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Public versus Private Health Insurance in Colorado at a Glance: A Glimpse at Health Care Coverage, Health Behaviors and Chronic Conditions Using the BRFSS, 2010

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Introduction

The Colorado Department of Health Care Policy and Financing (HCPF) manages the Medicaid and Child Health Plan Plus (CHP+) programs which serve the elderly, persons with disabilities, and low-income children and families. One goal of HCPF is to reduce risks to health and to ensure preventive health care and positive health outcomes among those who receive public health insurance. In order to better improve services and maintain good health, HCPF seeks to gain a wider understanding of the overall health of persons who utilize their programs and monitor their health into the future.

Currently, thorough information is available via HCPF claims data, and data collected from the 2008-09 Colorado Household Survey (COHS) regarding health insurance status, access to health care, and utilization of health services. The Colorado Health Access Survey (CHAS) is a follow-up survey of COHS and is administered every year to more than 10,000 households across the entire state. Although claims data and information on health insurance coverage, utilization, and access from COHS and CHAS is important, these sources lack information on health behaviors and chronic diseases, and are not sufficient to monitor the overall health status of the population.

By adding more detailed health insurance questions to the Colorado Behavioral Risk Factor Surveillance System (BRFSS) survey, an opportunity was created to examine health care coverage by health risk factors and outcomes. This report focuses on one of the questions which asked respondents to identify the different type(s) of health insurance coverage they had at the time of the interview. This brief report summarizes selected findings and will serve to:

- 1) Identify the proportion of the Colorado population reporting varying types of public versus private health insurance; and
- 2) Examine selected risk factors and health outcomes for people who are uninsured, on public health insurance, or private health insurance.

Methodology

The BRFSS is an annual statewide telephone survey of adults 18 years of age or older, and was developed by the Centers for Disease Control and Prevention (CDC) to monitor health behaviors related to leading causes of death and disease. In collaboration with the Colorado Department of Public Health and Environment, HCPF added a set of health insurance-related questions to the BRFSS in 2010. A total of 5,835 respondents completed interviews pertaining to detailed health care coverage. A standard protocol was used to weight the data to the state's population by age, gender, and race/ethnicity.

Traditionally, the BRFSS only asks a general question regarding whether a person has health care coverage. In 2010, a sub-set of respondents who answered that they have health care coverage were asked what type of coverage they had. The answers were used to estimate the prevalence of the public health insurance coverage, private health insurance coverage, and those who were uninsured. Ninety-five percent confidence intervals (CI) were also calculated in order to compare health care coverage and selected health behaviors and conditions.

Results

Respondents were predominantly white (80.3%), 35 years or older (78.4%), married (69.3%), had completed some college or greater (72.5%), were employed (72.9%), and reported a household income of at least \$50,000 (59.8%) (Table 1). Table 1 also illustrates the proportion of public, private, and uninsured health care coverage among adults in Colorado. These data indicate an estimated 540,000 or 15 percent of adult Coloradoans are uninsured. Additionally, over 190,000 Colorado adults (5%) reported utilizing a public health care coverage plan.

Table 1: Selected Demographics and Prevalence of Health Care Coverage among Adults: Colorado, BRFSS, 2010 (Public, Private, and Uninsured Households).

Demographic	Percent	95% CI*
Sex		
Female	49.9	48.1-51.7
Male	50.1	48.3-51.9
Age Group		
18-24	6.5	5.3-7.8
25-34	15.1	13.6-16.6
35-44	29.4	27.6-31.2
45-54	19.8	18.6-21.1
55-64	14.7	13.7-15.6
65+	14.5	13.7-15.4
Race and Ethnicity		
White, Non-Hispanic	80.3	78.7-81.8
Black, Non-Hispanic	2.0	1.5-2.5
Hispanic	13.1	11.8-14.4
Other**	4.6	3.8-5.5
Marital Status		
Married/Couple	69.3	67.6-71.0
Previously Married	16.2	15.1-17.3
Never Married	14.5	12.9-16.0
Education		
Less than High School	6.1	5.1-7.0
High School	21.5	20.0-22.9
Some College	72.5	70.8-74.1
Employment		
Employed	73.0	71.1-74.8
Unemployed	9.0	7.7-10.3
Homemaker	10.3	9.2-11.5
Student	3.9	2.8-4.9
Unable to Work	3.9	3.2-4.5
Income		
<\$25,000	18.4	16.9-19.9
\$25,000-\$49,999	21.8	20.3-23.2
\$50,000+	59.8	58.0-61.7
Type of Health Insurance Coverage		
Medicaid Only	1.8	1.3-2.2
Medicare Only	2.1	1.7-2.4
Medicaid and Medicare	1.3	0.9-1.7
Child Health Plan Plus CHP+	0.1	0.0-0.3
Health insurance through work or union (self or someone else) with or without another type of insurance plan	61.5	59.7-63.3
Uninsured	15.1	13.5-16.6
Health insurance bought by self or other person with or without another type of health insurance	13.4	12.3-14.6
Other (includes Railroad retirement plan, student health insurance, other unspecified plan)	4.7	4.0-5.5

*Confidence interval

** Other Race and Ethnicity includes Other and Multiple Race/Ethnicity, Non-Hispanic

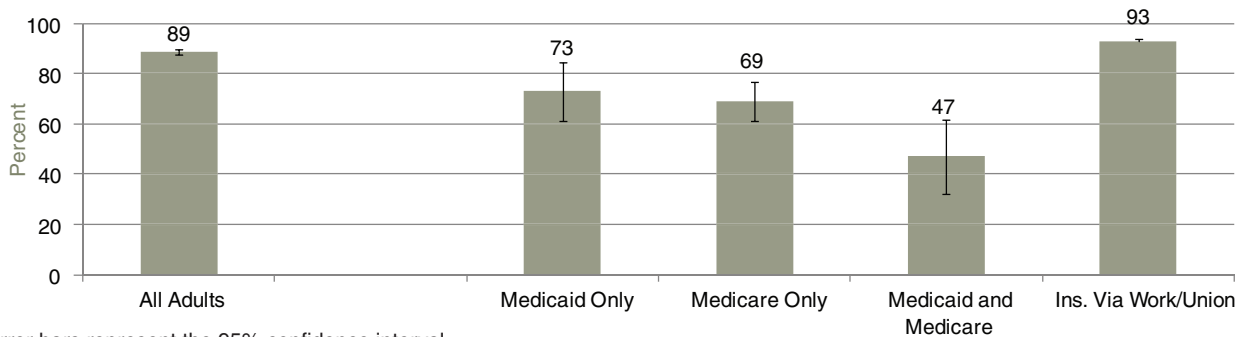
Overall Health Status, Mental Health, Adverse Health Behaviors, and Obesity by Health Care Coverage

General Health Status

In order to assess general health status, respondents were asked to rate their overall health. Eighty-nine percent of adults reported their general health was good or better. Adults who had a public health care plan, namely Medicaid Only (72.7%),

Medicare Only (69.3%), and Medicare & Medicaid (47.1%), reported less optimum health compared to respondents who had health care coverage provided through work or union (93.4%) (Figure 1).

Figure 1: General Health Status by Health Insurance Coverage among Adults: Colorado, BRFSS, 2010.



Error bars represent the 95% confidence interval.

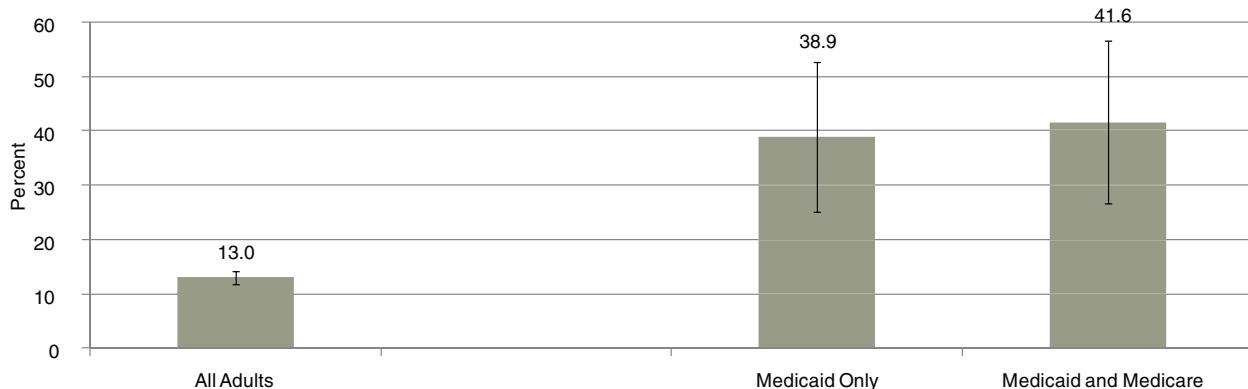
SOURCE: Health Statistics Section, Colorado Department of Public Health and Environment.

Mental Health

Respondents were also asked of the past 30 days, how many days was their mental health not good. Of all adults, 13 percent reported that they had eight or more days in the past 30 days that their mental health was not good. Figure 2 illustrates that those who reported having Medicaid Only or Medicaid & Medicare reported

higher percentages of unhealthy mental health days. Adults who listed Medicaid as their only source of health insurance reported a higher percent of poor mental health days (38.9%). Even higher at 41.6%, Medicare & Medicaid respondents reported that they had eight or more days in the past month which included stress, depression, and problems with their emotions.

Figure 2. Prevalence of Eight or More Days of Unhealthy Mental Health by Health Insurance among Adults: Colorado, BRFSS, 2010.



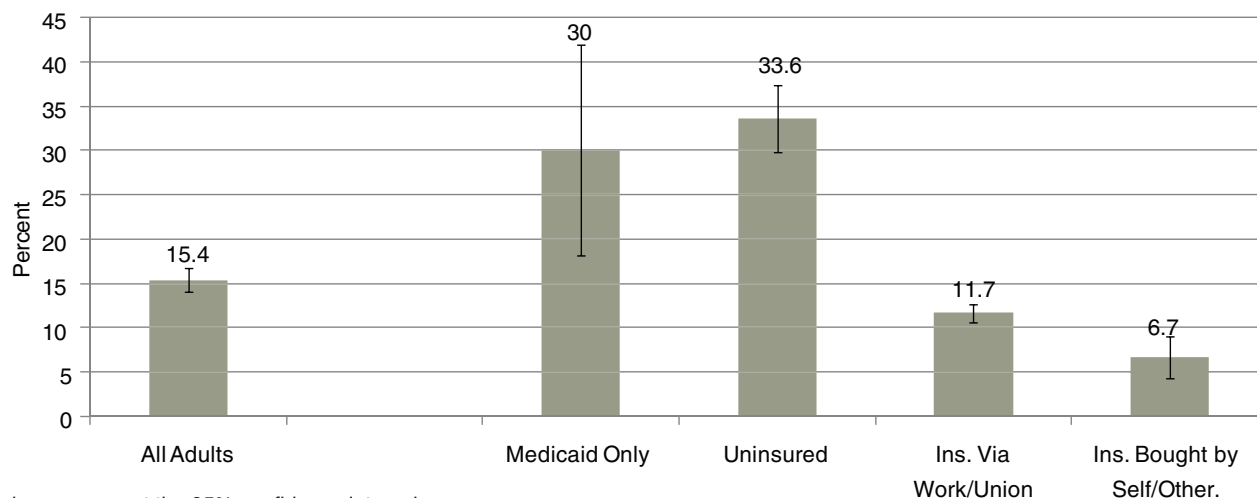
Error bars represent the 95% confidence interval.

SOURCE: Health Statistics Section, Colorado Department of Public Health and Environment.

Smoking

Respondents with Medicaid Only reported a higher percent of current smoking compared to all adults (30.0% vs. 15.4%). One third (33.6%) of uninsured respondents reported current smoking while those with health insurance through work or a union and adults who reported they had purchased insurance reported lower estimates of current smoking (11.7% and 6.7%, respectively) (Figure 3).

Figure 3. Prevalence of Current Smoking by Health Care Coverage among Adults: Colorado, BRFSS, 2010.



Error bars represent the 95% confidence interval.

SOURCE: Health Statistics Section, Colorado Department of Public Health and Environment.

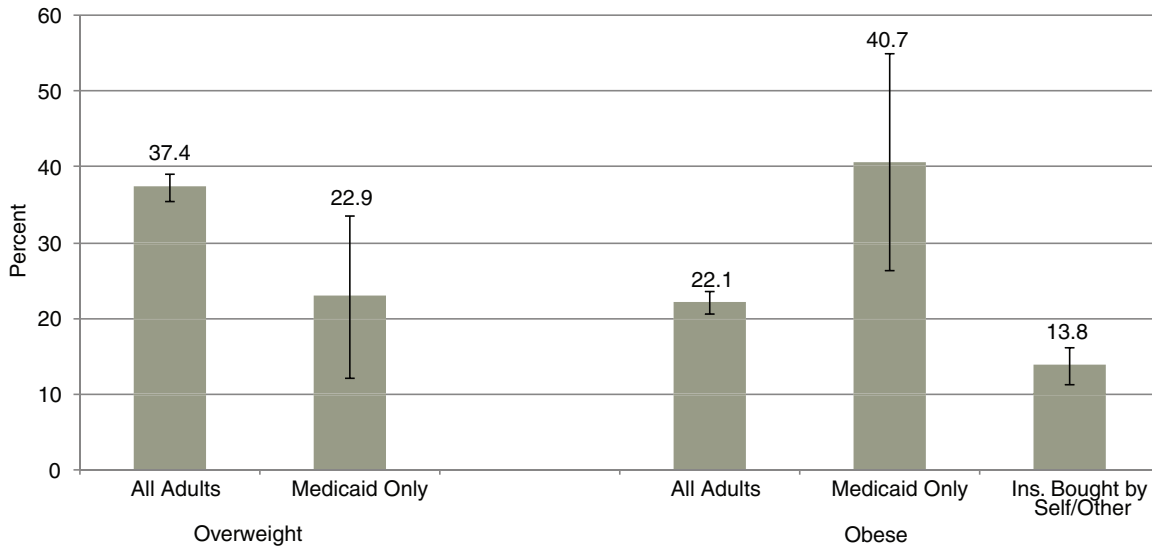
Physical Inactivity

Despite the majority of adults reporting doing physical activity or exercise in the past 30 days, 17.4 percent of adults reported no leisure time activity. Medicare Only (30.2%), Medicare & Medicaid (42.1%), and uninsured (26.8%) reported the highest percentages of physical inactivity. Conversely, those who had insurance via work or a union were the most physically active, with 13.7 percent reporting physical inactivity.

Overweight and Obesity

Over a third of all respondents had a Body Mass Index (BMI) in the overweight range (37.4%) and almost a quarter of the respondents were obese (22.1%). Those insured by Medicaid Only had a lower overweight proportion, but a higher obese proportion (22.9% and 40.7%, respectively) compared to all adults. On the other hand, survey participants who reported buying health care coverage had a lower percentage of obesity (13.8%) compared to all adults (22.1%) (Figure 4).

Figure 4. Overweight and Obesity by Type of Health Care Coverage among Adults: Colorado, BRFSS, 2010.



Error bars represent the 95% confidence interval of the life expectancy estimate.
 SOURCE: Health Statistics Section, Colorado Department of Public Health and Environment.

Oral Health

Those with Medicaid Only (31.7%), Medicaid & Medicare (26.1%), and who were uninsured (33%) had the lowest estimates of getting their teeth cleaned in the past year compared to all adults (67.6%). However, 76.8 percent of respondents who had health insurance through work or a union had the highest estimate of getting their teeth cleaned within the past year.

Chronic Health Conditions

Table 2 illustrates that chronic disease disparities exist among respondents with Medicare and Medicaid. Compared to all adults (6.4%), those who had Medicare Only (17.5%) or Medicaid and Medicare (26.9%) were more likely to have diabetes. Additionally, the Medicaid & Medicare group reported higher estimates of both lifetime asthma and current asthma compared to all adults (33.0% and 22.7% versus 13.7% and 8.6%). Finally, respondents with no health care coverage had the highest prevalence of tooth removal due to decay or periodontal disease compared to all adults (37.9% versus 25.7%).

Table 2. Prevalence of Selected Chronic Diseases by Type of Health Care Coverage among Adults: Colorado, BRFSS, 2010.

Chronic Disease	Percent	95% CI*
Diabetes		
All Adults	6.4	5.7-7.2
Medicaid Only	8.8	2.7-14.9
Medicare Only	17.5	11.0-24.0
Medicaid and Medicare	26.9	11.9-42.0
Child Health Plan Plus (CHP+)	N/A	N/A
Health Insurance through work or union with or without another type of insurance	5.3	4.4-6.2
Uninsured	4.1	2.0-6.2
Health insurance bought by self or other person with or without another type of insurance	7.4	5.2-9.6
Other (includes Railroad retirement plan, student health insurance, other unspecified plan)	10.6	6.7-14.4
Lifetime Asthma		
All Adults	13.7	12.5-15.0
Medicaid Only	24.3	11.5-37.2
Medicare Only	9.7	5.5-14.0
Medicaid and Medicare Adults	33.0	20.7-45.4
Child Health Plan Plus (CHP+)	N/A	N/A
Health Insurance through work or union with or without another type of insurance	13.5	11.9-15.2
Uninsured	14.7	10.4-19.1
Health insurance bought by self or other person with or without another type of insurance	11.9	8.8-14.9
Other (includes Railroad retirement plan, student health insurance, other unspecified plan)	9.8	6.0-13.6
Current Asthma		
All Adults	8.6	7.6-9.7
Medicaid Only	18.7	8.1-29.3
Medicare Only	6.4	2.9-9.9
Medicaid and Medicare Adults	22.7	11.9-33.4
Child Health Plan Plus (CHP+)	N/A	N/A
Health Insurance through work or union with or without another type of insurance	8.6	7.3-10.0
Uninsured	8.8	5.2-12.4
Health insurance bought by self or other person with or without another type of insurance	6.7	4.5-8.8
Other (includes Railroad retirement plan, student health insurance, other unspecified plan)	5.9	3.1-8.8
Permanent Tooth Loss		
All Adults	25.7	24.1-27.2
Medicaid Only	29.0	16.8-41.1
Medicare Only	33.7	25.8-41.5
Medicaid and Medicare Adults	34.0	18.0-50.1
Child Health Plan Plus (CHP+)	N/A	N/A
Health Insurance through work or union with or without another type of insurance	22.8	20.9-24.7
Uninsured	37.9	32.3-43.4
Health insurance bought by self or other person with or without another type of insurance	23.5	20.0-27.1
Other (includes Railroad retirement plan, student health insurance, other unspecified plan)	25.7	18.8-32.5

* Confidence Interval

N/A = not available

SOURCE: Health Statistics Section, Colorado Department of Public Health and Environment.

Bolded estimates are statistically significant compared to all sampled adults.

Conclusion

Literature exists regarding the relationship between insurance coverage, access to health care, and the utilization of health care services. By adding the question of what type of health care coverage an individual has to the 2010 Colorado BRFSS, a new dimension of the population's overall health can be assessed. The ability to associate health care access with chronic disease allows programs to build upon the current understanding of health outcomes. It is important to know how the health and behaviors of persons who utilize public health insurance programs compare to those who are uninsured, as well as to those who have access to private health care plans.

Although causality cannot be inferred, this analysis further supports previous findings that persons who are uninsured, or utilize Medicare and Medicaid have unique health challenges. People without health insurance or health care through a public plan reported more adverse health behaviors and had higher estimates of selected chronic conditions when compared to all Colorado adults.

Examination of the type of health care plan in conjunction with an individual's health behaviors and health conditions provides a more comprehensive understanding of the population's overall health. This broader knowledge can be important as programs monitor goals, identify challenges, target preventative programs and policies, and work with other agencies to improve the health and quality of care for people on public health insurance.