



# A Half Million Newly Insured: Is Colorado Ready?

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An Analysis of Primary Care Workforce Needs  
After Health Care Reform

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December 2011

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# Table of Contents

4	Introduction
5	Overview
7	Understanding the Analysis: Behind the Numbers
11	Meeting the Need: Policies and Practices
15	Focus on Colorado: Challenges and Ideas
16	Conclusion
17	Endnotes
19	Community-Level Planning Guide



# Introduction

The debate over federal health care reform was an all-consuming national drama leading up to its passage in 2010, a hard-fought battle filled with heated controversy, partisan politics and honest disagreements.

That may have been the easy part.

Now it's up to states, communities, hospitals, medical offices and safety net clinics, along with the nation's health care workers, to fill in the thousands of details necessary to implement the Affordable Care Act. This hard work is ramping up even as uncertainty surrounds the law, with a U.S. Supreme Court battle looming over its constitutionality and a great deal of opposition remaining.

In Colorado, implementing health reform means insuring an additional 510,000 residents and providing care for them in a system that is already stretched thin in many areas of the state. There are no one-size-fits-all solutions. About 130,000 of the newly insured will be enrolled in the federal-state Medicaid insurance program while another 380,000 will be required to purchase private insurance, some with government financial assistance.

Each group – indeed, each person – will present different challenges after becoming insured, and each will stress Colorado's health care system in different ways.

The Colorado Health Institute (CHI) has provided information and analysis about health care reform during the debate and since its passage. Now, for the first time in Colorado, CHI is answering this important question about the anticipated increase in demand for medical services: *How many*

*How many additional primary care providers will Colorado need to care for the residents who become insured under federal health care reform?*

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Conventional thinking has pointed to an overwhelming need for primary care physicians, nurse practitioners and physician assistants in the wake of health reform. CHI's findings, however, suggest a more manageable number. This will be welcome news for communities trying to prepare for the changing health care landscape of 2014 and beyond.

Still, in the areas of Colorado already struggling with a shortage of primary care providers – particularly rural, frontier and underserved urban communities – the need to attract even a small number of additional doctors and nurses will be challenging. And low-income Coloradans who currently have difficulty finding care will continue to encounter obstacles after a half million people enter the system. Essentially, the fault lines in Colorado's health care infrastructure will most likely widen, especially during the early phases of implementation.

***CHI, in keeping with its mission to provide reliable data and analysis as a sound basis for planning and policy, is pleased to present this study focusing on Colorado's health care workforce, post-reform. It includes estimates of the anticipated need for primary care workers by region as well as other factors necessary for thoughtful planning and policymaking. This information is targeted toward state and community leaders, policymakers, health care planners, and workforce educators and recruiters.***



# Overview

About 510,000 Coloradans – or nearly one of every 10 residents – will go from the ranks of the uninsured to the insured between 2014 and 2016 as the result of federal health care reform, according to a CHI analysis.

Approximately 130,000 of the newly insured will be covered by the federal-state Medicaid insurance program. The other 380,000 will obtain private insurance, either through their employer, a pooled statewide insurance benefits exchange or the individual market.

These 510,000 newly insured residents will make an estimated 256,010 to 432,420 additional annual visits to primary care providers – in this case, physicians, nurse practitioners and physician assistants. These visits will be above and beyond any yearly visits they made when they were uninsured.

Colorado, based on that expected change in medical usage, will need between 83 and 141 additional primary care providers by 2016. This breaks down to a need for 71 to 117 physicians and 12 to 24 nurse practitioners and physician assistants.

The increase in Medicaid enrollees alone will account for between 30 and 49 of the additional providers. As an indication of the magnitude of need in this often-underserved population, about 25 percent of the newly insured will be covered by Medicaid, but they will account for about 36 percent of the anticipated need for additional medical care.\*

It is important to note that Colorado faces the

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\* Since most medical providers serve a varied patient population, not just one payer type, all numbers of providers in this analysis refer to full-time-equivalent positions.

prospect of enlarging its primary care workforce for this newly insured population at the same time it is dealing with primary care shortages in some areas of the state. This primary care gap is fueled by an aging population that needs more care, an aging health care workforce that means more retirements, the decision by an increasing percentage of medical students to focus on specialty care, the limited number of providers who accept public insurance and the difficulty in attracting providers to rural, frontier and underserved urban sites.<sup>1</sup> Colorado will need to recruit primary care workers for the newly insured while trying to fill these ongoing demands.

At the same time, an excess of medical capacity most likely exists in some of the state's more populous and prosperous areas. Primary care

## By the Numbers

**510,000** Approximate number of Coloradans who will go from uninsured to insured between 2014 and 2016.

**256,010-432,420** Estimated number of additional annual visits to primary care providers by the newly insured.

**83-141** Additional primary care providers needed in Colorado by 2016 to care for the newly insured. This breaks down to **71-117** physicians and **12-24** nurse practitioners and physician assistants.

providers in these locations may be able to absorb a portion of the need created by health reform, especially for the privately insured.

Finally, there are lingering questions that will have a bearing on how many Coloradans ultimately become insured and how they consume medical care.

Insurance enrollment will depend on the effectiveness of outreach to eligible residents,

the level of understanding about the reform law's provisions, and how much weight the penalties will carry in preventing individuals and businesses from ignoring the law or its requirements.<sup>2</sup> Medical usage could be affected by any number of factors. It could be lower than expected because of unfamiliarity with the system or higher than anticipated because of pent-up demand by patients who delayed necessary care when they were uninsured.

## Primary Care: Definitions

**Primary Care:** The provision of integrated, accessible health care services by clinicians who are accountable for addressing a large majority of personal health care needs, developing a sustained partnership with patients and practicing in the context of family and community (Institute of Medicine, 1996).

**Primary Care Physician:** A generalist Doctor of Medicine (MD) or Doctor of Osteopathic Medicine (DO), specializing in family medicine, general pediatrics, internal medicine or obstetrics and gynecology, who serves as the entry point for a substantial portion of a patient's medical and health care needs. Primary care physicians are advocates for the patient in coordinating the use of the entire health care system.

**Nurse Practitioner (NP):** A registered nurse (RN) who has completed advanced education and training specific to the profession. Colorado allows NPs to diagnose and treat common medical conditions. Upon meeting additional requirements, NPs may independently prescribe medications. Colorado allows NPs to practice independently.

**Physician Assistant (PA):** Certified health care professionals licensed to practice clinical medicine under the supervision of a licensed physician. Within that relationship, PAs may exercise relative autonomy in medical decision-making, diagnosing and treating patients and prescribing medication.



# Understanding the Analysis:

## Behind the Numbers

CHI sought to answer this question: *How many additional primary care providers will Colorado need to care for the residents who become insured under federal health care reform?*

The formula used by CHI, in its simplest terms, is: The number of projected additional primary care visits by Colorado’s newly insured divided by a productivity factor that estimates the number of annual patient visits per full-time Colorado provider. The analysis includes all Coloradans under the age of 65.

First, it was necessary to determine how many Coloradans will most likely gain insurance under health reform, for either of two reasons: the expansion of eligibility for Medicaid coverage to all individuals and members of families earning less than 133 percent of the federal poverty level (FPL); or the law’s “individual mandate,” which requires most people to buy health insurance or face a penalty on their tax return. About 4.4 million Coloradans currently have health insurance

Federal Poverty Level, 2011		
Family Size	Gross Yearly Income	
	100%	400%
1	\$10,890	\$43,560
2	\$14,710	\$58,840
3	\$18,530	\$74,120
4	\$22,350	\$89,400

and about 829,000 Coloradans are not covered, according to the 2011 Colorado Health Access Survey.<sup>3</sup> After health care reform, an estimated 390,000 Coloradans will remain uninsured.<sup>4</sup>

**Number of newly insured:** The estimate that health reform will result in 510,000 newly insured Coloradans comes from a microsimulation model developed by Jonathan Gruber, professor of health

## The Formula



economics at the Massachusetts Institute of Technology. A number of state and federal policymakers have used his model to analyze the impact of health insurance reforms. For Colorado, the model created a baseline picture of health insurance coverage in the state by using data from the 2008-09 Colorado Household Survey. The data provided details on Coloradans by insurance type – employer-sponsored, individual market, public (Medicaid and the Child Health Plan *Plus* [CHP+]) or uninsured – as well as age, gender, income, employment status and health status. The addition of other data, including from the state of Colorado, allowed the model to simulate the effect of the Affordable Care Act on Colorado and project the number of residents who will gain health insurance.

**Increased visits:** Jean Marie Abraham, an assistant professor in the Division of Health Policy and Management at the University of Minnesota, provided the expected number of increased visits by the newly insured. Abraham adapted a multivariate regression model that was devised for a study published in *The Milbank Quarterly*, a peer-reviewed journal.<sup>5</sup> The primary data sources were the 2006, 2007 and 2008 Medical Expenditure Panel Surveys - Household Component (MEPS-HC). This national survey contains individual-level information for a wide variety of demographic and health factors and allows for statistical modeling that allows one to predict individuals' potential behavioral response upon becoming insured.<sup>6</sup> For example, a woman of child-bearing age can be expected to consume more medical care than an older man. The model estimated the number of annual primary care office visits as a function of demographic characteristics and insurance status. It then predicted the change in visits

resulting from becoming insured for a full year. Finally, that

## The Affordable Care Act: The Basics

**Requires** most Americans to have health insurance by 2014 or pay a penalty (“individual mandate”).

**Exempts** the undocumented, the incarcerated, those with incomes so low they are not required to file tax returns or those for whom premiums (even with subsidies) would top 8 percent of family income.

**Creates** state-based health insurance benefit exchanges where individuals and small businesses can purchase coverage.

**Expands** Medicaid coverage to all individuals and members of families below 133 percent of the Federal Poverty Level (FPL).

**Provides** premium and cost-sharing assistance for people not eligible for Medicaid with incomes below 400 percent of the FPL who are not offered employer coverage.

**Requires** insurers to issue coverage to all applicants regardless of health status or pre-existing conditions (“guaranteed issue”).



change in visits was applied to Colorado's expected newly insured population. (Of note, the model found that uninsured females averaged one annual visit to a primary care provider, followed by uninsured children at .9 and uninsured males at .5. As expected, the number of annual medical visits was higher for all age and gender groups when they were insured, compared to uninsured groups.)<sup>7</sup>

**Provider productivity factor:** This information is based on a Medical Group Management Association survey that gathered data on the number of documented, face-to-face patient encounters completed in a year by responding health care providers.<sup>8</sup> The weighted median number of annual encounters in 2010 for one full-time-equivalent primary care physician in the Western region was 3,137. For primary care nurse practitioners and physician assistants combined, the weighted annual visit productivity for one provider was 2,688 encounters.<sup>9</sup> A provider's productivity can be affected by number of hours worked, training and experience, characteristics of the patient population and other practice-related factors such as size and use of technology. CHI included nurse practitioners and physician assistants in the model because of their increasingly important role in primary care and the expectation that they will help meet the increased need created by the Affordable Care Act.<sup>10, 11</sup>

**The outcome of interest:** Taking all of these factors into account yielded the estimated need for additional primary care providers in Colorado by 2016, when it is expected that the health insurance expansions will be fully implemented. Because of the nearly unprecedented scope of the changes anticipated under health care reform, and the

## Results in Context

- Without federal health reform, all Coloradans under the age of 65 – insured and uninsured – would make an estimated 8.6 million primary care office visits in 2016.
- Projected additional primary care visits by the newly insured – 256,010 to 432,420 - represent a 3 percent to 5 percent increase.
- Colorado has 3,262 physicians practicing primary care.<sup>a</sup>
- The state has 995 licensed nurse practitioners and 785 licensed physician assistants who report primary care as a specialty.<sup>b</sup>
- Projected additional primary care providers – 83 to 141 – represent a workforce increase of 2 percent to 3 percent.
- The projected primary care usage by the newly insured assumes that their behavior will match the behavior of a person of similar age and gender who has been insured for at least a full year.

uncertainty surrounding some important variables, CHI chose to report this projected number within a range, the lowest quartile and the highest quartile, or the 25<sup>th</sup> and 75<sup>th</sup> percentiles.

# Lessons from Other States

## Is the Additional Need Really for Clinicians?

**Findings from Massachusetts:** A study that examined the health care workforce in Massachusetts before and after state-based health reform was instituted there in early 2006 can be instructive for Colorado. The rate of increase in the number of doctors and nurses was not much different than the rate of increase in the rest of the nation. Instead, significantly higher growth rates were found in the number of administrative personnel and in the number of employees who provided patient care services. The increase in those workers contributed to an overall level of health care workforce growth that topped that of the nation. The authors speculated that insuring 400,000 people created a great deal of additional paperwork to enroll them, manage their cases, file claims and comply with other regulatory requirements. The lesson, according to the authors, was that health reform may not require great numbers of additional doctors and nurses, but rather larger numbers of people supporting their work. One limitation of the study is that Massachusetts has more physicians per capita than Colorado (39.7 per 10,000 in Massachusetts compared with 24.7 per 10,000 in Colorado), meaning Massachusetts may have been in a better position to provide medical care to the newly insured.<sup>c</sup>

## Should Colorado Anticipate a Pent-up Demand?

**Findings from Oregon:** A study of uninsured low-income adults in Oregon who were selected by a 2008 lottery for the chance to apply for Medicaid may contain some early lessons. In the first year, the treatment group selected by the lottery had more health insurance and used more health care – primary care, preventive care and hospitalizations – than control group members who didn't receive Medicaid eligibility. Still, the study's authors wrote that they didn't believe the results showed pent-up demand, or an initial surge in health care use, among the newly insured, a question that had concerned many of those planning for health care reform. A limitation of the study is that it involved insuring a small number of people (about 10,000) while keeping the rest of the health care system constant, which would not be the case under the sweeping changes of health reform. Oregon's newly insured had expressed interest in obtaining health insurance by signing up for the lottery, in contrast to many of those who will become insured under health reform. This factor resulted in a study population that has more whites and fewer African-Americans than the general low-income uninsured U.S. population, is four to five years older, and appears to be in somewhat worse self-reported health and of lower socioeconomic status. CHI's analysis focuses on the longer-term impact of the newly insured on the health system and workforce. Because of the uncertainty about pent-up demand, it's important to look at the long-term policy implications.<sup>d</sup>



# Meeting the Need

## *Policies and Practices*

A fundamental rethinking of the health care delivery system is underway in Colorado and across the nation. Elements of this wide-ranging effort could be part of the equation in providing care to the newly insured. This section discusses several of these efforts:

- Building a more robust primary care workforce.
- Integrating patient care.
- Improving health outcomes at more reasonable and sustainable costs.

Finally, because health care is local, and because successful implementation of the health reform law will ultimately rest at the local level, the report highlights policy-based and practice-based solutions for some of Colorado's pressing concerns.

### **Building a Stronger Primary Care Workforce**

Acquiring an insurance card will be an important first step for uninsured Coloradans. But it won't automatically guarantee an appointment at a doctor's office. Although a number of factors will influence the ability of Colorado's newly insured to obtain medical care, having an adequate supply of primary care providers will be crucial. In many areas of Colorado, it is already the case that there aren't enough. Indeed, pockets of the state have been dealing with an inadequate supply of primary care providers for a number of years.

For example, more than 1 million Coloradans live in communities with fewer than half of the

primary care providers that are needed for optimal coverage, and 56 of Colorado's 64 counties have been designated as full or partial primary care Health Professional Shortage Areas, where there are 2,000 or more residents per primary-care doctor.<sup>12</sup> Anecdotally, it may take a year or longer to recruit a primary care physician in some of Colorado's remote communities.

Colorado had 3,262 practicing primary care physicians in 2011, or 28.7 percent of all practicing physicians, for its five million-plus residents. This translates to about 6.5 primary care physicians for each 10,000 Coloradans.<sup>13</sup>

As another illustration of the gap in primary care providers in some geographic regions, the Colorado Department of Public Health and Environment estimated that as of the last quarter of 2011, Colorado needed 194 primary care physicians in underserved communities.<sup>14</sup>

Colorado's safety net system is seeing a growth in demand for services. The state's community health centers – where more than 94 percent of the patients have family incomes below 200 percent of the FPL – provided care for more than 458,000 patients during 1.8 million visits in 2010.<sup>15</sup> This 80 percent increase from the 1 million patient visits in 1999 is an indication of a growing population but also of a growing need among low-income Coloradans for primary care providers.<sup>16</sup>

The economic downturn has driven a rising demand for care at community health centers. Respondents to a 2009 survey by the National Association of Community Health Centers said

that total visits increased 14 percent between June 2008 and June 2009 compared to a 6 percent increase between calendar years 2007 and 2008.<sup>17</sup> A number of Colorado's community health centers have reported that they have patients on waiting lists.

Meanwhile, the state's Community-funded Safety Net Clinics and Rural Health Clinics reported serving 250,000 patients during an estimated 700,000 clinic visits in 2008.<sup>18</sup>

The health care reform law has set aside \$11 billion for community health center expansion initiatives to serve the newly insured.

With primary care shortages documented in a number of geographic regions of the state, there is concern that the gap between the need for care and the available primary care workforce will worsen, especially in underserved communities. Several years ago, CHI projected that by 2025 Colorado will need an additional 2,200 primary care providers beyond the anticipated supply. The projection was based on current practice models, assumptions and the best data available at the time.<sup>19</sup>

It isn't advisable to add together CHI's 2009 supply-demand workforce projections and the current reform-related workforce projections because of the time lapse between the analyses and differences in methodology. The 2009 projections included a number of demographic and economic considerations, while the current study targets changes due solely to health reform. Still, it is clear that local and national efforts to address primary care needs will only become more critical.

Lawmakers, recognizing that a dearth of primary care providers and the prospect of long waits could compromise the Affordable

Care Act, included a number of workforce provisions designed to encourage innovation in training, recruitment and retention.<sup>20</sup> In addition, a workforce commission was created to analyze the primary care workforce and to propose efforts to strengthen it.

In Colorado, two major projects involving dozens of Colorado's health care workforce leaders and experts have recommended policy changes to address primary care workforce concerns in the state.

The Colorado Health Professions Workforce Policy Collaborative, funded by The Colorado Trust, issued a 2010 report that called for these policy interventions:

- Collecting key data through the state's professional licensing and certification processes.
- Supporting adequate reimbursement for primary care providers.
- Increasing public funding for health professions education programs.
- Optimizing the effectiveness of loan programs.
- Streamlining and coordinating administration of clinical placements and other health care professional training programs.
- Supporting policies to increase the number of clinical experiences and residencies.<sup>21</sup>

The Primary Care Office of the Colorado Department of Public Health and Environment in November 2011 released a draft report on its health care workforce development planning project. The work was funded by a Health Resources and Services Administration Grant. The report's recommendations include:<sup>22</sup>

- Developing a reliable, current and relevant workforce dataset.

- Conducting a needs assessment for primary care services.
- Developing a strategy for training health providers who are willing and prepared to serve underserved communities.
- Creating a common vision for a state workforce policy that works toward resolving the shortage in underserved communities.

## Integrating Medical Care and Improving Health Outcomes

Improving the efficiency of the health care system could ease the way to effectively caring for the influx of newly insured Coloradans. Striving for better health outcomes while reducing costs are two elements of the Affordable Care Act. Financial incentives included in the law have spurred some of the programs aimed at achieving those results, but others were launched prior to its passage.

Much of the effort is centered around the concept of integrating care, with teams of doctors, nurses and other providers working together – possibly with a care coordinator and probably out of a “medical home” – to provide efficient and effective care.<sup>23</sup>

Preventive care is a central component of this system. The aim is to keep people healthy and to avoid the need for expensive hospitalizations.

Some programs being tested that could eventually help improve the ability of Colorado’s health care delivery system to meet the needs of the newly insured include:<sup>24</sup>

### Accountable Care Organizations (ACOs) –

These networks of primary care providers, hospitals, clinics and other organizations coordinate care for a patient. Savings realized

by the coordination would be shared by network members, as would the risk of cost overages.

**In Colorado:** The state’s Medicaid program has launched a reform effort through Accountable Care Collaboratives (ACCs), dividing them into seven Regional Care Collaborative Organizations (RCCOs) throughout the state. The program began in May and has set an enrollment target of 123,000 Medicaid clients in the first year. The first clients to be eligible must have a primary care provider and a medical home.<sup>e</sup>

**Health Information Technology** – The promise of improving and sharing electronic records and the potential impact on care coordination is a high priority for providers.

**In Colorado:** The Colorado Regional Health Information Organization (CORHIO) is leading the effort to develop and implement secure systems to share clinical information. CORHIO is working with physicians, hospitals, clinics, mental health, public health, long-term care, laboratories, imaging centers, health plans and patients. The goal is to deploy a health information exchange in every Colorado community by 2015.<sup>f</sup>

**Medical homes** – Medical homes are generally housed in the office of a primary care provider, where a patient can be based and his or her care coordinated across a variety of providers, including specialists, pharmacies, clinics and hospitals. The concept measures performances, engages patients in their own care and builds in quality improvement activities. The hope is that long-term savings will result from reducing emergency room visits and hospitalizations. A number of experts have expanded the concept to “medical neighborhoods,” which include a wider array of caregivers, including family members, schools, community-based long-term services and supports, and patient navigators.

**In Colorado:** Sixty-five community health centers in Colorado and four other states are participating in a demonstration project called the Safety Net Medical Home Initiative. This effort is designed to test the use of medical homes in improving care delivery, enhancing access to care, improving doctor-patient interactions and producing higher quality. The pilot effort is funded by the Commonwealth Fund, Qualis Health and the MacColl Institute for Healthcare Innovation at the Group Health Research Institute.<sup>g</sup> The Colorado Community Health Network is the coordinating center in Colorado for the 11 federally qualified health centers (FQHCs), one non-federally funded health center and two rural health centers participating in the project.<sup>h</sup>

**Bundled payments** – A single payment would cover a medical episode, with incentives included for keeping costs within check. Providers in Colorado and across the nation are experimenting with a variety of bundled payment methods. For example, the PROMETHEUS Payment model, funded by the Robert Wood Johnson Foundation, the Commonwealth Fund, the New York State Health Foundation and The Colorado Health Foundation, packages payments based on a “comprehensive episode of medical care” covering all patient services related to a single illness or condition. The costs of treatment are calculated into an “Evidence-informed Case Rate” (ECR) that creates a budget for the patient’s entire care episode. This ECR can be adjusted to account for the severity or complexity of an individual patient’s condition. PROMETHEUS is being tested at four pilot sites.<sup>25</sup>

**In Colorado:** The Center for Improving Value in Health Care (CIVHC) has created a Payment Reform Advisory Group to encourage innovative payment methods in the state.<sup>i</sup> In the commercial arena, Exempla Saint Joseph in Denver was selected to participate in a bundled payment pilot program involving cardiovascular services through the Centers for Medicare and Medicaid Services (CMS), one of four in the nation. Under the program, the physician and the hospital receive one payment that they share, making it important to collaborate on providing the highest-quality care as efficiently as possible.<sup>j</sup>



# Focus on Colorado

## *Challenges and Ideas*

**Challenge:** The geographic remoteness and difficult terrain of many Colorado areas tend to amplify health care delivery problems. More than three-quarters of the state – about 79,872 square miles – is rural. The average rural Colorado county covers 1,632 square miles. And rural counties have, on average, lower-income residents, greater numbers of children and families living in poverty, and an older population.<sup>26</sup>

**Innovation:** Telehealth and telemedicine are being tested and used throughout the state to care for residents in rural areas. Advanced audio, video and medical technologies link patients in remote communities with physicians and other providers for an experience being described as feeling as real as an in-person consultation. The Colorado Telehealth Network, managed by the Colorado Hospital Association, hopes to link more than 300 hospitals, providers, clinics and other groups in rural Colorado with their urban counterparts using high-speed wireless technology.

**Challenge:** Because many Colorado counties are sparsely populated, adding even one full-time primary care physician might not make economic sense. Still, there is unmet need.

**Innovation:** Under the hub-and-spoke delivery model, hospitals or clinics would establish small outposts in rural areas and staff them at reduced levels, sometimes one or two days a week, depending on need. The goal would be to save costs associated with full-blown practices and full-time employees while still providing needed care. Electronic Medical Records would play an important role in this delivery model.

**Challenge:** Training more primary care providers and attracting them to Colorado's rural areas.

**Innovation:** A number of payment reform models are focusing on narrowing the earnings gap between specialists and primary care physicians. In addition, a number of recommendations by Colorado's health care workforce leaders focus on providing scholarships, loan repayments and other incentives for physicians who choose to provide care in underserved communities. The Colorado Rural Health Center assists local communities in putting together attractive packages to recruit physicians. In addition, the University of Colorado has created a successful model with its Rural Track, established in 2005, to identify and train medical students interested in practicing in rural areas. From 12 to 20 students are admitted to the Rural Track in each class.<sup>27</sup>

**Challenge:** The difficulty in convincing young physicians to move to a remote area, especially if they are from an urban environment.

**Innovation:** A 2009 survey of Colorado’s rural physicians found that 40 percent of them grew up in a rural area.<sup>28</sup>A number of rural

communities across the nation, particularly in the Midwest, have adopted a “grow-your-own” strategy, identifying promising students in their communities and connecting them with scholarships and loan-repayment programs while providing support and encouragement. Some successes have been recorded, including in Colorado.<sup>29</sup>



## Conclusion

It is evident that the Affordable Care Act could bring long-lasting change to the nation’s health care system. It is also clear that much work needs to be done at the state and local levels to achieve the law’s goals. This Colorado Health Institute analysis of the anticipated health care workforce needs related to health reform can be a basis to begin thinking and

planning for the new health care landscape. In addition to the estimates for primary care workforce needs, this guide includes a range of demographic, economic, health care and insurance data that will be useful in this planning process. It is broken down by Colorado’s 21 Health Statistics Regions so that it can be even more relevant for local planning efforts.



## Endnotes

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<sup>8</sup> Medical Group Management Association.

<sup>9</sup> Colorado Health Institute analysis of MGMA survey data.

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<sup>14</sup> Conversation with Steve Holloway, director, Office of Primary Care of the Colorado Department of Public Health and Environment. (November 2011).

<sup>15</sup> Colorado Community Health Network. Fact Sheet. (Retrieved Dec. 1, 2011, from: [http://cchn.org/pdf/about\\_cchn/news\\_room/2011\\_Fact\\_Sheet.pdf](http://cchn.org/pdf/about_cchn/news_room/2011_Fact_Sheet.pdf)).

<sup>16</sup> Colorado Community Health Network. "Colorado Community Health Center Trends Over the Past Ten Years: 1999-2008." (Retrieved Dec. 1, 2011, from: [http://cchn.org/pdf/about\\_cchn/news\\_room/CO\\_CHC\\_Ten\\_Years\\_Trends\\_99\\_to\\_08.pdf](http://cchn.org/pdf/about_cchn/news_room/CO_CHC_Ten_Years_Trends_99_to_08.pdf)).

<sup>17</sup> National Association of Community Health Centers. "Recession Brings More Patients to Community Health Centers." (2009). (Retrieved Dec. 1, 2011, from: [http://www.nachc.com/client/documents/20090929\\_Rising\\_Patient\\_Demand.pdf](http://www.nachc.com/client/documents/20090929_Rising_Patient_Demand.pdf)).

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<sup>19</sup> The Colorado Health Professions Workforce Policy Collaborative. (2010). "Addressing Colorado's Primary Care Provider Shortage." (Retrieved Dec. 1, 2011, from: [http://www.coloradotruster.org/attachments/0001/3811/Final\\_WorkforcePolicyAgenda2011-single-page.pdf](http://www.coloradotruster.org/attachments/0001/3811/Final_WorkforcePolicyAgenda2011-single-page.pdf)).

<sup>20</sup> HealthCare.gov. Fact Sheet. "Creating Jobs and Increasing the Number of Primary Care Providers." (Retrieved Dec. 1, 2011, from: <http://www.healthcare.gov/news/factsheets/2010/06/creating-jobs-and-increasing-primary-care-providers.html>).

<sup>21</sup> The Colorado Health Professions Workforce Policy Collaborative. (2010). "Addressing Colorado's Primary Care Provider Shortage." (Retrieved December 1, 2011, from:

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[http://www.coloradotruster.org/attachments/0001/3811/Final\\_WorkforcePolicyAgenda2011-single-page.pdf](http://www.coloradotruster.org/attachments/0001/3811/Final_WorkforcePolicyAgenda2011-single-page.pdf)).

<sup>22</sup> Colorado Department of Public Health and Environment Primary Care Office. (November 2011). Draft of "Colorado State Health Care Workforce Development Planning Project." (Retrieved Dec. 1, 2011, from: <http://www.cdphe.state.co.us/pp/primarycare/planning/plan.pdf>).

<sup>23</sup> Colorado Health Institute. (2010). *Collaborative Models of Primary Care: Case Studies in Colorado Innovation*. Available at: <http://www.coloradohealthinstitute.org/~media/Documents/workforce/csoc/CollaborativePrimaryCare.ashx>.

<sup>24</sup> The Commonwealth Fund. "The New Wave of Innovation: How the Health Care System is Reforming." (Retrieved Dec. 1, 2011, from: [http://www.commonwealthfund.org/~media/Files/Publications/Other/2011/2011\\_CJR\\_insert\\_New%20Wave\\_WEB%20v4.pdf](http://www.commonwealthfund.org/~media/Files/Publications/Other/2011/2011_CJR_insert_New%20Wave_WEB%20v4.pdf)).

<sup>25</sup> Health Care Incentives Improvement Institute. "What is PROMETHEUS Payment?" (Retrieved Dec. 1, 2011, from: <http://www.hci3.org/node/4/>).

<sup>26</sup> Colorado Rural Health Center. "Key Issues Facing Rural Colorado. 2011 Edition." (Retrieved Dec. 1, 2011, from: <http://www.coruralhealth.org/resources/documents/2011snapshot.pdf>).

<sup>27</sup> School of Medicine. University of Colorado. "Rural Track FAQ." (Retrieved Dec. 1, 2011, from: [http://www.ucdenver.edu/academics/colleges/medicalschool/education/degree\\_programs/MDProgram/longitudinal/tracks/ruraltrack/Pages/RuralTrackFAQ.aspx](http://www.ucdenver.edu/academics/colleges/medicalschool/education/degree_programs/MDProgram/longitudinal/tracks/ruraltrack/Pages/RuralTrackFAQ.aspx)).

<sup>28</sup> Colorado Health Institute. (2010). "Colorado's rural health workforce and population health indicators." (Retrieved Dec. 1, 2011, from: <http://www.coloradohealthinstitute.org/Projects/Other-Projects/2009-Colorado-Rural-Physician-Survey.aspx>),

<sup>29</sup> Renner, D, J, et al. (2010). *Rural and Remote Health*. "The influence of loan repayment on rural healthcare provider recruitment and retention in Colorado." (Retrieved Dec. 1, 2011, from: <http://www.coruralhealth.org/programs/loanrepayment/documents/influenceofloanrepayment.pdf>).

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## Endnotes for Boxed Material

<sup>a</sup> Peregrine Management Corporation master dataset. April 2011.

<sup>b</sup> Colorado Department of Regulatory Agencies, Division of Registration. (Retrieved January 3, 2011, from [https://www.doradls.state.co.us/lic\\_database\\_req.php](https://www.doradls.state.co.us/lic_database_req.php)).

<sup>c</sup> Staiger, D, D Auerbach and P Buerhaus. (2011). "Health Care Reform and the Health Care Workforce – The Massachusetts Experiment." *New England Journal of Medicine* 375:e24. (Retrieved Dec. 2, 2011, from: <http://www.nejm.org/doi/full/10.1056/NEJMp1106616>).

<sup>d</sup> Finkelstein, A, et al. (2010). "The Oregon Health Insurance Experiment: Evidence from the First Year." The National Bureau of Economic Research. NBER Working Paper No. 17190. (Retrieved Dec. 2, 2011 from: <http://www.nber.org/papers/w17190>).

<sup>e</sup> Colorado Department of Health Care Policy and Financing. (2011). "Colorado Accountable Care Collaborative Program." (Retrieved Dec. 2, 2011, from: <http://www.colorado.gov/cs/Satellite?blobcol=urldata&blobheader=application%2Fpdf&blobkey=id&blobtable=MungoBlobs&blobwhere=1251745507574&ssbinary=true>).

<sup>f</sup> Center for Improving Value in Health Care. (2011). "Payment Reform." (Retrieved Dec. 2, 2011, from: <http://civhc.org/CIVHC-Initiatives/Payment-Reform.aspx>).

<sup>g</sup> Safety Net Medical Home Initiative. (2011). "Transforming Safety Net Clinics into Patient-Centered Medical Homes." (Retrieved Dec. 2, 2011, from: <http://www.qhmedicalhome.org/safety-net/about.cfm>).

<sup>h</sup> Safety Net Medical Home Initiative. (2011). "Colorado Community Health Network." (Retrieved Dec. 2, 2011, from: <http://www.qhmedicalhome.org/safety-net/rcc/colorado.cfm>).

<sup>i</sup> Center for Improving Value in Health Care. (2011). "Payment Reform." (Retrieved Dec. 2, 2011, from: <http://civhc.org/CIVHC-Initiatives/Payment-Reform.aspx>).

<sup>j</sup> Exempla Saint Joseph Hospital. (2011). "ACE CMS Project." (Retrieved Dec. 2, 2011, from: <http://www.exempla.org/body.cfm?id=1317>).



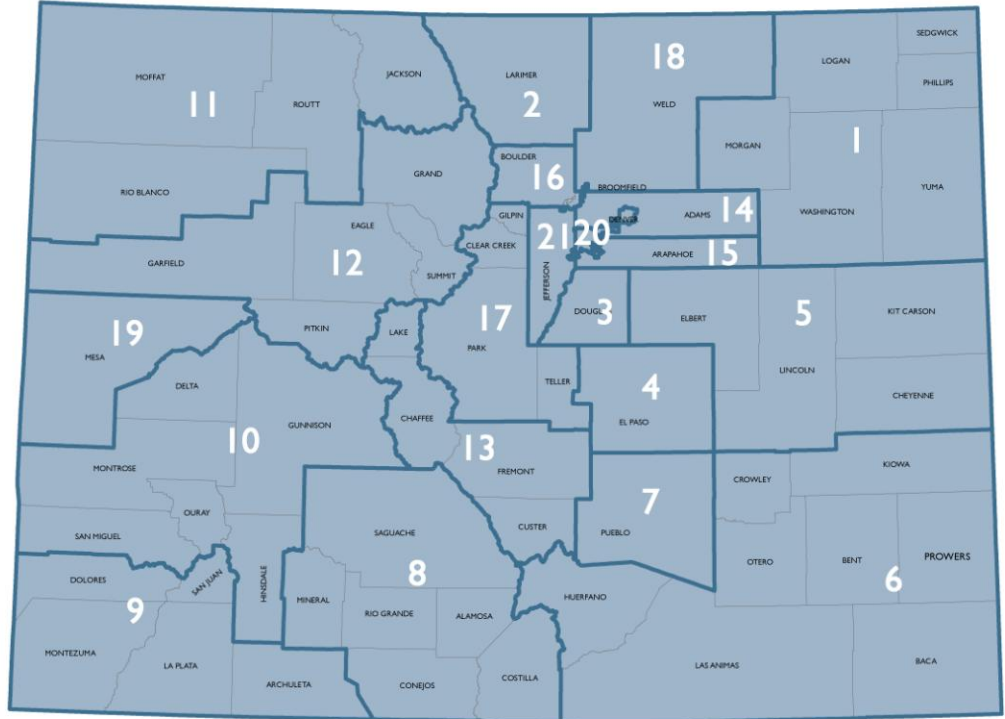
**colorado health**  
**INSTITUTE**

# Community-Level Planning Guide

# Colorado

## Key findings

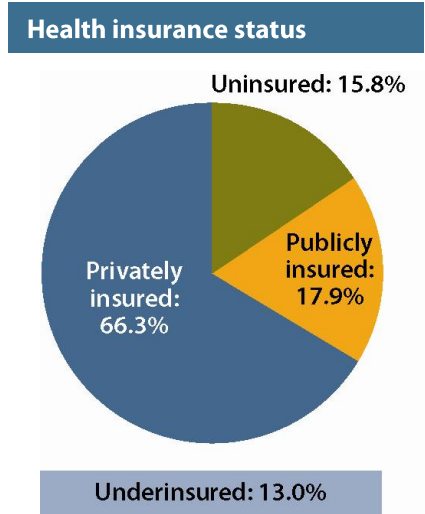
An estimated **510,000** residents of Colorado will be newly insured. They will make between **256,010** and **432,420** additional visits to primary care providers. This translates to a need for between **83** and **141** additional primary care providers – **71** to **117** physicians and **12** to **24** nurse practitioners and physician assistants.



Demographics	
Population	<b>5,029,196</b>
Percentage of population age 64 and under	<b>89.1%</b>
Population per square mile	<b>7,135</b>
Median household income	<b>\$35,852</b>
Percentage of population at or below 200% of FPL	<b>45.0%</b>
Females of childbearing age	<b>1,025,085</b>
Number of children enrolled in Medicaid	<b>242,387</b>
Number of children eligible for Medicaid but not enrolled	<b>39,554</b>
Number of children enrolled in CHP+	<b>57,945</b>
Number of children eligible for CHP+ but not enrolled	<b>38,888</b>

Workforce	
Practicing physicians	<b>11,284</b>
Practicing physicians per 1,000 population	<b>2.24</b>
Practicing primary care physicians	<b>3,271</b>
Practicing primary care physicians per 1,000 population	<b>0.65</b>
Licensed nurse practitioners	<b>2,651</b>
Licensed nurse practitioners per 1,000 population	<b>0.53</b>
Licensed physician assistants	<b>1,820</b>
Licensed physician assistants per 1,000 population	<b>0.36</b>

Safety Net	
Community health centers	<b>114</b>
Community-funded safety net clinics	<b>39</b>
Rural health clinics	<b>54</b>
School-based health clinics	<b>47</b>

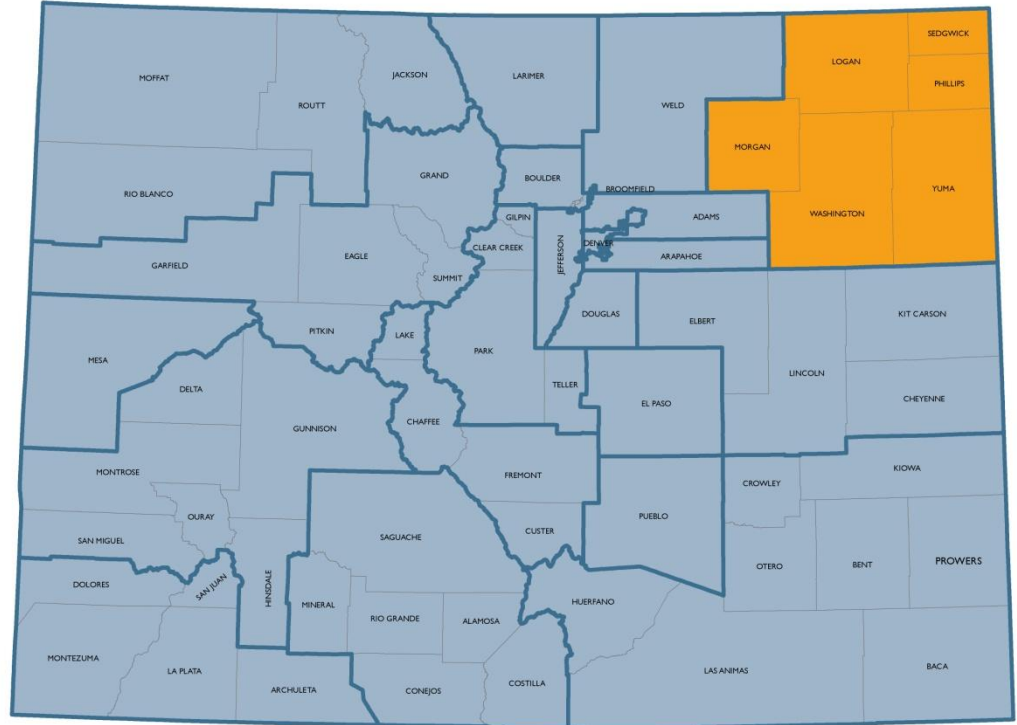


# Health Statistics Region 1

Counties: Morgan, Logan, Sedgwick, Phillips, Washington, Yuma

## Key findings

An estimated **6,620** residents of these six counties in the northeastern area of the state will be newly insured. They will make between **3,492** and **5,864** additional visits to primary care providers. This translates to a need for between **1.1** and **1.9** additional primary care providers - **1** to **1.6** physicians and **.2** to **.3** additional nurse practitioners and physician assistants.

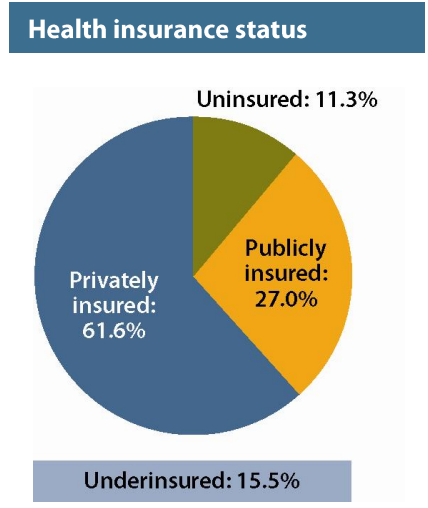


Demographics	
Population	<b>72,546</b>
Percentage of population age 64 and under	<b>84.4%</b> <b>89.1%</b>
Population per square mile	<b>8</b>
Median household income	<b>\$29,991</b> <b>\$35,852</b>
Percentage of population at or below 200% of FPL	<b>51.2%</b> <b>45.0%</b>
Females of childbearing age	<b>12,226</b>
Number of children enrolled in Medicaid	<b>4,383</b>
Number of children eligible for Medicaid but not enrolled	<b>650</b>
Number of children enrolled in CHP+	<b>1,334</b>
Number of children eligible for CHP+ but not enrolled	<b>981</b>

Workforce	
Practicing physicians	<b>100</b>
Practicing physicians per 1,000 population	<b>1.38</b> <b>2.24</b>
Practicing primary care physicians	<b>45</b>
Practicing primary care physicians per 1,000 population	<b>0.62</b> <b>0.65</b>
Licensed nurse practitioners	<b>20</b>
Licensed nurse practitioners per 1,000 population	<b>0.28</b> <b>0.53</b>
Licensed physician assistants	<b>17</b>
Licensed physician assistants per 1,000 population	<b>0.23</b> <b>0.36</b>

# = Numbers for HSR 1  
# = Numbers for Colorado

Safety Net	
Community health centers	<b>2</b>
Community-funded safety net clinics	<b>0</b>
Rural health clinics	<b>8</b>
School-based health clinics	<b>0</b>

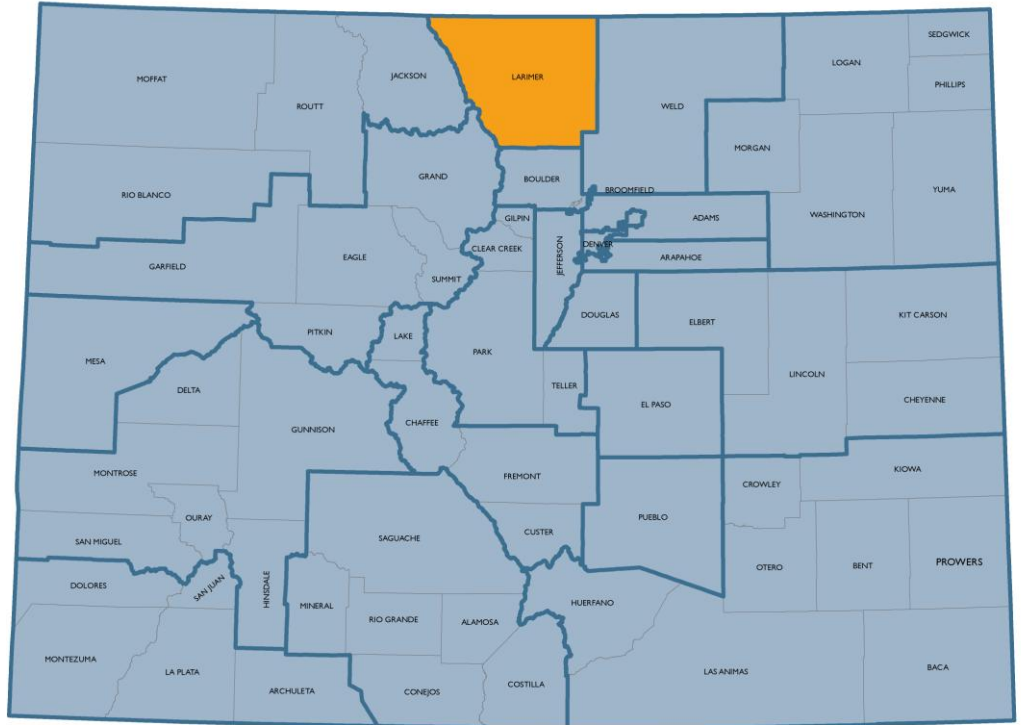


# Health Statistics Region 2

County: Larimer

## Key findings

An estimated **31,244** residents of this county on the northern end of the Front Range, with Fort Collins as its county seat, will be newly insured. They will make between **15,332** and **25,920** additional visits to primary care providers. This translates to a need for between **5.0** and **8.5** additional primary care providers – **4.3** to **7.0** physicians and **.7** to **1.4** additional nurse practitioners and physician assistants.

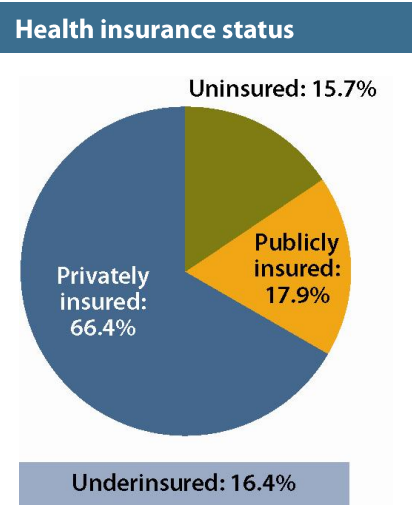


Demographics	
Population	299,630
Percentage of population age 64 and under	88.1% 89.1%
Population per square mile	114
Median household income	\$35,840 \$35,852
Percentage of population at or below 200% of FPL	43.6% 45.0%
Females of childbearing age	64,394
Number of children enrolled in Medicaid	11,125
Number of children eligible for Medicaid but not enrolled	2,400
Number of children enrolled in CHP+	3,300
Number of children eligible for CHP+ but not enrolled	1,845

Workforce	
Practicing physicians	639
Practicing physicians per 1,000 population	2.13 2.24
Practicing primary care physicians	219
Practicing primary care physicians per 1,000 population	0.73 0.65
Licensed nurse practitioners	142
Licensed nurse practitioners per 1,000 population	0.47 0.53
Licensed physician assistants	114
Licensed physician assistants per 1,000 population	0.38 0.36

# = Numbers for HSR 2  
# = Numbers for Colorado

Safety Net	
Community health centers	3
Community-funded safety net clinics	1
Rural health clinics	0
School-based health clinics	1

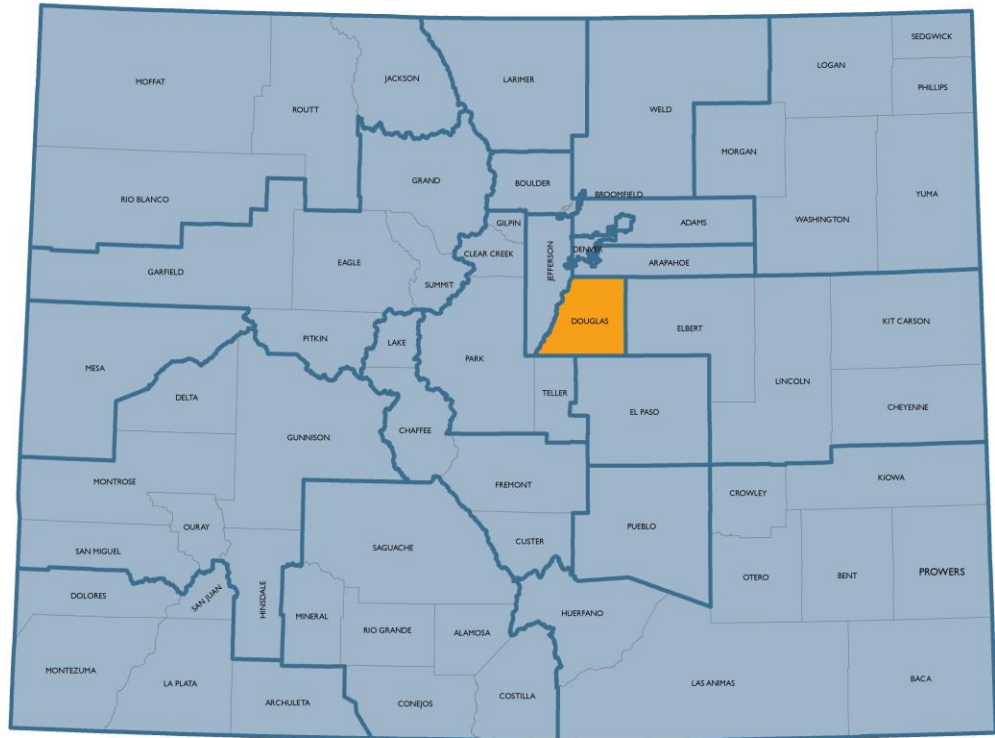


# Health Statistics Region 3

County: Douglas

## Key findings

An estimated **30,624** residents of this fast-growing county in the Denver metro area will be newly insured. They will make between **13,764** and **23,858** additional visits to primary care providers. This translates to a need for between **4.5** and **7.8** additional primary care providers – **3.9** to **6.6** physicians and **.6** to **1.2** additional nurse practitioners and physician assistants.

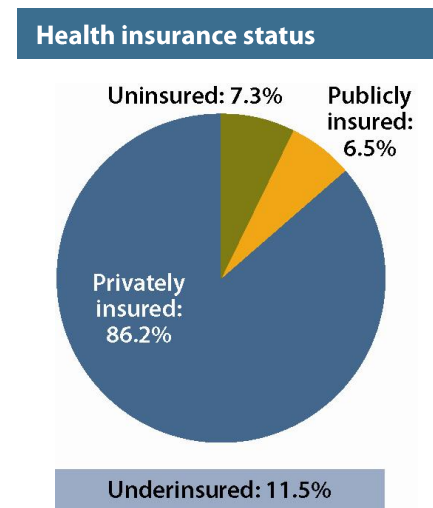


Demographics	
Population	<b>285,465</b>
Percentage of population age 64 and under	<b>92.9%</b> <b>89.1%</b>
Population per square mile	<b>339</b>
Median household income	<b>\$58,647</b> <b>\$35,852</b>
Percentage of population at or below 200% of FPL	<b>25.1%</b> <b>45.0%</b>
Females of childbearing age	<b>57,918</b>
Number of children enrolled in Medicaid	<b>3,282</b>
Number of children eligible for Medicaid but not enrolled	<b>876</b>
Number of children enrolled in CHP+	<b>1,284</b>
Number of children eligible for CHP+ but not enrolled	<b>730</b>

Workforce	
Practicing physicians	<b>334</b>
Practicing physicians per 1,000 population	<b>1.17</b> <b>2.24</b>
Practicing primary care physicians	<b>148</b>
Practicing primary care physicians per 1,000 population	<b>0.52</b> <b>0.65</b>
Licensed nurse practitioners	<b>191</b>
Licensed nurse practitioners per 1,000 population	<b>0.67</b> <b>0.53</b>
Licensed physician assistants	<b>124</b>
Licensed physician assistants per 1,000 population	<b>0.43</b> <b>0.36</b>

# = Numbers for HSR 3  
# = Numbers for Colorado

Safety Net	
Community health centers	<b>0</b>
Community-funded safety net clinics	<b>0</b>
Rural health clinics	<b>0</b>
School-based health clinics	<b>0</b>

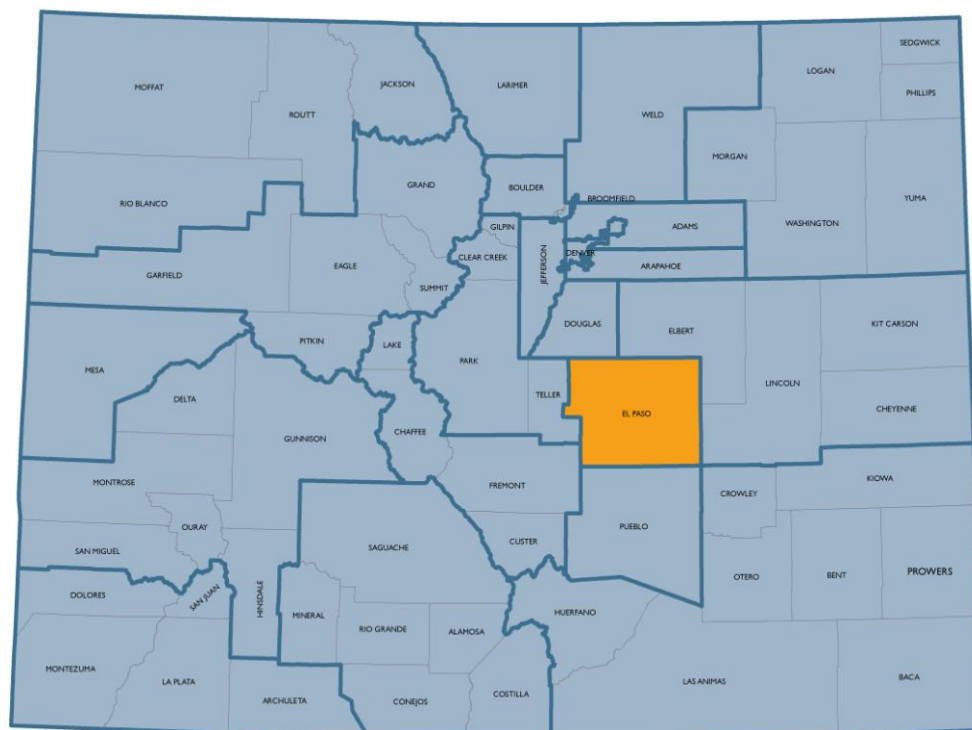


# Health Statistics Region 4

County: El Paso

## Key findings

An estimated **55,050** residents of this county south of the metro area, now the state’s most populous, will be newly insured. They will make between **27,869** and **47,129** additional visits to primary care providers. This translates to a need for between **9.1** and **15.4** additional primary care providers – **7.7** to **12.7** physicians and **1.4** to **2.7** additional nurse practitioners and physician assistants.



### Demographics

Population	<b>622,263</b>
Percentage of population age 64 and under	<b>90.0%</b> <b>89.1%</b>
Population per square mile	<b>292</b>
Median household income	<b>\$35,502</b> <b>\$35,852</b>
Percentage of population at or below 200% of FPL	<b>42.8%</b> <b>45.0%</b>
Females of childbearing age	<b>128,173</b>
Number of children enrolled in Medicaid	<b>30,509</b>
Number of children eligible for Medicaid but not enrolled	<b>1,887</b>
Number of children enrolled in CHP+	<b>6,137</b>
Number of children eligible for CHP+ but not enrolled	<b>2,325</b>

### Workforce

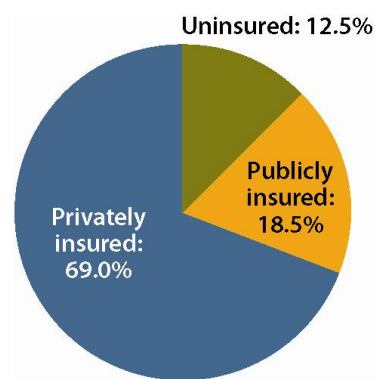
Practicing physicians	<b>1018</b>
Practicing physicians per 1,000 population	<b>1.64</b> <b>2.24</b>
Practicing primary care physicians	<b>274</b>
Practicing primary care physicians per 1,000 population	<b>0.44</b> <b>0.65</b>
Licensed nurse practitioners	<b>321</b>
Licensed nurse practitioners per 1,000 population	<b>0.52</b> <b>0.53</b>
Licensed physician assistants	<b>196</b>
Licensed physician assistants per 1,000 population	<b>0.31</b> <b>0.36</b>

# = Numbers for HSR 4  
# = Numbers for Colorado

### Safety Net

Community health centers	<b>11</b>
Community-funded safety net clinics	<b>3</b>
Rural health clinics	<b>1</b>
School-based health clinics	<b>1</b>

### Health insurance status



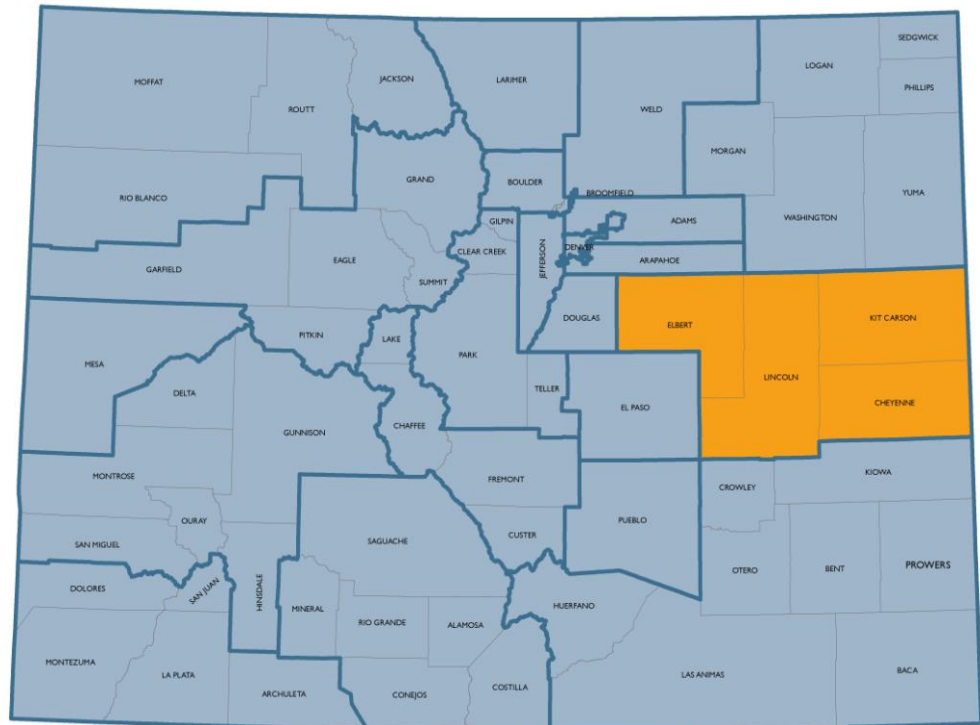


# Health Statistics Region 5

Counties: Cheyenne, Elbert, Kit Carson, Lincoln

## Key findings

An estimated **2,952** residents of these four rural counties in the eastern area of the state will be newly insured. They will make between **1,468** and **2,482** additional visits to primary care providers. This translates to a need for between **.5** and **.8** additional primary care providers - **.4** to **.7** physicians and **.1** additional nurse practitioners and physician assistants.

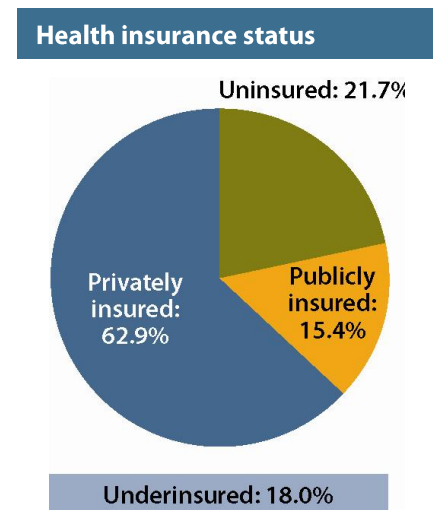


Demographics	
Population	<b>38,659</b>
Percentage of population age 64 and under	<b>87.7%</b> <b>89.1%</b>
Population per square mile	<b>5</b>
Median household income	<b>\$39,262</b> <b>\$35,852</b>
Percentage of population at or below 200% of FPL	<b>36.3%</b> <b>45.0%</b>
Females of childbearing age	<b>5,965</b>
Number of children enrolled in Medicaid	<b>1,377</b>
Number of children eligible for Medicaid but not enrolled	<b>338</b>
Number of children enrolled in CHP+	<b>Not available</b>
Number of children eligible for CHP+ but not enrolled	<b>510</b>

Workforce	
Practicing physicians	<b>17</b>
Practicing physicians per 1,000 population	<b>0.44</b> <b>2.24</b>
Practicing primary care physicians	<b>12</b>
Practicing primary care physicians per 1,000 population	<b>0.31</b> <b>0.65</b>
Licensed nurse practitioners	<b>14</b>
Licensed nurse practitioners per 1,000 population	<b>0.36</b> <b>0.53</b>
Licensed physician assistants	<b>8</b>
Licensed physician assistants per 1,000 population	<b>0.21</b> <b>0.36</b>

# = Numbers for HSR 5  
# = Numbers for Colorado

Safety Net	
Community health centers	<b>4</b>
Community-funded safety net clinics	<b>0</b>
Rural health clinics	<b>4</b>
School-based health clinics	<b>0</b>

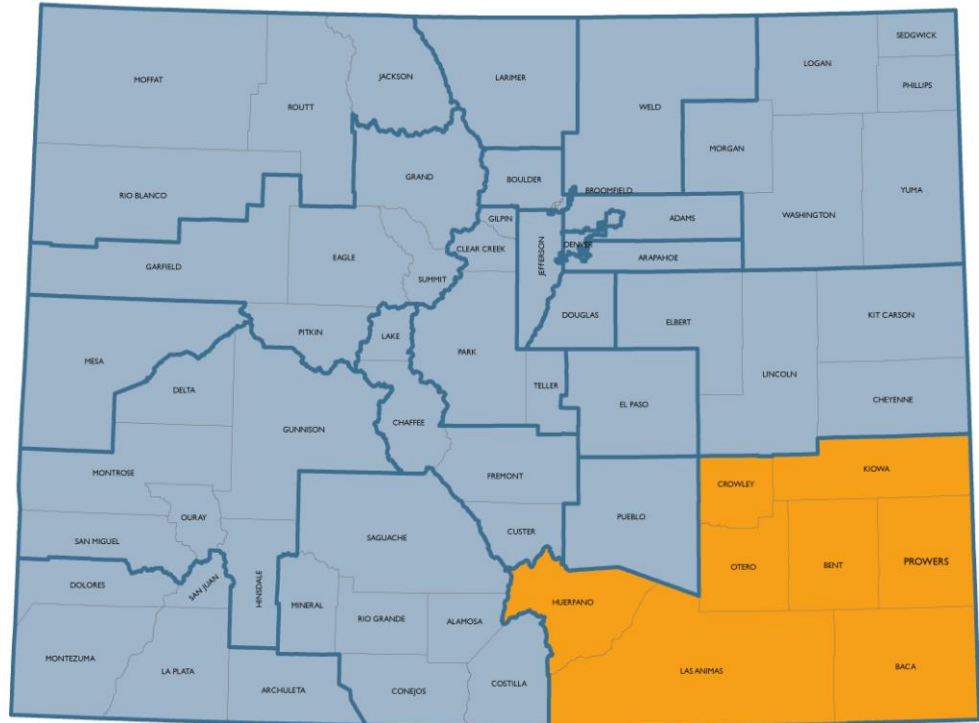


# Health Statistics Region 6

Counties: Baca, Bent, Crowley, Huerfano, Kiowa, Las Animas, Otero, Prowers

## Key findings

An estimated **7,767** residents of these eight rural counties in the southeastern area of the state will be newly insured. They will make between **4,449** and **7,376** additional visits to primary care providers. This translates to a need for between **1.5** and **2.4** additional primary care providers – **1.2** to **2.0** physicians and **.2** to **.5** additional nurse practitioners and physician assistants.

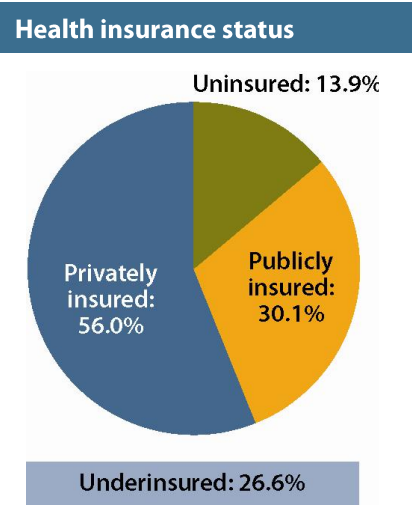


Demographics	
Population	<b>71,108</b>
Percentage of population age 64 and under	<b>82.5%</b> <b>89.1%</b>
Population per square mile	<b>4</b>
Median household income	<b>\$19,155</b> <b>\$35,852</b>
Percentage of population at or below 200% of FPL	<b>61.9%</b> <b>45.0%</b>
Females of childbearing age	<b>10,706</b>
Number of children enrolled in Medicaid	<b>6,084</b>
Number of children eligible for Medicaid but not enrolled	<b>853</b>
Number of children enrolled in CHP+	<b>1,617</b>
Number of children eligible for CHP+ but not enrolled	<b>1,035</b>

Workforce	
Practicing physicians	<b>106</b>
Practicing physicians per 1,000 population	<b>1.49</b> <b>2.24</b>
Practicing primary care physicians	<b>41</b>
Practicing primary care physicians per 1,000 population	<b>0.58</b> <b>0.65</b>
Licensed nurse practitioners	<b>34</b>
Licensed nurse practitioners per 1,000 population	<b>0.48</b> <b>0.53</b>
Licensed physician assistants	<b>7</b>
Licensed physician assistants per 1,000 population	<b>0.10</b> <b>0.36</b>

# = Numbers for HSR 6  
# = Numbers for Colorado

Safety Net	
Community health centers	<b>7</b>
Community-funded safety net clinics	<b>2</b>
Rural health clinics	<b>12</b>
School-based health clinics	<b>1</b>

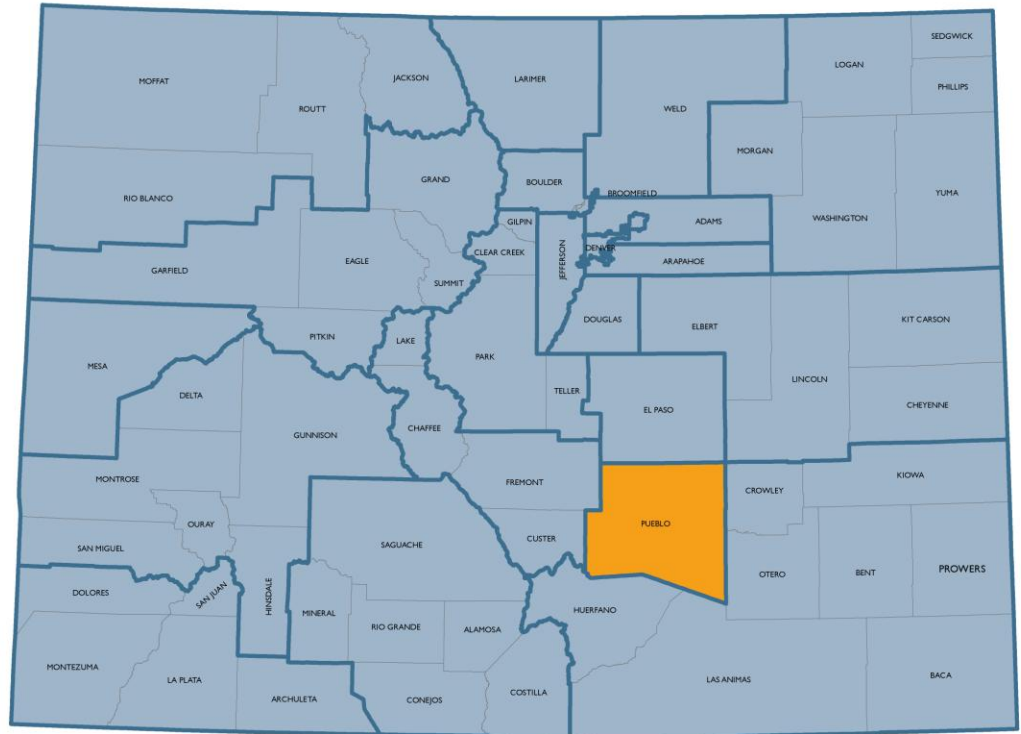


# Health Statistics Region 7

County: Pueblo

## Key findings

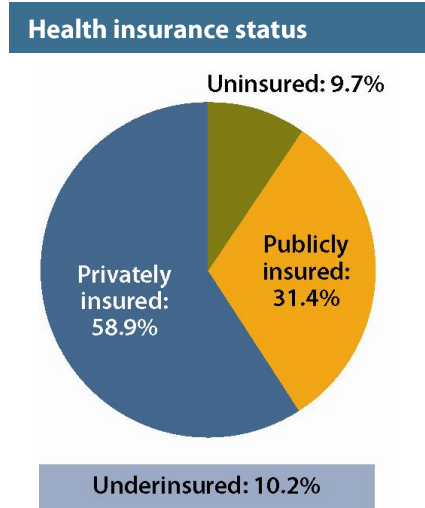
An estimated **17,552** residents of this southernmost county of the Front Range corridor will be newly insured. They will make between **9,937** and **16,590** additional visits to primary care providers. This translates to a need for between **3.2** and **5.4** additional primary care providers – **2.7** to **4.4** physicians and **.5** to **1** additional nurse practitioners and physician assistants.



Demographics	
Population	159,063
Percentage of population age 64 and under	84.7% 89.1%
Population per square mile	66
Median household income	\$24,784 \$35,852
Percentage of population at or below 200% of FPL	53.2% 45.0%
Females of childbearing age	29,512
Number of children enrolled in Medicaid	14,306
Number of children eligible for Medicaid but not enrolled	566
Number of children enrolled in CHP+	2,320
Number of children eligible for CHP+ but not enrolled	1,000

Workforce	
Practicing physicians	384
Practicing physicians per 1,000 population	2.41 2.24
Practicing primary care physicians	131
Practicing primary care physicians per 1,000 population	0.82 0.65
Licensed nurse practitioners	84
Licensed nurse practitioners per 1,000 population	0.53 0.53
Licensed physician assistants	38
Licensed physician assistants per 1,000 population	0.24 0.36

Safety Net	
Community health centers	10
Community-funded safety net clinics	2
Rural health clinics	0
School-based health clinics	4



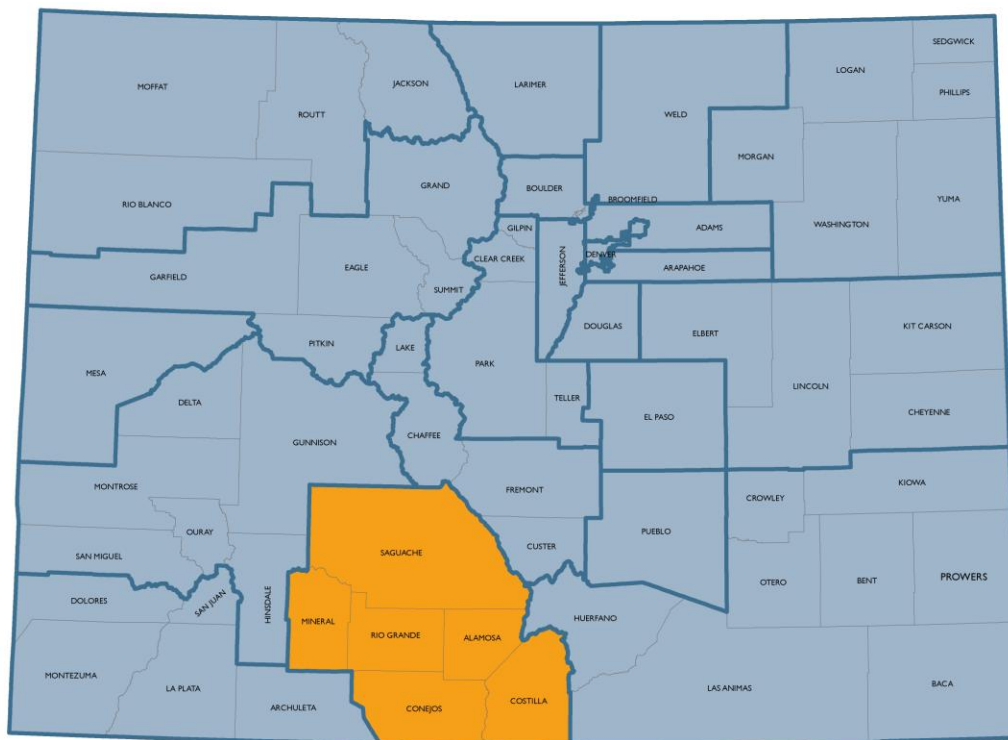
# = Numbers for HSR 7  
# = Numbers for Colorado

# Health Statistics Region 8

Counties: Alamosa, Conejos, Costilla, Mineral, Rio Grande, Saguache

## Key findings

An estimated **5,119** residents of these six counties in the south central area of the state will be newly insured. They will make between **3,035** and **5,015** additional visits to primary care providers. This translates to a need for between **1.0** and **1.6** additional primary care providers – **.8** to **1.3** physicians and **.2** to **.3** additional nurse practitioners and physician assistants.

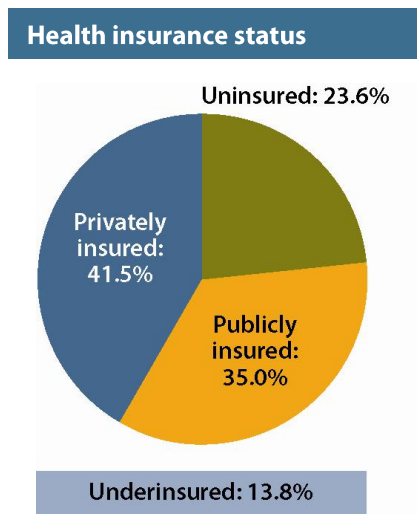


Demographics	
Population	<b>46,027</b>
Percentage of population age 64 and under	<b>85.2%</b> <b>89.1%</b>
Population per square mile	<b>6</b>
Median household income	<b>\$18,695</b> <b>\$35,852</b>
Percentage of population at or below 200% of FPL	<b>62.5%</b> <b>45.0%</b>
Females of childbearing age	<b>8,097</b>
Number of children enrolled in Medicaid	<b>Not available</b>
Number of children eligible for Medicaid but not enrolled	<b>570</b>
Number of children enrolled in CHP+	<b>Not available</b>
Number of children eligible for CHP+ but not enrolled	<b>614</b>

Workforce	
Practicing physicians	<b>61</b>
Practicing physicians per 1,000 population	<b>1.33</b> <b>2.24</b>
Practicing primary care physicians	<b>32</b>
Practicing primary care physicians per 1,000 population	<b>0.70</b> <b>0.65</b>
Licensed nurse practitioners	<b>14</b>
Licensed nurse practitioners per 1,000 population	<b>0.30</b> <b>0.53</b>
Licensed physician assistants	<b>21</b>
Licensed physician assistants per 1,000 population	<b>0.46</b> <b>0.36</b>

# = Numbers for HSR 8  
# = Numbers for Colorado

Safety Net	
Community health centers	<b>11</b>
Community-funded safety net clinics	<b>0</b>
Rural health clinics	<b>6</b>
School-based health clinics	<b>0</b>

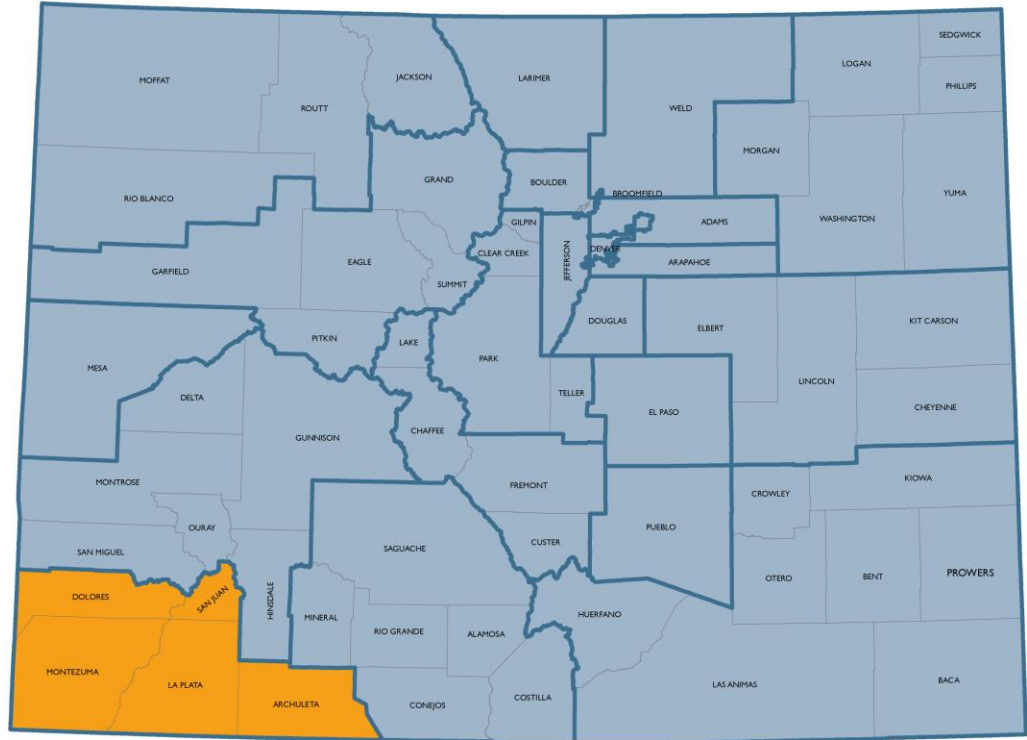


# Health Statistics Region 9

Counties: Archuleta, Dolores, La Plata, Montezuma, San Juan

## Key findings

An estimated **8,488** residents of these five counties in the southwestern area of the state will be newly insured. They will make between **4,351** and **7,306** additional visits to primary care providers. This translates to a need for between **1.4** and **2.4** additional primary care providers – **1.2** to **2.0** physicians and **.2** to **.4** additional nurse practitioners and physician assistants.

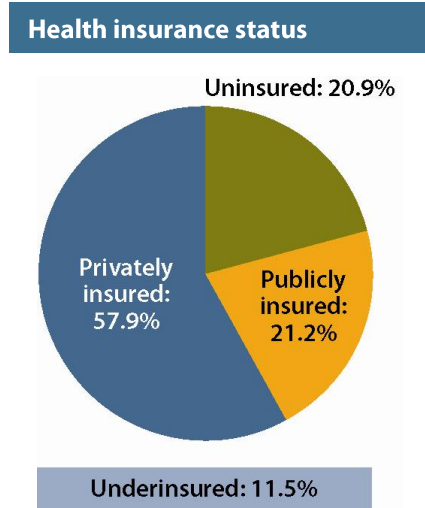


Demographics	
Population	<b>91,716</b>
Percentage of population age 64 and under	<b>86.0%</b> <b>89.1%</b>
Population per square mile	<b>14</b>
Median household income	<b>\$33,072</b> <b>\$35,852</b>
Percentage of population at or below 200% of FPL	<b>45.6%</b> <b>45.0%</b>
Females of childbearing age	<b>7,789</b>
Number of children enrolled in Medicaid	<b>Not available</b>
Number of children eligible for Medicaid but not enrolled	<b>857</b>
Number of children enrolled in CHP+	<b>NA</b>
Number of children eligible for CHP+ but not enrolled	<b>1,109</b>

Workforce	
Practicing physicians	<b>194</b>
Practicing physicians per 1,000 population	<b>2.12</b> <b>2.24</b>
Practicing primary care physicians	<b>55</b>
Practicing primary care physicians per 1,000 population	<b>0.60</b> <b>0.65</b>
Licensed nurse practitioners	<b>54</b>
Licensed nurse practitioners per 1,000 population	<b>0.598</b> <b>0.59</b>
Licensed physician assistants	<b>29</b>
Licensed physician assistants per 1,000 population	<b>0.32</b> <b>0.36</b>

# = Numbers for HSR 9  
# = Numbers for Colorado

Safety Net	
Community health centers	<b>2</b>
Community-funded safety net clinics	<b>0</b>
Rural health clinics	<b>4</b>
School-based health clinics	<b>2</b>

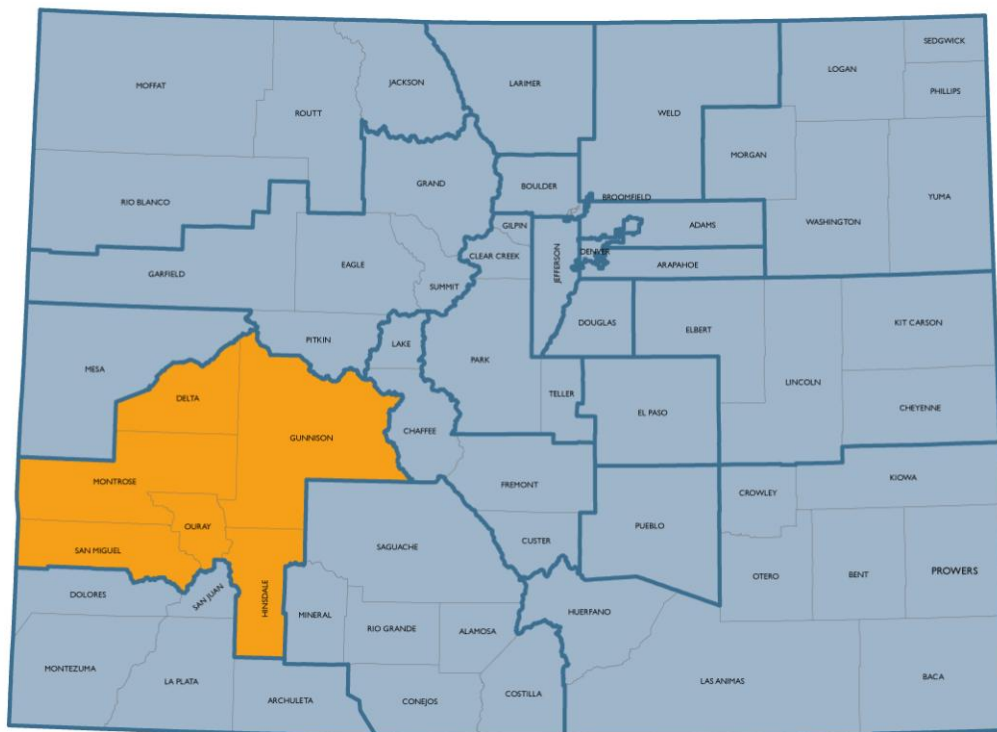


# Health Statistics Region 10

Counties: Delta, Gunnison, Hinsdale, Montrose, Ouray, San Miguel

## Key findings

An estimated **10,046** residents of these six counties in the western area of the state will be newly insured. They will make between **5,203** and **8,717** additional visits to primary care providers. This translates to a need for between **1.7** and **2.9** additional primary care providers – **1.4** to **2.3** physicians and **.3** to **.5** additional nurse practitioners and physician assistants.

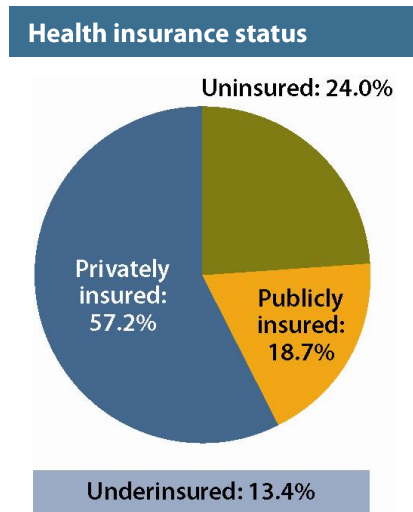


Demographics	
Population	100,190
Percentage of population age 64 and under	83.7% 89.1%
Population per square mile	10
Median household income	\$26,639 \$35,852
Percentage of population at or below 200% of FPL	52.6% 45.0%
Females of childbearing age	16,810
Number of children enrolled in Medicaid	Not available
Number of children eligible for Medicaid but not enrolled	833
Number of children enrolled in CHP+	Not available
Number of children eligible for CHP+ but not enrolled	994

Workforce	
Practicing physicians	175
Practicing physicians per 1,000 population	1.75 2.24
Practicing primary care physicians	76
Practicing primary care physicians per 1,000 population	0.76 0.65
Licensed nurse practitioners	39
Licensed nurse practitioners per 1,000 population	0.39 0.53
Licensed physician assistants	29
Licensed physician assistants per 1,000 population	0.29 0.36

# = Numbers for HSR 10  
# = Numbers for Colorado

Safety Net	
Community health centers	2
Community-funded safety net clinics	1
Rural health clinics	6
School-based health clinics	2

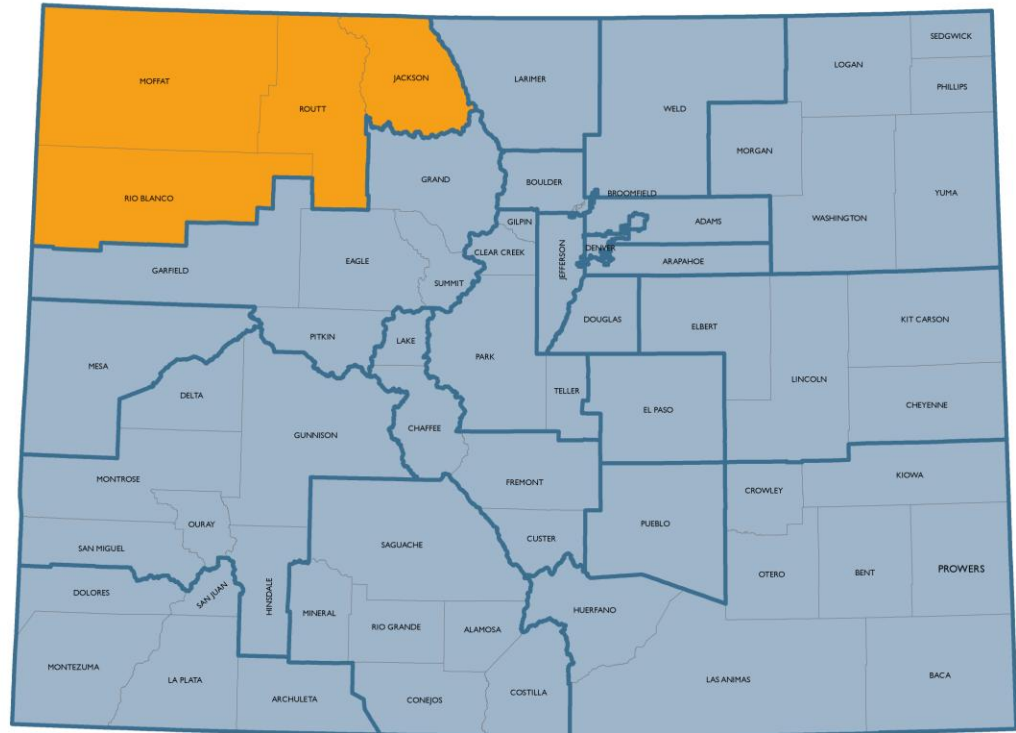


# Health Statistics Region 11

Counties: Jackson, Moffat, Rio Blanco, Routt

## Key findings

An estimated **4,221** residents of these four counties in the northwestern area of the state will be newly insured. They will make between **2,070** and **3,503** additional visits to primary care providers. This translates to a need for between **.7** and **1.1** additional primary care providers – **.6** to **1.0** physicians and **.1** to **.2** additional nurse practitioners and physician assistants.



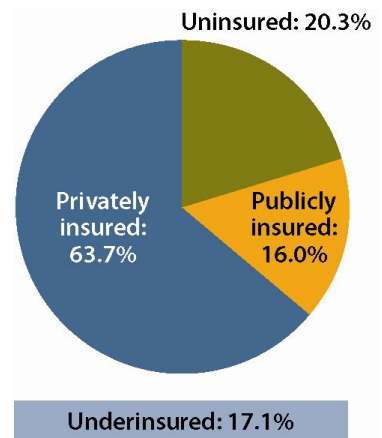
Demographics	
Population	<b>45,364</b>
Percentage of population age 64 and under	<b>90.2%</b> <b>89.1%</b>
Population per square mile	<b>4</b>
Median household income	<b>\$38,064</b> <b>\$35,852</b>
Percentage of population at or below 200% of FPL	<b>37.6%</b> <b>45.0%</b>
Females of childbearing age	<b>8,398</b>
Number of children enrolled in Medicaid	<b>1,635</b>
Number of children eligible for Medicaid but not enrolled	<b>524</b>
Number of children enrolled in CHP+	<b>Not available</b>
Number of children eligible for CHP+ but not enrolled	<b>776</b>

Workforce	
Practicing physicians	<b>86</b>
Practicing physicians per 1,000 population	<b>1.90</b> <b>2.24</b>
Practicing primary care physicians	<b>39</b>
Practicing primary care physicians per 1,000 population	<b>0.86</b> <b>0.65</b>
Licensed nurse practitioners	<b>15</b>
Licensed nurse practitioners per 1,000 population	<b>0.33</b> <b>0.53</b>
Licensed physician assistants	<b>21</b>
Licensed physician assistants per 1,000 population	<b>0.46</b> <b>0.36</b>

# = Numbers for HSR 11  
# = Numbers for Colorado

Safety Net	
Community health centers	<b>2</b>
Community-funded safety net clinics	<b>0</b>
Rural health clinics	<b>2</b>
School-based health clinics	<b>0</b>

## Health insurance status

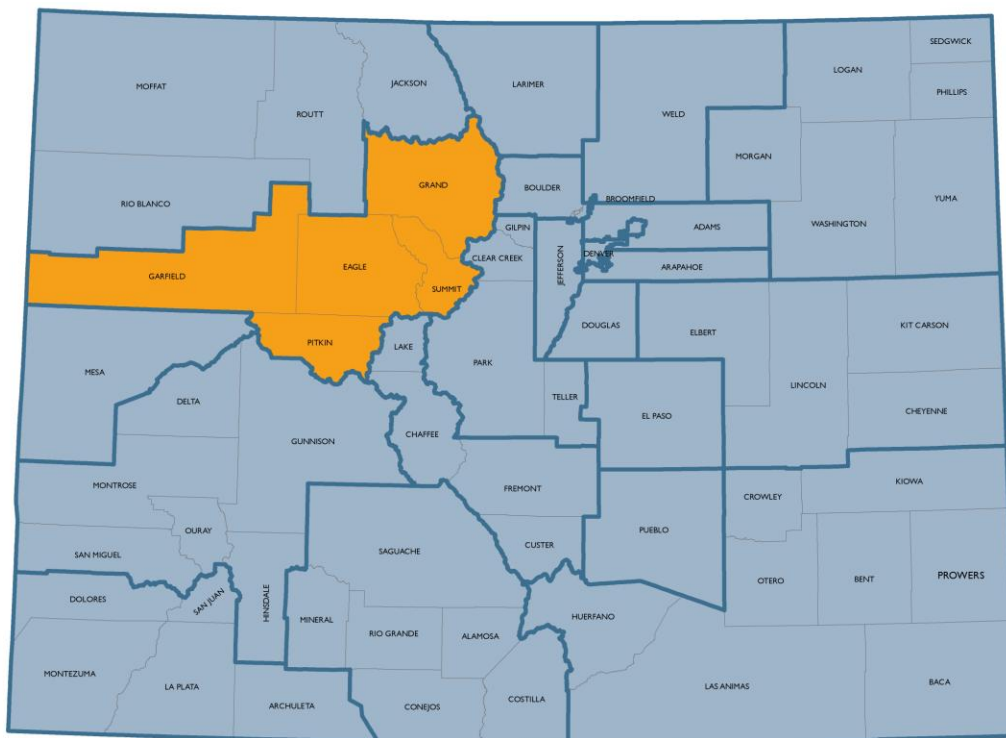


# Health Statistics Region 12

Counties: Eagle, Garfield, Grand, Pitkin, Summit

## Key findings

An estimated **14,981** residents of these five counties in the mountainous western area of the state will be newly insured. They will make between **7,029** and **11,899** additional visits to primary care providers. This translates to a need for between **2.3** and **3.9** additional primary care providers – **2.0** to **3.2** physicians and **.3** to **.6** additional nurse practitioners and physician assistants.

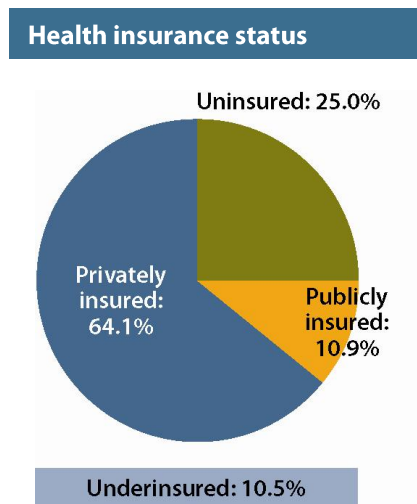


Demographics	
Population	<b>168,571</b>
Percentage of population age 64 and under	<b>92.1%</b> <b>89.1%</b>
Population per square mile	<b>21</b>
Median household income	<b>\$41,420</b> <b>\$35,852</b>
Percentage of population at or below 200% of FPL	<b>42.7%</b> <b>45.0%</b>
Females of childbearing age	<b>34,323</b>
Number of children enrolled in Medicaid	<b>5,929</b>
Number of children eligible for Medicaid but not enrolled	<b>1,094</b>
Number of children enrolled in CHP+	<b>1,712</b>
Number of children eligible for CHP+ but not enrolled	<b>1,124</b>

Workforce	
Practicing physicians	<b>313</b>
Practicing physicians per 1,000 population	<b>1.86</b> <b>2.24</b>
Practicing primary care physicians	<b>111</b>
Practicing primary care physicians per 1,000 population	<b>0.66</b> <b>0.65</b>
Licensed nurse practitioners	<b>63</b>
Licensed nurse practitioners per 1,000 population	<b>0.37</b> <b>0.53</b>
Licensed physician assistants	<b>48</b>
Licensed physician assistants per 1,000 population	<b>0.28</b> <b>0.36</b>

# = Numbers for HSR 12  
# = Numbers for Colorado

Safety Net	
Community health centers	<b>1</b>
Community-funded safety net clinics	<b>2</b>
Rural health clinics	<b>1</b>
School-based health clinics	<b>7</b>



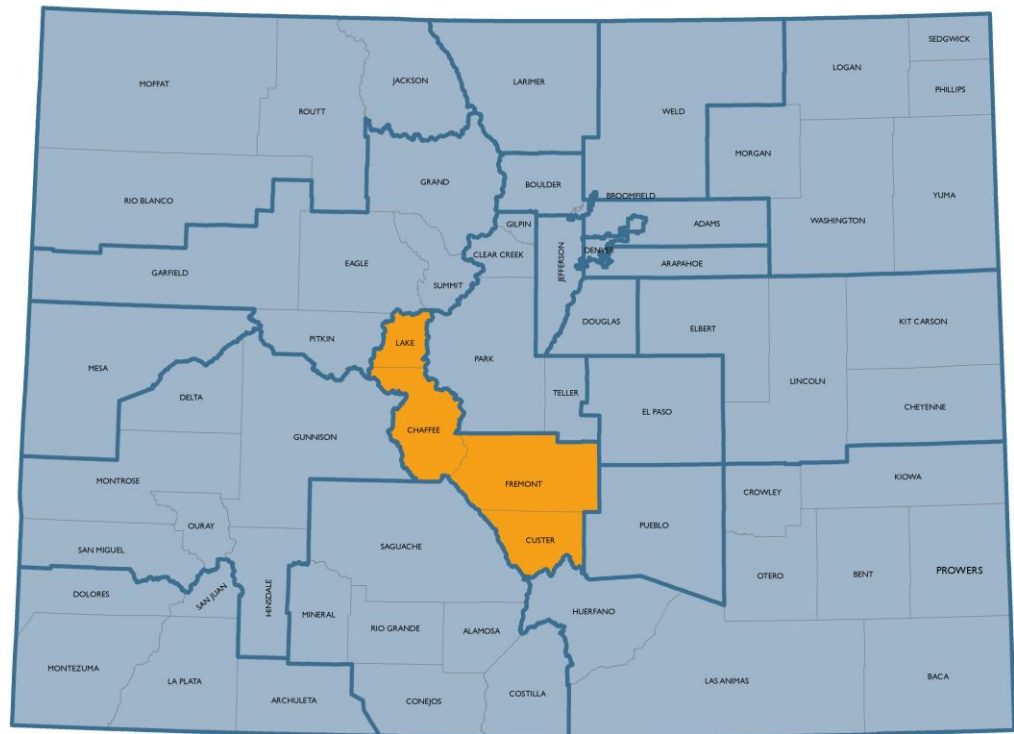


# Health Statistics Region 13

Counties: Chaffee, Custer, Fremont, Lake

## Key findings

An estimated **7,691** residents of these four counties in the south central area of the state will be newly insured. They will make between **4,036** and **6,724** additional visits to primary care providers. This translates to a need for between **1.3** and **2.2** additional primary care providers – **1.1** to **1.8** physicians and **.2** to **.4** additional nurse practitioners and physician assistants.

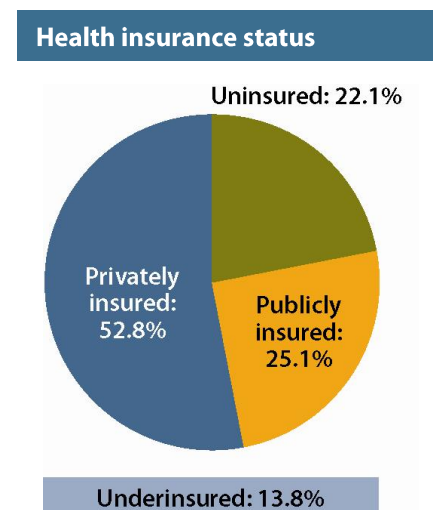


Demographics	
Population	<b>76,198</b>
Percentage of population age 64 and under	<b>82.5%</b> <b>89.1%</b>
Population per square mile	<b>21</b>
Median household income	<b>\$29,798</b> <b>\$35,852</b>
Percentage of population at or below 200% of FPL	<b>52.8%</b> <b>45.0%</b>
Females of childbearing age	<b>18,758</b>
Number of children enrolled in Medicaid	<b>3,670</b>
Number of children eligible for Medicaid but not enrolled	<b>257</b>
Number of children enrolled in CHP+	<b>1,211</b>
Number of children eligible for CHP+ but not enrolled	<b>746</b>

Workforce	
Practicing physicians	<b>75</b>
Practicing physicians per 1,000 population	<b>0.98</b> <b>2.24</b>
Practicing primary care physicians	<b>37</b>
Practicing primary care physicians per 1,000 population	<b>0.49</b> <b>0.65</b>
Licensed nurse practitioners	<b>42</b>
Licensed nurse practitioners per 1,000 population	<b>0.55</b> <b>0.53</b>
Licensed physician assistants	<b>28</b>
Licensed physician assistants per 1,000 population	<b>0.37</b> <b>0.36</b>

# = Numbers for HSR 13  
# = Numbers for Colorado

Safety Net	
Community health centers	<b>1</b>
Community-funded safety net clinics	<b>2</b>
Rural health clinics	<b>9</b>
School-based health clinics	<b>0</b>

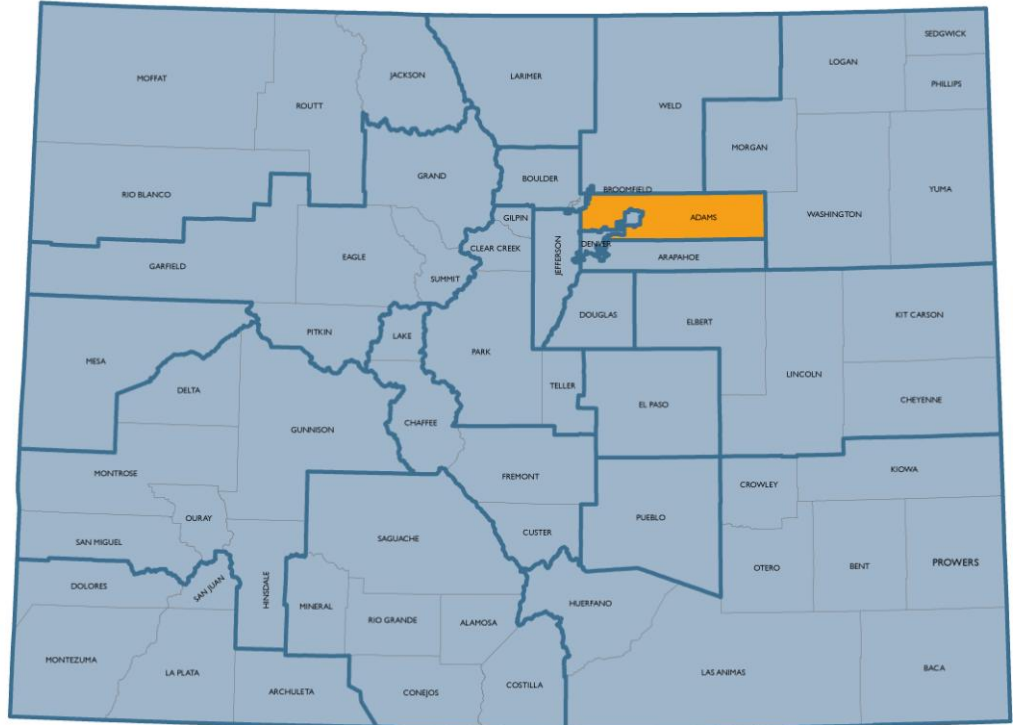


# Health Statistics Region 14

County: Adams

## Key findings

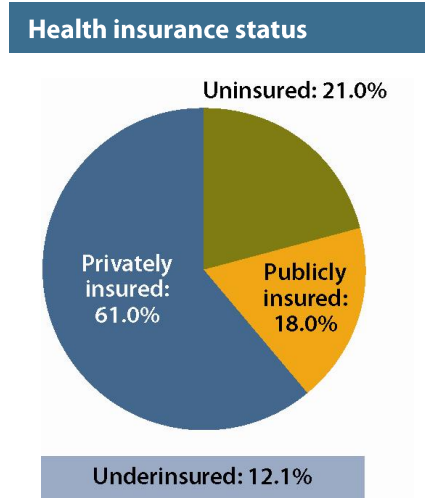
An estimated **43,998** residents of this metro area county will be newly insured. They will make between **22,325** and **37,925** additional visits to primary care providers. This translates to a need for between **7.3** and **12.4** additional primary care providers – **6.2** to **10.3** physicians and **1.1** to **2.1** additional nurse practitioners and physician assistants.



Demographics	
Population	441,603
Percentage of population age 64 and under	91.7% 89.1%
Population per square mile	373
Median household income	\$31,138 \$35,852
Percentage of population at or below 200% of FPL	46.4% 45.0%
Females of childbearing age	95,831
Number of children enrolled in Medicaid	33,033
Number of children eligible for Medicaid but not enrolled	4,899
Number of children enrolled in CHP+	8,839
Number of children eligible for CHP+ but not enrolled	6,422

Workforce	
Practicing physicians	1,285
Practicing physicians per 1,000 population	2.91 2.24
Practicing primary care physicians	268
Practicing primary care physicians per 1,000 population	0.61 0.65
Licensed nurse practitioners	103
Licensed nurse practitioners per 1,000 population	0.23 0.53
Licensed physician assistants	100
Licensed physician assistants per 1,000 population	0.23 0.36

Safety Net	
Community health centers	6
Community-funded safety net clinics	4
Rural health clinics	0
School-based health clinics	8



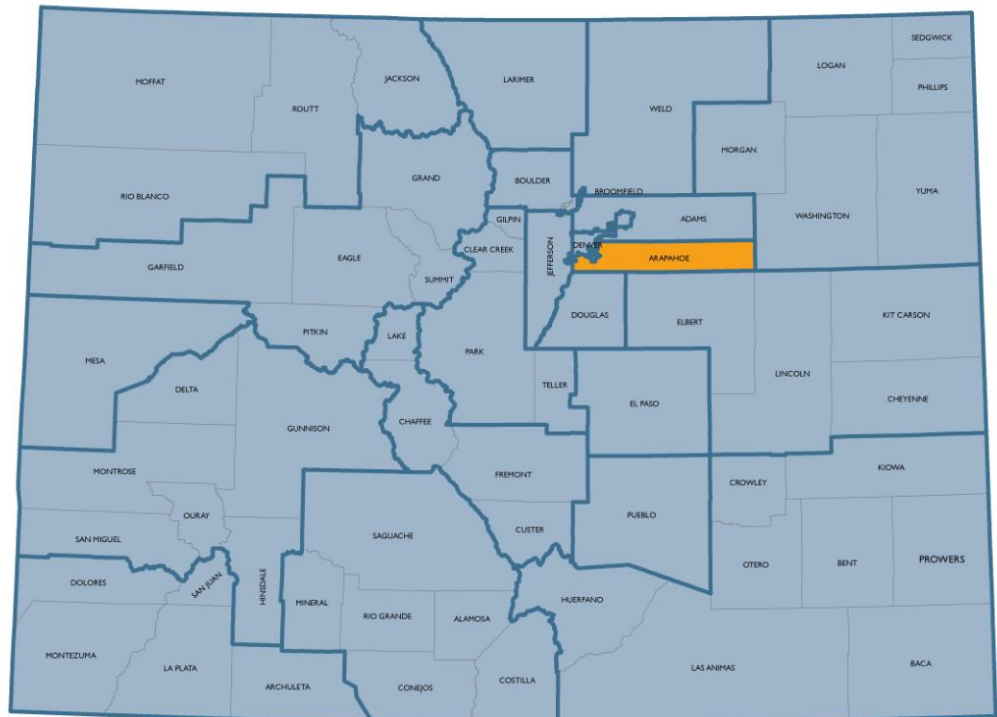
# = Numbers for HSR 14  
# = Numbers for Colorado

# Health Statistics Region 15

County: Arapahoe

## Key findings

An estimated **56,758** residents of this metro area county will be newly insured. They will make between **28,089** and **47,678** additional visits to primary care providers. This translates to a need for between **9.1** and **15.6** additional primary care providers – **7.8** to **12.9** physicians and **1.3** to **2.7** additional nurse practitioners and physician assistants.

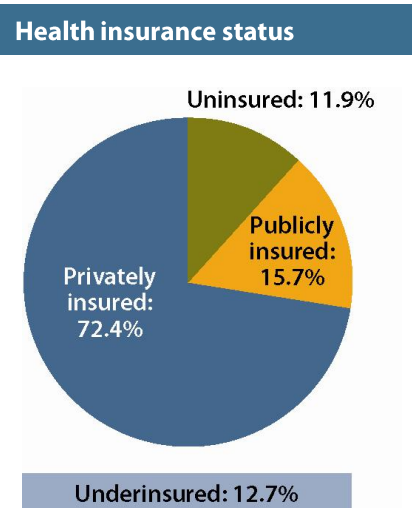


Demographics	
Population	<b>527,003</b>
Percentage of population age 64 and under	<b>89.9%</b> <b>89.1%</b>
Population per square mile	<b>710</b>
Median household income	<b>\$45,202</b> <b>\$35,852</b>
Percentage of population at or below 200% of FPL	<b>37.8%</b> <b>45.0%</b>
Females of childbearing age	<b>119,961</b>
Number of children enrolled in Medicaid	<b>27,800</b>
Number of children eligible for Medicaid but not enrolled	<b>6,548</b>
Number of children enrolled in CHP+	<b>7,089</b>
Number of children eligible for CHP+ but not enrolled	<b>3,821</b>

Workforce	
Practicing physicians	<b>1,486</b>
Practicing physicians per 1,000 population	<b>2.60</b> <b>2.24</b>
Practicing primary care physicians	<b>356</b>
Practicing primary care physicians per 1,000 population	<b>0.62</b> <b>0.65</b>
Licensed nurse practitioners	<b>306</b>
Licensed nurse practitioners per 1,000 population	<b>0.53</b> <b>0.53</b>
Licensed physician assistants	<b>182</b>
Licensed physician assistants per 1,000 population	<b>0.32</b> <b>0.36</b>

# = Numbers for HSR 15  
# = Numbers for Colorado

Safety Net	
Community health centers	<b>4</b>
Community-funded safety net clinics	<b>3</b>
Rural health clinics	<b>0</b>
School-based health clinics	<b>3</b>

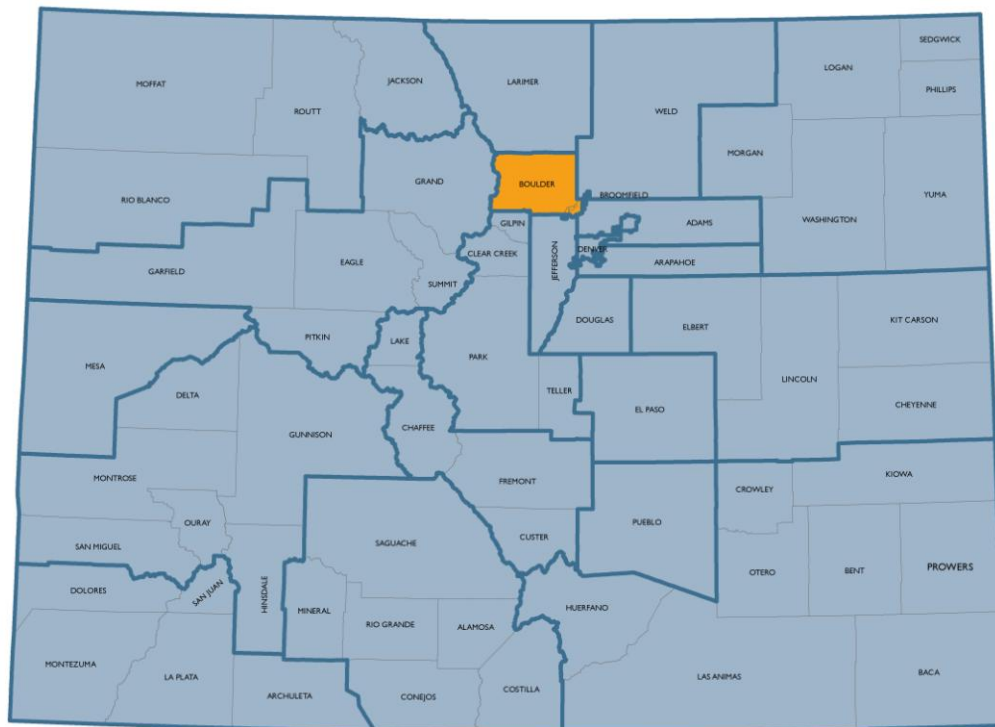


# Health Statistics Region 16

Counties: Boulder, Broomfield

## Key findings

An estimated **38,579** residents of these northern metro area counties will be newly insured. They will make between **18,297** and **31,047** additional visits to primary care providers. This translates to a need for between **6.0** and **10.1** additional primary care providers – **5.1** to **8.5** physicians and **.8** to **1.7** additional nurse practitioners and physician assistants.

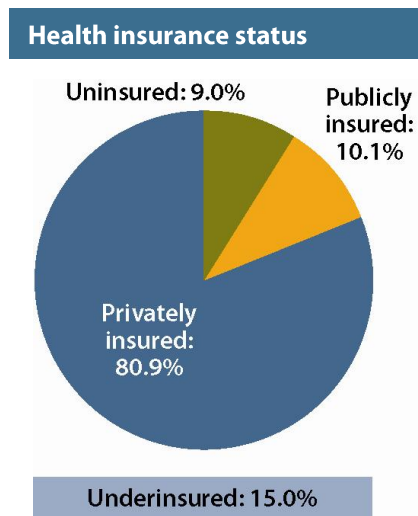


Demographics	
Population	<b>350,456</b>
Percentage of population age 64 and under	<b>90.0%</b> <b>89.1%</b>
Population per square mile	<b>453</b>
Median household income	<b>\$38,232</b> <b>\$35,852</b>
Percentage of population at or below 200% of FPL	<b>33.8%</b> <b>45.0%</b>
Females of childbearing age	<b>75,341</b>
Number of children enrolled in Medicaid	<b>10,452</b>
Number of children eligible for Medicaid but not enrolled	<b>1,905</b>
Number of children enrolled in CHP+	<b>2,955</b>
Number of children eligible for CHP+ but not enrolled	<b>1,714</b>

Workforce	
Practicing physicians	<b>859</b>
Practicing physicians per 1,000 population	<b>2.45</b> <b>2.24</b>
Practicing primary care physicians	<b>293</b>
Practicing primary care physicians per 1,000 population	<b>0.84</b> <b>0.65</b>
Licensed nurse practitioners	<b>214</b>
Licensed nurse practitioners per 1,000 population	<b>0.61</b> <b>0.53</b>
Licensed physician assistants	<b>174</b>
Licensed physician assistants per 1,000 population	<b>0.50</b> <b>0.36</b>

# = Numbers for HSR 16  
# = Numbers for Colorado

Safety Net	
Community health centers	<b>3</b>
Community-funded safety net clinics	<b>0</b>
Rural health clinics	<b>0</b>
School-based health clinics	<b>0</b>

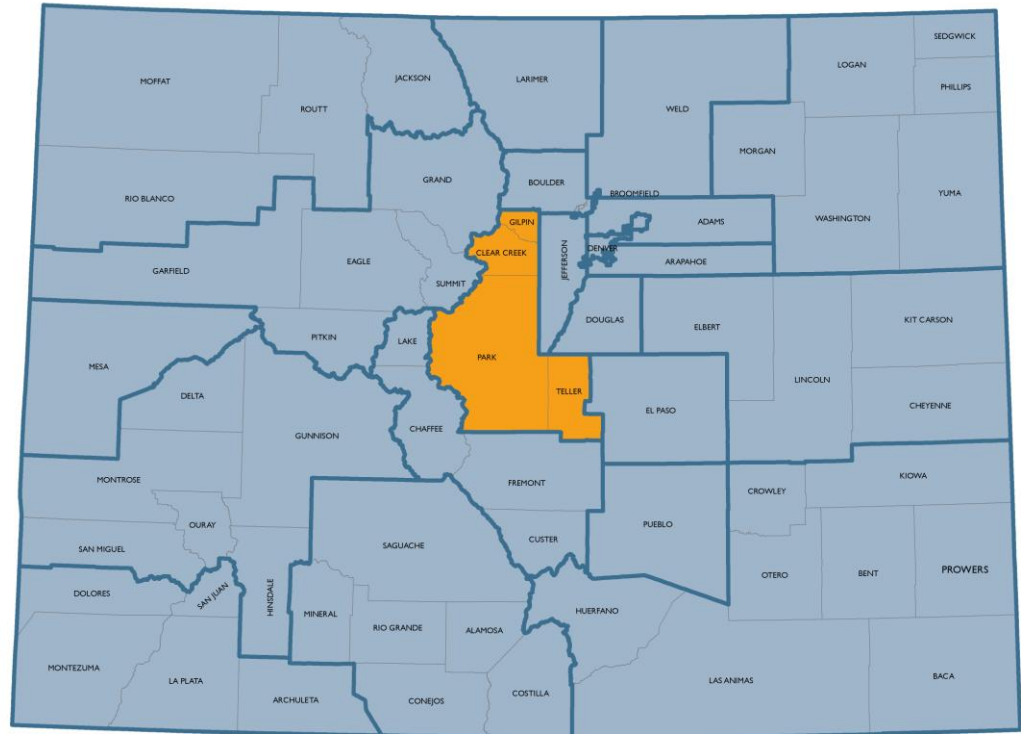


# Health Statistics Region 17

Counties: Clear Creek, Gilpin, Park, Teller

## Key findings

An estimated **4,694** residents of these four counties west of the metro area will be newly insured. They will make between **2,315** and **3,888** additional visits to primary care providers. This translates to a need for between **.8** and **1.3** additional primary care providers – **.6** to **1.1** physicians and **.1** to **.2** additional nurse practitioners and physician assistants.

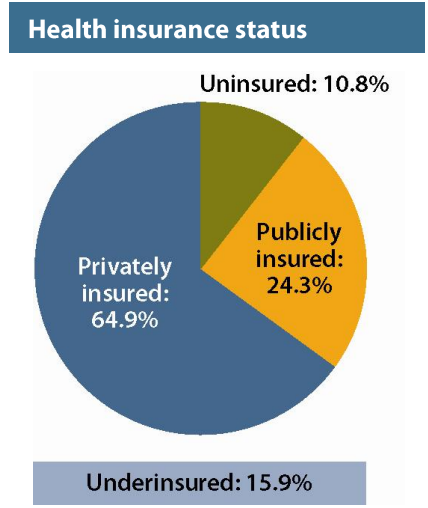


Demographics	
Population	<b>54,085</b>
Percentage of population age 64 and under	<b>87.9%</b> <b>89.1%</b>
Population per square mile	<b>16</b>
Median household income	<b>\$37,104</b> <b>\$35,852</b>
Percentage of population at or below 200% of FPL	<b>39.6%</b> <b>45.0%</b>
Females of childbearing age	<b>8,076</b>
Number of children enrolled in Medicaid	<b>1,680</b>
Number of children eligible for Medicaid but not enrolled	<b>214</b>
Number of children enrolled in CHP+	<b>Not available</b>
Number of children eligible for CHP+ but not enrolled	<b>399</b>

Workforce	
Practicing physicians	<b>21</b>
Practicing physicians per 1,000 population	<b>0.39</b> <b>2.24</b>
Practicing primary care physicians	<b>15</b>
Practicing primary care physicians per 1,000 population	<b>0.28</b> <b>0.65</b>
Licensed nurse practitioners	<b>29</b>
Licensed nurse practitioners per 1,000 population	<b>0.54</b> <b>0.53</b>
Licensed physician assistants	<b>18</b>
Licensed physician assistants per 1,000 population	<b>0.33</b> <b>0.36</b>

# = Numbers for HSR 17  
# = Numbers for Colorado

Safety Net	
Community health centers	<b>3</b>
Community-funded safety net clinics	<b>2</b>
Rural health clinics	<b>1</b>
School-based health clinics	<b>1</b>

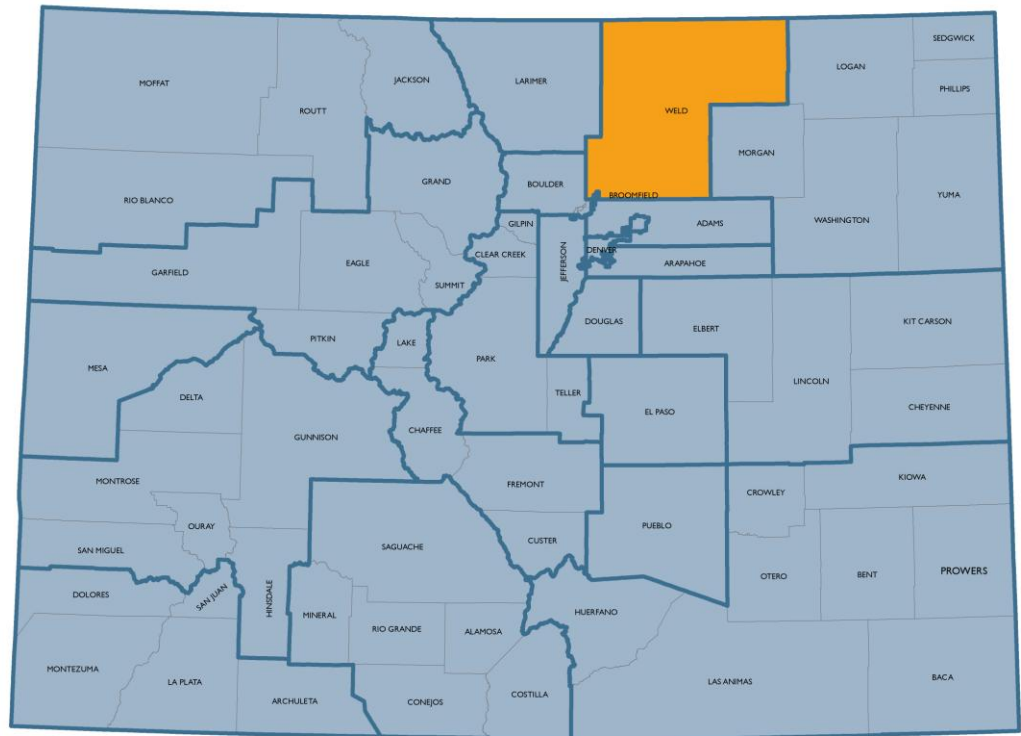


# Health Statistics Region 18

County: Weld

## Key findings

An estimated **26,597** residents of this county in the northern area of the state will be newly insured. They will make between **13,281** and **22,583** additional visits to primary care providers. This translates to a need for between **4.3** and **7.4** additional primary care providers – **3.7** to **6.1** physicians and **.6** to **1.3** additional nurse practitioners and physician assistants.

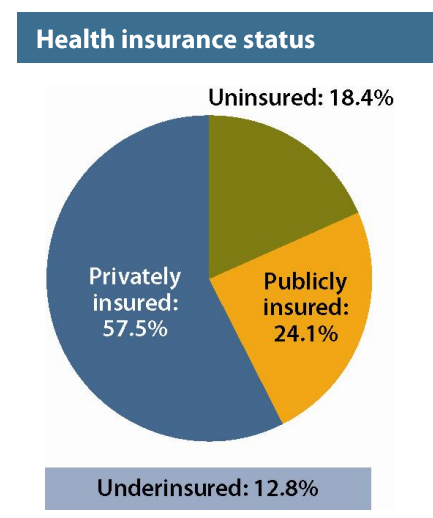


Demographics	
Population	252,825
Percentage of population age 64 and under	90.4% 89.1%
Population per square mile	63
Median household income	\$30,562 \$35,852
Percentage of population at or below 200% of FPL	47.3% 45.0%
Females of childbearing age	53,746
Number of children enrolled in Medicaid	16,216
Number of children eligible for Medicaid but not enrolled	3,329
Number of children enrolled in CHP+	4,056
Number of children eligible for CHP+ but not enrolled	1,612

Workforce	
Practicing physicians	280
Practicing physicians per 1,000 population	1.11 2.24
Practicing primary care physicians	117
Practicing primary care physicians per 1,000 population	0.46 0.65
Licensed nurse practitioners	115
Licensed nurse practitioners per 1,000 population	0.45 0.53
Licensed physician assistants	54
Licensed physician assistants per 1,000 population	0.21 0.36

# = Numbers for HSR 18  
# = Numbers for Colorado

Safety Net	
Community health centers	8
Community-funded safety net clinics	1
Rural health clinics	0
School-based health clinics	1

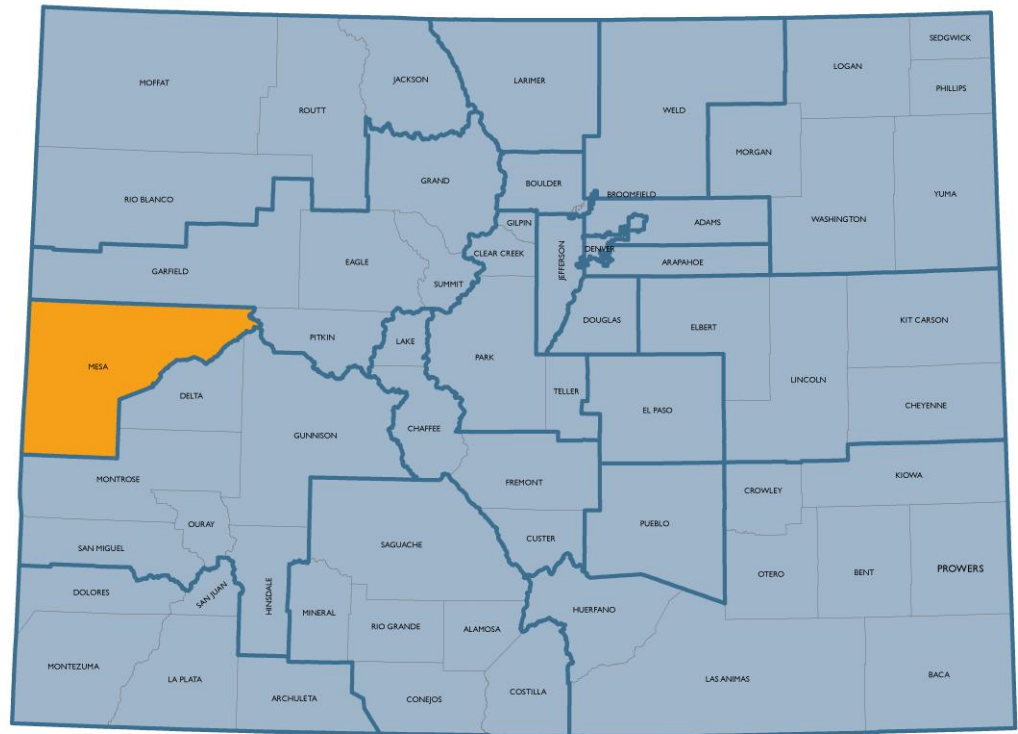


# Health Statistics Region 19

County: Mesa

## Key findings

An estimated **15,111** residents of this county in the western area of the state, home to Grand Junction, will be newly insured. They will make between **7,851** and **13,193** additional visits to primary care providers. This translates to a need for between **2.6** and **4.3** additional primary care providers – **2.2** to **3.5** physicians and **.4** to **.8** additional nurse practitioners and physician assistants.

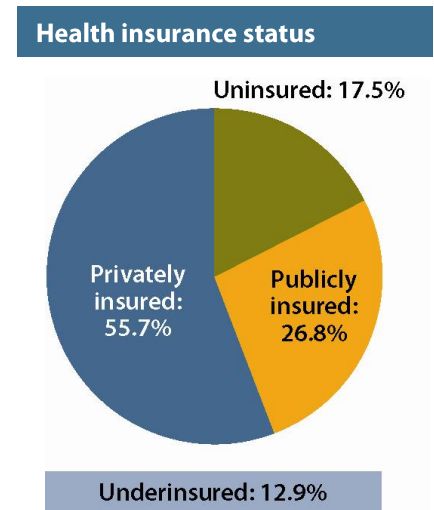


Demographics	
Population	146,723
Percentage of population age 64 and under	85.1% 89.1%
Population per square mile	44
Median household income	\$35,432 \$35,852
Percentage of population at or below 200% of FPL	45.2% 45.0%
Females of childbearing age	27,294
Number of children enrolled in Medicaid	8,007
Number of children eligible for Medicaid but not enrolled	1,918
Number of children enrolled in CHP+	2,520
Number of children eligible for CHP+ but not enrolled	1,704

Workforce	
Practicing physicians	409
Practicing physicians per 1,000 population	2.79 2.24
Practicing primary care physicians	150
Practicing primary care physicians per 1,000 population	1.02 0.65
Licensed nurse practitioners	76
Licensed nurse practitioners per 1,000 population	0.52 0.53
Licensed physician assistants	57
Licensed physician assistants per 1,000 population	0.39 0.36

# = Numbers for HSR 19  
# = Numbers for Colorado

Safety Net	
Community health centers	2
Community-funded safety net clinics	3
Rural health clinics	0
School-based health clinics	0

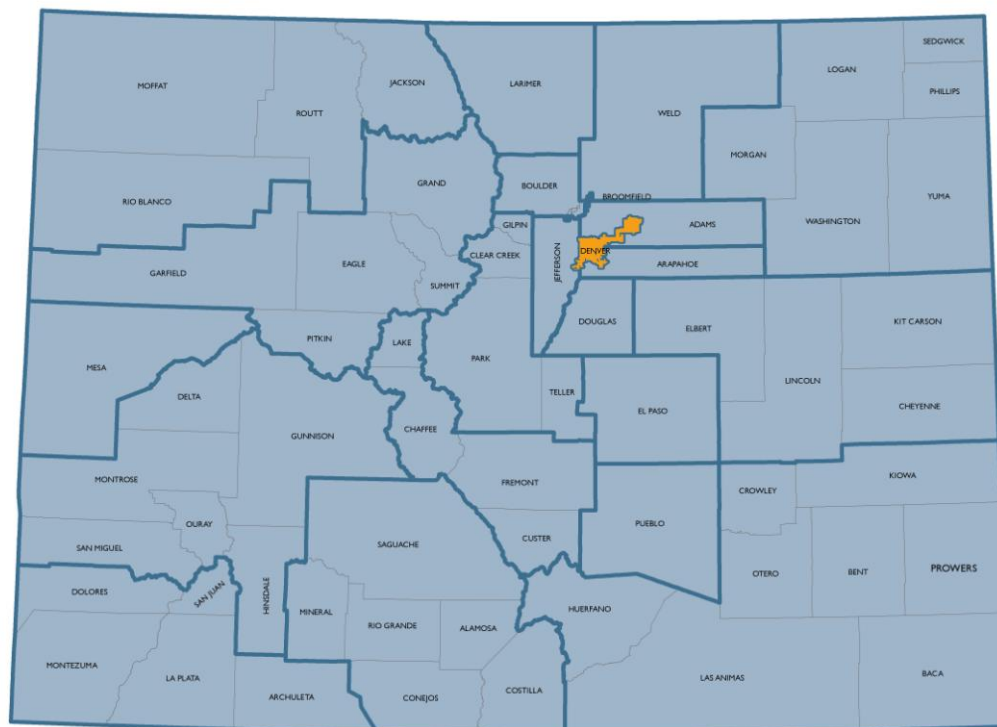


# Health Statistics Region 20

County: Denver

## Key findings

An estimated **65,340** residents of this metro area county will be newly insured. They will make between **34,530** and **57,559** additional visits to primary care providers. This translates to a need for between **11.3** and **18.8** additional primary care providers – **9.5** to **15.4** physicians and **1.8** to **3.4** additional nurse practitioners and physician assistants.



### Demographics

Population	<b>600,158</b>
Percentage of population age 64 and under	<b>89.6%</b> <b>89.1%</b>
Population per square mile	<b>3,882</b>
Median household income	<b>\$23,992</b> <b>\$35,852</b>
Percentage of population at or below 200% of FPL	<b>52.3%</b> <b>45.0%</b>
Females of childbearing age	<b>142,389</b>
Number of children enrolled in Medicaid	<b>46,797</b>
Number of children eligible for Medicaid but not enrolled	<b>5,651</b>
Number of children enrolled in CHP+	<b>8,705</b>
Number of children eligible for CHP+ but not enrolled	<b>6,448</b>

### Workforce

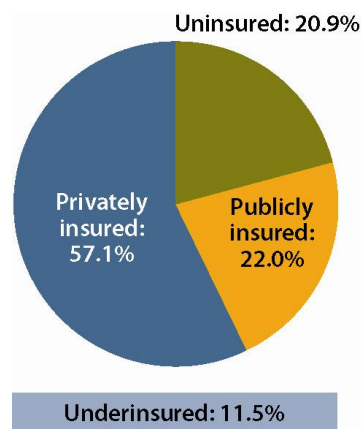
Practicing physicians	<b>2,493</b>
Practicing physicians per 1,000 population	<b>4.15</b> <b>2.24</b>
Practicing primary care physicians	<b>537</b>
Practicing primary care physicians per 1,000 population	<b>0.89</b> <b>0.65</b>
Licensed nurse practitioners	<b>415</b>
Licensed nurse practitioners per 1,000 population	<b>0.69</b> <b>0.53</b>
Licensed physician assistants	<b>314</b>
Licensed physician assistants per 1,000 population	<b>0.52</b> <b>0.36</b>

# = Numbers for HSR 20  
# = Numbers for Colorado

### Safety Net

Community health centers	<b>26</b>
Community-funded safety net clinics	<b>11</b>
Rural health clinics	<b>0</b>
School-based health clinics	<b>13</b>

### Health insurance status



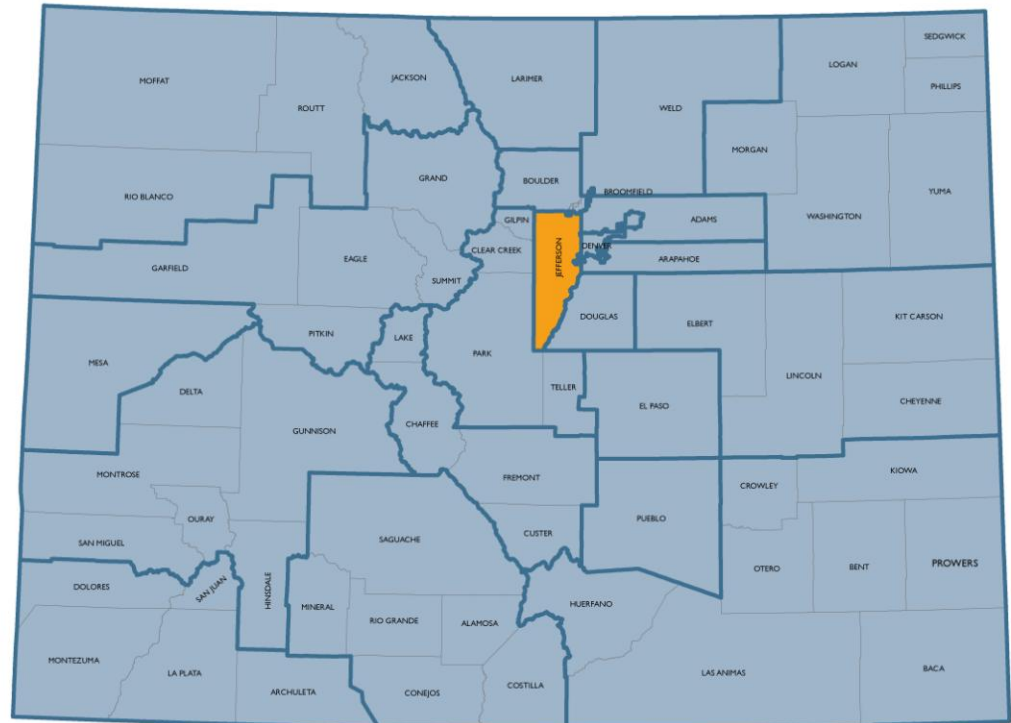


# Health Statistics Region 21

County: Jefferson

## Key findings

An estimated **56,568** residents of this metro area county will be newly insured. They will make between **27,287** and **46,125** additional visits to primary care providers. This translates to a need for between **8.9** and **15.1** additional primary care providers – **7.6** to **12.53** physicians and **1.3** to **2.5** additional nurse practitioners and physician assistants.

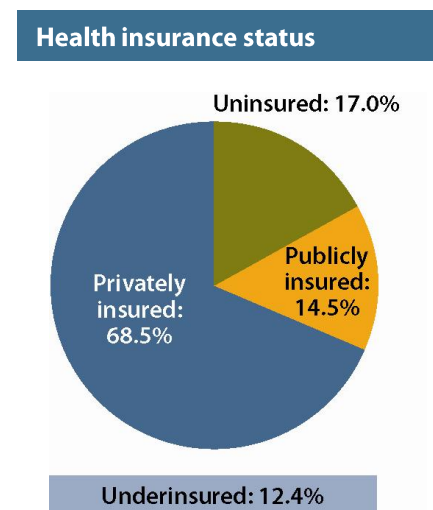


Demographics	
Population	<b>534,543</b>
Percentage of population age 64 and under	<b>87.4%</b> <b>89.1%</b>
Population per square mile	<b>690</b>
Median household income	<b>\$35,871</b> <b>\$35,852</b>
Percentage of population at or below 200% of FPL	<b>40.4%</b> <b>45.0%</b>
Females of childbearing age	<b>99,378</b>
Number of children enrolled in Medicaid	<b>16,102</b>
Number of children eligible for Medicaid but not enrolled	<b>3,385</b>
Number of children enrolled in CHP+	<b>4,866</b>
Number of children eligible for CHP+ but not enrolled	<b>2,959</b>

Workforce	
Practicing physicians	<b>949</b>
Practicing physicians per 1,000 population	<b>1.78</b> <b>2.24</b>
Practicing primary care physicians	<b>315</b>
Practicing primary care physicians per 1,000 population	<b>0.59</b> <b>0.65</b>
Licensed nurse practitioners	<b>360</b>
Licensed nurse practitioners per 1,000 population	<b>0.67</b> <b>0.53</b>
Licensed physician assistants	<b>241</b>
Licensed physician assistants per 1,000 population	<b>0.45</b> <b>0.36</b>

# = Numbers for HSR 21  
# = Numbers for Colorado

Safety Net	
Community health centers	<b>6</b>
Community-funded safety net clinics	<b>2</b>
Rural health clinics	<b>0</b>
School-based health clinics	<b>3</b>



Colorado Increased Visits and Increased Provider Estimates by County,  
as a result of Health Reform Implementation in 2016

COLORADO	Total Newly Insured 2016	Total Increased Visits		Total Physicians for Increased Visits		Total NPs and PAs for Increased Visits		Total Providers for Increased Visits	
		Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper
State	510,000	256,010	432,420	71.0	116.9	12.4	24.4	83	141.3
Adams	43,998	22,325	37,925	6.2	10.3	1.1	2.1	7.3	12.4
Alamosa	1,661	987	1,632	0.3	0.4	0.1	0.1	0.3	0.5
Arapahoe	56,758	28,089	47,678	7.8	12.9	1.3	2.7	9.1	15.6
Archuleta	1,051	537	903	0.1	0.2	0.0	0.1	0.2	0.3
Baca	386	218	361	0.1	0.1	0.0	0.0	0.1	0.1
Bent	651	362	602	0.1	0.2	0.0	0.0	0.1	0.2
Boulder	33,120	15,748	26,673	4.4	7.3	0.7	1.4	5.1	8.7
Broomfield	5,459	2,550	4,374	0.7	1.2	0.1	0.2	0.8	1.4
Chaffee	1,513	773	1,292	0.2	0.3	0.0	0.1	0.3	0.4
Cheyenne	194	99	167	0.0	0.0	0.0	0.0	0.0	0.1
Clear Creek	1,050	504	850	0.1	0.2	0.0	0.0	0.2	0.3
Conejos	958	575	948	0.2	0.2	0.0	0.1	0.2	0.3
Costilla	479	298	488	0.1	0.1	0.0	0.0	0.1	0.2
Crowley	580	320	533	0.1	0.1	0.0	0.0	0.1	0.2
Custer	340	176	294	0.0	0.1	0.0	0.0	0.1	0.1
Delta	3,164	1,673	2,796	0.5	0.7	0.1	0.2	0.5	0.9
Denver	65,340	34,530	57,599	9.5	15.4	1.8	3.4	11.3	18.8
Dolores	195	100	167	0.0	0.0	0.0	0.0	0.0	0.1
Douglas	30,624	13,764	23,858	3.9	6.6	0.6	1.2	4.5	7.8
Eagle	4,603	2,098	3,554	0.6	1.0	0.1	0.2	0.7	1.2
El Paso	55,050	27,869	47,129	7.7	12.7	1.4	2.7	9.1	15.4
Elbert	1,514	731	1,240	0.2	0.3	0.0	0.1	0.2	0.4
Fremont	4,870	2,620	4,350	0.7	1.2	0.1	0.3	0.9	1.4
Garfield	4,796	2,380	4,034	0.7	1.1	0.1	0.2	0.8	1.3
Gilpin	540	260	438	0.1	0.1	0.0	0.0	0.1	0.1
Grand	1,428	668	1,127	0.2	0.3	0.0	0.1	0.2	0.4
Gunnison	1,636	775	1,304	0.2	0.4	0.0	0.1	0.3	0.4
Hinsdale	107	54	90	0.0	0.0	0.0	0.0	0.0	0.0
Huerfano	814	484	797	0.1	0.2	0.0	0.1	0.2	0.3
Jackson	157	76	128	0.0	0.0	0.0	0.0	0.0	0.0
Jefferson	56,568	27,287	46,125	7.6	12.5	1.3	2.5	8.9	15.1

COLORADO	Total Newly Insured 2016	Total Increased Visits		Total Physicians for Increased Visits		Total NPs and PAs for Increased Visits		Total Providers for Increased Visits	
		Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper
State	510,000	256,010	432,420	71.0	116.9	12.4	24.4	83	141.3
Kiowa	128	63	107	0.0	0.0	0.0	0.0	0.0	0.0
Kit Carson	720	369	624	0.1	0.2	0.0	0.0	0.1	0.2
La Plata	4,365	2,181	3,671	0.6	1.0	0.1	0.2	0.7	1.2
Lake	969	467	788	0.1	0.2	0.0	0.0	0.2	0.3
Larimer	31,244	15,332	25,920	4.3	7.0	0.7	1.4	5.0	8.5
Las Animas	1,522	893	1,474	0.2	0.4	0.1	0.1	0.3	0.5
Lincoln	525	268	451	0.1	0.1	0.0	0.0	0.1	0.1
Logan	1,952	1,036	1,735	0.3	0.5	0.1	0.1	0.3	0.6
Mesa	15,111	7,851	13,193	2.2	3.5	0.4	0.8	2.6	4.3
Mineral	111	56	93	0.0	0.0	0.0	0.0	0.0	0.0
Moffat	1,483	750	1,265	0.2	0.3	0.0	0.1	0.2	0.4
Montezuma	2,808	1,495	2,501	0.4	0.7	0.1	0.1	0.5	0.8
Montrose	4,083	2,193	3,669	0.6	1.0	0.1	0.2	0.7	1.2
Morgan	2,631	1,390	2,337	0.4	0.6	0.1	0.1	0.5	0.8
Otero	2,112	1,245	2,056	0.3	0.5	0.1	0.1	0.4	0.7
Ouray	458	221	372	0.1	0.1	0.0	0.0	0.1	0.1
Park	1,228	601	1,009	0.2	0.3	0.0	0.1	0.2	0.3
Phillips	408	212	356	0.1	0.1	0.0	0.0	0.1	0.1
Pitkin	1,562	700	1,183	0.2	0.3	0.0	0.1	0.2	0.4
Prowers	1,574	864	1,446	0.2	0.4	0.0	0.1	0.3	0.5
Pueblo	17,552	9,937	16,590	2.7	4.4	0.5	1.0	3.2	5.4
Rio Blanco	659	331	559	0.1	0.2	0.0	0.0	0.1	0.2
Rio Grande	1,298	761	1,260	0.2	0.3	0.0	0.1	0.2	0.4
Routt	1,922	913	1,551	0.3	0.4	0.0	0.1	0.3	0.5
Saguache	612	358	593	0.1	0.2	0.0	0.0	0.1	0.2
San Juan	70	38	63	0.0	0.0	0.0	0.0	0.0	0.0
San Miguel	599	287	485	0.1	0.1	0.0	0.0	0.1	0.2
Sedgwick	267	143	240	0.0	0.1	0.0	0.0	0.0	0.1
Summit	2,593	1,182	2,001	0.3	0.5	0.1	0.1	0.4	0.7
Teller	1,877	951	1,591	0.3	0.4	0.0	0.1	0.3	0.5
Washington	427	218	367	0.1	0.1	0.0	0.0	0.1	0.1
Weld	26,597	13,281	22,583	3.7	6.1	0.6	1.3	4.3	7.4
Yuma	936	493	829	0.1	0.2	0.0	0.0	0.2	0.3

Productivity Factors are the 2010 MGMA weighted median ambulatory encounters, for the western region for physicians and weighted average for NPs and PAs in the western region  
Jean Abraham - behavioral estimates among full-year uninsured

# Sources and notes

## Demographics

- *Population*: U.S. Census Bureau, 2010.
- *Percentage of population age 64 and under*: U.S. Census Bureau, 2010.
- *Population per square mile*: Population estimates were obtained from the U.S. Census Bureau, 2010. The total square mileage of counties was calculated from 2007 TIGER/Line shapefiles provided by the U.S. Census Bureau. Population per square mile was produced using ArcGIS 9.2.
- *Median household income*: CHI analysis of the 2011 Colorado Health Access Survey (CHAS). The CHAS was funded by The Colorado Trust and administered by CHI.
- *Percentage of population at or below 200% of Federal Poverty Level (FPL)*: CHI analysis of the 2011 Colorado Health Access Survey. In 2011, 200% of the FPL was \$44,700 for a family of four.
- *Females of childbearing age*: U.S. Census Bureau, 2010. Females of childbearing age are defined as between the ages of 15 and 44.
- *Number of children (ages 0-18) enrolled in Medicaid*: Colorado Department of Health Care Policy and Financing (HCPF), Budget Division, average monthly enrollment for calendar year 2009. *Not available* indicates that enrollment data were not reported by HCPF for one or more of the counties in the Health Statistics Region.
- *Number of children (ages 0-18) eligible for Medicaid but not enrolled*: CHI analysis of the 2009 American Community Survey, U.S. Census Bureau. Estimates of uninsured children eligible but not enrolled in Medicaid are based on age, income and documentation requirements.
- *Number of children (ages 0-18) enrolled in the Child Health Plan Plus (CHP+)*: Colorado Department of Health Care Policy and Financing (HCPF), Budget Division, average monthly enrollment for calendar year 2009. *Not available* indicates that enrollment data were not reported by HCPF for one or more of the counties in the Health Statistics Region.
- *Number of children (ages 0-18) eligible for CHP+ but not enrolled*: CHI analysis of the 2009 American Community Survey, U.S. Census Bureau. Estimates of uninsured children eligible but not enrolled in CHP+ are based on age, income and documentation requirements. Income eligibility is based on income limits established prior to passage of state (HB 09-1293) and national health care reform (U.S. HR 3590).

## Workforce

- *Practicing physicians*: Peregrine Management Corporation master datasets for April 2010. A practicing physician is defined as a doctor of medicine (MD) or doctor of osteopathic medicine (DO) who has admitted or seen a patient in a Colorado hospital or has been reimbursed by a health insurance plan during the calendar year. The county location is based on the physician's primary practice location and was assigned by Centrus Desktop software.
- *Practicing physicians per 1,000 population*: Practicing physician data from Peregrine Management Corporation (see above.) Population estimates from U.S. Census Bureau, 2010.
- *Practicing primary care physicians*: Peregrine Management Corporation master datasets for April 2010. A practicing physician is defined as a doctor of medicine (MD) or doctor of osteopathic medicine

(DO) who has admitted or seen a patient in a Colorado hospital or has been reimbursed by a health insurance plan during the calendar year. Primary care includes general practice, family medicine, internal medicine and pediatrics. The county location is based on the physician's primary practice location and was assigned by Centrus Desktop software.

- *Practicing primary care physicians per 1,000 population:* Practicing primary care physician data from Peregrine Management Corporation (see above.) Population estimates from U.S. Census Bureau, 2010.
- *Licensed nurse practitioners:* Colorado Department of Regulatory Agencies, Division of Registration. The number represents individuals holding active licenses with a Colorado address; those with inactive licenses or with contact addresses outside of Colorado have been excluded from analysis.
- *Licensed nurse practitioners per 1,000 population:* Licensed nurse practitioner data from Colorado Department of Regulatory Agencies, Division of Registration (see above.) Population estimates from U.S. Census Bureau, 2010.
- *Licensed physician assistants:* Colorado Department of Regulatory Agencies, Division of Registration. The number represents individuals holding active licenses with a Colorado address; those with inactive licenses or with contact addresses outside of Colorado have been excluded from analysis.
- *Licensed physician assistants per 1,000 population:* Licensed nurse practitioner data from Colorado Department of Regulatory Agencies, Division of Registration (see above.) Population estimates from U.S. Census Bureau, 2010.

## Safety Net

- All clinic locations were obtained from the CHI safety net database using information from the Colorado Community Health Network, ClinicNET, the Colorado Rural Health Center and the Colorado Association for School-Based Health Care.

## Health insurance status

- *Privately insured:* CHI analysis of the 2011 Colorado Health Access Survey. This category includes employer-sponsored insurance, military insurance, individually purchased insurance, Railroad Retirement Plan and other insurance.
- *Publicly insured:* CHI analysis of the 2011 Colorado Health Access Survey. This category includes Medicare, Medicaid and the Child Health Plan *Plus* (CHP+) program.
- *Uninsured:* CHI analysis of the 2011 Colorado Health Access Survey. This category includes individuals who reported having no health insurance coverage at the time of the survey.
- *Underinsured:* CHI analysis of the 2011 Colorado Health Access Survey. Underinsured is defined as having public or private health insurance coverage that does not adequately cover the costs of medically necessary services relative to family income, resulting in out-of-pocket expenses that exceed an individual's ability to pay. Specifically, the ratio threshold used in this definition is 10% of annual income or 5% of annual income for households living below 200% of the Federal Poverty Level. In 2011, 200% of the FPL was \$44,700 for a family of four.