Analyzing Lower Rates of Health Insurance Among Colorado’s Hispanic Adults
Factors Associated with the Disparity

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Acknowledgements

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Executive Summary

The Colorado Health Institute (CHI) analyzed data from the 2013 Colorado Health Access Survey (CHAS) to identify and quantify the factors associated with a 14.5-point difference in health insurance coverage between Hispanic and non-Hispanic adults in Colorado.

The analysis found a number of specific factors associated with the lower rate of health insurance among the state’s Hispanics, including citizenship status, health status, the availability of employer-sponsored health insurance and family income. To a lesser extent, marital status, disability status and gender are considerations.

A good deal of the coverage disparity, however, is linked to socio-demographic and socio-economic factors that are not measured by the Colorado Health Access Survey.
Introduction

Hispanic adults in Colorado are nearly twice as likely to be without health insurance as the rest of the state’s adult population.

Data from the 2013 CHAS show that 31.0 percent of adult Hispanics in Colorado do not have health insurance compared with 16.5 percent of adult non-Hispanics (see Table 1).

This 14.5-point coverage gap has important implications. Studies have found a relationship between health insurance and better health. Broadly, the health of people with insurance tends to be better because their care is more affordable. This allows them to make more appropriate and timely use of health care, including receiving regular preventive care.

The changing composition of Colorado’s population also underscores the need to understand the coverage gap. About one of five Coloradans (21.0 percent) of all ages is Hispanic, according to the 2012 American Community Survey (ACS), up from 17.1 percent in 2000. Meanwhile, 31.0 percent of Colorado’s children are Hispanic, leading to the expectation that Hispanics will account for a greater proportion of the adult population as this generation grows up.

Colorado’s ability to address the disparity in insurance coverage will be crucial as it works to create an environment in which all residents have the opportunity to be as healthy as possible, a goal articulated by Governor John Hickenlooper in his May 2013 “The State of Health” vision statement.

It is useful to understand the underlying factors related to the difference in coverage. CHI analyzed CHAS data using statistical modeling to untangle the potential factors linked to the coverage gap.

Results of this analysis show that citizenship status is the largest specific factor associated with the coverage disparity. Self-reported health status comes in second, followed by the availability of employer-sponsored insurance and family income. Marital status, disability status, and gender are, to smaller degrees, factors that are related to the gap as well.

Still, the biggest overall factor associated with the coverage gap likely stems from an umbrella category of complex, interdependent factors: immigration status, country of origin, English proficiency, familiarity with the U.S. health care system, and the level of trust in that system, among others. Although these data are not collected by the CHAS, this brief highlights additional research related to these issues.

A better understanding of the possible reasons related to the health insurance gap will give Colorado’s leaders the ability to more precisely target the state’s limited resources, to consider concrete, evidence-based policy and program strategies, and to better tailor reforms outlined in the Affordable Care Act (ACA) to Colorado’s needs.

| Table 1. Insurance Status of Hispanic and Non-Hispanic Adults, Ages 19-64, Colorado, 2013 |
|:--:|:--:|:--:|
| Insured | Non-Hispanic | Hispanic |
| 83.5% | 69.0% |
| Uninsured | 16.5% | 31.0% |
| Total | 100.0% | 100.0% |
Methods

The Data

The CHAS is an extensive survey of health care coverage, access to health care and use of health care in Colorado. It is administered every other year through a random-sample telephone survey of more than 10,000 households across the state. The 2013 CHAS is a follow-up to surveys in 2008-09 and 2011. The CHAS provides detailed information that is representative of all Coloradans.

CHI – a nonpartisan institute focusing on data, information and analysis supporting health care policy decisions – manages the survey. It is funded by The Colorado Trust, a health equity foundation. Its vision is that all Coloradans have fair and equal opportunities to lead healthy, productive lives regardless of race, ethnicity, income or where we live.

The Question

CHI set out to answer this research question: What factors are related to the 14.5 point difference in health insurance coverage between Hispanic and non-Hispanic adults in Colorado, and can we try to quantify those factors?

The Statistical Analysis

The multiple regression model used to conduct the analysis teases out individual contributing factors associated with the coverage gap from a complex web of intertwined influences.

In a simple example, the model could test whether the coverage gap is entirely related to ethnicity, or if income plays a role. Looking at just these two factors, the model would assume that each adult has the same income – in statistical terms, it would “hold constant” the income variable. With identical incomes, would there still be a coverage gap between Hispanic and non-Hispanic adults in Colorado?

The answer is yes, according to the model, although the gap would be smaller. This is because we know that income is one factor associated with whether someone, regardless of ethnicity, will have insurance. Hispanic adults, as a group, have lower incomes than non-Hispanic adults, so this is related to their lower level of coverage.

CHI’s analysis was a step-wise process (see Illustration 1). First, the model found the significant factors associated with adults being uninsured in Colorado. A finding is statistically significant if it is unlikely that it is due to chance. Statistically significant survey results from the sample population may be applied to the larger population.

Hispanic ethnicity is a significant factor in whether someone has insurance coverage, according to the model. It is significant even after these other factors – gender, family income, citizenship, availability of employer-sponsored insurance, self-reported health status, self-reported disability status and marital status – are held constant. If each factor were identical for each adult in Colorado, Hispanics would still have a lower insurance rate than non-Hispanics, although the coverage gap would be narrowed.

Next, after determining that Hispanic ethnicity helps to explain being uninsured, the analysis focused on understanding the magnitude played by each of the other significant factors that are associated with the difference in health insurance coverage between Hispanics and non-Hispanics.

A statistical “decomposition” process quantified the factors associated with the coverage gap between Hispanic and non-Hispanic adults in Colorado.
For the analysis, CHI decided to:
• Focus on adults between the ages of 19 and 64 so that data related to employer-sponsored health insurance could be considered.
• Remove some variables that are so mathematically related to each other that it isn't possible to assess their unique association with the coverage gap. One example is income and education. In this case CHI chose to include income in the model.
• Include factors in the model that research has shown to account for disparities that Colorado could potentially target for action, either through policies or programs.

Limitations

The limitations of this analysis reflect both the measurement tools and the fact that race and ethnicity continue to be deeply intertwined with social and cultural experiences in the United States.

The CHAS was not designed to ask a comprehensive list of socio-demographic or socio-economic questions. Therefore, we must rely on peer-reviewed studies for this major portion of the coverage gap. It is also difficult to sort out the influence of factors such as family income that are associated with racial and ethnic identity. In fact, the literature used for much of this analysis shows that other socio-economic and “unmeasured” factors help to explain a substantial share of the coverage gaps. However, many of the other socio-economic factors that are discussed later in the “Delving into Unexplained Factors” section are not easily addressed through health policy reforms.

Regression modeling measures the statistical relationships between variables in a model. While this type of modeling helps us understand the association between variables, it does not allow us to determine causation. In other words, using regression modeling, we can conclude that certain characteristics of individuals are associated with health inequities, but we cannot conclude that they cause those inequities. This is an important limitation to remember throughout the analysis.

### Health Insurance Coverage

What are significant factors associated with whether Colorado adults (ages 19–64) have health insurance coverage?

#### Regression Analysis

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Significant Factors Associated With Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Insured or Uninsured”</td>
<td>Citizen or Non-citizen</td>
</tr>
</tbody>
</table>

Hispanic Ethnicity Is One of the Significant Factors Associated With Coverage

What Percentage of the Coverage Gap is Associated With the Other Factors?

#### Decomposition Analysis

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Each Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gap in Health Insurance Coverage Between Hispanic and Non-Hispanic Adults</td>
<td>Citizen or Non-citizen</td>
</tr>
<tr>
<td>33.1%</td>
<td>7.6%</td>
</tr>
</tbody>
</table>
Exploring the Coverage Gap

Seven measurable factors from the CHAS are associated with about 60 percent of the coverage difference between Hispanics and non-Hispanics in Colorado. The rest of the coverage gap is related to factors that are unexplained by the CHAS data (see Graph 1).

**Graph 1. Factors Associated With the Health Insurance Disparity between Hispanic and Non-Hispanic Adults, Ages 19-64, Colorado, 2013**

- Citizenship Status: 33.1%
- Health Status: 7.6%
- Income: 5.6%
- Marital Status: 3.2%
- Gender: 2.3%
- Disability Status: 1.6%
- Employer-Sponsored Insurance: 6.3%
- Measured Contributions: 59.8%
- Unmeasured Contributions: 40.2%

This is an analysis of the seven measurable factors from the CHAS that are associated with the coverage gap:

**Citizenship status – 33.1 percent:**
Lawfully present immigrants sometimes have limited access to public health insurance, including a five-year wait for Medicaid eligibility. Undocumented immigrants, however, are not eligible for public insurance programs, including Medicare, Medicaid and Child Health Plan Plus (CHP+). These policies tend to impact Hispanics more than non-Hispanics. About one of five (22.3 percent) Hispanic adults in Colorado is not a U.S. citizen, 10 times the percentage of non-Hispanic adults. The ACA is not likely to mitigate the coverage discrepancy, since undocumented immigrants may not buy health insurance through Connect for Health Colorado, the state’s insurance exchange. It is important to note that non-citizens are not necessarily undocumented immigrants.

**Health status – 7.6 percent:**
Before the ACA, insurers could offer limited coverage, or deny coverage altogether, to people with pre-existing health problems. They also were allowed to charge more based on health status. Roughly one of five (21.1 percent) Hispanic adults reports fair or poor health, compared with just over one of seven (13.7 percent) non-Hispanic adults. This suggests a relationship between health status and health insurance. People who were less healthy were...
less likely to get health insurance. Under the ACA, insurance companies can no longer reject applicants due to pre-existing conditions. Insurers can price insurance based on location, family size, age, and smoking status, but not on health status or gender.

**Availability of employer-sponsored insurance – 6.3 percent:**
Most health insurance coverage in the U.S. is offered through a workplace. Large employers are more likely to provide the option than businesses with 50 or fewer employees. CHAS data indicate that roughly 53.1 percent of Hispanic adults in Colorado are offered health insurance through their employer, about six percentage points below the rate for non-Hispanic adults. At the same time, about 8.7 percent of Hispanics are unemployed and looking for work, compared with 6.8 percent of non-Hispanics.

**Income – 5.6 percent:**
Nearly six of 10 (58.1 percent) Hispanic adults have annual family incomes at or below 200 percent of the federal poverty level (FPL), about 20 percentage points more than non-Hispanics. About one of three Hispanic adults (32.9 percent) is at or below the poverty line, about 13 percentage points higher than non-Hispanics. Both Hispanics and non-Hispanics listed high cost as the top reason for not having health insurance, according to the CHAS. This suggests that the question of affordability, especially for Hispanics, with lower incomes as a group, is impacting coverage levels.

**Marital status – 3.2 percent:**
Spouses are often given an option for coverage under employer-sponsored insurance, so marriage may result in higher insurance rates. Slightly more than 60 percent of Colorado Hispanics are married, 5.5 percentage points lower than non-Hispanics. This difference is not statistically significant, however.

**Gender – 2.3 percent:**
CHAS data show that females are more likely to be insured than males in Colorado. This may be in part due to a large difference in views on needing insurance: 31.6 percent of uninsured males said they don’t need it, double the rate of uninsured females. The Hispanic population has a slightly lower percentage of females than the non-Hispanic population, which appears to contribute to the coverage gap in a small way.

**Disability status – 1.6 percent:**
About 15.2 percent of non-Hispanics reported that they have a disability, slightly higher than the 12.9 percent of Hispanics reporting a disability, though the difference is not statistically significant. In the past, adults with a disability were more likely to have public coverage than adults without a disability. About 3.4 percent of non-disabled adults had public insurance in 2013, compared with 27.2 percent of Colorado adults with a disability. Under the ACA, all adults with incomes under 400 percent of FPL, regardless of disability status, qualify for either public insurance or tax credits to help buy a private policy. This change took place in the beginning of 2014, and its effects may influence the Hispanic, non-Hispanic coverage gap in years to come.
Delving Into the Unmeasured Factors

Some of the underlying factors related to the coverage gap between Hispanic and non-Hispanic adults in Colorado – 40.2 percent of them – are not measured by CHAS data.

To understand what might be included under this umbrella, we turned to other studies and research that have investigated cultural and social factors in health insurance disparities. The research suggests nuanced, complicated explanations for factors associated with the coverage gap – factors such as immigration status, country of origin, English proficiency, stigma, marginalization, and perception, trust and familiarity with the U.S. health system. Many of these factors are difficult to quantify, and research has tended to rely on qualitative observations.

Immigration status: Studies suggest that health insurance coverage can vary based on whether people are naturalized citizens, legal permanent residents, or undocumented immigrants. Other aspects, such as the length of time someone has lived in the U.S. or the number of generations a family has called the U.S. home, may also affect coverage. For example, one study found that foreign-born Hispanics who have lived in the U.S. more than 15 years are more likely to have health insurance than those who have lived in the U.S. less than 15 years. (Note: CHAS asks respondents about their citizenship status, but it does not ask about their immigration status or whether they are in the U.S. legally.)

Human capital: A measure of the economic value of a person’s skills, human capital can potentially impact whether a person can afford to buy health insurance. Economists regard education, training and medical care as investments in human capital. A higher level of human capital often depends on financial and community resources that can favor non-Hispanics. Even when Hispanics and non-Hispanics have the same income, as in our model, they still have differences in human capital that aren’t measured.

English proficiency: Some studies include English proficiency as a component of human capital. Findings suggest that a lack of English proficiency significantly is associated with the likelihood of being insured. The primary use of English – rather than being bilingual or primarily speaking Spanish – has been found to be positively correlated with having insurance. Limited English proficiency also may prevent Hispanics from seeking public health insurance due to fears of deportation or difficulty navigating the health care system.

Social factors related to ethnicity: Different appearances, cultural practices, religious practices, languages, accents, or skin tones may lead to Hispanics being stigmatized or marginalized. Researchers point to institutional racism that continues, at some level, to inhibit integration of Hispanics and other ethnic minorities into society. Additionally, public debate sometimes frames immigrants as undeserving of health insurance. Researchers also have identified the concept of risk aversion, which is the level of risk tolerance under conditions of uncertainty. Even as legal residents, Hispanics may worry they will face questions about their immigration status.

Perception, trust, and familiarity with the U.S. health system: Hispanics, especially those new to the U.S., may have only a vague understanding of the health care system. In addition, they may rely on alternative medical practices from their country of origin. And despite efforts to increase the ethnic diversity
of the health care workforce, Hispanic providers still make up a small percentage. Together, these factors may make it more difficult for some Hispanics to trust the U.S. health system. In turn, they may decide they don’t need health insurance. Findings suggest that Hispanics who had health insurance in their country of origin are more likely to seek coverage.\textsuperscript{27,28} A number of studies have found significant differences in health insurance coverage between Hispanics of different origins. One found that immigrants of Mexican ancestry had much lower rates of coverage than immigrants from other countries, most likely related to socioeconomic characteristics.\textsuperscript{29} Meanwhile, CHAS data show that roughly one of three uninsured Hispanics (30.7 percent) said they don’t know how to get insurance, compared with one of 10 non-Hispanics (11.6 percent). This suggests that Hispanics may not realize that they or their family members are eligible to obtain coverage.

### Considerations for Health Policy in Colorado

Narrowing the coverage gap in Colorado will involve working on complicated, entrenched issues. It will be a long-term effort involving leaders from a range of areas, including health care, education, economic development, the legislature, and state, local and even neighborhood groups. This section discusses how the findings from this study can be useful in informing policy discussions on reducing Colorado’s coverage disparity.

A combination of low incomes and high costs makes it difficult to obtain health insurance. Not having insurance, in turn, can make it expensive to get needed health care, with out-of-pocket expenses representing a greater percentage of disposable income for low-income Coloradans.\textsuperscript{30}

Affordable insurance – one of the goals of health reform – could help to chip away at the coverage gap. Colorado’s lawmakers voted to expand Medicaid eligibility for those with the lowest incomes. And Colorado’s health insurance marketplace features a number of plans that are competitive, price-wise, with plans offered in other states. But whether people without insurance – and, specifically, uninsured Hispanics – view the plans as affordable and decide to purchase them is yet to be determined. This will be an area for Colorado to monitor, and adjust if necessary.

CHAS data show that almost one of four Hispanics (23.4 percent) are unemployed and looking for work, or are not in the workforce, compared with 22.6 percent of non-Hispanics. This suggests opportunities for economic development and workforce programs for both Hispanics and non-Hispanics.

A slightly lower percentage of Hispanics work for small employers (27.4 percent) than non-Hispanics (28.6 percent). All employers of small businesses could benefit from provisions in the ACA designed to increase the availability of affordable employer-sponsored insurance, including the Small Business Health Options Program (SHOP).
Meanwhile, 35.2 percent of uninsured non-Hispanics report one reason they don’t have insurance is because a family member’s employer does not offer coverage or a family member is not eligible for the employer’s coverage, compared with 24.9 percent of uninsured Hispanics. This counterintuitive finding suggests that Hispanics may not expect to be offered workplace insurance for themselves and their dependents or do not understand that they have the option to purchase insurance. Enhanced efforts to communicate availability of health insurance could be helpful.

A good deal of research has focused on the importance of outreach and education in reducing uninsured rates among Hispanics. Adding to efforts underway in Colorado would address factors such as English proficiency and trust in the U.S. health system. Stepped-up outreach efforts could also tackle income-based factors, especially with an expanded Medicaid program and Connect for Health Colorado.

Ongoing debate surrounds immigration policy and health reform. The CHAS tells us that citizenship status is an important driver of the insurance gap between Hispanics and non-Hispanics in Colorado. Tracking immigration and health reform policies, and their implications for health insurance levels among Hispanics, will be important for making informed policy decisions.

Conclusion

The CHAS shows a large gap in health insurance between Hispanic and non-Hispanic adults in Colorado. For the first time, a regression analysis based on the CHAS gives us a data-based understanding of the factors associated with this large difference in coverage. Understanding these factors can help Colorado’s leaders tackle this disparity as part of the work to create a state in which each resident has the opportunity to be as healthy as possible.
Endnotes


2 Institute of Medicine, 2009.

3 1 year, 2012 American Community Survey.

4 1 year, 2012 American Community Survey, Sex by age.

5 http://www.colorado.gov/cs/Satellite/HealthCareReform/CBON/1251641417543


9 Thamer, 1997.


11 Bustamante, 2009.


23 Bustamante, 2009.


26 Perry, 2000.


28 Bustamante, 2009.


31 Abreu, 2009.

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