls Clinic health care provider (C. VanHook, personal communication, February 18, 2004).

Another local resource is the Area VIII Agency on Aging. At the Federal level, this agency is referred to as the Administration of Aging, and is under the auspices of the United States Department of Health and Human Services. The federal agency coordinates its activities with individual state offices which in Montana is called the Montana State Office of Aging. The state office oversees the financial requirements of the 10 local Area Agencies on Aging offices (M. Fasbender, personal communication, December 2, 2003).

The Great Falls Area VIII Agency on Aging offers several programs to assist the elderly. Although they do not offer direct financial assistance for medications, they offer guidance and assistance with the applications. Also, both the Foster Grandparent and Senior Companion programs are administered through this office and are available to anyone over the age of 65. These programs pay $2.65 per hour to those elders that are willing to schedule time to assist with these programs and that money is tax free. Eligibility for the programs is not limited by annual income levels. The Foster Grandparents program requires a minimum of 20 hours per week participation whereas the Senior Companion Program does not set a time requirement. Margaret Fasbender (personal communication, December 2, 2003), program director for Area VIII Agency on Aging, states that several seniors use this stipend to pay for prescriptions.

Patients who do not belong to the Great Falls Clinic rely on their private physicians’ office staff to help them with filling out applications to the pharmaceutical
companies or sending prescriptions in to their mail-order pharmacies. For smaller offices with fewer staff, the patients must manage their prescription assistance programs themselves, or they get no financial assistance.

The Sam’s Club Elite Card, which can be purchased locally, offers a discount on prescription medications purchased at Wal-Mart. It often will cover prescriptions that are excluded from other prescription drug plans. The discount may vary from one drug to another, but savings may be as high as 25%. Sam’s club also offers on-line pharmacy which will honor the discounts offered by the card (Sam’s Club, 2004).

State Assistance

Currently, the state of Montana does not offer elderly residents any form of medication prescription assistance. A drug assistance program for Montana elderly has been approved by the Senate but will not be operational until late 2004. Senate Bill 473 was sponsored by Montana Senator Jim Elliot and is currently known as “Healthy Montana.” If a waiver is approved by the Federal Department of Health and Human Services, the bill will require that drug manufacturers pay the same rebates for “Healthy Montana” participants that they already pay for Medicaid recipients. Pharmacies will sell prescription drugs to “Healthy Montana” enrollees for the retail price minus the rebate and the state will subsequently reimburse pharmacies from those rebate funds (Center for Policy Alternatives, 2003). This program will require a $25 annual application fee from all participants.
Of the 1,178 respondents to the AARP Montana Member Opinion Survey (2002), 41% stated that they are very concerned about being able to afford the cost of needed prescription drugs over the next two years. Thirty-two percent stated they were somewhat concerned. Thirty-eight percent strongly supported funding a prescription drug assistance program specifically for low-income persons in Montana even if it meant allocating new or reallocating existing state funds. Another 38% somewhat supported this purposed funding allocation. The strongest support, 54%, was shown for a purposed prescription drug assistance program which would be funded by increasing the tax on cigarettes. Survey respondents supported a tax of more than 50 cents but less than one dollar (AARP, 2002a).

**Federal Assistance**

Presently, the only type of assistance available at the federal level is the Medicare Prescription Card. It will not be available until May of 2004. The recently enacted Medicare Prescription Drug Improvement and Modernization Act of 2003 is designed to help Medicare beneficiaries with the cost of prescription drugs. This program will start accepting applications beginning in the spring of 2004. Only those that have individual incomes of not more than 135% of the poverty level, or $12,124 each year or married couples whose income is less than $16,363, will be able to receive this benefit. Beneficiaries at or below 100% of poverty will pay a 5% co-payment whereas beneficiaries above 100% will pay a 10% co-payment. In addition to the reduced cost, recipients will receive $600 towards the purchase of medications. An average Medicare
beneficiary without prescription drug insurance would pay approximately $1,400 in 2004, thus the discounts and $600 in assistance will be of substantial help (CMS, 2003b).

Pharmaceutical Assistance Programs

Most private, research based pharmaceutical companies have developed programs to provide prescription medicines free of charge to physicians whose patients might not otherwise have access to necessary medicines. Although individual pharmaceutical companies determine eligibility criteria and benefits for their programs, the majority have several common elements and generally target low-income individuals without any other form of drug coverage. To qualify, these individuals can not have coverage through private insurance, health maintenance organizations, Medicaid, state pharmacy assistance programs, Veterans Assistance or any social service agency (Ventimiglia, 2001). The Pharmaceutical Research and Manufacturers of America (PhRMA, 2002) publishes an annual directory of patient assistance programs with information about companies that make medicines available to those who can not afford to purchase them. Several companies in this directory state that no patient in need of their medicines will do without them. Despite the fact that the directory is comprehensive, it is rather intimidating. It lists 59 separate companies in a 47-page directory. The directory includes information about the name of each assistance program, contact information, the name of all the products covered by each company, eligibility requirements, and program information. No two patient assistance programs (PAPs) are exactly alike. Some companies have a single program for all the drugs they offer, while others have separate PAPs for each drug or
each type of drug. Most PAPs will provide the necessary drugs for free, but others do require a nominal co-payment or require that patients pay for shipping (Lewis, 2003).

Accessing the individual drug companies programs requires locating their 1-800 number or obtaining an application form from a healthcare provider, a pharmacist, or the drug company itself. The forms can also be found on specific Internet sites. Most companies require basic demographic information, annual proof of income, usually in the form of a tax return, bank statements, medicare information, and prescription information (C. VanHook, personal communication, February 18, 2004).

Income requirements also vary between the companies. For the majority of the PAPs, the participants must have annual incomes of below 200% of the Federal Poverty Level. This figure is affected by geographic location and the number of people in a household. For example, for a single person in the 48 contiguous states, 200% of poverty is defined as $17,720 or less, whereas a single person in Alaska or Hawaii, the income would be limited to $22,160 or less (Lewis, 2003).

Primary care providers play an integral role in assisting patients. Most companies rely on providers to assist patients with obtaining the program application, completing all or a portion of the form, and receiving and dispensing the medication to the patient. Although many primary care providers are knowledgeable of the PAPs, many do not have the time or make the time to learn about the programs. Some providers refuse to become involved in the process (Ventimiglia, 2001).
Once applications is submitted, it can take up to 6 weeks for companies to respond. If the applications are approved, most PAPs send the medications to the submitting physician. A few programs provide qualified patients with vouchers that can be exchanged for prescription drugs at a participating pharmacy (Ventimiglia, 2001). Typically, the companies will send 30 to 180 day supplies of drugs and then require a new application for re-fills. At the end of one year, most companies require that patients re-enroll and submit new income information (C. VanHook, personal communication, February 18, 2004).

For the elderly who do not meet the eligibility requirements to receive free medications, several other options are available. Some individual pharmaceutical companies offer prescription savings programs usually in the form of a discount card. A few examples are GlaxoSmithKline’s (GSK), Orange Card, Pfizer’s Share Card, Merck, and Lilly’s LillyAnswers Card. Typically, the income requirements are individual income below $18,000 or household income less than $24,000 (Eli Lilly, 2003; Pfizer, 2002), although the Orange Card uses a $30,000 per single or $40,000 per household ceiling (GSK, 2003). Enrollees use these cards at their local pharmacies and either pay a flat fee for each 30 day supply of a prescription, or receive a percent discount. Initiation of the program is dependent only on the subscribers and do not require the involvement of a healthcare provider.

In 2002, seven pharmaceutical companies formed an alliance and combined their individual PAPs into one savings program. This program offers Medicare beneficiaries
with limited income a prescription card that provides 20-40% off brand name drugs. The Together Rx Card, is free to people over 65 years of age enrolled in Medicare who do not have any other form of prescription assistance and have an annual income of less than $28,000 for individuals or $38,000 for couples. The income limits are higher for those living in Hawaii and Alaska. By using this card at participating pharmacies, the enrollees can have access to reduced fee on over 150 prescription medicines. The founding members of Together Rx are Abbott Laboratories, AstraZeneca, Aventis Pharmaceuticals, Bristol-Myers Squibb Company, GlaxoSmithKline, Johnson & Johnson, and Novartis Pharmaceuticals (Together Rx, 2003). The application process for this card does not require healthcare provider involvement.

Assistance services are also available through organizations such as AARP. Several different options are available to members who have a Medigap type insurance coverage through this organization and for those who are members but do not have additional insurance with the group. The members who have their secondary insurance with AARP are eligible for extra saving on more than 5,000 medications. They offer both Internet pharmacy services or a discount card which can be presented to local pharmacies. They advertise up to 47% savings on popular medications (AARP, 2004).

**Internet Access**

The Internet offers a vast amount of resources for PAPs, and discount card programs. Many sites offer direct enrollment for PAPs while others are designed to assist the consumer with finding a PAP for which they will qualify. There are government
supported sites such as the Center for Medicare and Medicaid, and the BenefitsCheckUp site which is sponsored by the National Council on Aging. Other sites, such as Helpingpatients.org, which is affiliated with the Pharmaceutical Research and Manufacturers of America (PhRMA) provides assistance by helping patients find PAPs for which they may qualify. This site coordinates with 48 member companies and provides application forms for those programs which the enrollee qualifies. Several other sites, such as RxHope, offer this same type of service.

Access to Out of Country Medications

The lack of prescription drug coverage for many American seniors has forced them to look elsewhere for their prescription medications. People who live close to the Canadian or Mexican borders have been aware that they could pay much less by taking their prescriptions across the border. Currently, this is not only popular with people living close to the borders, but for all Americans. A few years ago, it was a popular practice to take a bus of seniors to Canada just to fill prescriptions. People who lived too far to travel to either the north or south border found access to those same medications by purchasing them over the Internet (Barry, 2003).

In 2001, prices for patented drugs were on average 69% higher in the United States than in Canada. This difference in pricing has to do with the fact that Canada accounts for only 2% of the worldwide pharmaceutical sales. Canada is also home to a relatively small research based pharmaceutical industry, thus making a small contribution to new drug development. Also, Canada has implemented the Patented Medicine Prices
Review Board (PMPRB), which ensures that prices charged by manufacturers of patented medicines are not excessive (Gross, 2003).

An estimated one million Americans are currently obtaining their medication by crossing the border or ordering over the Internet, but the volume of traffic has caught the attention of the U.S. Government and the major pharmaceutical companies. The Food and Drug Administration (FDA) and the U.S. Customs Service identify this practice as illegal and are slowly taking steps to intervene. In the year 2003, GlaxoSmithKline stopped supplying products to Canadian mail-order pharmacies that sell to Americans. This action may lead to other large pharmaceutical companies implementing the same ban. Americans of all ages were so upset by that action that they formed protests outside the company offices and placed a full page add in The New York Times accusing GlaxoSmithKline of cutting off vital supplies (Barry, 2003).

The issue of whether these drugs are safe has created a controversy. Speaking at a Senate hearing last year, an FDA associate commissioner stated that any imported medications could potentially be dangerous although they have not received any complaints of impure drugs coming out of Canada (Barry, 2003). Counterfeit or contaminated drugs tend to come from southeast Asia, are purchased by an Internet pharmacy and sold under a trade name. Fake drugs are a problem when purchased from Mexican Internet pharmacies due to the fact that, except for narcotics, medicines in Mexico are sold without a prescription. Even if a medication purchased from a Mexican
Internet pharmacy is legitimate, it may be degraded due to improper storage. There is no way to tell by looking at the product (Karmel, 2003).

Worldwide, an estimated five to seven percent of drugs are fake. Though statistics are hard to quantify, it is estimated that the number of counterfeit drugs in Latin America can run as high as 25%. An authentication consulting firm recently intercepted counterfeit anti-inflammatory drugs in Columbia which were identical in detail to the manufacturer’s pill, but were made of boric acid, floor wax, and yellow leaded highway paint (Karmel, 2003).

**Traveling to Canada**

Rules about obtaining medications by traveling to Canada are changing rapidly. Until 2003, Canadian pharmacies would accept American prescription. This policy has been changed and they currently only accept Canadian healthcare provider prescriptions. To circumvent this problem, Americans can make appointments with Canadian providers, undergo a medical evaluation, show current medications or prescription from their American provider, obtain Canadian prescriptions, and then purchase their medications at a Canadian pharmacy. They must pay for the appointment with the provider. Typically, the Canadian provider will write the prescription for a 3 month supply with no refills. The patient must submit to an evaluation every three months to obtain a renewal. The border patrol will currently allow a three month supply to pass the border but will confiscate any medications beyond the three month supply (Wal-Mart Pharmacist/Lethbridge Alberta, February 26, 2004).
Canadian Internet Pharmacies

An estimated 80 to 90 Canadian Internet Pharmacies now offer prescription drugs at lower Canadian prices. They do not supply all medications, but rather they focus on long-term maintenance drugs. They also will not honor prescriptions for narcotics or scheduled medications (AARP, 2003c).

Once a person chooses an Internet pharmacy, they must download the enrollment form, fill them out and sign them, mail the form with their American prescription to the company, and pay with a credit card on the website. The prescriptions, which must be faxed, are then reviewed by a Canadian physician. Ordinarily, a company representative contacts the purchaser to confirm the order before processing begins. Once the order is processed, the medications are mailed and the shipping time tends to be seven to 14 days (AARP, 2003c).

In 1987, a law was written that made it illegal to import prescription drugs whether they were made in America or not. This was before the advent of Internet pharmacies, but the law still applies today. The FDA and the U.S. Customs have never prosecuted an American consumer, but are now taking a tougher line. They have issued warnings that health plans and other groups that aid in the importation of medications from Canada could be found criminally liable. Several insurance companies that for years have reimbursed their enrollees for medications purchased in Canada are now reconsidering this practice (Barry, 2003).
Traveling to Mexico

As with drugs from Canada, the price difference between Mexican drugs and American drugs can be substantial. For example, Prilosec costs about $4 per 20 milligram pill at an American pharmacy versus 84 cents at a Mexican pharmacy. Due to the fact that purchasers do not need a prescription, they can walk into a Mexican pharmacy and purchase any medication they desire. Without an English speaking professional overseeing the purchases, customers can experience problems when they mistakenly purchase the wrong medication. According to the Director of the Center for Pharmacoeconomic studies at the University of Texas at Austin, people buying drugs from Mexico need to be concerned about three potential problems: expired drugs, unfamiliar fillers, and bad substitutes. Mexican produced generic drugs are of special concern because the manufacturing requirements are not the same as in the U.S. (Karmel, 2003).

Mexican Internet Pharmacies

The same problems that plague the pharmacies in Mexico affect their Internet trade. They do not require a written prescription from a licenced health care provider, and there is no way to verify the quality of the products purchased.

Lifelong Learning

According to a study conducted by AARP (2000), lifelong learning experiences having the most appeal for seniors include subjects that are personally meaningful, taught in environments which provide a direct learning experience, allow adults control over all
aspects of their learning process, and are not too expensive. Seniors voiced the importance for them to stay current with what is going on in the world. These reasons were expressed universally by all elders of all socioeconomic levels, educational levels and genders. These findings are congruent with Orem’s self-care theory, that people will initiate activities on their own behalf in order to maintain life, health, and well being (Anna et al., 1978).

There are differences in the normal learning process between young and older. Changes associated with aging affect learning. Physical, psychological and sociocultural changes all play into the learning process. However, these changes do not infer differences in wanting to learn. Health care professionals should adapt educational approaches to meet their teaching needs. If teaching methods are adapted to accommodate older persons learning style, learning can be a positive, self-satisfying experience. One of the keys to successful learning is the attitude of the teacher. Knowledge of learning styles and patience with slower processing is imperative to a successful experience.

Older adult learners’ readiness to learn is strongly influenced by their ability to deal with the developmental tasks assigned by age group. Developmental tasks of later adulthood include adjustment to decreasing physical strength and health, retirement and reduced income, the loss of a spouse, friends and other family members, and possibly a change in one’s physical living arrangements. These changes should be recognized and assessed when evaluating patients’ readiness to learn (Cornett, n.d.).
Although aging is a process that occurs in a unique manner with each individual, normal aging processes can be generalized to the elderly population. For a healthcare provider to do an adequate assessment of persons in this age group, consideration must be given to physical, degenerative changes that can affect a person's ability to see, hear, feel, and react to stimuli. The ability for a person to complete a given task in a given period of time is referred to as a work rate. This rate, which reflects the output of several body systems, diminishes. Spatial orientation, mobility, and motor coordination may decline. Psychological changes may occur in perception, memory, and retention, and problem-solving. A patient’s previous learning experiences, mood, and attitude, self-concept, and personality are also factors effecting the learning process. A satisfying learning experience is an important way to enhance a person’s readiness to learn. The ability for a person to see themselves as a competent individual is affected by socio-cultural factors. When a person is faced with retirement, they may have a sense of isolation and frustration. They may also feel that society views them as being unproductive, rigid, and possibly senile. Strengthening a person’s self-esteem by highlighting the positive accomplishments and their individual abilities, is an important way to enhance a person’s readiness to learn (Cornett, n.d.).
Internet Use

With the Internet growing exponentially, accessing necessary information about PAPs can be a daunting task. The common stereotype or myth about older adults and computer use is that older adults are not interested in learning about computers or accessing the Internet. Findings of studies (Adler, 1996; Nahm, 2002) have shown that older adults can learn and are willing to learn about computer technology. Also the use of the Internet and e-mail can improve the quality of older adults’ lives by providing new connections to the outside world.

Computer ownership has steadily grown in the elderly population. In 1996, 30% of adults age 55 to 75 owned computers. This was up from 21% in a previous study in 1994 conducted by the same author (Adler, 1996). Among seniors who were college graduates, 53% owned a computer. Of the 600 seniors that were surveyed, 32% of males age 65 to 74 owned a computer while 23% of males 75 years and older owned a computer. In contrast, only 23% of females between the age of 65 to 74 reported owning a computer and this number decreased to 17% of women over the age of 75 (Adler, 1996).

Twenty-eight percent of computer owners used their computer for online services. Among those seniors who used an online service, 13% felt that communicating online was the most important use of their computer. The likelihood of participating online rose significantly with a higher level of education. Only 17% of seniors with a high school education accessed online services whereas, 38% of those with a college degree regularly utilized the Internet (Adler, 1996). Older computer owners reported using their computer nearly every day (43%) or a few times a week (24%). Online computer users used their
computers more frequently than did those without Internet services. Seventy percent of seniors with Internet access used their computers every day (Adler, 1996).

The Montana Member Opinion Survey conducted by AARP (2002) asked specific questions about computer use. Of the 1,178 respondents, 54% stated they had access to a personal computer at home, work, or some other place. Eighty-four percent of the 54% of these having computer access stated that they had access to the Internet and used online services.

Comprehension and Readability

Patient education materials are often given to patients with little regard for whether they can understand what they are reading. Two studies have addressed the problem of reading comprehension of health education materials (Miller & Bodie, 1994; Davis, Crouch, Wills, Miller, & Abdehou, 1990); authors have come to the conclusion that word recognition may not equal comprehension. Both studies found that participants’ reading level was actually three grade levels below the grade they last attended. In another study conducted strictly on elderly individuals, a majority (64%) read at or below the eighth grade level (Wamsley & Allington, 1982).

This discrepancy between education and reading ability suggest that there is a need to adapt education materials toward those with low literacy levels. Such materials should use simple words, short sentences, concrete concepts, and graphic illustrations to maximize ease of understanding important messages (Davis et al., 1990). Information should be as literal and as concrete as possible. If it is necessary to use abstract concepts, they should be explained with the use of examples and analogies. It is important that the
material presented is accurate and up to date so that there is little room for misinterpretation (Weinrich & Boyd, 1992). For the greatest impact, provision of phone numbers if there are questions and a list of resources where additional information can be obtained are recommended (Weinrich, & Boyd, 1992).

Potential barriers need to be considered when teaching the older adult. Some of these barriers include vision changes, hearing changes, intellectual ability, short term memory loss, motivation, anxiety, and rigidity. Over one half of severe visual impairments occur in individuals who are 65 years or older. The pupil of the eye admits 50% less light for a person of 50 than for someone who is 20. As the lens yellows with age, it tends to filter out blue, green, and violet colors. To make materials easier to see, lettering size, thickness, style, spacing, contrast and upper/lower case must be considered. To optimize visibility for the older adult, it is recommended that a minimum of a 12 to 16 point type with a serif print, where the letters have horizontal strokes at the top and bottom of the letters, be utilized. When creating materials, one should avoid script and orator type-styles and not use a variety of type in one piece. Thicker letters are easier to read and these must be in both upper and lower case letters. Spacing helps the eye in coding and encoding messages. Double spacing and adequate margins give the eyes a chance to rest. A lot of white space is essential, thus dark ink on light paper improves visibility. Therefore, use of red, black and dark gray ink colors are preferable since the older person’s eyes have trouble discriminating between blue, violet and green. The use of visual cues is helpful to the aged learner. Cuing techniques are devices that give emphasis to the most important information that a patient must know. Cuing can be done by underling words, using bold letters, enlarged details, and using arrows to depict
sequencing (Cornett, n.d.; Weinrich & Boyd, 1992). Written materials targeting the elderly population should have a positive psychological tone and emphasize that the elderly can be happy, healthy and independent.

To engage the reader, it is best to use a warm personal tone and include “do” instead of “do not.” The use of threatening or emotionally charged language such as “Smoking can kill you,” will have a negative impact on the reader (Winslow, 2001). The materials should address needs that seniors perceive as immediate and that will offer a benefit. According to the study conducted by AARP (2000), adults 50 and older are most interested in learning about subjects that improve the quality of their lives, build upon a current skill, or enable them to take better care of their health. Printed materials are the learning tools most frequently used by adults regardless of differences in age, income, education, or gender.
CHAPTER 3

METHODOLOGY

The purpose of this professional project was to create an educational tool that would assist the elderly in achieving optimum health. This section will emphasize the steps taken to create a pamphlet that would increase awareness of the existing pharmaceutical assistance resources for the elderly patient. The impetus for this project originated from personal testimonials of elderly patients that admitted they were altering their medications due to their limited income and the lack of financial assistance for prescriptions. Several admitted to suffering negative health effects after self-restriction or omissions, but were unaware of how to improve their situation. When questioned, they admitted they did not know where to get assistance or how to initiate the process. They felt intimidated and overwhelmed by the steps necessary to access these programs. The lack of a concise tool which presented several pharmaceutical assistance programs in an organized, non-threatening manner was noted.

Data Collection

An extensive review of the literature was completed in the areas of pharmaceutical assistance programs, out-of-pocket-expenses, statistics on Montana’s elderly population, Medicare, Medicaid, Internet use by the elderly, out of country medications and readability and comprehension of medical literature. The initial phase of the research took place on the Internet. A broad search utilizing the Montana State
Library Indexes and Data Bases provided the basis for the necessary research. Several pertinent articles were located by accessing both the CINAHL and Medline data bases utilizing the keywords, “medication,” “cost,” elderly.” Utilizing the same two data bases, a search was conducted with the keywords “readability,” “patient education,” and “Orem,” “self-care.” Articles located either at the Montana State University College of Technology Library or at Benefis Hospital Library in Great Falls were obtained and the reference pages of the pertinent articles were searched for further citations.

The AARP website offered a vast amount of information and guidance to pertinent sites. This organization employs research techniques to obtain statistical data not only about their members, but of seniors at large. Within their research center section of the website, is the Ageline Database search. A search was conducted using the keywords “prescription drug costs.” This search produced several articles which were applicable to this subject. The majority of the articles located were easily accessed directly on the Internet by clicking on the Uniform Resource Locators (URL’s), which were provided with each article. Many articles were located within the AARP website and were written by their staff members. Citations of the articles were reviewed for further direction to pertinent articles. The Montana AARP Internet site offered limited information and often referred back to the national site.

The Montana State Chapter of AARP is located in Helena. This chapter is recognized as being a leader within the national organization. The state chapter is active in initiating research about the states AARP members and elders of Montana as a whole. The
data collected has been used by many of the state politicians to bolster their fight in getting a state based prescription assistance program. The group works closely with those politicians offering lobbying support. According to Pat Bousliman (personal communication, October 6, 2003) of the Senate Finance Committee in Washington, DC, the AARP offered unlimited assistance in helping Senator Max Baucus and other Montana state politicians in passing the Medicare Prescription Drug Improvement and Modernization Act of 2003.

The employees at AARP in Helena were just as generous with their time and efforts during the data collection portion of this project. They provided statistical information which dealt specifically with Montana elderly, and packets which are available to their members pertaining to PAP’s. They also offered guidance to other organizations that could assist in researching this topic. One such referral was the Montana State Office of Aging.

The Montana State Office of Aging, which is also located in Helena, oversees the local Area Agencies on Aging. The state office was able to provide a large packet of PAPs. They also make this packet available to anyone who contacts their office.

Many contacts were made simply by discussing the purpose of this project with people in the healthcare field that deal with the elderly. A local geriatric/internal medicine physician inquired about the project and provided important information about a resource nurse at the Great Falls Clinic who specializes in PAPs. The Great Falls Clinic Care Manager, Cindy Van Hook, offered invaluable data about the availability and requirements of the PAP’s. She has worked with PAP’s for many years and is very
knowledgeable of their eligibility prerequisites. Through her experience with PAP websites, she was able to indicate which offered the most benefit to patients.

A Family Nurse Practitioner provided a referral to the Local Area Agency on Aging and provided names of knowledgeable people at the Great Falls Area VIII Agency on Aging. Margaret Fasbender, of the local Area Agency on Aging, provided information pertaining to the Foster Grandparents and Senior Companion programs. She also provided useful Internet websites such as the United States Census Bureau, The National Administration on Aging, and the Montana State Department of Commerce, and the Centers for Medicare and Medicaid Services.
CHAPTER 4

RESULTS

The results of this project was the creation of a pamphlet for Montana Medicare recipients which provided an organized, reader friendly outline of pharmaceutical assistance programs (See Appendix A). This pamphlet will serve as a resource for both Montana elderly and health care providers.

Components of the Pamphlet

An Internet search was completed utilizing Goggle with the keywords “creating pamphlet”. Chosen from the list was a free service which provided step by step instruction for creating a tri-fold pamphlet and also allowed importation of photographs. Due to the limitations of the pamphlet program, the pamphlet was printed, re-scanned and pertinent information was formatted incorporating the patient education materials + obtained on improved readability techniques.

The outer cover clearly states the topic of the pamphlet refers to Medication Assistance programs with an emphasis on Medicare recipients. The tri-fold is opened to display instructions on accessing free medications, medication discount cards, and helpful web-sites. The back cover lists pharmaceutical company phone numbers and websites.
Limitations

The intent of this project was to offer guidance to seniors to reduce their medication costs. This was completely dependent on the ability to disseminate this information to the appropriate sources. Finding funding for this project has proven to be a challenge. Many of the organizations contacted, such as Area Agency on Aging, are facing budget cuts and have no money available, although they felt this was a worthy project (M. Fasbender, personal communication, March 18, 2004). S. Rossberg (personal communication, March 18, 2004), with the Benefis Foundation was notified but stated that for the next five years their efforts will be directed at funding the Cancer Center. She said that historically, they have helped with this type of project and have an established protocol for dealing with such requests. She recommended filing the required paper work in five years.

Although this project will be finalized in accordance with the time frame established by Montana State University, I will continue research to find a means to get this information to Montana elderly. Printing proves to be expensive. The production costs for 500 tri-fold pamphlets printed in plain black and white with no picture or colors runs $127.50. A less expensive method may be through the Internet. If the pamphlet were made available in the form of a PDF file and e-mailed to organizations that deal with elderly services, they could possibly print the information and provide it to their clients. I also plan on contacting the office that distributes the monthly Social Security checks and evaluate whether they could feasibly include a copy from the PDF file.
Another significant limitation of this study was the inability to present the most up-to-date information. Neither the state of Montana nor the federal government have drafted a final outline of their prescription assistance programs. Montana is due to have information available by May of 2004 and the federal government is scheduled to have their plan in action by the year 2006. One of the final limitations was the lack of communication between organizations with access to this information. Even though Area VIII Agency on Aging and the Great Falls Clinic are located in Great Falls, the Agency on Aging was not aware that the Great Falls Clinic had a designated resource person to assist their elderly patients with PAPs. Many of the Great Falls Clinic patients were not aware of this service and had contacted the Agency on Aging trying to recruit assistance. The Agency on Aging also assumed that the Community Health Agency could assist the elderly with Medicare applications but the Community Health Agency will only help their own patients apply for PAPs.

**Implications for Future Study**

There are broad implications for future research from this project. The next logical step would be evaluating whether this pamphlet was beneficial to the target population and how it could be improved. Locating the recipients of the pamphlet would prove to be a challenging task unless they could be found through their primary care provider. Possibly, a contact list could be generated through the Care Manager’s office at the Great Falls Clinic, thus permitting future evaluation of the readability and usefulness of the pamphlet.
As more information becomes available about the new state and federal assistance programs, it would be interesting to evaluate the impact of those programs on the benefits offered through the pharmaceutical companies. Would the benefits remain the same? Would they be reduced or would the programs be eliminated? It would also be important to inquire whether the patients that would qualify for the new government benefits, felt the programs had reduced their out-of-pocket expenses.

Research pertaining to the knowledge of primary care providers on the accessibility and eligibility for PAPs would have important implications to providing comprehensive care to elderly patients. Patients could find themselves paying unnecessary out-of-pocket expenses if their primary care providers were unaware of their necessary involvement in these programs.

Implications for Practice

Despite the inability to disseminate the information through printed material, the author will present a lecture to classmates in an effort to educate future practitioners. A power point presentation along with a discussion period will be offered to the student Nurse Practitioners who will graduate in the spring of 2004. Hopefully, their increased knowledge on this topic will benefit not only Montana elderly but other professionals in the health care field. Emphasis will be placed on the need to share this knowledge with patients, family and co-workers. I will also offer to present this lecture to future Nurse Practitioner classes on this subject.
A “Call for abstract” form will be submitted to the Montana Nursing Association for the State Conference in October of 2004. If accepted, this information will be presented to nurse practitioners from around the state.

The information gathered has proven to be practical and applicable. Several patients encountered in my clinical experiences have benefitted from the information gathered during research. A Great Falls Clinic patient referral was made to Cindy Van Hook for a patient who was spending $400 per month out-of-pocket for prescriptions. Cindy Van Hook felt that she would qualify for free medication. Several physicians have asked for a synopsis of the information gathered so they too can be brought up to date.

With the burgeoning elderly population, it will be the responsibility of all primary care practitioners to remain knowledgeable and pro-active in their attempt to provide excellent, comprehensive care to their patients.
REFERENCES


APPENDIX A

PAMPHLET
Help can be found by contacting your local Area Agency on Aging or your local AARP office.

This is where I’d like to list all the phone numbers.

Do you need help paying for prescriptions? Are you a Medicare recipient?
Free Medications

*Check with your pharmacist to find out which company makes your medications. *If your income is around $14,000, you may qualify for free medications. *You will need your healthcare provider's help filling out the paperwork.

Medication Discount Cards

~ Some drug companies offer discounts on their medications.

~ Applications are available from the drug companies or on the internet (see back cover for phone numbers and web sites).

~ There are income limits. Each company is different but for some companies, annual income can be as high as $40,000 per couple.

~ You can not have other prescription drug coverage.

Internet sites will match you

+ The internet is a great way to find prescription assistance.

www.helpingpatients.org
www.phrma.org
www.needymeds.com