

EVALUATING ACCESS BARRIERS TO PRIMARY HEALTH CARE SERVICES
FOR HISPANIC RESIDENTS IN TOOMBS COUNTY, GEORGIA

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EVALUATING ACCESS BARRIERS TO PRIMARY HEALTH CARE SERVICES
FOR HISPANIC RESIDENTS IN TOOMBS COUNTY, GEORGIA

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Michele Vitale was born on October 10, 1972, in Rome, Italy. He graduated from 'Benedetto Croce' high school, Rome, Italy, in 1991. He attended the 'La Sapienza' University in Rome where he majored in Sociology. He graduated, receiving a Bachelor of Arts in 2000. He then attended the 'Universita' degli Studi' in Milan, Italy, where he majored in 'Analysis and Management of Development Projects.' He graduated, receiving a Master of Science in 2001. Michele entered in graduate school at Auburn University in August 2004 in the Department of Agricultural Economics and Rural Sociology.

THESIS ABSTRACT

EVALUATING ACCESS BARRIERS TO PRIMARY HEALTH CARE SERVICES
FOR HISPANIC RESIDENTS IN TOOMBS COUNTY, GEORGIA

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Latinos are no longer concentrated in “traditional” cities and states, like Los Angeles, Florida, and Texas, and the rural Latino population is rapidly increasing in number throughout many regions of the nation, mostly in the Southern and Midwestern states. However, as Hispanics relocate to the rural South, they progressively challenge local communities and institutions that had not planned to deal with a large number of Latino newcomers. One area of particular concern is the adequate provision of primary health care. Personal interviews with Hispanic residents and local medical professionals,

2000 census data, and location data entered into a Geographic Information System (GIS) are the sources of information and the methodological tools utilized by the present study, in order to evaluate the major barriers that Latinos face to access primary care in Toombs County, Georgia, and comprehend how the local health care system could respond to successfully meet the extra and unique Hispanic health needs.

Style manual or journal used

Rural Sociology

Computer software used

Microsoft Word 2003, Microsoft Excel 2003, ArcMap 9.2

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CHAPTER I. INTRODUCTION

Latinos are the largest minority group in the United States, numbering an estimated thirty-five million and comprising 12.5 percent of the U.S. population (Census 2000). Due in large part to the greatest fertility rate of any ethnic group and to sustained high levels of immigration, the growth rate of Latinos is expected to continue at more than three times the rate of the total U.S. population. By 2050, the Hispanic population of the United States is expected to increase to ninety-six million, representing 25 percent of the total population (Torres 2000).

Before the 1980`s the major settlement areas for Latinos were Texas, California, and New York. During the 1980`s, Latino settlement patterns moved from Texas to the Midwest and in the 1990`s migration and settlement patterns shifted away from the traditional areas to the Southeast. From 1990 to 1998, the Hispanic population in Georgia, North Carolina, and Arkansas more than doubled (Torres 2000).

Indeed, an ever increasing number of Latinos are moving out of historic Hispanic communities in California and Texas, and relocating in the “Deep South”, especially in those states, as Alabama, North Carolina, South Carolina, and Georgia, where the booming economy provides ample work and economic opportunities (Torres 2000).

In the rural Southeast, the expansion of industries has promoted rural industrialization and produced a strong economy that, coupled with strong employer recruitment, has encouraged the internal migration and immigration of Latinos to the region. Like other ethnic minorities, Latinos in the South are geographically clustered, and tend to relocate to where the jobs are. Latinos` geographic distribution is in fact clustered around certain types of agro-industrial production or other employment sectors that appear to rely mostly on Latino workers, such as the meat industry, the poultry processing industry, tobacco and horse farms, and construction (Torres 2000).

This type of Latino immigration is no longer a temporary borderlands issue. Most Latino immigrants come to the U.S. to stay and seek permanent rather than seasonal employment, and their permanency has relevant social and economic impacts on the host communities. Once established, the Hispanic population in fact significantly influences the socio-economic well-being of the local areas, contributes to create additional employment opportunities, and expands the consumer base. On the other hand, a rapidly increased Latino population poses new challenges at the institutional level, and imposes immediate financial costs to successfully meet those extra and special needs brought by the new Hispanic residents (Torres 2000). Besides, many southern rural communities to which new Latino immigrants relocate are not prepared to deal with a bicultural and linguistically different population, and the astonishing Hispanic demographic increase has not automatically been accompanied by proportional increases in information about Latinos and their specific social, cultural, and health needs (Arroyo 2004).

As a result, Hispanics are likely to experience a wide array of barriers that limit their access to community services and reduce their positive contribution to the local

economies. One area of significant concern is the adequate provision of health care. Especially in rural areas, local health care infrastructures and medical professionals are in fact being challenged to ensure access to care for a growing number of Latino newcomers, with low rates of health insurance coverage, limited income levels, and linguistic and cultural differences (Casey, Blewett, and Call 2004).

Already facing structural deficiencies, as the constant shortage of rural physicians, the large proportion of uninsured residents, and the lack of financial resources, rural health care systems are particularly unable to provide an adequate supply of primary care services, and this shortage affects Latinos and other minorities the most because they depend on primary practitioners to access immediate care. As the point of entry into the health care system, primary care physicians in fact considerably contribute to reduce health disparities among the poorest and underserved populations by addressing a large number of personal basic health needs and coordinating patients` specialist care (Blumenthal, Mort, and Edwards 1995). Therefore, delivering an adequate amount of primary care services is an indispensable condition in order to improve Hispanics` overall health status and enhance their constructive participation to the local communities.

Purpose of the Study

The main purpose of the present study is to examine the barriers that Latino residents face in accessing primary care services in Toombs County, Georgia and obtaining constructive feedback from both Hispanic residents and local medical professionals, in order to better comprehend how the health care system could respond to effectively meet Hispanics` health needs.

To be able to better examine and measure the diverse barriers and the specific impediments that limit Latinos` access to primary care, this research study has utilized, as a paradigmatic theoretical tool, the taxonomic definition of access to health care proposed by Penchansky and Thomas (1981). This taxonomic definition considers access as a general and complex concept that implies a set of five more specific dimensions concerning the degree of fit between patients and the health care system. These specific dimensions of access are:

1. Availability. The relationship of the volume and type of existing services (and resources) to the clients` volume and types of needs.
2. Accessibility. The relationship between the location of supply and the location of clients, taking account of client transportation resources and travel time, distance and cost.
3. Affordability. The relationship of prices of services and providers` insurance or deposit requirements to the clients` income, ability to pay, and existing health insurance.
4. Accommodation. The relationship between the manner in which the supply resources are organized to accept clients and the clients` ability to accommodate to these factors and the clients` perception of their appropriateness.
5. Acceptability. The relationship of clients` attitudes about personal and practice characteristics of providers to the actual characteristics of existing providers, as well as to provider attitudes about acceptable personal characteristics of clients.

Obviously, these five dimensions are closely related. They represent connected phenomena often able to influence each other, and their closeness may even raise the question whether they are sufficiently distinct to be analyzed and measured separately. Problems with access dimensions are supposed to influence patients and the health system in three measurable ways: 1) lower utilization of health services, 2) lessen patients` satisfaction with the health care system and/or the services they receive, and 3) health provider practice patterns may be affected. For instance, a shortage of physicians may cause doctors to limit preventive services, and spend less than appropriate amounts of time with their patients (Penchansky and Thomas 1981). In view of that, analyzing the numerous access barriers that Latinos face in Toombs County was precisely aimed at investigating in which ways access barriers affect Hispanic patients and the local health system, and precisely how they shape: 1) Hispanics` utilization of primary and preventive services, 2) the common Latinos` perception regarding the local health care system and the services received, and 3) the health care system`s response to Hispanic needs.

Besides the presence of the Southeast Georgia Communities Project (SEGCP), a local no-profit organization whose staff had been previously contacted in order to facilitate the interviewing process with Hispanic residents and gaining entry to the community, Toombs County has been chosen as the study-area since its Hispanic immigration pattern resembles the relocating process of Latinos in the Southern states, which principally concentrates around agricultural and forestry jobs, and meat processing plants.

In particular, Toombs County well represents the small, agricultural counties found in the rural south of Georgia, where an almost constant demand for seasonal and permanent agricultural workers in the last 10-15 years has fueled a remarkable increase of Hispanic

residents in the whole region. Principally attracted by the ‘Vidalia Onion’¹ and other crop harvesting processes, thousands of Hispanic farm workers have in fact relocated in Toombs County. During the decade 1990-2000, the percent change of the Latino population was 180.3 percent, making Latinos up to 8.9 percent of the county population (Census 2000). Toombs County resembles as well all those rural areas in which the provision of primary health services to minority populations is made even more complicated by the systematic problems that rural health care systems typically face, such as limited financial resources, higher rates of uninsurance coverage, shortages of primary care physicians, and struggling hospitals. Toombs County is therefore an interesting case for trying to understand how a southern rural county dealing with an unexpected and impressive Hispanic population growth is attempting to address challenges posed by Latino newcomers and, in particular, to what extent its rural health system is adapting to Hispanics` specific health needs.

Study Objectives and Research Questions

In order to include all five dimensions involved in the taxonomic definition of access to health care proposed by Penchansky and Thomas, the following specific study objectives and research questions have been addressed:

Objective 1. Address the first dimension of access (availability) by comparing the overall provision of primary care services currently existing in Toombs County with the specific health needs of the local Hispanic population and, accordingly, identifying the medical

¹ The ‘Vidalia Onion’ is recognized as one of the sweetest, best-tasting onions in the world. It is grown exclusively in twenty southeastern Georgia counties.

specialties and health facilities most required in order to facilitate Hispanics` access to health care services.

Research Question 1. What Latino health concerns are least adequately addressed?

Research Question 2. What medical specialties and health care facilities are most required to better meet Hispanic health needs?

Objective 2. Investigate the second dimension of access (accessibility) in order to evaluate geographic and transportation barriers by analyzing those limitations referring to Hispanics` availability of means of transportation, Latinos` areas of residence, and average length of time required to reach the local health care facilities. In addition, by investigating demographic and economic indicators, this objective intends to indicate the specific geographic areas in which Hispanic residents most require primary health assistance.

Research Question 1. In order to reach the local health care facilities, do Hispanic residents have access to appropriate means of transportation?

Research Question 2. Where in Toombs County are located those Latinos who reside most distant from their usual sources of care?

Research Question 3. On average, how far and how long do Latinos have to travel to reach local health care facilities?

Research Question 4. Where in Toombs County are located those Hispanics who most need primary health care?

Objective 3. This objective considered the third dimension of access (affordability), in order to evaluate economic and health insurance barriers, and consequently determine the Hispanics` overall ability to pay for health insurance coverage, medicines, and visits to the doctors.

Research Question 1. What is the overall income level of the local Hispanic population?

Research Question 2. To what extent do Latinos lack health insurance coverage?

Research Question 3. What economic consequences do Hispanics usually face in attempting to gain access to primary health care?

Objective 4. Considering the fourth dimension of access (accommodation), and the organizational barriers (e.g. lack of interpreter services and convenient hours of operation) that most limit Hispanics` access to primary care services. This objective is also aimed at assessing the propensity of local private physicians to accept and facilitate the recruitment of new Hispanic clients.

Research Question 1. What special arrangements do local private physicians and public health facilities lack the most in order to facilitate the recruitment of Hispanic patients?

Research Question 2. To what extent are local primary care physicians willing to facilitate the recruitment of new Hispanic patients?

Objective 5. Evaluate the last dimension of access (acceptability) by considering the extent to which health professionals` personal attitudes and behaviors adversely affect Latinos` access to health care services. This objective intends also to address traditional

cultural beliefs concerning folk illnesses and home remedies, in order to determine whether they represent an additional access barrier for local Hispanic residents.

Research Question 1. When they receive health care services, do Hispanics perceive that they are mistreated?

Research Question 2. If so, what kinds of mistreatment do Latinos experience?

Research Question 3. How significant are home remedies and folk practices among the local Hispanic community?

Research Question 4. To what extent do home remedies and folk practices complicate and limit Hispanics` access to primary care services?

Objective 6. Estimate the overall Hispanic utilization rate of the existing primary health services and preventive care, and identify those health care facilities that Hispanics most utilize in Toombs County.

Research Question 1. How often do Hispanics seek primary and preventive health care services?

Research Question 2. Where do Hispanics usually go for obtaining health care services?

Objective 7. Record the recommendations proposed by Hispanic residents, local informants, and medical professionals in order to identify what solutions the local health system could adopt to increase Hispanics` access to primary care services.

Research Question 1. What impediments do Hispanics consider as their biggest access barriers while seeking health services?

Research Question 2. What solutions do Hispanic residents propose?

Research Question 3. What do health professionals and informants suggest for improving access to primary health care?

Conceptual Framework

While the taxonomic definition of access to health care proposed by Penchansky and Thomas (1981) has been utilized as a theoretical tool to evaluate the specific access barriers that Hispanics face to obtain primary care, the existing literature concerning the social determinants of health inequalities has provided a broader conceptual perspective, and a more comprehensive theoretical framework. The term ‘social determinants of health’ increasingly has been used by researchers to identify those interrelated factors that most influence health status and health inequalities, within and between countries². In fact, wherever they live, health and life expectancy of all people are affected by their living circumstances and quality of life. Individuals in diverse socio-economic groups are exposed to different social, economic, political, and environmental conditions, and therefore come to experience varying degrees of health and illness (Wilkinson and Marmot 2003). Several health organizations, such as the World Health Organization (WHO) and the Public Health Agency of Canada, have recognized the considerable influence of social determinants on population health, and actively campaign to promote awareness and action on these major determinants.

In particular, the World Health Organization indicates the following as some of the major factors responsible for profoundly affecting collective and personal well-being.

² In the literature review section, the health outcomes of the Hispanic population are considered in relation to the socioeconomic status model (SES), the predominant explanatory model for health outcomes. Although they have a different denomination, the SES model and the social determinants of health approach share the idea that individuals in lower socio-economic positions experience higher levels of morbidity and mortality in almost every disease category.

The social gradient. Personal social and economic conditions strongly affect health throughout life, and worse health outcomes are usually associated with lower positions in the hierarchies of income, education, and occupational status. Health standards show a continuous gradient across the social groups, and people in low ranking social positions run twice the risk of serious illness and premature death than those near the top. Individuals' health might be also compromised by living in neighborhoods with high concentrations of unemployment, poor housing, a poor quality environment, and limited access to services.

The longer people live in stressful economic and social conditions, the less likely they are to live to a healthy old age. Both material and psychosocial causes contribute to these differences. Disadvantage may be absolute or relative, and might include having few family assets, a poor education, having an insecure and/or hazardous job, trying to bring up a family in difficult circumstances, or being relatively poor in a rich society (Wilkinson and Marmot 2003).

Stress. Social and psychological conditions might cause long-term stress. Continual anxiety, insecurity, low self-esteem, lack of control over work or home life, and social isolation all have powerful effects on health, accumulate during life, increase the chances of poor mental health, and may lead to premature death. The closer people are to the lower end of the social scale, the more common these health problems become (Wilkinson and Marmot 2003).

Early life. The foundations of adult health are laid before birth, in infancy, and in early childhood. Poor fetal development is a risk for health in later life, while a slow or retarded physical growth in infancy is associated with reduced cardiovascular,

respiratory, and kidney development and function in adulthood. The risks to the developing child are significantly greater among those in poor socioeconomic conditions, and must be reduced by improved preventive prenatal care, infant welfare, and health and educational programs (Wilkinson and Marmot 2003).

Social exclusion. Poverty, relative deprivation, and social exclusion have a major impact on health and premature death, since these characteristics deny individuals access to decent housing, health services, education, transportation and other vital opportunities required to fully participate in their social lives. The most vulnerable social groups are more likely to be socially excluded, and they include indigenous populations, migrant workers, ethnic minorities, refugees, the disabled, persons with chronic and contagious illnesses, and the homeless. Marginalization might be also caused by racism, hostility, discrimination, and unemployment. All these processes prevent people from gaining access to critical services and citizenship activities, forming a vicious circle that deepens poverty and segregation (Wilkinson and Marmot 2003).

Work. The social organization of work, management styles, and social relationships in the workplace are all important determinants of health. Stress at work increases the risk of disease, and when people have little control over their work, or few opportunities to use their skills, tend also to have a worse health status (Wilkinson and Marmot 2003).

Unemployment. Job security increases health, well-being and psychological satisfaction, while higher rates of unemployment cause more illness and premature death, especially in regions where unemployment is pervasive. Unemployed persons and their families are substantially more likely to suffer from anxiety and depression, self-reported ill health, heart diseases, and risk factors for heart disease (Wilkinson and Marmot 2003).

Social support. Social cohesion helps to protect people and their health. Good social relations, strong supportive networks, and friendships contribute to give people the emotional and practical resources they need, make individuals feel loved, esteemed, and valued, and may also encourage healthier behaviour patterns. Those without social and emotional help from others are more likely to experience less well-being, more depression, a greater risk of pregnancy complications, and higher levels of disabilities from chronic diseases. However, the amount of emotional and practical social support varies by social and economic status, and economic deprivation can contribute to isolation and exclusion (Wilkinson and Marmot 2003).

Addiction. Alcohol abuse and misuse of drugs and tobacco are huge causes of ill health and premature death. However, alcohol dependence, smoking habits, and illicit drug consumption are all closely associated with social and economic disadvantage, and frequently represent a response to social breakdown and disruption. For instance, poor housing, low income, single parenthood, unemployment, and homelessness are all associated with high rates of smoking. The casual pathway probably runs both ways: poor economic conditions and social deprivation cause more dependence, while in turn an increased dependence on alcohol, drugs and tobacco, intensifies the factors that led to their use in the first place (Wilkinson and Marmot 2003).

Food. Healthy food is critical for promoting health and well-being, and therefore the availability of nutritious and affordable food is an important public health issue. A well-balanced diet and adequate food supply are central for preventing malnutrition and cardiovascular diseases, diabetes, cancer, and obesity. However, social and economic conditions result in a social gradient in diet quality that contributes to health inequalities.

The main dietary difference between social classes concerns the source of nutrients, since the poor tend to substitute cheaper processed foods for fresh food. As a result, people on low incomes, such as the unemployed, young families, and the elderly are least likely to eat well (Wilkinson and Marmot 2003).

Transport. In urban areas, access to a public transportation system, less traffic, and more walking and cycling contribute to good health, provide physical exercise, and increase social interaction. In regional, rural and remote areas, access to transportation means being able to travel to school, work, and health care facilities (Wilkinson and Marmot 2003).

Throughout the present study, the complex correlation among these and other social determinants of health have been investigated to analyze the health conditions of one specific vulnerable and disadvantaged population: the Hispanic residents living in Toombs County. However, the major research intention has been to evaluate the significance of one particular social determinant: access to primary health care.

Access to medical care is in fact a powerful social determinant that significantly contributes to health inequalities. The U.S. Department of Health and Human Services in its '2010 Healthy People' report considers health care access as one of the major ten leading public health concerns that need to be addressed to eliminate disparities among Americans. This issue is particularly important for Hispanics, who represent the ethnic group with the worst access to health care. Hispanics are the minority group with the largest proportion of people without health insurance coverage, and who did not visit a doctor in the past year (Documét and Sharma 2004).

Social determinants of health are closely interrelated factors, and the five dimensions of access to health services (availability, accessibility, affordability, accommodation, and acceptability) perfectly represent associated phenomena often able to influence each other. For this reason, the analysis of each access-dimension has been based on the assumption that the poor social, economic, employment, psychological, and environmental conditions faced by Latinos in the study region, combined with their cultural and linguistic background, represent all connected barriers that considerably challenge Hispanics` ability to obtain primary health care, and eventually threaten their overall health status.

The Study Region

Toombs County is located 185 miles from Atlanta, in the heart of southeast Georgia (Figure 2). The county has three incorporated municipalities: Vidalia (population 10,491), Lyons, the county seat (population 4,169), and Santa Claus (population 237). As of 2000, the overall county population was around twenty-six thousands people, which represents an 8.3 percent growth during the period 1990-2000 (Census 2000).

In the last fifteen years, as a result of a relatively abundance of agricultural and industrial jobs, Toombs County has experienced unprecedented Hispanic population growth, and nowadays the Latino presence is practically visible everywhere. In Vidalia and Lyons, there are several Mexican restaurants and grocery stores (*tienditas*), dance clubs, and *taquerias*. As well Latino radio programs and at least two Spanish language publications are available: ‘*La Voz Hispana*’ a bimonthly newspaper, and ‘*La Voz del Pueblo*’ a weekly newspaper.

In 2000, the Census Bureau reported 2,310 Hispanics officially living in the county, which means that in ten years, between 1990 and 2000, the number of Latinos increased 180.3 percent, representing a significant 8.9 percent of the county's population (Census 2000). However, it is likely that these figures are an underestimation as they may not include thousands of temporary workers and undocumented residents.

In fact, above all during the 'Vidalia Onion' harvesting season, the overwhelmingly majority of Latinos in the area are documented seasonal farm workers (or undocumented migrants) who usually arrive in Toombs County following agricultural patterns from one crop to another, before returning to Mexico or other U.S. states, where they permanently reside. Therefore, at least at certain times of the year, Toombs County's Latino population is much bigger than any other Georgia county. Local informants estimate that approximately 8,000-12,000 Hispanic seasonal farm workers arrive in the region annually for cultivation and harvesting Vidalia onions and other local crops.

Traditionally a farming area, Toombs County has a long history of producing a variety of crops for local and national use. The favorable climatic conditions allow for the growth of different crops, including corn, peanuts, soybeans, fresh produce, cabbage, sweet potatoes, small grains, and pecans. One of the most important regional agricultural products is tobacco, and the Vidalia tobacco market ranks among the largest in the Georgia-Florida area. Cattle, livestock, dairy products, poultry and eggs, fishing, timber, pine straw, and bark also contribute to the local economy.

However, the major regional crop is the world-famous Sweet Vidalia onion, whose entire production area comprises 20 southeastern Georgia counties. The area's sandy soil, combined with mild temperatures and moderate rainfall, creates the ideal and

unique conditions for an eight-month growing season. Typically, Vidalia onions are planted in the fall, from September through February, and are harvested by hand from late April through mid-June³. Therefore, many Hispanic workers come to work in the Vidalia onion fields, planting in the fall and returning to harvest in the spring.

In recent years, several manufacturing industries have established plants in the area and augmented the local employment opportunities for both community residents and Hispanic immigrants. These new facilities manufacture a variety of products and utilities, such clothing, mobile homes, utility buildings, metal parts, and electrical components. As a consequence, manufacturing, besides educational, health, and social services, is currently the most important economic sector in Toombs County and the second predominant employment segment, employing 14.9 percent of the local labor force⁴ (Census 2000).

In order to supplement their income from farm labor, hundreds of Latino families, who have permanently settled in the area, have found regular employment in these modern industries, mostly in clothing factories, construction, poultry processing plants, and cotton gins. At the same time, other Latinos have found employment in a variety of local services, such as landscaping, shops, groceries, and restaurants.

In reality, although in Toombs County there is a high demand for Hispanic labor, Latinos are still struggling to fit into the local social system. As with many other southern

³ When planted in the sandy and low-sulphur soil of the region, plain onion seeds grow onions that are sweeter and juicier than the average onion. After the harvest, crops are dried, sorted and packed immediately to protect them from bruising. Workers following a tractor-pulled harrow that cuts the onions from the roots and loosens the ground. Workers pull the onions out of the ground, clip the stems and the roots, and then put them in 50-pound burlap bags, and are left in the fields to begin drying. Yields average 300 bags an acre. The onions are sorted in packing sheds, and either put into boxes or bags for sale.

⁴ Educational, health and social services are the largest county employment sectors and provide 18.4 percent of the jobs. Agriculture (comprising forestry, fishing and hunting, and mining) represents the fifth employment sector, providing 8.2 percent of the jobs (Census 2000).

areas traditionally divided only in Whites and African Americans, Toombs County is experiencing the growing complexity of its ethnic composition, and facing the social and cultural issues that it raises⁵. Hispanics` living conditions are made complicated by many economic impediments and socio-cultural barriers that undermine their full participation within the community. Mostly employed in minimum wage jobs with no insurance benefits, lacking in English proficiency, and often facing undocumented immigration status, the Latino population tends in fact to be socially isolated, and unable to appropriately take advantage of local educational, social, and economic opportunities.

This isolation contributes to inadequate access to social services and, more significant to this study, limits the Hispanics` contacts to health care, which in turns eventually jeopardizes the overall Latinos` health status. Consistent with national trends, in Toombs County, Latinos mainly face diabetes, cardiovascular diseases, hypertension, tuberculosis, and cancer. Lung cancer is particularly common, and is mostly caused by smoking habits and the exposure to pesticides. Hispanics are also likely to experience health problems related to the hazardous and unhealthy working conditions of their agricultural jobs, such as injuries, allergies, respiratory diseases, skin rashes, and exposure to toxic chemicals. Local Hispanics tend also to acquire new health problems as long as they reside in the U.S. The lack of physical activity is considered as the primary cause of obesity among local Hispanic children.

Again resembling nationwide trends, alcoholism and domestic violence are other major health concerns among the Latino community. Medical professionals and local

⁵ An example of a growing racial integration issue took place in 2004, when Hispanic students enrolled at the local high school in Lyons decided to hold a separate senior prom in response to what they defined as a racist environment. Several counties in Georgia allow their students to plan their own proms independent of the school, and Hispanic students exercised the right to hold their own prom to avoid the ambiguity of choosing between the black and white proms (Fisher and Tienda 2006).

informants underlined how the necessity of adapting to a new environment, distance from their families, homesickness, and long working hours are, above all for Hispanic males, common causes of psychological stress and alcohol abuse. Alcohol dependence in turn seriously contributes to deterioration of family relations, and increases the risk of domestic violence. Tensions at home are already created by the shift in wives' traditional roles, since Latino women are entering the workforce and thus increasingly compete with their husbands in terms of child rearing and earning income (Atiles and Bohon 2002).

Both professionals and informants indicated *hacinamiento*⁶ as one of the major risk factors for the spread of numerous contagious diseases (principally, tuberculosis) that affect the local Hispanic community. Many Latinos in fact (mostly migrant workers) decide to settle in the area living in trailers and sharing the location with several other persons, often in dangerously overcrowded conditions. Unsurprisingly, large household sizes (6, 8, and 10 persons as group living arrangements) were reported by 20 percent of the Hispanic respondents (Table 20), and the majority of the participants indicated they rented (55 percent) or owned a trailer (30 percent), while only 7.5 percent were homeowners and 5 percent house renters (Table 21). Normally, those Latinos housing in one locale are families who immigrated to the U.S. several years ago, have a regular employment, and are better integrated in the community.

Often unable to obtain health care from formal institutions, Hispanic residents frequently rely on the help provided by the Southeast Georgia Communities Project (SEGCP), the only local no-profit association that serves the Latino population regardless of its immigration status. Qualified medical interpretation, emergency food and clothing,

⁶ *Hacinamiento* is the Spanish term for residential overcrowding, which occurs when the number of people living in a single residence is more than the home was designated to hold.

and immigration legal assistance are among the most important services offered by the SGCP. However, the SEGCP (a community-based organization founded in 1995) provides a much broader range of health and social services in order to empower local Latino residents. Current projects include general health education, HIV/AIDS prevention, education programs on diabetes, healthy life style, and childbirth, youth projects about domestic violence prevention, translation of documents, computer labs, English classes, and a regular Latino radio program (“*La Voz Latina Del Pueblo*”), which was developed as a health education tool able to inform and educate the Hispanic community in the area⁷. The SEGCP has also established an annual farm worker health fair attended by over 1,500 farm workers every year, who are able to obtain primary care services provided by health educators and volunteer medical professionals.

⁷ Volunteers manage this show every Sunday from 12 – 6 P.M.

CHAPTER II. LITERATURE REVIEW

Although it began to substantially grow in the 1970s, large-scale immigration from Latin America surged after the mid-1990s, and most of the Latino population growth occurred over this period. According to the Census Bureau, between 1990 and 2000 the Hispanic population increased by 57.9 percent, from 22.4 million to 35.3 million, compared with an increase of 13.2 percent of the total U.S. population. Hispanics represent the largest and fastest growing minority group in United States, comprising 12.5 percent of the U.S. population (Table 1)⁸. At the same time, the Latino population has become increasingly diverse by national origin. Although Mexicans are still the largest Latino sub-group representing 58 percent of the total Hispanic population, followed by Puerto Ricans (10 percent), and Cubans (4 percent), a new trend of the past decade has been the rapid growth of Latinos from Central (mostly from El Salvador, Guatemala, and Honduras) and South America (mostly from Colombia, Ecuador, and Peru), who in 2000 represented 28 percent of the Hispanics living in the United States (Marotta and Garcia 2003).

As Hispanic population grows, it is also starting to disperse across the country. Although almost 50 percent of Hispanics are still concentrated in California and Texas (Table 2), and 90 percent of all Latinos still reside in metropolitan counties, Hispanics

⁸ African Americans are the second largest minority group. In 2000, they represented 12.3 percent of the total U.S. population (Census 2000).

are increasingly establishing roots in new geographic regions, like the Deep South and rural areas. Most of the U.S. states that experienced in the past decade the highest rates of Hispanic population increase are in fact southern states (Table 3). The Latino population quadrupled in North Carolina, more than tripled in Arkansas and Georgia, and more than doubled in Tennessee, South Carolina, and Alabama. Other states that experienced significant Hispanic growth rates include Nevada, Kentucky, Nebraska, and Minnesota (Marotta and Garcia 2003). In addition, between 1980 and 2000, the Hispanic population in rural America almost doubled from 1.4 to 2.7 million and represents now the fastest growing segment of the population in non-metro counties. At current growth rates, Latinos are projected to become the largest minority group in rural America by 2025, as they already have for the entire nation (Kandel 2005).

Typically, most Hispanics come to the United States as immigrants, in order to escape difficult economic conditions, look for better job and educational opportunities, and support their families in their home countries. As a result, Latinos now represent the second-largest ethnic group in the national labor force behind whites, and represent 13 percent of total U.S. workers. In 2004, there were twenty-eight million Latinos of working age (sixteen or older), and the number of working-age Latinos was almost three million greater than the number of African Americans, and more than double the number of other minority groups (Suro 2005).

As a consequence of their lower level of education, limited English proficiency, lack of labor-market experience, and uncertain immigration status⁹, Hispanic workers

⁹ Especially in the past decade, a significant share of the Latino growth has come through illegal immigration. Demographers estimate that the total undocumented population in the United States is currently ten million, and about 80 percent (eight million) are believed to come from Latin American countries (Suro 2005).

(especially recent immigrants) tend to concentrate in relatively low-skill occupations. Hispanics account for more than 30 percent of workers in private household services, and around 20 percent of workers in construction, agriculture, forestry and fishing, nondurable manufacturing, and eating, drinking and lodging services. On the other hand, Latinos are underrepresented in high-skill occupations, such as architecture and engineering, legal, computer and mathematical science, health care, and social sciences. In all these occupations, Latino representation hovers in the range of 5 percent. As a consequence, Hispanics tend also to earn less than the average of the national workers. In particular, foreign-born Latinos earn the least of all workers in the labor force, about \$200 per week less than whites (Suro 2005).

The tremendous growth of the Hispanic population has visible economic and social effects, and the main challenge for the new receiving areas is to accept the permanency and understand the potential impact Latino newcomers have on host communities. Although Hispanics are clustered in low-paid occupations, the Latino presence positively affects local economies by expanding the consumer base. Since 1990, the Latino buying power has in fact increased by 65 percent and, in 1997, in Texas and Florida, Hispanic purchasing power amounted to \$56 billion and \$33 billion, respectively. At the same time, this new demographic pattern challenges the infrastructures of nontraditional immigrant areas that were not prepared to deal with a large number of newcomers who had specific needs, and therefore higher concentrations of Latinos impose immediate net costs for local services (Torres 2000).

Georgia as a New Latino-Receiving State

Between 1990 and 2000, the Hispanic population in Georgia tripled. Of states experiencing the fastest growth, Georgia ranks third with a 300 percent increase (Table 3). As a result of this remarkable growth, Georgia now has the eleventh-largest Latino population in USA, with more than 435,000 Hispanic residents (Census 2000). Even though the growth of the Hispanic population is extraordinary, the total number of Latinos in Georgia is less impressive, in 2000 accounting for a little more than 5 percent of the population, while African Americans still represent 29 percent. However, according to 2004 Census estimates, Georgia currently has a population of 8,581,489 persons, 6.7 percent of whom are Latinos (Census Bureau 2004).

Similarly to other states, the Hispanic population in Georgia is unevenly distributed and is more concentrated in some counties than others. Seven out of 159 Georgia counties are more than 10 percent Latino, while 22 of Georgia's counties are less than 1 percent Latino. There are seven counties that have more than 10,000 Latino residents, and 108 counties with fewer than 1,000 Hispanics. However, unlike in 1990, there are no longer any counties in Georgia without a Latino presence. Hispanics are also highly concentrated within counties. Census block-level data reveal that in some areas several blocks and school districts might be exclusively Latino (Atilas and Bohon 2002).

As showed in Figure 1, the counties with the highest proportion of Latinos are usually located in urban areas surrounding Atlanta, Columbus, and Savannah. Indeed, more than half of the state's entire Latino population resides in metro Atlanta (Table

11)¹⁰, where in 2003 one in 13 residents (7.7 percent) was Hispanic. Gainesville and Dalton are instead the metropolitan areas with have the largest percentages of Latinos in Georgia, with 22.6 percent and 20.0 percent respectively (Arroyo and Hernandez 2005). The other geographic areas where Hispanics are concentrated include the rural textile-producing counties in the north, the poultry-producing counties east of metropolitan Atlanta, and the agricultural areas in the south (Atiles and Bohon 2002).

Besides the saturation of less skilled workers in traditional Latino areas (like California and New York) that pushed workers to the southern states, the state's expanding economy and prosperity of the 1990s was the most important factor attracting Latinos to Georgia. In the early- and mid-1990s, the demand for workers in the lowest-paying and lowest-skilled jobs was particular evident in the poultry, carpet, and farm industries. However, the 1996 Atlanta Olympics exacerbated the shortage of construction workers, originally fueled by an economic boom and growth in the housing industry.

In turn, construction activities generated a series of related businesses, creating additional widespread labor shortage for workers in textile and landscaping industries, furniture manufacturing, and house keeping services, among others. Many of these job openings were filled through immigration, and most of the immigrants were from Latin America. In reality, several studies suggest that the rapid Hispanic population growth in Georgia occurred mostly after 1994, while the 1996 Olympic Games additionally stimulated the demand for new workers later in the decade. Therefore, the massive 10 year-change in the Latino population, reported by the official statistics, is more likely an astonishing 5-or 6-year change (Atiles and Bohon 2002).

¹⁰ Among the nation's 20 most populous metropolitan areas, Atlanta experienced the most rapid Hispanic growth rate (Census Bureau 2003).

Compared to their home countries, Hispanics found particularly attractive Georgia's jobs because of high wages¹¹ and the large number of job opportunities for women (light manufacturers, and service businesses are particularly likely to hire women). The jobs were available also in other southern states, but many Latinos preferred Georgia, considering Georgia's labor market as more advanced and able to provide skills that might be marketable in other places. Above all in the construction industry, Hispanics value the opportunity to learn specific working skills that might be rewarded with higher pay. Latinos particularly appreciate the opportunity to work with marble and granite. The possibility to acquire these specific skills is in fact considered by Hispanic workers less common in other southern states (Atilas and Bohon 2002).

As a result, nowadays Hispanics represent a significant segment of the labor force. Their productivity and growing buying power are contributing progressively more to the state's economic stability and development. In the past 14 years, in the state of Georgia, Hispanic buying power grew faster than any other segment of the state's economy rising 710 percent to \$10.9 billion (Arroyo and Hernandez 2005). The growth of Latino population already represents a new profitable market for all kinds of goods and services, and is increasingly stimulating Georgia's economy by creating new jobs, and expanding the customer and tax base of many local economies (Atilas and Bohon 2002).

However, to maximize the potential positive impact on the state's economy, it is absolutely necessary to address the disparities that exist between Latinos and Georgians. Similarly to nationwide tendencies, Latinos (Table 13) are more likely than the rest of the total population to be poor (18.8 percent compared to 13.4 percent, respectively). Despite

¹¹ For instance, in Mexico, the federal minimum wage is \$3.50 per day, considerably less than \$41.20, the federal minimum wage for American workers (Atilas and Bohon 2002).

their high labor force participation rate (78.1 percent of them are working or looking for work, Table 12), Hispanics tend to be employed in low-wage jobs, and thus face lower income levels. In 2003, the median household income for all Georgia residents was \$44,037 compared to \$33,289 for Hispanics (Arroyo and Hernandez 2005).

Mostly employed in low-waged jobs that often do not provide employer-sponsored health coverage, Latinos are also more likely to be uninsured than other ethnic groups (Table 14). In 2002-2003, 43 percent of non-elderly Hispanics residing in Georgia did not have a health insurance plan, compared to 24 percent of African Americans, and 15 percent of non-Hispanic whites. Without health insurance, Latinos normally wait until the last minute to get health care, usually at the emergency room of a hospital, and clearly tend to underutilize preventive services. Preventive prenatal care is one of the major concerns. In 2002, only 65 percent of Latinas in Georgia sought early and adequate prenatal care, compared to 73 percent of African Americans and 81 percent of non-Hispanic whites. In the same year, prenatal period was the fifth cause of death for the Latino Georgia population (Arroyo and Hernandez 2005).

These records show that in Georgia much still needs to be done to reduce the existing economic and health disparities and assure Latinos equal opportunities to participate in fueling the state's economy. Compared to the traditional gateway states (such as California and New York), Georgia's situation is different, since the Hispanic population change has been relatively recent, sudden and impressive. Therefore, policy makers and service providers face greater difficulties for promoting economic development, easing community relations, and finding adequate venues to effectively address Hispanics' needs (Atiles and Bohon 2002).

Major Latino Health Care Access Barriers

Having regular and affordable access to health care services is indispensable to maintaining good health. However, socio-economically disadvantaged and underserved groups, like rural Latinos, continue to suffer greater health disparities, and access to Medicaid, physicians, or health insurance still represents a serious and major problem (Torres 2004). In reality, Latinos face a variety of barriers to obtaining appropriate and timely health care. Some of these barriers depend on their low socioeconomic status, while others are the result of diverse specific features of the Hispanic population (Kapur and Escarce 2006). As a consequence, the complex combination of deprived material circumstances with many other social and economic factors, including a different socio-cultural background and negative occupational conditions, creates specific access barriers to medical services that have profound and pervasive effects on the health and quality of life of Latinos. The following are access barriers that Hispanics are likely to face in U.S., regardless to their specific area of residence, either urban or rural.

Low Level of Education Attainment

Several studies found that low literacy skills are associated with poorer health, higher rates of hospitalization, and higher health care costs among patients. Personal education in fact influences the capability to read and follow medical prescriptions, acquire health care information, take medications, and keep appointments (Torres 2004). Although there are differences among Hispanic groups, when compared to other populations, Latinos have relatively low levels of educational attainment. Considering the population 25 years old and over (Table 4), only fifty-two percent of Hispanics have a high school diploma or

more, and just 10.4 percent of Latinos have a bachelor's degree. In contrast, 72.3 percent of African Americans graduated from high school, and 14.3 percent of them obtained a bachelor's degree. For non-Hispanic Whites, the percentages are 83.6 percent and 26.1 percent, respectively (Census 2000). As a result, Latinos have greater difficulties for communicating with health care providers, understanding physicians' instructions, and interacting with the complex health care delivery system (Kapur and Escarce 2006).

Lack of English Proficiency

Closely correlated to educational attainment, the capability to speak in English is a social advantage particularly important when negotiating complex bureaucracies, like the health care system. Therefore, limited proficiency in English affects Hispanics' ability to obtain health care and significantly deteriorate patient-provider relationships (Kapur and Escarce 2006). Communication problems between Hispanic patients and health care providers might be the primary cause of misdiagnosis, unnecessary testing, misinterpretation of patients' concerns, poor patient compliance, patient dissatisfaction, and inappropriate follow-up (Torres 2004). As shown in Table 5, about 28 million Latino persons speak Spanish at home, and of these almost 8 million, more than 28 percent of the total, report limited or an absolute lack of English proficiency (Census 2000).

Low Income Level

Personal income is considered as the strongest predictor of healthy behaviors, access to and use of health care services. Unfortunately, since Hispanics are much more likely than the rest of the population to be employed in low-waged occupations (mostly in

agriculture, construction, and domestic and food services), Latinos are also less able to afford the costs of care (Kapur and Escarce 2006). Low educational level, poor English language skills, and undocumented immigration status push Hispanics into the secondary labor market. Especially for rural Latinos, employment in the secondary labor market implies low-waged jobs that frequently take place in hazardous working conditions, and rarely provide health insurance, pension plans, or survivor benefits. Finally, these kinds of occupations in agriculture or in unskilled manual labor and service sectors (such as beef, poultry, and hog processing) are seasonal and sensitive to external factors, like weather and market demands (Torres 2004). As shown in tables 6 and 7, in 2004, the median per capita income for Hispanics was \$14,106 and almost 22 percent of Latinos lived below the poverty level. In the same year, the median personal income for non-Hispanic Whites was \$27,494 and only 8.6 percent of Whites were living in poverty (Census 2004).

Lack of Health Insurance Coverage

In the United States, insurance coverage is the most significant determinant of timeliness and quality of health care. However, Latinos' undocumented status, poor educational levels, and the tendency to be employed in low-wage jobs (usually in small firms that are less likely to offer coverage) are all factors strongly associated with low levels of job-based insurance coverage (Carrillo et al. 2001). Public health insurance represents a significant source of health coverage to low-income Latino families. However, welfare reforms and changes in Medicaid eligibility for legal immigrants have decreased the number of Hispanics covered by Medicaid. Undocumented residents and legal residents

entering the U.S. after August 1996 do not qualify for Medicaid, except for emergency care, while language and cultural barriers, misconceptions regarding eligibility, lack of awareness and information, and administrative obstacles, discourage Latinos from applying for Medicaid and other public programs (Carrillo et al. 2001). According to the U.S. Census Bureau, almost a quarter of the nation's forty-five million uninsured are Latinos. Hispanics are more than twice as likely to lack health insurance as the general population, and represent the ethnic minority most likely to be uninsured (Table 8). In 2004, more than 13 million of Latinos (around 33 percent of the total Hispanic population) were uninsured compared to 11.3 percent for the total non-Hispanic White population (Census 2004). As a result, when Latinos need health care services, they are more likely to use informal methods of care as over-the-counter medicines, home remedies, and the emergency rooms than to see a private physician. In 1999, almost half of uninsured Hispanics did not visit a doctor when sick, did not have a prescription for needed-medications, or did not receive required medical tests or treatments. About two-thirds of them had trouble paying their medical bills and expenses (Carrillo et al. 2001).

Shortage of Latino Physicians

A racial and ethnic diverse workforce is correlated with the ability to provide a better quality of care to socio-culturally different groups, and the concordance between the patient and the physician strongly increases patient satisfaction and self-rated quality of care (Carrillo et al. 2001). Research shows also that Latino patients tend to seek care from Hispanic physicians because of personal preference and language, and perceive that Hispanic physicians provide care of higher quality than do other physicians. Besides,

minority physicians tend to practice more in minority/underserved areas, reduce language and cultural barriers to care, and provide much needed community leadership (Kapur and Escarce 2006). However, the ethnic composition of the U.S. physician workforce does not reflect the general population and contributes to access problems for underrepresented minorities. For instance, although in the United States more than 12 percent of the population is Hispanic (Table 9), only 5 percent of the practicing physicians are Latino doctors.

While these access barriers are faced by Latinos regardless of the area of residence, in rural areas, Hispanics are likely to experience additional difficulties. These further barriers often reflect larger systemic deficiencies that commonly challenge rural counties and their health care systems, such as the shortage of physicians and the lack of public transportation systems.

Shortage of Rural Physicians

The limited number of health care physicians in rural communities has always been one of the more deep-rooted physician workforce concerns in the United States. Although rural America has 20 percent of the nation's population, less than 11 percent of the total physicians practice in rural areas, and this uneven distribution has worsened over time. In 1980, the proportion practicing in non-metropolitan counties was 13.6 percent, while in 1990 was 12 percent, and between 1990 and 1997, in the United States, the total supply of patient care physicians grew by 24.3 percent, but by only 11.1 percent in non-metropolitan areas (Ricketts 2000). Fear of professional isolation, lack of professional

interactions, inaccessibility of hospitals, absence of consultation and continuing medical education opportunities, lack of opportunity for spouse, and cultural deprivation (limited adult education and entertainment activities) explain why rural practice areas have always had considerable difficulties in recruiting and retaining both primary care and specialist physicians (Raffel and Raffel 1994). Besides, rural physicians tend to have lower salaries, longer working hours, and treat sicker, poorer, and more likely uninsured patients than do urban care providers (Torres 2004). The problem of seeing more patients and the consequent higher pressure on practitioners may make existing health care providers more reluctant to accept new clients, especially those, like Hispanics, more likely to be uninsured, and less willing to see patients who need interpreters, since office-visits usually take longer when a medical interpreter is needed (Casey, Blewett, and Call 2004).

Lack of Public Transportation

Rural patients face unique geographic barriers when seeking medical care, since they tend to have greater transportation difficulties for reaching health care providers, and often travel greater distances to reach a doctor or hospital. It has been estimated that the average distance traveled by rural residents to attain health care services or emergency medical treatment is nearly twice that of urban dwellers (Edelman and Menz 1996). Obviously, the lack of public transportation affects most those minorities, like Latinos, that are less likely to own a private mean of transportation and most rely on transport public systems.

Health Status of Latinos

An accurate and comprehensive description of the health status of Hispanics is complicated by many factors, such as the lack of detailed data for subgroups of Latinos defined by national origin and generation in the United States, or the scarcity of epidemiological data on the incidence and prevalence of common and important diseases, according to immigrant status, length of residency in the U.S. and degree of acculturation. Despite these limitations, health researchers could establish that health Hispanic status significantly differs across national-origin groups, by generational status and measures of acculturation (Escarce, Morales, and Rumbaut 2006).

In reality, access barriers to health care and education, greater poverty, lifestyle, language, occupational forces, and immigrant background make Latinos` health issues more complex than the health problems of the rest of the population. This greater complexity is demonstrated by the fact that Latinos` general health status is better than their socioeconomic profile would predict, and Hispanics present some health indicators that are equal to or better than that of non-Hispanic whites (Torres 2004).

In the United States, Hispanics have in fact lower age-adjusted mortality rates than both non-Hispanic whites and African Americans. In 2001, the age-adjusted death rate for Hispanic men was 802.5 per 100,000 persons, compared with 1012.8 for white men and 1393.7 for black men (Escarce et al. 2006).

The death rate from heart disease remains lower for Hispanics than for non-Hispanic whites, and cancer incidence is higher for non-Hispanic whites than for Latinos (at least partly, both outcomes seem to be due to Latinos` lesser tendency to smoke). In addition,

the Latino suicide rate is consistently decreasing and is about one-half the suicide rate of non-Hispanic whites (Torres 2004).

An “epidemiological paradox” has been proposed to explain why some health outcomes among Latinos are relatively better than most of other Americans, and researchers started to consider healthy social behavior (as nutrition, and lower rates of smoking), lower levels of stress, the supportive character of the Hispanic culture, and the selective character of migration as factors able to positively influence the health status of Latinos in the United States (Torres 2004).

However, the Hispanic paradox is not equally generalizable across all Latino sub-groups and, as long as Hispanics remain in U.S., acculturate, and adopt the lifestyle of the mainstream, they acquire new risky behaviors that lower their health status. Indeed, consistently with the socioeconomic status (SES) model, which hypothesizes that health disparities (especially in minority health) reflect socioeconomic disadvantages, Latinos present relatively higher rates than non-Hispanics for infectious diseases, such as AIDS and tuberculosis, some chronic conditions, including diabetes, hypertension, and liver disease, and external causes of death, as accidents and homicides (Torres 2004).

Although it has declined for the rest of the population, the HIV/AIDS death rate has increased for Latinos, and its devastating effects are greatest among young Latino males. In 2000, HIV/AIDS was the ninth leading cause of death among the general Hispanic population, but it was the third for Latinos between 25 and 44 years of age, a rate more than double for non-Hispanic white males.

Lack of knowledge about transmission and diagnosis of disease, a more negative attitude toward condom use, a higher likelihood to self-medicate, delay treatment, self-

inject medical preparations, and share needles are all factors that contribute to the diffusion of the disease. As a result, Hispanic HIV/AIDS rates are disproportionately high, and Latinos are twice more likely to die than non-Hispanics from HIV/AIDS disease (Torres 2004).

Another leading cause of death for Hispanics is diabetes. Among Latinos the disease is more poorly managed, and Hispanics experience a higher burden of morbidity and mortality due to diabetes than non-Hispanic whites. Mexicans are at especially high risk. In 2000, death rates per 100,000 people attributed to diabetes were 33.6 for Latinos and 22.0 for non-Hispanic whites (Torres 2004).

Diabetes and its poorly managed conditions are able to cause devastating complications, such as heart disease, kidney failure, limb amputations, blindness, and peripheral nervous system damage. Because of the higher prevalence of diabetes among Latinos, the burden of these potential complications is greater for Hispanics than for other groups (Escarce et al. 2006).

Both alcohol use and chronic hepatitis infection contribute to the high death rates from chronic liver disease and cirrhosis among Latinos. As a consequence, chronic liver disease is the ninth leading cause of death among non-Hispanic white males, and the Latino male age-adjusted death rate per 100,000 persons for cirrhosis is 23.7 compared to 12.5 for white males (Torres 2004).

Besides chronic and infectious diseases, another cause of death higher among Latinos than other populations is maternal mortality. Pregnancy-childbirth and associated complications are in fact in the top causes of death for Hispanic females 15 to 34 years of age, but not for non-Hispanic white females in comparable groups (Torres 2004).

Finally, external causes of death are more widespread among Hispanics than the rest of the population. Mortality rates due to homicide are significantly higher for Hispanics than for non-Hispanic whites. In 2000, the age-adjusted death rate from homicide among Hispanic men was 11.8 per 100,000 persons, more than three times the rate of 3.6 for non-Hispanic white men (Escarce et al. 2006). Homicide still represents the fifth leading cause of death among Hispanic males and the second leading cause for young Hispanic males. In particular, homicide is responsible for the higher death rate among Hispanic males 15 to 24 years of age.

In addition, since Latinos are more likely to hold jobs that expose them to higher risks for injury and illness, the death rate for occupational injuries per 100,000 employed workers in 1999 was 5.2 for Hispanics and 4.4 for non-Hispanic whites. As a result, unintentional injury is the third leading cause of death for Latino males (Torres 2004).

Many studies confirm that health outcomes and health behaviors of the Hispanic population presents relevant differences by national origin, generation, and grades of acculturation. Researchers have also documented that despite their low socioeconomic status Hispanics tend to have lower age-adjusted mortality than non-Hispanic whites. A finding considered so remarkable that it has been defined as the epidemiological paradox (Escarce et al. 2006).

At the same time, although health conditions of Americans have generally improved, Latinos continue to experience an unequal burden of disease and disability, mostly concerning to infectious diseases, chronic conditions, and external causes of death. Therefore, due to its complexity, a better understanding of the cognitive and structural factors that determine Latino health status is required. From this point of view, both the

SES model and the epidemiological model may be valid for different segments of the Hispanic population, and might help to explain health disparities among Latinos and between Hispanics and the rest of the U.S. population (Torres 2004).

CHAPTER III. RESEARCH METHODS

A combination of different research tools was utilized in order to evaluate access to primary care and investigate all the multidimensional barriers involved. Information concerning social, cultural, and organizational barriers and data regarding utilization of primary services and preventive care have been acquired through personal interviews with Hispanic residents, local health professionals, and key informants (essentially, the Southeast Communities Project staff). Economic constraints have been addressed through personal interviews, although the general economic conditions of the local Hispanic community also have been assessed by considering census data and comparing Latinos with the overall county population and the other minority groups.

At the same time, Geographic Information System data has been utilized in order to pursue four research objectives: 1) visualize Hispanics' settlement patterns by census block and tract, 2) mapping the Hispanics' most utilized local health facilities, 3) identify which areas Latinos face the greatest geographic distances when they try to reach their usual sources of care, and 4) indicate where in Toombs County Latinos most need primary health assistance. Residential patterns and areas in most need of health support have been identified by incorporating into a GIS database demographic and economic census data, and displaying them at the tract and block level.

In particular, I used three indicators of need: Hispanic median family and personal income, and Latino population under five years old. After recording their GPS positions on the ground, health facilities have been mapped using their geographic locations. Finally, I identified the geometric centroid of each census tract and calculated the distances from these geometric centers to the local health facilities that Latinos utilize the most. Therefore, each census tract has been classified by considering the average of the distances. The greater the average distance the lower the accessibility level of the tract. Besides its simplicity, this method has been chosen since travel impedance to nearest health provider, typically measured in units of Euclidean (straight line) distance from a patient's residence or from a population center (such as the geometric centroid of county of residence), is considered a good measure of spatial accessibility for rural areas, where provider choices are very limited and the geographically closest provider is also the most likely to be used (Guagliardo 2004).

Target Population

The present study focuses on both Hispanics who permanently reside in Toombs County, and Hispanic migrant farmworkers who are only temporary residents in the area. The initial plan also intended to consider as a target population those primary care physicians who practice in Toombs County, in order to obtain information concerning whether and what kinds of special arrangements for Hispanic patients they provide, their willingness to facilitate the recruitment of new Hispanic patients, and their personal opinions regarding Latinos' access to health care. However, this initiative was abandoned, mainly because of the common disinclination of private professionals to be

interviewed (a limited availability of time was the most frequent explanation provided), and the possibility to acquire almost the same information from different sources.

Data Collection

Primary data concerning utilization of health services and access barriers have been collected during spring 2006 by forty face to face semi-structured interviews, conducted with local Hispanic residents, and comprising both open and closed questions¹². The fact that some respondents had undocumented status required carrying out anonymous interviews, with the consequential intention to avoid making them feel threatened and less predisposed to participate. As expected, guaranteeing anonymity significantly eased the interviewing process. Nevertheless, numerous Hispanics refused to be approached and, in some circumstances, the answers provided, especially those ones concerning delicate topics (such as medical debts and reported mistreatment while seeking health care) might have been influenced by distrust and apprehension.

Several interviews were conducted at the local Wal-Mart in Vidalia (one of those few social places that Hispanics are more likely to frequent, such as the catholic church, grocery stores, and laundries), others in a trailer park located in Lyons, where mostly Latinos reside, and some in several of the Hispanic grocery stores placed in downtown Lyons. After being properly instructed, SEGCP`s staff directly interviewed sixteen of the total Latino respondents, either when Hispanics were waiting in medical professionals` offices or when Latinos were in the SEGCP`s facility.

¹² See Appendix C for the English and Spanish versions of the questionnaire utilized.

Almost all interviews were conducted in Spanish. Interviewing Latinos in Spanish has been absolutely necessary due to the limited English proficiency of nearly all the Hispanics contacted. In addition, communicating in Spanish served to make respondents more comfortable. The fact that I am not a U.S. citizen and speak Spanish, that the SEGCP staff supported my research, and that some interviews were carried out by SEGCP staff significantly contributed to the willingness of respondents to be interviewed and share their experiences.

Local key informants and five medical professionals employed at local public health facilities were the second source of primary information. These individuals were interviewed through open questionnaires in order to acquire their professional opinions concerning the most relevant access barriers to health services and the most appropriate solutions that the local health system could adopt. The professionals interviewed are employed at the Vidalia Hospital emergency room, the County Health Department in Lyons, and the Community Health Center located in Reidsville, Tattnall County. Andrea Hinojosa, executive director of the Southeast Georgia Communities Project, has been the most important and useful source of information, as a key-informant actively involved in the most problematic local Latino issues. In particular, she gave an important contribution to the identification of the practical solutions that should be implemented.

More in general, the Southeast Georgia Communities Project (SEGCP) played a significant gatekeeper role. In fact, the staff of this non-profit association not only has provided valuable information about Latinos' most needed health services, their cultural beliefs, and socio-economic conditions, but has also been useful for gaining entry to interviews with local Hispanics residents.

Data Representativeness

According to Census data (Table 15 and 16) the majority (84.2 percent) of Hispanic residents in Toombs County is from Mexico (1,945 out of 2,310), while Puerto Ricans are the second largest group (2.3 percent). Most (62 percent) are men (1,430 out of 2,310), and the median age of the whole Hispanic community is significantly low: 22 years old (Census 2000)¹³. Consistent with census statistics, Mexico was as the country of origin of 82.5 percent of the respondents, while the residual 17.5 percent of the participants reported to be born in U.S., specifically, in Texas and Florida. The sample correctly represents as well the young age of the Latino population. The largest respondent age group is in fact represented by those Hispanics who are between 25 and 29 (25 percent), and the two adjacent groups (18-24, 20 percent; 30-34, 20 percent) are the next two largest groups (Table 17). Together, these three age groups represent 55 percent of the surveyed sample. The elderly were particularly under-represented: only 2.5 percent of the sample was older than 50 years old.

However, the participants do not reflect the gender composition of the local Hispanic community, which is preponderantly male. The majority of the Hispanic respondents are in fact women, who represent 67.5 percent of the total sample. This gender preference is partly the consequence of the greater mistrust demonstrated by Hispanic men, who were normally more reluctant than women to be approached. One logical explanation might relate to their common undocumented status, and the consequent fear of male Latinos to jeopardize their traditional role as the main financial providers of their families. In addition, due to their expected homemaking role and more

¹³ In contrast, the median age of the whole county population is 34 years old (Census 2000).

frequent unemployed status, during interviews at residences it was more likely to find women at home and interview them. As a result, women represented the largest and the most valuable source of information. They normally showed a greater openness and propensity of talking about their economic conditions and personal health concerns, above all when asked to discuss issues related to the health status of their children. Nevertheless, as it will be subsequently explained, the prevalent female composition of the sample must be taken in consideration when analyzing the results concerning the utilization of primary and preventive services, because of the traditional higher likelihood that women have to contact the health care system.

From an occupational point of view, the sample is consistent with the Latinos' propensity to comprise the local agricultural workforce. The majority of the respondents in fact were farm workers, mostly crop harvesters (40 percent), while the other 30 percent reported to be employed at poultry plants and clothing factories, or as carpenters, mechanics, cooks, and waiters (Table 24). The additional 30 percent of the participants reported to be unemployed (all of them were women), or employed in 'other' occupations not classifiable. Since answers regarding their immigration status have been intentionally avoided, it is not possible to establish the number of Latino respondents who were authorized residents.

CHAPTER IV. FINDINGS

Although the majority of the Hispanic respondents have been residing and working in Toombs County for a medium or long period of time (as showed in Table 23, 52.5 percent of them reported having lived in the area for more than five years), Latino participants clearly indicated they faced significant barriers and inequalities when they sought health care assistance. Through the analysis of the interviews conducted and the data collected, the following pages will try to examine and evaluate several impediments that challenge the ability of Latinos residing in Toombs County to obtain adequate access to local health care services, and eventually undermine their overall health status.

Availability: Shortage of Primary Care Services

Because of their gateway-role in terms of referral to preventive and specialized medical care, primary care services play a central role in order to eliminate health disparities among the most vulnerable populations (Blumenthal et al. 1995). The provision of adequate primary care is therefore a crucial matter for those local communities willing to facilitate Hispanics` integration, and improving their overall health status.

However, above all in rural areas, the provision of medical services to community residents and minority populations is often challenged by systematic deficiencies and shortages that persistently affect local health care systems. In Georgia, many rural counties have inadequate numbers of primary care physicians, struggling hospitals, and large proportions of the population with no health insurance coverage. Based on their shortages of health professionals, poverty rates, and excess mortality, thirty-nine counties have been designated as high priority primary care access areas and, in 2000, there were twenty-five counties in Georgia with not even one family practitioner (NCPC 2003).

Similarly to many other Georgian rural areas, in Toombs County, local health facilities and personnel primarily confront a constant shortage of primary care services and physicians, and a significant number of uninsured residents. Since 1978, Toombs County has been designed as a Medically Underserved Area (MUA),¹⁴ a geographic area with a shortage of primary medical care. At the present time, Toombs County's IMU (Index of Medical Underservice) score is 50.7., where 0 represents completely underserved and 100 represent best served or least underserved. Under the established criteria, each service area found to have an IMU of 62.0 or less is considered to be a medically underserved region.

Toombs County is also designated as Health Professional Shortage Area (HPSA), because of its shortage of primary and mental health providers. Scores range from 1 to 25 and the higher the score the higher the priority. At this time, Toombs County's score is 16. Besides, the Census Bureau estimates that in 2000, 23.2 percent of the county population and 22.1 percent of people under age 18 did not have health insurance

¹⁴ The source of the data concerning MUA and HPSA status and scores is the HRSA Bureau of Health Professions National Center for Health Workforce Analysis, Shortage Designation Branch.

coverage, while at the Georgia state level in the same year, the estimated percents of uninsured were respectively 15.8 percent of the total population and 14.2 percent of children under age 18¹⁵. Since it already faces persistent physicians' shortages, an overloaded hospital, a great number of uninsured residents, and a limited availability of financial resources, the local health system in Toombs County is therefore only partially able to meet the special needs brought by Hispanic patients and is often unable to deal with Latinos' most serious health issues.

Local informants and medical professionals have claimed that the overall provision of private physicians has increased, but this improvement mostly involved specialist doctors. The county is still underserved regarding the provision of primary care physicians, and general practice doctors represent the medical specialty most required. At the same time, oncologists and endocrinologists are the specialists most needed, in order to effectively treat cancer, diabetes, hormonal disorders, obesity, and metabolic diseases.

Despite the significance of the scarcity of general practice physicians, the lack of qualified medical interpreters, bilingual staff, and Latino professionals and nurses is universally considered as the most significant access barrier for the local Hispanic community, and both informants and professionals have continuously underlined the need for hiring medical interpreters and Latino physicians¹⁶. Many studies show in fact that the lack of interpreter services and minority physicians significantly compromises patient care to minority groups, since limited-English-proficient patients are less likely than the rest of the population to understand their diagnosis, prescribed medications,

¹⁵ Source: U.S. Census Bureau, Data Integration Division, Small Area Estimates Branch. The Small Area Health Insurance Estimates (SAHIE) program provides model-based estimates of health insurance coverage for counties and states.

¹⁶ The lack of medical interpreters and Hispanic physicians is analyzed in more detail in the section concerning organizational barriers.

special instructions, and plans for follow-up-care. Spanish-speaking patients are also less satisfied with the patient-provider relationship, and more likely to omit medication, miss office appointments, and visit the emergency room for care (Carrillo et al. 2001).

Key informants underlined also the lack of nurses, the scarcity of private mental health physicians, and the need for additional primary health care facilities (especially patient clinics) able to reduce the great number of emergency visits that the emergency room at the Vidalia Hospital already has to deal with. As well an additional dialysis center and a detoxification center are required in order to better serve all those patients affected by diabetes and in need of blood filtering, and treat drug and alcohol abuse. At the present time, the local hospital is only able to stabilize alcohol abusers` conditions, but it is incapable of providing specific treatments, and patients are sent for treatment to health facilities in the surrounding counties.

All the medical professionals and informants I interviewed consider diabetes, alcoholism, and domestic violence the Latino health concerns that are least adequately addressed. Frequently uninsured and undocumented, Hispanic diabetic patients are in fact more seriously affected by the scarcity of dialysis centers, and encounter more serious difficulties than the rest of the population to obtain a proper and rapid treatment in the unique center existing in the area. Similarly, the lack of detoxification centers becomes an even greater concern for those Latinos with alcohol and drug problems (mostly young males), who hardly find appropriate help because of the absolute absence of bilingual mental professionals. In the same way, the scarcity of adequate family services able to serve those women who are victims of domestic abuses turns to be an even greater issue for those Hispanic women whose undocumented status does not allow them to sue their

husbands/partners, and whose lack of English proficiency does not permit them to obtain specific and qualified help. Key informants indicated the existence in the local area of just one safe shelter for abused women called ‘The Refuge – El Refugio’. As well the lack of specialists, such as oncologists and endocrinologists, becomes a relevant concern for the overall health status of the local Hispanic community, due to the common predominance among Latinos of lung cancer, diabetes, tuberculosis, and obesity.

Accessibility: Geographic and Transportation Barriers

The whole Southeast Georgia Health District area faces considerable challenges moving patients to and from healthcare delivery sites and, at this time, only two counties out of sixteen (Pierce and Tattnall) have a public transportation system (Figure 3)¹⁷. Thus, in Tombs County, community residents and minority populations must rely on private means of transportation to acquire the required health services.

Obviously, the complete absence of a public transportation system affects most those minorities that rely on public services. In Georgia, Hispanics are less likely to own a car and consequently are more likely to be dependent on public transit as their primary mode of transportation. Due to their low-income level, many Hispanics cannot afford to buy their own vehicles and in order to reach health care facilities or their usual work places often rely on alternative forms of transportation, such as taxi-services, rides provided by relatives, friends, and neighbors, car sharing, and employer-provided busing.

¹⁷ As showed in figure 3, the Southeast Georgia Health District includes 16 counties: Appling, Atkinson, Bacon, Brantley, Bulloch, Candler, Charlton, Clinch, Coffee, Evans, Jeff Davis, Pierce, Tattnall, Toombs, Ware, and Wayne.

In addition, since women are usually less likely than men to own a private vehicle, they tend to have even fewer transportation options (Atilas and Bohon 2002).

In north Georgia, taxi services specifically targeted at Hispanic residents have become a profitable market, and Latino taxi drivers function as paid interpreters for their customers once they arrive at their destinations. However, many Latinos cannot afford the high prices required and often miss needed health services. In Georgia, Latino women are particularly limited by lack of transportation because those industries that hire Hispanic workers in large numbers (such as poultry and other processing plants) and provide them transportation to and from work are more likely to hire men (Atilas and Bohon 2002).

Almost one third (32.5 percent) of the Hispanic participants (Figure 4) reported that they do not have access to a private mean of transportation, and one in eight (12.5 percent) indicated they used a taxi as their common way for reaching a health care facility. Sometimes, this might represent an unaffordable and prohibitive cost. As a Hispanic mother said: “I pay \$40 just for a one-way trip... [therefore] sometimes, I do not go to visit the doctor because I do not have enough money for the taxi.” (Hispanic resident interviewed by M. Vitale, Vidalia, Tombs County, Georgia, May 2006).

Asking for a ride from family members and friends might be also complicated because many Hispanics are afraid to drive if they are undocumented and without a valid driver license. Local informants reported that it is common for local Hispanics to be taken into custody and have to pay fines up to \$800 for driving without a valid documentation. One Hispanic resident said: “People are afraid of helping each

other...since they are illegal and do not have valid driver licenses.” (Hispanic resident interviewed by M. Vitale, Vidalia, Tombs County, Georgia, May 2006).

Licensing regulations in Georgia make it almost impossible for Hispanic immigrants without documentation to obtain a driver’s license. Licensing might be complex even for documented Latinos, who might find it difficult providing proof of identification, as many Hispanics coming from rural or poor backgrounds never had their births recorded. In addition, proof of local residency is difficult to establish since many Latino immigrants live with friends or relatives and do not have utility bills or leases in their name. As a result, many Hispanics drive unlicensed (Atilas and Bohon 2002). However, key informants indicated that in Toombs County local law enforcement officials are becoming increasingly more sensitive to the problem, and that Latino police officers are currently offering their help, in order to educate Hispanics and minimize the problem.

When lack of transportation and poverty are compounded by geographic distances and longer travel-time, attaining health care becomes an even more critical problem. Several studies in fact support the notion that spatial accessibility impacts probability of contact with the healthcare system and low income and minority populations represent those inhabitants who are particularly sensitive to geographic distance in the utilization of health services (Guagliardo 2004). In Toombs County, health care providers are not in close proximity to Hispanic communities. Most of the local private physicians and the hospital are in fact situated in Vidalia (the biggest county center), while Latinos are more likely to concentrate in the rural southern census blocks of the county (Figure 5). Although a number of Hispanics reside in Lyons (mostly in the southern and eastern

blocks of the town), there is no significant presence of Latinos in Vidalia and normally they tend to locate in the most remote and isolated rural areas, probably because of the tendency of Hispanic residents to be employed as agricultural workers¹⁸.

This ‘geographic disadvantage’ is even more evident when considering the other usual sources of care to which Latinos normally refer, since these health facilities are located outside Toombs County. As shown in figure 7, besides the local hospital in Vidalia and the county health department in Lyons, Latino respondents clearly indicated that local Hispanics, when seeking health care, usually refer to the East-Georgia Healthcare Centers located in three different contiguous counties, expressly in Treutlen County (Soperton), Emanuel County (Swainsboro), and Tattnall County (Reidsville).

After recording their GPS coordinates in a point location data set, the Hispanics’ most utilized health care facilities have been visualized on a map (Figure 7), and each census tract has been successively classified based on the average distance of the health facilities to the geometric center (Figure 8). The greater the average-distance from the centroid to the health facilities the lower the potential accessibility level of the tract (Figure 9). As shown in table 25, Latinos face considerable geographic distances to reach their usual sources of care, in some cases greater than 20, 30, or even 40 miles.

The southernmost census tract of the county is the tract with the lowest potential accessibility level or, in other words, the geographic area where Latino residents usually face greater distances in order to reach their usual health care facilities. On average, Hispanics residing in this sector of the county have to travel 22 miles, while in the northern and central tracts the distances are between 13.5 and 15.7 miles (Figure 9).

¹⁸ Obviously, these data refer only to Hispanics officially reported by the Census Bureau. No similar data exist for undocumented Hispanic workers who actually reside in the county.

As defined by the Institute of Medicine, a primary health care facility located in a rural area must be within close physical proximity, such as a 30-minute drive, in order to be considered geographically accessible ¹⁹(NCPC 2003). However, consistently with the geographic distances computed, 45 percent of the Hispanic participants have to drive more than 30 minutes to get to their usual source of care (Figure 11).

Facing a lack of private means of transportation, significant geographic distances, and long travel times, it is not surprisingly that 50 percent of the Latino respondents consider it ‘very difficult’ or ‘difficult’ to reach their usual health care facilities (Figure 12). In addition, when compared to all Hispanics living in Toombs County, those Latinos who live in the southernmost census tract present the lowest median family and per capita income, and the higher percentage of children under five years old, a particularly vulnerable population which typically requires frequent and special health support (Figures 13, 14, and 15). Therefore, Hispanics located in the southern rural areas of Toombs County are not only the poorest Latino residents, but also those ones who reside most distant from their usual sources of care and most need primary health assistance, confirming that geographical barriers to health often interact with those based on income, race, and ethnicity and lead to complex patterns of disadvantage (McLafferty 2003).

Affordability: Economic and Insurance Barriers

The most potent economic determinant of health is individual income. All environmental, behavioral, and psychosocial risk factors for health become more prevalent with lower income levels, or other poor conditions of life that are strongly

¹⁹ In contrast, the Institute of Medicine defines physical proximity in urban areas as a 45-minute trip on public transit bus or rail (NCPC 2003).

influenced by personal financial resources and socioeconomic status, such as education, occupation, or wealth (House 2001).

With the exception of Native Americans, Hispanics are the poorest ethnic group in Toombs County. Similarly to many other Latinos who relocated in the Southern states, Hispanic residents are in fact predominantly employed in the rural secondary labor market, and tend to hold low-waged jobs that infrequently provide health insurance or survivor benefits. According to the 2000 Census data, in 1999 the median per capita income for Latinos was \$6,034 compared to \$17,130 for non-Hispanic Whites, \$11,982 for Asians, and \$8,364 for African Americans. In the same year, 54.4 percent of the Hispanic families lived below the poverty level (Tables 26 and 27), while at the county level the percentage of families living in poverty was 17.8 percent (Census 2000).

Migrant farm workers who decide to temporarily reside in Toombs County face hard economic conditions. Several studies indicate that the East Coast stream workers, those migrant Latinos usually maintaining a 'home base' in Florida and then moving up the East Coast through the southern states, are more likely to be undocumented and consequently earn significantly less than their documented counterparts. In 1998, the annual East Coast family income was \$5,500, while migrant Latino families working in the Midwest and Pacific streams were earning \$10,250 and \$9,499 respectively (Ward and Atav 2004).

Unable to apply for government insurance plans because of their common undocumented status, and mostly employed in low-waged occupations that do not provide job-based health insurance, Latinos in Toombs County are rarely able to afford the weekly or monthly premium payments required for being insured, and tend to not

have insurance coverage. Nearly all (87.5 percent) of the Hispanic participants in this study reported to be uninsured (Figure 16), and those respondents who were insured were more likely to have an employment-based plan (7.5 percent) than having government health insurance, such as Medicaid (2.5 percent).

Besides low-income level, uncertain immigration status, and employment conditions, the lack of familiarity with the American health system might be considered as another major barrier, since Hispanics are often not used to deal with a private health system, and seem to be culturally not predisposed to acquire private health insurance. Local informants pointed out that even those Hispanics who have acquired a higher income level tend to not adequately value investing their financial resources in health insurance and preferred to employ their additional capital as savings for future unforeseen circumstances. In Latin American countries, the government normally subsidizes the health care system. Therefore, many Latinos do not understand the concept of health insurance, and are reluctant to take advantage of this benefit, even in those circumstances in which their employers offer them an insurance plan (Arroyo and Hernandez 2005).

Without insurance benefits and with low-income levels, Hispanics regularly struggle to pay for visits, medicines, and other medical bills. Over eighty percent of the Hispanic respondents (Figure 17) perceive particularly critical their economic conditions, and consider 'very difficult' or 'difficult' paying for basics, as shelter, food, and medications. A Hispanic mother explained: "When we [my husband and I] did not have health insurance...our children got sick...and it was not easy for us to pay for the doctors and the medicines." (Hispanic resident interviewed by M. Vitale, Vidalia, Tombs County, Georgia, May 2006). Latinos' general economic conditions might be even more difficult

when women are unable to work, and therefore cannot contribute to the overall family income. Around 30 percent of the Latina participants (Table 24) reported being unemployed, mostly because they were pregnant or had to take care of their numerous children. Instead, none of the male Latino respondents reported to be unemployed.

Because of their harsh economic situations, when Latinos seek health care they are generally unable to afford the high costs of the services required. In some circumstances, medical expenses are exorbitant and Hispanics might face serious economic consequences, as indicated by 40 percent of the Hispanic participants (Figure 18), who admitted to have had debts for paying their medical bills. For instance, a Latino resident reported having paid \$500 as a debt just for buying medicines.

Usually, Latinos are willing to pay their medical bills and try to pay them by monthly rates. However, in other circumstances, Hispanics simply avoid paying. As a Hispanic resident admitted: “Many times we [my husband and I] had bills to pay at the Hospital emergency room...they sent us the bills...but we never paid.” (Hispanic resident interviewed by M. Vitale, Vidalia, Toombs County, Georgia, May 2006). In all those situations in which Latinos do not pay their medical bills, it is nearly impossible to trace Hispanic patients who are undocumented and do not have a valid Social Security Number, and therefore the local public health facilities tend to cover the amount not paid with available funding. The Georgia Hospital Association reports that Georgia hospitals provide roughly \$1 billion per year in indigent care and unreimbursed services to the uninsured (NCPC 2003).

In order to avoid paying for expensive medications, it is not uncommon for Latinos to use modern drugs that family members or friends bring them from their original countries, where such medications, as antibiotics, are easily available.

Even if it is an illegal practice, local informants estimate that at least 15 percent of the Latino residents regularly purchase in local Hispanic stores medicines coming from Mexico. Medical professionals expressed concern that this might complicate medical care, since doctors and nurses may not be able to fully understand the indications reported in Spanish.

In other circumstances, Latinos prefer to go back directly to their home-countries, and obtaining there the required services for a significantly cheaper cost. However, the resulting absence from work might cause the loss of their jobs. As a 25-year-old Hispanic man said: “Once I was really sick...I went to Mexico for curing myself ...but when I came back here, I lost my job.” (Hispanic resident interviewed by M. Vitale, Vidalia, Tombs County, Georgia, May 2006). In total, 7.5 percent of the Hispanic respondents affirmed to have lost their jobs (Figure 18) because of unjustified absences, such as for being sick or injured, and the consequent incapability to go to work.

Accommodation: Organizational Barriers

Accommodation reflects the extent to which the health care providers organize their medical practices in ways that meet the constraints and preferences of the clients. Of greatest concern are convenient hours of operation, walk-in facilities, telephone services, and appropriate appointment systems (Penchansky and Thomas 1981). However, because of their specific cultural and linguistic background, the accommodation of Hispanic

patients requires special and additional arrangements, such as the provision of medical interpreter services and Latino physicians.

Although by law any recipient of federal funds must offer and provide adequate language services to all patients with limited English proficiency²⁰ many health providers are not in compliance with the directive, mostly because medical interpreters are costly. Therefore, in most cases the interpreter is a relative, a friend, or a staff person in the health care facility and not a trained medical interpreter (Kapur and Escarce 2006). As well cultural differences between patients and physicians are a common barrier. A review of the data on ethnic diversity of the health workforce reveals in fact the low availability of Hispanic physicians. For instance, in Georgia in 2004 only 5 percent of the doctors and 2 percent of the nurses were Hispanics (Arroyo and Hernandez 2005).

During the fieldwork stage, Hispanic participants were asked to mention what accommodation arrangements private physicians and local public health facilities lack the most, and the shortage of medical interpreters was clearly the barrier most often mentioned. Two-thirds of all respondents (67.5 percent) in fact considered the doctors' inability to speak Spanish as their biggest difficulty while seeking health services (Figure 19). Language and communication problems seriously challenge Latinos' abilities to communicate with health care personnel and obtain appropriate care, mostly because of the extreme lack of English proficiency and the low-levels of educational attainment of the Hispanic patients. Nearly 20 percent of Hispanic participants reported less than 6 years of education, while just 30 percent have completed elementary school. One-third

²⁰ Specifically, recipients of federal funds must be accountable for providing language services as required under Executive Order 13166 and Title VI of the Civil Rights Act of 1964 (Arroyo 2004).

reported to have between 7 and 11 years of education, and only 15 percent have 12 years of education (Table 19).

Hispanics not only feel unable to communicate with doctors and nurses, but are even afraid of both their own and their children's health. One Mexican 37-year-old woman said: "I am afraid of talking with doctors...it is dangerous...because I do not speak English...and they [the doctors] might misunderstand what illnesses my children have." (Hispanic resident interviewed by M. Vitale, Vidalia, Tombs County, Georgia, May 2006). Latino patients usually bring family members, friends, and neighbors to interpret, or refer to the Southeast Communities Projects that provides free interpretation services. In other circumstances, Hispanics must limit themselves to those few local public health facilities (such as the Health Department) that during recent years have trained and hired qualified medical interpreters.

Both key informants and local medical professionals agree that the overall situation has improved, and recognize the existence of a growing understanding for either the need of qualified interpreters or Latino doctors. However, they have also underlined the still significant lack of qualified interpreter services and bilingual staff able to appropriately work with physicians and nurses, and reported that the shortage is particularly considerable among local private physicians. Talking about the most significant access barriers to health care for Hispanics, the clinical coordinator of the Southeast Health Community Center in Reidsville, stated:

For Hispanics, the main access barrier is the lack of interpreters...the situation has improved only in the Health Departments, which deliberately chose to use their funding to get new interpreters...[However], Hospitals do not have full time certified interpreters and private physicians claim to not have the required resources to hire them...we need more certified medical interpreters and trained

bilingual staff for the safety of our patients. (Public health nursing and clinical coordinator, interviewed by M. Vitale, Tattnall County, Georgia, May 2006).

At the present time, no qualified medical interpreters practice at the Vidalia hospital, and the only public health facilities that have significantly improved by training and employing qualified interpreters are the community health centers (but they are not located in Toombs County) and the local health department in Lyons, which employs four qualified medical interpreters. On the other hand, informants reported that only three Hispanic doctors are currently practicing in the region.

The long waiting time required for getting an appointment is instead the second most common organizational barrier mentioned by Hispanic respondents (Figure 19). Twenty percent of the participants noted that it is not easy to obtain a medical appointment, especially with private physicians. The Institute of Medicine indicates that in a primary health care facility there must be sufficient capacity to care for acutely ill patients within 1-2 weekdays²¹ (NCPC 2003). However, only 37.5 percent of the Latinos respondents indicated `1 to 3 days` as their usual waiting time to get an appointment (Figure 20), and 27.5 percent of them reported a waiting time longer than one week, or in some circumstances even longer than two weeks. Although it represents a problem for all the community residents, excessive waiting time until the next available appointment is an even greater barrier for Hispanics, because of their common tendency to seek health care only when it is strictly necessary. When health treatments cannot be delayed any longer, even a one-day waiting time might represent a risk, and in these situations Hispanic patients must normally refer to the local emergency room.

²¹ For chronic/preventive care, the primary health facility should be able to give an appointment within 3 weeks (NCPC 2003).

The third most common accommodation barrier reported by Hispanics is the lack of convenient hours of operation (Figure 19). Ten percent of the Latino respondents in fact considered practice hours to be inconvenient, since they are normally limited to weekdays from 8 am to 5 pm. Usually, Hispanic workers do not have spare time due to their long daily working-hours, and tend to delay medical treatment because they cannot take time off work. Since at the present time no private doctors and no public health facilities provide in Toombs County evening and/or weekend hours of operation,²² in all those emergency situations in which medical help is required outside the usual working hours, the only place where Hispanics (and community residents) can find health care services is at the local emergency room.

To understand organizational barriers affecting Hispanics' access to health care we must include the extent to which local private physicians are willing to recruit new Hispanic patients. Generally, above all in rural areas, where they already have a great number of patients to deal with, private physicians are hesitant to accept those patients, like Latinos, whose accommodation is a time-consuming and costly process, since it involves specific requirements, as the presence of qualified interpreters and bilingual staff (Casey et al. 2004). In Georgia, physicians working in private practice are often concerned about uninsured and underserved patients and, in some communities, have organized coordinated approaches to providing charity care. For instance, in Emmanuel County there is a valuable example of a community rural health network in which private practitioners, the public health department, the community health center, and the school system have come together to develop a program for sharing the burden of providing

²² Only the community health centers located in Reidsville and Swainsboro offer hours of operation till 7 p.m., but these hours of operation are available just one day a week (on Mondays).

access to all the uninsured residents of their community. However, especially because of the growing influence of managed care plans, private health professionals typically cannot offer up-front discounted charges or sliding fees for the services they provide (NCPC 2003).

The medical professionals I interviewed reported that in Toombs County the overall number of physicians who provide charity care is decreasing, and local informants, like Andrea Cruz, co-founder and executive director of the Southeast Communities Project, explained why private doctors are usually hesitant to accept Hispanic clients: “Usually, private physicians accept to see Latino patients only if they [Hispanics] bring their own interpreters and pay in cash...otherwise, the doctors send the patients to the Health Department.” (Andrea Cruz, executive director of SGCP, interviewed by M. Vitale, Lyons, Tombs County, Georgia, May 2006).

Although some of them are actively involved in offering charitable care, normally private physicians tend to consider lack of insurance and communications problems as significant constraints. Local doctors are in fact uncertain that Latinos will be able to pay their medical bills, and usually agree to see them only when they prove somehow their ability to pay the medical bills, and provide their own interpreters. Medical professionals and informants underlined how the common practice to ask Latinos to provide their own interpreters might represent a dangerous misconduct able to seriously jeopardize the health of the patients, who might misunderstand their diagnoses and the medical treatments to follow. Health professionals have therefore emphasized the necessity to subsidize those physicians who are willing to provide sliding medical fees and hire

qualified interpreters, in order to improve the overall local offer of affordable care, and increase the safety of the Latino patients.

Acceptability: Socio-Cultural Barriers

Acceptability often refers to specific patients' reaction to health providers' personal attributes as age, sex, and ethnicity. In turn, health providers have attitudes about both the preferred personal attributes of patients and their financing mechanisms. For instance, providers may be unwilling to serve welfare clients (Medicaid / Medicare), or patients belonging to minority populations, and through accommodation they may select the patients they desire to serve (Penchansky and Thomas 1981). As a result, when seeking health services Latinos may receive different treatment by health care personnel, experience longer waits, and be denied services due to language barriers and lack of cultural understanding on the part of providers and their staff (Arroyo 2004).

Hispanic participants were asked to report whether they ever experienced being mistreated in a local health facility, and 32.3 percent of the respondents reported to have experienced at least one form of mistreatment while seeking health care (Figure 21). The most common mistreatment reported is 'negative staff attitudes' experienced mostly in public health facilities by nearly 18 percent of the Latino respondents. A Hispanic woman said: "It is like they [the doctors] were only serving me because they got paid to do it...and not because they wanted to work with people or even help someone." (Hispanic resident interviewed by M. Vitale, Tombs County, Georgia, May 2006).

In other circumstances, doctors and medical staff seem to be bothered and frustrated by their incapability to understand Hispanic patients, and Latinos complain that

physicians do not have enough patience with them. They would like to spend more time with doctors and nurses to better understand what illnesses they and their children have, how to correctly follow the prescriptions, and which behaviors to avoid. One Hispanic woman said: “They [doctors and nurses] do not have patience...they do not explain to us why and what we have to do.” (Hispanic resident interviewed by M. Vitale, Tombs County, Georgia, May 2006).

The second most common mistreatment is ‘longer waits’ reported by almost 12 percent of the Latino participants (Figure 21). As they lack English proficiency, sometimes Hispanics have in fact to wait longer in order to get the required help, and this extra-time is generally necessary to arrange an interpreter service. Finally, 2.9 percent of the Latino respondents reported to have been denied assistance in a local health facility.

In some circumstances, the Hispanics I interviewed considered these mistreatments as discriminatory behaviors explicitly related to their different national origin. A Latino woman said: “They [the doctors] do not treat us [Hispanics] in a fair way...it seems that what concerns us is not important...they first take care of the Whites, then of the Blacks, and only eventually of us.” (Hispanic resident interviewed by M. Vitale, Tombs County, Georgia, May 2006). Another Mexican woman stated: “Many times doctors and nurses had negative attitudes...they do not like Hispanic people.” (Hispanic resident interviewed by M. Vitale, Tombs County, Georgia, May 2006). Eventually, another Hispanic mother affirmed: “At the Hospital in Vidalia...they [the doctors] do not treat us [Hispanics] in a quick way...Americans and Blacks do not like Hispanic people...that’s very clear to me.” (Hispanic resident interviewed by M. Vitale, Tombs County, Georgia, May 2006).

Many studies show that health care providers may hold negative racial attitudes and stereotypes and that their clinical decisions might be influenced by patients' race and ethnicity. There is also considerable evidence that the care Hispanics receive may be affected by provider attitudes and behaviors. For instance, data from interviews with a nationally representative sample of U.S. adults revealed that 36 percent of Latinos, compared with 15 percent of whites, reported that they, a family member, or a friend had been treated unfairly by health professionals because of their race or ethnicity. In the same survey, 13 percent of Hispanics (compared with 1 percent of whites) reported personally experiencing unfair treatment (Kapur and Escarce 2006).

Generally, Hispanic immigrants in Georgia have not been the targets of violence and discrimination, and usually Latinos feel they are treated well. Possible explanations of this lack of hostility may be that many Georgians recognize the valuable economic contribution of Hispanic labor, or the fact that historically, in Georgia, residents have focused more on black-white race issues, considering Latinos not as important. In reality, it is more likely that the general 'welcoming attitude' reflects the fact that Hispanics still represent a small fraction of Georgia's total population²³. Therefore, despite the common warm reception, in those areas where the Hispanic community has reached a considerable size, there might be instances that reflect poor relations and tensions, and Latinos may perceive hostility from other ethnic groups or institutions (Atiles and Bohon 2002).

²³ Anthropological studies show in fact that sentiments of hostility toward newcomers become evident when the immigrant-group reaches a concentration of about 13 percent, and in Georgia Latinos still represent a much smaller percentage (around 6 percent) of the total state population (Atiles and Bohon 2002).

Local informants and medical professionals reported the existence of similar ethnic tensions in Toombs County, and explained that these tensions are mostly caused by the tendency to perceive Hispanics as a community that receives social and health services for free. White residents essentially complain that Hispanics do not pay taxes and do not contribute to the local economy, while African Americans are principally afraid of competing with Latinos for employment opportunities, and the already limited supply of community services and public health programs. Therefore, these concealed social tensions might assume a concrete discrimination form when Latinos interact with doctors and nurses, making Hispanics more likely than the rest of the population to be treated differently from other patients when accessing health care.

Another defined purpose of this study was investigating the importance of home remedies and folk medicine practices among the local Hispanic community, in order to understand to what extent traditional beliefs and health treatments represent a barrier to health care. Many studies in fact show that home remedies, over-the-counter (OTC) medications, and folk medicine practices are all potential access barriers, because the use of such therapies may delay or complicate conventional medical care (Glenn and Vega 1998).

The interviews conducted with Hispanic respondents, informants and medical professionals suggest that both home remedies and folk medicine practices are common phenomena among Latino residents, and that the usage of alternative treatments is often related not only to cultural beliefs but also to the high costs of medications and conventional health care. Since they cannot afford formal medical services, Hispanics in fact simply choose the cheapest remedies available, and those that are easier to find.

Twenty percent of the Hispanic participants indicated that they use ‘home remedies’ as their usual source of care (Figure 24). After the local emergency room, and the Health Department, ‘home remedies’ represent the third most common source of health care among Hispanic participants. Informants reported that Hispanics frequently self-medicate themselves by using salt, oil, lemon, eggs, tomatoes, and natural and traditional folk herbs (*hierbas*), which can be easily found in several local Mexican stores. Usually, these treatments are used to treat fever, cough, diarrhea, conjunctivitis, vomiting, and stomach pain. Latinos tend also to believe that penicillin is able to cure any kind of medical symptom, and informants revealed the existence of a lucrative local market for obtaining penicillin as an over-the-counter medicine.

One third (32.5 percent) of the Hispanics respondents reported to have experienced in the past at least one folk illness (Figure 22). Specifically, 15 percent of the participants experienced *empacho*, 12.5 percent of them *susto*, and 5 percent *mal ojo*. *Empacho* is considered an illness able to affect the gastrointestinal tract, in which usually food or saliva gets stuck inside the stomach because of a dietary indiscretion (like eating in excess or at the wrong time or eating the wrong food). Symptoms include diarrhea, vomiting, bloating, anorexia, fever, and chills. *Susto* is normally the result of a frightening experience that is supposed to cause the soul to leave the body, and symptoms might include apathy, anorexia, and insomnia. *Mal ojo* (evil eye) is experienced by children, and it happens when a person with ‘strong eyes’ looks at a child, causing symptoms like crying, diarrhea, fever, and vomiting (Glenn and Vega 1998)²⁴.

²⁴ Another common Latino folk illness is the ‘*Mollera Caida*’, or fallen fontanelle, which is believed to occur to children when the breast or bottle is removed too rapidly (Glenn and Vega 1998). However, none of the Hispanic respondents reported the occurrence of this illness.

In case of a folk illness, Hispanics clearly prefer to utilize traditional treatments rather than contacting a formal source of care (Figure 23). In fact, nearly half of all of the Hispanic respondents (46.1 percent) who were affected by a folk illness used home remedies as a medical treatment, 23 percent visited a *curandero*, and 15.3 percent asked relatives for advice. Only 15 percent decided to contact a private doctor or a pharmacist. *Curanderos* (healers) are individuals who are believed to be mediators between the patient and the spiritual realm. Many Hispanics in fact believe that spirits frequently interact with people and that the repercussions of these interactions can cause illnesses and diseases. However, in most cases, Hispanics refer to *curanderos* only when home remedies or consultation with relatives and friends do not bring relief (Neff 2002). Informants indicated the presence in the area of at least three *curanderos*, and described them as ‘normal persons’, who are regularly integrated in the rest of the community. Usually, they use prayers, muscle massages (defined as *Salvador*), bracelets, tokens, herbal and oil treatments in order to cure diverse medical symptoms, give health advice to pregnant women, and practice black magic. Local informants reported that *curanderos* might charge from \$10 up to \$50 for a normal medical treatment, and up to \$900 for carrying out a black magician spell on people.

In reality, Hispanics are usually hesitant to share information about home remedies, folk practices, and *curanderos* and a nurse manager employed at the County Health Department in Lyons, clearly explained the motivation:

Hispanics are usually reluctant to talk about these topics...they [Hispanics] know that these illnesses are not part of the U.S. culture...which is based on the use of the conventional medicine...and are consequently afraid of being judged and not accepted. (Nurse manager, interviewed by M.Vitale, Tombs County, Georgia, May 2006).

Therefore, these results represent an underestimation of the actual diffusion of alternative treatments among Latinos, and home remedies and folk practices are likely to be even more common than the interviews reported. Medical professionals and local informants have underlined how both traditional health treatments and *curanderos* might represent a serious danger for the health of many Hispanic patients, who instead of visiting a physician prefer curing themselves with inappropriate and only temporary remedies. Andrea Cruz, cofounder of the SEGCP, said: “Curanderos represent a great barrier...they are putting these people [Latinos] in danger...they pretend to be what they are not.” (Andrea Cruz, cofounder and executive director of the SGCP, interviewed by M. Vitale, Tombs County, Georgia, May 2006).

Nevertheless, local medical professionals believe that home remedies and folk practices only partially delay conventional health care. The medical professionals I interviewed consider in fact that informal medical contacts (*curanderos*, but also family members and friends) and the use of traditional therapies as primary sources of medical advice and treatment lead to fewer contacts with the conventional health system above among the oldest generations, but tend to decline the longer Hispanics reside in the U.S., get used to the U.S. culture, and improve their educational and economic status. Thus, home remedies and folk practices might be considered as significant access barriers mostly for recent migrants, the elders, the least educated, and those Hispanics coming from very low socio-economic backgrounds who are more likely to believe and rely in these ancient traditions.

Use of Existing Health Services

The health status of a population is influenced by both its social and economic conditions and the health care services it receives. Normally, researchers who study access to care distinguish between ‘potential accessibility’, which refers to all kinds of barriers to obtaining appropriate and timely health care, and ‘realized accessibility’, which describes the actual entry of a given population group to the health care delivery system (Kapur and Escarce 2006). For instance, common indicators of realized accessibility are hospitalization rates, and number of visits to the doctors.

Not having a usual source of care is a key barrier to health care access, since it significantly limits the quantity of health care actually received. Familiarity with a particular provider in fact makes patients more comfortable in seeking care, makes it easier to make appointments at convenient times, reduces uncertainty about costs, and serves as a link to more specialized types of care. However, there are different types of usual sources of care. Normally, public clinics, hospital outpatient departments, and emergency rooms are characterized by long waiting times, less satisfactory patient-physician relationships, and less continuity of care, while private physicians are considered as the most appropriate settings for primary care, since they foster continuity of care and facilitate preventive care. Unfortunately, Hispanics are less likely than non-Hispanics Whites to have a usual source of care, and are more likely than whites to rely on community or public clinics or hospital outpatient departments rather than physicians’ offices as their usual source of care (Kapur and Escarce 2006).

Resembling national trends, in Toombs County cost and lack of health insurance prevent Hispanics from seeking medical care in private practices. Latinos are therefore

more likely to rely on public health facilities and use informal methods of care (such as home remedies and over-the-counter medicines) rather than visiting a private doctor. Only 10 percent of the Hispanic respondents (Figure 24) consider a private doctor as their usual source of care, while 20 percent of them usually use home remedies as their first health treatment. As expected, Latinos are more likely to contact those health care facilities where it is easier to obtain low-cost health services. Nearly one-third of the Hispanic respondents (32.5 percent) indicated the local emergency room to be their usual source of care (Figure 24), while 27.5 percent of them normally refer to the county health department or the East Georgia Healthcare Centers²⁵. In all these facilities, the services provided have a cost but are never denied based on incapability to pay.

At the Meadows Regional Medical Center Hospital in Vidalia, documented Hispanics can also apply for Indigent Care Trust Funds, a program aimed at expanding Medicaid eligibility and services to all uninsured and indigent Georgians. Hospitals that deal with a ‘disproportionate’ number of Medicaid and other indigent patients qualify in fact to receive federal Disproportionate Share Hospital (DSH) payments through the Medicaid program, based on the hospitals’ estimated uncompensated cost of care for the uninsured²⁶ (NCPC 2003). The East Georgia Healthcare Center in Swainsboro and its satellite clinics (located in Reidsville and Soperton) are instead community primary care organizations that offer sliding scale medical fee plans. Those patients who qualify under

²⁵ Figure 24 shows that private doctors are the least common source of care for the Latino respondents, and that after the emergency room, the health department, and home remedies, the local Stanley Clinic (located in Lyons) is the most common source of care. This health facility is a rural primary care clinic funded by the hospital in Vidalia.

²⁶ The Indigent Care Trust Fund represents the largest component of DSH payments distributed through to Georgia Medicaid to DSH hospitals. The ICTF has three goals: expand medical eligibility and services, support rural providers (mostly hospitals) that serve the medically indigent, and fund primary health care programs for medically indigent Georgians (NCPC 2003).

this program pay a very small co-payment for office visits and services, and may also receive their medications at no cost or at a discount. To apply, patients are usually asked to bring proof of one month's income and expenses, along with their most recent tax return. However, exceptions might be made for those Hispanics unable to present physical proofs of their income and taxes. Usually, in Georgia, community health centers charge a minimal fee to patients with incomes below poverty levels and provide 75 percent, 50 percent, and 25 percent discounts off of usual charges to patients with incomes of up to 125 percent, 150 percent, and 200 percent of the federal poverty level (NCPC 2003). According to the Georgia Association for Primary Health Care, in 2001 the East Georgia Healthcare Center provided 7,859 medical visits, and 54.4 percent of them were directed at uninsured patients (NCPC 2003).

Access barriers to health care faced by Hispanics result in lower use of conventional health services. Many studies have found that Latinos are much less likely than whites to have a physician visit during the year and have fewer visits on average. In general, physician visit rates are lower among Mexicans, Latinos who lack of English proficiency, and those who are undocumented and less acculturated. Time since arrival in the United States also plays a role, and Hispanics who have been in U.S. less than five years have lower rates of ambulatory visits (Kapur and Escarce 2006). Hispanics are also less likely than non-Hispanic whites to receive recommended preventive services and, although the gap between Latinos and whites has narrowed in recent years, Hispanics are still less likely than the general population to receive selected immunizations and screening tests for certain cancers (Kapur and Escarce 2006).

Again following nationwide patterns, in Toombs County the complex combination of diverse access barriers induces Hispanics to seek formal health care only when they are extremely sick, and cannot delay seeking care any longer. Typically, Hispanics tend to procrastinate and delay health treatment, and seeking health care only when their conditions become more acute and severe.

Therefore, Latinos are less likely to receive preventive care and appropriate acute and chronic disease management. As a result, non-emergency care and continuity of care for Latino adults with chronic diseases are problematic issues that need a quick and appropriate response. When asked about the last time they received any kind of health service (Figure 27), the majority of the Hispanic respondents (55 percent) said they sought health care mostly in urgent situations, such as the treatment of illnesses or injuries, and those respondents who described in more detail the causes of their injuries reported having been injured at their work places²⁷. In contrast, only 15 percent of participants received health care as part of a regular check-up.

Primary services and preventive care are underutilized above all among the Hispanic male population, since pregnancy and motherhood normally push women to contact the local health care system more frequently than men. Hispanic mothers are usually in charge of maintaining the home and caring for the education and health of their children, and this traditional role naturally implies a closer relationship with doctors and other health professionals. A Mexican mother said: “I almost never go to the doctor for

²⁷ While at the national level the first leading cause of death for Latinos is heart disease, in Georgia the leading cause of death is ‘unintentional injuries’. Work-related accidents and skins rashes are a major health concern, above all for those farm workers exposed to harmful chemicals and pesticides (Arroyo and Hernandez 2005).

myself...If I go...it is only when my children are sick.” (Hispanic resident interviewed by M. Vitale, Tombs County, Georgia, May 2006).

Therefore, the prevalent female composition of the sample surveyed helps to explain why 42.5 percent of the Hispanic respondents received health care in the last six months (Figure 31), a result at least partially unexpected. In reality, of those Latinos who sought health care in the past six months, only one was a male (representing just 2.5 percent of the total participants), and near one-third (30.7 percent) of the Hispanic male respondents never received health care since they reside in Toombs County, compared to only 7.4 percent of all the Hispanic women (Figure 32). Accordingly, Hispanic men are also less likely than women to receive preventive care services and visit a private doctor. 53.8 percent of the male respondents never had a general physical check-up, compared to 14.8 percent of the Latinas (Figure 30), and during the past year 84.6 percent of the male respondents did not contact a private physician, compared to 51.8 percent of the female participants (Figure 26).

Although gender differences are relevant, the interviews conducted have documented the overall tendency of Latinos to employ their limited financial resources only for those circumstances where seeking health care is inevitable, and the consequent inclination to consider preventive services, such as regular check-ups, as additional and unnecessary costs. This may partially be the result of a cultural inaptitude to use preventive health care and the lack of familiarity with the American health system, but is mostly related to Hispanics' economic status. One Hispanic woman clearly described this behavior: “Since going to the doctor is so expensive...most of the times we [my husband and I] try to resist...and we take something...like pills.” (Hispanic resident interviewed

by M. Vitale, Tombs County, Georgia, May 2006). As a consequence, both medical professionals and informants pointed out how health treatment procrastination and lack of preventive care significantly contribute to the prevalence of chronic health problems among the local Hispanic community, such as diabetes, obesity, and heart diseases.

Solutions Proposed by Hispanics and Medical Professionals

The ultimate goal of this research study was to obtain useful feedback from medical professionals, local informants, and Hispanic participants living and working in Toombs County, in order to better comprehend the specific needs of the Latino population, and how the county health system could address these specific requirements.

Hispanic respondents were asked to identify their biggest perceived difficulties while seeking health care services and indicate what could be done to improve Latinos' access to care. At the same time, both local health professionals and informants identified a series of recommendations that the local health care system could adopt to overcome access barriers and improve the overall health status of the Hispanic population.

Clearly, Hispanics consider language and communication issues as the primary barrier to accessing health care. Forty percent of the Latino participants in fact (Figure 33) considered their limited English proficiency the most relevant obstacle when accessing health services, and believed that the difficulty of communicating with doctors and other health personnel is the most serious challenge to receive health care. To overcome their limited English proficiency and the difficulty of communicating with health care staff, many respondents (27.5 percent) recommended hiring a greater number of medical interpreters and bilingual professionals or more Latino doctors and nurses

(Figure 34), while 10 percent of the participants proposed the realization of a ‘Latino Health Clinic’, intended as a facility that should employ only Hispanic personnel and provide health services exclusively to Latino patients.

As well all the health professionals I interviewed have highlighted the absolute necessity to increase the number of full-time qualified and trained interpreters in both public and private facilities. Above all the local hospital and private physicians should hire a greater number of qualified medical interpreters and bilingual staff, in order to improve the safety of Hispanic patients, facilitate their recruitment, and reduce language barriers. Currently, there are no specific programs aimed at training qualified medical interpreters in Toombs County, and those local health facilities that hired qualified medical interpreters in the past have referred to specific programs existing in other Georgia counties or even in other states. For that reason, medical professionals highlighted the need of training programs offered at the county level, which should appropriately prepare qualified medical interpreters who might be hired by local physicians and public health facilities. In particular, hiring bilingual mental health physicians represents a vital priority, since at the present time no bilingual mental health doctors practice in Toombs County. Psychiatrists and psychologists able to speak in Spanish are in fact absolutely required in order to address those mental health issues that most affect the local Hispanic community, such as alcohol and drug abuse, domestic violence, juvenile delinquency, stress, anxiety, and depression.

Besides language and communication issues, the access barriers most often cited by Hispanic respondents (Figure 33) are the high cost of the services provided (27.5 percent) and the lack of health insurance (15 percent). Accordingly, 20 percent of the

participants claimed for some kind of economic support for paying health care or the provision of cheaper health services (Figure 34), while another 20 percent of the Hispanic respondents asked for an easier process to obtain Medicaid or the availability of affordable private health insurance plans.

Medical professionals defined the provision of affordable care as a key point and underlined that Hispanic patients are willing to pay, but for affordable health services. They strongly argued for the necessity to increase the availability of federal and state financial resources, in order to support the implementation of several grant programs aimed at enhancing the overall provision of affordable primary care services. Particular attention should be paid to the provision of low-cost services for prenatal care and chronic diseases. Prenatal care, preventive care related to women's health (such as breast cancer examinations), and chronic diseases care (such as diabetes, heart diseases, cancer, leukemia) are in fact the medical areas of most need to provide low-cost services regardless the immigration status of the Hispanic patients. To increase the supply of affordable basic care, health professionals proposed also to shift toward a county health department policy more focused on the provision of primary services. In effect, at the present time, the major political focus of the local health department is preventive care, which also includes natural disasters relief and terrorist attack prevention. Finally, to achieve coordination of services and increase the amount of affordable care, additional funding might be utilized to encourage and support those primary care physicians willing to provide discounted health services to Hispanic clients. Specifically, private doctors could be subsidized by receiving a fixed quote as a partial reimbursement for the provision of low-cost medical services based on family income.

The other barriers mentioned by Latino respondents refer to accessibility issues (Figure 33), such as the limited availability of time (12.5 percent), the excessive geographic distance of the health facilities (2.5 percent), and the long waits required for getting an appointment (2.5 percent). In order to address accessibility barriers, medical professionals urged establishment of a community health center located in Toombs County, which would avoid community residents driving to surrounding counties. To be accessible to Hispanic patients, this health care facility should provide: 1) an adequate number of Latino physicians and nurses, 2) sliding scale medical payment plans and discount medications, as programs explicitly directed to uninsured and low-income Hispanic clients, 3) convenient clinic hours, such as evening and/or weekend hours, and 4) emergency low-cost dial-a-ride services, for those Latinos who do not have access to private means of transportation. Time and transportation barriers could be overcome also by the implementation of mobile primary care units (on-site clinics) that follow the principle of going where the Hispanics are. Nurses and medical professionals could visit farm and plant-workers directly in their work-places (such as, fields and poultry processing plants), and providing them basic health services.

Medical professionals defined education as the key tool able to prevent almost every health issue that most affects local Hispanics' conditions. Additional education programs are therefore required as effective preventive tools able to increase Hispanics' awareness concerning their major health concerns. In particular, further education programs are required to address diabetes, obesity, prenatal care, pregnancy outcome, women's health, tuberculosis, HIV/AIDS, sexually transmitted diseases, cancer prevention and exams, high blood pressure, work safety, pesticide safety, domestic

violence, family planning, drug and alcohol abuse, healthy life style, stress, anxiety and depression. As well specific educational programs for Latino parents (Parents Information Centers) are required to inform them how to better understand their children's behaviors and prevent domestic child abuse, teenage pregnancy, obesity, juvenile delinquency, and juvenile drug and alcohol abuse.

Informants and medical professionals drew also attention to the relevancy of domestic violence and alcoholism among the local Hispanic community. In their opinion, these two significant Latino health issues need extra consideration and a more appropriate response of the local health system. In particular, it is necessary to establish a detoxification center able to better treat the large number of local patients affected by alcohol and drug abuse, and augment the number of social and family services able to serve abused Hispanic women.

Finally, medical professionals and local informants expressed great concern regarding the imminent implementation of the Georgia Security and Immigration Compliance Act²⁸. This comprehensive immigration reform requires public employers, contractors, and subcontractors to verify the immigration status of all employees and prove that they are legally able to work in the US. Immigrants have to prove their legal status before getting a job or receiving public assistance. All adults receiving non-emergency health care and other state funded services will be required to verify their eligibility to receive those services. However, no one will be denied emergency health assistance. The law will be active in July 2007. In contrast to the provisions of this law, informants and health personnel I interviewed believe that social and health programs

²⁸ The law (Senate Bill 529) was approved by the Georgia State Senate on March 2006.

should be available to all local residents, regardless of their ethnicity or immigrant status, and are extremely concerned about those undocumented residents for whom it will be even harder to obtain public health care.

Considered as a whole, the recommendations proposed by local medical professionals intend to create a comprehensive strategy based on the cooperation of local public health facilities and private physicians and aimed at substantially increasing the available amount of affordable services for the Latino community. However, alternative and innovative solutions should be continually negotiated among different social actors, ethnic groups, and institutions. Due to the complex nature of the phenomenon, in some circumstances these new approaches might in fact destabilize established local power relationships and even contribute to deteriorate existing ethnic tensions. For instance, an increased provision of public primary care might be perceived as a threat by private physicians, who may be afraid of losing part of their clients, while the realization of a Latino health clinic could encourage the development of a greater sense of discrimination among other minorities, especially among African Americans.

Although fears of competition between private doctors and public facilities represent a potential issue, in rural communities public and private health providers should work in coordination to make primary and preventive care services available to all patients. In order to face the needs brought by Latino immigrants, new health delivery strategies are required as programs that explicitly target uninsured and underserved patients. Therefore, the development of community rural health networks based on an on-going collaboration between public and private health providers could be able to insure coordination of care and, above all, increase the amount of affordable services by

providing subsidized fee scale payments based on family income (NCPC 2003). More in general, as indicated by the health professionals interviewed in Toombs County, policy makers should evaluate access to affordable health care, and reexamine the existing health programs, in order to make them more inclusive of all people, regardless of ethnicity or immigrant status (Atilas and Bohon 2002).

CHAPTER V. CONCLUSIONS

Although until now Hispanic immigration has been mostly an urban phenomenon, Latinos are no longer concentrated in “traditional” cities and states, like Los Angeles, Florida, and Texas, and the rural Latino population is rapidly increasing in number throughout many regions of the nation, mostly in the Southern and Midwestern states (Kandel 2005). As Hispanics relocate to the rural South, not only have they progressively changed rural areas and towns previously not having a significant Latino presence, but they also have challenged local infrastructures and institutions that had not planned to deal with a large number of Latino newcomers (Arroyo 2004).

Toombs County perfectly represents the case of a southern rural area that was unprepared to deal with a culturally different and fast growing minority population. Although the Hispanic immigration began about 20 years ago, the local health system and the county as a whole have not yet fully adapted to the peculiar health and social needs brought by Latino newcomers. Nowadays greater cultural sensitivity exists as does greater acceptance of the Latino community. The Southeast Georgia Communities Project (SGCP) and other community organizations have contributed to build valuable social networks among Hispanic residents, service providers, and local citizens and institutions.

There is also an overall better understanding of Latinos` cultural and health needs. Local health facilities and medical professionals make a great effort to facilitate the recruitment of new Hispanic patients, and are beginning to provide bilingual staff and trained interpreters.

Nevertheless, in Toombs County, Hispanics continue to experience social hostility, critical economic circumstances, job insecurity, hazardous working conditions, lack of health insurance, limited transportation, and uncertain immigration status. Structural deficiencies of the local health system, such as the large number of uninsured residents, the shortage of primary physicians, and the limited availability of financial resources, constantly challenge the local health system. Much still needs to be done to assure Latinos an adequate level of bilingual professionals, affordable and accessible services, and preventive care. As a result, Latinos` active involvement in the community and potential positive contribution to the local economy is undermined.

The rural South`s booming economy will continue to attract Hispanics looking for economic opportunities, and Latinos will increasingly play a significant role in shaping the economic stability and development of the southern states. However, in order to actively contribute to the economic prosperity of the rural South, Hispanics must acquire additional social and human capital (Torres 2000). One considerable way to enhance Hispanics` social and human capital is delivering health services, and therefore innovative and more effective strategies for delivering care to Latinos are required.

Improving the health status of Latinos, their access to medical care, and their insurance coverage are major national concerns, since socioeconomic and racial-ethnic disparities in health are large, persistent, and even increasing in the United States (House

2001). The most vulnerable and socially disadvantaged people have less access to health resources, and inadequate use of health care (especially preventive services) is normally considered as a primary cause of relatively poor health among individuals in lower socioeconomic groups (Wilkinson and Marmot 2003). Pronounced disparities in health status reflect inequalities on many broader social and economic indicators. Poverty, education, employment status, working conditions, access to health services, availability of safe and affordable housing, transportation, social networks, community cohesion, and social segregation are all important lifelong determinants of physical health and longevity that public health policies should promptly recognize and address (Wilkinson and Marmot 2003). The massive Hispanic demographic influx not only will transform the country's ethnic composition and its national identity, but will also challenge the ability of impacted regions to meet the need for and delivery of services for a fast growing and complex Latino community (Torres 2000). The proper allocation of the human and financial resources required to facilitate Latinos' integration, support their positive contribution to the economy, and improve their overall health status will represent one of the major challenges that policy makers and institutions will face at the local, state, and national level.

REFERENCES

- Arroyo L. 2004. "The Health of Latino Communities in the South: Challenges and Opportunities." National Council of La Raza (NCLR) Report. Atlanta, Georgia.
- Arroyo L. and N. Hernandez. 2005. "Latinos in Georgia: A Closer Look." National Council of La Raza (NCLR) Statistical Brief no.7. Atlanta, Georgia.
- Atilas, J.H. and S.A. Bohon. 2002. "The Needs of Georgia's New Latinos: A Policy Agenda for the Decade Ahead." Public Policy Research Series. Carl Vinson Institute of Government, University of Georgia, Athens, Georgia.
- Blumenthal, D., E. Mort, and J. Edwards. 1995. "The Efficacy of Primary Care for Vulnerable Population Groups." *Health Service Research* 30 (1):253-273.
- Carrillo, J.E., F.M. Treviño, J. R. Betancourt, and A. Coustasse. 2001. "The Role of Insurance, Managed Care, and Institutional Barriers." Pp. 55-73 in *Health Issues in the Latino Community*, edited by M. Aguirre-Molina, C. W. Molina, and R. E. Zambrana. San Francisco, CA: Jossey Bass Publishers.

- Casey, M. M., L. A. Blewett, and K. T. Call. 2004. "Providing Health Care to Latino Immigrants: Community-Based Efforts in the Rural Midwest." *American Journal of Public Health* 94(10):1709-1711.
- Cromley, E. and S. McLafferty. 2002. *GIS and Public Health*. New York: Guilford Press.
- Documét, P. I. and R. K. Sharma. 2004. "Latinos` Health Care Access: Financial and Cultural Barriers." *Journal of Immigrant Health* 6(1):5-13.
- Edelman, M. and Menz B. 1996. "Selected Comparisons and Implications of a National Rural and Urban Survey on Health Care Access, Demographics, and Policy Issues." *Journal of Rural Health* 12(3):197-205.
- Escarce, J.J., L.S. Morales, and R.G. Rumbaut. 2006. "The Health Status and Health Behaviors of Hispanics." Pp. 362-409 in *Hispanics and the Future of America*, edited by M. Tienda and F. Mitchell. Washington, D.C.: the National Academic Press.
- Fisher, M.J. and M. Tienda. 2006. "Redrawing Spatial Color Lines: Hispanic Metropolitan Dispersal, Segregation, and Economic Opportunity." Pp. 100-37 in *Hispanics and the Future of America*, edited by M. Tienda and F. Mitchell. Washington, D.C.: the National Academic Press.

- Glenn, F. and L. R. Vega. 1998. "Barriers to Health Care Access for Latino Children: A Review." *Family Medicine* 30 (3):196-205.
- Guagliardo, M.F. 2004. "Spatial Accessibility of Primary Care: Concept, Methods and Challenges." *International Journal of Health Geographics* 3:3. Published February 26, 2004 (<http://www.ij-healthgeographics.com/content/3/1/3>).
- House, J.S. 2001. "Relating Social Inequalities in Health and Income." *Journal of Health Politics, Policy and Law* 26(3): 523-532.
- Kandel, W. 2005. "Rural Hispanics at a Glance." United States Department of Agriculture (USDA), Economic Research Service (ERS), Economic Information Bulletin Number 8.
- Kapur K. and J.J. Escarce. 2006. "Access to and Quality of Health Care." Pp. 410-46 in *Hispanics and the Future of America*, edited by M. Tienda and F. Mitchell. Washington, D.C.: the National Academic Press.
- Marotta Sylvia A. and J.G. Garcia. 2003. "Latinos in the United States in 2000." *Hispanic Journal of Behavioral Sciences* 25(1): 13-34.
- McLafferty, S. 2003. "GIS and Health Care." *Annual Review Public Health* 24:25-42.

- National Center for Primary Care (NCPC). 2003. "Georgia's Health Safety Net. Access to Primary Care for Georgia's Uninsured and Underserved." Morehouse School of Medicine. Atlanta, Georgia.
- Neff, N. 2002. Folk Medicine in Hispanics in the Southwestern United States. [Online], Available: <http://www.rice.edu/projects/HispanicHealth/Courses/mod7/mod7.html>
- Penchansky R. and J.W. Thomas. 1981. "The Concept of Access: Definition and Relationship to Consumer Satisfaction." *Medical Care* 19(2):127-140.
- Rakesh, K., R. Suro, and S. Tafoya. 2005. "The New Latino South: The Context and Consequences of Rapid Population Growth." Washington, D.C: Pew Hispanic Center (PEW) Report.
- Ramirez, R. and G.P. de la Cruz. The Hispanic Population in the United States: March 2002, Current Population Reports, P20-545. Washington, D.C.: U.S. Census Bureau.
- Raffel, M. W. and N. K. Raffel. 1994. *The U.S. Health System: Origins and Functions*. Albany, N.Y.: Delmar Publishers.
- Ricketts T.C. 2000. "The Changing Nature of Rural Health Care." *Annual Review Public Health* 21:639-57.

Salsberg, E. and Gaetano J. Forte. 2002. "Trends in the Physicians Workforce, 1980-2000."
Health Affairs 21(5):165-173.

Suro, R. 2005. "Hispanic Trends: A People in Motion." Washington, D.C.: Pew Hispanic
Center (PEW) Report.

Torres, C.C. 2000. "Emerging Latino Communities: A New Challenge for the Rural South."
Policy Brief No. 12. Mississippi State, MS: Southern Rural Development Center.
August 2000.

Torres, C.C. 2004. "Health of Rural Latinos." Pp. 155-67 in *Critical Issues in Rural Health*,
edited by N. Glasgow, L. Wright Morton, N. E. Johnson. Ames, Iowa: Blackwell
Pub.

U.S. Census Bureau. 2000. Summary files, 1, 2, 3. Washington, D.C: U.S. Department of
Commerce.

U.S. Census Bureau. 2003. American Community Survey. Washington, D.C: U.S.
Department of Commerce.

U.S. Census Bureau. 2004. American Community Survey. Washington, D.C: U.S.
Department of Commerce.

Ward, L.S. and A. S. Atav. 2004. "Migrant Farmworkers." Pp. 169-81 in *Critical Issues in Rural Health*, edited by N. Glasgow, L. Wright Morton, N. E. Johnson. Ames, Iowa: Blackwell Pub.

Wilkinson, R. and M. Marmot. 2003. *Social Determinants of Health: The Solid Facts*. World Health Organization (WHO), Regional Office for Europe, Copenhagen, Denmark.

Williams, D. R., and T. D. Rucker. 2001. "Understanding and Addressing Racial Disparities in Health Care." *Health Care Financing Review* 21 (4): 75-90.

APPENDIX A

FIGURES

Figure 1. Percent of Hispanic Population in Georgia by County, 2000

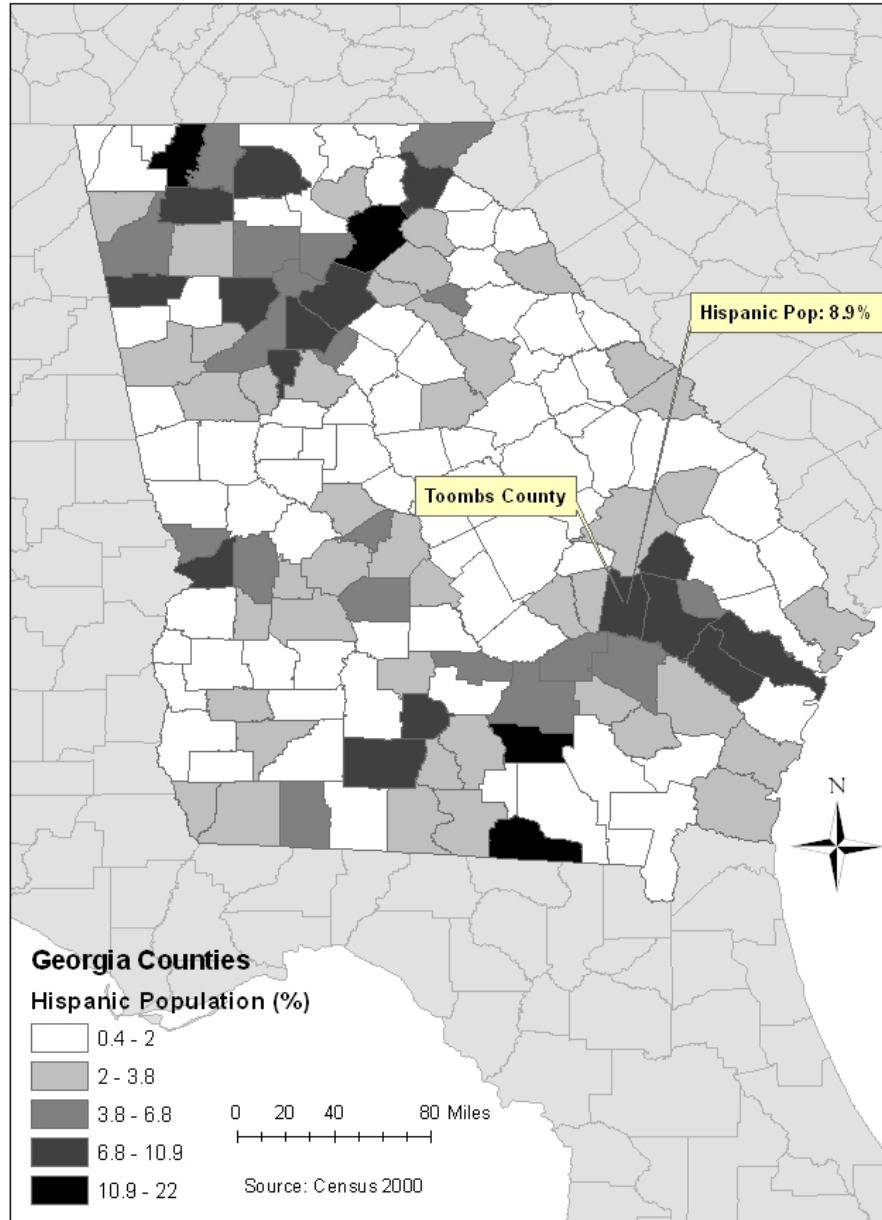


Figure 2. The Southeast Georgia Health District

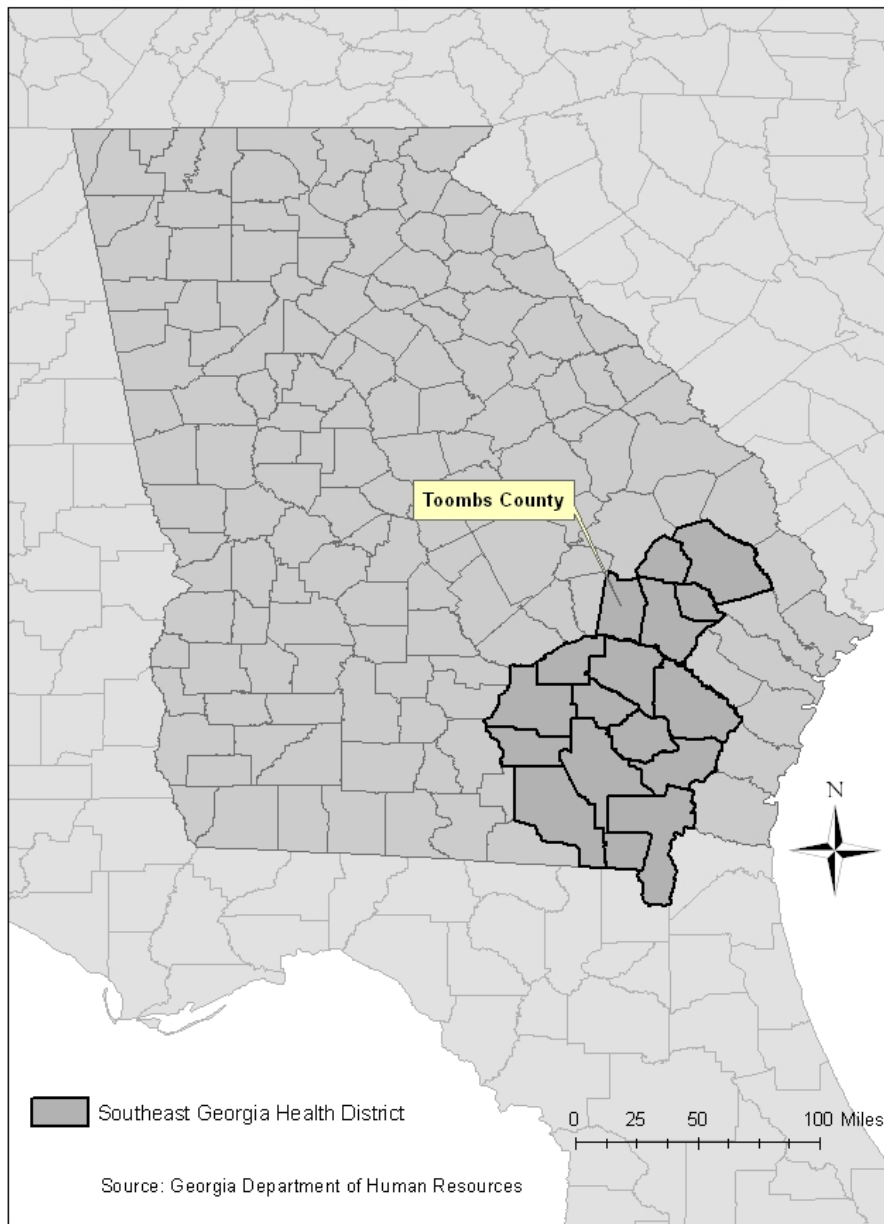


Figure 3. Counties With a Public Transportation System in the Southeast Georgia Health District

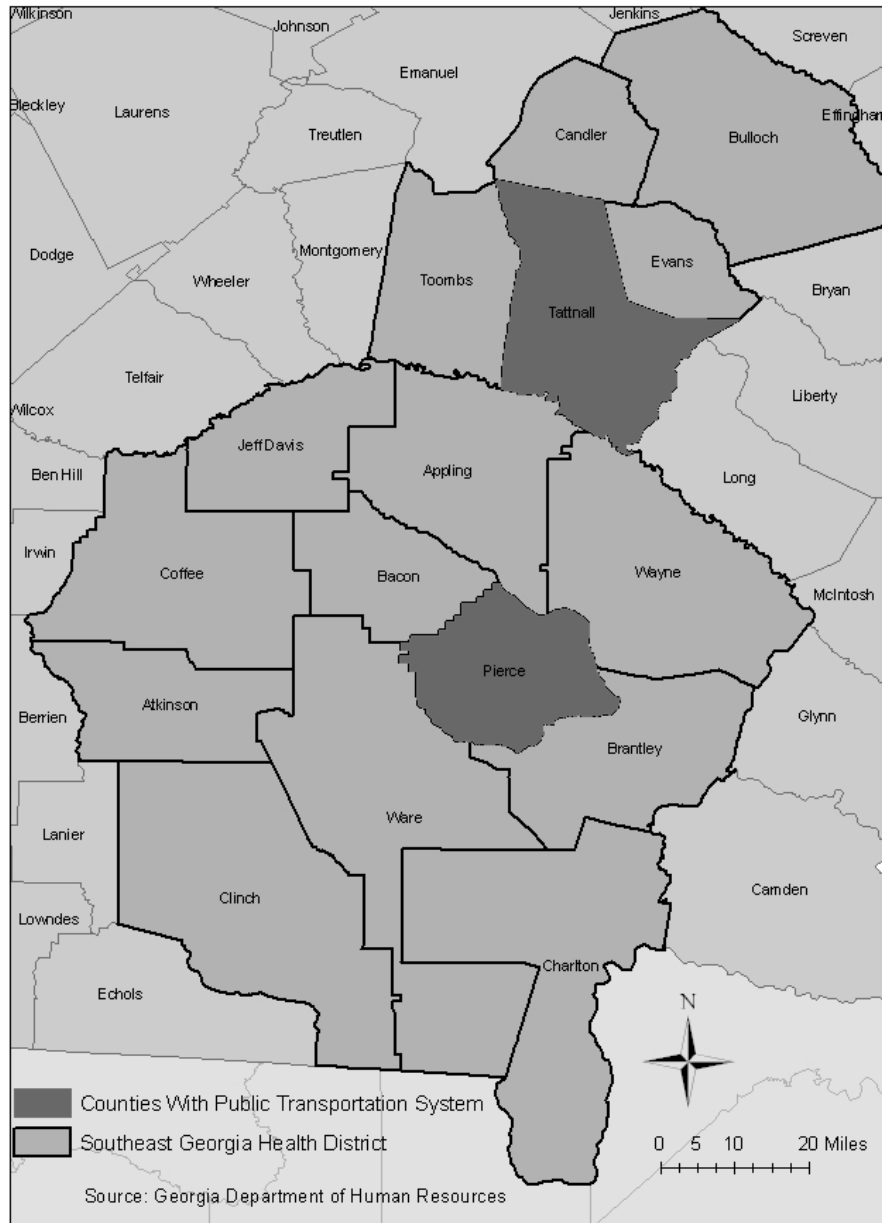
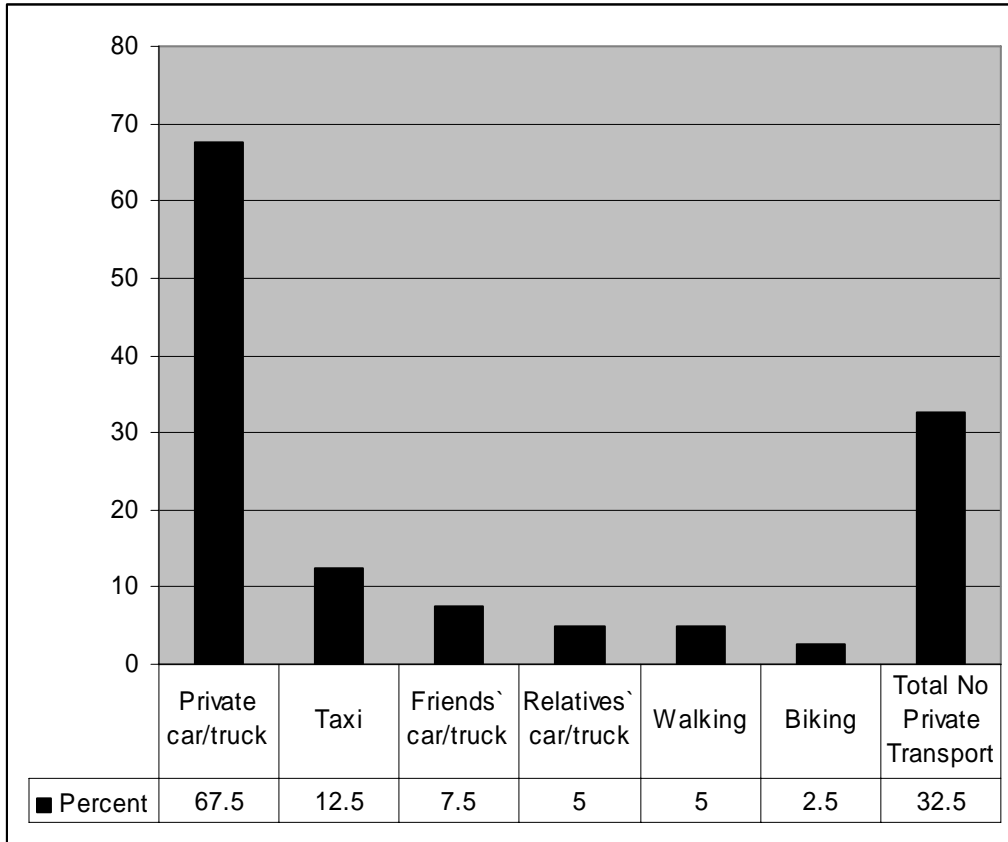


Figure 4. Mode of Transportation of Hispanic Respondents to Reach Their Usual Sources of Care



Source: Primary Data.

Figure 5. Hispanic Population in Tombs County, GA by Census Block, 2000

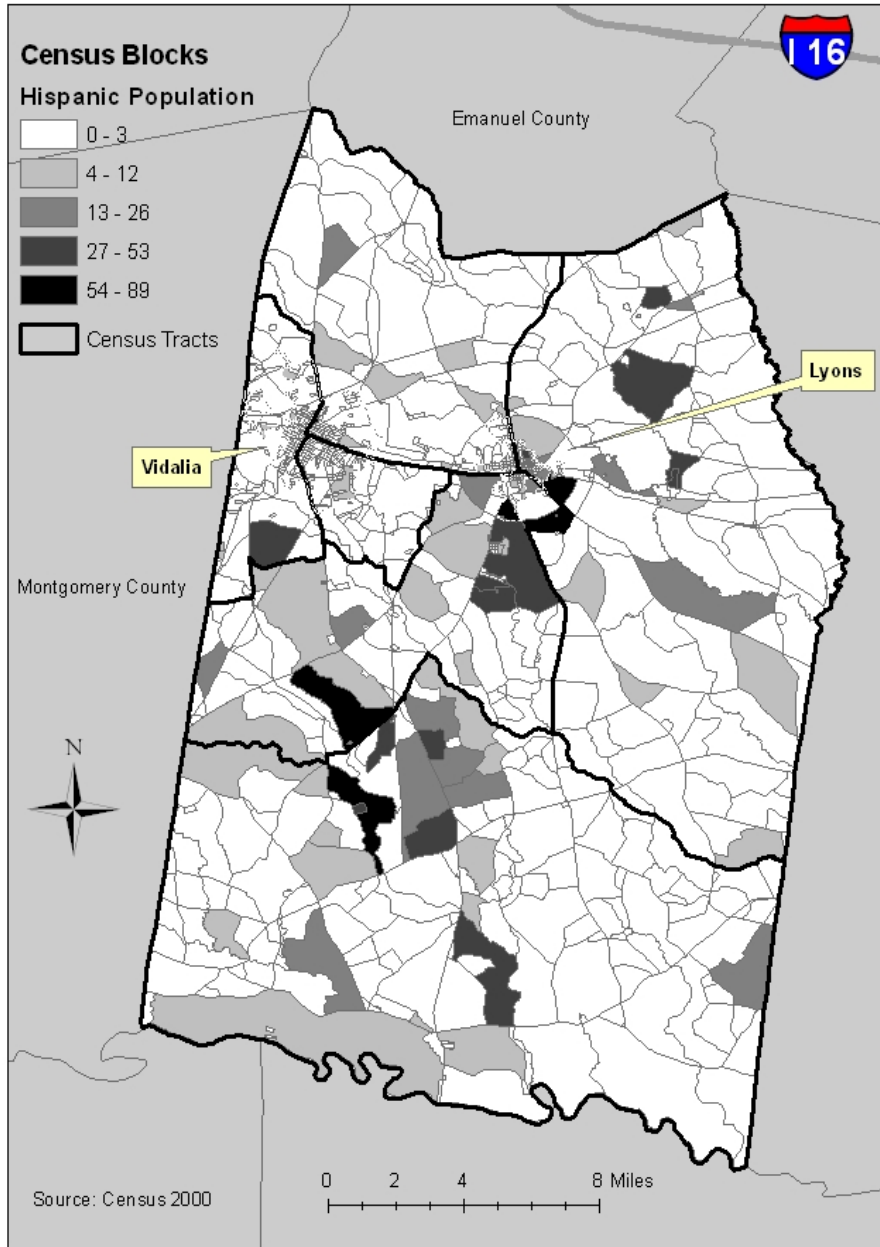


Figure 6. Hispanic Population in Tombs County, GA by Census Tract, 2000

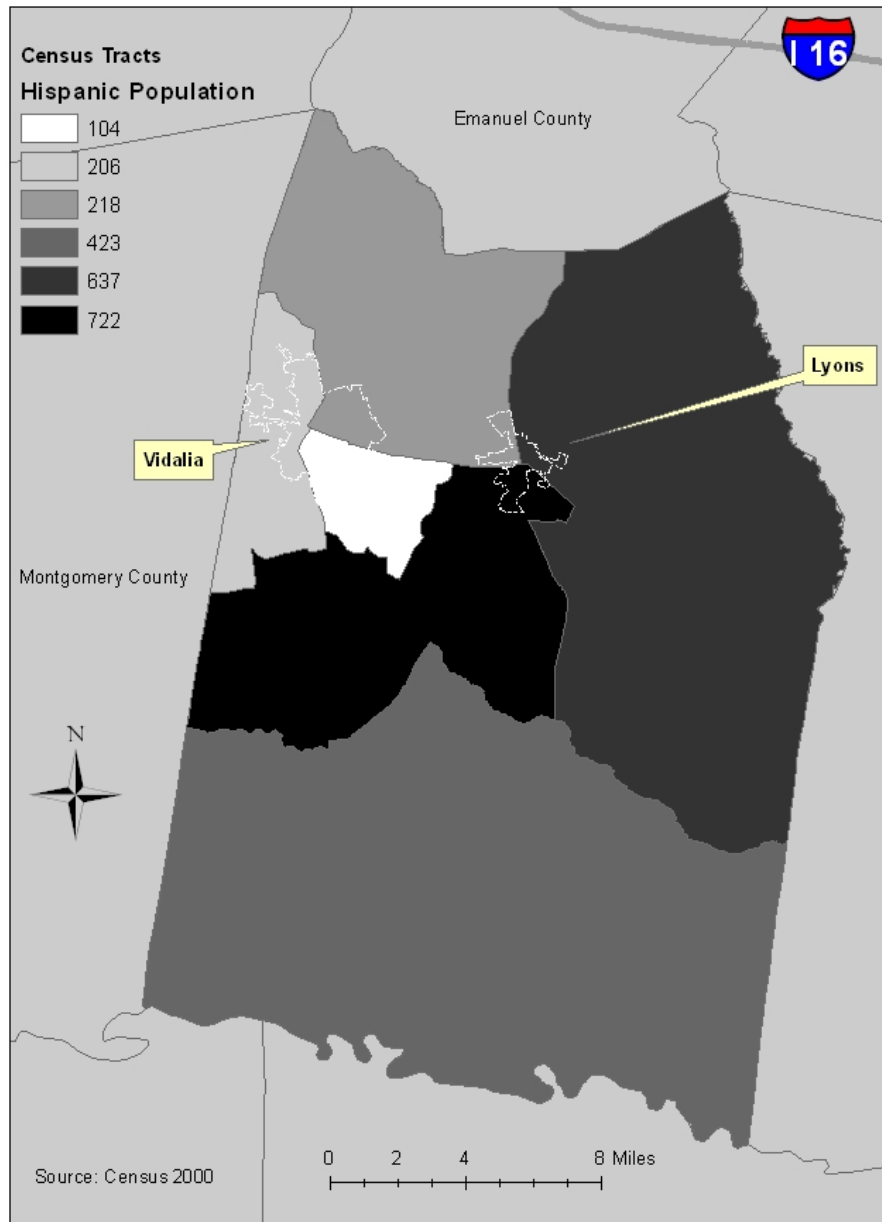
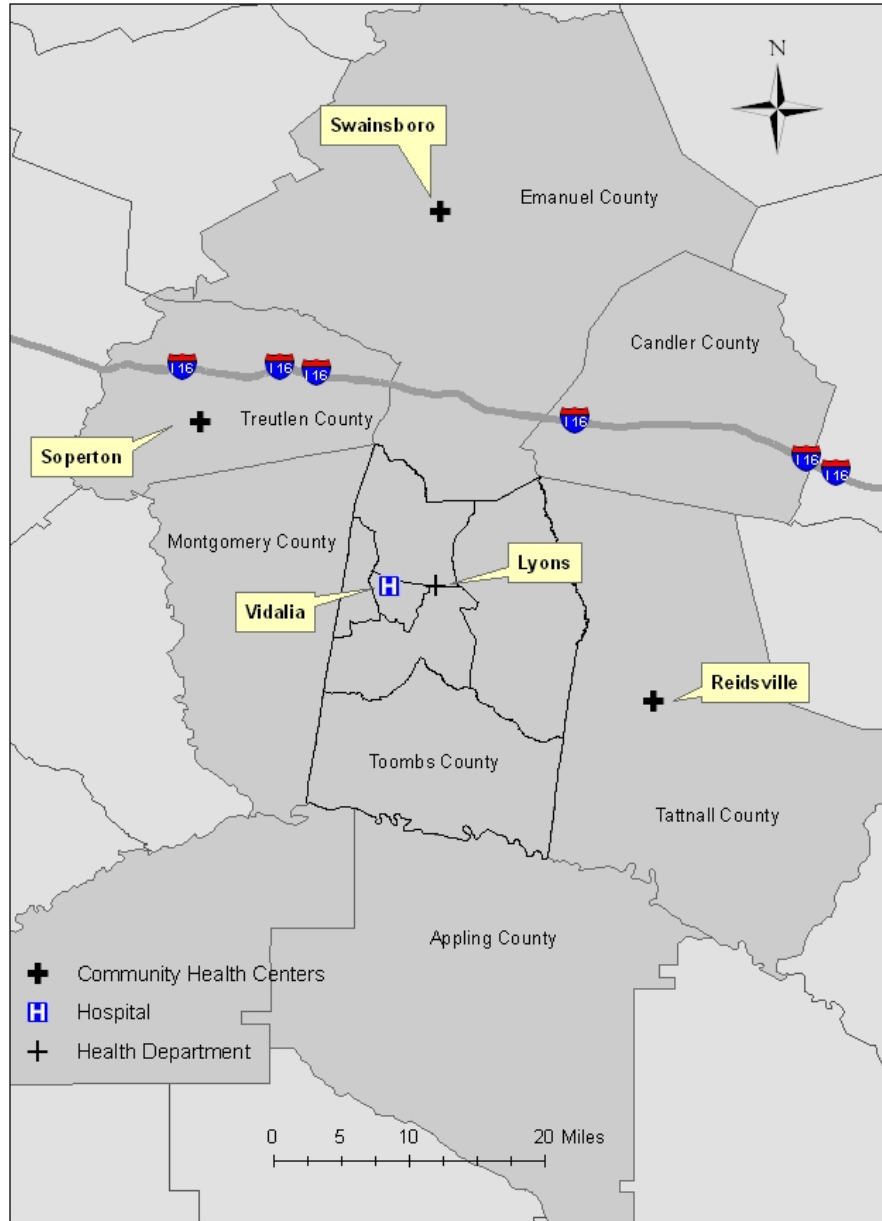
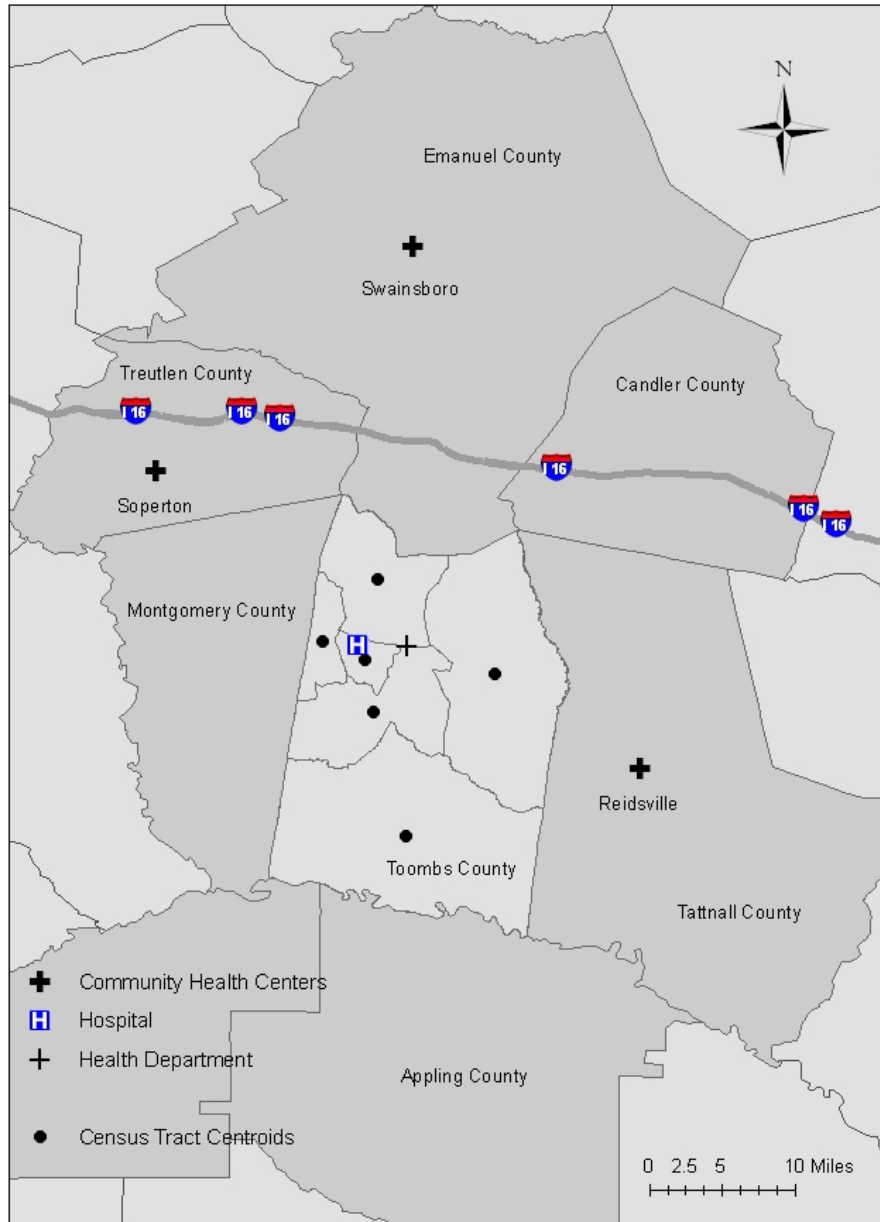


Figure 7. Hispanics` Most Utilized Health Care Facilities in the Area



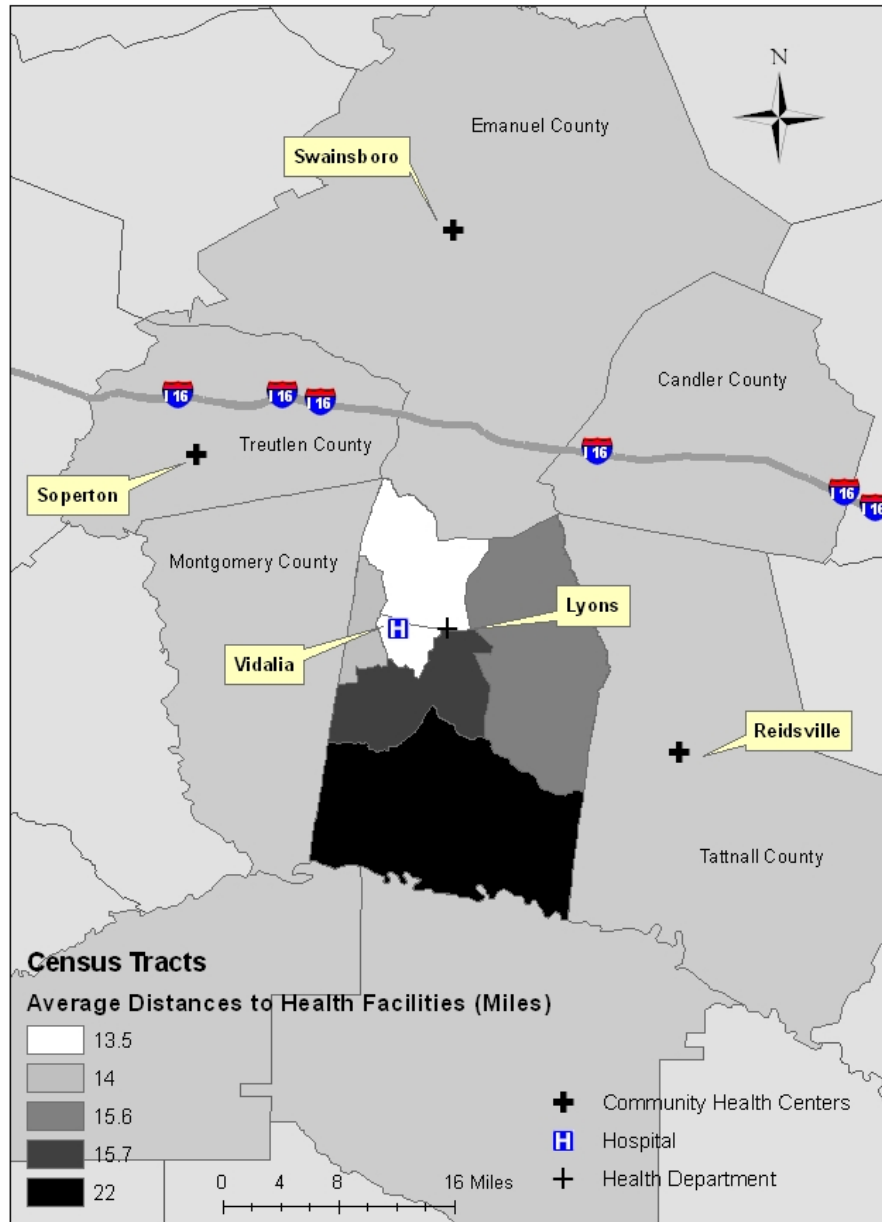
Source: Primary Data.

Figure 8. Toombs County Census Tract Centroids



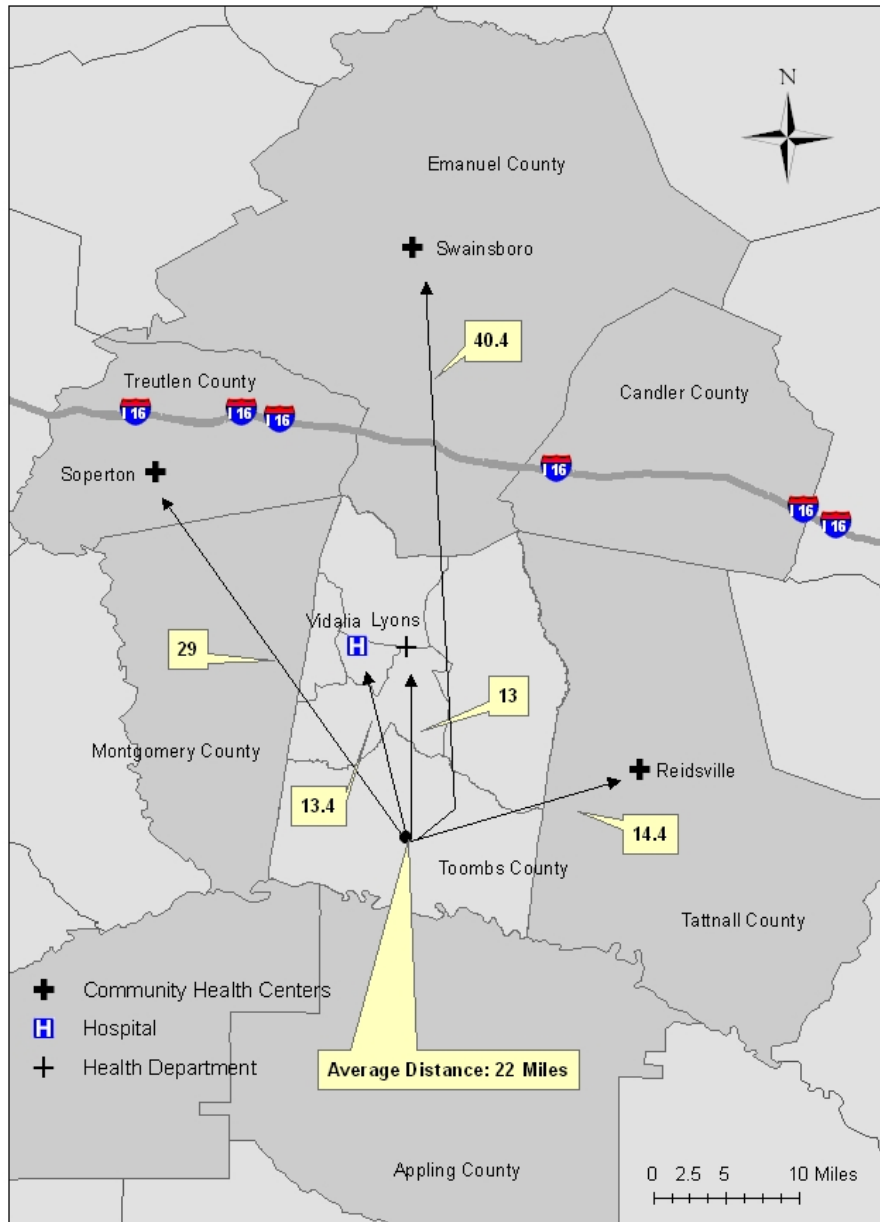
Source: Primary Data.

Figure 9. Average Distances from Centroids to Health Facilities



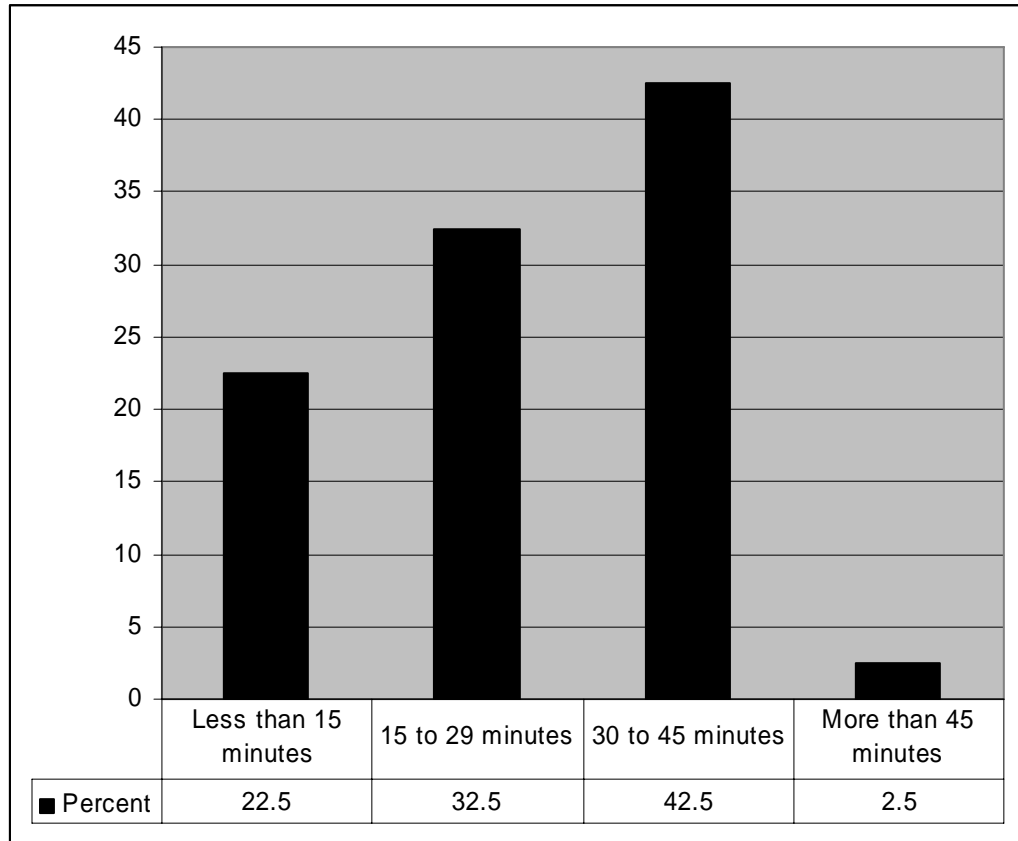
Source: Primary Data.

Figure 10. Distances to Health Facilities from the Southernmost Tract



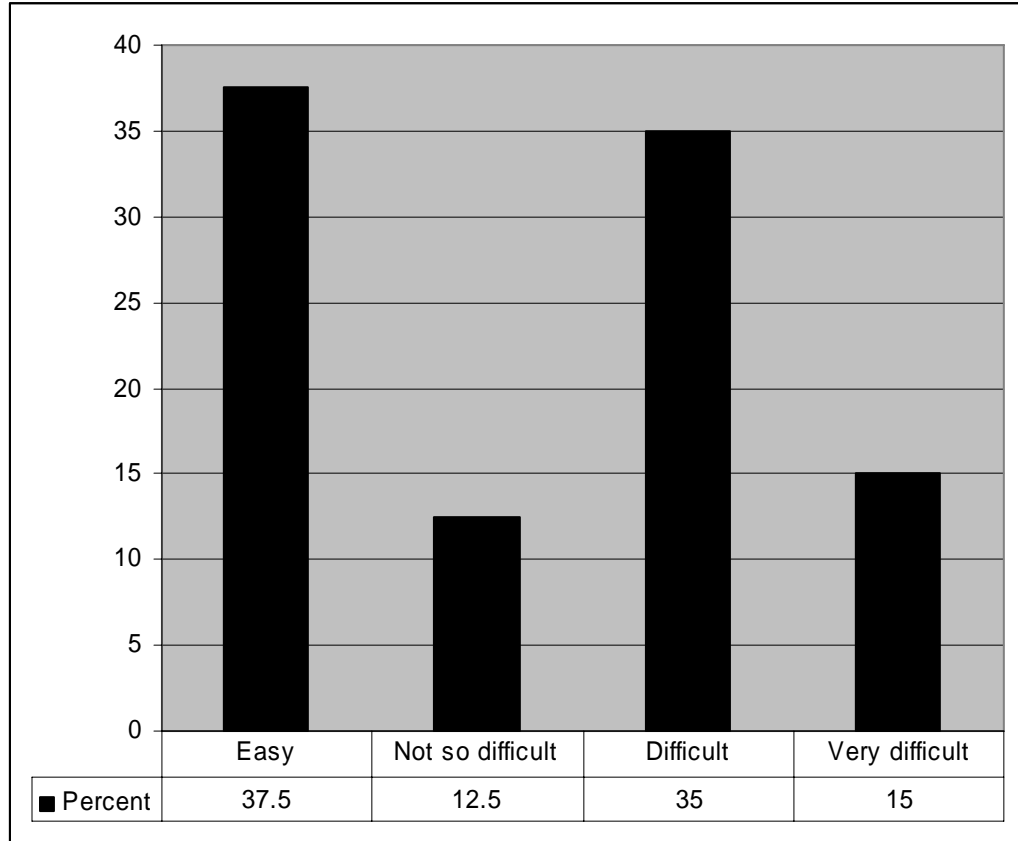
Source: Primary Data.

Figure 11. Length of Time for Hispanic Respondents to Reach Their Usual Sources of Care



Source: Primary Data.

Figure 12. Hispanic Respondents` Perceived Grade of Difficulty for Reaching Their Usual Sources Care



Source: Primary Data.

Figure 13. Hispanic Median Family Income in 1999 (\$) in Toombs County, GA by Census Tract

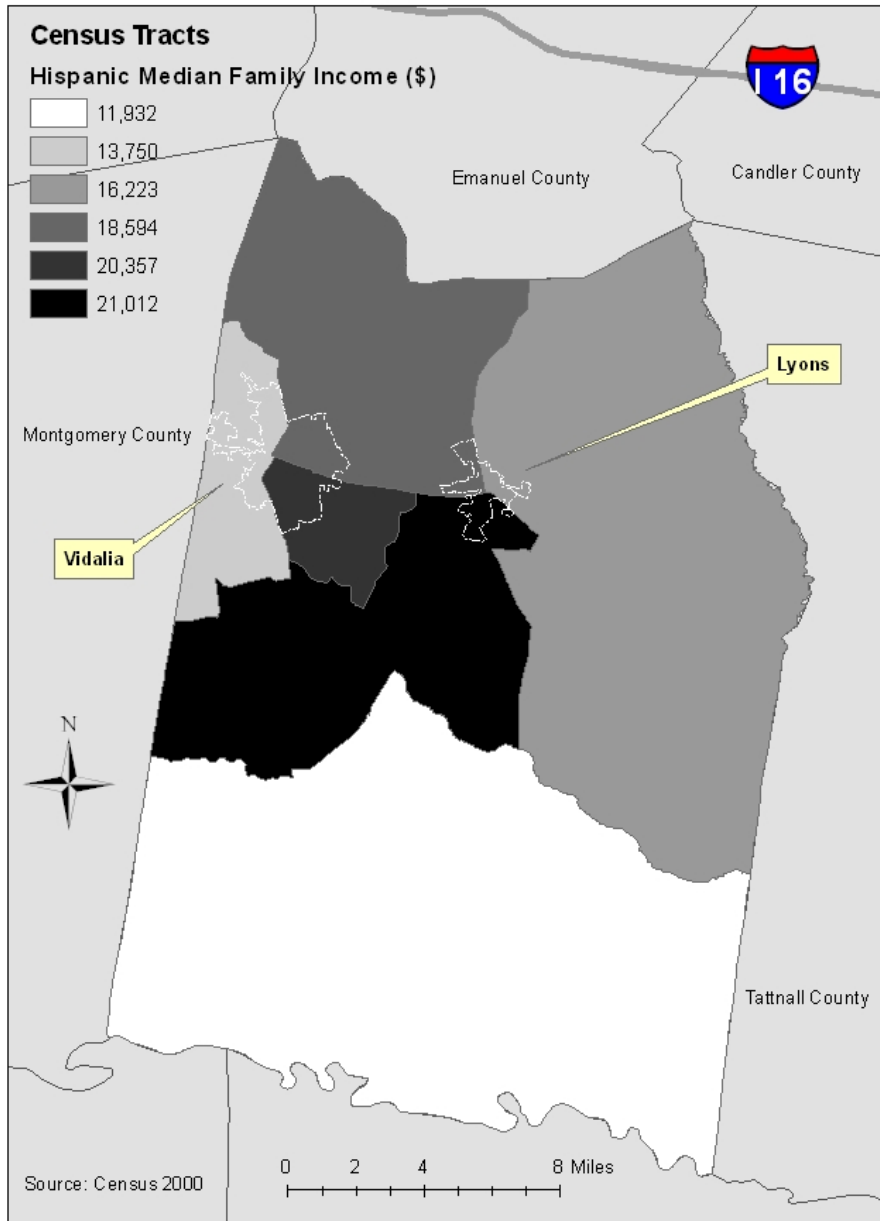


Figure 14. Hispanic Median Personal Income in 1999 (\$) in Toombs County, GA by Census Tract

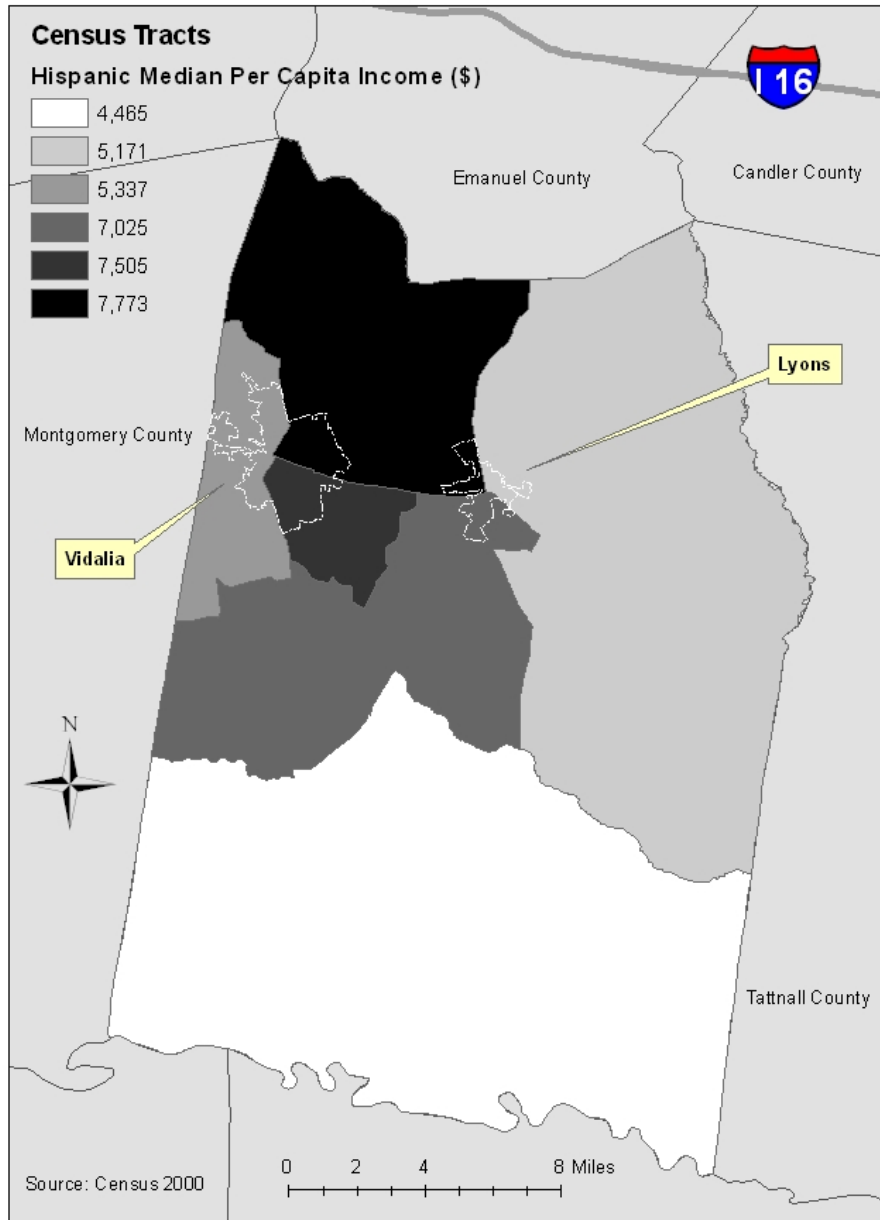


Figure 15. Percent of Hispanic Population Under 5 Years in Toombs County, GA by Census Tract, 2000

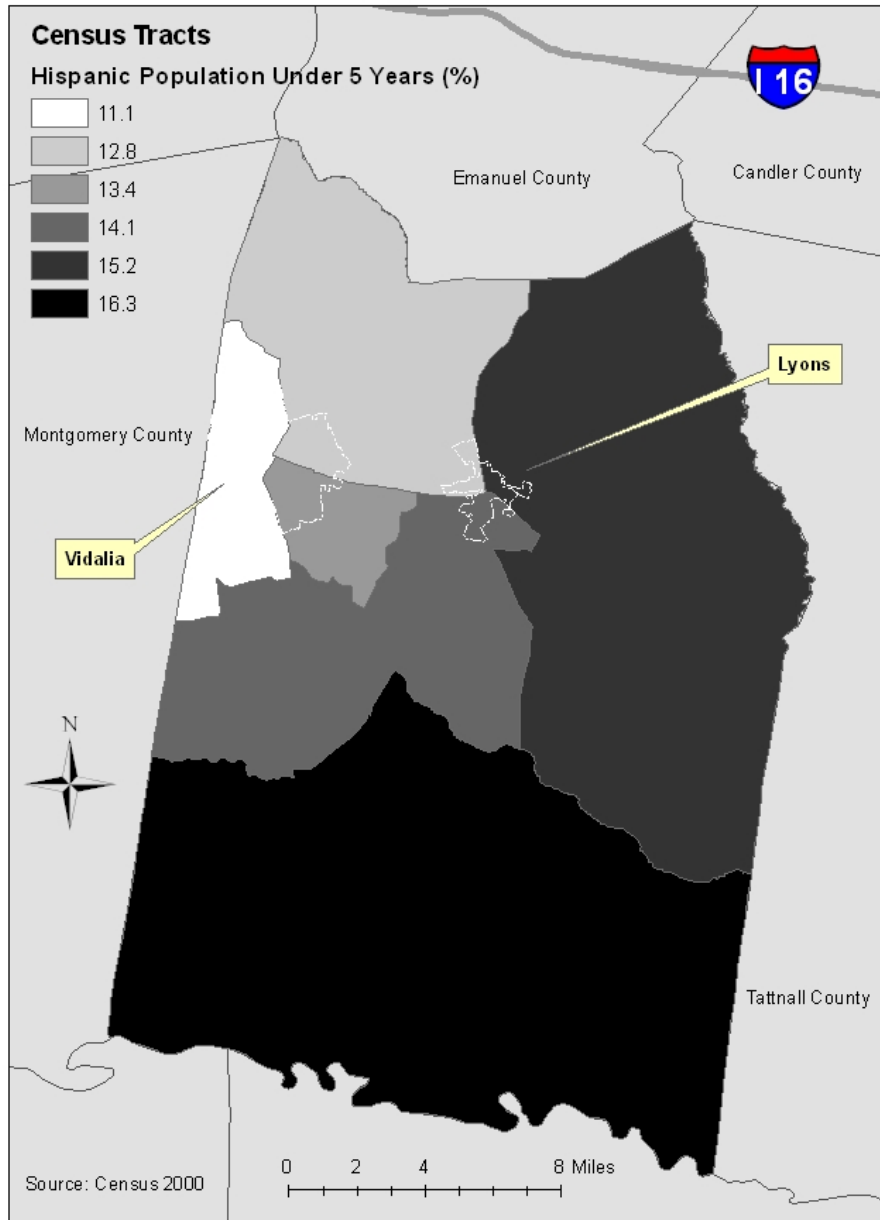
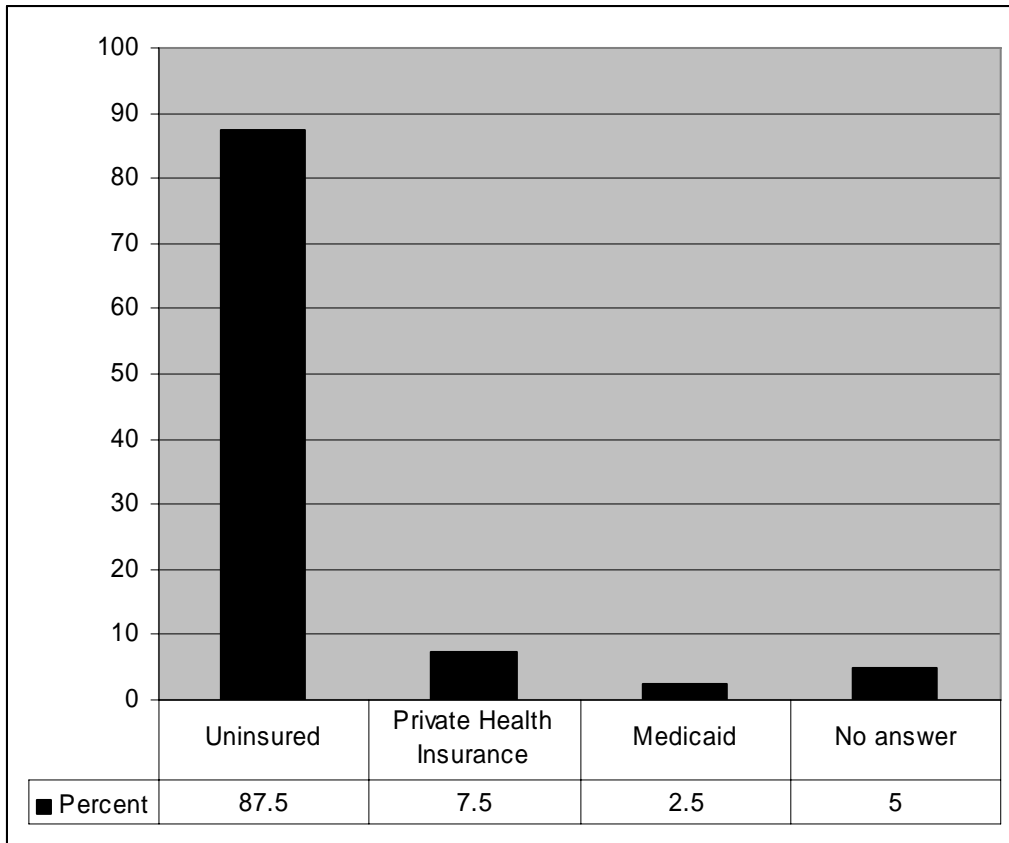
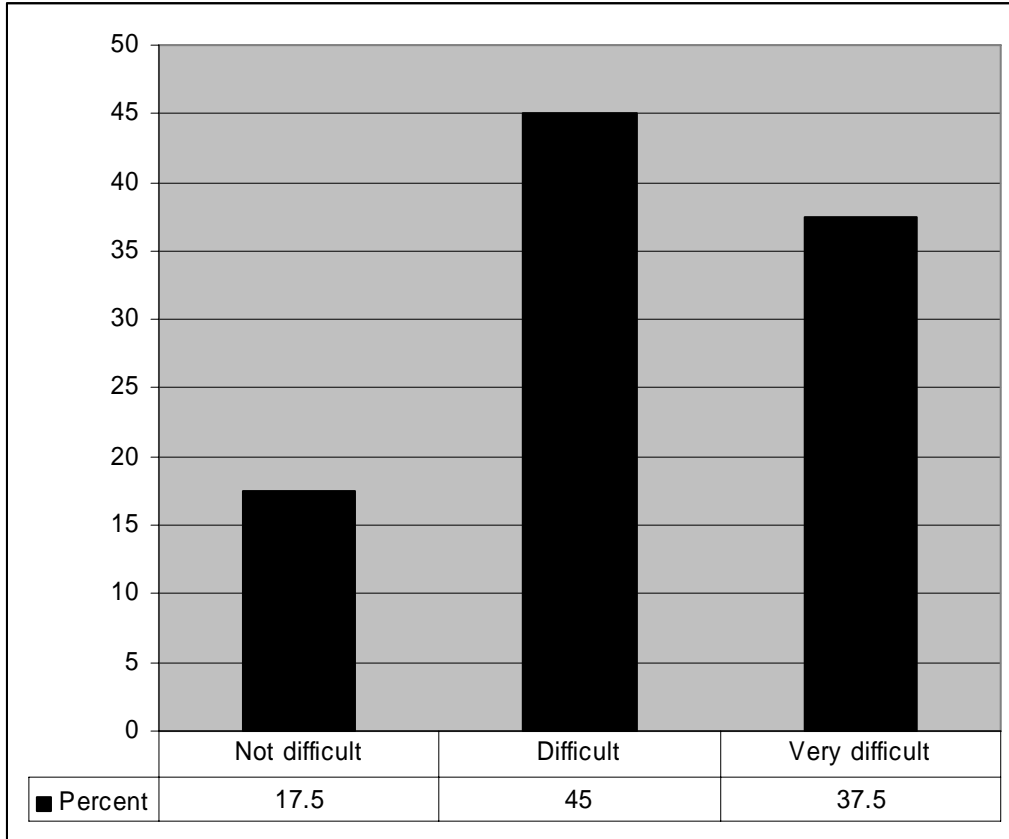


Figure 16. Health Insurance Coverage of Hispanic Respondents



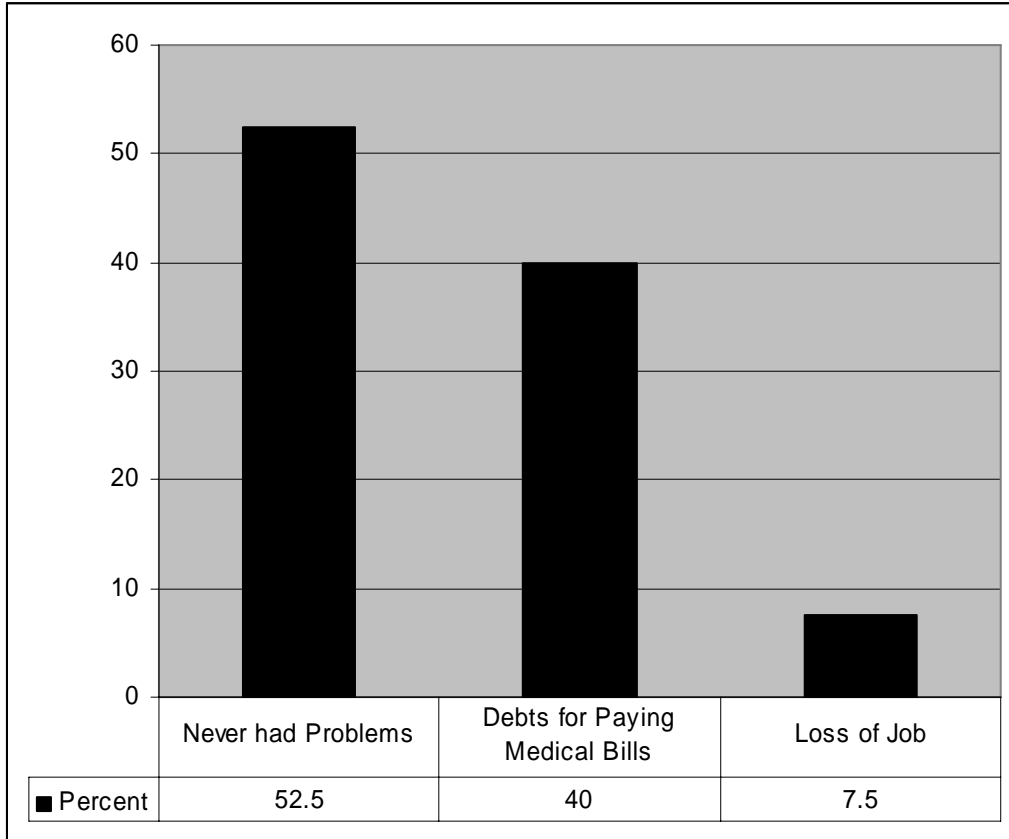
Source: Primary Data.

Figure 17. Hispanic Respondents` Perceived Ability to Pay for Basics (shelter, food, and medications)



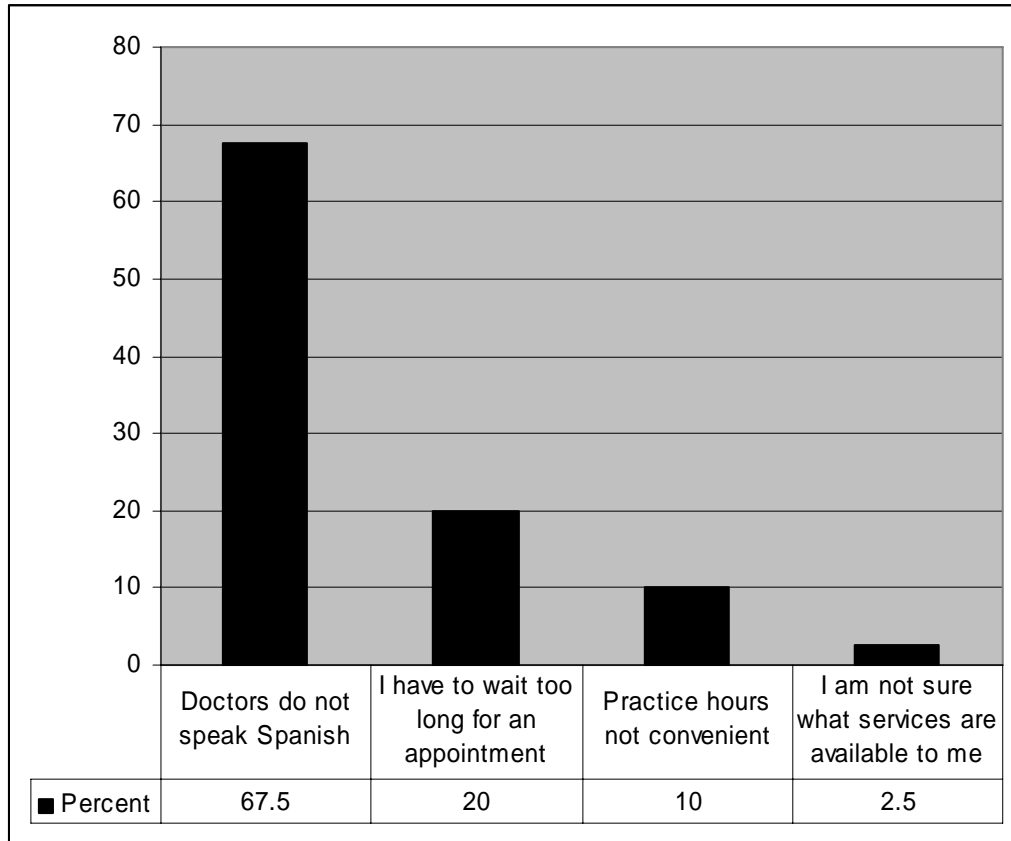
Source: Primary Data.

Figure 18. Economic Problems Caused to Hispanic Respondents by Illnesses or Injuries



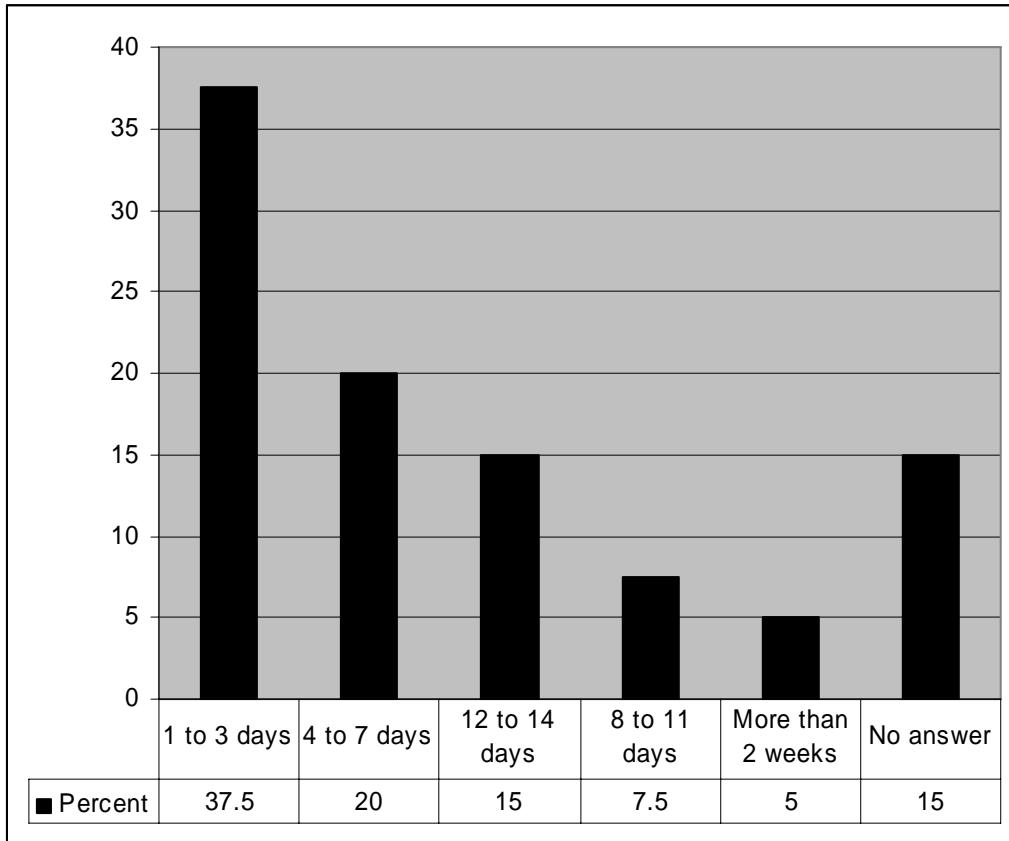
Source: Primary Data.

Figure 19. Accommodation Difficulties Experienced by Hispanic Respondents When Seeking Health Care



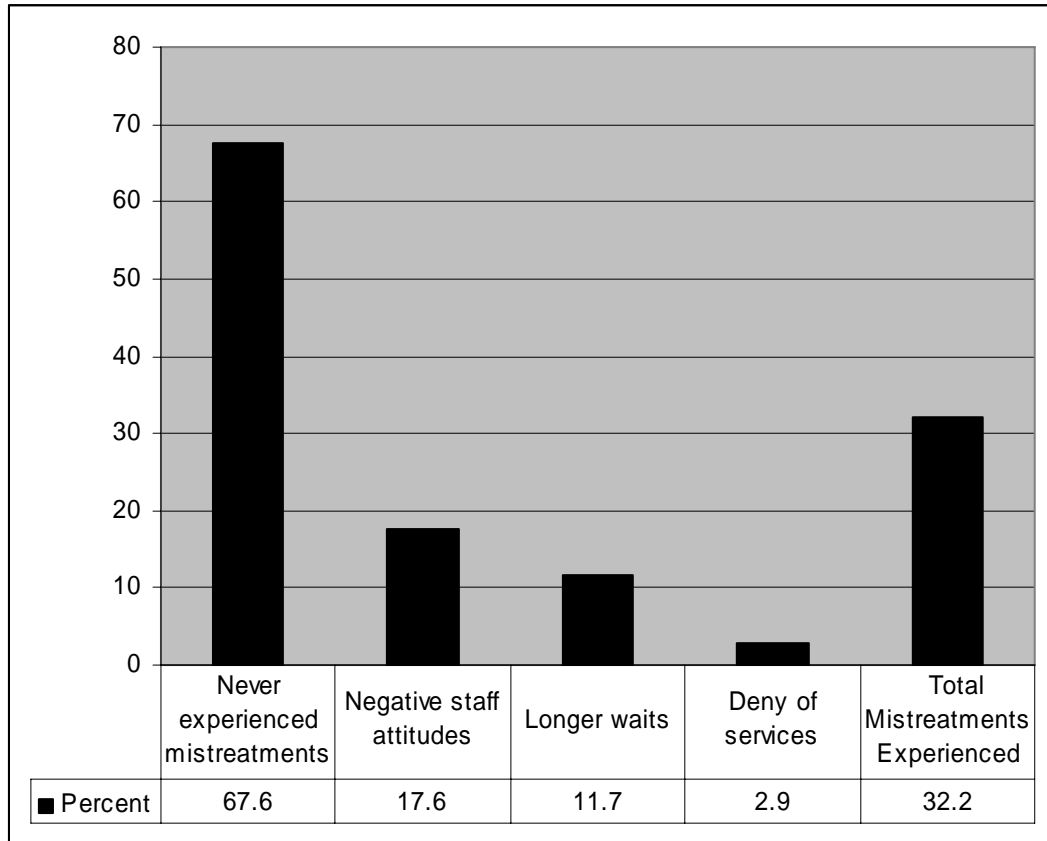
Source: Primary Data.

Figure 20. Waiting-Time Experienced by Hispanic Respondents for Getting a Medical Appointment



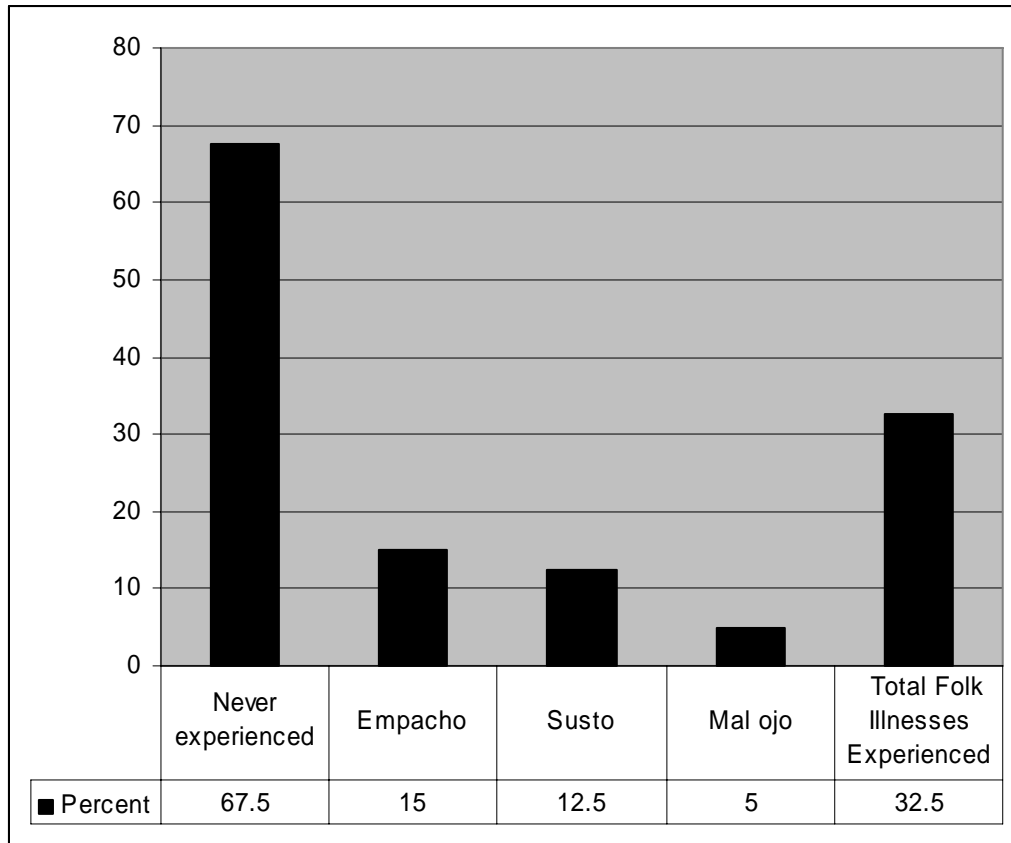
Source: Primary Data.

Figure 21. Mistreatments Experienced by Hispanic Respondents When Receiving Health Care



Source: Primary Data.

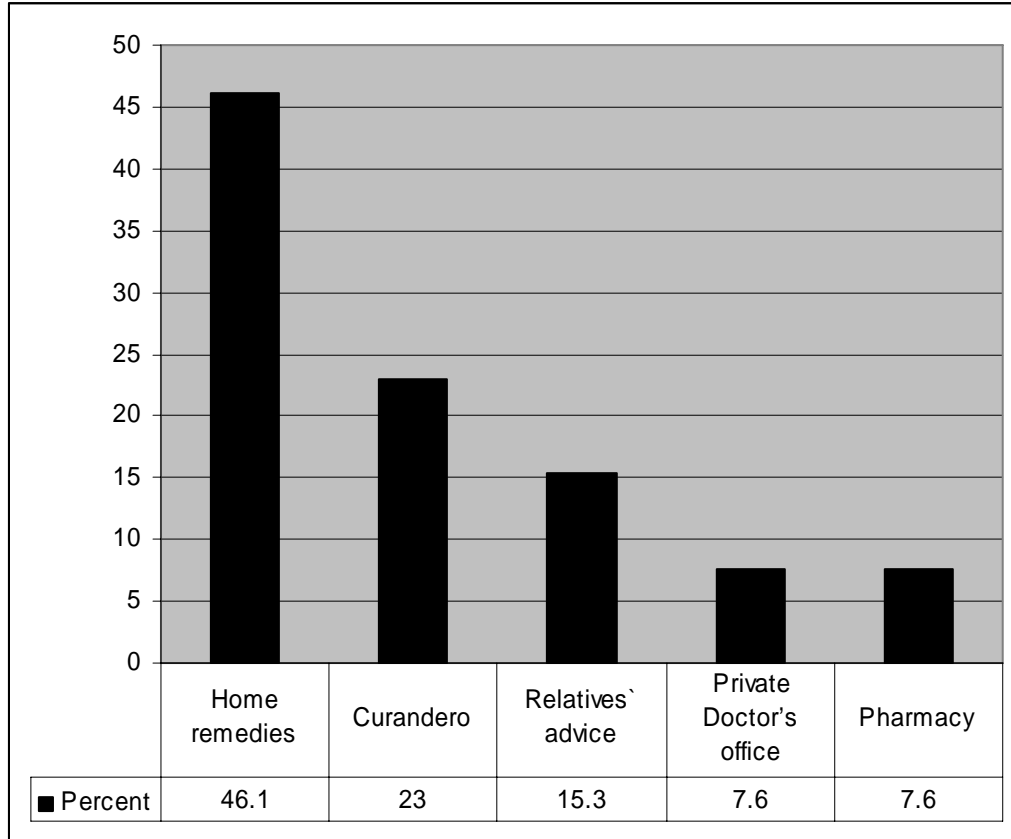
Figure 22. Folk Illnesses Experienced by Hispanic Respondents



Empacho is considered an illness able to affect the gastrointestinal tract. Symptoms include diarrhea, vomiting, bloating, anorexia, fever, and chills. *Susto* is normally the result of a frightening experience and symptoms might include apathy, anorexia, and insomnia. *Mal ojo* (evil eye) is experienced by children, and it happens when a person with ‘strong yes’ looks at a child, causing symptoms like crying, diarrhea, fever, and vomiting.

Source: Primary Data.

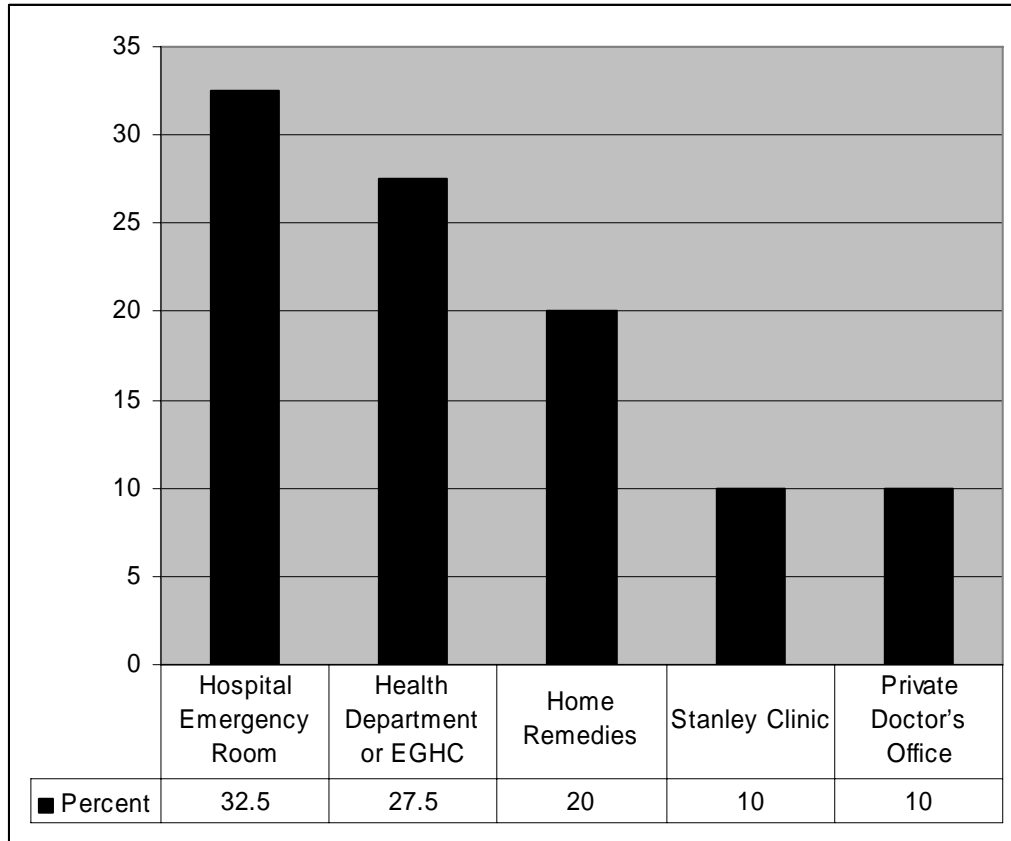
**Figure 23. Medical Treatments Followed by Hispanic Respondents
In Case of Folk Illnesses**



Curanderos (healers) are individuals who are believed to be mediators between the patient and the spiritual realm. Many Hispanics in fact believe that spirits frequently interact with people and that the repercussions of these interactions can cause illnesses and diseases

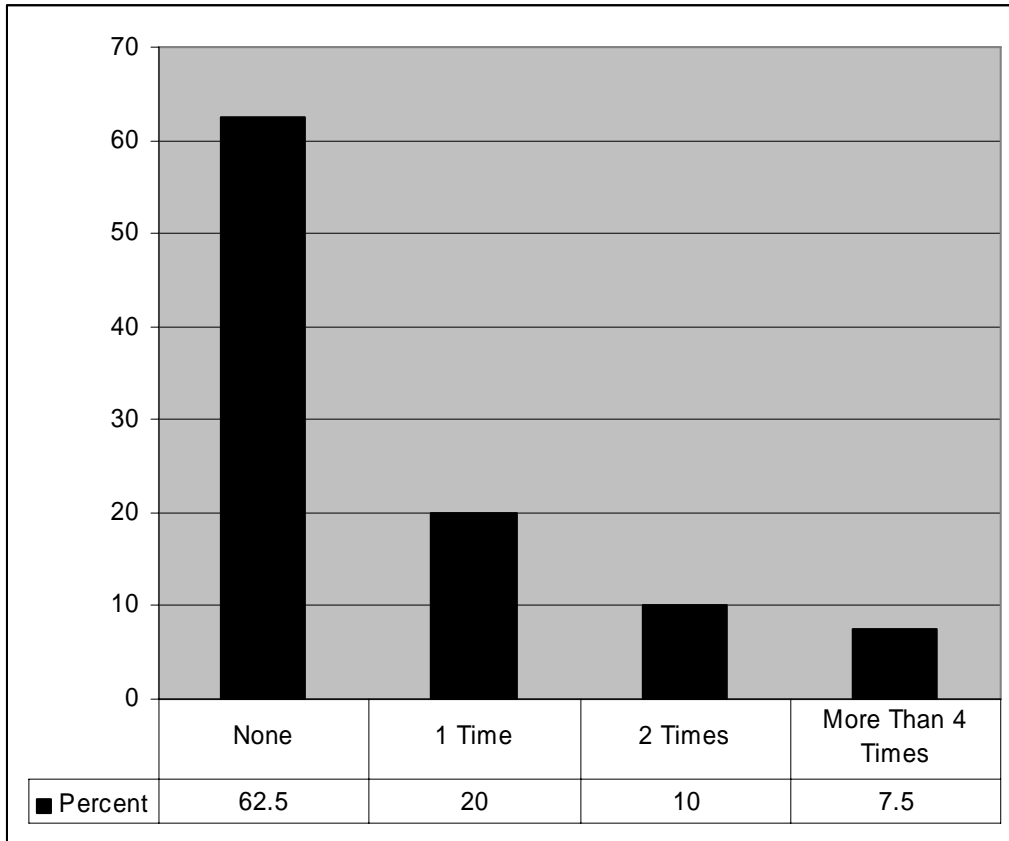
Source: Primary Data.

Figure 24. Usual Sources of Care of Hispanic Respondents



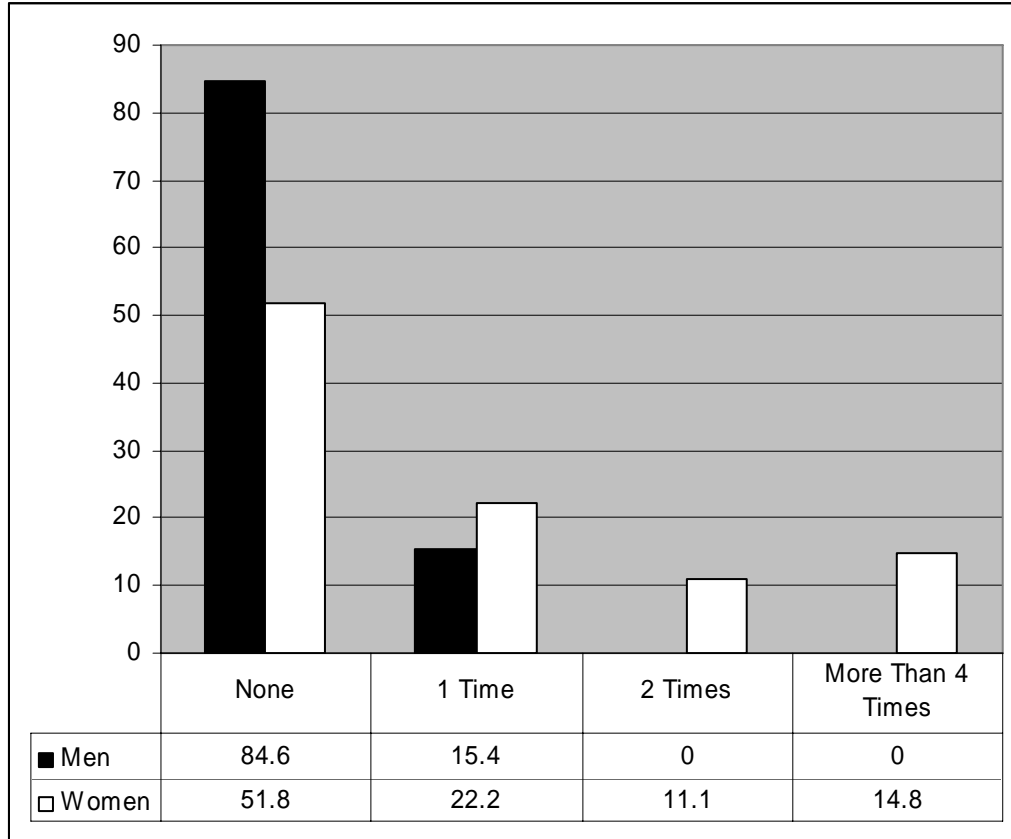
Source: Primary Data.

Figure 25. Number of Times Hispanic Respondents Contacted a Private Doctor In the Last Year



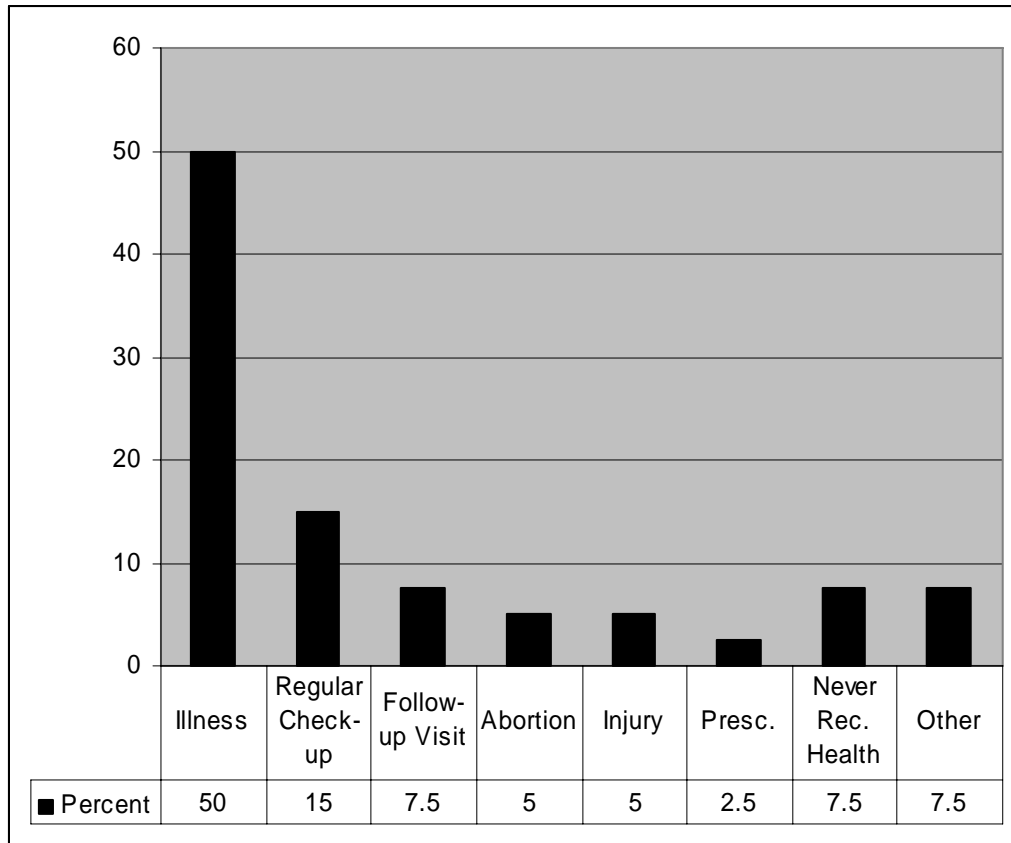
Source: Primary Data.

Figure 26. Number of Times Hispanic Respondents Contacted a Private Doctor In the Last Year by Sex



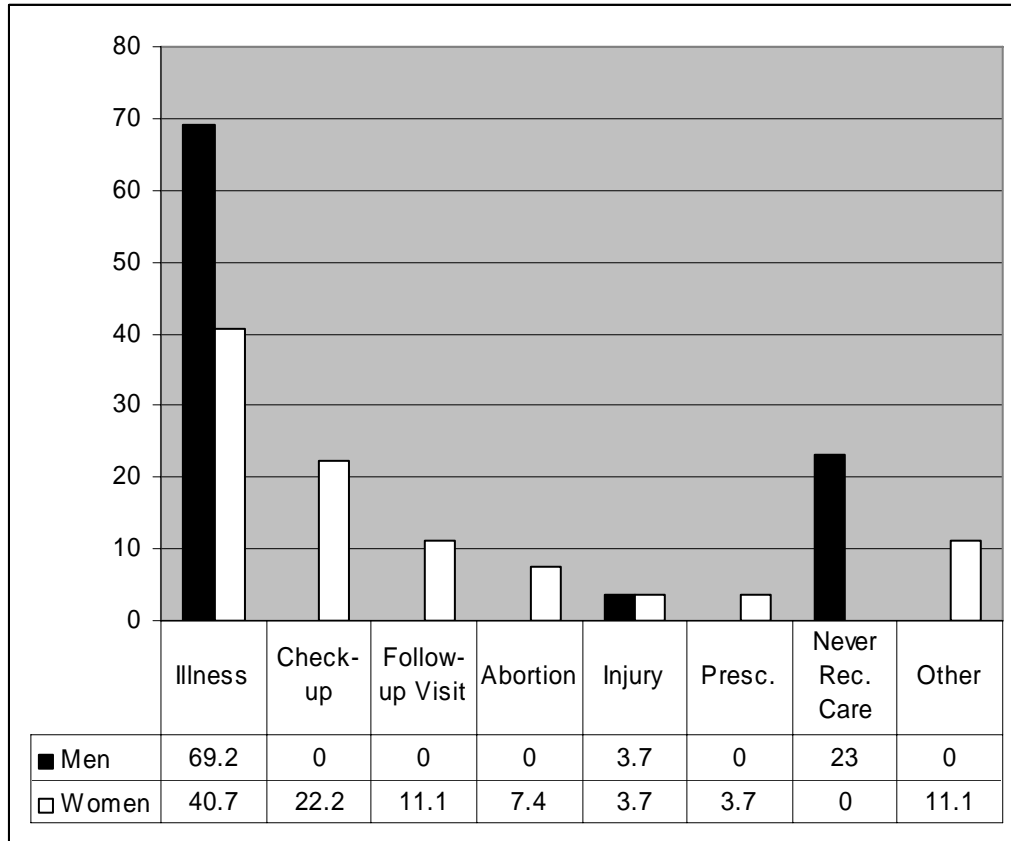
Source: Primary Data.

Figure 27. Reason Hispanic Respondents Sought Health Care the Last Time



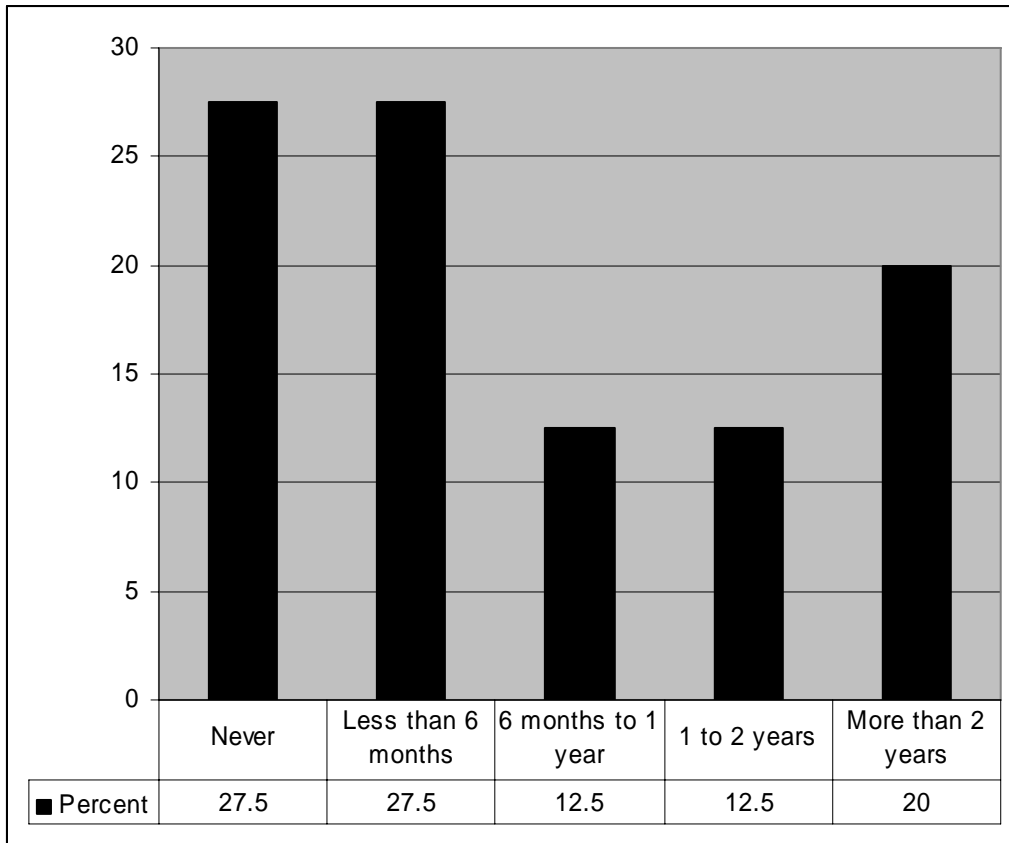
Source: Primary Data.

Figure 28. Reason Hispanic Respondents Sought Health Care the Last Time by Sex



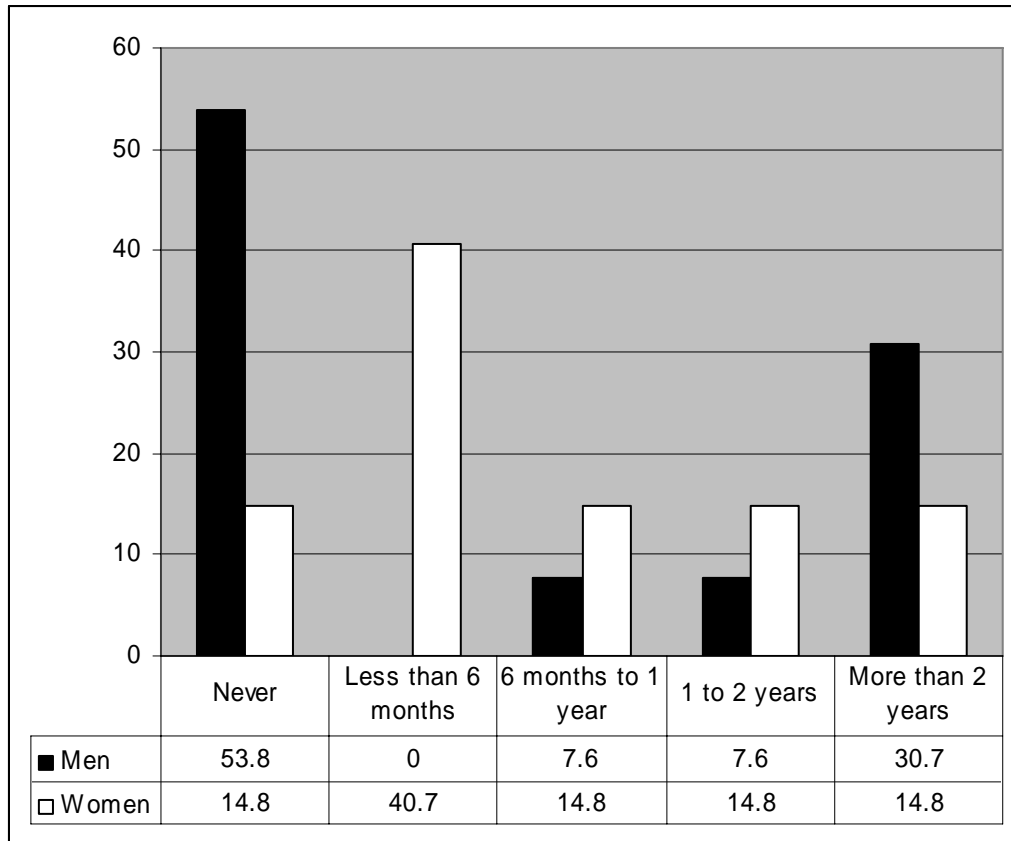
Source: Primary Data.

Figure 29. Last Time Hispanic Respondents Had a General Check-up



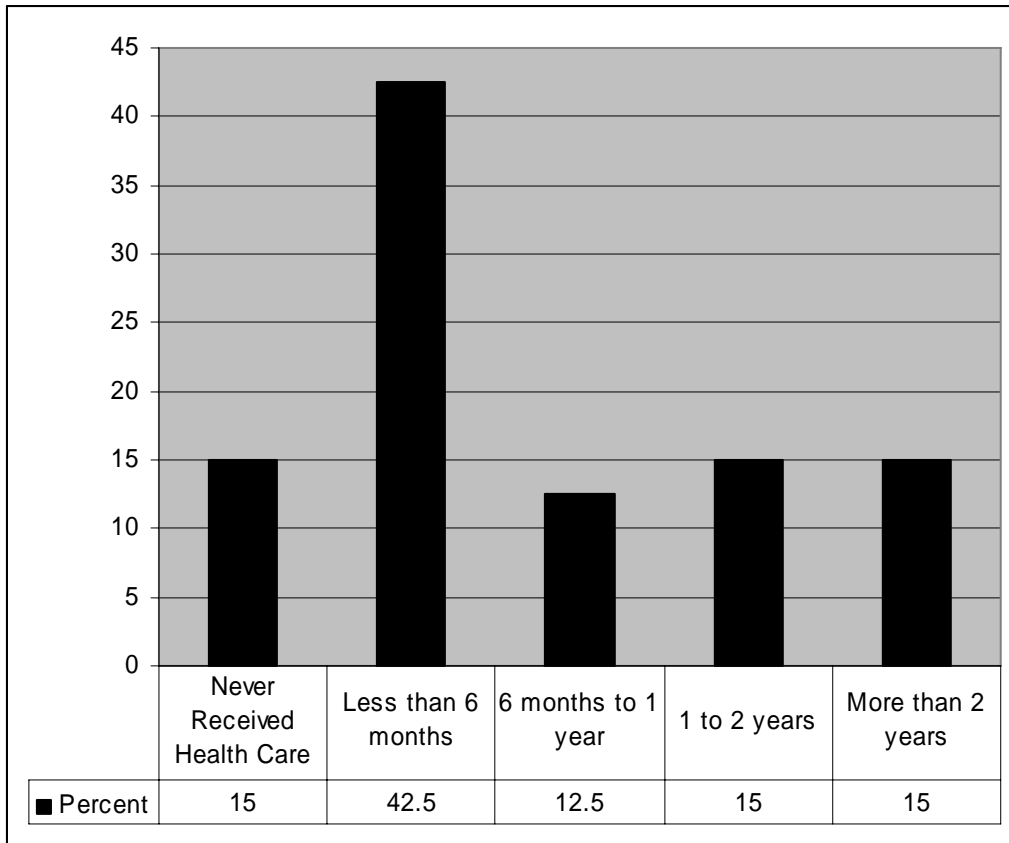
Source: Primary Data.

Figure 30. Last Time Hispanic Respondents Had a General Check-up by Sex



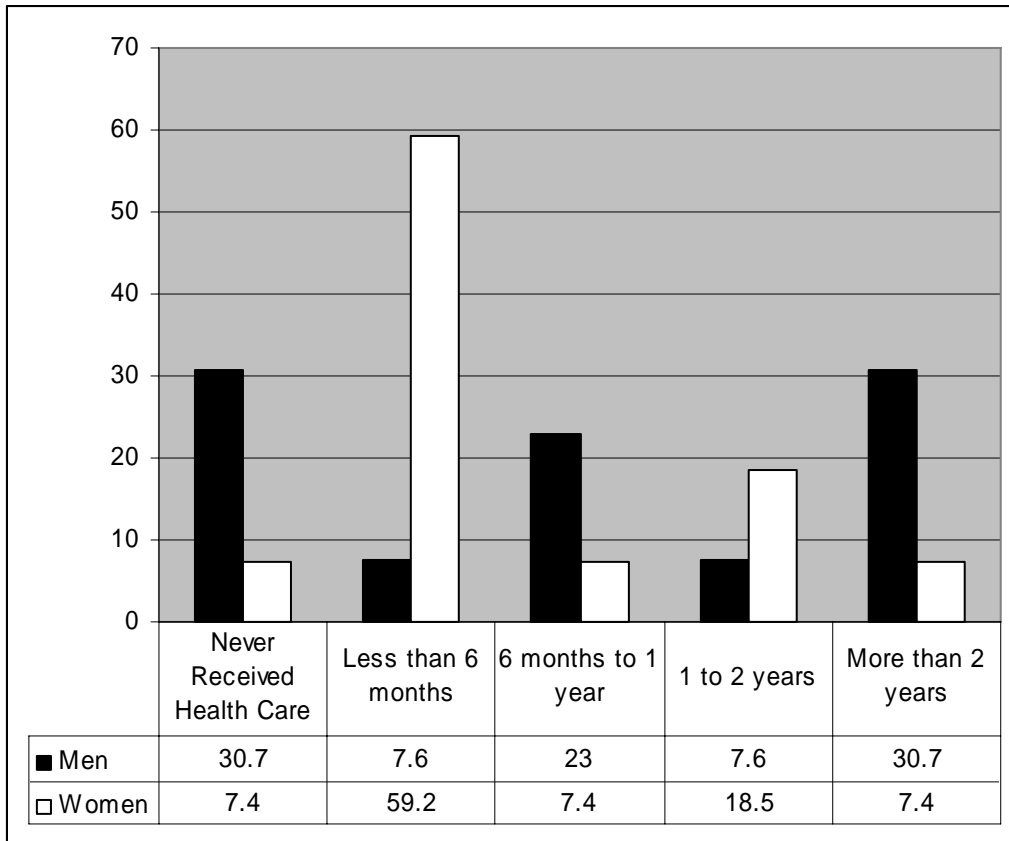
Source: Primary Data.

Figure 31. Last Time Hispanic Respondents Received Health Care



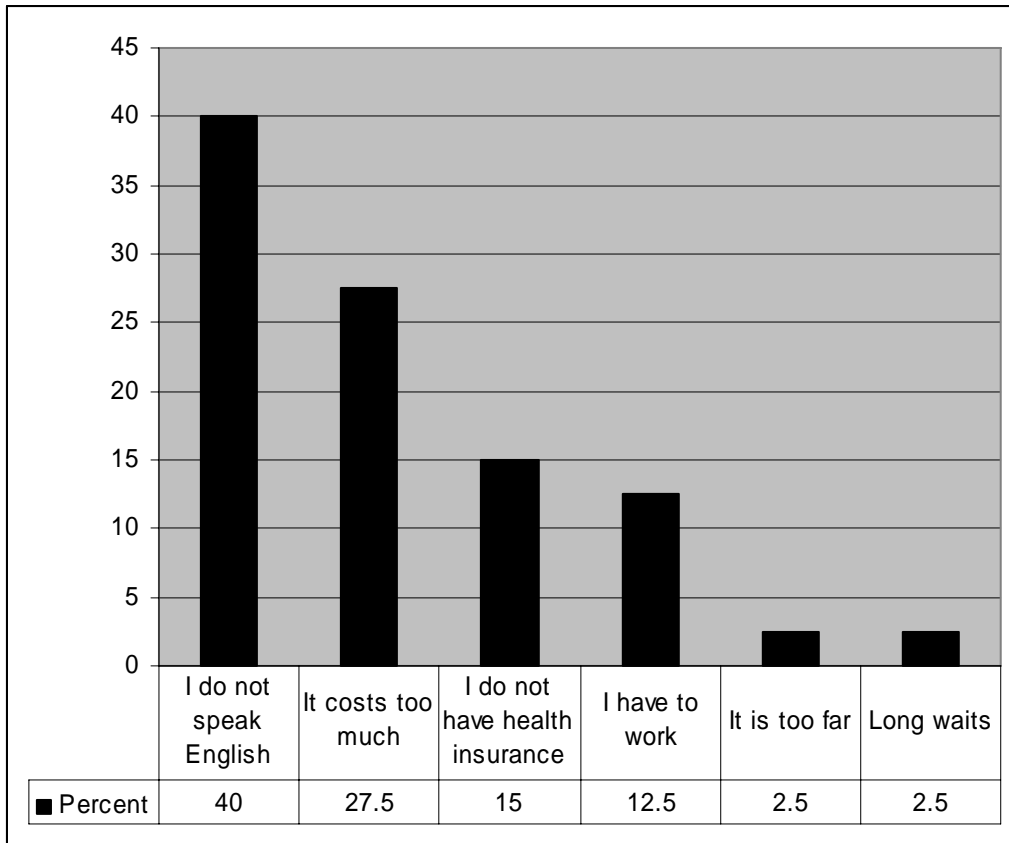
Source: Primary Data.

Figure 32. Last Time Hispanic Respondents Received Health Care by Sex



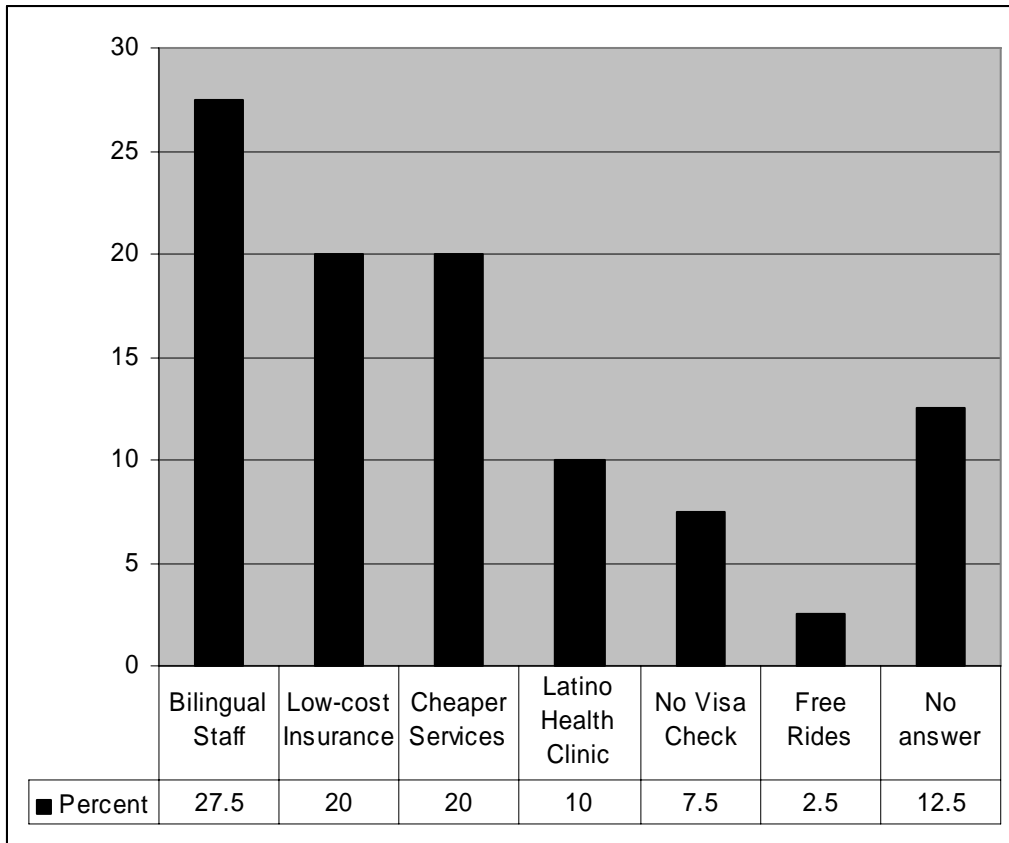
Source: Primary Data.

Figure 33. Major Difficulties Perceived by Hispanic Respondents To Obtain Health Care Services



Source: Primary Data.

Figure 34. Solutions Proposed by Hispanic Respondents



Source: Primary Data.

APPENDIX B

TABLES

Table 1. Hispanic Population in U.S., 2000

| | Number | % of Total Population | % Change (1990-2000) |
|-----------------------|-------------|-----------------------|----------------------|
| Total U.S. Population | 281,421,906 | 100 | 13.2 |
| Hispanic or Latino | 35,305,818 | 12.5 | 57.9 |
| Mexican | 20,640,711 | 7.3 | 52.9 |
| Puerto Rican | 3,406,178 | 1.2 | 24.9 |
| Cuban | 1,241,685 | 0.4 | 18.9 |
| Other Hispanic | 10,017,244 | 3.6 | 96.9 |

Source: U.S. Census Bureau, 2000.

Table 2. States With the Largest Latino Population, 2000

| State | 1990 | 2000 |
|------------|-----------|------------|
| California | 7,687,938 | 10,966,556 |
| Texas | 4,339,905 | 6,669,666 |
| New York | 2,214,026 | 2,867,583 |
| Florida | 1,574,143 | 2,682,715 |
| Illinois | 904,446 | 1,530,262 |
| Arizona | 688,338 | 1,295,617 |
| New Jersey | 739,861 | 1,117,191 |
| New Mexico | 579,224 | 765,386 |
| Colorado | 424,302 | 735,601 |
| Washington | 214,570 | 441,509 |

Source: U.S. Census Bureau, 2000.

Table 3. Top 10 States by Hispanic Rates of Increase, 1990-2000

| Ten Fastest Growing States | | | |
|----------------------------|---------------------|---------------------|------------|
| | No. Hispanics, 1990 | No. Hispanics, 2000 | Change (%) |
| North Carolina | 76,726 | 378,963 | 394 |
| Arkansas | 19,876 | 86,866 | 337 |
| Georgia | 108,922 | 435,227 | 300 |
| Tennessee | 32,741 | 123,838 | 278 |
| Nevada | 124,419 | 393,970 | 217 |
| South Carolina | 30,551 | 95,076 | 211 |
| Alabama | 24,629 | 75,830 | 208 |
| Kentucky | 21,984 | 59,939 | 173 |
| Minnesota | 53,884 | 143,382 | 166 |
| Nebraska | 36,969 | 94,425 | 155 |
| United States | 22,354,059 | 35,305,818 | 58 |

Source: Source: U.S. Census Bureau, 2000.

Table 4. Educational Attainment of US Population 25 Years and Over by Race, 2000

| Ethnicity | High School Graduate or More | Some College or More | Bachelor's Degree or More | Advanced Degree |
|-----------------|------------------------------|----------------------|---------------------------|-----------------|
| White | 83.6 | 54.1 | 26.1 | 9.5 |
| Black | 72.3 | 42.5 | 14.3 | 4.8 |
| American Indian | 70.9 | 41.7 | 11.5 | 3.9 |
| Asian | 80.4 | 64.6 | 44.1 | 17.4 |
| Hispanic | 52.4 | 30.3 | 10.4 | 3.8 |

Source: U.S. Census Bureau, 2000.

Table 5. Latinos` Ability to Speak in English (Pop. 5 Years and Over), 2000

| Total | Speak English 'very well' | | Speak English 'well' | | Speak English 'not well' | | Speak English 'not at all' | |
|------------|------------------------------|------|-------------------------|------|-----------------------------|------|-------------------------------|------|
| Number | Number | % | Number | % | Number | % | Number | % |
| 28,101,050 | 14,349,795 | 51.1 | 5,819,410 | 20.7 | 5,130,400 | 18.3 | 2,801,450 | 10.0 |

Source: U.S. Census Bureau, 2000.

Table 6. U.S. Median Per Capita Income (\$) by Race, 2004

| | 2003 | 2004 | % Change (2003-2004) |
|---------------------|--------|--------|-------------------------|
| White | 25,288 | 25,203 | -0.3 |
| White, not Hispanic | 27,494 | 27,414 | -0.3 |
| Black | 16,199 | 16,035 | -1.0 |
| Asian | 25,265 | 26,217 | 3.8 |
| Hispanic | 13,855 | 14,106 | 1.8 |

Source: U.S. Census Bureau, 2004.

Table 7. People Below Poverty Level (%) in U.S. by Race, 2004

| | 2003 | 2004 | % Change (2003-2004) |
|---------------------|------|------|-------------------------|
| White | 10.5 | 10.8 | 0.4 |
| White, not Hispanic | 8.2 | 8.6 | 0.5 |
| Black | 24.4 | 24.7 | 0.3 |
| Asian | 11.8 | 9.8 | -2.0 |
| Hispanic | 22.5 | 21.9 | -0.6 |

Source: U.S. Census Bureau, 2004.

Table 8. People Without Health Insurance Coverage U.S. by Race, 2004

| | 2003 (%) | 2004 (%) | Change 2003-2004 |
|---------------------|----------|----------|------------------|
| White | 14.6 | 14.9 | 0.2 |
| White, not Hispanic | 11.1 | 11.3 | 0.2 |
| Black | 19.6 | 19.7 | 0.1 |
| Asian | 18.8 | 16.8 | -2.0 |
| Hispanic | 32.7 | 32.7 | -0.1 |

Source: U.S. Census Bureau, 2004.

Table 9. Ethnicity Distribution of the Physician Workforce in U.S., 1999

| Ethnicity | Percentage |
|-----------------|------------|
| White | 75.4 |
| Black | 3.6 |
| Asian | 12.6 |
| Hispanic | 4.9 |
| American Indian | 0.1 |
| Other | 3.5 |

Source: American Medical Association, Physician Characteristics and Distribution in the U.S., 2001-2002 Edition

Table 10. Hispanic Population in Georgia, 2004

| | Population (2004) | | Hispanic % of Population | Growth Rate (1999-2000) | |
|---------|----------------------|------------|-----------------------------|----------------------------|----------|
| | Total Pop. | Hispanic | | Total Pop. | Hispanic |
| USA | 285,691,501 | 40,459,196 | 14.2% | 13.2% | 57.9% |
| Georgia | 8,581,489 | 576,113 | 6.7% | 26.4% | 299.6% |

Source: U.S. Census Bureau, 2004.

Table 11. Georgia Metropolitan Statistical Areas by Hispanic Origin, 2003

| City | Hispanic Population | Percent of Total Population |
|-------------------------|---------------------|-----------------------------|
| Gainesville | 35,326 | 22.6 |
| Dalton | 25,476 | 20.0 |
| Atlanta | 353,011 | 7.7 |
| Rome | 6,044 | 6.5 |
| Hinesville-Fort Stewart | 4,466 | 6.4 |
| Athens-Clarke County | 9,564 | 5.6 |
| Columbus | 9,018 | 3.8 |
| Valdosta | 3,701 | 3.0 |
| Warner Robins | 3,551 | 2.9 |
| Brunswick | 2,581 | 2.7 |

Source: Arroyo and Hernandez, 2005.

Table 12. Employment Status of Latinos in Georgia, 2004

| | Total Population | Hispanic |
|--------------------|---------------------|----------|
| In Labor Force | 4,399,000 | 299,000 |
| Participation Rate | 67.3% | 78.1% |
| Unemployed | 20,500 | 14,000 |
| Unemployed Rate | 4.7% | 4.6% |

Source: Arroyo and Hernandez, 2005.

Table 13. Poverty Among Latinos in Georgia, 2003

| | Total Population | Hispanic |
|-------------------------------------|---------------------|----------|
| Population Below Poverty Level | 1,125,160 | 98,930 |
| % of Population Below Poverty Level | 13.4% | 18.8% |
| Population Under 18 (children) | 2,250,294 | 174,170 |
| Children Below Poverty Level | 420,110 | 41,124 |
| % of Children Below Poverty Level | 18.7% | 23.6% |

Source: Arroyo and Hernandez, 2005.

Table 14. Rate of Non-Elderly Uninsured by Race in Georgia, 2002-2003

| Race or Ethnicity | Percent of Uninsured |
|-------------------|----------------------|
| White | 15% |
| Black | 24% |
| Other | 31% |
| Hispanic | 43% |

Source: Arroyo and Hernandez, 2005.

Table 15. Hispanic Demographic Characteristics in Toombs County, GA, 2000

| | Hispanic Population | County Population |
|---------------------|------------------------|----------------------|
| Total Population | 2,310 | 26,067 |
| Male | 1,430 | 12,443 |
| Female | 880 | 13,624 |
| Median Age (years) | 22 | 34 |
| % Under 5 Years Old | 14.5% | 7.7% |
| Average Family Size | 4.33 | 3.13 |

Source: U.S. Census Bureau, 2000.

Table 16. Hispanics by Country of Origin in Toombs County, GA 2000

| Hispanics | Number | Percent |
|--------------------------------|--------|---------|
| Total Population | 2,310 | 100 |
| Mexican | 1,945 | 84.2 |
| Puerto Rican | 52 | 2.3 |
| Cuban | 18 | 0.8 |
| Other Hispanic | 295 | 12.8 |
| Dominican (Dominican Republic) | 5 | 0.2 |

Source: U.S. Census Bureau, 2000.

Table 17. Hispanic Respondents by Age and Sex

| Age Group | Male | Female | Total | Percent |
|-----------|------|--------|-------|---------|
| 18-24 | 2 | 6 | 8 | 20 |
| 25-29 | 2 | 8 | 10 | 25 |
| 30-34 | 1 | 7 | 8 | 20 |
| 35-39 | 4 | 3 | 7 | 17.5 |
| 40-44 | 3 | 1 | 4 | 10 |
| 45-49 | 1 | 1 | 2 | 5 |
| >50 | -- | 1 | 1 | 2.5 |
| Total | 13 | 27 | 40 | 100 |

Source: Primary Data.

Table 18. Hispanic Respondents by Marital Status and Sex

| Marital Status | Male | Female | Total | Percent |
|------------------------------|------|--------|-------|---------|
| Married | 11 | 20 | 31 | 77.5 |
| Living Together, Not Married | -- | 6 | 6 | 15 |
| Single | 2 | -- | 2 | 5 |
| Divorced | -- | 1 | 1 | 2.5 |
| Total | 13 | 27 | 40 | 100 |

Source: Primary Data.

Table 19. Hispanic Respondents by Years of Education and Sex

| Years of Education | Male | Female | Total | Percent |
|--------------------|------|--------|-------|---------|
| Less than 6 years | 3 | 4 | 7 | 17.5 |
| 6 years | 4 | 8 | 12 | 30 |
| 7 to 11 years | 4 | 9 | 13 | 32.5 |
| 12 years | 2 | 4 | 6 | 15 |
| 13 to 16 years | -- | 2 | 2 | 5 |
| Total | 13 | 27 | 40 | 100 |

Source: Primary Data.

Table 20. Hispanic Respondents by Household Size

| Household Size | Frequency | Percent |
|----------------|-----------|---------|
| 2 | 2 | 5 |
| 3 | 8 | 20 |
| 4 | 11 | 27.5 |
| 5 | 11 | 27.5 |
| 6 | 5 | 12.5 |
| 8 | 2 | 5 |
| 10 | 1 | 2.5 |
| Total | 40 | 100 |

Source: Primary Data.

Table 21. Hispanic Respondents by Living Arrangement

| Living Arrangement | Frequency | Percent |
|--------------------|-----------|---------|
| Rent a Trailer | 22 | 55 |
| Own a Trailer | 12 | 30 |
| Own a House | 3 | 7.5 |
| Rent a House | 2 | 5 |
| Rent an Apartment | 1 | 2.5 |
| Total | 40 | 100 |

Source: Primary Data.

Table 22. Hispanic Respondents by Length of Residency in Toombs County

| Period of Time | Frequency | Percent |
|--------------------------|-----------|---------|
| Less than 1 year | 5 | 12.5 |
| 1 to 3 years | 7 | 17.5 |
| 3 to 5 years | 5 | 12.5 |
| More than 5 years | 21 | 52.5 |
| I live in other US State | 2 | 5 |
| Total | 40 | 100 |

Source: Primary Data.

Table 23. Hispanic Respondents by Length of Residency in US

| Period of Time | Frequency | Percent |
|-------------------|-----------|---------|
| Less than 1 year | 4 | 10 |
| 1 to 3 years | 6 | 15 |
| 3 to 5 years | 4 | 10 |
| More than 5 years | 19 | 47.5 |
| I was born in US | 7 | 17.5 |
| Total | 40 | 100 |

Source: Primary Data.

Table 24. Hispanic Respondents by Occupation and Sex

| Job | Frequency | Men | Women |
|-------------------------|-----------|-----|-------|
| Pine-straw Harvester | 8 | 4 | 4 |
| Onion Harvester | 8 | 1 | 7 |
| Unemployed | 8 | - | 8 |
| Poultry Plant | 2 | - | 2 |
| Carpenter | 2 | 2 | - |
| Cook | 1 | 1 | - |
| Air Condition Installer | 1 | 1 | - |
| Mechanic | 1 | 1 | - |
| Waiter | 1 | - | 1 |
| Construction | 1 | 1 | - |
| Data Entry | 1 | - | 1 |
| Crew-Leader | 1 | 1 | - |
| Clothing Factory | 1 | - | 1 |
| Truck-Driver | 1 | 1 | - |
| Other | 3 | - | 3 |
| Total | 40 | 13 | 27 |

Source: Primary Data.

Table 25. Distances in Miles from Toombs County Census Tract Centroids to the Hispanics` Most Utilized Health Facilities

| Census Tract | Health Department | Hospital | CHC Reidsville | CHC Soperton | CHC Swainsboro | Total | Average |
|--------------|-------------------|----------|----------------|--------------|----------------|-------|---------|
| Tract01 | 5.4 | 8.2 | 10.6 | 24.2 | 29.7 | 78.3 | 15.6 |
| Tract02 | 4.8 | 4.6 | 20.1 | 14.9 | 22.9 | 67.5 | 13.5 |
| Tract03 | 5 | 2 | 20.5 | 15.2 | 27.6 | 70.4 | 14 |
| Tract04 | 2.6 | 1.1 | 17.7 | 17.8 | 28.5 | 67.8 | 13.5 |
| Tract05 | 4.9 | 4.7 | 16 | 20.9 | 32.1 | 78.6 | 15.7 |
| Tract06 | 13 | 13.4 | 14.4 | 29 | 40.4 | 110.4 | 22 |

Source: Primary Data.

Table 26. Hispanic Economic Characteristics in Toombs County, GA

| | Hispanic Pop. in Toombs C. | Toombs C. Population | Georgia Population |
|--------------------------------------|-------------------------------|-------------------------|-----------------------|
| Median Household Income in 1999 (\$) | 16,495 | 26,811 | 42,433 |
| Median Family Income in 1999 (\$) | 15,771 | 34,478 | 49,280 |
| Per Capita Income in 1999 (\$) | 6,034 | 14,252 | 21,154 |
| % Families Below Poverty Level | 54.4 | 17.8 | 9.9 |
| % Individuals Below Poverty Level | 55.7 | 23.9 | 13 |

Source: U.S. Census Bureau, 2000.

Table 27. Per Capita Income in 1999 (\$) by Race in Toombs County, GA

| Race or Ethnicity | Toombs County | Georgia |
|---------------------------|---------------|---------|
| White | 17,130 | 24,724 |
| Asian | 11,982 | 20,155 |
| Black or African American | 8,364 | 14,371 |
| Hispanic or Latino | 6,034 | 12,576 |
| Native American | 2,487 | 17,341 |

Source: U.S. Census Bureau, 2000.

Table 28. Median Household Income in 1999 (\$) by Race in Toombs County, GA

| Race or Ethnicity | Toombs County | Georgia |
|---------------------------|---------------|---------|
| White | 33,060 | 47,832 |
| Asian | 26,964 | 50,496 |
| Black or African American | 16,856 | 30,998 |
| Hispanic or Latino | 16,495 | 39,041 |
| Native American | 2,500 | 37,073 |

Source: U.S. Census Bureau, 2000.

Table 29. Median Family Income in 1999 (\$) by Race in Toombs County, GA

| Race or Ethnicity | Toombs County | Georgia |
|---------------------------|---------------|---------|
| White | 41,963 | 55,644 |
| Asian | 26,964 | 54,268 |
| Black or African American | 20,198 | 34,147 |
| Hispanic or Latino | 15,771 | 36,474 |
| Native American | 2,500 | 40,169 |

Source: U.S. Census Bureau, 2000.

APPENDIX C
INTERVIEW QUESTIONNAIRES

HISPANIC RESIDENTS` SURVEY

Interview Date_____ Location_____ # of Respondent_____

UTILIZATION OF HEALTH SERVICES

1. What are the biggest difficulties involved in obtaining health care?

- It costs too much_____
- It is too far_____
- I do not speak English_____
- I have to work_____
- No easy to get an appointment__
- My immigration status_____
- Other_____

2. When you are sick, who/where do you usually go for help?

- I use home remedies_____
- Curandero*_____
- Private Doctor’s Office_____
- Hospital Emergency Room_____
- Pharmacist_____
- Nurse_____
- Health Department_____
- Other_____

3. How long has it been since you received health care for the last time?

- Less than 6 months_____
- 6 months to 1 year_____
- 1 to 2 years_____
- More than 2 years_____
- Never_____

4. Who/where did you go for seeking health care the last time?

- Relatives/Friends/Neighbors_____
- Curandero*_____
- Private Doctor’s Office_____
- Hospital Emergency Room_____
- Pharmacist_____
- Nurse_____
- Health Department_____
- Other_____

5. For what reason did you seek health care the last time?

- Illness_____
- Preventive Care_____
- Regular Check-up_____
- Follow-up Visit_____
- Injury_____
- For a Prescription_____
- Other_____

6. In the last 12 months, how many times did you visit a doctor?

- Never_____
- # of times_____

7. When did you have a General Physical Check-up for the last time?

- Less than 6 months___
- 6 months to 1 year___
- 1 to 2 years___
- More than 2 years___
- Never___

8. Have you ever been injured in Toombs County? If so, where did it happen?

- At home___
- Workplace___
- Transportation to job___
- Elsewhere_____
- No, never___

9. If you have been injured, who/where did you go for help?

- I used home remedies___
- Curandero*___
- Private Doctor's Office___
- Hospital Emergency Room___
- Pharmacist___
- Nurse___
- Health Department___
- Other_____

10. Did you ever experience one of the following illnesses?

- Empacho*___
- Mal ojo* (evil eye)___
- Mollera caida* (fallen fontanelle)___
- Susto* (anxiety)___
- Never___
- Other_____

11. If so, who did you consult for treatment?

- I used home remedies___
- Curandero*___
- Relatives/Friends/Neighbors___
- Private Doctor's office___
- Nurse___
- Heath Department___
- Hospital Emergency Room___
- Other_____

12. In your opinion, what can be done to improve Latino access to medical services?

ACCESSIBILITY

13. How long does it take you get to a clinic or a doctor's office?

- Less than 15 m ____
- 15 to 29 m ____
- 30 to 45 m ____
- 46 to 1 hour ____

14. What kind of transportation do you use to visit a doctor or a clinic?

- Private car/truck ____
- Relatives` car/truck ____
- Friends` car/truck ____
- Walking ____
- Taxi ____
- Other _____

15. How difficult is it for you to get there?

- Very difficult ____
- Difficult ____
- Not so difficult ____
- Easy ____

AFFORDABILITY

16. Are you covered by any form of health insurance or health plan at this time?

- Government Health Insurance
 - Medicaid ____
 - Medicare ____
- Private Health Insurance
 - Employment-based Plan ____
 - Direct purchase Plan ____
- No, I am uninsured ____
- Other _____

17. Did an illness or an injury sometimes result in any of the following problems?

- Debts for paying bills ____
- Loss of job ____
- Loss of health insurance ____
- Never ____
- Other _____

18. How hard is it for you to pay for basics (food, shelter, and medical care)?

- Very hard ____
- Hard ____
- Not hard ____

ACCOMODATION

19. When you call for an appointment, how many days do you usually have to wait to see a doctor?

- 1 to 3 days ____
- 4 to 7 days ____
- 8 to 11 days ____
- 12 to 14 days ____

20. Which of the following are the main problems for you for visiting a doctor?

- Doctors do not speak Spanish ____
- Practice hours not convenient ____
- I have to wait too long for an appointment ____
- Long waits in doctor's office ____
- I am not sure what services are available to me ____
- None of them ____

ACCEPTABILITY

21. If you ever visited a doctor or/and a nurse, how you can describe their attitudes towards you?

22. Have you ever experienced one of the following mistreatments in a health care facility?

- Deny of services ____
- Longer waits ____
- Negative staff attitudes ____
- Never ____
- Other _____

BACKGROUND INFORMATION

23. Gender

- M___
- F___

24. Which is your country of origin?

- Mexico___
- Guatemala___
- Dominican Republic___
- Puerto Rico___
- Cuba___
- Other_____

25. What is your present age?

- # of years___

26. Which is your present marital status?

- Married___
- Single, never married___
- Living together, not married___
- Divorced___
- Separated___
- Widowed___

27. What is the highest level of formal education you completed?

- Elementary school or less___
- Some middle school___
- Middle school diploma___
- Some high school___
- High school diploma___
- Some College___
- College degree___
- Graduate school___

28. How many children do you have?

- # of children___
- I do not have children___

29. If you have children, where do they live?

- With me___
- With relatives in US___
- With relatives in other Country___
- Other_____

30. Which of the following is your housing condition in Toombs County?

- Rent a Mobile Home___
- Own a Mobile Home___
- Rent a House___
- Grower/Crew Free Housing___
- Own a House___
- Grower/Crew Housing Rent___
- Rent an Apartment___
- Other_____

31. Including you, how many persons live in your place?

- # of occupants___

32. Does the place where you live lack of one of the following facilities?

- Kitchen___
- Plumbing___
- Electricity___
- Running water___
- Heating/AC___
- Not lacking___

33. For how long have you been living in the United States?

- Less than 1 year___
- 1 to 3 years___
- 3 to 5 years___
- More than 5 years___
- I do not live in US_____

34. For how long have you been living in Toombs County?

- Less than 1 year___
- 1 to 3 years___
- 3 to 5 years___
- More than 5 years___
- I live in other US State_____

35. Which is your present occupation in Toombs County?

- Vidalia Onion harvester___
- Pine-straw harvester___
- Poultry Plant___
- Clothing Factory___
- Restaurant___
- Grocery Store___
- Self-employer___
- Student___
- Unemployed___
- Other_____

ENCUESTA PARA LOS RESIDENTES HISPANOS

Fecha de la Entrevista _____ Lugar _____ # de Encuestado _____

UTILIZACIÓN DE LOS SERVICIOS SANITARIOS

1. ¿Cuáles son las dificultades más grandes para obtener el cuidado médico?

- | | |
|---|--|
| <input type="radio"/> Cuesta demasiado _____ | <input type="radio"/> No es fácil conseguir una cita _____ |
| <input type="radio"/> Queda demasiado lejos _____ | <input type="radio"/> Mi estado de inmigración _____ |
| <input type="radio"/> No hablo inglés _____ | <input type="radio"/> Otro _____ |
| <input type="radio"/> Tengo que trabajar _____ | _____ |

2. Cuándo usted está enfermo, donde va generalmente para pedir ayuda?

- | | |
|--|--|
| <input type="radio"/> Utilizo remedios caseros _____ | <input type="radio"/> Farmacéutico _____ |
| <input type="radio"/> <i>Curandero</i> _____ | <input type="radio"/> Enfermera _____ |
| <input type="radio"/> Doctor Privado _____ | <input type="radio"/> Departamento de la Salud _____ |
| <input type="radio"/> Emergencia del Hospital _____ | <input type="radio"/> Otro _____ |

3. ¿Hace cuanto tiempo usted recibió cuidado médico por la última vez?

- | | |
|--|---|
| <input type="radio"/> Menos de 6 meses _____ | <input type="radio"/> Más de 2 años _____ |
| <input type="radio"/> 6 meses a 1 año _____ | <input type="radio"/> Nunca _____ |
| <input type="radio"/> 1 a 2 años _____ | |

4. ¿Dónde fue usted para buscar cuidado médico la última vez?

- | | |
|--|--|
| <input type="radio"/> Parientes/Amigos/Vecinos _____ | <input type="radio"/> Farmacéutico _____ |
| <input type="radio"/> <i>Curandero</i> _____ | <input type="radio"/> Enfermera _____ |
| <input type="radio"/> Doctor Privado _____ | <input type="radio"/> Departamento de la Salud _____ |
| <input type="radio"/> Emergencia del Hospital _____ | <input type="radio"/> Otro _____ |

5. ¿Por cual razón usted buscó cuidado médico la última vez?

- | | |
|--|--|
| <input type="radio"/> Enfermedad _____ | <input type="radio"/> Lesión _____ |
| <input type="radio"/> Cuidado Preventivo _____ | <input type="radio"/> Para una Receta Médica _____ |
| <input type="radio"/> Chequeo Regular _____ | <input type="radio"/> Otro _____ |
| <input type="radio"/> Visita de Control _____ | _____ |

6. Durante los 12 meses pasados, cuántas veces usted visitó a un doctor?

- Nunca____ Número de veces____

7. Cuándo usted tuvo un chequeo físico general por la última vez?

- Menos de 6 meses____ Más de 2 años____
 6 meses a 1 año____ Nunca____
 1 a 2 años____

8. ¿Se ha lesionado usted alguna vez en el condado de Toombs? ¿Si es así, dónde sucedió?

- En casa____ Otra parte_____
 Lugar de trabajo____ No, nunca____
 Transporte al trabajo____

9. ¿Si se lesionó, dónde fue usted para pedir ayuda?

- Utilicé remedios caseros____ Farmacéutico____
 Curandero____ Enfermera____
 Doctor Privado____ Departamento de la Salud____
 Emergencia del Hospital____ Otro_____

10. ¿Alguna vez usted ha tenido alguna de las siguientes enfermedades?

- Empacho____ Susto____
 Mal ojo____ No, nunca____
 Mollera caída____ Otro_____

11. ¿Si es así, a quién consultó para el tratamiento?

- Utilicé remedios caseros____ Enfermera____
 Curandero____ Departamento de la Salud____
 Parientes/Amigos/Vecinos____ Emergencia del Hospital____
 Doctor Privado____ Otro_____

12. ¿En su opinión, qué se puede hacer para mejorar el acceso de los Latinos a los servicios médicos?

ACCESIBILIDAD

13. ¿Cuánto tiempo necesita usted para llegar a una clínica o a una oficina de un doctor?

- Menos de 15 m ____
- 15 a 29 m ____
- 30 a 45 m ____
- 46 a una hora ____

14. ¿Qué tipo de transporte utiliza usted para visitar un doctor o una clínica?

- Carro/Camioneta privado ____
- Carro/Camioneta de parientes ____
- Carro/Camioneta de amigos ____
- Caminar ____
- Taxi ____
- Otro _____

15. ¿Qué tan difícil es para usted llegar allí?

- Muy difícil ____
- Difícil ____
- No es tan difícil ____
- Fácil ____

CAPACIDAD DE PAGO

16. ¿Actualmente, tiene usted un seguro médico o un plan de salud?

- Seguro Médico del Gobierno
 - Medicaid ____
 - Medicare ____
- No, no tengo seguro ____
- Seguro Médico Privado
 - Plan Médico Para Empleados_
 - Plan Comprado Directamente_
- Otro _____

17. ¿Alguna vez una enfermedad o una lesión dio lugar a cualquiera de los siguientes problemas?

- Deudas para pagar cuentas ____
- Pérdida del trabajo ____
- Pérdida del seguro médico ____
- No, nunca ____
- Otro _____

18. ¿Qué tan difícil es para ud pagar por los alimentos, vivienda y asistencia médica?

- Muy difícil ____
- Difícil ____
- No es difícil ____

ATENCIÓN MÉDICA

19. ¿Cuándo usted llama para una cita, cuántos días generalmente tiene que esperar para visitar a un doctor?

- 1 a 3 días___
- 4 a 7 días___
- 8 a 11 días___
- 12 a 14 días___

20. ¿Cuáles de los siguientes problemas son importantes para visitar al doctor?

- Doctores no hablan español___
- Horas de atención no convenientes___
- Esperar demasiado por una cita_
- Larga esperas___
- No estoy seguro de qué servicios están disponibles para mí___
- Ningunos de ellos___

ACTITUDES DE PROVEEDORES MÉDICOS

21. ¿Si usted en el pasado visitó un doctor o una enfermera, cómo puede describir sus actitudes hacia usted?

22. ¿Alguna vez ha experimentado uno de los siguientes maltratos en un centro de cuidado médico?

- Niega de servicios___
- Esperas más largas___
- Actitudes negativas del personal___
- No, nunca___
- Otro_____

INFORMACIÓN PERSONAL

23. Género

- M___ F___

24. ¿Cuál es su país de origen?

- México___ Puerto Rico___
 Guatemala___ Cuba___
 República Dominicana___ Otro_____

25. ¿Cuál es su edad actual?

- Número de años___

26. ¿Cuál es su estado civil actual?

- Casado___ Divorciado___
 Soltero, nunca casado___ Separado___
 Convivencia___ Viudo___

27. ¿Cuál es el grado o año escolar más alto que ha completado?

- Número de años_____

28. ¿Cuántos niños tiene usted?

- Número de niños___ No tengo niños___

29. ¿Si usted tiene niños, dónde viven?

- Conmigo___ Con parientes en otro país___
 Con los parientes en US___ Otro_____

30. ¿Cuál de las siguientes es su condición de vivienda en el condado de Toombs?

- Alquilo una casa móvil___ Poseo una casa___
 Poseo una casa móvil___ Grower/Crew Housing Rent___
 Alquilo una casa___ Alquilo un apartamento___
 Grower/Crew Free Housing___ Otro_____

31. ¿Incluyendose usted, cuántas personas viven en su vivienda?

- Número de personas___

32. ¿Carece su vivienda de una de las siguientes instalaciones?

- Cocina____
- Plomería____
- Electricidad____
- Agua corriente____
- Calefacción/AA____
- No carece____

33. ¿Por cuánto tiempo ha estado viviendo en los Estados Unidos?

- Menos de 1 año____
- 1 a 3 años____
- 3 a 5 años____
- Más que 5 años____
- No vivo en los E.E.U.U._____

34. ¿Por cuánto tiempo ha estado viviendo en el condado de Toombs?

- Menos de 1 año____
- 1 a 3 años____
- 3 a 5 años____
- Más que 5 años____
- Vivo en otro estado_____

35. ¿Cuál es su ocupación actual en el condado de Toombs?

- Cosechador de Cebolla____
- Cosechador de Paja de Pino____
- Planta Procesamiento Pollo____
- Fábrica de Ropa____
- Restaurante____
- Otro_____
- Tienda de Comida____
- Negocio Proprio____
- Estudiante____
- Desempleado__

APPENDIX D

KEY TERMS

1. Latino – Hispanic.

Hispanic refers to people whose native language is Spanish or who are descendants of Spanish-speaking ancestors, while the broader term Latino is generally used to describe U.S. residents of Latin American origin. In other words, the term Latino emphasizes a geographical area and is inclusive of many cultures, while the term Hispanic emphasizes the Spanish heritage. In the United States, most Latinos are Hispanics, but there are some exceptions, like for instance Haitians and Brazilians who do not come from Spanish-speaking nations. Sometimes, the term Latino might be complicated by the fact that some researchers do not include the Caribbean as part of Latin America, while most Americans would recognize Caribbean natives such as Cubans, Puerto Ricans, and Dominicans as Latinos (Atilas and Bohon 2002). In this study, since the vast majority of the target population is from Mexico, Latino would be the most appropriate term. However, for simplicity and to parallel the U.S. Census Bureau modality, Latino and Hispanic will be used interchangeably to describe the target population residing in Toombs County.

2. Primary Care.

Primary care refers to the type of basic health care that would be delivered by a general practitioner. Areas of primary care include family practice, internal medicine, pediatrics, and obstetric/gynecology. Commonly, all these physicians provide continuing health surveillance, treat general illnesses, provide preventive care services, and triage patients to specialized medical care (Raffel and Raffel 1994).

3. Medicare.

Health insurance program for those aged 65 and above, regardless of income or wealth, and it also covers disabled people under 65 who have been entitled to Social Security or Railroad Retirement disability benefits for at least two consecutive years or who suffers from chronic renal (kidney) disease that requires a kidney transplant or routine dialysis treatment (Raffel and Raffel 1994).

4. Medicaid.

Federal-state financed program to pay for health services for the categorically needy and the medically needy. The categorically needy are those receiving public assistance from the Aid to Families with Dependent Children (AFDC) program and those who receive Supplementary Security Income (SSI) because they are aged, blind, or disabled. The medically needy are those people who have enough money to live on, but not enough money to pay for medical care. They might be covered under Medicaid if their state has opted to provide coverage for these low-income persons. It is up to each state to define income eligibility and the benefit structure of the program. Physicians who accept Medicaid patients must accept the full payment without charging the patient. Because payments have not grown with inflation, more and more physicians are resisting or limiting the number of Medicaid patients they treat (Raffel and Raffel 1994).

5. Medically Underserved Areas (MUAs).

Medically Underserved Areas and Medically Underserved Populations (MUPs) may have shortages of primary medical care, dental or mental health providers and may be

geographic (a county or service area), or demographic (low income, Medicaid-eligible populations). The Bureau of Health Professions National Center for Health Workforce Analysis develops shortage designation criteria and uses them to decide whether or not a geographic area or population group is a MUA or a MUP. The system of designation involves application of the Index of Medical Underservice (IMU) to data on a service area to obtain a score for the area. The IMU scale is from 0 to 100, where 0 represents completely underserved and 100 represents best served. Under the established criteria, each service area found to have an IMU of 62.0 or less qualifies for designation as a MUA. The IMU involves four variables - ratio of primary medical care physicians per 1,000 population, infant mortality rate, percentage of the population with incomes below the poverty level, and percentage of the population age 65 or over. The value of each of these variables for the service area is converted to a weighted value, according to established criteria. The four values are summed to obtain the area's IMU score.

6. TIGER Census Tract.

The Topographically Geographic Encoding and Referencing (TIGER/Line) data set are files produced by the U.S. Bureau of the Census and consist of street centerline spatial data in which street segments are represented as vectors to which attributes of the streets are attached. Census blocks and block groups (typically containing from 200 to 600 housing units) are the smallest units. Census tracts comprise groups of contiguous blocks and group blocks and have population ranging from 2,500 to 8,000 (Cromley and McLafferty 2002).

7. Geometric Centroid.

The centroid, or central location, defines the geometric center of a geographic area (Cromley and McLafferty 2002).