



The relationship between insurance coverage and access to a regular source of health care

The relationship between insurance status and access to and use of health care services has been established in the literature.¹ Among children, as coverage expansions have occurred, significant reductions in the proportion of children without a usual source of care have been achieved.² Not only does coverage matter, but the length of that coverage, continuous versus switching or intermittent coverage, has been shown to affect access to care. Adults and children who switched insurance coverage or became uninsured are significantly more likely to delay care or experience unmet need because of cost or the lack of insurance coverage.³

Using data from the 2008-09 Colorado Household Survey (COHS), conducted between November 2008 and March 2009, this issue brief summarizes findings that examine the relationship between insurance status, access to a usual source of health care and utilization of health care services. In the COHS, access to a usual source of care was defined as whether individuals had a place they usually went when sick or needed advice about their health. Once the usual source of care was established, a series of questions was asked about the type of clinic this source was, utilization of various kinds of health services—from emergency rooms to generalist care to specialists—and whether any of the generalist visits were for preventive care. This brief examines emergency room visits for a non-emergent reason, visits to a generalist and visits for preventive care by whether individuals had a regular source of care and insurance coverage.

According to the COHS, 949,000 Coloradans were uninsured at some time during the 12 months prior to completing the survey. Of these, 674,000 were uninsured for at least six of the previous 12 months (the *chronically uninsured*). Because previous research has established that continuous coverage is an important predictor of having a usual source of care, this brief reports on differences between the chronically and temporarily uninsured and those who have had insurance for at least 12 months, the likelihood of having a usual source of care and subsequent utilization of health care services. The brief describes Coloradans with and without a usual source of health care and profiles both groups by adults and children, health status, where in the state they reside, the type of clinic serving as their usual source of care, insurance status (insured, temporarily uninsured and chronically uninsured) and the relationship between having a usual source of care and health care-seeking behavior.

Methods

The 2008–09 COHS, sponsored by the Colorado Department of Health Care Policy and Financing and funded by The Colorado Trust, was a telephone survey of 10,000 randomly selected households in Colorado.⁴ A series of questions regarding health insurance coverage, health status, access to health care, health care utilization, employment and income was asked about an individual in each household

¹ Duderstadt, KG, et al. (2006); Lavarreda, SA, et al. (2008); Shi, L. (2000); DeVoe, JE, et al. (2003).

² Duderstadt.

³ Olson, LM, et al. (2005); Lavarreda (2008).

⁴ The Colorado Health Institute (CHI) served as the administrator for the COHS under contract with the Colorado Department of Health Care Policy and Financing and authored this issue brief.

who was randomly chosen as the “target.” If the person answering the telephone was at least 18 years of age and able to do so, he or she answered all survey questions about the target and a subset of questions (demographics and health insurance status) about all members of the household.⁵ Otherwise, another adult household member who could answer these questions was interviewed. If the randomly selected target was a child under the age of 18, a knowledgeable adult in the household answered the questions on behalf of the child.

Due to the increasing trend toward cell phone-only households, the survey also included 400 randomly selected individuals at least 18 years of age who lived in a household where a cell phone was the exclusive means of telecommunication.

Statistically significant differences between group estimates were calculated using appropriate statistical tests. All estimates reported in this issue brief have been weighted to represent both the total 2008 Colorado population of 5,010,395.⁶

Coloradans with and without a usual source of care by insurance coverage

One of the findings from the COHS was the large proportion of individuals that reported having a usual source of care—nearly 90 percent or 4.5 million Coloradans. As with any survey of attitudes, behaviors and beliefs, perceptions are in the eyes of the responder, but clearly the vast majority of Coloradans believe they *have a place where they usually go when they are sick or need health advice*. This is the wording of the question that established whether Coloradans had a usual source of care. The following graphs display various dimensions of Coloradans who have and do not have a usual source of care.

Coloradans with a usual source of care by insurance status

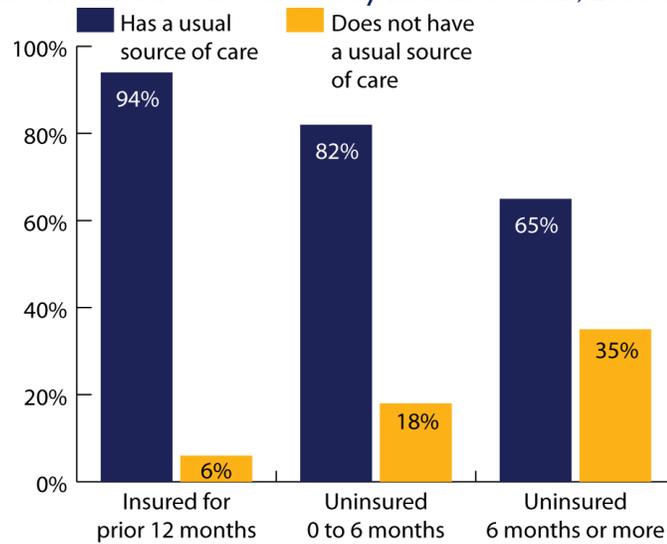
Figure 1 displays the percent of Coloradans with a usual source of care by their insurance status, which has been defined by whether they were insured for the full year, temporarily uninsured (fewer than six months) or chronically uninsured (uninsured six months or longer).⁷ Consistent with previous research, Coloradans who were continuously insured for at least 12 months were much more likely to have a usual source of care than those who were chronically uninsured. Approximately 94 percent of Coloradans insured for at least 12 months (3,787,000) had a usual source of care whereas 70 percent (665,000) of Coloradans uninsured at some time in the 12 months prior to the survey reported the same. This relationship existed regardless of whether they lived in a rural or urban area.

⁵ In some cases respondents may not have been able to answer all questions; therefore data are missing. For this reason, discrepancies may exist in the total number of individuals displayed in the various graphs.

⁶ 2008 population estimates are from the Colorado State Demography Office. All other estimates reported in this brief are based on data from the 2008-09 COHS. Detailed information on the methods used for the 2008-09 COHS is available for download from the CHI Web site at <http://www.coloradohealthinstitute.org/Projects/2008-09-Colorado-Household-Survey.aspx>.

⁷ Different definitions exist for the chronically uninsured. CHI analyzed the differences between Coloradans who had been uninsured for six months or more or 12 months or more. The population characteristics were very similar except that more children fell into the former category than the latter. For this reason, CHI opted to analyze those Coloradans who had been uninsured for six months or more.

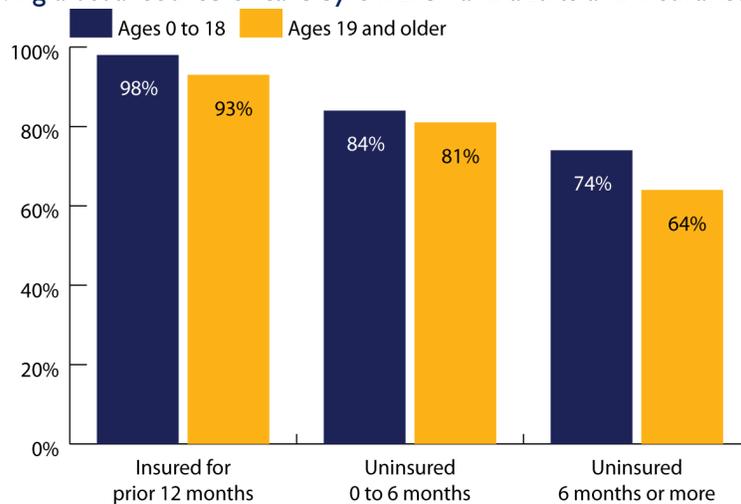
Figure 1. Coloradans with a usual source of care by insurance status, 2008-09



SOURCE: 2008–09 Colorado Household Survey

Figure 2 examines having a usual source of care by insurance status for two age groups—children (0-18 years) and adults (19 years and older). Differences in rates between children and adults were negligible, but again, insurance coverage, and the length of that coverage, was what mattered. Both adults and children were significantly more likely to have a usual source of care if they were continuously insured than if they were chronically uninsured.

Figure 2. Having a usual source of care by children and adults and insurance status, 2008-09



SOURCE: 2008–09 Colorado Household Survey

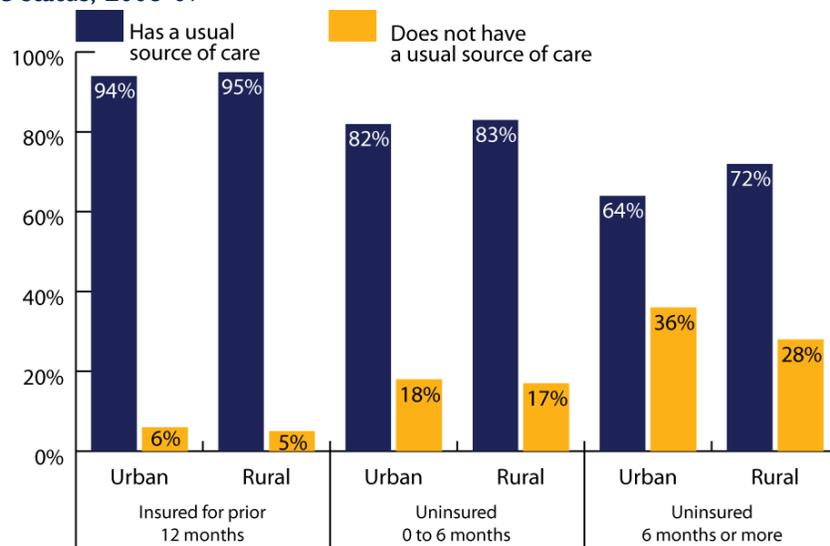
This brief also examines whether having a usual source of care varies by the type of the insurance coverage (Medicaid, Child Health Plan Plus [CHP+] or private insurance). Children are of particular interest because so many are covered by public programs. The analysis found that approximately 98 percent of children in Medicaid, 94 percent of children in CHP+, and 98 percent of children covered by private insurance had a usual source of care, demonstrating that the source of coverage was inconsequential but the coverage was not.

Coloradans with a usual source of care by urban/rural residence and insurance status

For several of the analyses conducted for this brief, geography (urban versus rural) was examined to establish whether it had an effect on having a usual source of care or where one went to get that care. Rural and urban are defined by rural/urban commuting areas (RUCAs).⁸

When geography was examined (Figure 3), approximately equal proportions of insured individuals living in urban areas and insured individuals living in rural areas had a usual source of care. For the chronically uninsured, however, there was an advantage that accrued to living in a rural area in terms of having a usual source of care (72% of rural chronically uninsured residents had a usual source of care compared to 64% of chronically uninsured urban residents).

Figure 3. Coloradans with and without a usual source of care by urban/rural residence and insurance status, 2008-09

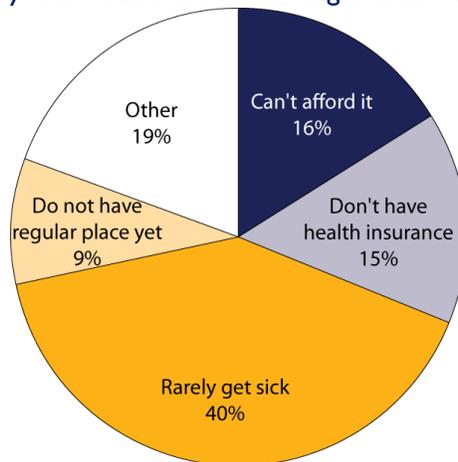


SOURCE: 2008–09 Colorado Household Survey

To further probe into the reasons why over 500,000 Coloradans did not have a usual source of care, Figure 4 displays the distribution of these reasons. It is instructive to note that 40 percent of Coloradans without a usual source of care *rarely get sick*. The reasons *can't afford it* (16%) and *don't have health insurance* (15%) could be viewed as two sides of the same coin—together they represent another 31 percent of the reasons. Of those Coloradans who don't have a usual source of care because they *rarely get sick*, 83 percent were in excellent or very good health and only 4 percent were in fair/poor health.

⁸The definition of urban and rural is based on Rural Urban Commuting Areas (RUCA) described in Appendix A.

Figure 4. Reasons cited by Coloradans for not having a usual source of care, 2008-09

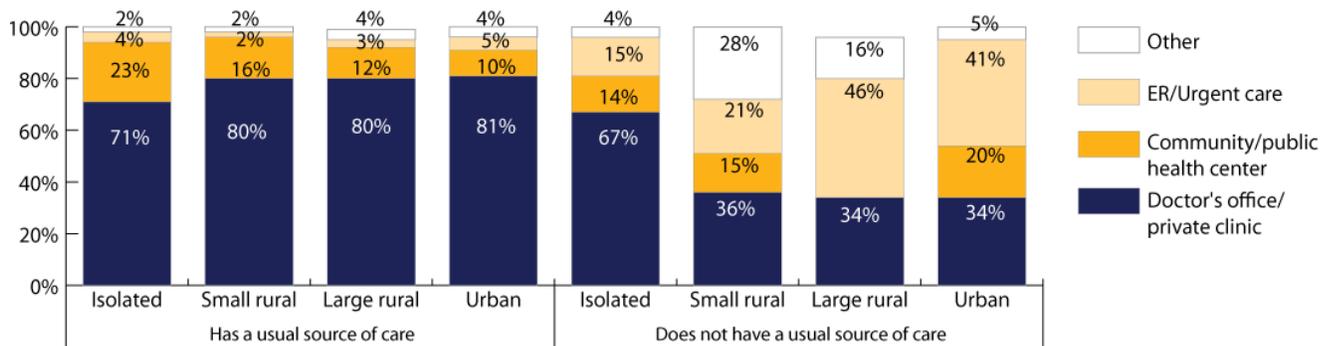


NOTE: The wording of the questionnaire item is included in Appendix B
 SOURCE: 2008–09 Colorado Household Survey

Coloradans with and without a usual source of care by type of clinic or facility where they seek care

Figure 5 displays the places where Coloradans with and without a usual source of care get the care they need. Although type of rural community didn't matter for other analyses, the analysis presented in Figure 5 found significant differences, particularly for individuals living in isolated rural areas and urban areas without a usual source of care.

Figure 5. Clinical settings where Coloradans with and without a usual source of care get the care they need by urban/rural residence, 2008-09



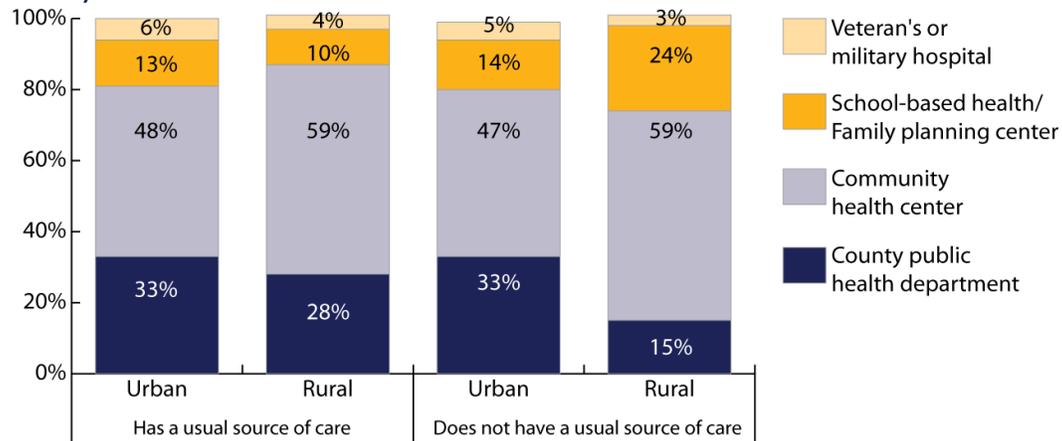
SOURCE: 2008–09 Colorado Household Survey

Coloradans with a usual source of care living in an urban area were somewhat more likely to get their care at a private doctor's office or clinic than those living in Colorado's most isolated rural communities (81% in urban areas versus 71% in isolated rural areas). Alternatively, Coloradans with a usual source of care who live in isolated rural communities were more likely to use community health centers or public clinics than those living in urban areas. It is interesting to note that these observed differences did not hold in the larger rural communities in Colorado that had care patterns almost identical to urban areas.

The clinic or facility where care was sought for individuals without a usual source of care was quite different from those with a usual source of care. Individuals without a usual source of care in isolated rural communities were much more likely to visit a private physician's office than Coloradans in large rural or urban areas where the emergency room was the dominant setting where care was sought.

Following the identification of clinical setting where care was sought, the COHS asked for more detail about the site if it was a community health center or public clinic. Figure 6 displays these results.⁹

Figure 6. Type of clinic or public facility visited by Coloradans with and without a usual source of care by urban/rural residence, 2008-09

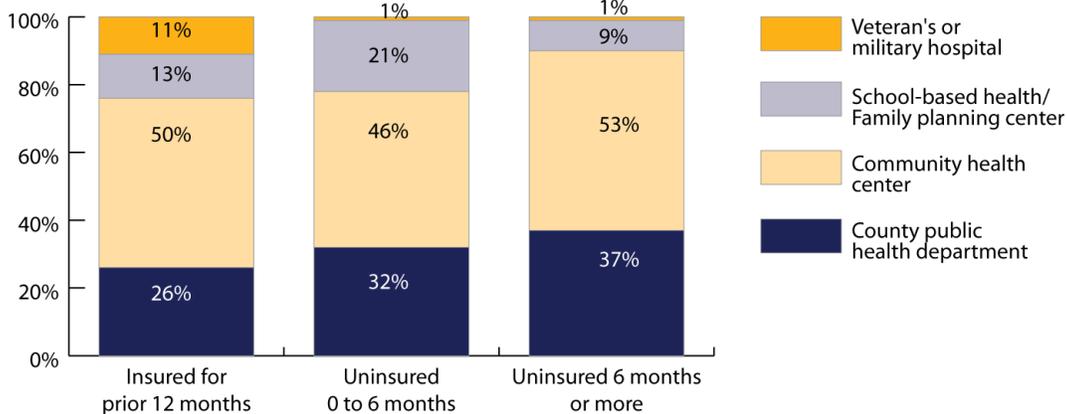


SOURCE: 2008–09 Colorado Household Survey

As noted in Figure 6, a higher percentage of Coloradans both with and without a usual source of care living in rural areas received needed health care from a community health center than people living in urban areas of the state. In the case of those without a usual source of care, people living in urban areas were statistically more likely to visit a county health department than those living in rural areas. The same was true for uninsured individuals when compared to those with 12 months or more of continuous insurance coverage (Figure 7).

⁹ Note that Coloradans who indicated they did not have a usual source of care are included in Figures 6 and 7. For individuals without a usual source of care, the wording of the COHS item was modified slightly to ask where they would go if they were to get sick or needed a medical professional.

Figure 7. Type of clinic or public facility visited by Coloradans when care was sought in a community health center or public clinic by insurance status, 2008-09



NOTE: Includes all Coloradans, regardless of whether they had a usual source of care.

SOURCE: 2008–09 Colorado Household Survey

Coloradans with and without a usual source of care and utilization of health care services

One of the important policy questions this brief seeks to answer is whether having a usual source of care affects the utilization of health care services, and if so, what types of services are affected. Table I displays Coloradans' utilization of generalist health care and emergency rooms in the 12 months prior to the survey. In addition, the table reports whether they did or did not have a usual source of care and overall health status by whether one did or did not have a usual source of health care.

Table I. Health care utilization and health status by having or not having a usual source of care, 2008-09

	Had a usual source of care (%)	No usual source of care (%)	All Coloradans regardless of usual source of care (%)
Visited an emergency room*			
0 visits	76.0%	71.4%	75.7%
1-3 visits	21.6%	26.0%	21.9%
More than 3 visits	2.4%	--	2.4%
Visited a primary care doctor (pediatrician, general practice, family medicine, internal medicine)*			
0 visits	7.0%	43.3%	9.1%
1-3 visits	64.1%	47.9%	63.2%
More than 3 visits	28.8%	8.8%	27.7%
Self-reported health status			
Excellent/Very good	65.3%	67.0%	65.6%
Good	21.5%	20.1%	21.4%
Fair/Poor	13.2%	12.9%	13.0%

SOURCE: 2008–09 Colorado Household Survey

*Question was asked only of individuals who indicated that they had visited a health care professional or health care facility (of any type) in the 12 months prior to the survey.

The data reported in Table 1 reveal that individuals without a usual source of care were six times more likely to have no visits to a generalist doctor in the 12 months prior to the survey than those with a usual source of care. Conversely, those who *had* a usual source of care were three times more likely to have three or more visits to a primary care doctor during this period than those without a usual source of care.

The following table further examines emergency room use by the type of health care facility an individual reported as his or her usual source of care.

Table 2. Emergency room utilization by type of facility identified as the usual source of care, 2008-09

	Type of facility identified as usual source of care				Does not have a usual source of care (%)
	Doctor's Office or Private Clinic (%)	Community or Public Health Department (%)	Emergency Room or Urgent Care Center (%)	Other (%)*	
Visited an emergency room**					
0 visits	79.2%	65.6%	34.4%	70.1%	71.4%
1-3 visits	19.2%	30.0%	54.2%	25.5%	26.0%
More than 3 visits	1.7%	4.4%	11.4%	4.4%	2.6%

SOURCE: 2008–09 Colorado Household Survey

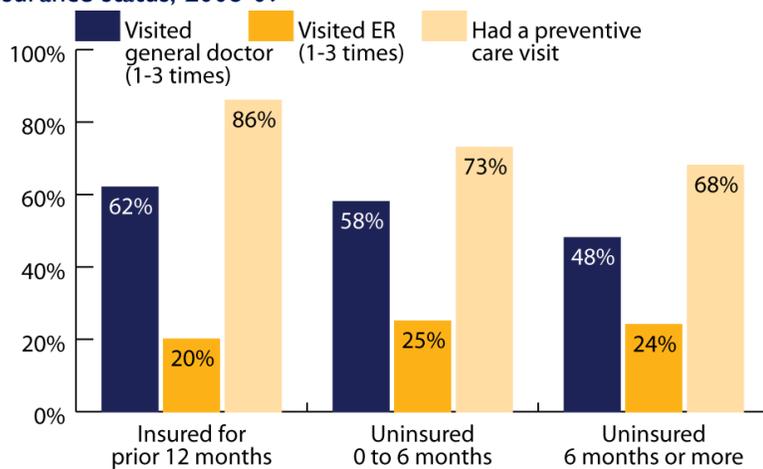
*Includes response options “Does not go to one place most often” and “Some other place.”

**Question was asked only of individuals who indicated that they had visited a health care professional or health care facility (of any type) in the 12 months prior to the survey.

The results in Table 2 reveal that people who reported using an emergency room or urgent care center as their usual source of care were significantly more likely to have visited an emergency room at least once in the 12 months prior to the survey than people who reported a different type of health care facility as their usual source of care.

Figure 8 reports whether individuals with a usual source of care visited a generalist doctor or emergency room (ER) one to three times during the 12 months prior to the survey as well as whether there were any visits for preventive care. A higher proportion of continuously insured Coloradans with a usual source of care visited a generalist doctor (62%) or had a preventive visit (86%) than those lacking health insurance for all or part of the year. The proportion of uninsured Coloradans with a usual source of care who visited an ER was only slightly lower (20%) than those who were uninsured for less than six months (25%) or uninsured for six months or more (24%).

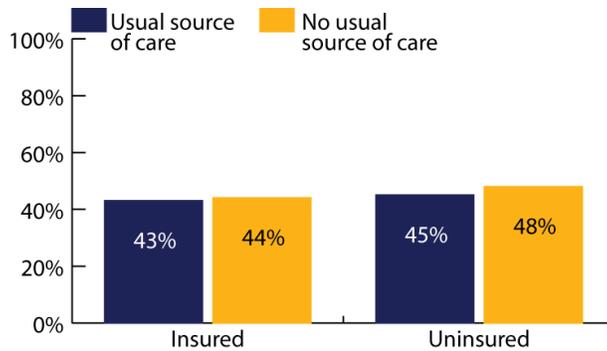
Figure 8. Coloradans with a usual source of care by generalist, ER and preventive health care visits and insurance status, 2008-09



SOURCE: 2008-09 Colorado Household Survey

Because of the ongoing interest in understanding emergency room use, the impact of being uninsured and having no usual source of care, ER visits for non-emergent reasons were examined for both the insured and uninsured (Figure 9). Coloradans visited the emergency room for non-emergent reasons at the same rate regardless of whether they were insured or uninsured and had a usual source of care or not.

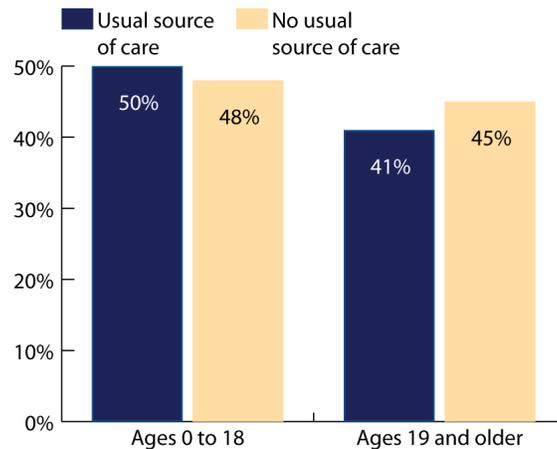
Figure 9. Emergency room visits for non-emergency conditions by insurance status and usual source of care, 2008-09



SOURCE: 2008-09 Colorado Household Survey

To identify differences in ER utilization between adults and children, Figure 10 displays the percent of Coloradans who visited an ER at least once in the 12 months prior to the survey for a non-emergency reason. Adults were slightly less likely to visit an ER for a non-emergency reason than children.

Figure 10. Coloradans who visited an ER at least once in the 12 months prior to the survey for a non-emergency reason by age category, 2008-09



SOURCE: 2008–09 Colorado Household Survey

Table 3 displays reasons why Coloradans with and without a usual source of care visited an ER. Regardless of whether an individual had a usual source of care, the most commonly cited reason for visiting an ER was that he or she needed care after normal business hours. Only a slightly higher proportion of individuals without a usual source of care (53%) indicated that convenience influenced their decision to visit an ER compared to those with a usual source of care (48%).

Table 3. Reasons for visiting an ER by usual source of care, 2008-09

Reason for visiting an ER*	Usual source of care (%)	No usual source of care (%)	All Coloradans regardless of usual source of care (%)
A. Was unable to get an appointment at the doctor's office or clinic as soon as [respondent] thought one was needed	58.2%	33.4%	56.5%
B. Needed care after normal operating hours at the doctor's office or clinic	75.3%	67.4%	74.7%
C. It was more convenient to go to the hospital emergency room	48.1%	53.0%	48.4%

SOURCE: 2008–09 Colorado Household Survey

*Questions asked only of individuals who indicated that they had visited an ER sometime in the 12 months prior to the survey for a condition that could have been treated by a doctor in a non-ER setting. Respondents could select more than one reason.

A final way to discuss the characteristics of Coloradans who do and do not utilize primary care or an ER is illustrated in Figure 11 which displays the insurance status of Coloradans who did not visit either location in the 12 months prior to the survey and Figure 12 which displays the reasons why.

Figure 11. Coloradans without a usual source of care who had no generalist doctor visits or visits to an ER in the 12 months prior to the survey by insurance status, 2008-09

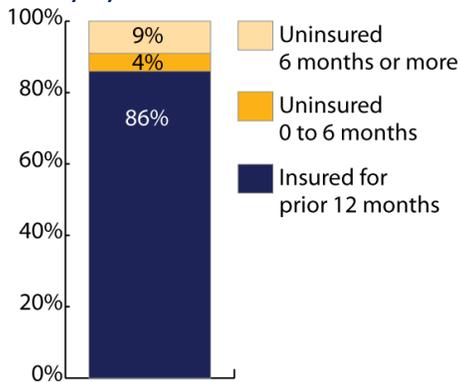
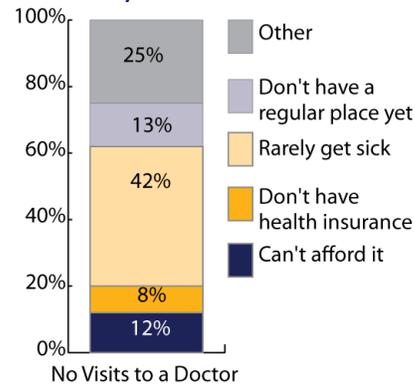


Figure 12. Reasons Coloradans without a usual source of care had no generalist doctor visits or visits to an ER in the 12 months prior to the survey, 2008-09



SOURCE: 2008–09 Colorado Household Survey

Conclusion

Nearly 90 percent or 4.5 million Coloradans report having a usual source of care. Data from the COHS confirm the relationship between coverage and access to health care. Ninety-four percent of Coloradans who were insured for the 12 months prior to the survey had a usual source of care compared to 70 percent of Coloradans who were uninsured sometime during the previous year. Ninety-eight percent of children in Medicaid and 94 percent of children in the Child Health Plan Plus (CHP+) had a usual source of care—nearly the same rate as children with private insurance coverage.

The most common reasons Coloradans cited for not having a usual source of care were that they *rarely get sick*, followed by *can't afford it* and *don't have health insurance*. Regardless of geography, the usual source of care for most Coloradans is a doctor's office or private clinic. Coloradans in rural areas of the state, however, were more likely to identify their usual source of care as a community or public health center than those living in urban areas.

Compared to Coloradans with a usual source of care, those without were six times more likely to have had no visits to a generalist doctor in the 12 months prior to the survey. Frequency of visits to an emergency room were similar for both groups. Likewise, there were no differences in emergency room utilization for non-emergency conditions between individuals with and without a usual source of care. Differences between the two groups in the reasons given for visiting an emergency room are notable. Coloradans without a usual source of care were significantly more likely to cite not being able to get an appointment with a doctor when needed compared to those with a usual source of care. Coloradans who neither visited an emergency room nor had any generalist doctor visits in the past year most frequently mentioned that they rarely get sick.

The COHS data confirm previously published literature which found that continuous insurance coverage matters with regard to having a usual source of care and whether this marker of access results in utilization that is appropriate to perceived need.

Appendix A: Geographic designations

The rural, urban and isolated geographic designations used in this brief are based on Rural-Urban Commuting Codes (RUCAs) developed by the Health Resources and Services Administration (HRSA), Department of Agriculture's Economic Research Service and the Rural Health Research Center (RHRC). The RUCAs are used to classify all of the nation's Census tracts and ZIP Codes regarding their rural and urban status and relationships.¹⁰

The RUCA codes are based on 2000 Census' work commuting information, Census Bureau defined Urbanized Areas (cities of 50,000 and greater population) and Urban Clusters (cities/towns of from 2,500 through 49,999 populations).¹¹

The RUCA codes are grouped into ten general categories based on the proportion of a ZIP Code's population that commutes to an Urbanized Area or Urban Cluster. CHI combined these 10 RUCA-based classifications¹² into the four categories used in this brief:

- Urban
- Large rural
- Small rural
- Isolated

To summarize the classification scheme, areas classified with "Urban" RUCA codes have a significant proportion of the population commuting within or to an Urbanized Area. A ZIP Code is considered a "large rural" area if it has between 10,000 and 49,999 population and a significant proportion of its population commutes to or within an Urban Cluster. Similarly, a ZIP Code is considered a "small rural" area if it has fewer than 10,000 population and a significant proportion commutes to or within an Urban Cluster. Isolated ZIP Codes are classified as such if a significant proportion of its population commutes to an area outside an Urbanized Area or an Urbanized Cluster.

This appendix was adapted from documentation available from the RHRC and is intended to provide only a cursory summary of RUCA methods. Additional information about the methods and complexity of RUCA codes is available on the RHRC Web site at: <http://depts.washington.edu/uwruca/index.php> or at the following reference:

L.G. Hart, E.H. Larson and D.M. Lishner. "Rural definitions for health policy and research." *American Journal of Public Health*. 2005(95): 1149-55.

¹⁰ The classifications in this brief are based on ZIP Code and not Census tract.

¹¹ Additional information on the U.S. Census Bureau's definitions of Urbanized Area and Urban Cluster can be found at <http://depts.washington.edu/uwruca/ruca-urban.php>.

¹² For specific code definitions, see <http://depts.washington.edu/uwruca/RUCACodeDes2.pdf>.

Appendix B: Primary reason for not having a usual source of care

2008-09 COHS questionnaire item A2b:¹³

A2b. What is the main reason (you/ TARGET) (do/does) not have a regular place that you go for health care?

- 1 Can't afford it
- 2 Do not have health insurance
- 3 Rarely get sick
- 4 Clinic hours don't fit my schedule
- 5 Transportation difficulties – general
- 6 Transportation difficulties – live in rural area and it's too far
- 7 Transportation difficulties – live in urban area and it's too far
- 8 Transportation difficulties – live in rural area and public transportation is difficult to use
- 9 Transportation difficulties – live in urban area and public transportation is difficult to use
- 10 Language is a barrier
- 11 Do not like/trust/ believe in doctors
- 12 Clinic I used to go to closed
- 13 Just moved, do not have a regular place yet
- 14 Just switched insurance, do not have regular place yet
- 15 Two or more places depending on what's wrong
- 16 Use the emergency room primarily
- 17 Seek advice from family/friends primarily
- 97 Other (SPECIFY) _____
- DD Don't know
- RR Refused

¹³ A copy of the 2008-09 COHS questionnaire is available on CHI's Web site at:
<http://www.coloradohealthinstitute.org/Projects/2008-09-Colorado-Household-Survey.aspx>.

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