A Study to Determine and Compare Employee Health Insurance Policies at Old Dominion University

Heather M. Canada
Old Dominion University

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A STUDY TO DETERMINE AND COMPARE EMPLOYEE
HEALTH INSURANCE POLICIES
AT
OLD DOMINION UNIVERSITY

A RESEARCH PROJECT
PRESENTED TO THE
DEPARTMENT OF OCCUPATIONAL
AND
TECHNICAL STUDIES FACULTY
OLD DOMINION UNIVERSITY

IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE
DEGREE MASTER OF SCIENCE IN EDUCATION

by

Heather M. Canada

Summer, 1997
This project was prepared by Heather M. Canada under the direction of Dr. John Ritz in OTED 636, Problems in Education, as partial fulfillment of the requirements for the degree of Master of Science in Education.

Date 8-7-97  Approved By  
Dr. John Ritz
Advisor, Graduate Program Director
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Heather M. Canada
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CHAPTER I

Introduction

In America, having a well-paying job is a high priority on nearly everyone's list. Landing a secure job that also includes health benefits may be even more important. Among the companies and business who offer health benefits, most have a selection of insurance policies to satisfy the needs of a variety of employees and their families. One of the most confusing aspects of health insurance is choosing the policy that is the most cost efficient while receiving the best possible health care. Health insurance has hundreds of structured benefit policies, HMO and PPO plans, combination plans and many variations of each (Drozen, 1996).

Old Dominion University offers several policies from which their employees may choose according to individual lifestyles, health care needs and expense. For example, does the employee need individual or family coverage? In the event of hospitalization, how much will the insurer cover? How much must the patient pay for health services, such as doctors' visits and prescriptions? How much will the policy holder have to pay per month to receive this coverage? Given a choice, what type of coverage is
important to you and which policy would best suit your needs?

**Statement of the Problem**

The purpose of this study was to determine and compare the differences and similarities of the health insurance policies Old Dominion University offers its employees.

**Research Goals**

The problem of this study was to look at the following questions:

1) How do the various employee insurance plans differ from each other?

2) Which plan offers the best medical, prescription, dental, hospitalization and mental coverage?

3) Which plan is most popular among Old Dominion University employees?

4) How much does insurance cost per month?

**Background and Significance**

President Clinton proposed a national health insurance plan during his first year in office that would
allow affordable medical services for every American (Zinkewicz, 1996). Whatever happened to that idea? Although Clinton's plan never materialized, hospitals, doctors and insurance companies have joined forces to obtain the same results through managed care. This managed care plan includes two major types of organizations: Preferred Provider Organizations (PPOs) and Health Maintenance Organizations (HMOs). Soon after their development, employers recognized the cost advantages PPOs and HMOs offered over other health care plans (Geisel, 1996). An employer should consider joining many HMOs to expand employee choice and to avoid higher cost of doing business with a single carrier (Author-2, 1996).

There are currently 29 HMOs licensed in Virginia which provide comprehensive health care coverage for nearly 1.35 million citizens in the Commonwealth (VAHMO, 1997). This Virginia enrollment is concentrated more heavily in the urban areas of Northern Virginia, Central Virginia and Hampton Roads and is expected to continue growing as more Medicare and Medicaid patients join HMOs (VAHMO, 1997). HMO enrollment has expanded because employers are more apt to make them available to their employees and in return, employees have chosen HMOs as their plan of choice (VAHMO, 1997). According to a survey
conducted by Sachs/Scarborough in 1995, "70% of HMO enrollees had a choice of health plans at the time of their enrollment" (VAHMO, 1997).

The significance of this study, through investigation and comparison of health insurance policies offered at Old Dominion University, was to clarify health care coverage and operations. This study was to illustrate a greater understanding and assist prospective insurance enrollees in their decision for optimal and satisfactory coverage.

**Limitations**

This study will result in limited findings which cannot be broadly generalized because the data is confined to employees at Old Dominion University. The data was restricted to the comparison of the few insurance policies obtained by Old Dominion. The population may be relatively small in regard to the abundant amount of policies and insurance companies in operation.

**Assumptions**

It was assumed that insurance plans offered by Old Dominion University are representative of all State employee and company packages in Virginia. The assumption
was made that the data is easily collected and will not invade or infringe upon individual privacy. It was also assumed that all active employees were covered by health plans at Old Dominion University and had equal freedom to enroll in the plan of their choice.

**Procedures**

Data for this study were secured from the Human Resource Department at Old Dominion University. Insurance information, such as benefit coverage and rates, were gathered from the specific insurance packages offered to Old Dominion University's employees. The statistics and percentages obtained from a Human Resource representative and insurance policy literature provided the following: variations of co-pay for certain health services and employee participation within each insurance policy.

**Definition of Terms**

To establish general understandings by the reader, the following terms have been defined. These terms have been used throughout this paper.

*Co-pay* is the preset amount of money the patient pays for health services, e.g., doctor's visit, annual physical,
prescription, etc.

Health Maintenance Organization (HMO) is a prepaid health insurance plan that entitles members to the services of participating physicians, hospitals and clinics emphasizing preventative medicine and PCPs. Members pay a flat periodic fee for medical services and their choice of physicians and is more limited than a PPO (Gallese & Steele, 1994).

Maintenance prescriptions are prescriptions filled regularly such as chronic allergy medication, heart or blood pressure medication, etc.

Medicaid is a joint federal and state program that offers various health benefits to low income and "needy" (i.e., aged, blind, disabled, etc.) populations (VAHMO, 1997).

Preferred Provider Organization (PPO) allows insurance companies to negotiate with hospitals and physicians for health services at a discounted price (Gallese & Steele, 1994).

Premium is the amount of money paid for health insurance.

Primary Care Physician (PCP) is a physician chosen by a patient from a list of doctors who participate with the individual's HMO program. The patient must receive services from the selected PCP or be referred elsewhere from the PCP to ensure optimal coverage.
Providers include hospitals, clinics, physicians, pharmacists or any medical service.

Overview of Chapters

This chapter defines the need for analyzing the various health insurance policies at Old Dominion University and establishes that insurance packages vary depending on the individual policy. It stated assumptions, limitations and definitions used in this report. Chapter II reviews the literature and Chapter III further defines the methods and procedures used in this study. Chapter IV states the findings of the report and Chapter V presents the summary, conclusions and recommendations.
CHAPTER II

Review of Literature

This chapter will review the literature concerning various types of health care plans and how they differ from traditional policies. It will review health care status in the United States and describe managed health care organizations.

Healthcare in the United States

The United States spends considerably more money on health care per person than any other nation (Wasik, 1991). The reasons for this excessive spending may include advances in technology, rising malpractice premiums, patient demand, insurance fraud or unprincipled providers who charge outrageous fees for their services (Gallese & Steele, 1994).

Citizens Fund, a consumer group, conducted a study that found that "Commercial insurance companies spend 33.5 cents to provide a dollar of benefits; 14 times more than it costs medicare and 11 times more than the Canadian national health system" (Wasik, 1991). It is also predicted that before the turn of the century, health care in the United States may cost more than one trillion
dollars (Gallese & Steele, 1994), and 110 million Americans will have enrolled in formal managed care plans (Schachner, 1996).

**Managed Health Care and Health Maintenance Organizations**

The teaming of health care providers has created a managed health care system consisting of Preferred Provider Organizations (PPOs) and Health Maintenance Organizations (HMOs). These managed care plans aid in the cost control by limiting the degree of choice and treatment allowed to each client. These insurance plans entitle members to the services of participating physicians, hospitals and clinics emphasizing preventative medicine. Members pay a flat periodic fee for medical services and must choose a primary care physician (PCP) from the insurers list of approved doctors (Gallese & Steele, 1994).

HMOs and PPOs are cost cutting strategies that decrease health care costs for employers purchasing plans for their employees and for the patients themselves by lowering premiums (Author-1, 1996). HMOs are able to negotiate discounts from providers by guaranteeing them a certain amount of patients (Author-1, 1996).
Since the peak of HMOs in December of 1986, the total number of organizations has declined as competition has increased. Over 150 have failed or gone out of business and more than 80 have merged as of 1993 (Feldman, et al., 1996). Today, approximately 60 million Americans are insured by managed health organizations (Schachner, 1996) making HMOs the dominant health care provider in the health care market (Zinkewicz, 1996). As of 1995, about 3 million Medicare beneficiaries were enrolled in HMO plans representing 8% of the Medicare population (VAHMO, 1997).

This HMO enrollment is predicted to increase by 80% (Schachner, 1996) by the year 2000 as government programs are encouraged to join managed care plans. A significant amount of this growth will also come from government sponsored programs, like medicare and Medicaid (VAHMO, 1997).

**Pros and Cons of Managed Health Care**

The monumental shift toward managed care is accompanied by many advantages and disadvantages. This transformation improves health care quality with lower costs and makes providers more accountable (Bell, 1996). The managed care organization educates providers and screens physicians and other health services to eliminate
low quality and ineffective services (Author-1, 1996). This advantage makes it possible for managed care organizations to reduce costs for employers purchasing insurance and lower premiums and co-pays for workers and patients (Author-1, 1996). Therefore it’s less expensive to receive coverage under a managed health care plan than a traditional insurance plan for the same services. It is also advantageous for physicians and health services to participate in managed care plans. Health providers may receive a lower co-pay for their services, but because they are included on the list of providers, they are guaranteed a certain number of patients. It’s kind of like free advertising.

The biggest disadvantage for a managed care enrollee is that the patient’s choice of physician is limited and restricted to the list of participating health care providers. There is also a more paperwork involved when the patient wishes to see a specialist. The primary care physician must send a referral (written or oral) to the specialist prior to the appointment date. Then the referral must be approved by the insurance company.
Quality Health Care

HMOs have taken more efforts to improve and measure quality health care than any other health care system (VAHMO, 1997). An evaluation project called Health Plan Employer Data and Information Set (HEDIS), along with the National Committee for Quality Assurance (NCQA), have demonstrated their ability to assess quality care (VAHMO, 1997). The HEDIS includes over 70 criterion on which to measure the quality of HMOs. Among these include (Author-3, 1996):

- **Listen to the customer.** Offer choices that clearly explain benefits and customer service.

- **Commit to quality.** Communicate effectively to providers, patients and employers.

- **Build brand equity.** Reputation is critical to success.

- **Partner with physicians.** The health plan is only as good as its providers.

- **Focus locally.** Act on a local level and care personally.

- **Tap into larger resources.** Take advantage of national and/or regional resources.

- **Share a vision.** Realize the plan’s impact on
people's lives.

In addition to the preceding criteria, the HMOs were also evaluated on access, convenience, quality and general perception & value (Author-3, 1996).

**Summary**

Throughout this research, it is clear that managed health care is making its mark in the health insurance market and company benefits. It is cost efficient and quality driven. Chapter III will discuss the methods and procedures used to gather the data for this study. The methods of data analysis will be provided and explained.
CHAPTER III

Methods and Procedures

Chapter III contains a description of the methods and procedures used to obtain the needed information for this study. It describes the population of the study and data obtained from the Human Resource Department at Old Dominion University. Informational insurance handbooks on each policy were obtained. The comparative analysis of the data will also be described.

Population

The population for this study was the various health care plans Old Dominion offers its employees. It includes 2 statewide plans, Cost Alliance and Key Advantage, administered by Blue Cross/Blue Shield and 2 HMO plans, Health Keepers and Sentara Health Plan. The statewide policies varied in coverage under extended plans.

Instrument Design

This study is a descriptive design. It will utilize a comparative analysis of the various available health plans and determine employee participation within each plan. The study will utilize figures to display findings.
Data Collection

Data for this study was obtained from actual copies of health plan member handbooks distributed to Old Dominion University employees. A summary of monthly statewide plan premiums (Appendix A) and HMO premiums (Appendix B) was also acquired. Employee participation data for each insurance plan will be obtained from a Human Resource Representative.

Statistical Analysis

The data collection instrument will be insurance literature collected from the Human Resource Department at Old Dominion University through contact of the employee benefits representative. Actual costs obtained from the literature and employee percentages will be displayed and compared in graphical form.

Summary

The statewide health plans and HMOs were compared to each other in several categories. The percentage of employees who participate with each plan was also determined. Chapter IV discusses the findings of each insurance plan's report.
CHAPTER IV

Findings

This chapter presents the findings of this study. Research goals will be answered and results will be illustrated through figures. The findings initially discussed are presented in Figures 1-6.

Summary Results

There are vast differences in the cost and coverage of the health insurance policies at Old Dominion University. Results will be discussed and presented in graphical form. Both statewide plans and Health Maintenance Organizations are represented.

Basic Cost Alliance requires no monthly premium. Basic Key Advantage requires $8 for the single plan, $91 for the employee plus one dependant, $157 for family coverage and $82 for family coverage including both spouses. Per month Health Keepers requires $11 for the single plan, $97 for the employee plus one dependant, $165 for family coverage and $90 for family coverage including both spouses. Per month Sentara requires $33 for the single plan, $141 for the employee plus one dependant, $227 for family coverage and $152 for family coverage
including both spouses. Figure 1 illustrates the monthly premiums required to receive services from the individual plans.

**Figure 1**

*Premiums*

**Monthly Costs for Active**

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<th>Family</th>
<th>Family + Sp.</th>
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<tr>
<td>Health Keepers-HMO</td>
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<tr>
<td>Sentara Health Plan-HMO</td>
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The next section compares the co-pay for a doctor's office visit to either your primary care physician or to a referred specialist. Cost Alliance patients pay $20 each visit to their regular doctor and $35 to recommended specialist. Basic Key Advantage patients pay $10 to their doctor as well as to a specialist each visit. Basic Health Keepers patients are not charged when seeing their PCP nor does a specialist charge for services if referred by the
patients PCP. Sentara patients pay $5 to see their PCP and $5 to see a PCP referred specialist. See Figure 2.

**Figure 2**

Co-pay per Doctor's Visit

The next data presented compares prescription drug costs. Cost Alliance customers pay $20 for prescriptions filled monthly or for maintenance drugs. They pay $15 for a 34-day supply of medication and $30 for a 34-90 day supply. Key Advantage patients pay $15 for maintenance prescriptions, $10 for a 34-day supply and $20 for a 34-90 day supply. Health Keepers customers pay $3 for every prescription, while Sentara patients pay $5 per prescription. See Figure 3.
The next section of this study compares the cost of emergency room visits and inpatient hospitalization. Cost Alliance patients pay $50 for each visit to the emergency room and $100 per day when admitted into the hospital. Key Advantage patients pay $30 when receiving emergency room services and $100 when admitted. This co-pay covers the entire confinement period. Health Keepers and Sentara Health patients are both charged $25 at the emergency room and are exempt from hospitalization charges when arranged through the patient's PCP. See Figure 4.
The next data compares insurance coverage of biannual dentist visits (including cleaning, exams and x-ray) and mental health services. All insurance plans offer full routine dental services. Cost Alliance and Key Advantage may request a slightly higher premium for this service (See Appendix A). Cost Alliance patients must pay $35 for each visit to a mental health professional. Health Keepers and Sentara patients pay $15 for each mental health visit. See Figure 5.
Patients have choices in health care coverage. The next section will analyze the choices by Old Dominion Employees. There were approximately 1808 active employees at Old Dominion University; 931 classified, 625 full-time faculty and 252 part-time faculty. Of this population, as of May 1997, 6% are insured by Cost Alliance, 69% are insured by Key Advantage, 12% are insured by Health Keepers and 13% are insured by Sentara Health Plan. See Figure 6.
Summary

The author’s assessment of data from Old Dominion University’s health insurance options and their participants revealed several findings. As presented, the premiums varied considerably in individual plans. Information was also presented that compared the variety of co-pays in the areas of doctor’s visits, prescriptions, hospitalization, dental and mental health services and employee preferences. The percentage of employees enrolled in each insurance plan were also presented.
CHAPTER V

Summary, Conclusions and Recommendations

Summary

The purpose of this study was to compare various health insurance plans offered to active employees at Old Dominion University in Norfolk, Virginia. This study was initiated to evaluate the differences in employee health insurance policies at Old Dominion University and provide a better understanding of premiums and health care coverage for insurance seekers. To aid in this understanding, the following research goals were addressed:

1) How do the various employee insurance plans differ from each other?
2) Which plan offers the best medical, prescription, dental, hospitalization and mental coverage?
3) Which plan is most popular among Old Dominion University employees?
4) How much does insurance cost per month?

The Human Resource Department at the University supplied current insurance plan handbooks on each policy, an insurance option and premium guide, and statistics on employee participation to each plan.
The United States spends more money on health care and charges its citizens a larger amount than any other nation to have health care insurance. To try and reduce the costs to insurance customers, insurance companies, doctors, hospitals and others, health services have joined together forming Health Maintenance Organizations (HMOs). This cost-cutting strategy has appealed to over 60 million Americans who have enrolled with HMOs.

Health insurance options were obtained and researched from Old Dominion University as a sample for comparing various plans. The plans Old Dominion offers its employees were two Statewide plans, Cost Alliance and Key Advantage and two HMOs, Health Keepers and Sentara Health Plan. Premiums varied depending on individual or group coverage, dental options, co-pays at doctor's offices, pharmacies, hospitals and counseling centers. These options gave employees the opportunity to choose the desired coverage and rates in their health care plan.

Conclusion

Insurance plans can be overwhelming to customers when trying to choose the plan that would be most beneficial and cost efficient.

As stated in Chapter I, one of the primary questions
of this study was whether the insurance plans differ from each other. The plans do vary in several ways. The most visible difference was cost per service. Fees for doctor's visits ranged from $0 to $35 depending on if you were seeing the PCP or being referred to a specialist. Prescription drug costs varied depending on if the medication was maintenance, a 34-day supply or a 34 to 90-day supply. The co-pay for prescriptions ranged from $3 to $30.

Hospital visit costs were another difference. Emergency room visit co-pays ranged from $0, if arranged by the PCP, to $100. If admitted into the hospital, the fee could range from $0, if arranged by the PCP to $100 a day to $100 per confinement. Dental coverage also varied according to policy. All offered optional plans for complete coverage on routine dental services. Mental health service fees ranged from $15 to $35 for each office visit.

The second question raised was "which plan offers the best medical, prescription, dental, hospitalization and mental health coverage?". There was no easy answer to this question. Any policy may be the "best" according to the individual's needs. There was not a wrong or right choice when deciding on a health care plan. Although Cost
Alliance required little or no premium, co-pays were higher in all areas. It would cost at least $20 to see a physician, $30 to see a specialist, $15 or more to fill a prescription, $50 for a trip to the emergency room, $100 a day if admitted, 20%-50% of the total dental bill other than routine check-ups and $50 in the event of psychological therapy. This statewide plan may be appropriate for the individual who wants to spend the minimal amount of money and was rarely planning to visit any type of health provider.

Key Advantage was most complex with options in comparison to the others Old Dominion University offered. An extended plan option included dental and periodontal services, vaccinations and immunizations, vision care, preventative testing and screening, e.g., blood pressure and cholesterol tests. If these services were desired, it was necessary to increase coverage. This meant a higher premium. The standard Key Advantage Plan required at least $8 for the individual plan. The individual could expect to pay a little less by way of co-pay. It would cost patients $10 to visit the doctor or a specialist, $10-$20 to fill a prescription, $30 each trip to the emergency room, $100 per confinement (not per day), and $35 to see a mental health professional. Twice-a-year visits to the dentist
were covered as well as 80% of primary services such as, fillings, denture repair, oral surgery and root canals. Extended dental care services were optional in other Key Advantage Expanded Benefit plans. Key Advantage did require higher premiums, but co-pays were lower.

As an HMO, Health Keepers offered very reasonable co-pays at affordable premiums. For $11 a month as a single employee, it would cost the patient nothing to see their primary care physician (PCP) or specialist, if referred by the PCP. Prescriptions would cost $3 and $25 in the event of visiting the emergency room, but this was waived if admitted into the hospital. There was no co-pay to render dental service for bi-annual check-ups. Mental health visits costed $15 per visit.

Sentara Health Plan, also an HMO, was very similar, in rates and coverage, to Health Keepers. For the minimum of $33 per month, Sentara Health Plan required the co-pay of $5 to the PCP and to a referred specialist. Prescriptions costed $5 and an emergency room visit costed $25 and was also waived if omitted. Again, routine visits to the dentist were fully covered. The co-pay to visit a mental health professional was $15.

The third question raised in Chapter I was “which policy was most popular with Old Dominion employees?”. The
preferred policy was Key Advantage, selected by 66% of the employees, also offering the largest amount of options within its policy. Although no accurate documents were available, a Human Resource representative confirmed that the Out-of-Network expansion was a definite selling point. This network allows policy holders to receive health services outside of their service area. Many employees who have children living out of town or who are away at college, find the Out-of-Network item most convenient for their children to use benefits.

The last question raised was "how much does insurance cost per month?". In response to that question, premiums varied depending on the type of insurance plan the employee decided to join. The premiums for Old Dominion University plans ranged from $0 to $249 depending on the type of coverage that was desired. All plans offered a standard health care plan that covered a percentage of prescription costs, various tests and hospitalization, doctor's visits, emergency room visits and appointments with specialists, such as optometrists and psychiatrists.

Cost Alliance offered a standard plan that did not require a premium but also gave an option for additional dental coverage that required a premium ranging from $19 for individual coverage to $53 for complete family
coverage. Key advantage offered a standard plan and a variety of additional coverages for an increased premium (Appendix A). These premiums ranged from $8 to $249. As premiums increased in extended plans, the amount of health services provided and percentage of coverage also increased.

The HMOs offered one plan. Both plans covered a percentage of dental and specialty services for one set premium without having to extend coverage. The major restriction was that the patient must receive health services from the primary care physician (PCP) chosen at the time of enrollment or be referred to a specialist by that PCP.

Recommendations

The data collected for this study was uniformly reported by Old Dominion University or the health insurance companies. Insurance coverage conclusions were drawn by the author from the obtained handbooks. Further research and redesign of the study is recommended to compare and correlate individual background such as age, family size, age of children, etc., to insurance plan preference. The author recommends further study on policy complaints and concerns made by patients and the means of
providers to improve their services. Additional research is also advised to assess the level of satisfaction among the Old Dominion University employees and the insurance policy of their choice.
BIBLIOGRAPHY


Drozen, Mike. (1996). The Ins and Outs of Health Insurance. Broker World, 16(2), 74-EOA.


Zinkewicz, Phil. (1996). Managed Care- The Playing Field Continues to Change. Rough Notes, 139(6), 14-16.
## APPENDICES

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## Appendix A

### Monthly Costs for Active Employees,

**Effective January 1, 1997**

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## Appendix B

Monthly Costs for Active Employees, Effective January 1, 1997

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