Policy Brief

Workforce Challenges in Delivering Health Care to Elderly and Low-Income Populations in Wyoming:

Medical Providers' Acceptance of Medicaid and Medicare Patients

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by

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The Center brings together researchers from medicine, nursing, dentistry, public health, the allied health professions, pharmacy, and social work to perform applied research on the distribution, supply, and requirements of health care providers, with emphasis on state workforce issues in underserved rural and urban areas of the WWAMI region. Workforce issues related to provider and patient diversity, provider clinical care and competence, and the cost and effectiveness of practice are emphasized.

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EXECUTIVE SUMMARY

This report examines the extent to which medical professionals in Wyoming provide care to enrollees in Medicaid and Medicare, and factors associated with provider acceptance of new patients.

- Medicaid, jointly funded and administered by states and the federal government, provides health care coverage to low-income, financially needy populations. EqualityCare, Wyoming's Medicaid program, insured 14.8% of the state's population in 2008.
- Medicare, federally funded and administered, provides insurance coverage to the population age 65 and older as well as certain eligible populations under 65, such as the disabled. Medicare insured 15.1% of Wyoming's population in 2004.
- For eligible individuals to receive services under Medicaid and Medicare, health care providers must be willing and able to accept these patients at the programs' payment rates.
- EqualityCare reimburses providers at relatively high rates compared with other states and compared with Medicare reimbursement rates, which are set by the federal government.

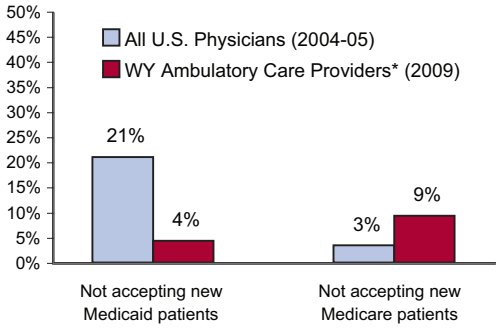
This report's findings can inform Wyoming health care policies for low-income and elderly populations, establish a baseline against which to track trends in health care access, and identify issues of concern for further investigation.

KEY FINDINGS

The Center for Health Workforce Studies at the University of Washington analyzed data from 2008-09 surveys of Wyoming medical clinics and health care providers—including physicians, physician assistants, and advanced practice nurses—for the Wyoming Healthcare Commission. Key findings include:

- New patients wait longer for an appointment at clinics that serve more rather than fewer Medicare patients.
- Wyoming ambulatory care practices accept new Medicaid patients more readily than new Medicare patients, whereas nationally, the

Percentage of Providers Accepting No New Medicaid/Medicare Patients



* Includes Physicians, Physician Assistants, and Advanced Practice Nurses

pattern is reversed, with practices accepting new Medicare patients more readily than new Medicaid patients.

- Smaller clinics are less likely to accept new Medicaid patients.
- Specialists are more likely than primary care providers to accept all new Medicaid and Medicare patients.
- Rural physicians are more likely than urban physicians to accept new Medicaid and Medicare patients.

POLICY CONSIDERATIONS

- Providers' overall high rates of accepting new Medicaid patients, relative to both national rates and Medicare acceptance rates in Wyoming, provide preliminary evidence that Wyoming's EqualityCare policies, including Pay for Participation program incentives, have had a positive effect.
- Smaller clinics, particularly those that are the sole health care providers in a community, may require additional incentives to ensure Medicaid patient access.
- If the Medicaid-eligible population grows in the current economic downturn, it may be challenging to maintain current levels of coverage.
- Further investigation is needed to determine whether clinics in particular communities or specific clinical settings are experiencing difficulties scheduling new appointments due to a heavy Medicare patient load.
- As Wyoming's elderly population grows, health care access may become increasingly limited without changes to Medicare reimbursement policies.
- Shortages of rural and primary care physicians are projected to increase across the United States. While Wyoming's rural physicians had greater acceptance rates than urban physicians for both Medicaid and Medicare patients, primary care providers statewide were less willing than specialists to accept new patients with these types of public insurance. Sole providers in isolated rural communities may feel socially or financially obligated to accept all patients, contributing to the higher rural acceptance rates found in this study. Further stress to reimbursement in rural areas due to an increasing proportion of Medicare patients or other factors ultimately could exacerbate predicted shortages of rural primary care providers.

These findings offer insight into the effectiveness of state and federal policies to insure low-income and elderly populations. Periodic examination of the attitudes and practices of providers who serve these populations is needed to monitor Wyoming citizens' access to appropriate and timely health care. This information can inform state-level policymaking and program implementation, as well as national reform efforts to increase the availability of affordable health care.

Workforce Challenges in Delivering Health Care to Elderly and Low-Income Populations in Wyoming: Medical Providers' Acceptance of Medicaid and Medicare Patients

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INTRODUCTION

The purpose of this report is to examine patterns of provider acceptance of Medicaid and Medicare patients in Wyoming. This information can help guide Wyoming's health care policies for low-income and elderly populations, establish a baseline for tracking trends in health care access, and identify issues of concern for further investigation. Using new data from surveys of Wyoming's health care providers, this report seeks to answer several questions:

- What proportion of Wyoming's medical practices are made up of Medicaid and Medicare patients?
- When practices serve more of these patients, does it have an impact on the amount of time new patients must wait for an appointment?
- Are new Medicaid and Medicare patients readily accepted by medical practices in Wyoming?
- Do rates of acceptance vary by size of practice? Medical specialty? Urban or rural location?
- What are the implications of this study's findings for future policy decisions?

Medicaid and Medicare are federal health insurance programs that combined provide coverage to over 90 million beneficiaries nationwide.[1] Medicaid, with the larger enrollment of the two programs, targets low-income, financially needy beneficiaries. Medicare provides coverage to almost all persons ages 65 or older regardless of financial need, certain persons under 65 on Social Security disability, and those with permanent kidney failure or amyotrophic lateral sclerosis (ALS or Lou Gehrig's disease). While the federal government administers Medicare uniformly throughout the United States, Medicaid is jointly funded and administered by the states, whose rules for eligibility, services covered, and provider reimbursement vary considerably from state to state.

For Medicaid and Medicare services to reach covered individuals, health care providers must be available, willing, and able to accept these patients at the reimbursement rates of each program. The purpose of this study is to examine the extent to which health care providers in Wyoming provide health care to Medicaid and Medicare recipients, and to explore the issues associated with acceptance of these types of insurance.

Wyoming is highly rural, with the smallest population of any state in the United States. The proportion of gross state product that Wyoming spends on health care is also the lowest of any state at 9.4%, compared with an average of 13.3% for the United States as a whole.[1] A total of 78,634 Wyoming residents, 14.8% of the state's population,[2] were recipients of EqualityCare, Wyoming's Medicaid program, in 2008 (see Table 1), compared with a national average of 20% receiving Medicaid coverage.[1] Wyoming's total

Table 1. Wyoming Medicaid and Medicare Populations and Expenditures, Fiscal Year 2008

EqualityCare (Medicaid)*	Medicare†
78,634 enrollees $445 million	75,790 enrollees $420 million (FY 2004)

* Source: Wyoming Department of Health. Wyoming Medicaid/EqualityCare state fiscal year 2008 annual report. Available at: http://health.wyo.gov/Media.aspx?mediaId=6799. Accessed June 28, 2009.
† Source: The Henry J. Kaiser Family Foundation. Statehealthfacts.org. Available at: http://www.statehealthfacts.kff.org/. Accessed June 28, 2009.

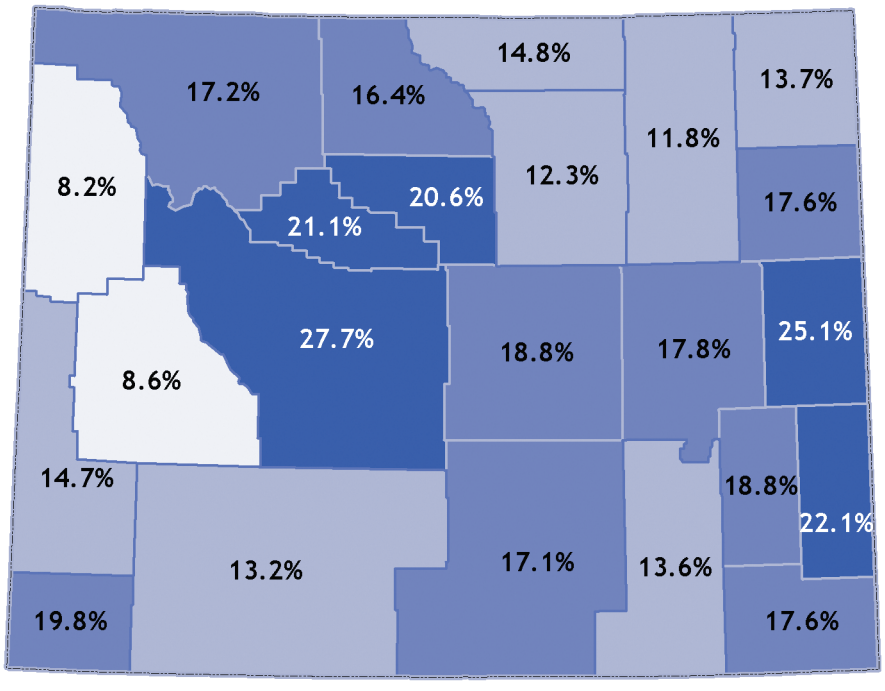
Medicare enrollment in 2004 was of a comparable size to Medicaid enrollment: 75,950 enrollees, or 15.1% of the state's population.[3] Wyoming Medicare coverage is slightly higher than the national average of 14.3% of the population.[3,4]

EQUALITYCARE: WYOMING'S MEDICAID PROGRAM IN THE NATIONAL CONTEXT

The proportion of Wyoming's population covered by Medicaid varies widely across the state, from a low of 8.2% in Teton County to a high of 27.7% in Fremont County (see Figure 1). EqualityCare differs from Medicaid programs in most other states in several important ways:

- In 2009 Wyoming is tied with New Hampshire for the lowest Medicaid Federal Medical Assistance Percentage (federal matching funds proportion) of any state, at 56.2%.[1] The highest state matching level is 83.6% in Mississippi. The federal match is based on a state's per capita income relative to the national average. Wyoming's low federal matching rate reflects the fact that Wyoming is relatively wealthy, on a per capita basis, compared with other states.
- EqualityCare focuses principally on the categorically needy: those populations that it is required to cover by federal mandate. Wyoming also covers certain optional beneficiary categories and medications, which are not federally mandated.[1] Wyoming's income criteria for eligibility are relatively low, such that Wyoming covers a narrower segment of its low-income population than do many other states.
- For the populations and services that are covered, however, EqualityCare is one of the most generous Medicaid programs in the nation. Wyoming's Medicaid expenditures per enrollee are higher than those of most other states, and Wyoming now has the second highest Medicaid Physician Fee Index, after Alaska. From 2003 to 2008, Wyoming increased its Medicaid physician fees at a faster rate than almost all other states.[5] High physician fees are thought to help ensure access by compensating for the fact that Wyoming does not have as extensive a network of subsidized low-income clinics (e.g., Federally Qualified Health Centers) as do other states.
- In 40 states, Medicare reimbursements are higher than those for Medicaid. Wyoming, with the highest ratio of Medicaid to Medicare fees of any state, shows the opposite trend. In 2008, Medicaid reimbursement was 1.43 times that of Medicare, compared with an average ratio of 0.72 nationally.[1]

Figure 1. EqualityCare Recipients in Wyoming: Percentage of County Population, 2008



Data Sources: US Census, Wyoming Department of Health, ESRI Map Date: July 2009

WYOMING'S MEDICARE ENROLLEES: ELDERLY AND DISABLED POPULATIONS

The size of Wyoming's population 65 years and older is comparable to that of the nation as a whole. An estimated 63,901 Wyoming residents, or 12.2%, were 65 years and older in 2007, compared with 12.6% of the total U.S. population.[6] Medicare beneficiaries ages 18 to 64 on Social Security Disability Insurance constituted 3.3% of Wyoming's population, compared with 4.0% of the U.S. population as a whole.[1]

Figure 2 shows Wyoming's population 65 years and older by county. Because the vast majority of Americans age 65 and older are eligible for Medicare, this map is a reasonable approximation of Wyoming's Medicare population distribution, though it does not reflect other beneficiary categories such as the disabled under age 65. There is significant variation in the elderly population distribution across the state, from a low of 5.7% in Campbell County to a high of 24.5% in Hot Springs County. These proportions will increase with time as the population ages overall: Wyoming's elderly population is expected to increase from 11.1% in 1995 to 20.9% in 2025.[7]

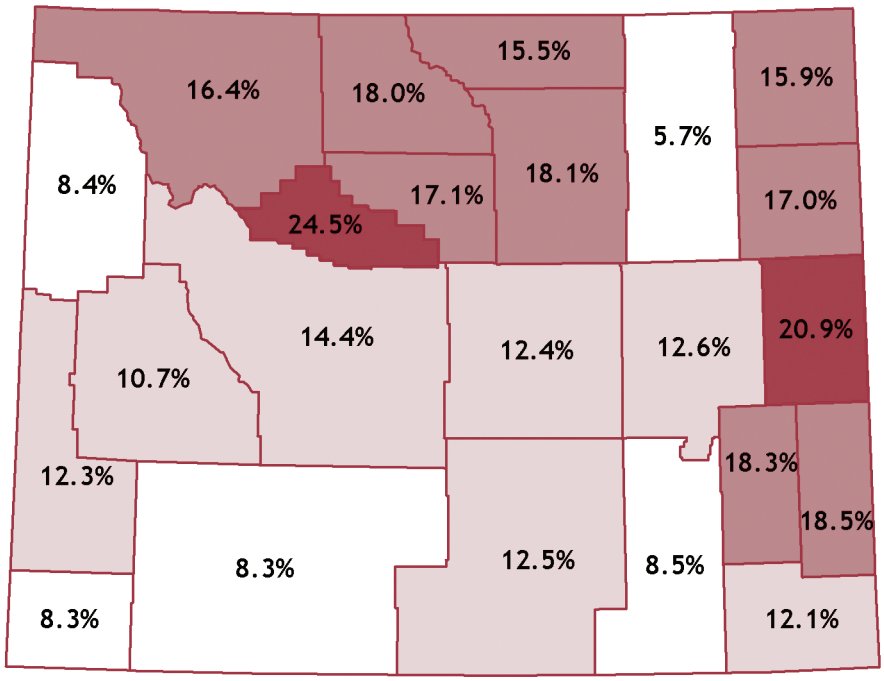
FACTORS ASSOCIATED WITH ACCEPTANCE OF MEDICAID AND MEDICARE PATIENTS

Medicare and Medicaid beneficiaries' access to health care depends on an adequate supply of local medical providers who accept these patients. During the past decade there has been concern about declining rates of acceptance of both types of insurance nationally.[8-10] One study showed that just 52% of physicians reported accepting all new Medicaid patients in 2004-05, compared with 73% accepting all new Medicare

Factors Associated with Lower Physician Acceptance of Medicaid and Medicare Patients Nationally

- Low rates of provider reimbursement compared with private insurance.[6]
- High administrative burden.[6]
- Reimbursement delays.[8,9,11]
- Primary care providers report less willingness than specialists.[8,9]
- Physicians in large metropolitan areas report less willingness than smaller metropolitan and rural physicians.[9,12]

Figure 2. Percentage of Wyoming's Population Over 65, 2007



patients.[9] The trend away from accepting Medicaid patients was particularly pronounced among solo and small group practices. These patterns suggest that in rural areas, enrollees increasingly run the risk of having few or no local providers who will accept Medicaid, and to a lesser extent, Medicare.

PATTERNS OF MEDICAID AND MEDICARE ACCEPTANCE AMONG WYOMING'S MEDICAL PROVIDERS

The findings reported here are based on analyses of surveys of Wyoming's licensed health care providers conducted for the Wyoming Healthcare Commission by the Center for Health Workforce Studies at the University of Washington (UW CHWS). UW CHWS developed questionnaires to survey medical facilities and providers, including physicians/osteopathic physicians (referred to collectively as "physicians" throughout), physician assistants, and advanced practice nurses. The Wyoming Survey & Analysis Center (WYSAC) at the University of Wyoming carried out the surveys from late 2008 through early 2009. The response rate for physicians and advanced practice nurses was 56%; for physician assistants, the rate was 62%. Response rates were comparable for licensees with in-state and out-of-state addresses, providing reassurance that the responses are reasonably representative of the total licensed population.

We report results for the 261 Wyoming clinics that responded to the clinic survey and identified themselves as medical clinics.

The type and number of health care professionals overall who responded to the provider surveys, and who reported a primary practice location in Wyoming, are shown in Table 2. Physicians are by far the largest workforce of the three provider types, followed by advanced practice nurses and physician assistants. A majority of each provider type practices in an ambulatory care setting. Throughout the rest of this report, except where noted, we restrict analyses to ambulatory care providers because they have much greater discretion over acceptance of new patients than do inpatient providers.[13]

FINDINGS

New Patients Wait Longer for an Appointment at Clinics that Serve More Rather than Fewer Medicare Patients

Nearly half of clinics, 46%, estimated that more than a quarter of their patients were covered by Medicare, while just 27% of clinics reported that more than a quarter of their patients were covered by Medicaid. Nearly half of clinics with more than a quarter of their patients covered by Medicare reported appointment wait times of more than a week (Figure 3). By contrast, most clinics serving fewer Medicare patients reported that new patients could expect to get an appointment within a week. The proportion of Medicaid patients served made no difference in appointment wait times. Sixteen percent of clinics reported wait times of more than two weeks.

Wyoming Ambulatory Care Practices Accept New Medicaid Patients More Readily than New Medicare Patients, Contrary to U.S. Trends

U.S. physicians as a whole are more likely than Wyoming ambulatory care providers to report that their practices were not accepting new Medicaid patients, based on a comparison of Wyoming ambulatory care medical providers (physicians, physician assistants, and advanced practice nurses) in 2009 to all U.S. physicians (both inpatient and ambulatory care) in 2004-05. Wyoming providers, however, are more than twice as likely as all U.S. physicians to report their practices accept no new Medicare patients (see Figure 4). Thus Wyoming ambulatory care providers as a whole are more likely to accept new Medicaid than Medicare patients. This striking pattern, which runs contrary to U.S. trends overall, also holds for each of the three provider types when examined individually.

Table 2. Provider Survey: Respondents Whose Primary Practice Location Is in Wyoming

	Physicians and Osteopathic Physicians		Physician Assistants		Advanced Practice Nurses	
Hospital (non-federal)	122	(21.7%)	9	(8.3%)	25	(18.9%)
Ambulatory care*	382	(68.1%)	87	(80.6%)	77	(58.3%)
Other†	57	(10.2%)	12	(11.1%)	30	(22.7%)
Valid total	561	(100.0%)	108	(100.0%)	132	(100.0%)
Missing	5		1		4	
Total	566		109		136	

* Includes freestanding and hospital-associated clinics, Federally Qualified Health Centers, Rural Health Clinics, and office practices.
† Includes colleges/universities, state institutions, Veterans Administration and Indian Health Service facilities, health departments, and all other practice settings not included in the non-federal hospital and ambulatory care categories.

Figure 3. Wait Time for an Appointment by Percentage of Medicare Patients Served

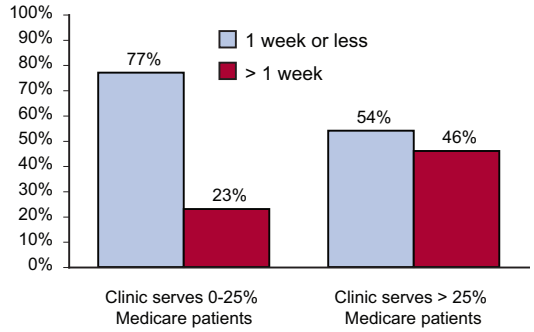


Figure 4. Percentage of Wyoming Providers Accepting No New Medicaid/Medicare Patients

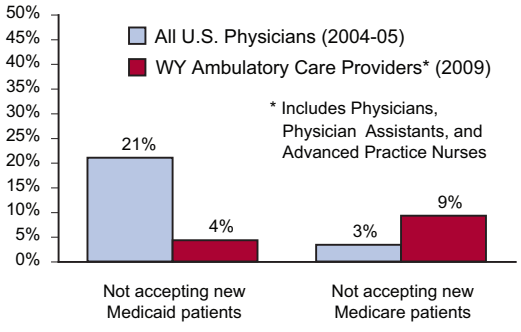


Figure 5 presents Medicaid acceptance by provider type. Medicare acceptance by provider type is shown in Figure 6. Just 3% of all U.S. physicians reported they were accepting no new Medicare patients, compared with 21% accepting no new Medicaid patients. Four percent of Wyoming's ambulatory care physicians reported accepting no new Medicaid patients, while 8% reported accepting no new Medicare patients. Eight percent of Wyoming's ambulatory care physician assistants reported accepting no new Medicaid patients, compared with 11% accepting no new Medicare patients. And just 1% of advanced practice nurses reported accepting no new Medicaid patients, compared with 14% accepting no new Medicare patients. Thus, Wyoming ambulatory care physician and physician assistant rates of acceptance resemble each other fairly closely, which is consistent with the fact that physician assistants practice under the supervision of physicians, and 85% of physician assistants receive supervision from physicians on site. In contrast, more than a third of Wyoming's ambulatory care advanced practice nurses do not have physicians in their practice, and they accept new Medicaid and Medicare patients at rates somewhat distinct from those of physicians and physician assistants. Advanced practice nurses are the least likely to accept "all" and the most likely to report acceptance of "some" or "most" new Medicaid and Medicare patients. As pointed out above, however, all three Wyoming provider types are more likely to accept new Medicaid patients and less likely to accept new Medicare patients than U.S. physicians as a whole.

Figure 5. Percentage of New Medicaid Patients Accepted by Wyoming Ambulatory Care Providers in 2009

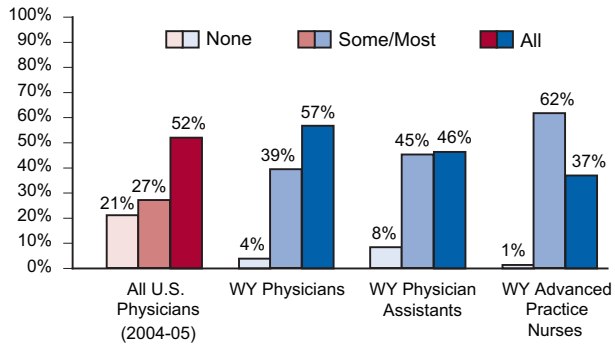
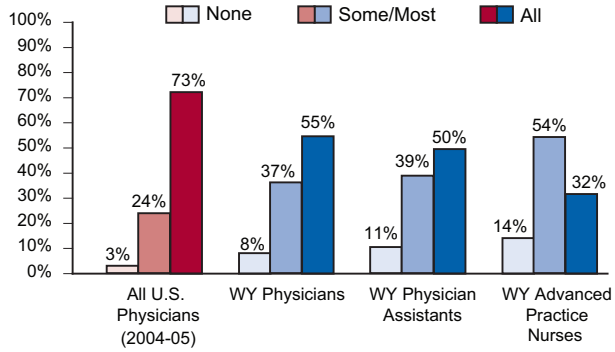


Figure 6. Percentage of New Medicare Patients Accepted by Wyoming Ambulatory Care Providers in 2009



Smaller Clinics Are More Likely Not to Accept New Medicaid Patients

Medical clinics indicating that they were closed to new Medicaid patients were less than half the size, in terms of total full-time equivalent positions (FTEs), than clinics open to new Medicaid patients, an average of 5.2 FTEs versus 12.4 FTEs (see Table 3). In contrast, the difference in size between clinics accepting and not accepting new Medicare patients was slight: 12.4 FTEs versus 11.6 FTEs. A comparison between solo[14] and group practice ambulatory care providers revealed similar, though much smaller, differences (not shown in tables): 7% of solo practice providers reported accepting no new Medicaid patients, compared with 2% of group practices, a difference of 5%. For Medicare, the difference was just 3%: 11% of solo providers reported accepting no new Medicare patients, compared with 8% of group providers.

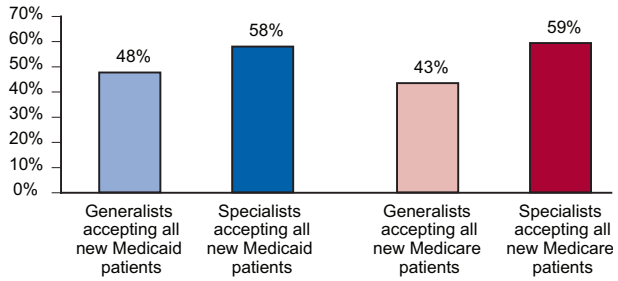
Table 3. Average Size of Medical Clinics Accepting and Not Accepting New Medicaid/Medicare Patients

	New Medicaid Patients		New Medicare Patients	
	Accepting	Not Accepting	Accepting	Not Accepting
Clinic size (average FTEs)	12.4	5.2	12.4	11.6

Specialists Are More Likely than Generalist/Primary Care Providers to Accept All New Medicaid and Medicare Patients

Fifty-eight percent of Wyoming specialist ambulatory care providers reported accepting all new Medicaid patients, compared with 48% of primary care providers, a difference of 10% (see Figure 7).[15] For Medicare patients, the difference of 16% was even greater: 59% of Wyoming specialist ambulatory care providers reported accepting all new Medicare patients, compared with 43% of primary care providers. These patterns are consistent with national trends for generalist and specialist physicians.

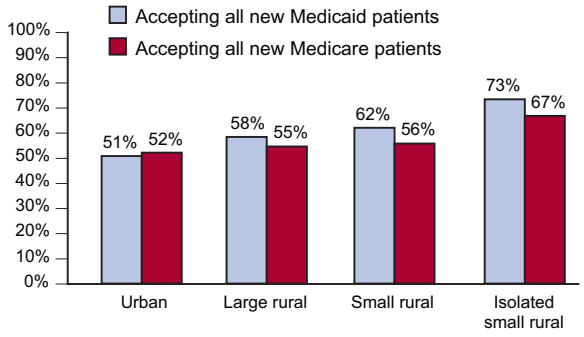
Figure 7. Accepting All New Medicaid/Medicare Patients: Generalists/Primary Care vs. Specialists (All Wyoming Ambulatory Care Providers)



Rural Physicians' Practices Are More Likely to Accept New Medicaid and Medicare Patients

The more rural a physician's practice location, the more likely the practice accepts all new Medicaid patients (see Figure 8). Seventy-three percent of isolated small rural physicians reported accepting all new Medicaid patients, compared with 51% of those in urban locations. A similar trend, though not as pronounced, was found for Medicare, with 67% of isolated small rural versus 52% of urban physicians reporting acceptance of all new Medicare patients. Physician assistants and advanced practice nurses showed no clear pattern of acceptance by location (not shown).

Figure 8. Wyoming Ambulatory Care Physicians' Acceptance of All New Medicaid/Medicare Patients by Urban-Rural Continuum



POLICY CONSIDERATIONS

The patterns of Wyoming providers' acceptance of new Medicaid and Medicare patients may offer lessons for policymakers. Here we offer policy considerations as they apply to Medicaid and Medicare programs separately and together as appropriate.

MEDICAID CONCERNS

Providers' overall high rates of accepting new Medicaid patients, relative to both nationally reported rates and rates of accepting new Medicare patients in Wyoming, suggest that Wyoming's EqualityCare policies have helped patients' ability to access care. These policies include relatively high reimbursement rates and "Pay for Participation" program incentives. Pay for Participation encourages adherence to clinical guidelines by offering providers higher reimbursements for implementing evidence-based disease prevention and chronic illness management approaches.[16] The program aims to support providers by reimbursing them quickly and providing clinical support services. The provider surveys did not ask about Pay for Participation, but state policymakers report anecdotally that providers appear to judge the program more favorably than Medicare.

The fact that smaller clinics were less likely to accept new Medicaid patients indicates that the capacity constraints they face may require special kinds of incentives or supports. In particular, smaller clinics that are the sole health care providers in a community may merit special attention to ensure Medicaid patient access. Clinics in more isolated rural areas that are the sole providers for their community may feel socially or financially obligated to accept all patients, contributing to the higher rural acceptance rates found in this study.

While Wyoming attempts to ensure access to high-quality care for EqualityCare enrollees through provider fees, incentives, and patient programs, some medically needy uninsured populations do not qualify for EqualityCare coverage. In 2006-07, 16% of Wyoming's nonelderly were uninsured, similar to the national rate of 17%.[1] The 2008-09 economic recession has likely increased the numbers of uninsured Wyoming citizens while straining the state's health care budget. A 2007 report on policy options to expand health insurance coverage in Wyoming described expanding EqualityCare, to cover otherwise uninsured populations, as an incremental step with a modest cost to the state.[17] Under recessionary conditions, however, it may prove challenging for the state budget to keep pace with a growing Medicaid-eligible population even under existing coverage rules. Will providers remain as open to new Medicaid patients as they have been? Monitoring changes in provider acceptance of Medicaid patients through difficult economic times may be increasingly important for crafting appropriate policy responses to sustain the high level of access to care that EqualityCare has helped to establish for Wyoming's low-income citizens.

MEDICARE CONCERNS

Of particular concern is that Wyoming practices were less accepting of new Medicare patients than were U.S. physicians as a whole. As Wyoming's elderly population grows, health care access may become increasingly limited. In May 2009, Wyoming U.S. Senator John Barrasso co-sponsored federal legislation to increase Medicare reimbursements to rural providers, the outcome of which was not known at the time of this report (S. 1157, the Craig Thomas Rural Hospital and Providers Equity Act of 2009).[18] If implemented, higher fees might help increase Medicare acceptance overall in a predominantly rural state such as Wyoming. This strategy, however, would not address the lower Medicare acceptance rates that we found among urban physician practices, of which only about half were open to all new Medicare patients. Medicare reimbursement rates and related issues, such as reimbursement turnaround times and paperwork burden, may require more study to identify ways to increase both urban and rural providers' acceptance of Medicare patients.

Survey findings suggest that clinics with a greater concentration of Medicare patients may also carry a greater patient workload overall, to the point of hampering timely scheduling of new patient appointments. Though this problem does not affect the majority of clinics, 16% reported appointment wait times of more than two weeks. More information is needed to understand the dynamics underlying longer wait times, including whether certain communities or types of services are particularly affected.

MEDICAID AND MEDICARE PATIENT ACCESS CONCERNS

These data do not address whether or not Wyoming has a sufficient health care workforce. A separate report on primary care providers in Wyoming found that supply was low in many Wyoming counties, particularly rural counties.[19] Rural physicians reported greater acceptance rates for both Medicaid and Medicare patients, but what might appear to be a rural advantage may actually mask access problems if there are not enough rural providers in the first place. Moreover, we found that primary care providers are less willing than specialists to accept new patients with either type of public insurance.

A more general caution is that providers' self-reported acceptance of new patients is probably overstated due to social desirability bias when responding to surveys. It is difficult to measure access to ambulatory care accurately.[20] For all of the above reasons, it is important not to equate the patterns we have reported

with direct measurement of patient access to care. These results are a snapshot in time that provides a starting point for inquiry into the effectiveness of state and federal policies to insure low-income, elderly, and other populations whose access to health care might otherwise be in jeopardy. Periodic assessment of providers' attitudes and practices in serving these populations is needed to monitor trends in Wyoming citizens' access to appropriate timely health care. This information should inform state-level policymaking and program implementation, most obviously with respect to EqualityCare, but also national reform efforts to increase the availability of affordable health care.

NOTES

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13. We urge some caution in interpreting these results because survey respondents may not be fully representative of all Wyoming health care providers, particularly when results represent small numbers, such as subgroup analyses. See the Appendix for detailed information on methods and results.

14. For physicians, the solo category included one- and two-physician practices.

15. Physician and physician assistant generalist specialties include family/general practice, internal medicine, and pediatrics. Advanced practice nurse generalists include adult and family practice, pediatrics, women's health, and school/college health.

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APPENDIX: STUDY METHODS AND DETAILED RESULTS

This appendix presents this study's survey methodology and detailed results. For additional information regarding methods and results, please contact the study authors.

SURVEY METHODOLOGY

The Wyoming Healthcare Commission in 2008 contracted the University of Washington Center for Health Workforce Studies (UW CHWS) and the Wyoming Survey & Analysis Center (WYSAC) at the University of Wyoming to carry out surveys of Wyoming's healthcare facilities and selected licensed healthcare professionals. The UW CHWS developed questionnaires[i] with input from key stakeholders and provided technical assistance for the surveys. WYSAC carried out the surveys in late 2008 and early 2009. All questionnaires were offered to respondents either online or on paper, via e-mail, fax, and paper questionnaire mailings.

Facility Surveys

Distinct questionnaires were sent to each of three groups of healthcare facilities—hospitals, pharmacies, and clinics—using a contact database obtained with the help of the Wyoming Healthcare Commission. The clinics data analyzed for this report were from medical clinics (the survey also included dental, mental health, substance abuse/addiction recovery, and long term care/rehabilitation facilities (Wyoming Healthcare Commission Practice Workforce Survey, 2008). Solo physician and solo dentist practices were excluded from the clinics survey contact list (to the extent they could be identified). These providers were included in the licensed health professionals surveys (described below). The clinics survey was conducted from late November 2008 through January 2009, including e-mail invitations, three paper mailings, and up to seven follow up phone calls to nonrespondents. Of the 597 clinic surveys sent, 496 responded for a response rate of 83.1%,[ii] 261 of which were medical clinics.

Licensed Health Professional Surveys

WYSAC surveyed licensed physicians (including osteopathic physicians), physician assistants, and advanced practice nurses from late March through May 2009 (also referred to as "providers"). Provider lists were obtained from the Wyoming Board of Nursing and the Wyoming Board of Medicine. Providers were sent up to two e-mail invitations and two paper questionnaires, with one reminder phone call to nonrespondents. Table A-1 displays response rates by professional type.

Table A-1. Response Rates for Wyoming Physicians, Physician Assistants, and Advanced Practice Nurses*

	Physicians and Osteopathic Physicians	Physician Assistants	Advanced Practice Nurses
Total number of surveys sent	2,762	211	382
Undeliverable	81	4	5
Deceased	6	0	0
Total valid	2,675	207	377
Total responses (n)	1,503	128	210
Total responses (%)	56.2%	61.8%	55.7%

* Data set extracted May 8, 2009.

i. These surveys included the Wyoming Healthcare Commission Practice Workforce Survey, 2008; Survey of Wyoming Licensed Health Care Providers: PHYSICIANS AND OSTEOPATHIC PHYSICIANS; Survey of Wyoming Licensed Health Care Providers: PHYSICIAN ASSISTANTS; and Survey of Wyoming Licensed Health Care Providers: ADVANCED PRACTICE NURSES. Survey questionnaires are available from http://depts.washington.edu/uwchws/questionnaires.html.

ii. Note that clinics having a business affiliation with other clinics (e.g., a main branch and affiliated branches) sometimes received and responded separately to questionnaires, while at other times, the main branch responded for the entire group of clinics. For this reason, it is not possible to determine how many clinics are in the denominator, that is, the precise size of the clinic population, necessary in order to calculate a true response rate.

Table A-2 displays the non-federal hospital/ambulatory care breakdown of providers whose primary practice location is in Wyoming. The findings in this report are based on the ambulatory care subsample except where indicated.

DETAILED RESULTS

The following tables provided detailed responses to the questions of interest for this report. Statistical tests (not shown) were performed for group comparisons, but small sample sizes frequently prevented detection of significant differences, particularly for physician assistants and advanced practice nurses.

Medicaid and Medicare Payer Mix and Acceptance of New Patients

Clinics were asked "What is your best estimate of the percent of patients in this practice/facility who are covered by the following programs?" for Medicaid and Medicare patients, with the response options: none, <10%, 10-25%, 26-50%, >50%. Providers were asked a similar question ("What is your best estimate of the percentage of patients in this practice who are covered by the following programs?") with the same response options. Table A-3 gives results for Wyoming ambulatory care providers and medical clinics.

Time for New Patients to Get a Clinic Appointment by Medicaid and Medicare Payer Mix

Clinics were asked "On average, how long will it take for a new patient calling your office to get an appointment for an examination or treatment?" with these response options: one week or less; more than 1 week, but less than 2; more than 2 weeks, but less than 4; more than 4 weeks, but less than 6; 6 or more weeks. Table A-4 displays the reported time for new patients (of any type) to get an appointment according to whether the proportion of Medicaid patients in the clinic is up to 25% vs. more than 25% of all patients, and the same breakdown for proportion of Medicare patients.

Clinics were also asked, "Is your practice accepting new [Medicaid, Medicare] patients?" with these response options: no, yes, NA, not eligible. Providers

Table A-2. Provider Survey: Respondents Whose Primary Practice Location Is in Wyoming

	Physicians and Osteopathic Physicians		Physician Assistants		Advanced Practice Nurses	
Hospital (non-federal)	122	(21.7%)	9	(8.3%)	25	(18.9%)
Ambulatory care*	382	(68.1%)	87	(80.6%)	77	(58.3%)
Other†	57	(10.2%)	12	(11.1%)	30	(22.7%)
Valid total	561	(100.0%)	108	(100.0%)	132	(100.0%)
Missing	5		1		4	
Total	566		109		136	

* Includes freestanding and hospital-associated clinics, Federally Qualified Health Centers, Rural Health Clinics, and office practices.
† Includes colleges/universities, state institutions, Veterans Administration and Indian Health Service facilities, health departments, and all other practice settings not included in the non-federal hospital and ambulatory care categories.

Table A-3. Medicaid and Medicare Payer Mix Reported by Wyoming Ambulatory Care Providers and Medical Clinics

Percentage of patients in this practice covered by…	Physicians and Osteopathic Physicians		Physician Assistants		Advanced Practice Nurses		Medical Clinics	
	Medicaid N (%)	Medicare N (%)	Medicaid N (%)	Medicare N (%)	Medicaid N (%)	Medicare N (%)	Medicaid N (%)	Medicare N (%)
None	11 (3.0%)	28 (7.7%)	4 (4.9%)	6 (7.5%)	2 (3.1%)	9 (14.1%)	17 (6.8%)	30 (12.0%)
<10%	71 (20.4%)	42 (11.6%)	10 (12.3%)	4 (5.0%)	7 (10.8%)	10 (15.6%)	72 (28.7%)	44 (17.5%)
10-25%	178 (49.0%)	110 (30.4%)	40 (49.4%)	27 (33.8%)	30 (46.2%)	26 (40.6%)	94 (37.5%)	62 (24.7%)
26-50%	82 (22.6%)	129 (35.6%)	21 (25.9%)	33 (41.3%)	19 (29.2%)	14 (21.9%)	50 (19.9%)	75 (29.9%)
>50%	18 (5.0%)	53 (14.6%)	6 (7.4%)	10 (12.5%)	7 (10.8%)	5 (7.8%)	18 (7.2%)	40 (15.9%)
Valid total	363 (100.0%)	362 (100.0%)	81 (100.0%)	80 (100.0%)	65 (100.0%)	64 (100.0%)	251 (100.0%)	251 (100.0%)
Missing	19	20	6	7	12	13	10	10
Total	382	382	87	87	77	77	261	261

Table A-4. Wait Time for New Patients to Get a Clinic Appointment by Medicaid and Medicare Payer Mix in Wyoming

Proportion of (a) Medicaid, (b) Medicare Patients in Practice	(a) Medicaid Patients				(b) Medicare Patients			
	0-25% N (%)		>25% N (%)		0-25% N (%)		>25% N (%)	
Wait time of one week or less	116	(67.1%)	43	(66.2%)	98	(76.6%)	60	(54.1%)
Wait time of more than one week	57	(32.9%)	22	(33.8%)	30	(23.4%)	51	(45.9%)
Total	173	(100.0%)	65	(100.0%)	128	(100.0%)	111	(100.0%)

were asked a modified version of this question: "At the present time, how many of the following types of patients is this practice accepting (please think of the entire practice, not just your own patients)?" Response options were: none, some, most, all, NA (no contract with insurance plan or no patients of this type presenting). Table A-5 presents results for medical clinics, Table A-6 for providers.

Table A-5. Wyoming Medical Clinics' Acceptance of New Medicaid and Medicare Patients

Is this practice accepting new…	Medicaid Patients N (%)		Medicare Patients N (%)	
Yes	227	(92.3%)	206	(88.4%)
No	19	(7.7%)	27	(11.6%)
Total	246	(100.0%)	233	(100.0%)
Missing	1		3	
Not applicable	14		25	
Total	261		261	

Acceptance of New Medicaid and Medicare Patients by Practice Size

Table A-7 shows acceptance of new Medicaid and Medicare patients by mean size of the clinic's practice. Practice size was measured in full-time equivalent (FTE) positions as reported by the clinics when asked to specify a numeric response to the question, "Approximately how many total FTEs (clinical, support, and administrative) are employed or work in this facility?"

Unlike the clinics questionnaire, the provider questionnaire did not ask total practice FTEs. Instead physicians were asked, "Which one of the following best describes your current employer or employment arrangement at this practice location?" For this analysis providers in one or two physician practices were compared with group practices. Physician assistants and advanced practice nurses were asked "Which ***one*** of the following ***best*** describes your current employment arrangement?" and could specify solo, group, or other practice arrangements. Table A-8 gives results for acceptance of new Medicaid patients, Table A-9 for Medicare.

Table A-6. Wyoming Ambulatory Care Providers' Acceptance of New Medicaid and Medicare Patients

Is this practice accepting new…	Physicians and Osteopathic Physicians				Physician Assistants				Advanced Practice Nurses			
	Medicaid Patients N (%)		Medicare Patients N (%)		Medicaid Patients N (%)		Medicare Patients N (%)		Medicaid Patients N (%)		Medicare Patients N (%)	
None	14	(3.9%)	28	(8.0%)	7	(8.3%)	9	(10.7%)	1	(1.4%)	10	(14.1%)
Some	109	(30.4%)	91	(25.9%)	29	(34.5%)	23	(27.4%)	32	(43.8%)	30	(42.3%)
Most	32	(8.9%)	41	(11.6%)	9	(10.7%)	10	(11.9%)	13	(17.8%)	8	(11.3%)
All	204	(56.8%)	192	(54.5%)	39	(46.4%)	42	(50.0%)	27	(37.0%)	23	(32.4%)
Valid total	359	(100.0%)	352	(100.0%)	84	(100.0%)	84	(100.0%)	73	(100.0%)	71	(100.0%)
Missing	13		11		3		1		2		2	
Not applicable	10		19		0		2		2		4	
Total	382		382		87		87		77		77	

Table A-7. Acceptance of New Medicaid and Medicare Patients by Medical Clinic Practice Size (Full-Time Equivalent Positions) in Wyoming

Is this practice accepting new…	Medicaid Patients		Medicare Patients	
		Clinic Size—FTE Positions		Clinic Size—FTE Positions
Response	N	Mean FTEs (SD)	N	Mean FTEs (SD)
Yes	209	12.4 (18.3)	189	12.4 (18.3)
No	15	5.2 (5.7)	23	11.6 (17.1)
Total	224	11.9 (17.8)	212	12.3 (18.1)

Table A-8. Acceptance of New Medicaid Patients by Solo vs. Group Practice* in Wyoming

	Physicians and Osteopathic Physicians		Physician Assistants		Advanced Practice Nurses	
	Solo or 2-Physician-Owned Practice	Group Practice (Owned by 3 or More Physicians)	Solo Practice	Group Practice	Solo Practice	Group Practice
	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)
None	9 (6.3%)	2 (1.5%)	2 (7.4%)	3 (4.8%)	2 (8.7%)	0 (0.0%)
Some	53 (37.1%)	40 (30.1%)	12 (44.4%)	20 (32.3%)	7 (30.4%)	43 (50.6%)
Most	11 (7.7%)	6 (4.5%)	4 (14.8%)	6 (9.7%)	6 (26.1%)	8 (9.4%)
All	70 (49.0%)	85 (63.9%)	9 (33.3%)	33 (53.2%)	8 (34.8%)	34 (40.0%)
Valid total	143 (100.0%)	133 (100.0%)	27 (100.0%)	62 (100.0%)	23 (100.0%)	85 (100.0%)

* Includes providers in ambulatory care, inpatient, and other settings. For physicians, includes only self-employed solo or group practices and excludes salaried, hourly, locum tenens, and other employment arrangements. For physician assistants and advanced practice nurses, includes all those who indicated solo or group practice regardless of pay or employment arrangement.

Acceptance of New Medicaid and Medicare Patients by Primary/Generalist vs. Specialist Care Providers

Providers were asked to select their primary area of practice: "Select ONE category below that best describes your primary area of practice. If you are not clinically active, please select the type of work with which you are most closely associated." Physicians and physician assistants were classified as engaging in primary/generalist practice if they selected family/general practice, internal medicine, and pediatrics. All other responses were classified as specialist care. Advanced practice nurses were classified as engaging in primary/generalist practice if they selected adult and family practice, pediatrics, women's health, and school/college health. All other responses were classified as specialist care. Tables A-10 and A-11 break down acceptance of new Medicaid and Medicare patients for primary/generalist vs. specialist providers.

Acceptance of New Medicaid and Medicare Patients by Urban and Rural Location

The urban-rural location analyses of each provider type's acceptance of new Medicaid and Medicare patients, reported in Tables A-12 through A-17, assign one of four urban-rural categories to primary practices, based on ZIP codes, using Rural-Urban Commuting Area Codes (RUCAs). RUCA documentation is available at http://depts.washington.edu/uwruca/.

Table A-9. Acceptance of New Medicare Patients by Solo vs. Group Practice* in Wyoming

	Physicians and Osteopathic Physicians		Physician Assistants		Advanced Practice Nurses	
	Solo or 2-Physician-Owned Practice	Group Practice (Owned by 3 or More Physicians)	Solo Practice	Group Practice	Solo Practice	Group Practice
	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)
None	14 (10.1%)	7 (5.3%)	1 (3.8%)	6 (9.7%)	6 (30.0%)	10 (12.0%)
Some	42 (30.4%)	31 (23.5%)	11 (42.3%)	15 (24.2%)	8 (40.0%)	32 (38.6%)
Most	14 (10.1%)	9 (6.8%)	5 (19.2%)	7 (11.3%)	1 (5.0%)	10 (12.0%)
All	68 (49.3%)	85 (64.4%)	9 (34.6%)	34 (54.8%)	5 (25.0%)	31 (37.3%)
Valid total	138 (100.0%)	132 (100.0%)	26 (100.0%)	62 (100.0%)	20 (100.0%)	83 (100.0%)

* Includes providers in ambulatory care, inpatient, and other settings. For physicians, includes only self-employed solo or group practices and excludes salaried, hourly, locum tenens, and other employment arrangements. For physician assistants and advanced practice nurses, includes all those who indicated solo or group practice regardless of pay or employment arrangement.

Table A-10. Acceptance of New Medicaid Patients by Primary/Generalist vs. Specialist Care in Wyoming

Is this practice accepting new…	Physicians and Osteopathic Physicians		Physician Assistants		Advanced Practice Nurses	
	Primary/ Generalist Care*	Specialist Care	Primary/ Generalist Care*	Specialist Care	Primary/ Generalist Care†	Specialist Care
	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)
None	11 (6.8%)	3 (1.6%)	3 (5.8%)	2 (6.9%)	0 (0.0%)	1 (4.5%)
Some	49 (30.2%)	58 (30.4%)	20 (38.5%)	8 (27.6%)	22 (43.1%)	10 (45.5%)
Most	19 (11.7%)	13 (6.8%)	5 (9.6%)	4 (13.8%)	10 (19.6%)	3 (13.6%)
All	83 (51.2%)	117 (61.3%)	24 (46.2%)	15 (51.7%)	19 (37.3%)	8 (36.4%)
Valid total	162 (100.0%)	191 (100.0%)	52 (100.0%)	29 (100.0%)	51 (100.0%)	22 (100.0%)

* Includes family/general practice, internal medicine, and pediatrics.
† Includes adult and family practice, pediatrics, women's health, and school/college health.

Table A-11. Acceptance of New Medicare Patients by Primary/Generalist vs. Specialist Care in Wyoming

Is this practice accepting new…	Physicians and Osteopathic Physicians		Physician Assistants		Advanced Practice Nurses	
	Primary/ Generalist Care*	Specialist Care	Primary/ Generalist Care*	Specialist Care	Primary/ Generalist Care†	Specialist Care
	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)
None	23 (14.9%)	5 (2.6%)	6 (11.5%)	2 (6.9%)	0 (0.0%)	1 (3.7%)
Some	46 (29.9%)	44 (22.9%)	14 (26.9%)	8 (27.6%)	18 (41.9%)	13 (48.1%)
Most	18 (11.7%)	22 (11.5%)	7 (13.5%)	3 (10.3%)	9 (20.9%)	3 (11.1%)
All	67 (43.5%)	121 (63.0%)	25 (48.1%)	16 (55.2%)	16 (37.2%)	10 (37.0%)
Valid total	154 (100.0%)	192 (100.0%)	(100.0%)	(100.0%)	43 (100.0%)	27 (100.0%)

* Includes family/general practice, internal medicine, and pediatrics.
† Includes adult and family practice, pediatrics, women's health, and school/college health.

Table A-12. Physicians' Acceptance of New Medicaid Patients by Urban-Rural Location in Wyoming

	Urban N (%)		Large Rural N (%)		Small Rural N (%)		Isolated Small Rural N (%)	
None	11	(7.4%)	3	(2.6%)	0	(0.0%)	0	(0.0%)
Some	54	(36.5%)	32	(27.8%)	21	(26.6%)	2	(13.3%)
Most	8	(5.4%)	13	(11.3%)	9	(11.4%)	2	(13.3%)
All	75	(50.7%)	67	(58.3%)	49	(62.0%)	11	(73.3%)
Valid total	148	(100.0%)	115	(100.0%)	79	(100.0%)	15	(100.0%)

Table A-13. Physicians' Acceptance of New Medicare Patients by Urban-Rural Location in Wyoming

	Urban N (%)		Large Rural N (%)		Small Rural N (%)		Isolated Small Rural N (%)	
None	17	(11.6%)	7	(6.4%)	3	(3.8%)	1	(6.7%)
Some	40	(27.4%)	27	(24.5%)	22	(27.8%)	2	(13.3%)
Most	13	(8.9%)	16	(14.5%)	10	(12.7%)	2	(13.3%)
All	76	(52.1%)	60	(54.5%)	44	(55.7%)	10	(66.7%)
Valid total	146	(100.0%)	110	(100.0%)	79	(100.0%)	18	(100.0%)

Table A-14. Physician Assistants' Acceptance of New Medicaid Patients by Urban-Rural Location in Wyoming

	Urban N (%)		Large Rural N (%)		Small Rural N (%)		Isolated Small Rural N (%)	
None	2	(6.7%)	4	(20.0%)	1	(5.0%)	0	(0.0%)
Some	8	(26.7%)	8	(40.0%)	4	(20.0%)	8	(61.5%)
Most	5	(16.7%)	1	(5.0%)	3	(15.0%)	0	(0.0%)
All	15	(50.0%)	7	(35.0%)	12	(60.0%)	5	(38.5%)
Valid total	30	(100.0%)	20	(100.0%)	20	(100.0%)	13	(100.0%)

Table A-15. Physician Assistants' Acceptance of New Medicare Patients by Urban-Rural Location in Wyoming

	Urban N (%)	Large Rural N (%)	Small Rural N (%)	Isolated Small Rural N (%)
None	2 (6.9%)	5 (23.8%)	1 (5.0%)	1 (7.7%)
Some	7 (24.1%)	5 (23.8%)	3 (15.0%)	7 (53.8%)
Most	5 (17.2%)	2 (9.5%)	3 (15.0%)	0 (0.0%)
All	15 (51.7%)	9 (42.9%)	13 (65.0%)	5 (38.5%)
Valid total	29 (100.0%)	21 (100.0%)	20 (100.0%)	13 (100.0%)

Table A-16. Advanced Nurse Practitioners' Acceptance of New Medicaid Patients by Urban-Rural Location in Wyoming

	Urban N (%)	Large Rural N (%)	Small Rural N (%)	Isolated Small Rural N (%)
None	0 (0.0%)	1 (2.4%)	1 (4.0%)	0 (0.0%)
Some	23 (54.8%)	15 (36.6%)	11 (44.0%)	4 (50.0%)
Most	3 (7.1%)	9 (22.0%)	3 (12.0%)	1 (12.5%)
All	16 (38.1%)	16 (39.0%)	10 (40.0%)	3 (37.5%)
Valid total	42 (100.0%)	41 (100.0%)	25 (100.0%)	8 (100.0%)

Table A-17. Advanced Nurse Practitioners' Acceptance of New Medicare Patients by Urban-Rural Location in Wyoming

	Urban N (%)	Large Rural N (%)	Small Rural N (%)	Isolated Small Rural N (%)
None	4 (10.0%)	8 (19.5%)	4 (18.2%)	0 (0.0%)
Some	19 (47.5%)	14 (34.1%)	6 (27.3%)	5 (62.5%)
Most	4 (10.0%)	5 (12.2%)	3 (13.6%)	0 (0.0%)
All	13 (32.5%)	14 (34.1%)	9 (40.9%)	3 (37.5%)
Valid total	40 (100.0%)	41 (100.0%)	22 (100.0%)	8 (100.0%)

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