Health Care Access for Low-Income Hispanic Families

Enrolled in Head Start

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Head Start serves families with children ages three to five with income at or below 130% of the national poverty level (See Appendix A) (Kolbe & Good, 2008, p. iv). Recently, Aurora and Denver counties have received funding for an Early Head Start program which provides services to children from birth to age three who meet the same low income criteria. Services for both Head Start and Early Head Start include education, early childhood development, medical, dental, mental health and disabilities, nutrition, and parental involvement (Head Start Program, 2008). The three major Head Start programs in the Denver metropolitan area include Denver Great Kids Head Start (DGKHS) and Rocky Mountain Service Employment and Redevelopment (RMSER) serving Denver County, Aurora Head Start serving Adams and Arapahoe Counties, and Jefferson County Head Start serving Jefferson, Clear Creek, Gilpin, and Park counties. Together, these Head Start agencies serve 3,927 children in the seven counties mentioned, which is 10.2% of eligible children in those counties (Kolbe & Good).

Demographics

In Denver County, RMSER and DGKHS serve 1,895 children through the Head Start and Early Head Start programs, and many children receive services through other agencies such as the Colorado Public School System, the Colorado Preschool and Kindergarten Program, and the Colorado Child Care Assistance Program (Kolbe & Good, 2008, p. vii-viii). However, it is estimated that 37.8% of Head Start eligible children and 82.3% of Early Head Start eligible children in Denver County are not served by any early childhood education or childcare resource agency (Kolbe & Good, p. viii).

Projections based on the 2000 U.S. Census forecast a current population of 5 million for the state of Colorado, 2.5 million for the Denver metropolitan area, and 594,740 for the city and county of Denver (CEDIS, 2005). In 2000, a total of 917,430 children under the age of 15 were
living in Colorado, with 11.3% of those children living in Denver County alone (CEDIS). The U.S Census Bureau estimated that 56,039 Colorado children under the age of 5 were living under the national poverty level in 2005, up 11% from 2004 estimates, showing that Colorado children living in poverty is on the rise (SAIPE, 2008).

The demographic breakdown based on ethnicity for the state of Colorado, Denver County, and Head Start families can be found in Figure 1.

**Figure 1:** Demographic Comparison between State, County, and Head Start Populations

Sources: SAIPE, 2008; U.S. Census 2000; Harris, 2006

As shown in Figure 1, Hispanic children constitute 71.6% when Hispanics make up 51% of the population of Denver County for children less than five years of age. Likewise, 43.9% of Denver Head Start children are African American, when only 10% of the children in Denver County younger five years old are African American. The reverse trend is seen for the White
population. Although 32% of children under five years old in Denver County are white, they only make up 3.1% of the Head Start population. This trend reflects that only 3.6% of White families in Colorado are living in poverty, compared to 19.9% of Hispanic families, and 16.0% of African American families (“American Community Survey [ACS],” 2006). Since the majority of Head Start children are Hispanics with low income, this is the target population for the group health planning project.

Analysis of the 2000 U.S. Census shows that 48.6% of non-Latino Whites, 27.1% of African Americans, and 14.6% of Hispanics in Denver County are employed in management, professional, and related occupations (ACS, 2006). Likewise, 6.4% of Whites, 6.3% of African Americans, and 21.2% of Hispanics are employed in production, transportation, and material moving occupations (ACS). Lastly, 11.0% of Whites, 19.6% of African Americans, and 23.9% of Hispanics work in “service occupations” (ACS). For a summary of occupation by ethnicity in Denver County, refer to Figure 2.

**Figure 2: Summary of Occupation by Ethnicity in Denver County**

![Figure 2: Summary of Occupation by Ethnicity in Denver County](image-url)

*Source: U.S Census Bureau, base on 2000 Census*
Perhaps the most astounding statistics regarding ethnical disparities in Denver County were those regarding yearly income and earnings. For example, in 1999, Whites earned $33,765 per capita, which is nearly three times the per capita earnings of Hispanics ($11,990) and more than twice as much as the per capita earnings for African Americans ($16,786) (“U.S. Census 2000”). For Denver County children under 18 years of age, 26.9% of Hispanics, 26.1% of African Americans, and 7.1% of Whites were determined to be living in poverty based on the 2000 U.S. Census. Hispanics earned the least for full time year round employment of the three ethnicities, and African Americans still earned significantly less than Whites (ACS, 2006). In all ethnicities, women earned less than men for full time employment, which could have a significant impact on single mothers. Also, per capita income may be lower for Hispanics due to the fact that they generally have more children. A recent study found that “34 percent of the Hispanic population was younger than 18, compared with 25 percent of the general population” (Bernstein, 2008). For a summary of incomes based on ethnicity, refer to Figure 3.

**Figure 3:** Income by Ethnicity in Denver County

**Source:** U.S. Bureau of Statistics, based on 2000 U.S. Census
Though data for educational levels by ethnicity was not available for the county of Denver alone, national statistics from the 2000 U.S. Census provided data that can be used to estimate approximate education levels in the county. Nationally, 9.8% of White Non-Latino’s over age 25 have an advanced degree, contrasted with 3.8% of Non-White Latinos and 4.8% of African Americans (Bauman & Graf, 2003, p. 5). Of White Non-Latinos, 27.0% have obtained a bachelor’s degree, contrasted with 10.4% of Hispanics and 14.3% of African Americans (Bauman & Graf). The same trend was reflected down to the High school graduate level, with 85.5% of Whites, 52.4% of Hispanics, and 72.3% of African Americans obtaining a high school diploma or the equivalent (Bauman & Graf).

Though religious data based on ethnicity is not readily available for Denver County, N.J. Kelly and J.M. Kelly (2005) found that, nationally, 56% of the Latino population in the U.S. is Roman Catholic, followed by evangelical (23%), secular (9%), and mainline protestant (7%). The general trend showed that those who lived in the U.S. longer, or who were born and raised in the U.S. were more likely to be affiliated with religions other than Catholicism (Kelly & Kelly, p. 89).

**Literature Review**

It is a well-known fact that the United States health care system is in distress. However, some populations are getting hit harder than others. As mentioned above, the target population for Head Start is Hispanics of low income. This population has numerous health issues. First, it is important to point out that the Hispanic population in the United States is on the rise. According to one study, the Hispanic population “will soon be the largest minority group in the United States” and that by the year 2050, will constitute one fourth of the population (Flores et al., 1998, p. 1119). Hispanic’s in general are also known to have larger households and higher
birth rates than other populations (Lasseter & Baldwin, 2004). However, despite their increasing population, they are most likely to be of low socioeconomic status, “the least likely to have health insurance and the most likely to encounter difficulty accessing health care” (Cheong, 2007, p.154). Therefore, one of the major health issues regarding the Hispanic population is their access to care. It is estimated that 40% of the Hispanic/Latino population is uninsured and that 29% of those are children (Betancourt et al., 2004). Healthy People 2010 also reported Mexican Americans having one of the highest rates of being uninsured (U.S. Department of Health and Human Services [HHS], 2007). Latino children are actually considered to be the “most uninsured racial/ethnic group of the U.S. children” (Flores et al., 2006, p. 730). This is even more disturbing when you consider that Latino children make up “39% of the Latino population in the United States,” (Lasseter & Baldwin, 2004, p.184). In comparison, some studies show uninsured rates for whites as low as 6% (Flores & Tomany-Korman, 2008). The growing disparity is obvious, but is the lack of health insurance affecting Hispanic’s overall health?

Obesity, diabetes, poor dental hygiene, and suicide are just a few of the ailments that disproportionately affect the Hispanic population. In fact, it is estimated that 14% of Hispanic children are overweight and that this is likely to carry on into adulthood (Haas et al., 2003). According to a study, overweight adolescents are found to “complete fewer years of education, are less likely to marry, and have lower household income in adulthood” when compared with Caucasians (Haas et al., 2003, p. 2105). Having the highest rate of uninsured is also thought to directly correlate with their increased likelihood of being overweight, (Haas et al.). Despite the estimated over 100% increase in obesity among U.S. children in general, Hispanic children are “more likely to be overweight than children in other racial/ethnic groups,” (Kimbro, Brooks-Gunn, & McLanahan, 2007, p. 298). In fact, 35% of low-income Hispanic kids, age two to five,
were over the 85th percentile for weight (Kimbro et al., 2007). Latino children in general are considered to be the most likely to be in poor or fair health with one-third being overweight (Flores & Tomany-Korman, 2008). Maternal weight status has also been found to be a key determinant of whether or not kids will be obese (Kimbro et al., 2007). Since obesity is a leading health indicator according to Health People 2010, this is rather distressing information regarding this population and their overall health. Healthy People 2010 also states that obesity not only substantially increases the risk of developing other illnesses (e.g. high blood pressure, diabetes, high cholesterol) but is considered to be especially prevalent among populations with low incomes such as Mexican Americans and African Americans (HHS, 2007). Having a low income, therefore, is a major factor in the health issues affecting this population as well.

Many Hispanics’ also have very poor dental care. In fact, according to one study, Hispanic’s are at the highest risk of never seeing a dentist (18%), (Flores & Tomany-Korman, 2008). Another report found that “uninsured children were 33 percent less likely to have an annual dental visit” and that “25 percent of children ages 2 to 17 had untreated dental caries,” (Head Start, 2008, p.79). They also found that “untreated dental caries were higher among Hispanics than non-Hispanics,” (Head Start).

In terms of mental health needs, Latino’s were also found to have “decreased access to mental health services,” (Duarte-Velez & Bernal, 2007, p. 435). This is especially concerning when you consider that “suicide is the third leading cause of death for Latino’s 10-24 years old” and that Hispanic adolescents in general are considered to be at “increased risk for depressive symptoms, suicidal ideation, and suicide attempts,” (Duarte-Velez & Bernal). Despite the obvious need for mental health service, many are reporting trouble accessing care. “According to the National Survey of Children’s Health from 2005, only 59.9% of Colorado children with a
chronic emotional, developmental or behavioral problem have received mental health care in the last year” (Head Start, 2008, p. 82-83). This percentage is most likely even less for the Hispanic population. Mental health is also another leading health indicator according to *Healthy People 2010*; however it is obviously not something that the Head Start population is receiving care for.

Diabetes morbidity and mortality rates are 30% higher for the Hispanic population than white American as well (Betancourt et al., 2004). Hispanic Americans are estimated as having “poorer outcomes in diabetes and HIV/AIDS, have lower rates of blood pressure control, and receive fewer child and adult immunizations,” (Betancourt et al., p.16). In fact, overall Hispanic’s are less likely “to receive treatment for diabetes, mental illness, and tuberculosis and were less likely to receive dental and preventative care,” (Stone & Bablerrama, 2008, p.4).

So, why is this happening? Why are those most in need of care the exact ones not receiving it? Not having health insurance is not the only barrier to health care access, although it is linked to poor socioeconomic status and parents with limited English (Flores, Abreu, & Tomany-Korman, 2006). One study found that when asked what barriers prevented the Hispanic population from seeking medical care, having no medical insurance was listed as number one, then the expense, then cultural barriers, and lastly the difficulty found in making an appointment (Flores et al., 2006). Another study, however, found the number one barrier to be language problems (26%), and then long waiting time (15%), then no insurance (13%), and lastly difficulty paying (7%) (Flores et al., 1998). The language barrier becomes especially important when you consider that some researchers found that 46% of the Hispanics studied reported not being able to speak English very well and 26% reported not being able to speak English at all, (Flores et al., 1998). Other barriers mentioned, when specifically addressing why parents did not bring a sick child in, were lack of transportation (21%) and inability to pay for care (7%) (Flores
et al, 1998). The travel distance to a health provider is significant when you consider that it also limits their options for providers. In fact, 30% of Hispanic’s reported having to travel a significant distance for health care and that this presented “very little” or “no choice” of where they could go for care (Betancourt et al., 2004, p.20).

Many are also forced to use the emergency room for care. According to one study, 53% reported using the ER as a main source of health care (Betancourt et al., 2004). This is not only a poor use of health care services, but places a considerable strain on resources and funds throughout the health care system. The health care issues for Hispanics are tremendous and the care they are receiving is far from adequate. Obvious barriers exist, so what can we as health care providers do to help to break down these barriers and start building a system more accessible to those most in need?

Health Problems and Outcomes

The major problem that exists in our target population is that of access to health care. Considering the major health issues mentioned that affect this population, accessing health care becomes a key concern that should be addressed in order to better their health outcomes. One study stated that the “majority of the conditions that disproportionately affect Latino Americans are both preventable and treatable,” (Betancourt et al., 2004, p.17). So, if they were to receive adequate and quality care from the beginning, these major health issues that affect the Hispanic population can be prevented. If access becomes better, their outcomes will also be better. One of the public health nursing competencies “for providing essential public health services” includes “linking people to needed personal health services and assuring the provision of health care when otherwise unavailable” (Public Health Nursing, n.d., para. 9). One of the core functions of public health nursing is that of assurance, which is described as “the role of public health in making
sure that essential community health services are available, which may include providing essential personal health services to those who would not otherwise receive them” (Stanhope & Lancaster, 2006, p.66). Therefore, it is our duty to aid in accessing care for the Hispanic population considering they have so many barriers in doing so. We must also consider these barriers preventing them from access and incorporate that into our plan.

Because of the obvious issues surrounding the Head Start population, last fall the Head Start nurses asked the previous group of nursing students to create a spread sheet of health care services that the nurses could use to refer Head Start families to appropriate health care services. Since it is part of their role to provide this information, the Head Start nurses needed a user-friendly template to do so. Therefore, the previous students interviewed nursing staff in order to come up with an Excel spread sheet that lists resources available, what insurance they accepted, what services they provide (i.e., primary, care dental, mental health, vision), their contact information, their location, and if they spoke a language other than English. This was a wonderful start to developing a resource to allow the access to health care to improve for the Hispanic population that Head Start serves. Due to the nature of our clinical rotations, however, this project became an ongoing endeavor which we will be expanding upon. We plan to address what the previous group was able to accomplish and what gaps still exist which we can further develop. This project is an example of primary prevention whereby our ultimate goal is to allow better access to care for a population whose access is poor. Therefore, we are seeking to “promote health and prevent disease from the beginning” (Stanhope & Lancaster, 2006, p.156). Primary prevention is especially important when it comes to populations that are vulnerable or more susceptible to disease and injury. The Hispanic population that Head Start serves is
certainly a vulnerable one whose outcomes would be far worse without the prevention that is
most definitely needed.

So, you might now be asking yourself, what would the consequences be if this population
was to not have adequate access to health care? Considering that most Hispanics are uninsured,
its not surprising that this has been found to result in this population “not having a regular source
of care, lacking preventative care screening, and delaying care until health problems are severe
and more costly” (Stone & Bablerrama, 2008, p.4). Other consequences of being uninsured
include being less likely to have a regular physician, not being up to date on vaccinations, and
being more likely not to come in for needed medical care (Flores et al., 2006). For these reasons,
this population is often seen when their condition is at its worst, and they are forced to be seen in
the emergency room. Having the ER as their primary source of care also has its own
consequences. Their care ultimately has decreased continuity and the staff which they are seen
by is most likely to be residents or graduate house staff (Betancourt et al., 2004). So, the quality
of care that they do receive is also not of high quality.

Another major barrier that often leads to poor health outcomes is that of the cultural and
language barriers that exist. Many studies have shown that language barriers often led to poor
medication compliance, less preventative interventions, a decreased number of
procedures/surgeries performed, and an ultimate dissatisfaction with the health care provided
(Betancourt et al, 2004). Another study found that minority patients in general, but especially
those that have limited English proficiency, are less likely to receive empathy or establish a good
rapport with their provider, are less likely to receive adequate information regarding their health,
and are less likely to receive encouragement to participate in decision making (Perez-Stable,
2007). All of these aspects of care have previously been linked to positive outcomes (Perez-
So, since they are not occurring with the care of many minorities, it is not surprising that their care is ultimately suffering and negative outcomes are ensuing. These negative outcomes include longer hospital stays and more frequent emergency room visits (Perez-Stable). Some have also reported feeling that because their provider did not speak Spanish, this led to “serious consequences for the health of Latino children” including misdiagnoses and overall poor medical care (Flores et al., 1998, p. 1123). Therefore, the cultural and language barriers for this population not only affect their access to care, but their overall health outcomes.

If some of the specific health issues that most often plague the Hispanic population are not addressed, their health will only become worse. For example, obesity and being overweight is all too common for many Hispanic populations. However, they have been linked to the future development of type II diabetes and cardiovascular disease (Kimbro et al., 2007). Being overweight is also often positively correlated with a lack of health insurance and associated with low self-esteem, leading to mental health issues (Haas et al., 2003). The outcomes for this population in general are overwhelmingly negative, making improvements in access to health care a huge and important priority for the nurses at Head Start. Therefore, aiding in this step is a more than appropriate intervention on our part.

Interview with Healthcare Professional

After reviewing the research and past students’ data we came up with seven questions to ask a Head Start nurse. During the interview Dee, one of Head Start’s registered nurses, was asked about the current resources and obstacles families face when accessing health care. She revealed many of the known barriers identified by research data, including awareness of programs and resources. It was determined that families would like to have one place they can get all their medical needs met. Often families have difficulty “navigating the process and
procedures systems set by state and or public health facilities” (D. Daniels, personal communication, April 29, 2008). Dee also mentioned that patients and clients often are treated with negative attitudes from employees at the facilities. A complete list of questions and answers can be found in Appendix B. Based on these needs and the already identified needs of the population found in the research, it is obvious this specific population requires our support and assistance in gaining much needed access to medical care. (D. Daniels, personal communication, April 29, 2008)

The need for a comprehensive resource posted online that can be easily accessed and continually updated is apparent after conducting research and interviews. Many nurses and family services workers are referring families several times a week, having to search through unorganized and often outdated sources, until one is found that will accept the new patients (D. Daniels, personal communication, April 29, 2008; L. Joslyn, personal communication April 28, 2008). Having an online data base available to the Head Start faculty will decrease time wasted in needless searching. Head Start administrators hope this resource will be the spring board for a comprehensive online search engine of health care providers for the Head Start population. The online search engine would begin with searching for the type of provider, such as dental, vision, general medicine, and then allow for a search by location. When the list of options is provided it should list types of insurance and coverage accepted and the contact information for accessing that clinic.

Interview with Members of Target Population

I interviewed one Head Start parent and one caregiver; both were very nice and receptive to being interviewed anonymously for informational purposes. Each parent was asked the same eight questions, which our group had formulated based on reviewing the literature and evaluating
the purpose of our project. The full interview can be found in Appendix C. Both families
mentioned having some type of insurance for the children and said they took advantage of the
Head Start resources for their children’s health care needs. Both families suffered difficulty in
paying for medical services and felt the family and community was lacking primary services,
including dental and mental health access. Through Head Start and the community, our resource
can make these families aware of the health care services that are available to them. A need for
health care and a lack of access to these services has already been established through the
literature review. These findings have been confirmed through interviewing members of our
target population. This online document available to Head Start personnel creates a quick and
easy method to provide health care resources and referrals to Head Start families.

Comparing Literature to Interviews

Head Start has effectively helped children enroll in available insurance programs, but
parents still face considerable barriers in accessing care for their families. As we have seen in the
literature, obesity, diabetes, poor dental hygiene, and suicide disproportionately affect the
Hispanic population (Haas et al., 2003). In fact, both obesity and mental health were mentioned
during the parent interviews. For example, one of the mothers admitted she was concerned about
her weight, and would like nutritional counseling, but did not know where to get it. With
approximately 14% of Hispanic children being overweight it is epically important to have
nutrition education and regular check ups with primary care providers (PCPs) (Haas et al., 2003).
Since maternal obesity has been linked to increased chances of a child being obese, it is
important to consider concerns from mothers like this one (Kimbro et al., 2007). Access to health
and nutrition should be a priority, not only for the children at school, but also available to parents
in the community. Likewise Health People 2010 discusses the fact that obesity increases the risk
of developing other chronic illness, leading to a lifetime of medical needs that will likely be unfulfilled (HHS, 2007). Obesity can also lead to a lack of self-confidence and eventually depression, and potentially suicide (Goodman & Whitaker, 2002, p. 497). Nutrition and exercise education are a must. The other caregiver mentioned that she and others in her community could benefit from mental health services, citing that depression was common among those she knew in her community. Access to mental health services for the Head Start community is particularly important because, as the literature has shown, the third leading cause of death for Latinos ages 10-24 is suicide (Duarte-Velez & Bernal, 2007).

Studies have shown that the Latino population is at the highest risk of never seeing a dentist (Flores & Tomany-Korman, 2008). It has also been shown that Hispanics had a higher rate of untreated dental caries than non-Hispanics (Head Start, 2008). Both of the family members I interviewed stated that there was a definite need for better access to dental care.

Both the literature and the interviews reflected the actual needs of the Head Start families, including improved access to health care and educational information about many health care services such as dental care, mental health, obesity education, and nutritional support. However, information from the interviews conflicted with the literature regarding language and cultural barriers and the use of the emergency room for primary care.

Though one study found that the third largest barrier to getting medical care was cultural barriers (Flores et al., 2006), and a second study found that language was the largest barrier to accessing care (Flores et al., 1998), neither family member mentioned these as being issues. In fact, one mother mentioned preferring white doctors because she feels they were better. Also, though Batancourt et al. (2004) found that 53% of low-income Hispanics use the emergency room for primary health care, both the parent and the caregiver that they avoided the emergency
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room and used their primary care providers at Denver Heath. These differences among the literature and the parent interviews may be due to the fact that the families interviewed are already enrolled in Head Start, an organization that facilitates access to culturally competent primary health care services.

**Literature Review on Past Projects**

Providing access to care for low-income Hispanic families is not an easy task. The first issue is to find health insurance, or some way to cover the cost of care for these families. Multiple studies have shown that “children with health insurance have better access to health care, including preventative care, than those who remain uninsured” (Rosenbach, Irvin, & Coulam, 1999, p. 1167). Head Start nurses not only aim to link low-income families with available health insurance services (e.g., Medicaid, CHP+, CBMS, etc.), but they also are the main source of information for educating these families on how to use these services.

Zuvekas and Taliaferro (2003) found that “disparities in access [to health care] persist even among well-insured minority racial and ethnic groups” (para. 4). This is validated by Rosenbach et al. who state that “insurance alone may not be sufficient to remove barriers to care” (p. 1167). Though several factors, such as education, income, health status, culture, language, perceptions and bias, have been suggested as potential barriers to using health insurance, results regarding these factors affecting health care access have been inconclusive (Zuvekas & Taliaferro). Our health planning project addresses the issue of how to create better access and use of primary health care among low income Hispanic families who are enrolled in Head Start. Our project was based on the assumption that once health insurance is obtained, families must be educated on how to properly use the health insurance, what types of services are provided through their insurance, and where they can go to receive these services. This
assumption was validated by Zuvekas and Taliaferro (2003), who showed that “education appears to play a substantial role in disparities in ambulatory care use, explaining about 20 percent of Hispanic-white gaps” in health care access and use (para. 24). One great example of how education can help increase use of available care is the situation that occurred in 1996 in relation to a federal welfare reform law (Ku & Matani, 2001). Since this reform restricted access to health care for some immigrants for up to five years after moving to the U.S., it reinforced fears that had been instigated by California’s Proposition 187 and publicity related to the Immigration and Naturalization service “asking immigrants to repay the value of Medicaid benefits received or else jeopardize their U.S. residency status” (Ku & Matani). In fear they would lose residency status, eligible immigrants avoided enrolling in health care services for themselves and for their children (Ku & Matani). Had these families been educated through an agency such as Head Start, their misunderstanding may not have prevented them from obtaining care they were eligible to receive.

Theory of Behavioral Change

The learning theory that best fits our project is a behavioral theory. As stated by the text Foundations of Nursing in the Community, this type of theory concentrates on “behaviors that can be observed and measured” and where “the ultimate goal is a behavioral change” (Stanhope & Lancaster, 2006, p.195). In the case of our project, the behavior that we want to change is Head Start’s population’s lack of access to health care. We are seeking to increase health care access for this group. So, by implementing a change (resource spreadsheet for the nurses) to the Head Start program, we are making Head Start a more effective resource, thus increasing the access for their population. The specific behavioral change theory that we choose is the “Transtheoretical Model” or Stages Change Model of behavioral change. This model is
considered one of “intentional change” and one that “focuses on the decision making of the individual” (Transtheoretical Model, 2004). It is most often used in regards to smoking cessation, however can be applied to many other behavioral changes. The model consists of five stages, each of which, are part of a cycle or continuum of change.

The first stage is precontemplation. This stage is described as one in which “people are not intending to take action in the foreseeable future” or they are “uninformed” (Transtheoretical Model, 2004). It has also been described as the stage in which, “there is no intention to change behavior in the foreseeable future” (Prochaska, DiClemente, & Norcross, 1992, p.1103). In our project, this stage represents the Head Start nurses not having a good source of referrals because the book they have is too big and not user-friendly. Therefore, they are not using it and do not have a future plan. Ultimately this results in the Head Start population not having resources and thus not accessing care.

The next stage is contemplation, which includes the “intention to change” (Transtheoretical Model, 2004). In this stage, “people are aware that a problem exists and are seriously thinking about overcoming it” (Prochaska et al., 1992, p.1103). The Head Start nurses know they need a better source of referrals for their patients and start to consider alternatives. The target population realizes the need for resources in order to better their health care situation.

Preparation is the next stage and includes “immediate action” or a “plan of action” (Transtheoretical Model, 2004). This is the stage where the nursing students come into play. We are given the issue and asked to start planning the intervention. This includes gathering information from the nurses and the target population in order to develop a better referral list to use to refer the target population. This also requires the target population approaching the Head
Start nurses in order to be referred to a health care provider that meets their needs and that they can readily utilize.

Action is the next stage and the one in which “people have made specific overt modifications” (Transtheoretical Model, 2004). In this stage, the referral spread sheet is made, posted, and available for use by Head Start. It is this stage in which the change becomes observable. Therefore, we actually observe the nurses using the spread sheet and the target population actually reports using the resource and thus accessing care.

The final stage is the Maintenance stage and involves “preventing relapse” (Transtheoretical Model, 2004). This would be the stage were the spread sheet would need to be continuously updated and maintained in order to provide the most accurate information. Otherwise, the list might not provide accurate information, thus negating its purpose. If the referral resource is not maintained, the target population and the Head Start nurses will be less likely to use it, and access will yet again be limited.

Our Project and Future Improvements

At Head Start, nurses are the main facilitators in helping low income Hispanic families navigate the health care system. On a weekly basis, nurses refer Head Start parents to various clinics and providers where their health care concerns can be addressed and covered by their respective insurance program. In order to effectively direct Head Start families to physicians and facilities that will provide care through eligible insurance programs, the nurses must have an up-to-date referral resource. The Colorado Consumer Health Initiative (CCHI) has compiled a book of local providers and agencies that provide low cost care for those who are uninsured, have low income, or are enrolled in an income-based insurance plan. This book is available at agencies such as Head Start and online through the CCHI website. Though the resource was published
with good intent, several of its characteristics make it quite inconvenient to use. First, although the resource is available online, most of the families who need the information do not have access to a computer. Additionally, it is not available in a Spanish printed version, so even if the families could access it online, they may not be able to read it. As Eng et al. points out, technology has potential to make great strides in prevention and accessibility to care, but those who lack health insurance coverage are the least likely to have access to such technology (1998, p. 1371). The second inconvenience is that the resource is not available in a format that can be easily updated. Almost as soon as a new version is published, the information is out-dated and no longer useful for making referrals. In addition, the 142-page book takes an excessive amount of time to search through, so the nurses end up just referring patients to clinics with which they are already familiar. Lastly, the resource is incomplete, and lacks information such as vision resources who take Medicaid, CHP+, and other low-income health insurance plans.

Though the last group who worked on this project made great strides in developing a user-friendly referral resource, several factors still make the resource inaccessible. The book was condensed into a smaller document using Microsoft Excel spreadsheet that broke the information down based on type of service provided (i.e., dental, primary care, mental health). However, the spreadsheet was not formatted well, requiring that hundreds of pages be printed in order obtain an actual document. Our group worked with Jan Watkins from the Early Childhood Education Center of the Mayor’s office in order to reformat the document to form that could be easily printed into a _page brochure for the Head Start nurses. Based on input from the Head Start nurses, we also posted the project on the Head Start website in a form that could be easily updated. This portion of the project required coordinate with members of the information technology team (IT) at the mayor’s office who knew how to code and post resources onto the
website. In addition, Jan set up a communication system between herself and the IT department that allows her to notify them of updates and have the resource continuously updated and available for Head Start nurses. We also informed Head Start nurses to notify Jan via email of any changes that needed to be made, so that the resource could be kept current. Before the final resource was posted and printed, we found information on vision services through Denver Health that take both Medicaid and CHP+, and this information was added to the final document.

The success of our project depends on several factors. Perhaps the most important factor will be whether the Head Start nurses get in the habit of using the online tool and regularly updating Jan about new referral resources as they become available. One possible roadblock to keeping the resource current is that several nurses mentioned that they did not wish to disclose the names of certain health facilities or physicians who took underinsured and uninsured patients. They explained that if the information became readily available to others, these resources would quickly become overloaded leaving them with no places to refer families from their own Head Start location. One possible solution to this would be to make the document only accessible through log-in, hopefully giving the nurses enough security that they would be willing to update the resource. Another factor that might affect the success of the project is that the resource is still not available in Spanish. Though our group did not have the time or resources to complete this portion of the project, this may be a good goal for the next group of nursing students who adds to this project. Thirdly, even with the ability to search for key words in a pdf document, the resource my not be user-friendly enough. In order to address this need, our group suggests a future improvement of creating an interactive search engine that can be used to find providers for the underinsured based on a variety of criteria including location, income, languages spoken, and
types of insurance taken. Once again, this may be a useful continuation of our project for a future group of nursing students.

Evaluation Plan

The health care access project proposed by Head Start has been an on-going project implemented by the nursing student groups from the University of Colorado at Denver during their public health rotation. The last group gave a copy of the health care access spreadsheet to several of the head Start nurses in order to evaluate the effectiveness of the resource. Part of our job in proceeding with this project involved reevaluating the spreadsheet and making necessary corrections or updates. We were also to take the document to the next step by providing an online link, making it more accessible to Head Start health care staff. Due to the time constraints of this short rotation, we have been unable to initiate the evaluation plan for this project. However, we have several recommendations to ensure the resource is used and appreciated by those who will eventually be accessing it.

We propose there be a survey used for the evaluation, an example of which can be found in Appendix D. The survey would offer a place for suggestions and for identifying if the ability to use the search function on the online document for the nurses or family service workers in making referrals to Head Start families. It might also be beneficial for the page to have a counter as a measure of how much the web site is actually being utilized. Overall, these provisions will provide generous feedback and information to update the website and keep the information on it current. In fact, this could also be a place for nurses to list changes or updates they have personally found about the database providers.

We recommend the evaluation survey be implemented by the next rotation of nursing students in order to provide feedback on future improvements needed. Our goal was to make this
referral resource more user-friendly, accessible, and able to be easily updated. We do believe this goal has been achieved, but that more work is needed in order to make this project into a working online search engine. Once in place, we feel Head Start families will benefit greatly and that their access to health care and thus overall health will certainly improve.
References


## Appendix A: National Poverty Level Guidelines

**Figure 1:** 2008 HHS National Poverty Guidelines

<table>
<thead>
<tr>
<th>Persons in Family or Household</th>
<th>48 Contiguous States and D.C.</th>
<th>Alaska</th>
<th>Hawaii</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$10,400</td>
<td>$13,000</td>
<td>$11,960</td>
</tr>
<tr>
<td>2</td>
<td>14,000</td>
<td>17,500</td>
<td>16,100</td>
</tr>
<tr>
<td>3</td>
<td>17,600</td>
<td>22,000</td>
<td>20,240</td>
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<tr>
<td>4</td>
<td>21,200</td>
<td>26,500</td>
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</tr>
<tr>
<td>6</td>
<td>28,400</td>
<td>35,500</td>
<td>32,660</td>
</tr>
<tr>
<td>7</td>
<td>32,000</td>
<td>40,000</td>
<td>36,800</td>
</tr>
<tr>
<td>8</td>
<td>35,600</td>
<td>44,500</td>
<td>40,940</td>
</tr>
</tbody>
</table>

For each additional person, add:

- $3,600 for 48 contiguous states and D.C.
- $4,500 for Alaska
- $4,140 for Hawaii


Appendix B: Nurse Interview with Dee Daniels, RN

Q: What have you found to be the major health needs of Head Start families?

A: “Affordable health care for families that do not qualify for any state funded insurance programs. Adequate knowledge of resources such as the Health Department’s, prenatal care clinics in their area and what specific services each facility has available to clients. One-stop shopping for a primary care provider, making it possible to establish a relationship and a continuum of care…”

Q: What barriers to health care have you seen Head Start families face?

A: “Navigating the process and procedures systems set by state and or public health facilities. The systems process currently in use at health facilities is not user friendly or flexible and this makes it is difficult to access care. Unfortunately client’s also encounter negative attitudes from workers at the health facilities.”

Q: What information is missing in the current referral resource? (vision.)

A: “A thorough dental list for adults and children – this is one of our most challenging resources we face. Vision for adults would be a useful resource that includes basic information such as potential Cost for an eye exam.”

Q: How do you usually find a provider for a Head Start family?

A: “Usually by familiarity- there has never been a complete health provider list for families. We have just been piecing resources together as each nurse or agency receives information. There is a state list but it does not provide specific information, i.e. pay options, location of facility, or a contact person.”

Q: How often do you refer Head Start families to health care resources?

A: “Several times a week I either provide a list of potential resources or I will assist parents in making an appointment.”

Q: Do you foresee any major issues with this resource? (access, continuous updating)

A: “The issues you have listed are the major one’s, the continual updating or adding new resources as they become available will be challenging.”

Q: Would an online resource with search options be helpful? If so, what search criteria would you like? (location, payment plan, income)

A: “Online resource would be great and specific search criteria would minimize the search time. The search would be helpful by beginning with the client’s zip code and them break down the criteria from that point to meet the client’s needs or request, Such as family physician, vision, dental etc...”
Appendix C: Parent Interviews

First Interview

The following interview was with the grandmother of a Head Start child. Answers have been paraphrased.

Q: What do you feel are the major health concerns for your family or community? (accessing care, mental health, obesity/diabetes, nutrition, dental, vision)

A: lack of dental care

Q: Do you have access to dental, mental, vision?

A: Yes, however the lack of ability to pay for it keeps us from using them

Q: What do you feel prevents you from receiving the health care your family needs? (language barriers, long waiting times, paying for care, not insurance, finding a provider, transportation)

A: money, the distance away from home and the location

Q: When was your child’s last visit to a health care provider? (dentist, doctor, vision)

A: 1 month ago for an ear infection

Q: What do you do if your child becomes sick? (contact Head Start, ER, PCP)

A: wait to see if the child gets better, if the fever persist or what not, then take them to PCP. Tries not to go to the ER

Q: Do you have difficulty paying for health care? What financial priorities interfere with paying for health care? (food, clothing, shelter, etc)

A: Yes, my Daughter (mother of the children) is not working, so it kind of hard right now. Food and clothing are a priority over medical care

Q: Does your family have any health insurance? (children, parents)

A: my daughter has CICP, the children have CICP or Medicaid and I have Medicaid

Q: Have you ever gotten a medical referral from a Head Start nurse? Did it meet your needs? If not, why? (Language, type of care, financial)

A: yes for the kids. Sometimes Head Start has doctors come on site for testing and well child visits.
Appendix C: Parent Interviews (cont.)

Second Interview

The following interview was with the mother of a Head Start child. Answers have been paraphrased.

**Q:** What do you feel are the major health concerns for your family or community? (accessing care, mental health, obesity/diabetes, nutrition, dental, vision)

**A:** mental health, nutrition for me (the mom), vision

**Q:** Do you have access to dental, mental, vision?

**A:** The kids have dental through the school, but my husband and I do not. I have not been in 5 years.

**Q:** What do you feel prevents you from receiving the health care your family needs? (language barriers, long waiting times, paying for care, not insurance finding a provider, transportation)

**A:** money, our situation being Mexican

**Q:** When was your child’s last visit to a health care provider? (dentist, doctor, vision)

**A:** 6 months ago, like January for a healthy, well child visit

**Q:** What do you do if your child becomes sick? (contact Head Start, ER, PCP)

**A:** go to Denver Health for the kids because of the co pay its cheep. If I get sick I wait a while to see if it gets worse then I will to Denver health also. I try to never to the ER, it is way more expensive. I only went once because I thought it was an emergency.

**Q:** Do you have difficulty paying for health care? What financial priorities interfere with paying for health care? (food, clothing, shelter, etc)

**A:** for the kids no, the co pays make it easier. For me a little, I usually try to get better on my own

**Q:** Does your family have any health insurance? (children, parents)

**A:** The kids have Medicaid and I don’t have any

**Q:** Have you ever gotten a medical referral from a Head Start nurse? Did it meet your needs? If not, why? (Language, type of care, financial)

**A:** yes they gave us information about Denver health. Yes they spoke Spanish. But I prefer the white doctors, they are better
Appendix D: Project Evaluation Survey

The following is an example of a survey that could be developed to evaluate the resourcefulness of the online provider list:

1. Is it easier to find providers based on insurance coverage and location?
2. Have you had any trouble accessing documents from Head Start website?
3. Has the new database online made referrals easier to find?
4. Are the results you received accurate or up-to-date?
5. What future improvements would you suggest for this project or the web page?