



A Profile of Colorado's Rural Physicians

Colorado Rural Physician Survey: A Chart Pack

Updated June 5, 2012

Informing Policy. Advancing Health.

Introduction

CHI's survey of Colorado's rural physicians provides a snapshot of these crucial health care providers, including why they practice in rural Colorado, what keeps them working in their communities and the demands placed on their practices. Attracting and retaining physicians for Colorado's rural areas can be challenging, illustrated by the fact that these rural areas are home to one sixth of the state's population, but just one tenth of the state's physicians.¹ As Colorado leaders work to devise the best strategies to maintain and improve health care access among rural residents, insights from this survey can serve as a resource.

These findings are from a Colorado Health Institute (CHI) survey of Colorado's rural physicians taken in 2009. Particular attention is paid to factors associated with the supply of Colorado's rural physician workforce. These factors include:

- Demographic and practice characteristics
- Perceptions of the adequacy of classroom and residency training
- Reasons for choosing a rural practice
- Career satisfaction and potential turnover
- Practice policies affecting patient access to care.

Profile of Rural Physicians in Colorado, 2009

- 35% were age 55 or older
- 29% were female
- 88% were white
- 39% grew up in a rural area
- 11% had a Doctor of Osteopathic Medicine degree
- 18% were in-state medical school graduates
- 5% were international medical school graduates

Key Findings

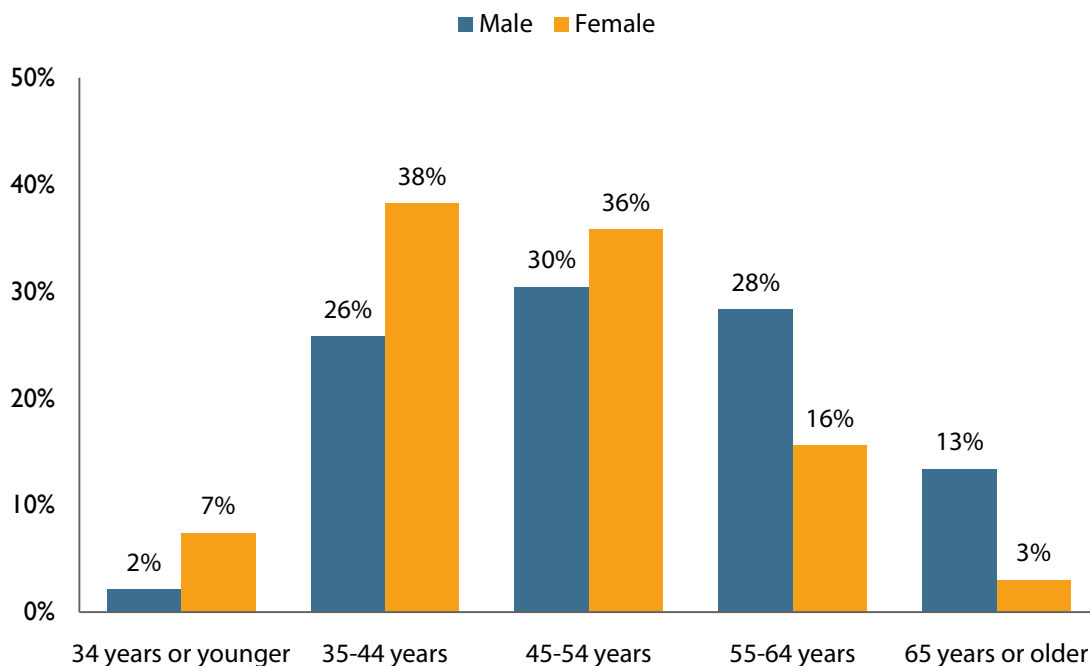
- Forty-three percent of Colorado's rural physicians practice primary care.
- Thirty-nine percent grew up in a rural area.
- Nearly two-thirds (61 percent) completed a rotation in a rural setting during their medical school training.
- Fourteen percent said they were likely to leave their practice in the twelve months following the survey. Among this group, one-third listed retirement as an important reason.
- Opportunities exist for improved classroom instruction and residency training in telemedicine, occupational health and interdisciplinary practice. Training in these topic areas was most likely to be rated inadequate by rural physicians.
- Rural physicians rated a variety of lifestyle factors as important determinants in their choice of, and satisfaction with, living and working in a rural area. They most commonly cited recreational and leisure activities (70 percent); suitability for raising children (55 percent); and professional independence (44 percent). The physicians had the highest satisfaction levels with: the

community (84 percent); their ability to provide quality care (83 percent); and work-life balance (60 percent).

- Common areas of dissatisfaction with living and working in a rural area related to the overhead costs (56 percent) and administrative burden of maintaining a practice (49 percent). Spousal dissatisfaction was listed as an important factor by about one quarter (26 percent) of physicians who had plans to leave their practice in the next year. These responses suggest that rural physicians may benefit from additional professional and spousal support.
- Rural physicians were likely to accept public forms of insurance, such as Medicare (89 percent), Medicaid (79 percent for children, 76 percent for adults) and Children's Health Plan *Plus* (CHP+; 82 percent). For physicians who did not accept Medicaid, low reimbursement rates (98 percent) and time-consuming paperwork (71 percent) were the most common obstacles.

I. Demographic Characteristics

Figure 1. Age of Rural Physicians in Colorado by Gender, 2009



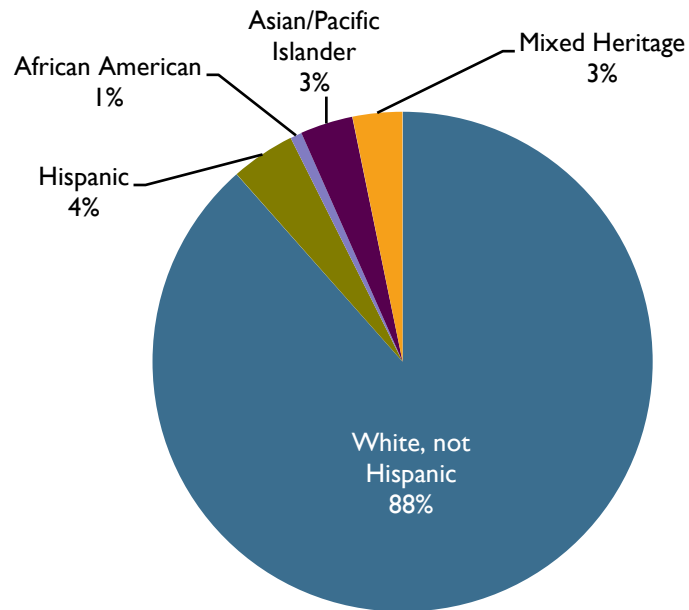
NOTE: Values may not total 100 percent due to rounding.

SOURCE: 2009 Colorado Rural Physician Survey, Q8

Physicians 55 or older made up about a third (35 percent) of the rural group. The findings suggest that retirements are likely to affect Colorado’s supply of rural physicians.

The growing participation of women in medicine is a major demographic factor shaping the physician workforce. In Colorado, women made up 29 percent of the rural physician workforce in 2009. And they were younger than their male counterparts. Male physicians practicing in rural Colorado were twice as likely to be aged 55 or older (41 percent) compared to women physicians (19 percent). (see Figure 1.)

Figure 2. Race and Ethnicity of Rural Physicians in Colorado, 2009



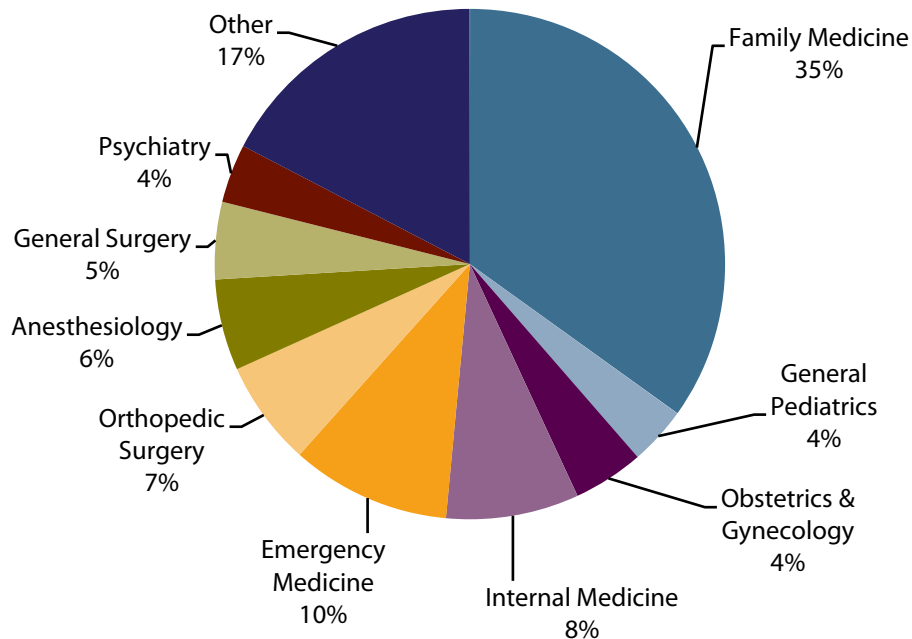
NOTE: Values may not total 100 percent due to rounding.

SOURCE: 2009 Colorado Rural Physician Survey, Q10

About 88 percent of Colorado's rural physicians were non-Hispanic White. (see Figure 2.) The rest of the rural physicians were split between Hispanic, Asian/Pacific Islander and mixed heritage.

2. Practice Characteristics

Figure 3. Specialties of Rural Physicians in Colorado, 2009

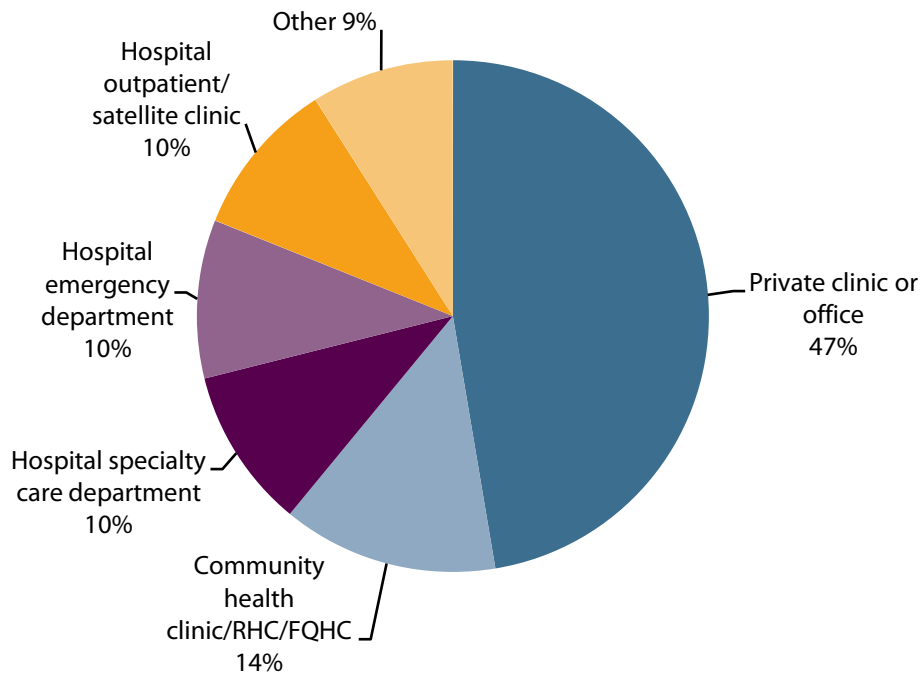


NOTE: The 'Other' category includes specialties with frequencies lower than 3 percent, including: dermatology, gastroenterology, gynecology, ophthalmology, otolaryngology, pathology, psychiatry, pulmonology, radiology, plastic surgery, urology and others. Values may not total 100 percent due to rounding.

SOURCE: 2009 Rural Physician Survey, Colorado Health Institute, Q4

A strong link exists between primary care and rural practices. Almost half of Colorado's rural physicians (43 percent) were primary care clinicians, including family medicine, general pediatrics and obstetrics and gynecology. Eight percent were physicians specializing in general internal medicine or internal medicine sub-specialties. Rural physicians also include an array of specialists, most commonly emergency medicine (10 percent), orthopedic surgery (7 percent), anesthesiology (6 percent) and general surgery (5 percent). (see Figure 3.)

Figure 4. Practice Setting of Rural Physicians in Colorado, 2009



NOTE: The 'Other' category includes Indian Health Services Clinic, Military/Veterans Affairs health system or clinic and nursing facility/home health agency. RHC stands for Rural Health Clinic and FQHC stands for Federally Qualified Health Center. Values may not total 100 percent due to rounding.

SOURCE: 2009 Rural Physician Survey, Colorado Health Institute, Q16

The most common practice setting for Colorado's rural physicians was a private clinic or office, where nearly half of physicians practiced (47 percent). About a third (30 percent) worked in a hospital-related setting, including emergency department, specialty care and outpatient or satellite clinics. (see Figure 4.)

Independent of practice setting, many rural physicians worked in a partnership with one other physician (40 percent). One third of rural physicians in Colorado were in a group practice with three or more physicians (32 percent). A slightly smaller number of rural physicians (28 percent) practiced in a solo setting, although 14 percent of practitioners who did not work with fellow doctors worked with nurse practitioners or physician assistants.

Table 1. Practice Characteristics of Rural Physicians in Colorado, 2009

| Practice characteristic | Average |
|---|---------|
| Annual visits (Family medicine, full-time solo practice only) | 4,625 |
| Total professional practice hours per week | 46.6 |
| Hours spent in direct patient care per week | 36.1 |

NOTE: Full-time refers to physicians who provided at least 32 hours of direct patient care per week.

SOURCE: 2009 Rural Physician Survey, Colorado Health Institute, Q4, Q17, Q18, Q19

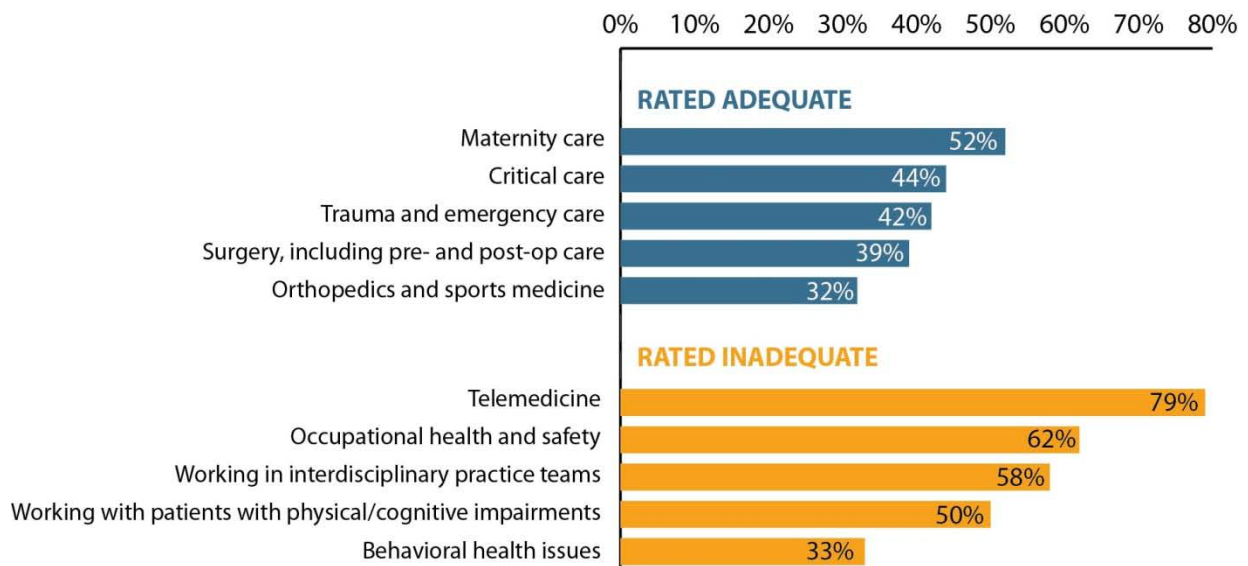
On average, full-time rural family medicine physicians in solo practice provided care for 4,625 patient visits annually. (see Table 1.)

Fifty percent of rural physicians worked an average of 50 or more hours per week and 22 percent worked 40 to 49 hours per week on average. Twenty-nine percent averaged fewer than 40 hours of work per week.

3. Preparation for Rural Practice

Medical school and residency training experiences are critical for providing physicians with the broad range of skills required to provide care to rural populations. The vast majority of rural physicians in Colorado have earned Doctor of Medicine (MD) degrees (89 percent). About 11 percent of the rural physicians said they have earned Doctor of Osteopathic Medicine (DO) degrees. Nearly one of every five rural physicians graduated from in-state programs (18 percent) and 5 percent said they were international medical graduates.

Figure 5. Areas of Classroom Instruction in Medical School Most Commonly Rated as Adequate or Inadequate by Rural Physicians in Colorado, 2009

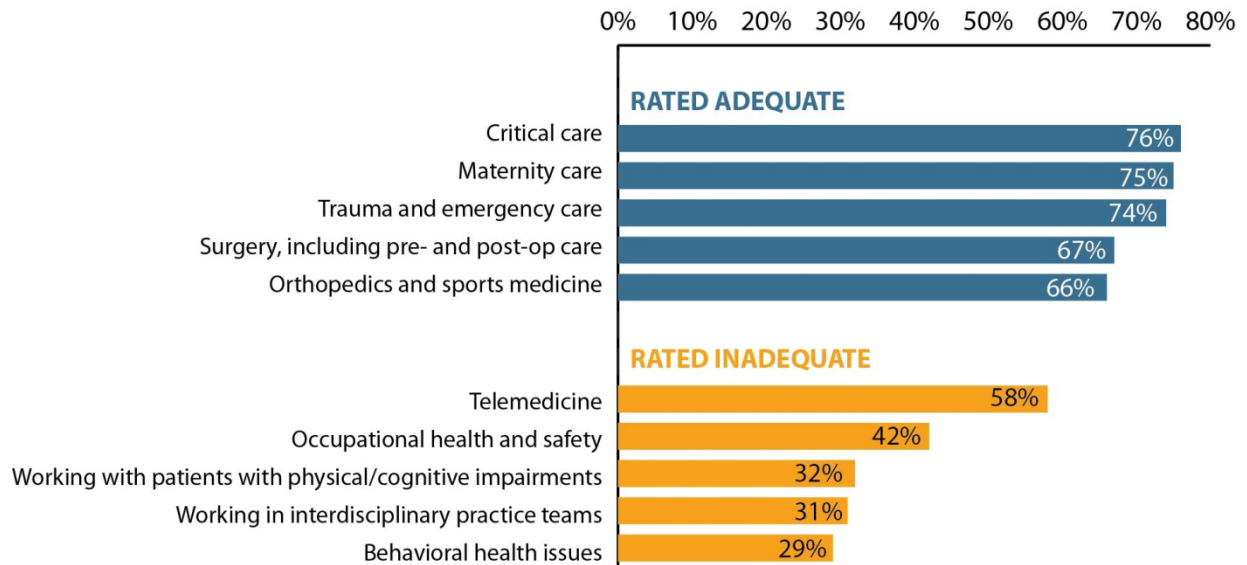


NOTE: Percentage indicates physicians who ranked reason as 1 or 2 (adequate) or 4 or 5 (inadequate) on a 5-point scale with 1 representing most adequate and 5 representing inadequate.

SOURCE: 2009 Rural Physician Survey, Colorado Health Institute, Q33

Of eleven possible areas of classroom instruction, areas relating to acute care were most likely to be rated as adequate. These areas included maternity care (52 percent), critical care and trauma/emergency care. Conversely, rural physicians most commonly rated their classroom instruction in telemedicine (79 percent) and occupational health (62 percent) as inadequate in preparing them for rural primary care practice. Overall, areas of classroom instruction were rated inadequate at a higher frequency than they were rated adequate. (see Figure 5.)

Figure 6. Areas of Clinical Preparation in a Residency Program Most Commonly Rated Adequate or Inadequate by Rural Physicians in Colorado, 2009



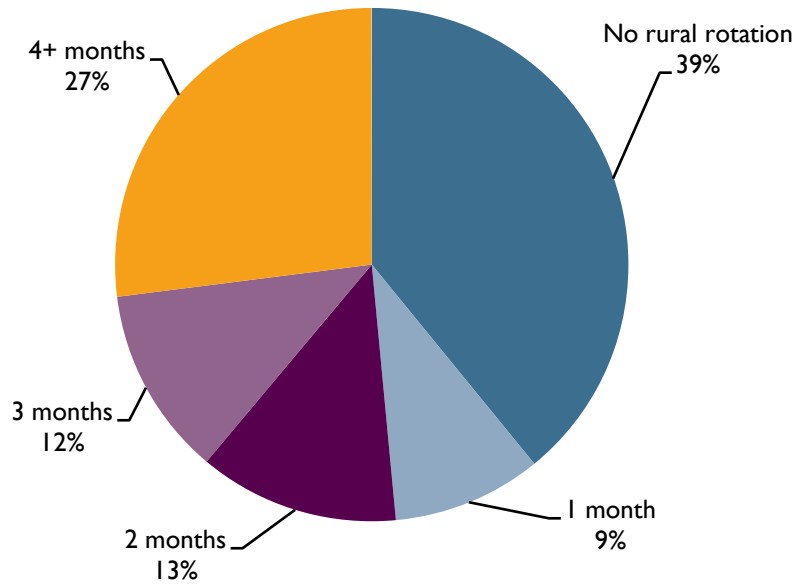
NOTE: Percentage indicates physicians who ranked reason as 1 or 2 (adequate) or 4 or 5 (inadequate) on a 5-point scale with 1 representing most adequate and 5 representing inadequate.

SOURCE: 2009 Rural Physician Survey, Colorado Health Institute, Q34

In addition to classroom experience in medical school, physicians also receive training through clinical experiences during their graduate medical education (residency). For residency training, topical areas of medical practice tended to be rated adequate at a higher rate than they were rated inadequate compared to the same areas in their classroom education.

Three-quarters of the rural physicians rated critical care, maternity care, and trauma/emergency care as areas of adequate clinical instruction during residency in terms of preparing them to provide primary care in a rural community. Likewise, telemedicine was ranked inadequate by more than half of rural physicians (58 percent). (see Figure 6.)

Figure 7. Time Spent in a Rural Rotation in Medical School by Rural Physicians in Colorado, 2009



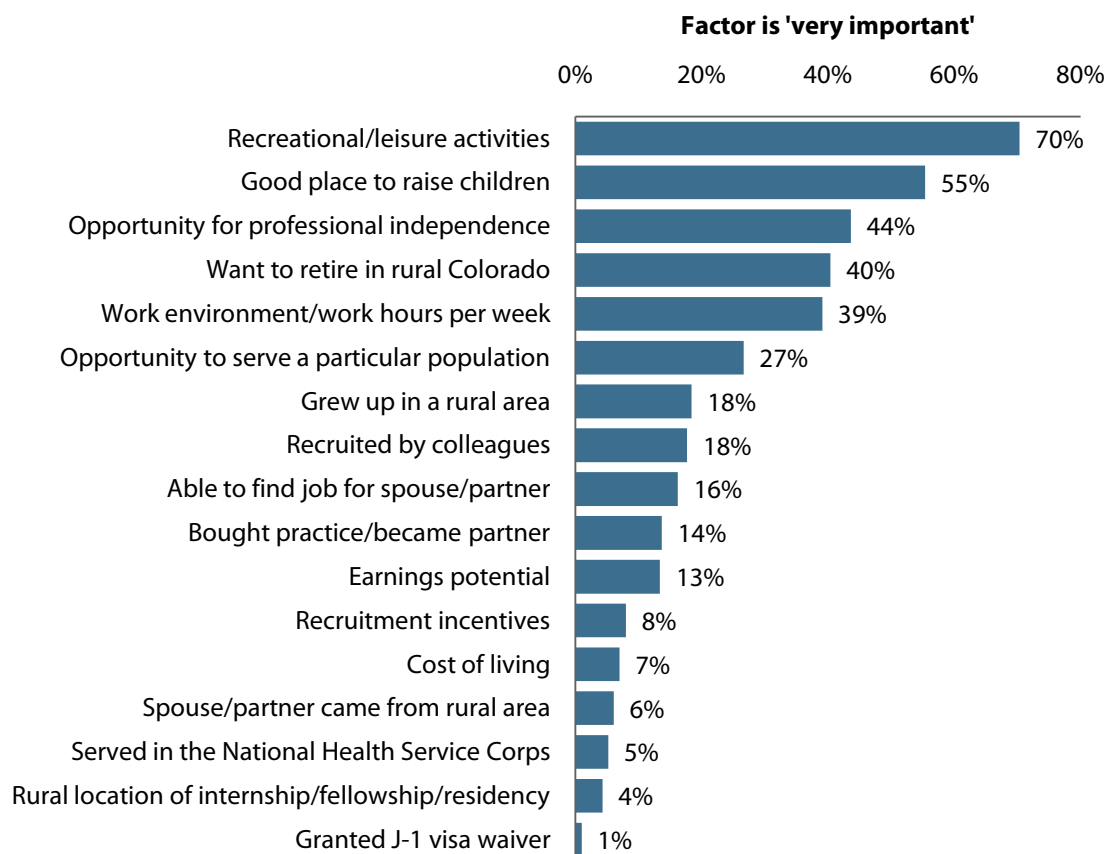
NOTE: Values may not total 100 percent due to rounding.

SOURCE: 2009 Rural Physician Survey, Colorado Health Institute, Q30

During the course of medical school, the majority of Colorado’s rural physicians (61 percent) spent at least one month in a rural rotation in medical school. (see Figure 7.) Additionally, rural physicians may have had other rural experiences following medical school or during the course of their graduate medical education (residency), including rural training tracks or fellowships.

4. Factors that Attract Physicians to Rural Practice

Figure 8. Most Important Factors for Choosing a Rural Practice Among Rural Physicians in Colorado, 2009

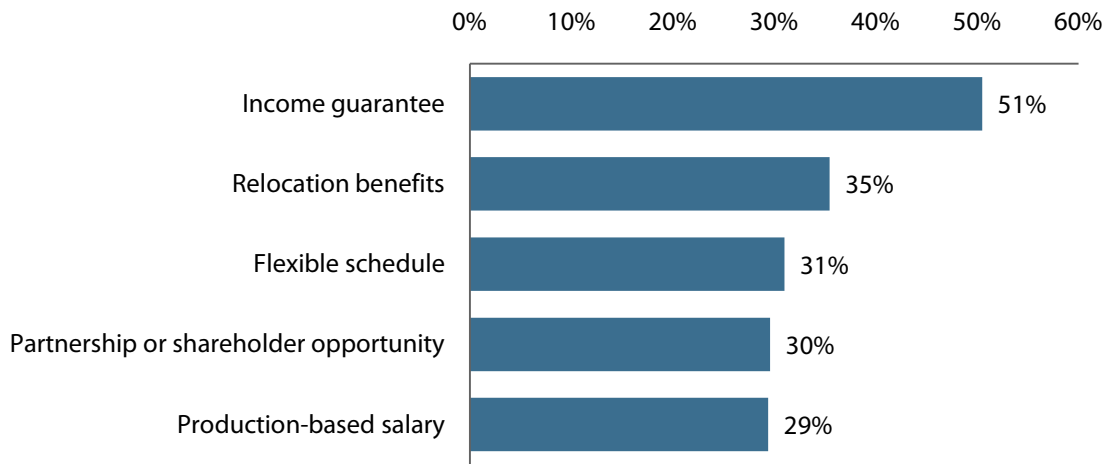


SOURCE: 2009 Rural Physician Survey, Colorado Health Institute, Q11

Among Colorado's rural physicians, the factors of greatest importance for choosing to practice rural medicine were primarily lifestyle-related. The top-ranked factor was recreational and leisure activities (70 percent). Having a good place to raise children was ranked second (55 percent), illustrating the importance of family considerations when physicians choose a practice location. (see Figure 8.)

Two-fifths of Colorado's rural physicians grew up in a rural area (39 percent). When considered alongside multiple factors, rural upbringing was not among the most important factors for choosing a rural practice, but was still very important for almost one-fifth of rural physicians (18 percent). (see Figure 8.)

Figure 9. Most Common Recruitment Incentives Offered to Rural Physicians in Colorado at Their Current Practice Position, 2009



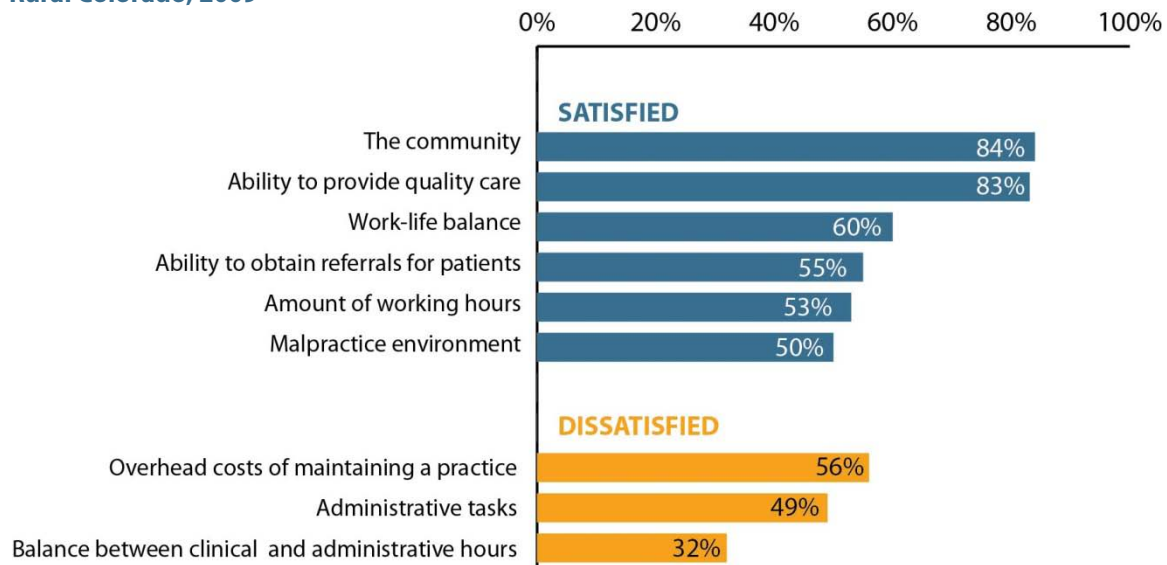
SOURCE: 2009 Rural Physician Survey, Colorado Health Institute, Q14

Colorado’s rural physicians reported that lifestyle factors were most important for their decision to practice in rural areas. However, recruitment incentives most commonly targeted other factors (with the exception of flexible scheduling).

Half of the state’s rural physicians (51 percent) were offered an income guarantee to recruit them to their current practice location. Relocation benefits were given to more than a third of rural physicians (35 percent) as a recruitment incentive. Although it was not among the most common incentives offered, loan repayment incentives were offered 13 percent of the time. Similarly, 11 percent of rural physicians were offered assistance finding employment for their spouse. (see Figure 9.)

5. Satisfaction with Rural Practice

Figure 10. Areas of Highest and Lowest Satisfaction Related to Living and Working as a Physician in Rural Colorado, 2009



NOTE: Percentage indicates physicians who ranked factor as 1 or 2 (satisfied) or 4 or 5 (dissatisfied) on a 5-point scale with 1 representing very satisfied and 5 representing not at all satisfied.

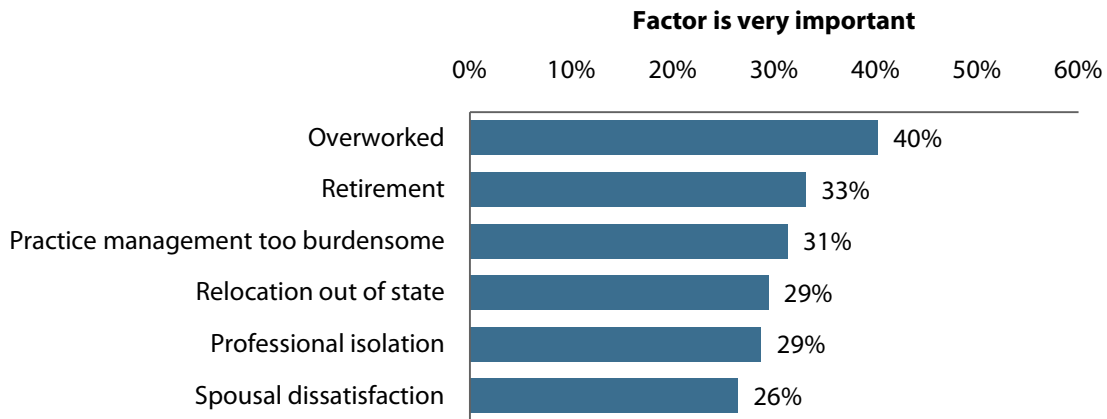
SOURCE: 2009 Rural Physician Survey, Colorado Health Institute, Q6

Job satisfaction plays a role in retaining physicians and avoiding turnover. In Colorado rural physicians were satisfied by a variety of aspects related to living and working in rural areas of the state. These factors were a mix of personal factors, including pride in their work, relationship with the community and work-life balance.

The least satisfying aspects associated with rural medical practice related to the difficulty of handling economic and administrative pressures. The top three factors contributing to dissatisfaction among rural physicians were overhead costs (56 percent), administrative tasks (49 percent), and the balance between clinical and administrative hours (32 percent). (see Figure 10.)

6. Reasons for Potential Turnover

Figure 11. Top Reasons for Having Plans to Leave Their Current Practice in the Next 12 months Among Rural Physicians in Colorado, 2009



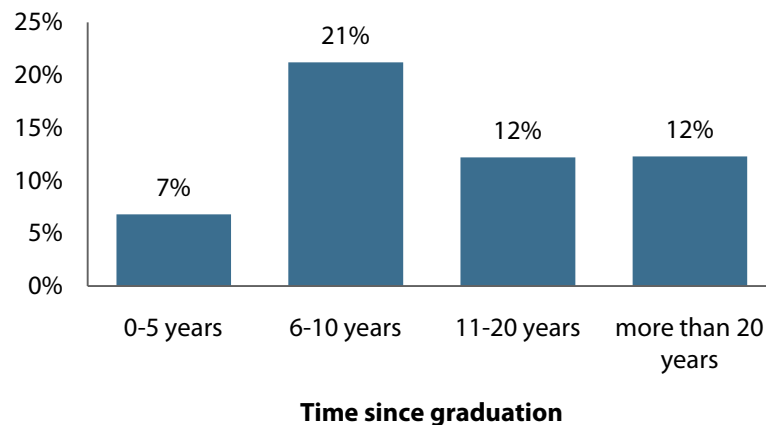
NOTE: Physicians rated each reason as very, somewhat or not important on a 3-point scale

SOURCE: 2009 Rural Physician Survey, Colorado Health Institute, Q37

Retention of rural physicians can be improved by examining the factors that contribute to turnover. At the time of the survey, 14 percent of rural physicians in Colorado reported that they planned to leave their current position within the 12 months following the survey.

Their reasons for leaving aligned with important areas of satisfaction such as overwork and the burden of practice management. In one third of cases, potential turnover was related to retirement. It is also worth noting that spousal dissatisfaction was an important factor for a quarter of physicians with plans to leave their current practice. (see Figure 11.) This may relate to the low frequency that assistance with spousal employment is offered as a recruitment incentive.

Figure 12. Percentage of Rural Physicians in Colorado Planning to Leave Their Current Practice in Next 12 months, by Time Since Graduation, 2009



SOURCE: 2009 Rural Physician Survey, Colorado Health Institute, Q13, Q36

The potential for turnover was highest among rural physicians who had graduated in the past six to 10 years (21 percent). This pattern can help to guide targeted retention efforts to those with the highest turnover potential. (see Figure 12.)

Table 2. Reasons for Planning to Leave Current Practice in Next 12 Months Among Rural Physicians in Colorado, by Years Since Graduation, 2009

| Time since graduation | Most common reasons for planning to leave | Rated very important |
|-----------------------|---|----------------------|
| 6-10 years | Relocating out of state | 72% |
| | Spousal dissatisfaction | 30% |
| 11-20 years | Overwork | 63% |
| | Practice management is too burdensome | 42% |
| More than 20 years | Retirement | 52% |
| | Practice management is too burdensome | 28% |
| | Overwork | 27% |

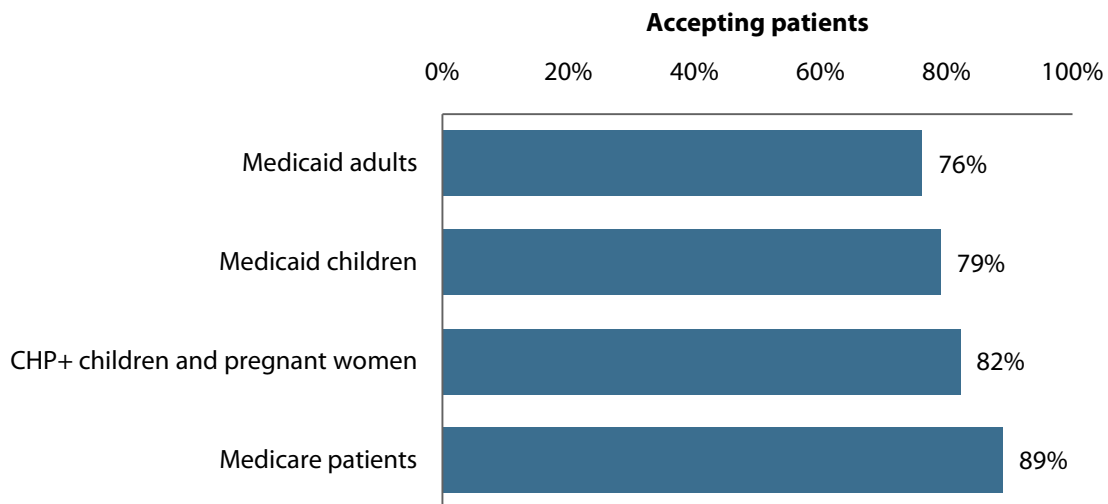
NOTE: Physicians rated each reason as very important, somewhat important or not important on a 3-point scale

SOURCE: 2009 Rural Physician Survey, Colorado Health Institute, Q31, Q37

The reasons physicians cited for leaving their current practice varied according to the length of time since their graduation. Early-career rural physicians were more likely to cite lifestyle-related reasons, compared to overwork and administrative burden among mid- and late-career physicians. Late-career physicians also cited retirement. (see Table 2.)

7. Access to Public Insurance

Figure 13. Rural Physicians in Colorado Reporting That Their Practice Accepts Medicaid, CHP+ or Medicare Patients, 2009

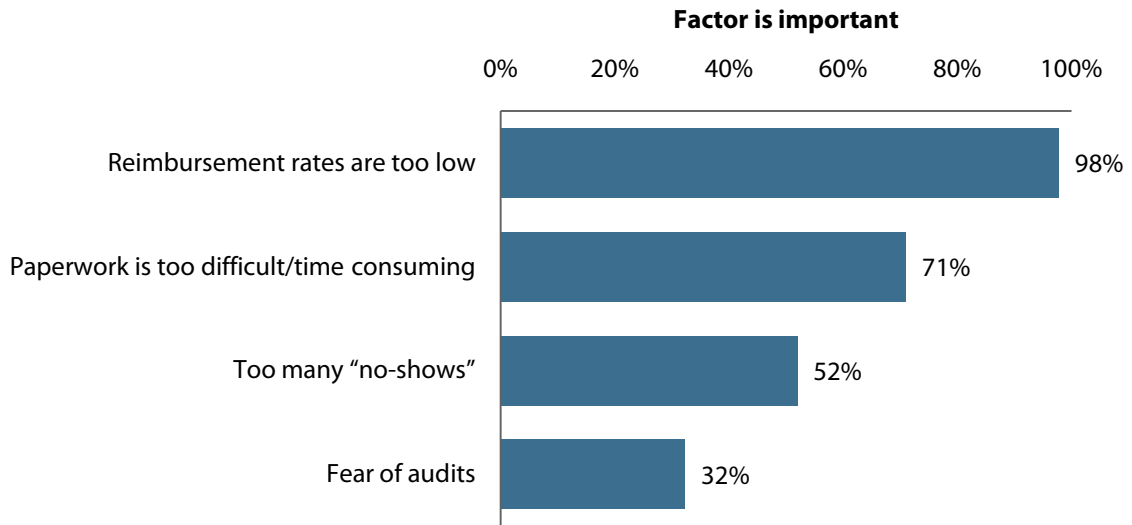


SOURCE: 2009 Rural Physician Survey, Colorado Health Institute, Q23

Access to care is an important issue, particularly in rural areas. In addition to potential long distances to reach a provider, it can sometimes be difficult to find a provider that accepts public insurance plans.

At the time of the survey, rural physicians' practices accepted fewer clients covered by Medicaid than those covered by CHP+ and Medicare. (see Figure 13.) The survey found that 76 percent of rural physicians accepted adults covered by Medicaid and 79 percent accepted children covered by Medicaid.

Figure 14. Reasons for Rural Physicians in Colorado Not Accepting Medicaid Reimbursement, 2009



NOTE: Percentage indicates physicians who ranked reasons 1 or 2 on 5-point scale with 1 representing very important and 5 representing not important.

SOURCE: 2009 Rural Physician Survey, Colorado Health Institute, Q23, Q25

Of the rural physicians who indicated that their practice was closed to Medicaid adults and children, they almost universally (98 percent) cited low reimbursement rates as obstacles, and nearly three in four (71 percent) cited the administrative burden of accepting these patients. (see Figure 14.)

Survey Methods

The Colorado Health Institute (CHI) in 2009 conducted a survey of active licensed physicians working in rural communities of Colorado on behalf of the Rural Track of the University of Colorado School of Medicine, the Colorado Medical Society, the Colorado Rural Health Center, COPIC Companies (COPIC Insurance Co., COPIC Financial Service Group and COPIC Medical Foundation), Area Health Education Centers, the Health Resources and Services Administration Region 8 and The Colorado Trust.

The Colorado Department of Regulatory Agencies records showed that 13,052 physicians were licensed to practice in the state in 2009. CHI used Rural Urban Commuting Area designations to determine the rural classification of physician addresses from the licensure information, which, following the survey, were confirmed by survey responses. Of the eligible sample of 1,272 physicians practicing in rural Colorado who received the survey, 56 percent responded (n=711). Weights were calculated and applied to the data to present findings that are representative of all rural physicians in Colorado.

Endnotes

- ¹ Colorado Health Institute. Analysis of 2009 physician licensure data from the Colorado Department of Regulatory Agencies; US Census Bureau. (2000). 2000 Census of Population and Housing, Population and Housing Unit Counts PHC-3. (Retrieved on February 3, 2011, from: <http://www.census.gov/compendia/statab/2011/tables/11s0029.pdf>).