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Impact of Patient Demographics and Health Insurance on Hospital Discharge

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IMPACT OF PATIENT DEMOGRAPHICS AND HEALTH INSURANCE
ON HOSPITAL DISCHARGE
PLANNING

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Master's Program in Sociology

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Ana Acosta

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IMPACT OF PATIENT DEMOGRAPHICS AND HEALTH INSURANCE
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by

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THESIS

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Introduction

According to the United States Centers for Disease Control & Prevention (2016), 2.8 million older adults are treated in emergency departments for fall injuries every year. The goal of this study is to explore factors related to mode of patient discharge from the emergency department for individuals who are 55 years of age and over and have suffered a fall. The medical institution that I will focus on is located along the U.S.-Mexico border in a city that is 82% Latina/o.

This population is important to consider given that by the year 2030, the population of older Latina/os residing in the U.S. is projected to increase by 555% compared to only 93% in 1990 for Non-Latina/o whites (Ouchida & Lachs, 2015). Additionally, one in five Americans will be 65 years old or over by the year 2030 (Ouchida & Lachs, 2015). Population projections estimate 70 million adults age 65, with over 9 million being over the age of 85 by the year 2030 (Ouchida & Lachs, 2015). Additionally, Latina/os 65 years and over will account for 20% of the older population in the next twenty years (Angel, Rote, Brown, Angel & Markides, 2014). The number of older Latina/os will grow by nearly six times, from 3 million to 17.5 million by the year 2030. These population projections highlight the need to focus on older Latina/os.

Scholars have noted the increase of the Latina/o elderly population and how crucial it is to investigate health disparities and healthcare utilization as population needs grow (Delgadillo, Sörensen, & Coster, 2004; Lee, Schwarz, & Goldstein, 2014; Orsini, 2010). According to Delgadillo et al. (2004), there is an issue with the underutilization of services. Despite this, Latina/o elders are mostly underrepresented in studies on both minority elders and Latina/o families (Gallant et al., 2010).

According to Delgadillo et al. (2004), the health care needs of older Latina/o adults are greater than Anglos in comparable age categories. Researchers mention, for example, Latina/o elderly in the southwest U.S. have more advanced rates of certain chronic disease (Delgadillo et al., 2004). They also found Latina/os have poorer self-rated health than non-Latina/o Whites do and less health insurance coverage (Delgadillo et al., 2004). Delgadillo et al (2004) identified that a large proportion of the Latina/o population held lower socioeconomic status and more health-related issues, which suggests a higher need for supportive care to maintain function of daily living activities. (Delgadillo et al., 2004).

In regards to insurance, Latinas/os are the most underinsured of all minority groups (Caesar, 2006; Delgadillo et al., 2004; Fennell, Feng, Clark, & Mor, 2010). Additionally, when holding Medicare insurance (which is only covered at 80%), Latinas/os are the least likely to have supplemental insurance coverage (20% out of pocket) and that was the most significant factor in economic access to home health care (Clark et al., 2005; Dunlop, Manheim, Song & Chang, 2002). Dunlop et al. (2002) suggested that further research is needed regarding Latinas/os and health insurance, especially when accounting for other predisposing factors. One important issue is falls. For older adults, injuries are one of the most frequent causes of mortality and hospitalization (Clark, DeLorenzo, Lucas & Wennberg, 2005). Researchers estimated that 6-12 million Medicare eligible older adults residing in the community fall each year (Bohl, Phelan, Fishman, & Harris, 2012). Injury prevention in older adults is important, but once an injury occurs, reducing the cost of care and death, while maintaining function in patients over 65 should also be a priority (Clark et al., 2005).

Based on discharge data collected with 241 patients who received medical care from a fall injury between 2014 and 2015 at the emergency room in a general hospital in El Paso, Texas,

I will examine whether individuals over age 55 have health insurance and the type of care that is recommended to patients after being discharged. In particular, I will examine demographics, including ethnicity, age, and language on whether the patient paid with insurance and the disposition of discharge from the emergency department after a fall. Additionally, I will examine which demographic factors are associated with disposition of discharge— facility, self-care, or home health care.

Alper, O'Malley, Greenwald, Aronson, & Park (2015) described the differences in home health, facilities, and self-care in terms of patient's ability to perform activities of daily living. Discharging a patient to another facility such as a rehabilitation center, intermediate care facility, or extended care nursing facility indicates that the person is in need of extended health care and will benefit from intensive treatment and regular physician and professional supervision and therapy. Home health services such as home/routine care and organized home health care services are for patients who require less than constant supervision, but still need assistance with their daily activities of living. A patient discharged from the emergency room to home/self-care implies that they can perform their activities of daily living independently and does not need further, immediate care referrals. This study intends to contribute to the field of health care by exploring the type of care that patients are receiving and bringing awareness to the resources that are available after a patient suffers from a fall. Understanding patient demographics and the discharge disposition may offer some insight to factors leading to a readmission or another fall injury.

Theoretical Framework

Erving Goffman's Total Institutions

Another explanation for the low usage rates of long term care can be related to the sociological theory created by Erving Goffman who writes about total institutions. According to Goffman (as cited in Applerouth and Edles, 2012a), the effect of total institutions can be seen in his term of “the mortification of self” which is defined as “the process of ‘killing off’ the multiple selves possessed prior to one’s entrance into the total institution and replacing them with one totalizing identity over which the person exercises little, if any, control” (p. 492). For example, if a patient is discharged involuntarily into a nursing home, they may feel like they are stripped of their normal independencies like being able to regulate who they socialize with and when and other aspects of their own schedule such as food, medications, and not being able to do things that they are used to doing. Other researchers have used Goffman's ideas of the mortification of self in relation to health care facilities. For example, Surr (2006) found that patients who felt they had undesirable roles or were not permitted to maintain or adopt roles they desired, experienced an undermining of self.

Goffman (1961) also describes the idea of role dispossession. Learning how to switch roles from caretaker to being taken care of can have an effect on one's sense of self. If the individual was used to going for walks around their neighborhood everyday and had frequent interactions with certain individuals, and all of a sudden no longer has access to those familiar interactions, this could also have an effect on their senses of self. On the other hand, when a person is voluntarily discharged to a nursing home, it could mean that his/her personal ties or daily routines were already starting to disappear. Perhaps the person no longer took their daily walk or felt like conversing with their neighbors and decided that they would feel more

comfortable socializing in a shared home environment with people that were having the same experiences. This could be a positive aspect of being discharged to an institution.

Another effect of total institutions on the self according to Goffman (1961) centers on personal possessions. If an individual is involuntarily taken out of their home and put into a nursing home with only a few of their possessions they may no longer have the same relation to their self. They will no longer be sleeping in their bed or looking in their mirror or using their own drawers. They will still have access to these things, but they know that these possessions do not truly belong to them, they belong to the institution. According to Ekerdt & Baker (2014), possession preservation may be a story about the self. Self-construction includes their possessions, which older adults come to consider as parts of themselves.

Along with the previous reasons that a patient may choose, or not choose, to be discharged under self-care relate to what Goffman (1961) discusses as the indignities being expressed in total institutions. In the case of the nursing home this can be seen as having to ask for things in which the resident was previously used to getting for themselves such as water, a snack, an extra blanket, or TV time. Goffman (as cited in Applerouth and Edles, 2012a) states that “whatever the form or the source of these various indignities, the individual has to engage in activity whose symbolic implications are incompatible with his conception of self” (p.496). For these reasons, a patient may choose to stay at their own home instead of being treated in an institution.

As differences between cultures and the treatment of chronically ill patients persist, so do the social structures in terms of caring for the ill. In White-American culture, it is emphasized that older adults maintain their autonomy, even though family does play an important role, elderly Whites fear loss of independence (Westerhof et al., 2001). This viewpoint may have

implications for the type of facility in which a patient agrees to be discharged. Some older adults may prefer to be independent at their home and insist on caring for themselves and, in some cases, refuse a referral for extended care at a facility. For example, if a patient is discharged under self-care, they can return home and avoid role dispossession and mortification of self. However, if this patient is in need of further, more intensive treatment, they are at increased risk of another fall.

Erving Goffman's Stigma

Older adults possess some attributes that have been shown to be stigmatized in a culture that is centered on the idea of staying young. Erving Goffman (1963) defined stigma as an attribute that is deeply discrediting. Stigma exists when elements of labeling, stereotyping, separation, status loss, and discrimination occur together in a power situation (Link & Phelan, 2001).

According to Goffman (1963), there are two types of perspectives on stigma: the discredited and the discreditable. Goffman described the discredited as a stigmatized individual who assumes that his/her differentness is known about already or is evident on the spot and the discreditable is when the person assumes it is neither known about by those present nor immediately perceivable. Discrediting attributes in older adults can be seen in the physical (biological) signs of aging (such as decreased skin elasticity and grey hair or hair loss). An example of a discreditable attribute can be when a person does not have the typical or generalized appearance of a person their age, such as lacking signs of perceived physical weakness which could have an effect on disposition of discharge for patients.

According to Blafe, Brugha, O'Connell, McGee, O'Donovan (2010), individuals with discreditable traits are concerned with controlling the release of information that would undermine the impression that they are attempting to foster. They do this by presenting sides of themselves that elicit and confirm positive inferences that others can draw about them and suppressing sides of themselves that would undermine these inferences. In an example using older adults, there are some who choose not to seek further treatment such as physical therapy or home health for fear of looking weak and not being able to function on their own. According to Goffman (1963), when a person is in our presence, and there is an indication that they might be different from us in an undesirable manner, he /she is thus reduced in our minds from a whole and usual person to a tainted, discounted one. This person is known to possess a stigma, especially when its discrediting effect is very extensive; sometimes it is also called a failing, a shortcoming, or handicap.

The stigmatization of older adults can also have an effect on healthcare, where ageism is subtle but prevalent. For example, even though older adults were willing to endure discomfort and complex procedures, some older patients may not be recommended for physical rehabilitation due to opinions of the inability to endure the intensity and beliefs they will not benefit from it as much as their younger counterparts (Kane & Kane, 2005).

Review of Relevant Literature

Nursing Home, Facility, and Home Health Care

Authors stress the importance of the changing demographics and its relation to nursing home use and disparities in long-term care (Angel et al., 2014; Dunlop et al., 2002; Feng, Fennell, Tyler, Clark & Mor, 2011; Katz, Kabeto & Langa, 2000). Historically, Latina/o immigrant communities have low rates of nursing home and other care service use, especially among elderly Latina/o residents (Angel, et al., 2014). The low usage of nursing homes among Latina/os may be due to not only individual and family preferences but to cultural norms of taking care of the elderly and low socioeconomic status that prevents them from affording formal long-term care (Angel et al., 2014). These continuing developments may lead to a larger number of disabled older adults in the community that are vulnerable to unmet needs and deteriorating health (Katz et al., 2000).

It is important to consider the prevalence of older adult falls and the way that they increase the need for long term care because health care costs are rising (Bohl et al., 2012). One study found that long-term care is the biggest out-of-pocket expense for the older population. The annual nursing home cost is estimated at over \$75,000 per year, with only 10-15 % of older adults covered by private long term care insurance and the annual cost of unpaid informal care is estimated to be billions of dollars (Brown, Goda, & McGarry, 2012). One study mentioned/ that long-term care spending only went to a small portion of recipients residing in nursing homes, leaving the majority of community residents in need with little financial assistance seeking unpaid or low-cost help (Kaye et al., 2010).

Kaye et al (2010) also noted that further research is needed on the usage and effectiveness of different long-term care settings such as nursing homes, foster care, and state

facilities. According to Alper et al. (2015), discharge to an environment that is unable to fulfill the patient's needs more often than not results in readmission and that some readmissions were preventable by having adequate discharge support and sufficient follow ups.

Race/Ethnicity

Latina/o health is mostly described under the Latina/o health paradox. This paradox describes the Latina/o population as having greater longevity and health outcomes despite disadvantaged social positions such as lower levels of education and income (Markides and Coreil, 1986; Teller and Clyburn, 1974; Thomson, Nuru-Jeter, Richardson, Raza & Minkler, 2013). Consequently, the relationship between falls and their relationship to long term care, especially among Latina/os, has received limited attention. While most of their non-Latina/o-White participants went to a physicians' office or clinics for medical care, minorities were more likely to use health department or government-sponsored clinics and the emergency room (Fitzpatrick, Powe, Cooper, Ives & Robbins, 2004). As such, discharge determinations after emergency room visits can shape the health care trajectory of Latina/os to a greater extent than to those of other groups who are not as dependent on emergency room care.

In addition, self-care for older adults at their homes without professional guidance, in terms of modern western prevention and disease control, and knowledge of illness among Latina/o elderly, is less common than among Non-Latina/o elderly (Gallant et al., 2010). Ironically, aside from living longer, Latinas/os have higher rates of obesity, arthritis, and diabetes compared to non-Latina/o Whites (Dunlop et al., 2002; Fennell et al., 2010; Zunker & Cummins, 2004), which lead to higher rates of disabilities and necessary assistance for daily activities as well as the need for long-term care. Researchers documented that although minorities reported higher needs for services that offer further attention, long-term care was

underutilized (Fennel et al., 2010). Moreover, Lee et al. (2014) found Latina/os tend to hold more fatalistic views regarding health and aging, meaning that those who were at risk for a fall were less likely to seek help by dismissing their symptoms as a normal part of aging.

Older minorities will also face larger challenges than older Whites in accessing adequate home health care and nursing home care (Feng, et al., 2011). This may be due to more choices of care in the White elderly population and people with private insurance mostly use better living facilities (Feng et al., 2011). Researchers suggest policies to incorporate culturally sensitive and cost-effective options for long-term care (Angel et al., 2014; Solis & Champion, 2017).

Therefore, based on the literature above, I pose the following hypothesis:

Hypothesis 1: Latinas/os versus non-Latina/os are less likely to be discharged to facilities or home health care than to self-care.

Language

Latina/os are less likely than Whites to seek out formal care due to language barriers (Delgadillo et al., 2004). Sentell & Braun (2012) found that Latinas/os with limited English proficiency reported lower health literacy and were at a higher risk of poor health compared to those who spoke English fluently. Cultural barriers such as language proficiency could significantly affect medical care, in some cases, more than race or ethnicity (Caesar, 2006; Dunlop et al., 2002). Caesar (2006), for example, found language is significantly related to the type of health insurance that was accessed by Latina/o elderly. Participants who were proficient in English were more likely to have supplemental private insurance while those not proficient in English were more likely to have no insurance coverage. Therefore, based on the literature, I predict the following:

Hypothesis 2: Patients who prefer to speak in Spanish as opposed to English are less likely to be discharged to a facility or home-health care, than self-care.

Age

As stated earlier, the needs for long-term care are going to rise quickly due to the projected increase of the older adult population with chronic disease, which may lead to higher morbidity and disability in the future (Feng et al., 2011). Aging also raises questions about access to health care services. Being of older age significantly increases the use of home health care and nursing homes, especially those limited in their daily activities (Dunlop et al., 2002).

Moreover, providers can easily make mistakes regarding diagnosis of acute and chronic illnesses due to previously held beliefs about the aging process and the normal changes associated with it. These beliefs could influence where a patient is discharged. Common symptoms and diseases such as pain, cognitive decline, depression, anxiety and fatigue are often dismissed as signs of old age and are left untreated (Ouchida & Lachs, 2015). These signs can either be undiagnosed by healthcare providers or are dismissed by older adults who refuse to seek treatment. Researchers found that even though some procedures are covered under Medicare or insurance, older patients may be considered poor risk for surgery based on age and restricted life expectancy alone. They also specified that older adults who acquired a disability were less likely than younger adults to be offered rehabilitation, training and equipment needed to manage and maneuver their day-to-day lives (Kane & Kane, 2005).

Kane & Kane (2005) recommend for healthcare professionals not to base treatments on age alone and that effective communication is vital. Also, Hochschild (2012) mentions that doctors were more likely to take older men's complaints about illnesses more seriously than an older woman's and would also view a younger adult's illness complaint as more valid than an

illness complaint of an older adult. The meaning of biological decline is also different between cultures and one study suggests that the incorporation of culture into views on the biological aging process can enhance knowledge of age-related changes and assumptions on health perceptions of older adults (Westerhof et al., 2001), which is an important consideration for the Latina/o population. Therefore, based on the literature above, I pose the following hypothesis:

Hypothesis 3: Patients who are over 85 are more likely to be discharged under self-care than facilities or home care, in contrast to those who are 84 and younger.

Health Insurance

Health insurance is important in relation to the use of health services and medical outcomes (Fitzpatrick et al., 2004). One study found that even though most Americans 65 years and over are enrolled in Medicare, their coverage reportedly differs by age and race/ethnicity (Clark et al., 2005). The Mexican-origin population, for instance, is the most underinsured of all minority groups suggesting this could be due to societal barriers such as income, citizenship status, and employment history (Caesar, 2006; Delgadillo et al., 2004; Fennell et al., 2010). This leaves Mexican-origin individuals with few options other than to turn to their children, Social Security, or Medicaid. However, Medicaid home health care is only available to a limited amount of lower income older adults with a certain level of physical impairment and is dependent on availability through state resources (Angel et al., 2014).

Moreover, of the patients solely holding Medicare, Latina/os are the least likely to have supplemental insurance coverage, which is among the most significant factors in economic access to home health care (Clark et al., 2005; Dunlop, et al., 2002). This is a concern given that not all services, including discharge facilities, are covered under Medicare and out-of-pocket expenses can be a burden for older adults, especially those who do not have any supplemental

insurance. Brown et al. (2012), for example, stated that Medicare is mistakenly assumed to cover a significant amount of long-term care. In reality, Medicare (Part A) only covers skilled nursing care. Elsewhere, Kane & Kane (2005) discovered proven methods to manage and treat geriatric patients are poorly reimbursed under Medicare even if they are considered cost effective.

Additionally, in 1997 Medicare imposed a limit on reimbursement that home care agencies could receive when treating elderly Medicare patients, which caused a sharp decline in home health care visits. After the decline in home health services, informal health care and shared living arrangements started to rise in its place, however, the result of care or treatments are not measured (Orsini, 2010). According to Orsini (2010), the reimbursement limit per user created incentives for home health care facilities to turn away patients with long-term care needs. This is an important barrier in terms of access to care. Research found that providers may be limiting the amount of patients they accept under Medicare, making it more difficult for patients to get an appointment with a doctor or deal with longer wait times compared to those who are able to pay out-of-pocket (Ouchida & Lachs, 2015).

A study done to assess perceptions of barriers to health care included age, gender, race, income, and health insurance (Fitzpatrick, Powe, Cooper, Ives & Robbins, 2004). Specifically, Latina/os without supplemental insurance or Medicaid older than 85 years are among those who reported issues with access to general healthcare. As mentioned in the introduction, there is an issue with underutilization and lack of knowledge of services designated to serve those with low income and high need (Delgadillo et al., 2004). Solis & Champion (2017) concluded that it was necessary for older adults and health care practitioners to understand the importance of annual exams and functional assessments, especially to provide the appropriate recommendations for

safety issues such as a fall. Based on insights from the literature I developed the following hypotheses as it relates to insurance coverage:

Hypothesis 4: Patients who prefer to speak in Spanish as opposed to English are more likely to be uninsured.

Hypothesis 5: Uninsured patients are less likely to be discharged to a facility or home-health care versus self-care.

Hypothesis 6: Latinas/os versus non-Latinas/os are likely to be uninsured.

Hypothesis 7: Patients under 85 are more likely to be uninsured and those over 85 years of age.

Summary of Hypotheses

Hypothesis 1: Latinas/os versus non-Latina/os are less likely to be discharged to facilities or home health care than to self-care.

Hypothesis 2: Patients who prefer to speak in Spanish as opposed to English are less likely to be discharged to a facility or home-health care, than self-care.

Hypothesis 3: Patients who are over 85 are more likely to be discharged under self-care than facilities or home care, in contrast to those who are 84 and younger.

Hypothesis 4: Patients who prefer to speak in Spanish as opposed to English are more likely to be uninsured.

Hypothesis 5: Uninsured patients are less likely to be discharged to a facility or home-health care versus self-care.

Hypothesis 6: Latinas/os versus non-Latinas/os are likely to be uninsured.

Hypothesis 7: Patients under 85 are more likely to be uninsured and those over 85 years of age.

Data and Methods

This study is based on secondary data from the Emergency Department of University Medical Center (UMC) of El Paso collected from March 2014 to February 2015. UMC is the only designated Level I Trauma center public hospital within a 280 mile radius that predominantly serves a low-income population located directly on the U.S.-Mexico border. The El Paso County population consists of 82 % Latina/o which makes it a suitable location to examine the access to health care for this population. In particular, the subjects include patients over the age of 55 that arrived to the hospital due to a fall. The definition of fall for this study is consistent with the World Health Organization (2008) that defines a fall as an event that occurs when a person comes to rest inadvertently on the ground, floor or other lower level. In particular, for this study a fall is defined as a person's injury by stumbling, fainting, slipping, tripping, plummeting, and losing balance.

The data were gathered and entered by medical staff upon admission, diagnosis, and discharge and recorded electronically. This study was IRB approved by the University of Texas at El Paso. The confidentiality of the patients was maintained by not including any identifying information in the study. In particular, medical record numbers, names, addresses and other information was excluded without the ability to be linked to any patients. Records are identified by an ID number.

Operationalization of Variables

The first dependent variable is mode of discharge. Final discharge is defined as where the patient is referred to after they are treated in the emergency room and are released from the hospital. Final discharge includes a series of variables indicating facility (extended care skilled nursing facility, foster home, psychiatric facility, rehabilitation facility, state facility, and intermediate care facility) which is coded as "1," and self-care (left against medical advice and discharge/ home/self-care), which is the reference category coded as "0". Patients discharged under end of life care were excluded from this study.

The second dependent variable is insurance/payor. Primary payor was entered during the patient's visit when being charged for services rendered. For this study "1" is uninsured (i.e. International SP, Charity Out of state SP, Self-Pay) and the reference is "0" for those who are insured which including private insurance (Blue-Cross, Champus, commercial insurance, HMO/PPO, lein filed) and public (Medicaid, Medicaid Eligible, Medicaid Managed Care, Medicare, Medicare HMO, Out of State Medicaid). These categories of public and private insurance were merged due to low sample size of individuals whose primary mode of payment was private insurance (N= 12).

Independent variables are based on demographic characteristics that will allow for a profile to be constructed on the continued care of fall patients and the health access via the method of payment. First, language preference was asked at the time of treatment and used throughout the patient's stay at the hospital in the interactions with all healthcare providers. Language preference is based on which language the patient prefers to communicate in, coded as "0" if English dominant and "1" if Spanish dominant. The age of respondents range from 55 to

102. Age has been re-coded as ordinal variables to allow for cross-tabulations. In particular, 2 = 55-74, 1 = 75-84, and 0= 85 and above. Categories of age were determined by the sample size in each category for a more even spread per category which could have an effect on results.

Ethnicity is identified as 1= Latina/o and 0= Non-Latina/o.

Plan of Analysis

First, descriptive statistics will be used to provide a profile of the fall victims and to where they are discharged as well as how fall victims are paying for medical services. Second, to test hypotheses at the bivariate level I will use chi-square analyses given that my dependent variables are ordinal. Following bivariate analysis, I will examine mode of discharge with multinomial logistic regression since the dependent variable has three categories. The second dependent variable determining if respondents paid their emergency room visit with insurance is based on a binary variable and therefore logistic regression will be used.

Results

Descriptive Statistics

Table 1 displays the frequency distribution of the independent and dependent variables. The total number of fall patients included in this study is 241 (N=241). Age was categorized into three categories with those 75-84 being the largest percent (37.3%) followed by age 85 and older (31.5%) and 55-74 (31.1%). Of fall patients seen in an emergency room, 88.8% of patients in this sample were Latina/o with 45.6% Spanish dominant. 64.3% of fall patients were female and 35.7% were male. The majority of fall patients were discharged to self-care (70.5%) while 18.3% were discharged to a facility and 11.2% were discharged to home health. A large percentage of patients (84.2%) had health insurance coverage.

Table 1 Frequency Distribution and Percentage

Variable	Frequency	Percent
<i>Age</i>		
55-74	75	31.1
75-84	90	37.3
85+	76	31.5
<i>Ethnicity</i>		
Latina/o	214	88.8
Non Latina/o	27	11.2
<i>Sex</i>		
Male	86	35.7
Female	155	64.3
<i>Language</i>		
English Dominant	131	54.4
Spanish Dominant	110	45.6
<i>Insurance Status</i>		
Insurance	203	84.2
No Insurance	38	15.8
<i>Discharged to</i>		
Self-Care	170	70.5
Facility	44	18.3
Home Health	27	11.2

Bivariate Analysis

To begin to test the hypotheses, I conducted a chi-square analysis (Table 2). Table 2 displays the cross tabulation of the percent of patients' discharge location in selected categories. Discharging a patient to another facility indicates that the person is in need of extended health care and will benefit from intensive treatment and regular physician and professional supervision and therapy. Home health services such as home/routine care and organized home health care services are for patients who require less than constant supervision, but still need assistance with their daily activities of living. A patient discharged from the emergency room to home/self-care implies that they can perform their activities of daily living independently and does not need further, immediate care referrals.

Marginally supporting hypothesis 1, the majority of Latinas/os were discharged to self-care (72.9%) rather than to facilities (16.8%) or home health (10.3%) while a little more than half of Non-Latinas/os were discharged to self-care (51.9%) (Chi-square= .078, $p < .10$). Also in support of hypothesis 2, of those patients who were Spanish-language dominant, 79.1% were discharged under self-care, 6.4% facility and 14.5 % to home-health care (Chi-square=.000, $p < .01$). Of the patients who were English-language dominant, 28.2% of patients were referred to a facility (Chi-square=.000, $p < .01$). In contrast, among those who are Spanish dominant only 6.4% got referred to a facility. In regards to age, not supporting Hypothesis 3, patients 55-74 were actually the largest group to be discharged under self-care (81.3%), followed by those 75-84 (68.9%) and lastly patients 85 years and older (61.8%) (Chi-square= .033, $p < .05$).

Table 2 Percent of Patients' Discharge Location in Selected Categories

Variable	Facility	Self-Care	Home Health	Total	Chi Square
<i>Age</i>					
55-74	9.3	81.3	9.3	100	.033**
75-84	23.3	68.9	7.8	100	
85+	21.1	61.8	17.1	100	
<i>Sex</i>					
Male	20.9	70.9	8.1	100	.439
Female	16.8	70.3	12.9	100	
<i>Language</i>					
English	28.2	63.4	8.4	100	.000***
Spanish	6.4	79.1	14.5	100	
<i>Ethnicity</i>					
Latina/o	16.8	72.9	10.3	100	.078*
Non-Latina/o	29.6	51.9	18.5	100	

* $p < .10$ ** $p < .05$ *** $p < .01$

UMCEP ER Admission Data 2014-2015

Table 3 displays the percentage for insurance status of patients in selected categories. Of the patients who were uninsured, 65.8% were Spanish dominant and 32.4% were English dominant (chi-square= .007, $p < .01$), providing preliminary support for hypothesis 4. In regards to hypothesis 6, of those who are uninsured the majority are Latina/o patients (92.1%) compared to non-Latina/o patients (7.9%), however, these results were statistically insignificant (chi-square=.481). Also, those who are 75-84 and older than 85 are equally likely to be uninsured (23.7%) while over half of those who are between 55-74 are more likely to be uninsured (52.6%) (Chi-square= 0.007, $p < .01$), providing mixed results for hypothesis 7. These data only reflect primary insurance status as secondary insurance information was not available which may further explain disposition of discharge and access to health.

Table 3 Percent Uninsured of Patients in Selected Categories

Variable	Uninsured	Chi-Square
<i>Age</i>		
55-74	52.6	.007***
75-84	23.7	
85+	23.7	
<i>Sex</i>		
Male	34.2	.836
Female	65.8	
<i>Language</i>		
English	34.2	.007***
Spanish	65.8	
<i>Ethnicity</i>		
Latina/o	92.1	.481
Non Latina/o	7.9	

* $p < .10$ ** $p < .05$ *** $p < .01$ UMCEP ER Admission Data 2014-2015

Table 4 displays the multinomial regression for patients discharged to self-care. Patients who are age 55-74 are 66% less likely to be discharged to a facility than to the reference category of self-care ($p < .05$) and 58% less likely, with marginal significance, to be sent to home health than self-care than the reference category of patients age 85 and older ($p < .10$) (Model 1). Model 2 adds the variables of sex, language dominance, uninsured, and Latina/o ethnicity. In terms of the odds of being discharged to a facility versus self-care (reference category), individuals who are between 55 and 74 years of age are less likely those who are over 85 years of age (reference category) to be discharged to a facility in contrast to self-care. In regards to age, patients who are Spanish dominant, as opposed to English dominant, are less likely to be discharged to a facility than to self-care. In particular, those who are Spanish dominant are 79% less likely to be discharged to a facility than to self-care ($p < .01$). Patients who are uninsured are also less likely to be discharged to a facility and home health than to self-care. Specifically, uninsured patients

are 82% less likely than patients with insurance to be discharged to a facility and 72% less likely to be discharged to home health than to self-care. Latina/o patients as opposed to non-Latina/o patients are 71% less likely to be discharged to home health care than to self-care ($p < .05$). Latina/os are also less likely to be discharged to a facility than self-care, but results are not statistically significant.

Table 4 Odds Ratio for Fall Patients Discharged

Selected Variables	Model 1 Facility	Model 1 Home Health	Model 2 Facility	Model 2 Home Health
<i>Age</i>				
55-74	.34**	.42*	.37*	.52
75-84	1.00	.41	.99	.48
Female			.97	1.56
Spanish Dominant			.21***	1.79
Uninsured			.18*	.28*
Latina/o			.64	.29**

* $p < .10$ ** $p < .05$ *** $p < .01$

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Table 5 displays the binary logistic regression predicting the odds of patients being uninsured. Model 1 examines the influence of age on the likelihood of being uninsured. Results confirm Hypothesis 7 in that patients who are age 55-74 are 171% more likely to be uninsured than those 85 and older ($p < .05$). When accounting for ethnicity and language, patients who are 55-74 in contrast to 85 and older continue to have greater odds of being uninsured supporting Hypothesis 7. In particular, those age 55-74 are 192% more likely to be uninsured than those age 85 and over.

Table 5 Odd Ratio for Being Uninsured Among Fall Patients

Selected Variables	Model 1	Model 2
Age		
55-74	2.71**	2.92**
75-84	.83	.80
Spanish Dominant		.34
Latina/o		.82***
Female		1.05

* $p < .10$ ** $p < .05$ *** $p < .01$

UMCEP ER Admission Data 2014-2015

Discussion and Conclusion

This study researched data that were collected from 241 patients who received medical care from a fall injury between 2014 and 2015 at an emergency room in a general hospital in the Southwest. I examined demographics including age, ethnicity, language and health insurance status and the type of care that is recommended to patients being discharged to a facility, home health or under self-care. Descriptive statistics, chi-square analyses, and logistic regression were used to provide a better understanding of patient demographics and the discharge disposition in an attempt to offer some insight into factors leading to a readmission or another fall injury. Below I identify the main results, followed by limitations, and directions for future research.

A main finding of this study concerns where emergency rooms discharge older Latina/os after their falls. According to Delgadillo et al. (2004), there is an issue with the underutilization of services. This study also concluded that the majority of Latinas/os, Spanish dominant and uninsured patients were discharged to self-care while their non-Latina/o, English dominant, insured counterparts were more likely to be discharged to facilities and home health care. These findings agree with research regarding the underutilization of services such as facilities and home health care for Latinas/os. As mentioned in the literature review, Latina/o immigrant communities have historically low rates of nursing home and other care service use, especially among elderly Latina/o residents (Angel, et al., 2014).

Age was also a factor in where a patient was discharged after having a fall. Younger patients were more likely to be discharged under self-care, while the older a patient was more likely to be discharged to facilities and home health care. These findings are in agreement with the research by Dunlop et al. (2002) that suggested older age significantly increased the use of home health care, especially those limited in their daily activities. Further research on refusals

and referrals upon discharge is suggested in order to gain a better understanding of the reasons for the underutilization of facilities and home health services. It is also useful to increase awareness on the lack of specialized geriatric care that is available and the stigma of age and bodily decline. It is important to bring awareness to the prevalence of older adult falls and the need for increased services because the costs are rising and these community residents in need are left with unpaid or low-cost help.

A second major finding concerns a profile of fall patients that are uninsured. This study also concluded that of the patients who were uninsured, the majority were Spanish dominant, Latina/o, and between ages 55-74. According to the literature review, Latinas/os are the most underinsured of all minority groups suggesting this could be due to societal barriers such as income, citizenship status, employment history, or language barriers (Caesar, 2006; Delgadillo et al., 2004; Fennell et al., 2010). This leaves Latinas/os with few options other than to turn to their children, Social Security, or Medicaid. However, Medicaid home health care is only available to a limited amount of lower income older adults with a certain level of physical impairment and is dependent on availability through state resources (Angel et al., 2014). Latinas/os are also the least likely to have supplemental insurance coverage and that was the most significant factor in economic access to home health care (Clark et al., 2005; Dunlop, et al., 2002).

Previous researchers such as Caesar (2006) also discovered that language is significantly related to the type of health insurance that was accessed by Latina/o elderly. Participants who were proficient in English were more likely to have supplemental private insurance while those not proficient in English were more likely to have no insurance coverage (Caesar, 2006). These findings are a useful addition to previous research regarding home health and facility utilization, especially for the uninsured, Latino/a, Spanish dominant elderly population Latina/os are also

less likely than Whites to seek out formal care due to language barriers (also see Delgadillo et al., 2004). Further research is recommended regarding borderland areas where bilingual care is abundantly offered to identify other factors leading to healthcare barriers and language such as economic status, education and acculturation.

One of the limitations of this study is that the sample is taken from only one hospital in the area. The sample from one non-profit level 1 hospital in the Southwest might not be representative to the population of fall patients as a whole. Further research is suggested to include for-profit and other area and level 2, 3, 4, and 5 hospitals. Also, since this study is focused on secondary data, possible reporting errors such as typos made by hospital staff during the intake process, missing or incomplete data that were not entered, and coding errors such as entering a fall under a different reason for visit should be noted. Additionally, data on secondary insurance status or supplemental insurance were not available, which could have an effect how patient discharge and affordability for further care. Lastly, I have limited knowledge on the role of the patient had, if any, in deciding what type of discharge is better suited for them. It is possible that patients did indicate their choice and thus showed some agency in determining their care as oppose to solely following institutionalized guidelines. Some older adults may prefer to be independent at their home and insist on caring for themselves and, in some cases, refuse a referral for extended care at a facility.

Further research is recommended to include a follow-up for after a patient is discharged and on the usage and effectiveness of different long-term care settings such as facilities, home health care, as well as low cost or unpaid informal health care. According to Alper et al. (2015), discharge to an environment that is unable to fulfill the patient's needs more often than not results in readmission. Alper et al. (2015) also noted that some readmissions were preventable

by having adequate discharge support and sufficient follow ups. Researchers documented that although minorities reported higher needs for services that offer further attention, long-term care was underutilized (Fennel et al., 2010). Dunlop et al. (2002) suggested that further research is needed regarding Latinas/os and health insurance, especially when accounting for other predisposing factors. This study highlighted the Latina/o, Spanish dominant, uninsured elderly and underutilization of facility and home health services, but further research is recommended to create a better rounded profile of this population in a larger setting.

Research on hospital discharge is limited on fall prevention especially in the older Latina/o population. With the population numbers expected to rise, it is important to understand the factors surrounding an important event such as a fall, because, for older adults, injuries are one of the most frequent causes of mortality and hospitalization (Clark, DeLorenzo, Lucas & Wennberg, 2005). Injury prevention in older adults is important, but once an injury occurs, reducing the cost of care, while maintaining function and death in patients over 65 should also be a priority (Clark et al., 2005). The results of this study will be shared with the Trauma Services-Injury Prevention and Education department at University Medical Center of El Paso. The results will be used to create awareness about the importance of patient discharge and referrals after a patient has suffered from a fall. Results will also be used to target specific populations in order to educate the community on how to better prevent a fall or future falls from occurring and the resources that are available once a fall has taken place.

This issue of older adult falls should be very important to state and federal policymakers to improve the long-term care system for the rapidly increasing adult population. They are currently limited by lack of information on quality, cost, services, settings, and the nature and

extent of unpaid help that older adults receive (Kaye, Harrington & LaPlante, 2010). The results will be used by the county hospital; a level 1 trauma center, to create awareness about the importance of patient discharge and referrals after a patient has suffered from a fall. Researchers also suggested a development of standardized methods to monitor medical fall rates and comparing acute and post-acute health services to help improve health and decrease cost after a medical fall (Bohl et al., 2012).

References

- Alper, E., O'Malley, T. A., Greenwald, J., Aronson, M. D., & Park, L. (2015). Hospital discharge and readmission. *UpToDate website: Available at: <http://www.uptodate.com/contents/hospital-discharge-and-readmission>*. Accessed November, 2017.
- Angel, J. L., Rote, S. M., Brown, D. C., Angel, R. J., & Markides, K. S. (2014). Nativity status and sources of care assistance among elderly Mexican-Origin adults. *Journal of Cross-Cultural Gerontology, 29*(3), 243-258.
- Associated Press (2004). *Ageism in America: As boomers age, bias against the elderly becomes hot topic*. Retrieved from <http://www.nbcnews.com/id/5868712/ns/health-aging/t/ageism-america/>.
- Binstock, R. (2005). Old-age policies, politics, and ageism. *Generations, 29*(3), 73-78.
- Blafe, M., Brugha, R., O'Connell, E., McGee, H., O'Donovan, D. (2010) Where do young Irish women want Chlamydia-screening services to be set up? A qualitative study employing Goffman's impression management framework. *Health & Place, 16*(1), 16-24.
- Bohl, A. A., Phelan, E. A., Fishman, P. A., & Harris, J. R. (2012). How are the costs of care for medical falls distributed? The costs of medical falls by component of cost, timing, and injury severity. *The Gerontologist, 52*(5), 664-675.
- Brown, J. R., Goda, G. S., & McGarry, K. (2012). Long-term care insurance demand limited by beliefs about needs, concerns about insurers, and care available from family. *Health Affairs, 31*(6), 1294-1302.
- Caesar, L. G. (2006). English proficiency and access to health insurance in Hispanics who are elderly: Implications for adequate health care. *Hispanic Journal of Behavioral Sciences, 28*(1), 143-152.

- Clark, D. E., DeLorenzo, M. A., Lucas, F. L., & Wennberg, D. E. (2005). Injuries among older Americans with and without Medicare. *American Journal of Public Health, 95*(2), 273-278.
- Delgadillo, L., Sörensen, S., & Coster, D. C. (2004). An exploratory study of preparation for future care among older Latina/os in Utah. *Journal of Family and Economic Issues, 25*(1), 51-78.
- Dunlop, D. D., Manheim, L. M., Song, J., & Chang, R. W. (2002). Gender and ethnic/racial disparities in health care utilization among older adults. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences, 57*(4), S221-S233.
- Ekerdt, D. J., & Baker, L. A. (2014). The material convoy after age 50. *Journals of Gerontology Series B: Psychological Sciences and Social Sciences, 69*(3), 442-450.
- Feng, Z., Fennell, M. L., Tyler, D. A., Clark, M., & Mor, V. (2011). Growth of racial and ethnic minorities in US nursing homes driven by demographics and possible disparities in options. *Health Affairs, 30*(7), 1358-1365.
- Fennell, M. L., Feng, Z., Clark, M. A., & Mor, V. (2010). Elderly Hispanics more likely to reside in poor-quality nursing homes. *Health Affairs, 29*(1), 65-73.
- Fitzpatrick, A. L., Powe, N. R., Cooper, L. S., Ives, D. G., & Robbins, J. A. (2004). Barriers to health care access among the elderly and who perceives them. *American Journal of Public Health, 94*(10), 1788-1794.
- Franzini, L., Mikhail, O. I., & Skinner, J. S. (2010). McAllen and El Paso revisited: Medicare variations not always reflected in the under-sixty-five population. *Health Affairs, 29*(12), 2302-2309.

- Gallant, M. P., Spitze, G., & Grove, J. G. (2010). Chronic illness self-care and the family lives of older adults: A synthetic review across four ethnic groups. *Journal of Cross-Cultural Gerontology, 25*(1), 21-43.
- Gaskin, D. J., Spencer, C. S., Richard, P., Anderson, G. F., Powe, N. R., & LaVeist, T. A. (2008). Do hospitals provide lower-quality care to minorities than to whites?. *Health Affairs, 27*(2), 518-527.
- Goffman, E. (1961). *Asylums: essays on the social situation of mental patients and other inmates*. [1st ed.] Garden City, N.Y.: Anchor Books.
- Goffman, E. (1959). *The presentation of self in everyday life*. Garden City, N.Y.: Doubleday.
- Goffman, E. (2012a). *Asylums*. Applerouth, S., Edles, L.(Ed.), *Classical and Contemporary Sociological Theory*. (p.493-502). Thousand Oaks, CA: Pine Forge Press.
- Goffman, E. (2012b) *The Presentation of Self in Everyday Life*. Applerouth, S., Edles, L.(Ed.), *Classical and Contemporary Sociological Theory*. (p.479-492). Thousand Oaks, CA: Pine Forge Press.
- Gurak, D. T., & Kritz, M. M. (2010). Elderly Asian and Hispanic foreign-and native-born living arrangements: Accounting for differences. *Research on Aging, 32*(5), 567-594.
- Hochschild, A.R. (2012b) *The Managed Heart*. Applerouth, S., Edles, L.(Ed.), *Classical and Contemporary Sociological Theory*. (p.509-517). Thousand Oaks, CA: Pine Forge Press.
- Jha, A. K., Orav, E. J., & Epstein, A. M. (2011). Low-quality, high-cost hospitals, mainly in South, care for sharply higher shares of elderly black, Hispanic, and Medicaid patients. *Health Affairs, 30*(10), 1904-1911.
- Kane, R., & Kane, R. (2005). Ageism in healthcare and long-term care. *Generations, 29*(3), 49-54.

- Katz, S. J., Kabeto, M., & Langa, K. M. (2000). Gender disparities in the receipt of home care for elderly people with disability in the United States. *Jama*, *284*(23), 3022-3027.
- Kaye, H. S., Harrington, C., & LaPlante, M. P. (2010). Long-term care: Who gets it, who provides it, who pays, and how much?. *Health Affairs*, *29*(1), 11-21.
- Kingston, P. (2000). Falls in later life: status passage and preferred identities as a new orientation. *Health*, *4*(2), 216-233.
- Lee, S., Schwarz, N., & Goldstein, L. S. (2014). Culture-sensitive question order effects of self-rated health between older Hispanic and non-Hispanic adults in the United States. *Journal of Aging and Health*, *26*(5), 860-883.
- Link, B., Phelan, J. (2001). Conceptualizing Stigma. *Annual Review of Sociology*, *27*, 363-385.
- Miyawaki, C. E. (2016). Caregiving practice patterns of Asian, Hispanic, and non-Hispanic white American family caregivers of older adults across generations. *Journal of Cross-cultural Gerontology*, *31*(1), 35-55.
- Orsini, C. (2010). Changing the way the elderly live: Evidence from the home health care market in the United States. *Journal of Public Economics*, *94*(1), 142-152.
- Ouchida, K. M., & Lachs, M. S. (2015). Not for doctors only: Ageism in healthcare. *Generations*, *39*(3), 46-57.
- Sentell, T., & Braun, K. L. (2012). Low health literacy, limited English proficiency, and health status in Asians, Latina/os, and other racial/ethnic groups in California. *Journal of Health Communication*, *17*(sup3), 82-99.
- Solis, G. R., & Champion, J. D. (2017). Examining fall recurrence risk of homebound Hispanic older adults receiving home care services. *Hispanic Health Care International*, *15*(1), 20-26.

- Surr, C. A. (2006). Preservation of self in people with dementia living in residential care: a socio-biographical approach. *Social Science & Medicine*, 62(7), 1720-1730.
- Thomson, E. F., Nuru-Jeter, A., Richardson, D., Raza, F., & Minkler, M. (2013). The Hispanic paradox and older adults' disabilities: is there a healthy migrant effect?. *International Journal of Environmental Research and Public Health*, 10(5), 1786-1814.
- United States Census Bureau (2015). 2011-2015 American Community Survey 5-year estimates. American FactFinder. Retrieved from <https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF>
- Westerhof, G. J., Katzko, M. W., Dittmann-Kohli, F., & Hayslip, B. (2001). Life contexts and health-related selves in old age: perspectives from the United States, India and Congo/Zaire. *Journal of Aging Studies*, 15(2), 105-126.
- World Health Organization. Ageing, & Life Course Unit. (2008). *WHO global report on falls prevention in older age*. World Health Organization.
- Zunker, C. L., & Cummins, J. J. (2004). Elderly health disparities on the US-Mexico border. *Journal of Cross-cultural Gerontology*, 19(1), 13-25.

Vita

Ana Acosta graduated from the University of North Texas with a Bachelor's degree from the College of Public Administration and Community Service with a major in Sociology and a minor in Psychology. Throughout her undergraduate career she participated as a volunteer with the Center for Leadership and Service at UNT organizing large community service events such as Make a Difference Day and The Big Event which both focused on recruiting students and faculty members to participate in various projects, all with the goals of helping those in need.

Mrs. Acosta is currently employed at University Medical Center of El Paso. As a trauma injury prevention technician, she provides education and community outreach throughout the community by gathering and analyzing data through the trauma registry. She also holds the position of Safe Kids El Paso Coalition Coordinator in the region and lead instructor for the Nationally Certified Child Passenger Safety Technician Training for the past 7 years. Safe Kids El Paso is an organization of Safe Kids Worldwide which strives to prevent morbidity and mortality for children and teenagers. She is also a member of the American Trauma Society, Texas Injury Prevention Leadership Collaborative and chair member of the Drowning Prevention Coalition of El Paso and has been acting secretary for over 5 years.

Professional presentations include a local conference for older adult health as the key note speaker on fall prevention awareness, a state conference session presentation speaker on pre-teen pedestrian safety, and a global conference poster presenter on child motor vehicle safety on the border area.

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