

A DESCRIPTIVE ANALYSIS OF NON-URGENT EMERGENCY DEPARTMENT
UTILIZATION

By

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Recommendations

To the Faculty of Washington State University:

The members of the Committee appointed to examine the thesis of CARLA B. BRIM find it satisfactory and recommend that it be accepted.

Chair

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A DESCRIPTIVE ANALYSIS OF NON-URGENT EMERGENCY DEPARTMENT
UTILIZATION

Abstract

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This study describes the characteristics and factors that contribute to the utilization of the emergency department (ED) for non-urgent medical care. Healthcare access, or having a usual source of care, affords the individual with prevention measures and ongoing management of chronic conditions. The usual source of healthcare for a portion of our population is the ED. This study analyzes why people seek non-urgent care in the ED during hours when community providers are practicing.

A cross-sectional descriptive study was conducted. A convenience sample (N= 64) comprised adults who met inclusion criteria of seeking care in an ED and having a problem consistent with “non-urgent” triage acuity category. A 13-item instrument was self-administered in the waiting area of the ED of a community hospital over a one-week period of time during the hours of 8:00 a.m. and 6:00 p.m. on Monday through Friday. Data regarding insurance status, type of insurance, and having a usual source of care and barriers to having a usual source of care were obtained.

Results indicate lack of healthcare insurance and having public insurance are the factors most closely associated with utilization of the ED for non-urgent care. Disparity in healthcare access is most significantly related to healthcare insurance status. This information can be utilized to leverage change for program planning and policymaking decisions to improve healthcare assess.

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A Descriptive Upstream Analysis of Non-Urgent Emergency Department Utilization

Chapter One

Introduction and Background

Access to healthcare is a major concern of healthcare consumers, providers, and policymakers. Healthcare access is defined as having a usual source of care for healthcare needs (Litaker, Koroukian &, Love, 2005). Having a usual source of care affords the individual with prevention measures and ongoing management of chronic conditions. The usual source of health care for a portion of our population is the emergency department (ED) despite the fact that the ED is intended to provide care for people who have been in accidents, experienced traumatic injuries or are suffering with severe or potentially life threatening symptoms. The ED health care delivery model is problem focused and episodic, not one that focuses on long-term health outcomes. The ED does not provide the preventative services and management of chronic conditions made available through outpatient primary care clinics. Overcrowding of the ED can result from non-urgent utilization of this resource. Many negative effects of ED over-utilization such as incomplete assessment of patient needs due to rushed exams, staff burnout, and patient dissatisfaction with long wait times impact patient outcomes (Knapp, Bojko, Dolan &, Frush, 2004).

Various social determinants impact health care access. Social determinants of health include economic and social policies that impact an individual's ability to live, work and function. (World Health Organization [WHO], 2003) The number of health care resources available to an individual varies greatly based on these social determinants. The gap in resource availability creates disparities based on race, ethnicity, and socioeconomic status (SES).

The ineffectiveness of the current healthcare system for underserved populations is illustrated by the analogy of providers that are so busy pulling drowning victims from a river that they have no time to look upstream to see what is pushing them in (Butterfield, 1990). The call for upstream policy decisions is echoed in a 2005 study of healthcare access that concludes interventions to improve health care access should focus on the context of healthcare disparities (Litaker, Koroukian &, Love, 2005). The need to look upstream at the reasons why people choose to utilize the ED for their primary care is the focus of this study.

Statement of the Problem

Assessing the reasons patients use the ED for non-urgent care requires analysis of the factors that affect healthcare access. These factors include the number of available providers, employment, ability to reach the resource, ability to pay for the resource, knowledge of what resources are available and personal choices. Issues around finding a suitable healthcare provider are numerous. Individual access issues related to employment include whether insurance coverage is affordable, work-related hours of service, and the ability to take time off. Financial issues such as the ability to pay premiums, co-pays or costs of office visits, affordable or reliable transportation, and availability of childcare often determine where and when healthcare can be accessed. Educational level impacts access through knowledge or perception of illness and employment options. Cultural issues of language barriers and acceptance are also important.

System issues are related to providers accepting new patients who are covered through private or government insurance is significant to healthcare access. The hours of service, the wait time for the next appointment, and the environment of the clinic also impact healthcare access. These many factors weigh heavily on patients seeking primary healthcare attention. The health care access issue is a concern for all members of the community. (Andersen, 1995)

Access to care issues at the national level.

Access to affordable quality healthcare is a national problem. One overarching goal of *Healthy People 2010* is to eliminate health disparities. One of the goal's leading health indicators (LHI) is to address access to healthcare (United States Department of Health and Human Services Office of Disease Prevention and Health Promotion, p. 1). In 2002, national health care spending in the United States totaled \$1.6 trillion (National Center for Health Statistics (NCHS), 2004, p.4). The United States spent 14.6% of its gross domestic product (GDP) on healthcare which is 53% more than Switzerland, whose spending is the second highest of developed nations (Anderson, Hussey, Frogner, & Waters, 2005, p. 904-905). Despite this amount of health care spending in the United States, 46 million Americans are estimated to be uninsured while another 13 million are considered to be underinsured due to the large amount of out of pocket expenses (The Commonwealth Fund, 2006). Additionally, 93 million are publicly insured by Medicaid or Medicare (The Commonwealth Fund, 2006).

The United States invests a great deal of resources into healthcare yet residents do not have better access than in other nations. The Organization for Economic Cooperation and Development (OECD) uses the number of hospital beds, physicians and nurses per capita as measures of access to health care and found that the United States is below the median of participating countries (Anderson, Hussey, Frogner &, Waters, 2005, Exhibit 2). The 2003 National Hospital Ambulatory Medical Care Survey (NHAMCS) reported an estimated 114 million visits to hospital emergency departments, with only 15% of these visits considered emergent (McCaig & Burt, 2005). This is true despite the fact that the ED is intended to provide care for people who have been in accidents, experienced traumatic injuries or are suffering with severe or potentially life threatening symptoms.

Access to care issues in Washington State.

Washington State spends 2.8 % of the gross state product (GSP) on healthcare expenditures with total Medicaid expenditures over \$5 billion in 2003(The Henry J. Kaiser Family Foundation [KFF], 2004). The 2000 distribution of insurance coverage for Washington State was reported as 46% employment-based insurance, 41% public insurance, 5% are privately insured (Washington State Department of Health (WDOH), 2002, p. 46-47). According to the same report, 86% of Washington residents disclose that they do have access to a regular primary care source (WDOH, p.43). Nonetheless, when determining access to healthcare one must assess availability and affordability of services (WDOH, p44).

Several counties in the state have looked at various factors related to health care access. A two-part study of East Pierce County conducted in 1999 included a telephone survey and a waiting room survey of ED users. This study found that 14% of the telephone and 18% of ED waiting room participants did not have health insurance. Of the adults with insurance, 67% was provided through employer-based programs and 15% reported Medicaid as their insurance provider. Twenty-one percent of the participants reported that in the past twelve months they needed to see a provider but did not because of cost. The study defined routine care as either preventative or care for minor illness. Respondents reported barriers to routine care to be transportation costs, difficulty in getting an appointment, clinic hours, language barriers, cost, not having insurance, not knowing where to go or personal or religious beliefs (Tacoma-Pierce County Health Department, 1999).

An analysis of Eastern Washington access to healthcare in eleven counties indicates that of the 547 participants, barriers to access are similar for both urban and rural areas. Primary barriers identified for urban are: cost (39%), long wait in office (32%), and inconvenient office

hours (22%) compared to rural findings of cost (37%), long wait in office (37%) and inconvenient office hours (20%). Rural counties identify a higher proportion of barriers related to the need to miss work, childcare, and poor quality of care (Bayne, Higgs, Gruber & Bendel, 2002).

The Office of Community and Rural Health (OCRH) of the Washington State Department of Health conducted an access study in 2002 of five rural counties in Washington State to evaluate availability of primary care providers to Medicare or Medicaid. The study found that Medicare patients were preferred over Medicaid patients in three of the five counties. In two of the counties only 20% of the providers were open to Medicare patients. Providers in four of the five counties were open to insured or self pay patients (Schueler & Olexa, 2002, p. 2).

The Clark County Health Department and the OCRH conducted a survey of primary care providers for federal designation as a Health Professional Shortage Area (HPSA) in April 2005. The findings indicate that there is adequate primary care provider capacity for existing patients. The county however, is approaching a shortage of providers. The provider to population ratio for the low-income residents below the 200% federal poverty level (FPL) ratio is approaching serious shortage. Rural parts of the mostly urban county qualify as shortage areas. The report indicates that 91% of the providers practices are open to privately insured patients with only 12% open to Medicaid fee-for-service patients and 60% open to Medicaid managed care patients. There is no data of the provider availability for the uninsured (Schueler, Berthon, Olexa, & Taylor, 2005, p. 3-4).

Thurston County convened a community access health care task force. The task force's 2004 report lists barriers to access including inadequate reimbursement of public insurance which results in reduced availability of providers, lack of sufficient providers, and a rising

number of uninsured and under-insured individuals (Thurston County Community Health Task Force, 2004).

Access to care in Cowlitz County, Washington.

The local environment of this study, Cowlitz County, is located in southwest Washington. Residents have a lower SES compared to national and state averages (United States Census Bureau [USCB], 2004). The population of Cowlitz County is ranked 12th for Washington State but has a Medicaid eligible percentage of 20.9% (Washington Health Foundation [WHF], 2003, p.1). Comparison of national, state and county median income suggests that Washington State is a wealthy state compared to national average yet Cowlitz County is largely impoverished (Table 1). An interesting county finding is that the high school graduation rate is higher than the national average yet the median household income is lower and there are more residents living below poverty. This suggests that the county has lower paying jobs, which can impact insurance status and ultimately health care access.

The primary sources of healthcare are located in and around the city of Longview with a population of 34,660 (City of Longview Washington, 2004). There is a level III trauma community hospital, St. John Medical Center (SJMC), with 193 beds. SJMC has a generous charity care program with over \$14 million dollars of uncompensated care reported for 2005 (Washington State Department of Health [WDOH], 2006). SJMC employs twenty-six family practice and internal medicine providers. There are two clinics in the county that are federally qualified health centers, a designation that garners them enhanced reimbursement for providing care to Medicaid patients and funding for serving the uninsured. Kaiser Permanente has a clinic in the area but it does not provide care for Medicaid or uninsured individuals. There are also four private practice clinics and three pediatric clinics in the county. Cowlitz County is recognized as

a medically underserved area in Washington State (Health Resources and Services Administration [HRSA], 2005). Evaluation of provider to patient ratios and availability of services based on insurance status is scheduled for study in spring of 2006 by the County Health Department and the OCRH.

The SJMC emergency department utilization data indicate a steady increase in non-urgent visits by people without insurance or covered through public insurance over the past five years. Annual ED visits totaled 39,861 in 2004 and 49,725 visits in 2005 with Medicaid or private pay accounting for 44% of those visits. (T.Broderius, personal communication, March 2, 2006) These statistics are congruent with national data indicating a 26 million-visit increase in EDs from 1993 to 2003 (McCaig & Burt, 2005, p. 2). This increase has been related to factors including having health insurance, access to a provider and perception of serious illness.

Statement of Purpose

The purpose of this study is to determine the reasons that people seek non-urgent services from the ED during routine clinic hours of operation. This research is focused on upstream causes of non-urgent usage of the ED as described by the very stakeholders that use it. Like many counties in the United States, Cowlitz County has very limited resources. Multiple agencies have their “own” programs and there is not a lot of sharing of resources. This “silo” program planning leads to duplication and ineffective programs for the population in need. This research will be used to combine community-based participatory research for future collaboration in Cowlitz County to tackle healthcare access issues. Community collaboration is essential to develop programs based on issues described by the stakeholders.

A study of the past five decades of nursing research on health disparities recommends that “research on health disparities requires less emphasis on psychosocial variables and models

that focus on individuals and individual change, and greater emphasis on community-focused models and intervention studies in which tangible socioeconomic and health resources are provided to determine their effects on health disparities” (Flaskerud et al., 2002, p. 85). Giving voice to underserved populations is crucial to effective policymaking and program planning.

Conceptual Framework

The framework for healthcare access used in this study is based on Andersen’s behavioral model of health services use. The model consists of three factors: environment, population characteristics, and health behaviors Figure 1. (Andersen, 1995, p.8).

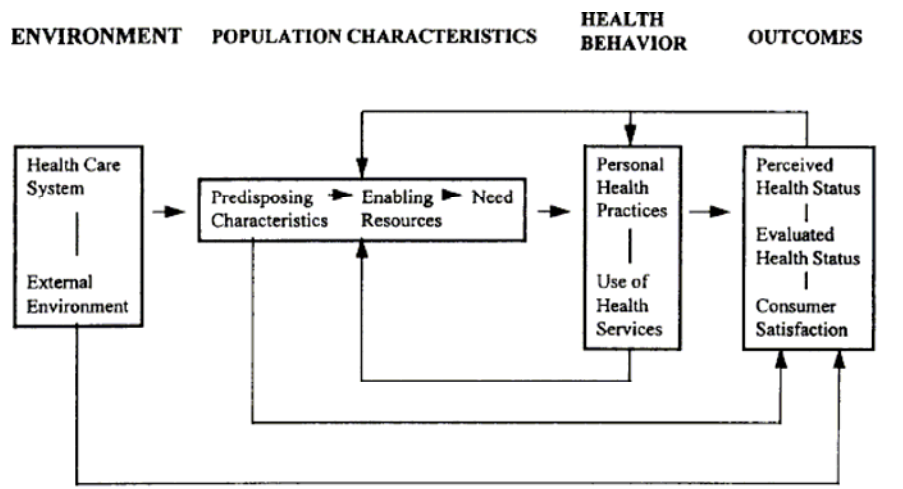


Figure 1(Andersen, 1995, figure 7)

Environment.

The health care system contains various factors that influence access to services. Insurance status is the first factor considered in most access studies. Medical benefits and insurance coverage are usually tied to employment. Employer-based insurance plans are not always offered and if so may not be affordable to the employee. This creates a “Health Gap” defined as a “large void in health care coverage between the comprehensive employer-based coverage by high wage employers and the comprehensive public health care programs available for very low-income people” (Northwest Federation of Community Organizations [NWFCO],

2005, p. 3). The environment may “force” individuals into the health gap and delay seeking early care, which may result in more advanced illness or the need to seek care in the ED at a higher cost. In one study, nearly half of uninsured adults postponed seeking medical care, and over a third say they needed but did not get medical care in the past year (The Henry J. Kaiser Family Foundation [KFF], 2003).

Certain policy-making decisions perpetuate the reliance on the ED for non-urgent care. The Emergency Medical Treatment and Active Labor Act (EMTALA) enacted in 1986 to prevent hospitals from rejecting patients, refusing to provide treatment or transfer them to another facility because of inability to pay or coverage under the Medicare or Medicaid programs (Fosmire, 2003). The effect of EMTALA is utilization of the ED by individuals who cannot get access to other services for non-urgent care. This approach is a downstream solution to the problem of access to healthcare for individuals. The upstream environmental factors that are barriers for individuals to have healthcare access are not addressed.

Population characteristics.

Differences in population characteristics influence healthcare access. Abraham Maslow’s hierarchy of needs is a good frame of reference when considering how people of lower SES make decisions on when and how to seek health care. The person who is working at a low paying job just making ends meet can not take time off work to seek preventative care. The expense to clothe and feed a family takes higher importance than the need to pay an office visit.

A large determinant of health is SES because of the resource marginalization. “Marginalization is a social process with implications for health because it effectively limits peoples’ abilities to gain access to resources and denies the opportunities to acquire capital” (Lynam, 2005, p. 36). An analysis of characteristics of frequent ED usage found that frequent

users are likely to be “African American, poor, publicly insured, and to report health problems” (Zuckerman & Shen, 2004, p. 181). Furthermore, publicly insured adults are two times more likely to be frequent users while the uninsured and the privately insured adults have the same risk of frequent users of ED (Zuckerman & Shen, 2004, p. 181). A study of 49,603 adult ED users and nonusers found that individuals who used ED services were more likely to be in poor health and have experienced disruptions in care (Weber, Showstack, Hunt, Colby, Callaham, 2005, p.4). A qualitative study explored overutilization of ED services and found that marginalized patient saw the ED as a place to get “help” (Malone, 1998, p. 801) Decision making must account for education, culture or social norms when resource allocation is made in order to eliminate disparities in access.

Healthcare behaviors.

Education level, materials, and social norms all help shape individual’s attitudes and beliefs about health. The individual forms feelings of self-efficacy and perceptions of barriers to healthy choices in healthcare and lifestyles. A British cross-sectional study in 2003 researched the impact of SES on attitudes and beliefs about health and found that lower SES resulted in less future thinking, more risky health behaviors, and the belief that chance had the biggest impact on health outcomes (Wardle & Steptoe, 2003, p. 443). This could influence choosing the ED for non-urgent care. Potential implications suggest policy and program planning to move toward expansion of service delivery that provides continuity of care at a lower expense for this population.

A gap remains in how traditional preventative care and a usual source of care are made available to patients. Malone suggests that “we might reconsider the importance of *place* in health and the impacts of strict medical functionalist approach to ED care, particularly for those

who are socially and economically dispossessed” (Malone, 1998, p. 821). Descriptive statistics for demographic characteristics and health status measures for adults show that low-income adults fared worse than high-income adults on every measure of health status (Chen & Escarce, 2004, p. 41). An examination of California hospital discharge data found that, among other factors, poverty was correlated with higher rates of preventable hospitalization (Andrulis, 1998, p. 413). The need to establish preventative behaviors at an early age to decrease chronic illness later in life is missed by utilization of the ED for a primary health care source. A 2003 Sudano Jr. & Baker study revealed that even episodic periods of “uninsured status” lead to a “pool of persons who are at risk for negative care experiences and potentially adverse outcomes” and that once they obtained insurance they did not “catch-up” with their insured peers in the use of preventative care (p. 134). The routine diagnostics being studied were the pap smear, cholesterol level and flu vaccine which are not accessible through non-urgent ED utilization.

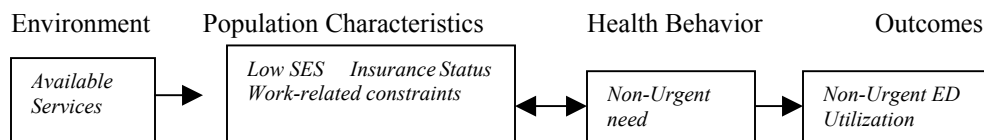


Figure 2 Study variables

The Andersen model is applied in this study to evaluate environment and population characteristics evidenced by the health behaviors in relationship to the outcome of non-urgent ED utilization during clinic hours (Figure 2). The environment of clinic hours of operation, availability of providers, and clinic atmosphere will be measured. The population characteristics include the social determinants of health such as insurance coverage, costs of care, transportation availability, and personal choice. Health behaviors include personal choices such as when or where the person determines that healthcare is needed. The non-urgent need is the outcome or result of the combination of these variables.

Review of the Literature

The literature reveals that people select healthcare services based on many variables but there are some very definite themes that arise. The literature review suggests many reasons and barriers that encourage utilization of the ED for non-urgent care. Most research has been through retrospective chart reviews rather than direct investigation with patients. Databases used for the search were, CINAHL ®, EBSCO ®, OVID ® and PROQUEST ®. Keywords used were: Healthcare access, Healthcare Disparities, Emergency Department Utilization, and Primary care access.

Impact of insurance status on access.

A correlation between insurance status and access to healthcare is well established in the literature. The cost of private insurance has increased from \$1.28 per employee hour in 2001-2002 to \$1.41 per employee hour in 2003 (National Center for Health Statistics [NCHS], 2004, p.16). Individually purchased insurance may not be a realistic option due to expense. Government provided insurances, Medicaid or Medicare, have lower reimbursement rates than private insurance, thus impacting the provider's willingness to accept publicly insured patients. Others who do not have health care insurance for various reasons are vulnerable as well. "Lack of insurance can have a substantial financial impact: over a third of the uninsured had a serious problem paying medical bills in the past year, and nearly a quarter were contacted by a collection agency." (KFF, 2003, Fact Sheet # 1420-05) Health insurance affects access to healthcare as well as the financial well being of families. Families USA conducted a study that found approximately \$43 million of uncompensated care is paid through two sources: approximately one-third through government programs and two-thirds through higher premiums for people with

insurance. It is estimated that by 2010 health insurance premiums will be at least \$2000 higher due to the cost of unreimbursed care (Families USA, 2005, p. 1).

Individuals with health insurance have more healthcare options available. A retrospective descriptive study of ED users in a 600-bed urban academic tertiary-care facility measured access to care by insurance status and having a primary care provider (Blank et al., 2005). Findings indicated that for “heavy” users, defined as over 12 ED visits in 12 months, access to care was better. High users were insured 84% of the time compared to 72% of non-frequent users with 93.2% of heavy users having a primary care provider compared to 76.1% of the non-frequent users. This indicates that insurance status alone does not determine individual ED utilization. When type of insurance was compared it was found that more persons with less than 12 ED visits per year had private insurance coverage at 45% versus 20% for the high users. More high users had Medicaid coverage, 44%, compared to 13% with Medicaid among the less frequent users. (Blank et al., 2005, p. 142)

The cost of health care may cause delays in seeking care or following the prescribed plan of care for chronic conditions. Many insurance plans do not cover prescription medications and others that do often require high co-pays. An analysis of costs associated with chronic illness concluded that a large portion of diabetes patients in the study reported using less medication in the prior year because of cost (Piette, Wagner, Potter &, Schillinger, 2004, p. 107). The burden of following a prescribed plan of care on the patient without the financial resources and often the knowledge resources is considerable.

Impact of socioeconomic status on access.

Various studies indicate having adequate personal resources available is a large determinant of healthcare access. A cross-sectional study of 200 patients found that heavy ED

users, defined as more than four visits in the previous year, were also heavy users of other services within the health care system, indicating that heavy service users perceived lower social support (Byrne et al., 2003). A study of the health of persons receiving care at federally funded community health centers (CHC) utilized a self-administered survey related to patient satisfaction, sociodemographics, and self-reported health status (Cashman et al., 2004, p. 61-62). The findings indicate that on all measures, low-income traditionally underserved patients score less well (Cashman et al. p. 70).

A Utah study of children with ED visits between 1996-1998 compared insurance status and neighborhood median income with ED usage for conditions such as otitis media and upper respiratory infections reported evidence that both SES and insurance status effects pediatric ED usage (Suruda, Burns, Knight & Dean, 2005, p.7). The study also found that usage for non-urgent conditions was related to both having Medicaid coverage and being low income. This suggests that there could be a relationship across the age continuum related to access. While access to healthcare is important for children there are many public programs available to children that are not open to adults. For this reason the current study will be limited to adult access.

Individuals of lower SES tend to delay seeking care based on availability of resources. A study found that 35% of 1,819 participants delayed seeking care in the past twelve months for reasons such as unable to take time off work, need to care for another, and no transportation (Diamant et al., 2004). The same study indicated that 25% did not seek care due to lack of money. The participants prioritized resource utilization for food, shelter or clothing of higher importance than medical care. Diamant concluded that “ patients without any form of coverage

and those in the poorest of health are at greatest risk of having unmet needs for medical care due to competing priorities associated with activities of daily living” (Diamant et al., 2004, p. 788).

A study of a nationally representative sample quantifying an income-related inequality in healthcare concluded that utilization of services is based on need rather than social or economic characteristics including ability to pay. The study utilized the Medical Expenditure Panel Survey (MEPS) and found that wealthy individuals accounted for 58.7 % more of the total medical care expenditures (Chen & Escarce, 2004, p.40-42). This suggests that individuals with money to spend on healthcare are more likely to receive higher cost services.

Some individuals of lower SES, however, “beat the odds” and remain relatively healthy. A community tracking study of the effects of SES and health outcomes found that although there appears to be a resilient group there also appears to be deterioration on health as people reach middle age (Ferrer & Palmer, 2004, p. 381).

Impact of system issues on access.

Several studies indicate barriers to access include cost, wait time for an appointment, discomfort with the providers, and having to miss work for appointments. In a 2002 descriptive, cross-sectional study employment-related constraints related to healthcare access were studied (Gleason & Kneipp, 2004). This study used a 27-item questionnaire regarding income, employment characteristics, job flexibility, and ability to access care for both prevention and illness episodes. The study found that increased job flexibility impacts low- income workers’ ability to access care. Greater than 60% of the sample worked eight to five and found it “somewhat to very difficult” to leave work and 58.7% reported “somewhat to very much difficult” to take the day off. Health insurance coverage for this sample was lower than the national average with 51.3% reporting uninsured status.

The fact that clinic hours impact access is an important variable to review. The 1999 Learning and Using New Approaches in Research (LUNAR) project collected retrospective data from 89 EDs in 35 states to evaluate ED utilization. Of the 12,442 patients studied, 52% were for non-urgent needs with most visits between 10 am and 8 pm. Researchers concluded that it was necessary to provide new services of non-urgent care and interventions focused on preventative services (MacLean et al., 1999, p. 269). Lowe et al. found that practices that were open for evening hours had 20% less ED visits than those without evening hours (Lowe et al., 2005, p. 798). This suggests that the traditional eight to five office hours may no longer be meeting the individual's needs for health care.

The current trend to assist with underserved populations is the use of the CHC. A 2001 study of uninsured adults under the age of 65 and below the 300% FPL found that users of CHCs were significantly more likely to have a usual source of care and to have more frequent visits with providers than the overall uninsured population. (Carlson, Eden, O'Connor &, Regan, 2001, p. 58) Providing a usual source of care is noted in one retrospective pediatric study to lower ED utilization (Chrisakis, Wright, Koepsell, Emerson, & Connell, 1999, p. 738).

Referral for follow-up services is often a source of non-urgent ED usage. McCarthy et al. completed an evaluation of a referral program for 655 eligible patients to a CHC for follow-up care. ED usage was monitored over one year and there was not a significant change from baseline. Financial barriers still impaired access of these individuals because 45% were required to pay for the CHC visit in full whereas only 3% had to pay for an ED visit. (McCarthy et al., 2002, p. 641) Asplin et al. found similar barriers to follow-up care at private clinics for patients with urgent follow-up care needs (Asplin et al., 2005, p. 1251). In this study research assistants placed telephone calls to randomly selected clinics and posed as patients that had been seen in

the ED and were in need of follow-up care. The findings suggest the barriers of the individual are still overlooked in some program planning. In a retrospective study of ED utilization after a state funded CHC was established non-urgent and ambulatory visits by uninsured between 1990 and 2000 decreased by 25% while visits by insured increased by 98% (Smith-Campbell, 2005, p. 82). This indicates other services are utilized when made available.

Research Questions

1. Why do patients seek non-urgent care in a Cowlitz County Washington emergency department during the hours when community providers practice?

Significance to Nursing

In order for public policymaking to be effective the needs of underserved populations must be addressed. Nursing is a profession that practices advocacy for vulnerable populations. Nurses have the ethical and moral obligation to look upstream at the real reasons for the clients' use of health care services. "Nurses gain insight into the social precursors of poor health and restricted opportunities and learn rationales for engaging social action" (Butterfield, 1990, p. 8). Nursing must join the call to action to address the healthcare access crisis. Communities should "own" their community access issues and collaboration is a valid process in identification of the needs (Higgs, Bayne & Murphy, 2001).

Involvement of stakeholders in non-urgent ED utilization is vital if policies and programs are to impact the real problem of healthcare access. This information can then be used to create policy changes and fund appropriate healthcare resources for the publicly insured, the under-insured and the uninsured. Now is the time to rethink how and where we provide care to these

individuals. Now is the time to learn what their reasons for utilization of the ED for non-urgent care are.

Chapter Two

Method of Study

Introduction

The study aim is to analyze the patient's reasons for seeking non-urgent care in the Emergency Department (ED) during hours when providers are practicing. There have been many studies based on medical record review. The goal of this study is to obtain the information directly from the patient accessing the care.

Design

This is quantitative cross-sectional descriptive study. Quantitative research seeks to understand a phenomenon in a broad sense gathering information that results in some formal measurement and that is analyzed with a statistical procedure (Polit & Beck, 2004, p 16). The descriptive study seeks to answer questions about how often, how prevalent, and what characteristics are common about the phenomenon. Cross-sectional designs collect data from one point in time. This type of design is appropriate to describe the status or relationships among phenomena at a fixed point of time (Polit & Beck, p.166). Content analysis will be utilized for open-ended responses. Content analysis is the process of organizing and integrating narrative, qualitative information according to emerging themes and concepts (Polit & Beck, p. 714).

Setting

The setting is the ED waiting area of St. John Medical Center (SJMC) in Southwest Washington. The community hospital had 49,725 visits in 2005 with 89% being for non-urgent or stable triage acuity (Washington Department of Health [WDOH], 2006).

Population and Sample

The population consists of adults over the age of 18 who speak and read English accessing non-urgent healthcare in a community hospital ED. English language literacy is part of the inclusion criteria as the study involves a self-administered English language questionnaire. A convenience sample of patients triaged to non-urgent or ambulatory care, based on the triage acuity categories defined by the facility (Appendix A), was chosen.

Instrumentation

The instrument was developed by the researcher using local sources, themes developed from the review of the literature, and a review of tools used in prior studies. Instruments used in previous Washington State county research were utilized as a frame of reference during the development of the current instrument (Bayne, Higgs, Gruber &, Bendel, 2002; Tacoma-Pierce County Health Department, 1999). The questionnaire (Appendix B) was piloted with five patients at the setting for readability and understanding. Content validity is the degree to which the items in the instrument sufficiently represent the universal content for the concept being measured (Polit & Beck, 2004, p. 714). An expert in the field evaluated the content validity of the instrument. The content expert has experience conducting research with consumers on access to health care.

The instrument is a thirteen-item questionnaire that is written at a seventh grade reading level. The instrument is separated into three sections that inquire about healthcare utilization, healthcare insurance coverage and basic demographics. The instrument was self-administered, taking approximately five minutes to complete. There were no questions that contain personal identifiers so all responses remain anonymous.

Data Collection Procedure

Data collection occurred in the ED waiting area. Data were collected over a one-week period on the days of Monday through Friday during the hours of eight in the morning until six in the evening. The triage registered nurse (RN) in the reception area of the ED utilized a script (Appendix C) to inform patients that they met the inclusion criteria of the study. The RN then notified the principal investigator (PI) when a patient met inclusion criteria.

The PI approached the prospective participant with the questionnaire, which contained a letter of explanation. The PI utilized a script (Appendix D) to discuss participation in the study with the prospective participant. The prospective participants were told that the questionnaire was to be self-administered and would take about five minutes to complete. A pencil was provided for use. Prospective participants were also told where to place the completed questionnaire should she or he choose to participate. The participant placed the questionnaire in a secured file box in the ED waiting area.

At the end of each hour, the PI retrieved the questionnaires and coded them for the date and hour of collection. MacLean and others found that ED utilization was greatest during the hours of ten AM through eight PM (MacLean et al., 1999). This information is essential in analyzing this phenomenon in patterns of ED use. Completed questionnaires are kept in a locked, secure file cabinet in the PI's office. They will be kept for a period of three years after which they will be destroyed.

Data Analysis

The data were analyzed using Statistical Package for the Social Sciences version 13 (SPSS) software ®. Both descriptive and inferential statistics were employed. Frequency and percentages were obtained on all data. The mean and standard deviation for age and the

participant perceived barriers to access were obtained. Correlations between demographics, day of week, location in the county, insurance status, having a source of routine care and non-urgent ED utilization were obtained through parametric and non-parametric correlation coefficient, depending on level of measurement. Determination of statistical significance was based on two-sided alpha level of 0.5.

There were nine questions to which the participant could respond “other” for such things as the type of health facility that is used. These responses were transcribed verbatim by the PI, placed in a grid, grouped and counted. There was one open-ended question to which the participant could write a few sentences. The PI transcribed the responses to open-ended questions into Microsoft Word format. Content analysis was employed to identify themes that emerged from the data.

Human Subjects Consideration

The Washington State University (WSU) as well as the participating institution’s human subjects protocol was obtained from the Institutional Review Board (IRB) for approval prior to collection of data (Appendix E). Informed consent was obtained from the participants. The letter of explanation (Appendix F) is in English.

The risks to the participants included discomfort with answering personal questions and uncomfortable feelings with the healthcare system. The potential benefits included a feeling of having expressed their difficulty with the healthcare system and a sense of empowerment to help with improving access to healthcare. Information obtained was free of personal identifiers and anonymity was protected. Completion of the survey implied consent.

Chapter Three

A Descriptive Analysis of Non-Urgent Emergency Department Utilization

Public Health Nursing

Abstract

This study describes the characteristics and factors that contribute to the utilization of the emergency department (ED) for non-urgent medical care. Healthcare access or having a usual source of care affords the individual with prevention measures and ongoing management of chronic conditions. The usual source of healthcare for a portion of our population is the ED. This study analyzes why people seek non-urgent care in the ED during hours when community providers are practicing.

A cross-sectional descriptive study was utilized. A convenience sample (n= 64) comprised of adults who that met inclusion criteria of seeking care in an ED and having a problem consistent with “non-urgent” triage acuity category was obtained. A 13-item instrument was self-administered in the waiting area of the ED of a community hospital over a one-week period of time during the hours of 8:00 a.m. and 6:00 p.m. on Monday through Friday. Data regarding insurance status, type of insurance, and having a usual source of care and barriers to having a usual source of care were obtained.

Results indicate lack of healthcare insurance and having public insurance are the factors most closely associated with of utilization of the ED for non-urgent care. Disparity in healthcare access is most significantly related to healthcare insurance status. This information can be utilized to leverage change for program planning and policymaking decisions to improve healthcare assess.

Key Words: Healthcare access, emergency department utilization, policy.

Introduction

Access to healthcare is a major concern of healthcare consumers, providers, and policymakers. Healthcare access is defined as having a usual source of healthcare or a regular source or site of care that serves as a point of entry into the healthcare system (Litaker, Koroukian & Love, 2005). Having a usual source of care affords the individual with prevention measures and ongoing management of chronic conditions. The usual source of healthcare for a portion of our population is the Emergency Department (ED) of a hospital (Burt & McCaig, 2001). The 2003 National Hospital Ambulatory Medical Care Survey (NHAMCS) reported an estimated 114 million visits to hospital emergency departments, with only 15% of these visits considered emergent (McCaig & Burt, 2005). This is true despite the fact that the ED is intended to provide care for people who have been in accidents, experienced traumatic injuries or are suffering with severe or potentially life threatening symptoms.

The ED healthcare delivery model is problem focused and episodic rather than one that provides ongoing primary care. Overcrowding of the ED can result from non-urgent utilization of this resource. Many negative aspects of ED over-utilization such as incomplete assessment of patient needs due to rushed exams, staff burnout, and patient dissatisfaction with long wait times affect patient outcomes (Knapp, Bojko, Dolan & Frush, 2004). The cost of non-urgent care in the ED compared to similar care in a clinic setting is another concern. One study indirectly found that the marginal costs of care provided in the ED outpatient visit compared to other settings were higher than commonly believed and concluded that non-urgent care over other outpatient options should be evaluated (Bamezai, Melnick, & Nawathe, 2005).

An upstream analysis of the reasons why people choose to utilize the ED rather than using primary care is important if the overall healthcare system is to be improved. The

ineffectiveness of the current healthcare system for underserved populations is illustrated by the analogy of providers that are so busy pulling drowning victims from a river that they have no time to look upstream to see what is pushing them in (Butterfield, 1990). The call for upstream policy decisions is echoed in a 2005 study of healthcare access that concludes interventions to improve health care access should focus on the context of healthcare disparities (Litaker, Koroukian &, Love, 2005). The study reported in this article analyzes patients' reasons for seeking non-urgent care in the ED during hours when community providers are practicing.

Review of Literature

The United States' (US) national health care spending totaled \$1.6 trillion in 2002 and represented 14.6% of the gross domestic product, more than any other nation in the world (National Center for Health Statistics (NCHS), 2004). This is 53% more than Switzerland whose health care spending is the second highest in the world (Anderson, Hussey, Frogner, & Waters, 2005). Despite this amount of health care spending in the United States, 46 million Americans are estimated to be uninsured while another 13 million are considered to be underinsured due to the large amount of out of pocket expenses (The Commonwealth Fund, 2006). Additionally, 93 million are publicly insured by Medicaid or Medicare (The Commonwealth Fund, 2006). Access to affordable quality healthcare is a national problem and one of the goals of *Healthy People 2010* is to eliminate health disparities. One of the goal's leading health indicators (LHI) is to address access to healthcare (United States Department of Health and Human Services Office of Disease Prevention and Health Promotion, 2002).

Various social determinants of health impact access to healthcare. Social determinants of health include economic and social policies that impact an individual's ability to live, work and function. (World Health Organization [WHO], 2003) The number of healthcare resources

available to an individual varies greatly based on these social determinants. The gap in resource availability creates disparities based on race, ethnicity, and socioeconomic status (SES).

The majority of healthcare access research has been through retrospective chart reviews rather than direct investigation with patients. The literature reveals that people select healthcare services based on many variables. Several studies indicate many reasons and barriers that encourage utilization of the ED for non-urgent care.

Insurance status is the first factor considered in most access studies (Blank, et al., 2005; Suruda, Burns, Knight, & Dean, 2005). Medical benefits and insurance coverage are usually tied to employment. Employer-based insurance plans are not always offered and even when it is, it may not be affordable to the employee. This creates a “Health Gap” defined as a “large void in health care coverage between the comprehensive employer-based coverage by high wage employers and the comprehensive public health care programs available for very low-income people” (Northwest Federation of Community Organizations [NWFCO], 2005, p. 3).

An analysis of characteristics of frequent ED usage found that publicly insured adults are twice as likely to be frequent users than people with private insurance (Zuckerman & Shen, 2004). Negative health effects such as low perceived social support and inability to get preventative care were associated with being uninsured (Bryne, Murphy, Plunkett, McGee, Mury, & Bury, 2003; Sudano Jr & Baker, 2003; Weber, Showstack, Hunt, Colby, & Callahan, 2005).

Low socioeconomic status (SES) is a determinant of health that may result in resource marginalization defined as a “. . . social process with implications for health because it effectively limits peoples’ abilities to gain access to resources and denies the opportunities to acquire capital” (Lynam, 2005, p. 36). An individual who experiences resource marginalization

may form negative feelings of self-efficacy and perceptions of barriers to healthy choices in healthcare and lifestyles. A British cross-sectional study in 2003 revealed that lower SES resulted in less future thinking, more risky health behaviors, and the belief that chance had the biggest impact on health outcomes (Wardle & Steptoe, 2003). This factor may influence choosing the ED for non-urgent care as opposed to using a primary care provider.

In addition to resource marginalization, several studies indicate barriers to access include cost, wait time for an appointment, discomfort with the providers, and having to miss work for appointments (Diamant, et. al, 2004; Gleason & Kneipp, 2004; Lowe, et al., 2005; MacLean, et. al, 1999). Research in Washington State where this study was conducted found similar factors that impact healthcare access (Bayne, Higgs, Gruber, & Bendel, 2002; Higgs, Bayne, & Murphy, 2001; Schueler & Olexa, 2002, Schueler, Berthon, Olexa, & Taylor, 2005, Tacoma-Pierce County Health Department, 1999).

In some communities, underserved populations may access care in community health centers (CHC), however these centers often provide only a portion of the care needed by people without access to primary care provider (Carlson, Eden, O'Connor, & Regan, 2001; Chrisakis, Wright, Koepsell, Emerson, & Connell, 1999; Smith-Campbell, 2005). People may be unable to obtain care from a CHC because of financial barriers, as they are often required to pay a portion of the cost of care at the time of the appointment (Asplin, et. al, 2005; McCarthy, et. al, 2002).

The national healthcare system as a whole impacts the way in which individuals access healthcare. A recent study suggests that current governmental policymaking decisions to contain Medicaid costs will likely lead to an increased uninsured population. This will have the downstream effect of increased ED utilization overall including use for non-urgent care

(Cunningham, 2006). Few studies have investigated the patient's perspective on obtaining care for non-urgent problems in the ED.

Conceptual Framework

The framework for this study is based on Andersen's behavioral model of health services use. The model consists of three factors: environment, population characteristics, and health behaviors (Andersen, 1995). The environment consists of clinic hours of operation, availability of providers, and clinic atmosphere. Population characteristics include the social determinants of health such as insurance coverage, costs of care, transportation availability, and personal choice. Health behaviors include personal choices such as when or where the person determines that healthcare is needed. The non-urgent use of the ED is the outcome or result of the combination of these variables. This study investigates the reasons why people use an ED for non-urgent care during the hours when primary care providers are available.

Methods

A quantitative cross-sectional descriptive study was conducted in the emergency department of a community hospital located in Washington State. The community hospital had 49,725 visits in 2005 with 89% classified as being for non-urgent or stable triage acuity (Washington Department of Health [WDOH], 2006). This is considerably higher than the 33% national average reported by NHAMCS (McCaig & Burt, 2006, p. 6). Additionally, this hospital provided over \$14 million in uncompensated care in 2005 (WDOH, 2006).

A convenience sample comprised of people that met the inclusion criteria of: (a) English speaking; (b) literate; (c) ages eighteen or older; and (d) seeking non-urgent care in the ED between the hours of eight a.m. and six p.m. Monday through Friday. Non-urgent care was defined using the facility triage acuity category level four. The non-urgent criteria includes: (a)

minimal procedures, medications or treatments anticipated, (b) minimal to no alteration in vital signs, and (c) can wait without compromise.

A questionnaire was developed by the researcher using local sources, themes developed from the literature, and, with permission, questions used in prior studies (Bayne, Higgs, Gruber & Bendel, 2002; Tacoma-Pierce County Health Department, 1999). The 13-item questionnaire obtained data about healthcare utilization, healthcare insurance coverage, and basic demographics. It was written in English at an approximate seventh-grade reading level. A likert-type scale used to evaluate the impact of various factors in obtaining healthcare services. One open-ended question allowed the participant to write a few sentences. The questionnaire was piloted with five patients at the setting for readability and understanding. An expert with experience in conducting research with consumers on access to healthcare evaluated the content validity of the instrument.

Data collection began after receiving Institutional Review Board approval from the researcher's academic institution and the hospital. The questionnaire was then distributed between the hours of eight a.m. and six p.m. during one week in January 2006 to potential participants who met the inclusion criteria. A script was used when approaching prospective participants to minimize threats to internal validity. Informed consent was implied by the participant's choice to complete and return the questionnaire and place it into a secured ballot box. At the end of each hour, the questionnaires were retrieved and coded for the date and hour of collection.

Data were analyzed using the Statistical Package for the Social Sciences version 13(SPSS) software ®. Determination of statistical significance was based on two-sided alpha

level of 0.5. Both descriptive and inferential statistics were employed. Responses to the open-ended questions were transcribed and analyzed using content analysis.

Results

Demographics

The participants (N=64) ranged in age from eighteen to seventy-six with the mean age of thirty-six. Sixty-three percent were female and 37% were male. Participants were primarily Caucasian (88%, n=53), however representation included Hispanic/ Latino (5%, n=3), Asian American (3%, n=2), American Indian Alaskan Native (2%, n=1), African American (2%, n=1), which reflects demographics similar to that of the county's demographics (United States Census Bureau, 2004). Twenty percent (n=12) of participants had less than high school completion, 34% (n=21) had completed high school or held a GED, and nearly 43% (n=26) had some college education although only six people had completed a college degree. Only 26% (n=16) of participants worked full time (40 hours per week), 16% (n=10) worked part time (less than 40 hours per week), and 23% (n=14) were unemployed, with another 14% (n=8) that were students or retired. The annual income level for approximately 60% (n=35) of the participants was below \$15,000, another 20% (n=11) reported annual income between \$15,000 and \$29,999 and the remaining 20% (n=12) had income levels of \$30,000 or greater. The individual's rather than the participant's household income was requested.

Insurance Status and Usual Source of Care

While 69% (n=42) of the participants were insured, only 24% (n=10) of the insured had private insurance (Figure 3). Private insurance was associated with having a routine provider as 33% (n=15) of the insured respondents reported a private clinic as their usual source of care. Over half of the insured participants were publicly insured by Medicaid (29%, n=12) and

Medicare (24%, n=10). Thirty-one percent (n=19) of the participants were uninsured. Seventy percent (n=14) of the uninsured indicated that cost was the reason for not having insurance.

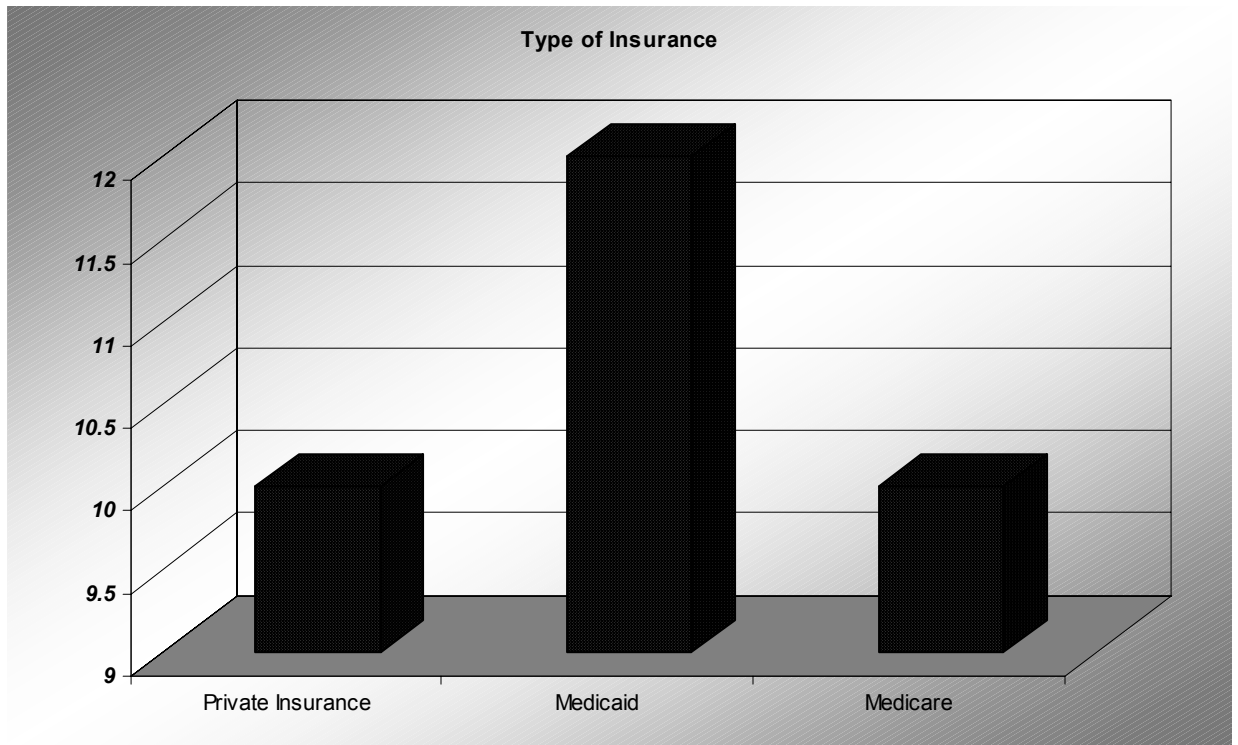


Figure 3: Type of Insurance graphic

Over 70% of the respondents (n=45) reported having a routine source of care (Figure 4). The sources identified were a CHC (42%, n=19), the ED (37%, n=17), and private clinic (33%, n=15). For the respondents (30%, n=19) that reported they did not have a routine source of care, 55 % (n=12) described lack of insurance as the reason. Another 18% (n=4) could not find a clinic that would accept their insurance carrier and 20% (n=4) could not find a clinic open to new patients. Just over half of the participants (53%, n=34) attempted to make an appointment with a provider but (66%, n=21) could not get an appointment soon enough. Of those making an attempt, 30% (n=18) were instructed by their provider to go the ED for their healthcare need.

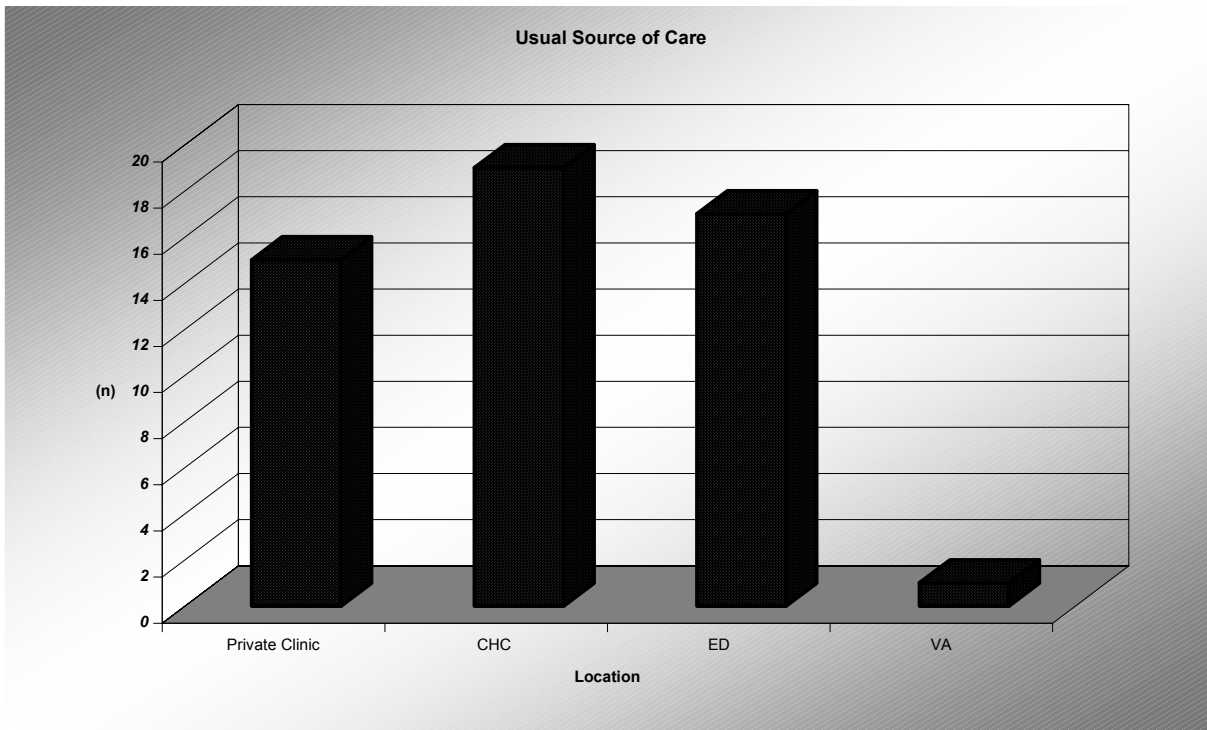


Figure 4. Usual Source of Care graphic

Statistically significant correlations were found in several categories related to insurance status and type of insurance (Table 3). The data indicate a significant positive relationship between private insurance and having a routine source of care. Participants were significantly more likely to be publicly insured. There were significant correlations between income and the SES indicators. Income was correlated positively with private insurance and negatively with either Medicaid or lack of insurance. Income was positively related with higher levels of education. Correlations in regard to gender reveal that females were more likely to have public insurance and a routine source of care. Males were more likely to have private insurance than females. No significant correlations were made between time of day or day of week with utilization.

Barriers to Healthcare Access

Participants were asked to rate how much of a barrier certain factors were in obtaining access to healthcare. The factors were rated as: (a) no problem, (b) a small problem, (c) a significant problem and (d) a very significant problem (Table 4). The most significant barriers were too long of a wait for an appointment, no appointment available at the clinic and lack of medical insurance. The knowledge of where to make an appointment, the cost of care and the office accepting the participants insurance were also of concern. The barrier with the least impact on access was spiritual/cultural values.

Over half of the participants (n=33) made comments to the open-ended question: “Any other comments you would like to make about the reason you selected the emergency department for your care today?” Themes that emerged from these responses include lack of providers open to publicly insured or uninsured participants (n=9), long wait times for appointments (n=8), the need for “help” (n=6) and a sense of urgency for care (n=8).

Discussion

The environmental factors of clinic hours and available providers influence how the client will access healthcare. Crucial findings identified in three aspects of the study make a compelling argument that there are insufficient primary care providers available to this population seeking non-urgent care. Important findings from the healthcare utilization section of the questionnaire indicated that more than half of the respondents (53%) attempted to make an appointment with their usual source of care but nearly two-thirds (66%) of them were unable to get an appointment. Moreover, 30% were told by their provider to go to the ED for care. Similarly, respondents also reported that very significant barriers to care were that it took too long for an appointment or no appointment was available. The narratives of the participants

reflected this with statements of: “Can’t wait a few weeks for an appointment;” or “Can’t find a place that has an appointment for months.”

Like many counties in the United States, the Washington State County in which this study took place has very limited resources. The county is federally recognized as a medically underserved area (MUA) in Washington State (Health Resources and Services Administration [HRSA], 2005). The MUA designation is calculated based on the number of primary care providers to population ratio. The Office of Community and Rural Health (OCRH) of the Washington State Department of Health and the County Health Department plan an evaluation of provider to patient ratios and availability of services based on insurance status in spring of 2006.

The county in which the study was conducted is suffering from insufficient provider availability for the number of persons in need of care as indicated by the MUA designation. The fact that 42% of the sample is utilizing the CHC suggests that this is a valuable resource for this community. Implications for this would include increasing the CHC services for this population through: (a) increasing the number of providers, (b) increasing the number of same day appointments, and (c) expanding clinic hours to increase the number of appointments.

The finding that 37% of respondents report the ED as their usual source of care is problematic. This suggests a large reliance on the ED for routine care that is best achieved in a clinic or office setting. This finding has not been well documented in the literature. Implications for this new finding warrant further investigation in future studies. The finding could be unique to this MUA County due to the providers’ insufficient available appointments for their clients.

The population characteristics of public insurance or being uninsured pre-disposed the client to non-urgent ED utilization. The data indicate that there is a relationship between having private insurance and having a usual source of care. Although a large portion of the participants

had insurance, more than half of those were publicly insured. Open-ended responses suggested that providers are difficult to obtain if one's insurance is public. Several respondents commented that providers were "not taking new patients on Medicaid or Medicare." The uninsured also reported difficulty finding an available provider: "Don't know any other place that takes patients without proof of insurance," or "No insurance, can't be seen routinely by a doctor."

These respondents were largely publicly insured or uninsured and were also low-income working members of the county as indicated by nearly 80% of the participants with income levels below the median levels for the county. The median household income for this county in 1999 was \$39,797 (US Census, 2004). The usual barriers associated with lower SES were not considered as a significant barrier as indicated by the data. These usual barriers relate to transportation, employment, childcare or clinic hours but were not considered to be significant barriers for this population although they were previously identified as significant barriers in other studies (Diamant et al., 2004; Gleason & Kneipp, 2004; MacLean et al., 1999). The variance could be due to the glaring difficulty in obtaining an appointment.

The health-seeking behaviors of the population factor into the non-urgent ED use. Although 70% of the respondents had a usual source of care, often they could not get into the provider in a timely manner. The narrative data indicated that the ED is considered a place to "get help" when "no one else would help me". The study facility had over 89% of the ED visits as non-urgent in 2005 and is known to provide a generous charity care program, which could perpetuate the reliance on the ED for care. Community providers in this county should be encouraged to share the financial burden of caring for publicly insured or uninsured individuals.

An implication of this study is to encourage collaboration between the study facility, the CHC, and the community providers to encourage increased utilization of the community

resources. Another implication would be to reallocate the current resources used for charity care to enhance other community resources. The hospital could consider sponsoring the CHC through assistance in hiring providers. Another consideration would be to increase clinic capacity in the community as an alternate resource for publicly insured and the uninsured. This shift in resource allocation could serve to reduce the burden on the ED, ultimately improve the care for these patients while providing care at a lower cost.

Limitations

The limitations of this study include the requirement of English fluency to complete the survey. This potentially ignores a large portion of the underserved population that either do not read well or are non-English speaking. Further studies that included interview techniques and multi-lingual versions would be more inclusive. An additional limitation was the small sample size. Further studies over a period of time longer than one week would increase the sample size and generalizability of the findings.

This research was limited to adults over the age of eighteen. This ignores the problem of non-urgent utilization of the ED by children. Although children often have insurance access through the governmental agencies there may be a reliance on the ED due to insufficient available providers that are willing to accept public insurance. Further research related to factors that encourage parents of children to access the ED for non-urgent illness is needed to see if there are similar problems to adults or are there unique barriers for children.

One threat to internal validity is consistent triage acuity selection. Registered nurses conducting triage may be reluctant to categorize patients to the non-urgent category if they believe that the patient needs to be seen. While the need for care may not be in question the urgency of the need may be. Additionally, the inter-rater reliability with several RN's conducting

the triage categories introduces threats to internal validity. Further research should include staff education on what acuity levels indicate and how they are utilized within the facility prior to data collection.

Conclusion

This study reinforces what prior retrospective chart reviews have found. Barriers to healthcare access were related to low socioeconomic status. This information must be used to make upstream program planning and policymaking decisions if we are going to impact the healthcare system as a whole. The delivery of services in an emergency setting that should be managed at a non-urgent clinic is costly to the system and increases dissatisfaction to all users. The frustrations that people are “inappropriately” accessing healthcare is the downstream effect of insufficient resources.

Policymakers must be made aware of these concerns. There is a “blame the victim” approach when labeling people for “inappropriately” using the ED for non-urgent care. This population, however, is accessing the services exactly as they are made available. Thirty percent of respondents were told by the provider to go to the ED. Many tried to make an appointment with their provider but were informed it could be weeks for an appointment or were informed that public insurance was not accepted. The need for policy and program planning aimed at the healthcare needs of citizens with lower SES is evident.

The creation of additional non-urgent, community based primary care services are needed. Additional capacity must be targeted to accommodate publicly insured or uninsured individuals as insurance status is closely related to the ability to obtain a usual source of care. Availability of affordable private insurance could improve the opportunity to have a usual service of care. Improvement of reimbursement to providers for publicly funded patients will

open up clinics and private practices to decrease the demand on the ED. Additionally, promotion of availability of same day appointments for acute problems for clients to reduce the burden on the ED. The prevention and management of chronic conditions are best met with a usual source of care or a primary care provider. It is important to advocate for policymaking that considers these concerns.

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Appendix: A

TRIAGE ACUITY CATEGORIES AND SIGNIFICANCE:

Category I: Critical Immediate care required. Threat to life, limb or vision. Needs rapid intervention to maintain status, and usually have multi-symptom problems. To include compromised airway, shock, unstable vital signs, hemorrhage, imminent delivery, psychiatric patient exhibiting immediate threat to self or others. Patient is taken back immediately. Includes all life-threatening conditions.

Category II: Emergent Acute distress with potential threat to life, limb or vision. To include active labor and psychiatric condition exhibiting no immediate threat to self or others. Take back as soon as possible for medical exam and definitive treatment.

Category III: Stable: Alert, appropriately oriented, skin signs normal. Needs further exam and definitive treatment but can wait without compromise. May include minor lacerations or single limb splint, can safely wait; same day care required. Take back as able for further exam and treatment.

Category IV Non-urgent: Minimal procedures, medications or treatments anticipated, can wait without compromise, minimal to no alteration in vital signs. Can safely wait; same day care.

(PeaceHealth, Lower Columbia Region, 2003)

Emergency Department Waiting Room Health Care Access Survey

Section I — Health Care Utilization

1. Is there one or more particular clinic, health center, healthcare provider's office, or other place that you usually go to if you are sick or need advice about your health?

Yes → What kind of place is it?
Check all that apply

- Private Office
- Community Health Clinic
- Rural Health Center
- Tribal Health Clinic
- Hospital emergency room
- Military health care facility
- VA hospital or clinic
- Some other kind of place: _____

No → *Check all that apply*

- Have not needed a healthcare provider
- Do not like healthcare providers
- Do not believe in healthcare providers
- Do not know where to go
- Previous healthcare provider no longer in practice or moved
- No insurance
- No place is open to my insurance
- No place is open to new patients
- Other _____
- Don't know/Not sure

2. Did you attempt to make an appointment with a healthcare provider before coming to the emergency department today?

Yes → Did any of the following problems keep you from seeing your routine provider for this illness?

- Transportation
- Childcare
- Unable to get time off work
- Office hours
- Need money for co-pay or deductible
- Not able to get an appointment soon enough
- Office did not accept my insurance
- No problems
- Other: _____

No

3. Did your routine source of care tell you to come to the emergency department for this illness?

- Yes No No routine source of care

4. **Barriers to Routine Care:** There are many reasons why adults do not get routine health care. How much do *you* experience the following as **problems**? *Check one box per row.*

	NOT A PROBLEM	A SMALL PROBLEM	A SIGNIFICANT PROBLEM	A VERY SIGNIFICANT PROBLEM
Did not know where to get appointment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Transportation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Childcare	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unable to get time off work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inconvenient office hours	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cost of office visit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No insurance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Too long for an appointment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No appointment available	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Office did not accept your insurance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did not like the care provided at the clinic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Personal values or spiritual beliefs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (<i>please explain</i>): _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Section II— Insurance Coverage

5. Do you have any kind of health care coverage, including health insurance or government plans such as Medicare?

- Yes → What is the healthcare insurance source? (*Check all that apply*)
- Private Insurance; such as Blue Cross/ Blue Shield
 - Medicaid
 - Medicare
 - Veterans Administration
 - Other (*please describe*) _____

If yes to question Number 5→

Does your health plan require you to pick a provider or clinic for routine care?

- Yes
- No
- Don't know / Not sure

No → What is the reason you do not have health care insurance?

- Cannot afford it
- Do not want it
- Unable to get health care insurance
- Other (*please describe*) _____

Don't know / Not sure

Section III — Background Information

6. What is your gender? Female Male

7. What is your age? _____

8. What is your race/ethnicity? (*Select only one*)

African-American Asian-American American Indian/Alaska Native

Caucasian Hispanic/ Latino Other: _____

9. Where do you live? ZIP code: _____

10. What is the highest grade or year of school you completed?

- Grades 1 through 8 (No high school)
- Grades 9 through 11 (Some high school)
- Grade 12 or GED (High school graduate)
- Some college or technical school
- Associate Degree
- Bachelor Degree
- Master's Degree
- Other: _____

11. Are you currently?

- Employed (Full time 40 hours per week)
- Employed (Part time _____ hours per week)
- Unemployed
- Student
- Retired
- Unable to work
- Other (please specify) _____

12. Please indicate your yearly income before taxes.

- | | |
|---|--|
| <input type="checkbox"/> Zero | <input type="checkbox"/> \$45,000-\$59,999 |
| <input type="checkbox"/> Less than \$15,000 | <input type="checkbox"/> \$60,000-\$74,999 |
| <input type="checkbox"/> \$15,000-\$29,999 | <input type="checkbox"/> \$75,000-\$89,999 |
| <input type="checkbox"/> \$30,000-\$44,999 | <input type="checkbox"/> \$90,000 or more |

13. Any other comments you would like to make about the reason you selected the emergency department for your care today?

Thank you again so much for completing this survey!

Appendix C:

Triage registered nurse (RN) script for participation in research study.

There is a graduate nursing student here today collecting information for research on access to health care. I would like to let her know that you are eligible for her study. Would that be all right with you?

If yes: Thank you. Please have a seat in the waiting area and she will be over to talk to you shortly.

If no: Thank you for your consideration.

Appendix D:

Primary Investigator script for participation in the study.

Hello, my name is Carla Brim. I am a graduate nursing student at Washington State University (WSU). I am doing a research study on why people use the emergency department for routine care during the hours of 8 am and 6 pm. The triage RN told me that you are eligible for my study. It will take about 5 minutes to answer the questions on this form. Would you be willing to participate?

If yes: Thank you very much. When you are done please place the questionnaire in the file box.

If no: Thank you for considering this request.

MEMORANDUM

TO: Carla Brim
Intercollegiate College of Nursing, Spokane

FROM: Malathi Jandhyala (for) Kris Miller, Chair, WSU Institutional Review Board

DATE: 24 January 2006

SUBJECT: Review of Protocol Modification - Modification

Your proposal to modify the protocol titled **"A Descriptive Analysis of Non-urgent Emergency Department Utilization,"** IRB File Number **8897-c** was reviewed for the protection of the subjects participating in the study. Based on the information received from you, the IRB has **approved** your modification request on **24 January 2006**. This modification includes deletion of additional sentence on question # 5 of survey instrument, addition of Peace Health IRB contact information to the letter of explanation and additional wording to clarification of race/ethnicity selection.

IRB approval indicates that the modifications described to the previously approved study protocol are designed to adequately protect the subjects participating in the study. This approval does not relieve the investigator from the responsibility of providing continuing attention to ethical considerations involved in the utilization of subjects participating in the study.

The approval for this protocol expires 26 December 2006. If any more changes are made to the study protocol you must notify the IRB and receive approval before implementation.

If you have questions, please contact the Institutional Review Board at OGRD (509) 335-9661. Any revised materials can be mailed to Research Compliance Office (Campus Zip 3140), faxed to (509) 335-1676, or in some cases by electronic mail, to irb@wsu.edu.

Review Type: MOD
Review Category: XMT
Date Received: 17 January 2006

OGRD No.: NF
Agency: NA



January 9, 2006

Carla Brim, RN, BSN
126 Carriage Court
Kelso, WA 98626

RE: Your letter dated 12/2/2005 regarding study number 06-001: A Descriptive Analysis of Non-Urgent Emergency Department Utilization (N/A)

Dear Ms. Brim:

Your request for approval of the new study listed above was reviewed at the 1/6/2006, meeting of the PeaceHealth Institutional Review Board.

The following information and/or changes are required: Revise the survey question #8 to include Hispanic/Latino and correct the typo on question #5 by removing the statement, "You use insurance above rather than coverage."

The Board also requests you do not record the time and date of collection on the survey document.

Please submit the requested information or documents for re-review. You may not begin your study until your revised application is approved. Contact Sally J. Hunt ((541) 686-6949; fax (541) 685-1839; email: sjhunt@peacehealth.org) if you have any questions or require further information.

Sincerely,

A handwritten signature in black ink, appearing to read "Phyllis Brown".

Phyllis Brown, MD
PeaceHealth IRB Chair

Phone: (541) 686-6949
Fax: (541) 685-1839
1255 Hilyard St. PO Box 10905 Eugene, OR 97440
www.peacehealth.org/irb

*Dedicated to Exceptional Medicine
and Compassionate Care*



January 23, 2006

Carla Brim, RN, BSN
126 Carriage Court
Kelso, WA 98626

RE: Your followup submission of 1/13/2006 regarding study number 06-001: A Descriptive Analysis of Non-Urgent Emergency Department Utilization (N/A)

Dear Ms. Brim:


Thank you for your response to requests from a prior review of your application for the new study listed above. Your study is eligible for expedited review under FDA and DHHS (OHRP) 7. Individual or group behavior designation.

This is to confirm that your application is now fully approved. The survey has been revised to reflect the Board's request to change #8 Hispanic to Hispanic/Latino, and on #5 to remove the typo. Also approved is the revision to the Letter of Explanation.

You are granted permission to conduct your study as most recently described effective immediately. The study is subject to continuing review on or before 1/5/2007, unless closed before that date.

Please note that any changes to the study as approved must be promptly reported and approved. Some changes may be approved by expedited review; others require full board review. Contact Sally J. Hunt ((541) 686-6949; fax (541) 685-1839; email: sjhunt@peacehealth.org) if you have any questions or require further information.

Sincerely,



Phyllis Brown, MD
PeaceHealth IRB Chair

Phone: (541) 686-6949
Fax: (541) 685-1839
1255 Hilyard St. PO Box 10905 Eugene, OR 97440
www.peacehealth.org/irb

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Appendix: F

Letter of Explanation

January 2006

I am a registered nurse and a graduate student at Washington State University. I am doing a research study on the reasons that patients use the emergency department for routine care between 8 am and 6 pm.

I am asking for your help in this study. Your involvement will consist of answering a series of questions that should take about five minutes to complete. No information that can identify you will be collected so your answers will be anonymous. I will be the only person to view the survey. The information will be reported as a group. Your information will not be reported on an individual basis. The surveys will be kept in a locked file for three years at which time they will be destroyed.

One benefit of taking part in this study is the satisfaction of helping to understand problems people have in getting health care in our community. Another benefit is that this research may help improve access to health care in the community. A possible risk of involvement in the study is uncomfortable feelings.

If you have questions regarding this study, you can contact me at 360-414-7768 or cbrim@peacehealth.org and if you have questions regarding your rights as a participant you can contact the Washington State University Institutional Review Board at 509-335-9661 or irb@wsu.edu or the Peace Health Institutional Review board at 541-686-6949.

Sincerely,

Carla Brim, RN

Tables

Table 1:

Comparison of Population Characteristics

	United States	Washington State	Cowlitz County
Population, 2004 estimate	293,655,404	6,203,788	96,189
High school graduates	80.4%	87.1%	83.2%
Median household income	\$41,994	\$45,776	\$39,797
Persons below poverty level	12.4%	10.6%	14.0%

(United States Census Bureau, 2004)

Table 2 Healthcare Barriers

Barriers to Healthcare Access in Ranked Order

Barrier	N	Not a problem	A Small Problem	Significant Problem	Very Significant Problem
No appointment available	54	n=17 32%	n=7 13%	n=11 20%	n=19 35%
Too long for an appointment	54	n=22 41%	n=8 15%	n=11 20%	n=13 24%
No insurance	56	n=32 57%	n=1 2%	n=7 12%	n=16 29%
Did not know where to get appointment	58	n=35 60%	n=6 10	n=7 12%	n=10 17%
Cost of office visit	56	n=34 61%	n=5 9%	n=8 14%	n=9 16%
Office did not accept your insurance	52	n=34 65%	n=6 12%	n=3 6%	n=9 17%
Did not like the care provided at the clinic	52	n=35 67%	n=8 15%	n=2 4%	n=7 11%
Transportation	58	n=43 74%	n=5 9%	n=5 9%	n=5 9%
Inconvenient office hours	54	n=42 78%	n=4 7%	n=4 7%	n=4 7%
Childcare	55	n=45 82%	n=4 7%	n=2 4%	n=4 7%
Unable to get time off work	54	n=44 82%	n=6 11%	n=2 4%	n=2 4%
Personal values or spiritual beliefs	53	n=51 67%	n=1 2%	n=1 2%	n=0

Table 3. Correlations

Healthcare Access Correlations

Private Insurance related to Usual Source of Care				
N	Pearson R	Significance (2-tailed)		
61	.465**	.000		
Insurance type related to Insurance				
Insurance type	N	Pearson R	Significance (2-tailed)	
Medicaid	41	-.365*	.019	
Medicare	41	-.323*	.040	
Healthcare access related to Gender				
Healthcare access factor	N	Pearson R	Significance (2-tailed)	
Usual source of care	60	.257*	.048	
Insured	58	.344**	.008	
Medicaid Insurance	38	-.623**	.000	
Healthcare access related to Income				
Healthcare access factor	N	Pearson R	Significance (2-tailed)	
Privately Insured	38	.742**	.000	
Medicaid Insurance	38	-.402*	.012	
Unable to obtain Insurance	18	.494*	.037	
Education Level	58	.351**	.007	
Current Employment	58	-.354**	.006	

Note * $p < .05$ two-tailed. ** $p < .01$ two-tailed.