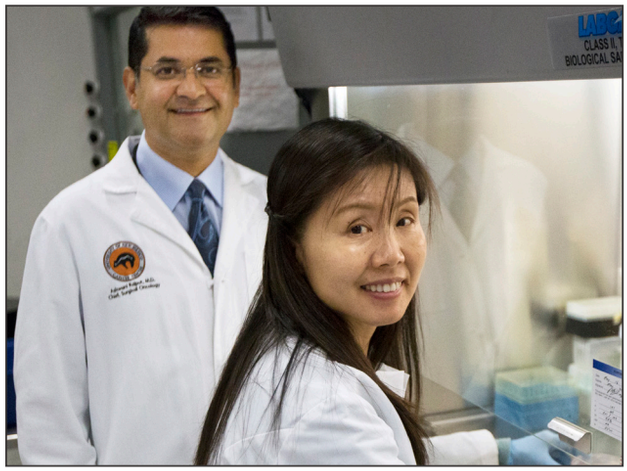
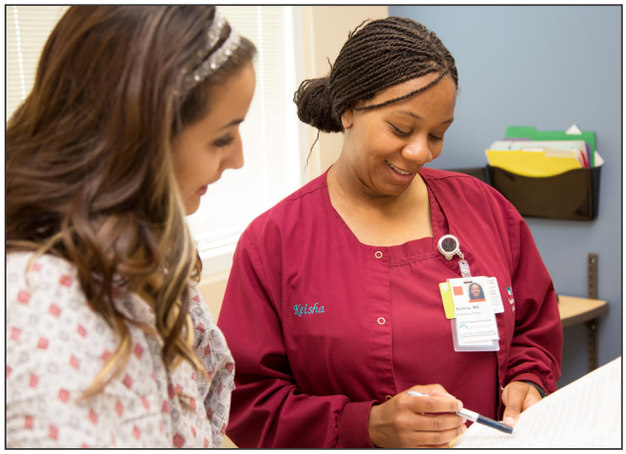
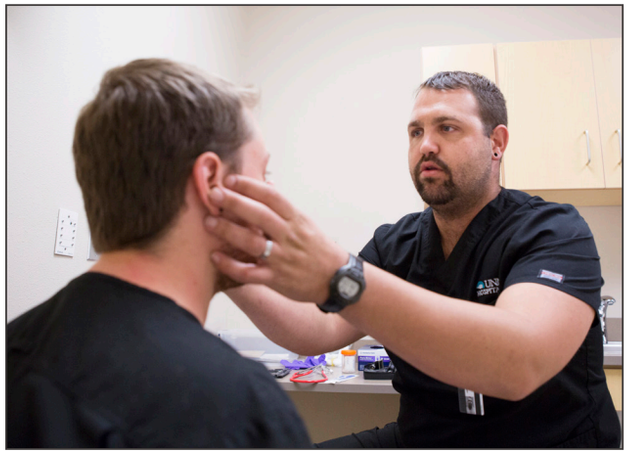
New Mexico Health Care Workforce Committee

2014 Annual Report







October 1, 2014

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EXECUTIVE SUMMARY

Full implementation of the Patient Protection and Affordable Care Act (ACA) has made health care workforce demand a national issue. New Mexico in particular faces unique challenges due to its geographic size, large percentage of rural and underserved populations and limited institutions and infrastructure for training doctors, nurses, dentists and other practitioners, as compared to more densely populated states.

The New Mexico Health Care Workforce Committee estimates that there are 1,957 primary care physicians, 1,089 certified nurse practitioners and certified clinical nurse specialists, 256 obstetrics and gynecology physicians, 179 general surgeons and 321 psychiatrists practicing in the state. While New Mexico as a whole meets some national averages and recommendations for adequate health practitioner numbers, practice location distribution reveals significant shortages in most areas of the state. Without redistributing the current workforce, *an estimated 153 primary care physicians, 271 nurse practitioners and clinical nurse specialists, 40 obstetrics and gynecology physicians, 21 general surgeons and 104 psychiatrists are needed in New Mexico to meet these practice gaps*.

Building New Mexico's health care workforce requires coordination and the active cooperation of multiple entities, including state agencies, the New Mexico Legislature, academic institutions, clinics and hospital systems, local governments and community organizations.

Recruitment and retention strategies, such as those detailed in this report, function through multiple levels, ranging from federal and state policy to training programs and community involvement. Health workforce diversity directly affects patient access to health care and is a particularly critical consideration in a state like New Mexico, which has a minority-majority and racially/ethnically diverse population.

Historically, financial incentives such as student loan repayment, loan for service and tax credits, have been important recruitment and retention tools. The U.S. Department of Health and Human Services did not renew for FY 2014-FY 2015 a matching grant that has for many years provided $400,000 annually (including the state's matching funds) for New Mexico's loan repayment program. This loss of funds underscores the importance of supporting state financial incentive programs to ensure continuation of ongoing recruitment and retention efforts, as well as the need to promote health care workforce programs at the federal level.

Educational and training programs in the state are increasing New Mexico's workforce capacity by encouraging interest in health careers among New Mexico's youth and supporting students as they enter college, medical school and other health professional programs. Unique collaborations are providing opportunities for people to access health professional education and medical training from their home communities through curriculum sharing, credit transfer options and telehealth platforms. These training and education programs emphasize the importance of

building workforce in all parts of the state, particularly in rural areas that have historically faced more significant health care professional shortages.

This report proposes new strategies to enhance community involvement in retention and recruitment and create more interaction statewide among institutions and practitioners. These initiatives involve prioritizing health care workforce retention and recruitment within local planning by including local elected officials on hiring committees, providing more training and educational resources in rural areas and engaging new partners, such as small businesses and city governments. Building the health workforce in rural areas will underscore the important role health care can play in fostering community development, in addition to improving residents' health and wellbeing.

New Mexico's physicians and other health care professionals make substantial contributions to the state's economy and local economies. An American Medical Association study found that New Mexico physicians in 2012 supported 39,385 jobs and generated $5.5 billion in total economic benefit.[1] This includes $3.2 billion in direct output from revenue, wages and benefits and $191.2 million in state and local taxes. The remaining indirect financial benefit captures economic activity that physicians support outside of their industry, including supplies purchased, practice administrative services, cleaning and property maintenance services and clinical and laboratory services.

The following recommendations for increasing recruitment and retention comprise short- and long-term strategies, with a focus on meeting health workforce needs in rural and underserved areas.

Education and Training

A1. Career interest-building programs in New Mexico that recruit students into the health care professions before or during high school and as undergraduates should be carefully monitored and best practices adopted. Both short-term and long-term outcome measures should be required for state funding of these programs. (See page 33)

A2. Training programs should be further enhanced to extend opportunities for training health professionals, including strong support for the UNM School of Medicine, Advanced Practice Registered Nurse programs at UNM and NMSU, New Mexico Nursing Education Consortium programs to increase the BSN-prepared workforce and development of a BA-DDS program. As the state invests in these programs, the New Mexico Health Care Workforce Committee will need to expand and implement tracking to analyze how many graduates practice in New Mexico and where they practice. (See page 37)

A3. The state should fully support Graduate Medical Education (GME) by continuing funding for nine current GME positions and explore options for increasing the number of funded positions, particularly for practice in rural areas and underserved areas. This would entail developing additional primary care training locations throughout New Mexico. (See page 42)

A4. The Community Health Worker certificate should be fully implemented. (See page 44)

Financial Incentives for Addressing Shortages

B1. Financial incentives for recruiting health care professionals should be maintained and expanded on the basis of their demonstrated efficacy. The New Mexico Health Care Workforce committee should be funded to develop appropriate outcome measures of these programs in order to collect data and conduct analyses. (See page 46)

B2. The state tax incentive program should be evaluated for its impact on recruiting and retaining New Mexico's rural health care workforce. (See page 49)

Recruitment for Retention in New Mexico Communities

C1. Community leaders should be included in the selection process to strengthen local investment in health workforce development and provide candidates with a more realistic view of the community and its values and vision. (See page 52)

C2. Recruitment efforts should address social and environmental barriers to successful recruitment. (See page 54)

C3. Explore strategies to help manage workloads for health care practitioners and create professional support networks, particularly in health professional shortage areas. (See page 54)

C4. Enhance linkages between rural practitioners and the UNM Health Sciences Center to improve health care workforce retention. (See page 56)

New Mexico Health Care Workforce Committee

D1. The New Mexico Health Care Workforce Committee should be funded in order to conduct its analyses. Funding for this committee will allow it to assess the efficacy of health care workforce programs and study in depth the mental health service environment, as well as expand tracking of health care workforce recruitment and retention. (See page 57)

With implementation of the Affordable Care Act, we anticipate health care workforce needs will continue to grow and change. The New Mexico Health Care Workforce Committee hopes to receive sufficient funding to continue its ongoing analyses of the current state of affairs and make projections of future need.

BACKGROUND

How many health care providers does New Mexico need? It is a deceptively simple question with a complex answer. Access to health care and determining factors vary significantly across the state, though it is generally believed that New Mexico needs more providers in most health-related professions. The U.S. Department of Health and Human Services reports significant primary care medical, dental and behavioral health shortages in nearly every New Mexico county.

When the 2012 New Mexico Legislature amended sections of the Health Care Work Force Data Collection, Analysis and Policy Act to transfer health workforce data from the Department of Health to the University of New Mexico Health Sciences Center, one of the first tasks was to improve the collection and analysis of health workforce data to more accurately determine shortage numbers and make projections based on the number of those actually practicing. The statute mandated the creation of the New Mexico Health Care Workforce Committee, which represents a broad range of health care professionals, health care consumers, professional groups, health care educators, the Department of Health, the Public Education Department, Higher Education Department and professional licensing boards. The Committee is tasked with reporting on the data and making recommendations for short- and long-term solutions.

The Committee's initial report, in October 2013, was the first analysis to take advantage of newly available data collected by the health licensing boards. Since 2010, physicians obtaining a medical license or telemedicine license have completed a survey at re-licensing (required every three years), which includes questions on demographics, practice status, education and training, practice activities, hours and weeks worked, near-future practice plans and the effects of professional liability insurance on practice change.

The New Mexico Health Care Workforce Committee now also collects licensure data to more accurately reflect the actual number of physicians practicing in the state, as compared to those who obtain a New Mexico license but practice elsewhere. Using practice location rather than a mailing address is crucial for accurately assessing the rural health workforce. As shown in the table below, more than 25 percent of the physicians with a New Mexico medical license (2,140 out of 8,405) do not have an address in the state and do not practice in the state.

With the continual refinement of data collection and increased access to data, this report represents a more accurate depiction of the current health workforce, particularly for physicians. For the 2013 report, 71.8 percent of New Mexico's licensed physicians (6,657 out of 9,271) had completed the survey. This year's report represents 90.6 percent survey completion among New Mexico-licensed physicians (7,570 out of 8,405 total). The decrease in the total number of physicians from the 2013 report is misleading and can be explained by modifications to the inclusion criteria (see Table below). The 2013 report classified as "active" everyone who completed a survey, whereas an active New Mexico license was required to be counted in the

2014 report, resulting in 472 medical doctors who were not counted. This report also does not include MDs licensed for "telemedicine," which accounted for 583 practitioners. Applying the new criteria results in an increase between 2012 and 2013 of 169 licensed MDs.

Table 1. Variance in the Number of Physicians, 2013 – 2014 Reports

Category	2013 Report		2014 Report	
	Count	Percent	Count	Percent
Not surveyed, does not have NM address	1,309	14.10%	533	6.3%
Not surveyed, has NM address	1,305	14.10%	302	3.6%
Surveyed, does not have NM address, does not practice in NM	2,113	22.80%	1,985	23.6%
Surveyed, does not have NM address, no active practice in NM	39	0.40%	155	1.8%
Surveyed, does not have NM address, does practice in NM	607	6.50%	934	11.1%
Surveyed, has NM address, does not practice in NM	514	5.50%	270	3.2%
Surveyed, has NM address, no active practice in NM	51	0.60%	392	4.7%
Surveyed, has NM address, does practice in NM	3,333	36.00%	3,834	45.6%
Total	**9,271**	**100.00%**	**8,405**	**100.0%**

- The 2013 report included everyone with a survey as active. An active New Mexico license was required to be counted in the 2014 Report. This results in 472 MDs that were not counted in 2014 but were counted in 2013.
- The 2014 report does not include MDs licensed as "telemedicine," which accounted for 583 licenses reported in the 2013 Report (and would account for 591 licenses in the 2014 report).
- There are 677 MDs licensed in 2013 who were not active in 2012 and 508 MDs who were licensed in 2012 but not 2013; this results in a net increase of 169 licensed MDs.

In 2013, the committee reported 1,201 licensed advanced practice registered nurses (APRNs) practicing in New Mexico (out of 1,286 total licenses), which included 926 certified nurse practitioners. This year, the committee reports 1,366 licensed APRNs practicing in New Mexico (out of 1,371 total licenses, per the New Mexico Board of Nursing report for FY 2013). The committee reports 947 certified nurse practitioners (CNP), 116 certified clinical nurse specialists (CNS), and 26 with both CNP and CNS certification, for a total of 1,089.

The committee continues to enhance data collection and analysis of medical professions in addition to nurses and physicians. Surveys are now being collected from all medical professions that require licensure through the state, including medical, dental, behavioral health and allied professions (see Table 2). In the future, the committee will be able to use this data to more broadly examine medical professional shortages.

Table 2. Active License and License Renewal Surveys, 2010-2013

License Type	License Count	Survey Count	Survey Percent
Alcohol and Drug Counselor	631	172	27.3%
Art Therapist	107	34	31.8%
Audiologist	46	38	82.6%
Audiologist w/ Endorsement to Dispense	110	88	80.0%
Clinical Mental Health Counselor (LPCC)	1,901	610	32.1%
Community Dental Health Coordinator	1	0	0.0%
Dental Assistant	2,469	370	15.0%
Dental Hygienist	1,290	215	16.7%
Dentist	1,505	285	18.9%
Doctor of Chiropractic	650	515	79.2%
Doctor of Naprapathy	15	0	0.0%
Doctor of Osteopathy	635	510	80.3%
Genetic Counselor	34	0	0.0%
Licensed Baccalaureate Social Worker	694	147	21.2%
Licensed Independent Social Worker	1,806	551	30.5%
Licensed Masters Social Worker	1,587	349	22.0%
Licensed Mental Health Counselor	989	204	20.6%
Marriage and Family Therapist	310	103	33.2%
Occupational Therapist	896	659	73.5%
Occupational Therapy Assistant	360	139	38.6%
Physical Therapist	1,755	603	34.4%
Physical Therapist Assistant	556	181	32.6%
Physician Assistant	35	23	65.7%
Physician Assistant Medical	809	0	0.0%
Podiatrist	132	90	68.2%
Polysomnographic Technician	18	0	0.0%
Polysomnographic Technologist	76	0	0.0%
Professional Mental Health Counselor	300	74	24.7%
Psychologist	777	235	30.2%
Psychologist Associate	9	5	55.6%
Registered Pharmacist	3,059	1,097*	35.9%
Speech-Language Pathologist	1,557	1,265	81.2%
Substance Abuse Associate	335	46**	13.7%
Total	**25,454**	**8,608**	**33.8%**

* Surveyed directly from Board of Pharmacy

** Survey license type is "Substance Abuse Intern" rather than "Substance Abuse Associate"

The Impact of the Affordable Care Act

Full implementation of the 2010 Patient Protection and Affordable Care Act, with its requirements for U.S citizens to have health insurance and provisions for Medicaid expansion, is expanding health care coverage and the need for new health professionals in New Mexico. According to U.S. Census data, approximately 377,986 of New Mexico's 2,051,805 residents (18.4 percent) were uninsured in 2012.[2]

As of April 2014, 32,062 individuals were enrolled in the state health insurance exchange (out of 58,628 determined eligible to enroll in a plan).[3] The New Mexico Department of Human Services projected that 52,055 individuals would enroll in the exchange in FY 2014 (with enrollment of 96,718 by FY 2015).

With Medicaid expansion, 204,000 uninsured children and adults in New Mexico became eligible for Medicaid. The average pre-ACA enrollment from July-September 2013 was 572,111 individuals. The average enrollment in June 2014 was 691,524 individuals[4], which exceeds the Department of Human Services' enrollment projection of 679,675 for FY 2014.[5]

Combined, health insurance exchange enrollment and new enrollment in Medicaid represents a significant increase in coverage (approximately 40 percent of the uninsured in 2012) and potentially increased demand for care. It is anticipated that as this trend continues New Mexico will need a larger health care workforce and an effective health system to be able to provide timely and quality care.

Maldistribution

Physician and nursing shortages do not affect all areas of New Mexico equally. Rural areas are much more affected than urban areas. In fact, most of New Mexico faces significant shortages, with some counties having no primary care providers at all. At the same time, a few counties have more primary care physicians and other practitioners than the national averages and benchmarks used in this report to estimate shortage. For this reason, in addition to identifying the number of practitioners and supplying comparisons to metrics for each county, this report also estimates the number of practitioners needed in the state *absent the redistribution of practitioners from counties with above-average numbers to counties with less*.

Thirty-two of New Mexico's 33 counties are full or partial federally designated Health Professional Shortage Areas (HPSAs) for primary medical care. A HPSA may be designated as a geographic area, demographic group or institution, such as a comprehensive health center or federally qualified health center. Twenty-seven New Mexico counties are single-county primary medical care HPSAs, meaning that the entire county is considered an HPSA – an extraordinarily high number.

I. Updated New Mexico Health Care Workforce Data by Profession

In-depth analysis is available for the following professions, with the total number indicating the estimated number of New Mexico-licensed professionals practicing in the state:

Table 3. Updated New Mexico Health Care Workforce Data by Profession

Profession*	Total Number	Total Number in Bernalillo County (Percent)
Primary Care Physicians	1,957	855 (43.7%)
Certified Nurse Practitioners and Certified Clinical Nurse Specialists	1,089	533 (48.9%)
Obstetrics and Gynecology Physicians	256	133 (52%)
General Surgeons	179	68 (38%)
Psychiatrists	321	174 (54.21%)

*Definitions:

Primary Care Physicians includes specialists in family practice, family medicine, general practice, general pediatrics or general internal medicine.

Certified Nurse Practitioners and Certified Clinical Nurse Specialists includes advanced practice registered nurses whose practice may include family practice, general practice, pediatrics, community health, psychiatric/mental health, medical/surgical, geriatrics and those working on special care units. This definition excludes nurse anesthetists (CRNAs) and certified nurse midwives (CNMs).

Obstetrics and Gynecology Physicians includes physicians who self-identify obstetrics or gynecology, together or separate, as their specialty.

General Surgeons includes all physicians who list general surgery as their primary specialty.

Psychiatrists includes all physicians who list psychiatry as their primary specialty.

Benchmarks used by the New Mexico Health Care Workforce Committee:

Primary Care Physicians: 0.79 PCPs per 1,000 population, based on the national average reported by the Association of American Medical Colleges[6]

Certified Nurse Practitioners and Certified Clinical Nurse Specialists: 0.58 per 1,000 population, based on the national average reported by the Kaiser Foundation[7]

Psychiatrists: 1 per 6,500 population, based on evidence-based recommendations in the academic literature[8]

Ob/GYN: 2.1 per 10,000 female population, based on the national average reported by the American Congress of Obstetricians and Gynecologists[9]

General Surgery: Critical need = 3.0 per 100,000 population; Minimum need = 6.0 per 100,000; Optimal ratio = 9.2 per 100,000, based on recommendations by the American College of Surgeons Health Policy Institute[10]

A. State Workforce Shortages

More comprehensive systems for collecting workforce data that account for practice location and other factors have enabled us to continually refine our estimates of the number of health care workers practicing in each county. Due to the nature of extrapolation, our estimates of shortages will show year-to-year variation until data for a full three-year licensure cycle are obtained. This year represents three years of data for physicians and advanced practice nurses.

After determining the number of health care workers, the New Mexico Health Care Workforce Committee compared those numbers with benchmarks based on national averages and

recommendations (see Definitions above). This analysis provides an assessment of the number of practitioners needed for each county and in the state overall. The standards for primary care physicians, certified clinical nurse practitioners and certified clinical nurse specialists, and obstetrics and gynecology physicians indicate the national averages for these professions. They provide benchmarks for New Mexico, although national averages do not fully reflect workforce needs, particularly as health care reform is changing the landscape. Another important caveat is that national averages and recommendations are not entirely reflective of rural practice.

Some of New Mexico's health care workforce shortage is mitigated by primary care and specialty consultation services provided by UNM Health Sciences Center programs. Project ECHO (Extension for Community Healthcare Outcomes) in FY 2014 provided more than 1,229 hours with clinicians and assisted with 670 new patient consultations and 370 follow-up patient consultations. There are TeleECHO clinics in child youth epilepsy, chronic pain and headache, complex care, dementia, hepatitis, HIV/AIDs, addiction, palliative care, rheumatology and women's health. Envision New Mexico, a quality improvement program based in the UNM Department of Pediatrics, provides telehealth-based pediatric sub-specialty consultation services for practitioners, as well as technical assistance and training. The Physician Access Line Service (PALS), based at the UNM Center for Telehealth and staffed 24/7, provides support for physicians, physician assistants, nurse practitioners and nurse midwives. PALS enables consultation with UNM faculty members, assists with making referrals and arranges facility-to-facility transfers and air transports to UNM Hospital.

The UNM Locum Tenens program also holds the potential to mitigate shortages. UNM Locum Tenens contracts with more than 40 organizations, including Federally Qualified Health Centers, hospitals, state health centers and private practices, in approximately 135 locations. There are 54 locum tenens providers (16 advanced practice nurses/physician assistants and 38 MDs/DOs). UNM Locum Tenens provided 11,328 hours of medical care in FY 2014.

Based on survey responses, 85 New Mexico-licensed physicians practice for the Indian Health Service and 159 New Mexico-licensed physicians practice at Department of Defense and Veterans Affairs health facilities. Our data include only federally employed physicians with New Mexico licenses. Physicians working for federal agencies may practice in New Mexico with a license from another state, although our data suggest that most do obtain a New Mexico license. Approximately 76 percent of all New Mexico VA practitioners (MDs, ODs, nurse practitioners and physicians assistants) are licensed in the state. Native American, military and veteran populations are included in the New Mexico and county population estimates. It is important to note that the populations served by federally employed physicians may seek care outside of their county of residency, for example at the nearest IHS clinic or the VA Hospital in Albuquerque.

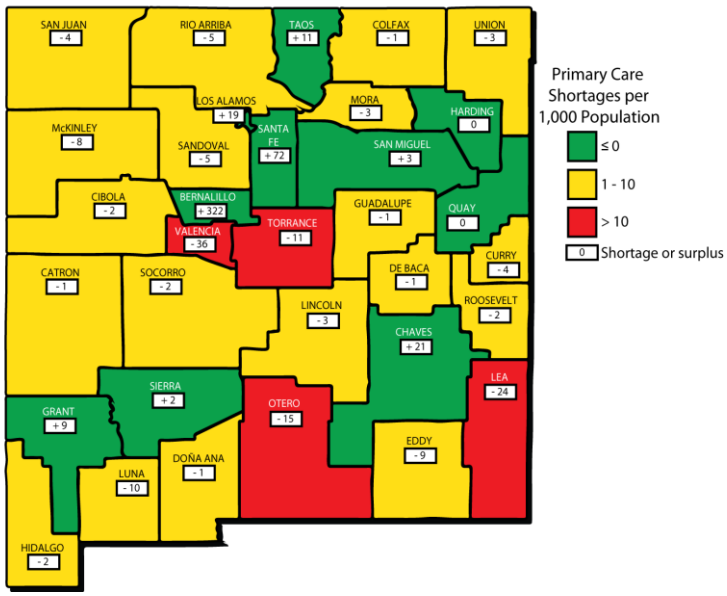
Table 4. Summary of Health Care Workforce

Health Care Providers	# Practicing in NM	Surplus (+) /Shortage(-)	Shortage with Maldistribution Considered *
Primary Care Physicians (MDs/DOs)	1,957	+306	**-153**
Certified Nurse Practitioners and Certified Clinical Nurse Specialists	1,089	-121	**-271**
Obstetrics/Gynecology Physicians	256	+36	**-40**
General Surgeons	179	+43	**-21**
Psychiatrists	321	-1	**-104**

1. Primary Care Physicians

Approximately 1,957 primary care physicians practice in New Mexico (compared with 1,429 reported in the 2013 Annual Report). This number includes 1,682 Doctors of Medicine (MDs), 70 non-surveyed MDs and an estimated 203 Doctors of Osteopathic Medicine (DOs). Shortage estimates are based on survey data and the national average ratio of 0.79 primary care physicians per 1,000 population in the United States (*AAMC 2011 Physician Workforce Data Book*). New Mexico's rate is 0.94 physicians per 1,000 population.

Shortage of New Mexico Primary Care Physicians



The estimated number of 1,957 primary care physicians is based on the 7,570 MDs who have completed the license renewal survey. Of these, 2,140 MDs do not have a New Mexico address and do not practice in the state. Primary care specialty was indicated by the MD (family practice, general practice, general pediatrics or general internal medicine). For the non-surveyed MDs with an active license (835 MDs), primary care specialty was identified by the specialty indicated through licensure and/or board certification. There are 308 Doctors of Osteopathy, for whom it is assumed, based on the literature, that 70% practice in primary care specialty fields. Numbers for both non-surveyed MDs and DOs were adjusted, based on the surveyed MDs, to reflect that 5.5% of those with a New Mexico address actually practice in another state and 0.6% are licensed but do not have an active practice. For surveyed MDs, the county is indicated by the address of their primary practice and for the non-surveyed MDs and DOs, the county is identified by county of licensure (often the home address or PO box).

A comparison of our current primary care physician levels with the national ratio (0.79:1,000) suggests that there are an adequate number of primary care physicians in New Mexico. This obscures that fact that many counties in the state have severe physician shortages, particularly in the southern and southeastern regions. Valencia and

Torrance also have high shortages, but it is important to note their proximity to Bernalillo and Santa Fe counties, which have the state's greatest numbers of primary care physicians.

Counties with Greatest Shortage	Primary Care Physicians Needed
Valencia	36
Lea	24
Otero	15
Torrance	11
Luna	10

That some counties have a higher ratio of primary care physicians than the national average underscores the importance of analyzing the statewide distribution of physicians. A number of counties, based on 2013 survey data and the national ratio, have more primary care physicians than the national average, including Bernalillo (322 above the national average), Santa Fe (72 above the national average), Chaves County (21 above the national average) and Los Alamos County (19 above the national average). Practitioners' preferences for living in more urban areas may partially explain these numbers. Also, primary care physicians who practice in hospitals are included in this data, as well as in the national averages that the committee used to estimate shortages. Counties with hospitals, therefore, may have higher numbers of primary care physicians, in part because of the number of primary care physicians practicing at those facilities (this is particularly true in Bernalillo County). This caveat also applies to certified nurse practitioners and clinical nurse specialists, as discussed below. Absent a redistribution of primary care physicians from counties with more than the national average to counties with a shortage, *New Mexico needs an estimated 153 primary care physicians to meet the national average of primary care physicians per population.*

It is also important to note that, except for Los Alamos, the counties with more primary care physicians than the national average still contain HPSA shortage designations, indicating within-county health care workforce maldistribution. For example, Bernalillo County has 18 shortage designations, including the Albuquerque Indian Hospital, three comprehensive health centers (First Choice Community Healthcare, Inc., Albuquerque Healthcare, and First Nations Community Health), the low-income population in Albuquerque's Southeast Heights, Isleta Health Center (Isleta Pueblo/Native American Tribal Population designation) and 12 census tracts. Santa Fe County has 32 HPSA designations, including three Native American tribal populations and 24 census tracts.

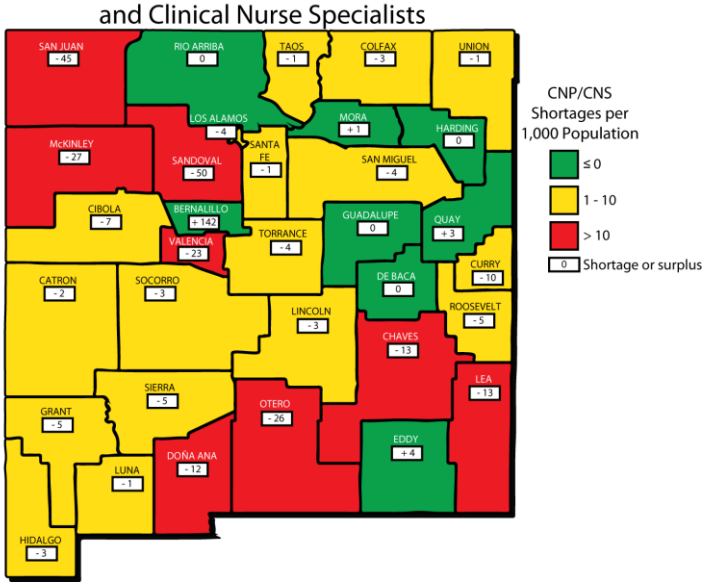
2. Certified Nurses Practitioners and Clinical Nurse Specialists

According to licensure survey data, there are approximately 1,089 certified nurse practitioners (CNP) and certified clinical nurse specialists (CNS) practicing in New Mexico, out of 1,690 CNP/CNS licensed by the New Mexico Board of Nursing. This figure includes 947 CNPs, 116 CNSs, and 26 practitioners with both certifications.

Certified nurse practitioners and clinical nurse specialists in New Mexico have full practice and prescriptive authority under the Nurse Practice Act (NMSA Section 61-3-1). Nurse practitioners evaluate patients, order and interpret diagnostic tests, and initiate and manage treatments (including prescribing medications).[11] Clinical nurse specialists have a similar scope of practice, although are often more involved in administrative duties and management, education, patient care coordination and policy development.[12] Nurse practitioners and clinical nurse specialists are regulated by the New Mexico Board of Nursing.

Practice areas of the 1,089 certified nurse practitioners and certified clinical nurse specialists include family practice, general practice, pediatrics, community health, psychiatric/mental health, medical/surgical, geriatrics and those working on special care units. This definition excludes nurse anesthetists (CRNAs) and certified nurse midwives (CNMs). The total estimated count of all advanced practice registered nurses (APRN) is approximately 1,366 practicing in New Mexico.

Shortage of New Mexico Certified Nurse Practitioners and Clinical Nurse Specialists



There are 1,690 CNP/CNS registered nurses licensed by the New Mexico Board of Nursing, however survey data indicates that 601 of these CNP/CNS nurses do not practice in New Mexico.

The committee used the national average of 0.58 certified nurse practitioners per 1,000 as a metric to estimate the number of certified nurse practitioners and certified clinical nurse specialists needed in New Mexico.[13] This metric implies that, absent any redistribution, *New*

Mexico needs approximately 271 more certified nurse practitioners and clinical nurse specialists to meet national averages.

Counties with Greatest Shortage	Certified Nurse Practitioners and Nurse Specialists Needed
Sandoval	50
San Juan	45
McKinley	27
Otero	26
Valencia	23

Last year, the committee reported a deficit of 284 certified nurse practitioners in New Mexico in 2012. However, that analysis did not include certified nurse specialists. If we compare only the number of certified nurse practitioners between 2012 and 2013, there is an estimated reduction in the deficit, from 284 needed in 2012 to meet the national average to 237 needed in 2013.

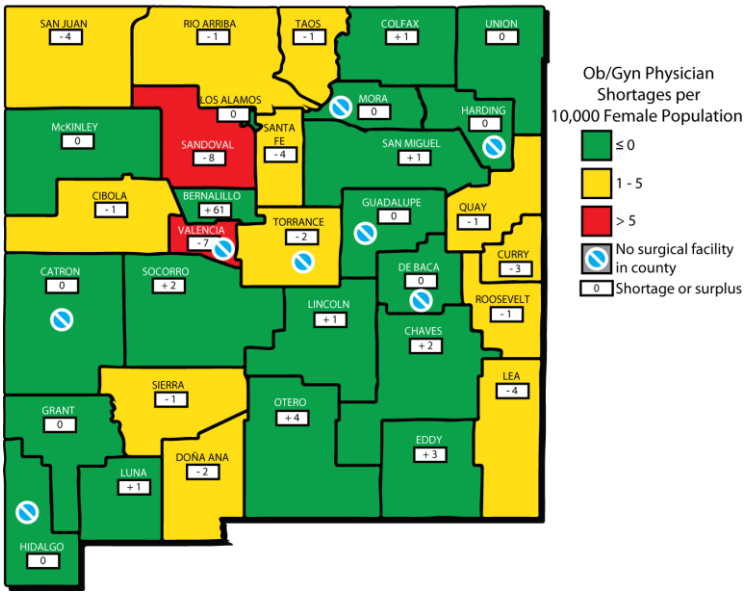
Of the 1,089 nurse practitioners and nurse specialists, only an estimated 524 (48.1 percent) work within a primary care practice area. As with many other clinicians who traditionally provided primary care, there has been a trend towards specialization. Certified nurse midwives also practice independently and provide a range of primary care health services for women, although they are not included in the above calculations and shortage estimates (unless they are also CNPs or CNSs). The New Mexico Health Workforce Committee estimates that 204 advanced practice registered nurses are specializing in obstetrics and/or gynecology, including certified nurse midwives. The committee is not aware at this time of a national metric for CNMs.

In addition to advanced practice registered nurses, 670 physician assistants with a New Mexico address hold licenses issued by the New Mexico Medical Board. Physician assistants also provide a broad range of primary care diagnostic and therapeutic services and have authority to make medical decisions, although they must practice with physician supervision. The New Mexico Health Workforce Committee does not yet have sufficient physician assistant survey licensing data indicating location of practice and specialty to accurately gauge the number of physician assistants in New Mexico and so cannot at this time make adequate shortage estimates. The committee anticipates that this data will be available in the future.

3. Obstetrics/Gynecology Physicians

Approximately 256 obstetrics and gynecology (Ob/Gyn) physicians practice in New Mexico. Nationally, the average ratio of Ob/Gyn physicians is 0.21 per 1,000 female population.[14] New Mexico's ratio is approximately 0.24 per 1,039,577 female population, based on its female population of 1,039,577.

Shortage of New Mexico Ob/Gyn Physicians



The estimated number of Ob/GYNs is based on the 7,570 MDs who completed the license renewal survey and 835 MDs who have an active license but no survey. For the MDs, an Ob/GYN specialty was indicated by the MD. For the non-surveyed MDs with an active license, Ob/GYN specialty was identified on the basis of licensure and/or board certification. For surveyed MDs, the county is indicated by the address of their primary practice and for the non-surveyed MDs, the county is identified by county of licensure. 241 Ob/Gyns were identified through the survey and 21 were identified by license only.

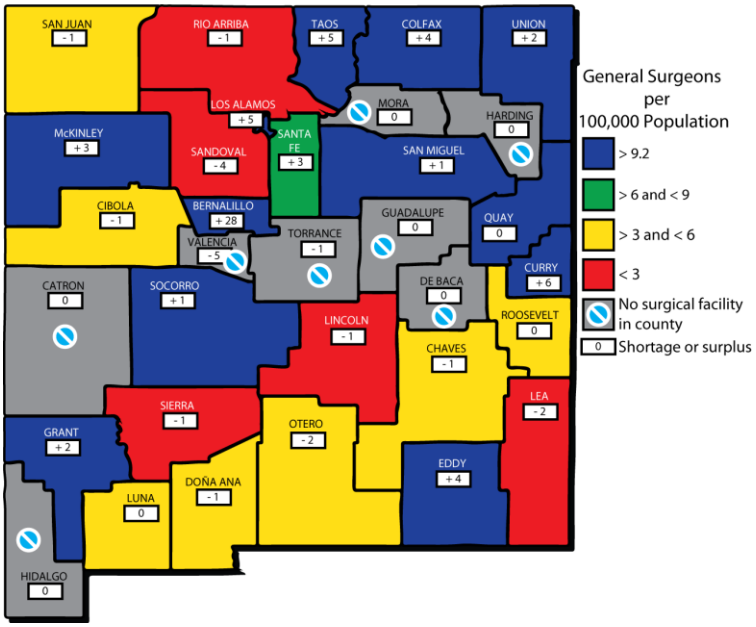
The committee estimates, based on survey data and the ratio of Ob/Gyn physician to population, that New Mexico has approximately 36 more Ob/Gyn physicians than the national average, however, as with other professions, there is a significant maldistribution, with 61 more Ob/Gyn physicians practicing in Bernalillo County than the national average. The only other counties with Ob/Gyns above the national average are Otero (four), Eddy (three) and Chaves (two). Absent any redistribution (the sum of shortages county by county), *New Mexico needs 40 Ob/Gyn physicians in order to meet the national average.*

Counties with Greatest Shortage	**Ob/Gyns Needed**
Sandoval	8
Valencia	7
San Juan	4
Santa Fe	4
Lea	4

4. General Surgeons

General surgery is a discipline that encompasses comprehensive knowledge of anatomy/physiology and surgical procedures. Common surgeries performed by general surgeons include obstetrical/gynecological, orthopedic, endoscopic and other gastrointestinal procedures. They also have expertise in the comprehensive management of trauma. General surgeons provide essential services and support for primary care physicians and trauma systems, particularly in rural areas where other specialists may be unavailable. They also contribute to the financial viability of small rural hospitals.[15]

Shortage of New Mexico General Surgeons



The estimated number of general surgeons is based on the 7,570 MDs who completed the license renewal survey and 835 MDs who have an active license but no survey data. For licensed MDs, general surgeon was indicated by the MD. For non-surveyed MDs with an active license, general surgery specialty was identified by the specialty indicated through licensure and/or board certification. For surveyed MDs, the county is indicated by the address of their primary practice and for non-surveyed MDs the county is identified by county of licensure. 170 general surgeons were identified through the survey and nine were identified by license only.

Approximately 179 general surgeons practice in New Mexico. To estimate shortages the committee used the following metrics recommended by the American College of Surgeons: Critical need = 3.0 per 100,000; Minimum need = 6.0 per 100,000; Optimal ratio = 9.2 per 100,000.[16]

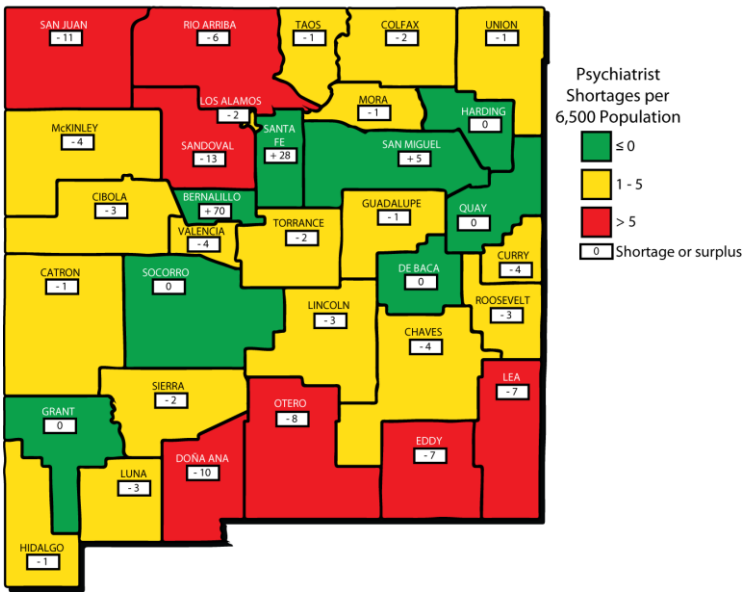
New Mexico has an estimated 8 general surgeons per 100,000 population. Based on national metrics for minimum need, New Mexico as a whole has an adequate number of general surgeons. However, similar to other physician specialties, there are areas of the state with significant shortages.

There are no surgical facilities in Mora, Harding, Guadalupe, Catron, Valencia, Torrance, de Baca or Hidalgo counties. The most pronounced shortages are in Valencia (-5) and Sandoval (-4). However, it is anticipated that the number of general surgeons will change in Sandoval County in the next report because it is now home to two new hospitals, Presbyterian Rust Medical Center (October 2011) and UNM Sandoval Regional Medical Center (July 2012).

5. Psychiatrists

Approximately 321 psychiatrists practice in New Mexico. The benchmark ratio used to estimate adequacy of the workforce is 1 psychiatrist per 6,500 population.[17] Of the actively licensed medical doctors responding to a renewal survey who have a specialty in psychiatry, only 69 out of the 321 (21.5 percent) identify their specialty as child and adolescent psychiatry. Of the medical doctors who did not fill out a practice survey and have a New Mexico address, 29 are licensed as psychiatrists. It is not clear how many of these 29 psychiatrists specialize in adult or child and adolescent psychiatry.

Shortage of New Mexico Psychiatrists



The estimated counts of psychiatrists were based on the 7,570 MDs who completed the license renewal survey and 835 MDs who have an active license but no survey. For licensed MDs, Psychiatrist was indicated by the MD. For non-surveyed MDs with an active license, psychiatric specialty was identified by the specialty indicated through licensure and/or board certification. For surveyed MDs, the county is indicated by the address of their primary practice and for non-surveyed MDs, the county is identified by county of licensure. 303 psychiatrists were identified through the survey and 18 were identified by license only. One psychiatrist identified through the survey is a locum tenens psychiatrist and so not associated with a county.

A comparison with the nationally recommended levels indicates a maldistribution of providers. Twenty-five (out of 33) New Mexico counties are experiencing shortages, with the greatest needs in the following locales:

Counties with Highest Shortages	**Psychiatrists needed**
Sandoval	13
San Juan	11
Doña Ana	10
Otero	8
Eddy	7
Lea	7

Absent any redistribution (the sum of shortages county by county), *New Mexico needs 104 psychiatrists to meet the national benchmark established by the committee.*

B. Other Features of the Health Care Workforce

1. Age Distribution

The average age of New Mexico physicians is 53.6. More than 46 percent are 55 or older. Nationally, New Mexico has the highest percentage of physicians age 60 or older (33.3%, compared to 27.6% nationally).[18]

Table 5. Age Distribution for New Mexico Medical Doctors, 2013

Age	All Medical Doctors		Primary Care		Ob/Gyn		Psychiatrists		General Surgeons	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
<25	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
25 - 34	257	5.1%	134	7.6%	13	5.4%	8	2.6%	4	2.4%
35 - 44	1,194	23.6%	436	24.7%	60	24.9%	46	14.7%	34	20.0%
45 - 54	1,221	24.1%	420	23.8%	54	22.4%	79	25.2%	46	27.1%
55 - 64	1,441	28.5%	493	28.0%	68	28.2%	104	33.2%	47	27.6%
65 - 74	744	14.7%	225	12.8%	31	12.9%	61	19.5%	34	20.0%
75+	182	3.6%	48	2.7%	14	5.8%	15	4.8%	5	2.9%
Unknown	19	0.4%	7	0.4%	1	0.4%	0	0.0%	0	0.0%
Total	5,058	100.0%	1,763	100.0%	241	100.0%	313	100.0%	170	100.0%
Average Age	53.6		52.3		53.6		56.9		55.1	

The average age of all APRNs practicing in New Mexico is 53.55. More than 50 percent of New Mexico's primary care APRNs are 55 or older.

Table 6. Age Distribution of Advanced Practice Nurses in New Mexico, 2013

Age	All APRNs		Primary Care		Ob/Gyn		Mental Health	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent
<25	0	0.00%	0	0.00%	0	0.00%	0	0.00%
25-44	314	23.00%	117	19.10%	57	27.90%	12	10.90%
45-54	362	26.50%	157	25.60%	54	26.50%	30	27.30%
55-64	506	37.00%	246	40.10%	71	34.80%	46	41.80%
65+	184	13.50%	93	15.20%	22	10.80%	22	20.00%
Unknown	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Total	**1,366**	**100.00%**	**613**	**100.00%**	**204**	**100.00%**	**110**	**100.00%**

2. Gender

Survey data show that 33.8 percent of New Mexico's medical doctors are female, and 66.2 percent are male (compared to 31.9 percent of all physicians being female nationally[19]). Female physicians represent 43.3 percent of primary care physicians, 51.9 percent of obstetrics and gynecology physicians, 39.6 percent of psychiatrists and 20.6 percent of general surgeons.

Table 7. New Mexico Medical Doctors by Gender, 2013

Age	All Medical Doctors		Primary Care		Ob/Gyn		Psychiatrists		General Surgeons	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Female	1,710	33.8%	763	43.3%	125	51.9%	124	39.6%	35	20.6%
Male	3,348	66.2%	1,000	56.7%	116	48.1%	189	60.4%	135	79.4%
Total	**5,058**	**100.0%**	**1,763**	**100.0%**	**241**	**100.0%**	**313**	**100.0%**	**170**	**100.0%**

According to survey data, 85.1 percent of all APRNs practicing in New Mexico are female, and 14.9 percent are male.

Table 8. Gender Distribution of Advanced Practice Nurses in New Mexico, 2013

Age	All APRNs		Primary Care		Ob/Gyn		Mental Health	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Female	1,163	85.1%	513	83.7%	198	97.1%	98	89.1%
Male	203	14.9%	100	16.3%	6	2.9%	12	10.9%
Total	**1,366**	**100.0%**	**613**	**100.0%**	**204**	**100.0%**	**110**	**100.0%**

3. Race and Ethnicity

The New Mexico physician survey categorizes respondents by ethnicity and race. For survey questions regarding race, physicians were asked to choose all that applied. Those who chose two or more races are indicated by the group "Two or More." One-fifth of the primary care physician workforce self-describes as Hispanic or Latino. Nearly three-quarters (73.9 percent) self-describe as White or Caucasian, followed by 12.1 percent Asian, 5.6 percent Other, 3.2 percent Black or African American, 1.2 percent American Indian or Alaska native and 0.3 percent Native Hawaiian or Pacific Islander.

The following tables provide detailed data on race and ethnicity of New Mexico's physicians and the state's population based on the 2010 U.S. Census:

Table 9. New Mexico Physicians' Ethnicity, 2013

Ethnicity	All Physicians		Primary Care		Ob/Gyn		Psychiatrists		General Surgeons	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Hispanic or Latino	737	14.3%	350	20.0%	33	13.4%	42	13.0%	28	15.6%
NOT Hispanic or Latino	3,955	76.9%	1,297	74.2%	199	80.9%	251	78.0%	133	74.3%
Not Answered or Not Applicable	449	8.7%	101	5.8%	14	5.7%	29	9.0%	18	10.1%
Total	**5,141**	**100.0%**	**1,748**	**100.0%**	**246**	**100.0%**	**322**	**100.0%**	**179**	**100.0%**

Table 10. New Mexico Population by Ethnicity: Hispanic or Latino*

Ethnicity	Count	Percent
Total Population	2,059,179	100.0
Hispanic or Latino	953,403	46.3
NOT Hispanic or Latino	1,105,776	53.7

* U.S. Census Bureau, 2010 Census

Table 11. New Mexico Physicians' Race, 2013

Race	All Physicians		Primary Care		Ob/Gyn		Psychiatrists		General Surgeons	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
American Indian or Alaska Native	46	0.9%	22	1.2%	3	1.2%	4	1.3%	3	1.8%
Asian	503	9.9%	214	12.1%	18	7.5%	19	6.1%	18	10.6%
Black or African American	152	3.0%	56	3.2%	18	7.5%	6	1.9%	7	4.1%
Native Hawaiian or Pacific Islander	11	0.2%	5	0.3%	0	0.0%	1	0.3%	0	0.0%
White or Caucasian	3,923	77.6%	1,302	73.9%	184	76.3%	253	80.8%	126	74.1%
Other	241	4.8%	99	5.6%	6	2.5%	16	5.1%	8	4.7%
Two or more	134	2.6%	50	2.8%	10	4.1%	10	3.2%	7	4.1%
Not Answered	48	0.9%	15	0.9%	2	0.8%	4	1.3%	1	0.6%
Total	**5,058**	**100.0%**	**1,763**	**100.0%**	**241**	**100.0%**	**313**	**100.0%**	**170**	**100.0%**

Table 12. New Mexico Population by Race*

	Count	Percentage
Total Population	2,059,179	100.00
One Race	1,982,169	96.3
American Indian or Alaska Native	193,222	9.4
Asian	28,208	1.4
Black or African American	42,550	2.1
Native Hawaiian or Pacific Islander	1,810	0.1
White	1,407,876	68.4
Other	308,503	15.0
Two or more	77,010	3.7

* U.S. Census Bureau, Census 2010

The primary care APRN workforce identified race/ethnicity as follows: 71.3 percent Caucasian, 14.7 percent as Hispanic, 3.1 percent as Other, 0.7 percent as Black or African American and 7.2 percent as unknown or unreported.

Table 13. Distribution of Advanced Practice Nurses in New Mexico by Race/Ethnicity, 2013

Age	All APRNs		Primary Care		Ob/Gyn		Mental Health	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent
American Indian or Alaska Native	17	1.2%	8	1.3%	7	3.4%	2	1.8%
Asian or Pacific Islander	25	1.8%	11	1.8%	3	1.5%	2	1.8%
Black or African American	11	0.8%	4	0.7%	2	1.0%	0	0.0%
Hispanic	191	14.0%	90	14.7%	22	10.8%	14	12.7%
Caucasian, non-Hispanic	988	72.3%	437	71.3%	158	77.5%	76	69.1%
Other Race	51	3.7%	19	3.1%	7	3.4%	5	4.5%
Unknown or Unreported	83	6.1%	44	7.2%	5	2.5%	11	10.0%
Total	**1,366**	**100.0%**	**613**	**100.0%**	**204**	**100.0%**	**110**	**100.0%**

4. Practice

A number of additional questions were put forth in the physician survey related to practice characteristics, and the results are below**:**

Practice Location and Setting

Table 14. New Mexico Medical Doctors Practice Status, 2013

Location	All Physicians		Primary Care		Ob/GYN		Psychiatrists		General Surgeons	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Practice in New Mexico	4,692	92.8%	1,663	94.3%	233	96.7%	289	92.3%	148	87.1%
Practice in Texas	256	5.1%	54	3.1%	4	1.7%	10	3.2%	10	5.9%
Practice in Colorado	108	2.1%	28	1.6%	1	0.4%	2	0.6%	7	4.1%
Practice in Arizona	103	2.0%	25	1.4%	3	1.2%	5	1.6%	5	2.9%
Practice in Other	370	7.3%	89	5.0%	10	4.1%	20	6.4%	23	13.5%
Inactive in New Mexico	60	1.2%	17	1.0%	4	1.7%	7	2.2%	4	2.4%
Retired	229	4.5%	57	3.2%	7	2.9%	16	5.1%	9	5.3%
Fellowship	100	2.0%	26	1.5%	1	0.4%	4	1.3%	7	4.1%
Not Answered	43	0.9%	10	0.6%	1	0.4%	4	1.3%	1	0.6%
Count*	**5,058**	**100.0%**	**1,763**	**100.0%**	**241**	**100.0%**	**313**	**100.0%**	**170**	**100.0%**

* Physicians can choose more than one category.

Table 15. New Mexico Medical Doctors by Practice Setting, 2013

Practice Setting	All Physicians		Primary Care		Ob/Gyn		Psychiatrists		General Surgeons	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Solo Physician	715	14.1%	234	13.3%	26	10.8%	78	24.9%	36	21.2%
Solo Physician + Intermediate(s)	221	4.4%	85	4.8%	10	4.1%	19	6.1%	6	3.5%
Two Physicians	399	7.9%	155	8.8%	26	10.8%	25	8.0%	14	8.2%
Three or Four Physicians	733	14.5%	277	15.7%	57	23.7%	46	14.7%	33	19.4%
Five to Nine Physicians	819	16.2%	344	19.5%	47	19.5%	32	10.2%	18	10.6%
10+ Physicians	1,560	30.8%	491	27.9%	63	26.1%	67	21.4%	41	24.1%
Not Applicable / Not Answered	611	12.1%	177	10.0%	12	5.0%	46	14.7%	22	12.9%
Total	**5,058**	**100.0%**	**1,763**	**100.0%**	**241**	**100.0%**	**313**	**100.0%**	**170**	**100.0%**

Practice Activity and Hours

Table 16. New Mexico Medical Doctors – Direct Patient Care and Other Activities, 2013

Percent of Time	Direct Patient Care		Research		Teaching and Precepting		Healthcare Administration		Other	
	Count	%	Count	%	Count	%	Count	%	Count	%
None	213	4.2%	4,033	79.7%	3,148	62.2%	3,070	60.7%	4,389	86.8%
1-10	86	1.7%	455	9.0%	1,023	20.2%	1,004	19.8%	147	2.9%
11-20	68	1.3%	116	2.3%	314	6.2%	297	5.9%	58	1.1%
21-30	73	1.4%	40	0.8%	125	2.5%	114	2.3%	21	0.4%
31-40	74	1.5%	17	0.3%	38	0.8%	58	1.1%	8	0.2%
41-50	184	3.6%	26	0.5%	43	0.9%	44	0.9%	21	0.4%
51-60	176	3.5%	13	0.3%	6	0.1%	19	0.4%	8	0.2%
61-70	292	5.8%	8	0.2%	9	0.2%	21	0.4%	6	0.1%
71-80	580	11.5%	3	0.1%	6	0.1%	28	0.6%	4	0.1%
81-90	852	16.8%	6	0.1%	7	0.1%	24	0.5%	17	0.3%
91-100	2,139	42.3%	20	0.4%	18	0.4%	58	1.1%	58	1.1%
Not Applicable /Not Answered	321	6.3%	321	6.3%	321	6.3%	321	6.3%	321	6.3%
Total	**5,058**	**100.0%**	**5,058**	**100.0%**	**5,058**	**100.0%**	**5,058**	**100.0%**	**5,058**	**100.0%**

Table 17. New Mexico Medical Doctors Hours per Week, 2013

Hours per Week	All Physicians		Primary Care		Ob/Gyn		Psychiatrists		General Surgeons	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
None	402	7.9%	96	5.4%	10	2.9%	24	7.7%	18	10.6%
10 or less	323	6.4%	83	4.7%	17	4.9%	26	8.3%	8	4.7%
11-20	243	4.8%	71	4.0%	8	2.3%	29	9.3%	6	3.5%
21-30	392	7.8%	175	9.9%	20	5.7%	33	10.5%	6	3.5%
31-40	603	11.9%	227	12.9%	19	5.4%	51	16.3%	6	3.5%
41-50	1,559	30.8%	631	35.8%	58	16.6%	103	32.9%	36	21.2%
51-60	1,516	30.0%	471	26.7%	109	31.1%	45	14.4%	89	52.4%
61 or more	20	0.4%	9	0.5%	109	31.1%	2	0.6%	1	0.6%
Total	**5,058**	**100.0%**	**1,763**	**100.0%**	**350**	**100.0%**	**313**	**100.0%**	**170**	**100.0%**

Table 18. New Mexico Medical Doctors Weeks per Year, 2013

Weeks per Year	All Physicians		Primary Care		Ob/Gyn		Psychiatrists		General Surgeons	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
None	374	7.4%	89	5.0%	10	4.1%	22	7.0%	15	8.8%
1-13	370	7.3%	95	5.4%	13	5.4%	13	4.2%	27	15.9%
14-26	339	6.7%	116	6.6%	16	6.6%	11	3.5%	13	7.6%
27-39	154	3.0%	58	3.3%	6	2.5%	8	2.6%	7	4.1%
40-52	3,821	75.5%	1,405	79.7%	196	81.3%	259	82.7%	108	63.5%
Total	**5,058**	**100.0%**	**1,763**	**100.0%**	**241**	**100.0%**	**313**	**100.0%**	**170**	**100.0%**

Full-Time Equivalents (FTE) of Physician Workforce

Table 19. New Mexico Medical Doctors Hours per Week, 2013

Hours per Week	All Physicians		Primary Care		Ob/Gyn		Psychiatrists		General Surgeons	
	Count	%	Count	%	Count	%	Count	%	Count	%
None	402	7.9%	96	5.4%	10	2.9%	24	7.7%	18	10.6%
10 or less	323	6.4%	83	4.7%	17	4.9%	26	8.3%	8	4.7%
11-20	243	4.8%	71	4.0%	8	2.3%	29	9.3%	6	3.5%
21-30	392	7.8%	175	9.9%	20	5.7%	33	10.5%	6	3.5%
31-40	603	11.9%	227	12.9%	19	5.4%	51	16.3%	6	3.5%
41-50	1,559	30.8%	631	35.8%	58	16.6%	103	32.9%	36	21.2%
51-60	1,516	30.0%	471	26.7%	109	31.1%	45	14.4%	89	52.4%
61 or more	20	0.4%	9	0.5%	109	31.1%	2	0.6%	1	0.6%
Total	**5,058**	**100.0%**	**1,763**	**100.0%**	**350**	**100.0%**	**313**	**100.0%**	**170**	**100.0%**

Nearly 8 percent of New Mexico-licensed medical doctors indicate no hours worked per week and 73.1 percent indicate that they work full-time (more than 30 hours per week). For primary care medical doctors, 5.4 percent indicate zero hours per week and 75.9 percent indicate full-time. For obstetrics and gynecology physicians, 2.9 percent indicate zero hours and 84.3 percent indicate full-time. For psychiatrists, 7.7 percent indicate zero hours and 64.2 percent indicate

full-time. For general surgeons, 10.6 percent indicate zero hours and 77.6 percent indicate full-time.

Table 20. Current Practice Capacity of New Mexico Medical Doctors, 2013

Current Practice Capacity	All Physicians		Primary Care		Ob/Gyn		Psychiatrists		General Surgeons	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
My practice IS FAR FROM FULL: I can accept new/add	1,015	20.1%	350	19.9%	75	31.1%	29	9.3%	49	28.8%
My practice IS NEARLY FULL: I can accept a few new	1,564	30.9%	577	32.7%	106	44.0%	136	43.5%	37	21.8%
My practice IS FULL: I cannot accept any new/additional	407	8.0%	211	12.0%	11	4.6%	43	13.7%	5	2.9%
Not Answered/Not Applicable	2,072	41.0%	625	35.5%	49	20.3%	105	33.5%	79	46.5%
Total	**5,058**	**100.0%**	**1,763**	**100.0%**	**241**	**100.0%**	**313**	**100.0%**	**170**	**100.0%**

Future Practice Planning

Table 21. Near-Future Practice Plans for New Mexico Medical Doctors, 2013

Near Future Practice Plans	All Physicians		Primary Care		Ob/Gyn		Psychiatrists		General Surgeons	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Retire from patient care	222	4.4%	69	3.9%	11	4.6%	18	5.8%	6	3.5%
Significantly reduce patient care hours	337	6.7%	107	6.1%	19	7.9%	16	5.1%	11	6.5%
Move my practice to another geographic location in New Mexico	128	2.5%	53	3.0%	6	2.5%	12	3.8%	5	2.9%
Move my practice out of New Mexico	247	4.9%	93	5.3%	14	5.8%	14	4.5%	11	6.5%
None of the above	4,189	82.8%	1,462	82.9%	196	81.3%	256	81.8%	141	82.9%

Table 22. New Mexico Medical Doctors Reasons for Practice Change, 2013

Change Factors	All Physicians		Primary Care		Ob/Gyn		Psychiatrists		General Surgeons	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Age	403	8.0%	127	7.2%	24	10.0%	18	5.8%	16	9.4%
General lack of job satisfaction	277	5.5%	96	5.4%	13	5.4%	16	5.1%	12	7.1%
Geographic preference	163	3.2%	58	3.3%	9	3.7%	12	3.8%	7	4.1%
Gross receipts tax	186	3.7%	45	2.6%	10	4.1%	16	5.1%	6	3.5%
Health	65	1.3%	25	1.4%	3	1.2%	5	1.6%	3	1.8%
Increasing administrative/regulatory burden	394	7.8%	132	7.5%	20	8.3%	22	7.0%	16	9.4%
Practice environment	314	6.2%	100	5.7%	19	7.9%	19	6.1%	14	8.2%
Reimbursement issues	310	6.1%	94	5.3%	17	7.1%	15	4.8%	10	5.9%
Other	1,477	29.2%	543	30.8%	77	32.0%	106	33.9%	43	25.3%

Liability Insurance

Table 23. 2013 Medical Doctors answers to the question, "At what percentage increase in your annual professional liability insurance premium above your current level would you consider..."

Professional Liability Insurance Threshold	Retiring From Patient Care		Significantly Reducing Patient Care Hours		Moving Practice Out of State	
	Count	Percent*	Count	Percent*	Count	Percent*
0%	400	21.7%	370	21.9%	349	23.3%
0 - 10%	389	42.7%	381	44.5%	268	41.2%
0 - 20%	368	62.6%	356	65.5%	277	59.8%
0 - 30%	218	74.4%	200	77.4%	196	72.9%
0 - 40%	80	78.8%	78	82.0%	59	76.8%
0 - 50%	234	91.4%	195	93.5%	199	90.1%
0 - 60%	11	92.0%	15	94.4%	21	91.5%
0 - 70%	23	93.3%	18	95.5%	17	92.6%
0 - 80%	3	93.4%	9	96.0%	12	93.4%
0 - 90%	6	93.8%	5	96.3%	6	93.9%
0 - 100%	111	99.8%	61	99.9%	89	99.8%
0 - >100%	4	100.0%	1	100.0%	3	100.0%
Total	**1,847**	**100.00%**	**1,689**	**100.00%**	**1,496**	**100.00%**
Not Answered/Not Applicable	**3,211**	**63.48%**	**3,211**	**100.00%**	**3,211**	**100.00%**

***Cumulative percent of medical doctors who responded**

Table 24. 2013 Primary Care Medical Doctors answers to the question, "At what percentage increase in your annual professional liability insurance premium above your current level would you consider..."

Professional Liability Insurance Threshold	Retiring From Patient Care		Significantly Reducing Patient Care Hours		Moving Practice Out of State	
	Count	Percent*	Count	Percent*	Count	Percent*
0%	134	24.14%	133	26.13%	124	28.18%
0 - 10%	130	47.6%	123	50.3%	78	45.9%
0 - 20%	105	66.5%	100	69.9%	75	63.0%
0 - 30%	70	79.1%	56	80.9%	62	77.0%
0 - 40%	23	83.2%	17	84.3%	15	80.5%
0 - 50%	60	94.1%	49	93.9%	42	90.0%
0 - 60%	4	94.8%	6	95.1%	10	92.3%
0 - 70%	6	95.9%	5	96.1%	7	93.9%
0 - 80%	1	96.0%	2	96.5%	3	94.5%
0 - 90%	0	96.0%	1	96.7%	2	95.0%
0 - 100%	21	99.8%	17	100.0%	22	100.0%
0 - >100%	1	100.0%	0	100.0%	0	100.0%
Total	**555**	**100.00%**	**509**	**100.00%**	**440**	**100.00%**
Not Answered/Not Applicable	1,208	68.52%	1,254	71.13%	1,323	75.04%

***Cumulative percent of medical doctors who responded**

Table 25. 2013 Obstetric/Gynecology Medical Doctors answers to the question, "At what percentage increase in your annual professional liability insurance premium above your current level would you consider..."

Professional Liability Insurance Threshold	Retiring From Patient Care		Significantly Reducing Patient Care Hours		Moving Practice Out of State	
	Count	Percent*	Count	Percent*	Count	Percent*
0%	14	12.3%	19	17.4%	22	21.8%
0 - 10%	26	35.1%	31	45.9%	19	40.6%
0 - 20%	38	68.4%	31	74.3%	30	70.3%
0 - 30%	15	81.6%	6	79.8%	12	82.2%
0 - 40%	3	84.2%	5	84.4%	3	85.1%
0 - 50%	8	91.2%	11	94.5%	8	93.1%
0 - 60%	1	92.1%	0	94.5%	0	93.1%
0 - 70%	2	93.9%	2	96.3%	0	93.1%
0 - 80%	1	94.7%	0	96.3%	1	94.1%
0 - 90%	0	94.7%	1	97.2%	0	94.1%
0 - 100%	6	100.0%	3	100.0%	6	100.0%
0 - >100%	0	100.0%	0	100.0%	0	100.0%
Total	**114**	**100.0%**	**109**	**100.0%**	**101**	**100.0%**
Not Answered/Not Applicable	127	52.70%	132	54.77%	140	58.09%

***Cumulative percent of medical doctors who responded**

Table 26. 2013 Psychiatrists answers to the question, "At what percentage increase in your annual professional liability insurance premium above your current level would you consider..."

Professional Liability Insurance Threshold	Retiring From Patient Care		Significantly Reducing Patient Care Hours		Moving Practice Out of State	
	Count	Percent*	Count	Percent*	Count	Percent*
0%	31	25.0%	20	18.7%	19	20.2%
0 - 10%	16	37.9%	16	33.6%	15	36.2%
0 - 20%	21	54.8%	26	57.9%	15	52.1%
0 - 30%	11	63.7%	10	67.3%	9	61.7%
0 - 40%	4	66.9%	6	72.9%	5	67.0%
0 - 50%	18	81.5%	19	90.7%	19	87.2%
0 - 60%	3	83.9%	1	91.6%	1	88.3%
0 - 70%	4	87.1%	2	93.5%	2	90.4%
0 - 80%	0	87.1%	0	93.5%	0	90.4%
0 - 90%	0	87.1%	1	94.4%	1	91.5%
0 - 100%	13	97.6%	5	99.1%	6	97.9%
0 - >100%	3	100.0%	1	100.0%	2	100.0%
Total	**124**	**100.00%**	**107**	**100.00%**	**94**	**100.00%**
Not Answered/Not Applicable	189	60.38%	206	65.81%	219	69.97%

***Cumulative percent of medical doctors who responded**

Table 27. 2013 General Surgeons answers to the question, "At what percentage increase in your annual professional liability insurance premium above your current level would you consider..."

Professional Liability Insurance Threshold	Retiring From Patient Care		Significantly Reducing Patient Care Hours		Moving Practice Out of State	
	Count	Percent*	Count	Percent*	Count	Percent*
0%	15	23.8%	16	9.40%	11	6.50%
0 - 10%	15	47.6%	14	17.60%	10	12.40%
0 - 20%	11	65.1%	13	25.30%	13	20.00%
0 - 30%	10	81.0%	8	30.00%	13	27.60%
0 - 40%	5	88.9%	1	30.60%	1	28.20%
0 - 50%	6	98.4%	4	32.90%	5	31.20%
0 - 60%	0	98.4%	0	32.90%	1	31.80%
0 - 70%	0	98.4%	0	32.90%	1	32.40%
0 - 80%	0	98.4%	0	32.90%	0	32.40%
0 - 90%	0	98.4%	0	32.90%	0	32.40%
0 - 100%	1	100.0%	0	32.90%	5	35.30%
0 - >100%	0	100.0%	0	32.90%	0	35.30%
Total	**63**	**100.00%**	**56**	**100.00%**	**60**	**100.00%**
Not Answered/Not Applicable	107	62.94%	114	67.06%	110	64.71%

***Cumulative percent of medical doctors who responded**

Medicare Payment

Table 28. 2013 Medical Doctor responses to the question, "At what percentage decrease in your Medicare payment would you consider…"

Medicare Payment Threshold	Retiring from patient care		Closing my practice to NEW Medicare patients		Closing my practice to ALL Medicare patients		Significantly reducing patient care hours		Moving practice out of state	
	Count	Percent*	Count	Percent*	Count	Percent*	Count	Percent*	Count	Percent*
0%	385	23.19%	341	21.04%	343	21.50%	357	23.67%	349	27.63%
0 - 10%	495	53.0%	604	58.3%	468	50.8%	472	55.0%	293	50.8%
0 - 20%	330	72.9%	307	77.2%	325	71.2%	287	74.0%	234	69.4%
0 - 30%	215	85.8%	181	88.4%	205	84.1%	183	86.1%	156	81.7%
0 - 40%	43	88.4%	37	90.7%	72	88.6%	44	89.1%	56	86.1%
0 - 50%	131	96.3%	70	95.0%	90	94.2%	88	94.9%	92	93.4%
0 - 60%	5	96.6%	12	95.7%	14	95.1%	12	95.7%	8	94.1%
0 - 70%	11	97.3%	7	96.2%	16	96.1%	12	96.5%	13	95.1%
0 - 80%	10	97.9%	7	96.6%	12	96.9%	7	96.9%	13	96.1%
0 - 90%	8	98.4%	11	97.3%	12	97.6%	8	97.5%	4	96.4%
0 - 100%	27	100.0%	44	100.0%	38	100.0%	38	100.0%	45	100.0%
0 - >100%	0	100.0%	0	100.0%	0	100.0%	0	100.0%	0	100.0%
Total	**1,660**	**100.00 %**	**1,621**	**100.00%**	**1,595**	**100.00%**	**1,508**	**100.00%**	**1,263**	**100.00%**
Not Answered / Not Applicable	3,398	67.18%	3,437	67.95%	3,463	68.47%	3,550	70.19%	3,795	75.03%

***Cumulative percent of medical doctors who responded**

Table 29. 2013 Primary Care Medical Doctor responses to the question, "At what percentage decrease in your Medicare payment would you consider…"

Medicare Payment Threshold	Retiring from patient care		Closing my practice to NEW Medicare patients		Closing my practice to ALL Medicare patients		Significantly reducing patient care hours		Moving practice out of state	
	Count	Percent*	Count	Percent*	Count	Percent*	Count	Percent*	Count	Percent*
0%	132	28.21%	125	26.04%	116	24.58%	120	28.04%	115	32.39%
0 - 10%	136	57.3%	181	63.8%	143	54.9%	134	59.3%	80	54.9%
0 - 20%	93	77.1%	83	81.0%	88	73.5%	75	76.9%	56	70.7%
0 - 30%	57	89.3%	42	89.8%	52	84.5%	45	87.4%	41	82.3%
0 - 40%	9	91.2%	9	91.7%	21	89.0%	9	89.5%	12	85.6%
0 - 50%	32	98.1%	19	95.6%	23	93.9%	21	94.4%	22	91.8%
0 - 60%	0	98.1%	4	96.5%	5	94.9%	2	94.9%	3	92.7%
0 - 70%	3	98.7%	1	96.7%	5	96.0%	6	96.3%	4	93.8%
0 - 80%	2	99.1%	1	96.9%	4	96.8%	2	96.7%	7	95.8%
0 - 90%	1	99.4%	4	97.7%	3	97.5%	3	97.4%	1	96.1%
0 - 100%	3	100.0%	11	100.0%	12	100.0%	11	100.0%	14	100.0%
0 - >100%	0	100.0%	0	100.0%	0	100.0%	0	100.0%	0	100.0%
Total	**468**	**100.00%**	**480**	**100.00%**	**472**	**100.00%**	**428**	**100.00%**	**355**	**100.00%**
Not Answered / Not Applicable	1,295	73.45%	1,283	72.77%	1,291	73.23%	1,335	75.72%	1,408	79.86%

***Cumulative percent of medical doctors who responded**

Table 30. 2013 Obstetric/Gynecology Medical Doctor responses to the question, "At what percentage decrease in your Medicare payment would you consider…"

Medicare Payment Threshold	Retiring from patient care		Closing my practice to NEW Medicare patients		Closing my practice to ALL Medicare patients		Significantly reducing patient care hours		Moving practice out of state	
	Count	Percent*	Count	Percent*	Count	Percent*	Count	Percent*	Count	Percent*
0%	28	28.28%	20	18.52%	20	18.87%	26	26.80%	23	29.11%
0 - 10%	29	57.6%	47	62.0%	37	53.8%	31	58.8%	19	53.2%
0 - 20%	19	76.8%	13	74.1%	21	73.6%	14	73.2%	11	67.1%
0 - 30%	11	87.9%	11	84.3%	10	83.0%	11	84.5%	13	83.5%
0 - 40%	3	90.9%	3	87.0%	1	84.0%	1	85.6%	3	87.3%
0 - 50%	2	92.9%	3	89.8%	7	90.6%	5	90.7%	3	91.1%
0 - 60%	1	93.9%	2	91.7%	1	91.5%	1	91.8%	1	92.4%
0 - 70%	1	94.9%	1	92.6%	0	91.5%	0	91.8%	1	93.7%
0 - 80%	3	98.0%	1	93.5%	3	94.3%	2	93.8%	1	94.9%
0 - 90%	1	99.0%	2	95.4%	2	96.2%	1	94.8%	1	96.2%
0 - 100%	1	100.0%	5	100.0%	4	100.0%	5	100.0%	3	100.0%
0 - >100%	0	100.0%	0	100.0%	0	100.0%	0	100.0%	0	100.0%
Total	**99**	**100.00%**	**108**	**100.00%**	**106**	**100.00%**	**97**	**100.00%**	**79**	**100.00%**
Not Answered / Not Applicable	142	58.92%	133	55.19%	135	56.02%	144	59.75%	162	67.22%

***Cumulative percent of medical doctors who responded**

Table 31. 2013 Psychiatrist responses to the question, "At what percentage decrease in your Medicare payment would you consider…"

Medicare Payment Threshold	Retiring from patient care		Closing my practice to NEW Medicare patients		Closing my practice to ALL Medicare patients		Significantly reducing patient care hours		Moving practice out of state	
	Count	Percent*	Count	Percent*	Count	Percent*	Count	Percent*	Count	Percent*
0%	21	26.92%	20	22.73%	16	17.98%	18	25.35%	20	30.30%
0 - 10%	21	53.8%	35	62.5%	26	47.2%	18	50.7%	12	48.5%
0 - 20%	15	73.1%	13	77.3%	20	69.7%	16	73.2%	11	65.2%
0 - 30%	6	80.8%	10	88.6%	9	79.8%	7	83.1%	8	77.3%
0 - 40%	1	82.1%	3	92.0%	7	87.6%	3	87.3%	4	83.3%
0 - 50%	11	96.2%	5	97.7%	6	94.4%	6	95.8%	8	95.5%
0 - 60%	0	96.2%	1	98.9%	0	94.4%	1	97.2%	0	95.5%
0 - 70%	0	96.2%	0	98.9%	3	97.8%	1	98.6%	1	97.0%
0 - 80%	0	96.2%	1	100.0%	0	97.8%	0	98.6%	1	98.5%
0 - 90%	0	96.2%	0	100.0%	1	98.9%	0	98.6%	0	98.5%
0 - 100%	3	100.0%	0	100.0%	1	100.0%	1	100.0%	1	100.0%
0 - >100%	0	100.0%	0	100.0%	0	100.0%	0	100.0%	0	100.0%
Total	**78**	**100.00%**	**88**	**100.00%**	**89**	**100.00%**	**71**	**100.00%**	**66**	**100.00%**
Not Answered / Not Applicable	235	75.08%	225	71.88%	224	71.57%	242	77.32%	247	78.91%

***Cumulative percent of medical doctors who responded**

Table 32. 2013 General Surgeon responses to the question, "At what percentage decrease in your Medicare payment would you consider…"

Medicare Payment Threshold	Retiring from patient care		Closing my practice to NEW Medicare patients		Closing my practice to ALL Medicare patients		Significantly reducing patient care hours		Moving practice out of state	
	Count	Percent*	Count	Percent*	Count	Percent*	Count	Percent*	Count	Percent*
0%	11	17.19%	10	14.49%	13	19.12%	16	27.59%	13	23.21%
0 - 10%	23	53.1%	31	59.4%	22	51.5%	19	60.3%	13	46.4%
0 - 20%	13	73.4%	17	84.1%	19	79.4%	15	86.2%	16	75.0%
0 - 30%	9	87.5%	7	94.2%	6	88.2%	5	94.8%	5	83.9%
0 - 40%	2	90.6%	1	95.7%	2	91.2%	0	94.8%	2	87.5%
0 - 50%	3	95.3%	1	97.1%	2	94.1%	3	100.0%	1	89.3%
0 - 60%	1	96.9%	0	97.1%	1	95.6%	0	100.0%	2	92.9%
0 - 70%	0	96.9%	1	98.6%	1	97.1%	0	100.0%	0	92.9%
0 - 80%	0	96.9%	0	98.6%	0	97.1%	0	100.0%	0	92.9%
0 - 90%	1	98.4%	0	98.6%	0	97.1%	0	100.0%	0	92.9%
0 - 100%	1	100.0%	1	100.0%	2	100.0%	0	100.0%	4	100.0%
0 - >100%	0	100.0%	0	100.0%	0	100.0%	0	100.0%	0	100.0%
Total	**64**	**100.00%**	**69**	**100.00%**	**68**	**100.00%**	**58**	**100.00%**	**56**	**100.00%**
Not Answered / Not Applicable	106	62.35%	101	59.41%	102	60.00%	112	65.88%	114	67.06%

***Cumulative percent of medical doctors who responded**

II. Recruitment for Retention

The New Mexico Health Care Workforce Committee has multiple recommendations to improve the recruitment of health care professionals in New Mexico.

Effective recruitment entails identifying and bringing to New Mexico diverse and qualified health care professionals in a cost-effective and timely manner. A diverse workforce, whose characteristics and distribution reflect the patient population, is also important for ensuring access to care.

Studies have shown that patients belonging to a racial/ethnic minority group may be more likely to consult physicians of the same background and that physicians of a minority race or ethnicity may be more likely to care for more patients from minority and underserved populations. Research also has shown that greater diversity in the health care workforce may improve communication between practitioners and patients and increase trust in the health care delivery system among minority and socioeconomically disadvantaged populations.[20]

The following recommendations fall under three broad categories: education and training programs, incentives for addressing shortages and recruitment for retention in New Mexico communities, which focuses on addressing community needs and environmental factors affecting practice experience and job satisfaction.

A. Education and Training

New Mexico should develop new educational programs and enhance successful existing models that address unequal distribution of the health care workforce and shortages in rural and underserved areas.

Research shows that a student or health professional who comes from an underserved population is more likely to practice in rural or underserved communities.[21] Students are also more likely to practice in these areas if they have worked in a rural setting for an extended period during their medical education.[22]

A1. <u>Recommendation</u>: Career interest-building programs in New Mexico that recruit students into the health care professions before or during high school and as undergraduates should be carefully monitored and best practices adopted. Both short-term and long-term outcome measures should be required for state funding of these programs.

Educational programs are a key part of long-term solutions for increasing health workforce capacity. A number of programs are collaborating to varying degrees with partners at the UNM Health Sciences Center.

It is too early to fully address the impact of these programs on workforce recruitment, although student participants have been afforded opportunities for academic advancement and exposure to health professional careers that might not have otherwise existed. These programs also tap local resources, such as mentoring with practitioners, that give students opportunities to gain exposure to health care challenges and potential careers in their home communities.

The following health care career-building programs are active in New Mexico:

a. Health Career Programs for New Mexico's Youth. The UNM Health Sciences Center's Office for Diversity, in collaboration with many UNM departments, local schools and communities, oversees a comprehensive suite of programs to recruit New Mexico students into health care professions. A number of programs supported by other health care entities maintain varying levels of partnership with UNM:

- Youth Empowerment Project (*Middle School and High School*) – Supports youth to continue with their education and exposes them to nursing and other health careers. Coordinated by UNM Hospital's Research Nursing Division, YEP has engaged more than 500 underserved middle and high school students in multi-tiered after-school and summer programs that provide hands-on learning and mentoring. All of the participants from 2003-2009 graduated from high school, 78 percent entered postsecondary educational programs and 63 percent entered health care careers. There were 121 participants from Fall 2012 to Spring 2014.

- Healthcare Exploration Program of Christus St. Vincent Regional Medical Center (*High School*) – Provides Santa Fe County high school students with education, direct clinical observation experience, clinical rotations and career/college guidance. Students participate in a sequence of four-week intensive summer sessions, with a stipend and opportunity for an internship at the advanced level. HEP was started by St. Vincent Hospital Foundation in 2007. Sixty-three students participated in the summer of 2014.

- Dream Makers Health Careers Club (*Middle School and High School*) – Introduces students, especially from underrepresented and underserved populations, to career paths associated with health sciences and health care fields through afterschool programs that meet twice each month and mentoring by health professionals from UNM and the community. Fifteen sites participate in the program and 76 students were served in FY 2013.

- Dream Makers Plus Health Careers Club (*High School*) – This academic year program provides in-depth workshops from many health disciplines, discussion of health issues, CPR certification and assistance with the college application process. There were 79 participants in FY 2013.

- Health Careers Academy (*High School Summer Program*) – A non-residential summer program for freshmen, sophomores and juniors designed to raise ACT performance and provide exposure to and information about health care professions. There were 40 participants in FY 2013.
- Undergraduate Health Sciences Enrichment Program *(College Incoming Freshmen Summer Program*) – A six-week residential program for incoming college freshman that offers academic enrichment and extended introduction to programs and services offered by the university, as well as clinical exposure by shadowing health care professionals. There were 25 participants in FY 2013.
- FORWARD NM (*Middle School, High School College and Medical Education*) – Developed by Hidalgo Medical Services in Silver City to increase access to primary care in rural southwestern New Mexico by expanding health careers workforce development in public schools, undergraduate and graduate education, and resident rotations in underserved communities. Local middle and high school students are encouraged to consider health careers through clubs, camps, internships, volunteering and mentoring. Programs for undergraduates include health career clubs, shadowing experiences and opportunities to mentor younger students. Forward NM tracks rural students through college into health careers programs and provides rural training experiences during medical school, as well as a family medicine residency program (a HRSA Teaching Health Center Graduate Medical Education program site, accredited in May 2013).
- Mental and Behavioral Health Academy (*College Undergraduates and Graduates*) – A 15-week Saturday academy that provides opportunities for those interested in mental and behavioral health careers. It includes preparation for standardized tests, academic enrichment and rural clinical immersion experiences. There were 15 participants in FY 2013.
- MCAT +/- DAT+/PCAT+ (*College Undergraduates and Graduates)* – A six-week summer program designed to strengthen students' applications to medical, pharmacy and dental school by providing Kaplan preparatory courses and pre-admission workshops and seminars. There were 45 participants in FY 2013.
- New Mexico Clinical Education Program (*Pre-Medicine College Juniors*) – A six-week summer immersion program for pre-professional students. It provides clinical and community experience by placing students in a primary care setting throughout rural and tribal New Mexico. There were five participants in FY 2013.
- UNM-NMSU Cooperative Pharmacy Program (*College Incoming Freshmen for Pharmacy Pathway)* – A seven-to-eight-year program that enables students to complete pre-pharmacy coursework at NMSU and ultimately be admitted to the UNM College of Pharmacy. It engages students in pharmacy practice experiences

and provides preparatory courses for the PCAT. There were 10 participants in FY 2014.

- Pathways to Pharmacy (*College Graduates*) – Improves academic qualifications and facilitates entry to the UNM College of Pharmacy. There were two participants in FY 2013.
- Premedical Enrichment Program (*College Graduates*) – Helps educationally disadvantaged students work toward a medical degree. There were seven participants in FY 2013.

These programs focus on recruiting students from rural and underserved populations. Middle and high school programs provide crucial mentoring and exposure to health professions and introduction to academic skills needed to pursue higher education. Pre-college programs address significant barriers to pursuing medical professions by providing assistance with college admission processes, including test preparation. Baccalaureate and pre-medical programs provide continued support for navigating educational challenges and achieving professional success.

The New Mexico Area Health Education Center (AHEC) network is another important source of health career development programming and coordination. Part of a national initiative sponsored by the Health Resources and Services Administration, AHEC is led by the Office for Community Health at the UNM Health Sciences Center and includes three regional centers: Montañas del Norte AHEC in Las Vegas (located at Luna Community College), Southern AHEC in Las Cruces (located at New Mexico State University) and FORWARD NM AHEC in Silver City (located at Hidalgo Medical Services). Working with community partners, the AHEC centers encourage students from rural and medically underserved backgrounds to explore health care careers, coordinate placement of health professions students in underserved communities and provide continuing education opportunities to residents and practitioners in rural New Mexico.

b. UNM BA/MD Program –The Combined BA/MD Program is a groundbreaking state-funded collaboration between the UNM Health Sciences Center and the UNM College of Arts and Sciences, designed to address physician shortages. It is one of the country's first programs to directly link rural and family and community medicine with recruitment of promising students from rural and underserved areas. The program, which admitted its first cohort in 2006, each year assembles a diverse class of approximately 28 New Mexico students who are interested in meeting the needs of underserved communities. Students who meet entry requirements with their baccalaureate degree are admitted to the UNM School of Medicine in hopes that they will ultimately practice in New Mexico.

Between 2006 and 2013, 226 students matriculated into the program (all were New Mexico residents, except four students from the Navajo Nation in Arizona). Fifty-eight

percent of students are from underrepresented minority populations – 43 percent Hispanic/Latino, 14 percent American Indian and 5 percent African American. Fifty-six percent are female, and 44 percent male. Sixty-eight percent are from rural areas. Based on the U.S. 2010 Census, approximately 46.3 percent of New Mexico's population is Hispanic/Latino, 40.5 percent White, 9.4 percent American Indian/Alaska Native and 2.1 percent Black/African American.[23]

It is too early to quantify the effectiveness of the BA/MD program. The first class of students recently began their residency training, and outcome data and the number and percentage of students returning to New Mexico will not be available until their training is completed. However, preliminary outcomes demonstrate the potential impact of reaching out to students in underserved communities and strengthening community infrastructure to support health professionals by making connections to schools and local organizations.

A2. <u>Recommendation</u>: Training programs should be further enhanced to extend opportunities for training health professionals, including strong support for the UNM School of Medicine, Advanced Practice Registered Nurse programs at UNM and NMSU, New Mexico Nursing Education Consortium programs to increase the BSN-prepared workforce and development of a BA-DDS program. As the state invests in these programs, the New Mexico Health Care Workforce Committee will need to expand and implement tracking to analyze how many graduates practice in New Mexico and where they practice.

Training health professionals in New Mexico is a critical component of enhancing recruitment and retention in the state. The UNM Health Sciences Center has many successful training programs at its Albuquerque campus. As the only academic health center in a geographically large state, UNM HSC has also established partnership with health centers, hospitals and community colleges to expand opportunities for health care training.

The following programs are crucial for training New Mexico primary care practitioners:

a. **The UNM School of Medicine should continue its mission to educate and increase the diversity of health professionals and provide outstanding medical care to New Mexico's residents.** The state's only medical school, established in 1964, is vital for training the physician workforce. Approximately 33 percent of all practicing physicians in New Mexico were trained at UNM (1,528 out of 4,692 total), according to survey data collected by the New Mexico Health Care Workforce Committee. According to the American Association of Medical Colleges, almost two thirds (65.8 percent) of physicians who both attended medical school and completed their medical residency at UNM are licensed to practice in New Mexico.[24]

Based on Fall 2013 student enrollment data, 46 percent of School of Medicine students identify as Caucasian, 32 percent as Hispanic/Latino, 7 percent as Asian, 4 percent as American Indian or Alaskan Native, 2 percent as African American and 7 percent as other (2 percent indicated two or more ethnicities).[25]

The School of Medicine has developed very strong programs in family medicine and primary care as part of its commitment to serving communities within New Mexico and the surrounding region.). Over the past five years, 16 percent of UNM medical students have chosen family medicine and 39 percent have chosen primary care (defined as a combination of family medicine, pediatrics and internal medicine) on average, as compared to 9 percent and 39 percent nationally.[26] It should be noted that the primary care category can be misleading, because many of those residents who initially pursue graduate medical education in internal medicine do not end up practicing primary care but instead go into a specialty.

b. Advanced Practice Registered Nurse programs at UNM College of Nursing and New Mexico State University have been expanded and should be supported and monitored for outcomes. Advanced Practice Registered Nurses (APRNs) will be essential for meeting New Mexico's current and future health care workforce needs. APRNs provide comprehensive care, including prevention, diagnosis, treatment and management of patients with acute and chronic illnesses.

The UNM College of Nursing offers programs for family nurse practitioner (FNPs), pediatric nurse practitioner (PNPs) and certified nurse midwifery (CNM). The family and pediatric nurse practitioner specialties focus on primary care, especially for rural and underserved populations. Students in the CNM specialty concentrate on the primary care of women and infants. All students are required to travel outside of the Albuquerque area for a minimum of two clinical rotations. Students from rural areas are often placed in their home community for their clinical rotation. NPs have full practice and prescriptive authority per the New Mexico Nurse Practice Act (NMSA section 61-3-1).

Graduation data from the UNM College of Nursing, between Summer 2009 and Summer 2013, indicate that 90 percent of APRNs reside in a New Mexico county. Of these APRNs, 78 percent reside in metropolitan areas, 10 percent in micropolitan areas (areas with a population of at least 10,000 but less than 50,000) and 1.6 percent in a noncore county (those not near an urban area of 10,000 or more).

Beginning in 2015, the College will increase FNP, PNP and CNM admissions by an additional 24 students a year over current admits for a total of 40 students per year (with the first group graduating in 2017). The College is promoting the expansion through a number of channels as part of its recruitment effort, including professional conferences and meetings with administrators at health care facilities throughout the state.

The NMSU School of Nursing offers a Doctor of Nursing Practice (DNP) degree, which was established in 2011 to replace the Master's degree program in advanced nursing specialties. The DNP is offered in four specialty tracks: family psychiatric/mental health, adult/gerontology, public/community and family nurse practitioner (newly offered in 2013). There is also a post-master's-to-DNP option. All programs are web-based, making the program more accessible for working nurses and those who do not live close to the university campus. The program includes a mandatory weeklong session on campus once a year and a weeklong clinical immersion requirement for each year after the first year (not required for the master's-to-DNP program).

NMSU's DNP programs enrolled 66 students for the 2014-2015 academic year. Since 2006, NMSU has received legislative funding for the family psychiatric/mental health nurse practitioner specialty, which has supported remodeling of clinical space and simulation equipment. There have been 160 advanced practice nurse graduates from NMSU's graduate programs since 2006.

c. The New Mexico Nursing Education Consortium should be supported and monitored for outcomes. The New Mexico Nursing Education Consortium (NMNEC) is a network of all 17 state-funded nursing education programs that was established in 2010. NMNEC promotes educational advancement for nurses and coordination among nursing programs to build and enhance New Mexico's nursing workforce. NMNEC's goals are to:

- Increase the number of nurses with BSN and graduate degrees.
- Improve efficiency, quality and educational outcomes of nursing education through cooperation among community colleges and universities.
- Increase workforce diversity by improving nursing education for minorities, particularly in rural areas.

The institutions are connected by a common nursing curriculum, with faculty sharing resources for curriculum development, technology and program evaluation. Students can seamlessly transfer across nursing programs to receive credits toward their degree. NMNEC is increasing program capacities and access in rural areas to advanced training in order to create a larger and better-educated nurse workforce.[27]

The NMNEC curriculum has been accepted by all 17 public Associate Degree in Nursing (ADN) programs in New Mexico. NMNEC is also in the process of establishing partnerships between universities and community colleges to provide Bachelor of Science in Nursing (BSN) programs at community colleges and smaller universities. BSN students receive more in-depth training and as graduates are prepared for a broader scope of practice and professional engagement, particularly for team-based health care

practices.[28] Community colleges partner with either UNM College of Nursing or NMSU School of Nursing to offer the BSN on their campus. Students are dually enrolled at the community college and university and so earn their associate's degree and BSN degree simultaneously.

Table 33. NMEC Partners and Curriculum Implementation Status

College Nursing Program	NMNEC ADN/BSN Curriculum Implementation Status	College Nursing Program	NMNEC ADN/BSN Curriculum Implementation Status
Central New Mexico Community College (Albuquerque) *	Spring 2014	**Northern New Mexico College (Española)**	Fall 2018 *Plan to apply for ACEN candidacy*
Clovis Community College	Spring 2015 *Prerequisites implemented Fall 2014*	**San Juan College (Farmington) ***	Fall 2014
Doña Ana Community College	Fall 2016 *- Prerequisites implemented Fall 2014* *- ACEN candidacy pending*	**Santa Fe Community College (Santa Fe) ****	Summer 2014
Eastern New Mexico University-Roswell	Fall 2015 *Prerequisites implemented Fall 2014*	**UNM-Gallup**	Fall 2016 *Received ACEN accreditation Aug 2014*
Luna Community College (Las Vegas)	Fall 2017	**UNM-Taos**	Fall 2016
New Mexico Junior College (Hobbs) *	Fall 2014	**UNM-Valencia (Los Lunas)**	Fall 2017 *ACEN candidacy pending*
NMSU-Carlsbad	Fall 2016	**Western New Mexico University (Silver City)**	Fall 2018 *CCNE application submitted*

* Partnering with University of New Mexico College of Nursing

** Partnering with New Mexico State University School of Nursing

ACEN: Accreditation Commission for Education in Nursing

CCNE: Commission on Collegiate Nursing Education accreditation

The first partnership began in Spring 2014 between the University of New Mexico and Central New Mexico Community College, followed by New Mexico State University and Santa Fe Community College. UNM is now also partnering with San Juan College and New Mexico Junior College. As of 2014, 104 students at these community colleges have selected the BSN track, with graduation expected in Spring 2016. UNM and NMSU expect to graduate 253 BSNs in this time period. In total, it is anticipated that New Mexico's nursing workforce will grow by 357 BSN-prepared nurses by 2016.

Ten additional community colleges in Clovis, Roswell, Carlsbad, Taos, Gallup, Española, Las Vegas, Las Cruces, Los Lunas and Silver City are projected to begin matriculating

students into the BSN track in Spring 2015 through 2018. Barriers to implementation include accreditation issues and faculty shortages, though it is anticipated that all institutions will implement prerequisite courses by 2017 and full NMNEC courses by FY 2018.

According to a study in *Nursing Outlook*, BSNs experience more professional satisfaction compared to nurses with associate degrees, which may contribute to recruiting and retaining a stable nursing workforce.[29] Studies have also shown a link between BSN degrees and better patient care and lower mortality rates. One study found that a 10-point increase in the percentage of nurses with BSNs within a hospital was associated with an average reduction of 2.12 deaths for every 1,000 surgical patients and 7.47 deaths per 1,000 in a subset of complex patients.[30] In addition to NMNEC-affiliated BSN programs, four New Mexico schools offer accredited RN-to-BSN programs: Eastern New Mexico University (Portales), New Mexico Highlands University (Las Vegas), UNM and Western New Mexico University (Silver City).

The Institute of Medicine's 2011 *Future of Nursing* report recommended that 80 percent of the nursing workforce should hold a bachelor's degree by 2020 in order to meet the demands of an evolving health care system. Over the last year, NMNEC has made substantial progress in New Mexico toward this goal by putting in place infrastructure to extend BSN education across the state.

d. Dental medicine programs should be supported, including exploration of a BA/DDS program.

Dentistry shortages were addressed in last year's report. Financial support for developing a BA/DDS program similar to the UNM BA/MD program should be considered.

The New Mexico Legislature recently expanded funding for Western Interstate Commission for Higher Education (WICHE) positions. An educational consortium of 15 Western states, WICHE enables students from states like New Mexico that lack their own accredited dental programs to pay in-state tuition at affiliated dental schools in exchange for a commitment to practice in their home states. New Mexico pays the difference between in-state and out-of-state tuition with the agreement that students will "repay" the state through service. Ninety-two percent of WICHE participants have returned to New Mexico and completed their mandatory service obligations. Those who do not return must pay substantial penalties plus interest to the state. During the 2013-2014 academic year, 42 New Mexico students were part of the professional student exchange program for dentistry (up from 38 in 2012-2013).[31]

However, a dental school in New Mexico would do a better job of providing dentists willing to practice in rural areas of the state.

A3. <u>Recommendation:</u> The state should fully support Graduate Medical Education (GME) by continuing funding for nine current GME positions and explore options for increasing the number of funded positions, particularly for practice in rural areas and underserved areas. This would entail developing additional primary care training locations throughout New Mexico.

Medical school enrollment has increased, yet there has not been an increase in financial support for GME, the training that medical school graduates receive as residents in teaching hospitals. The federal government is the largest single source of GME funding through Medicare funds ($9.5 billion), Medicaid funds ($2 billion) and other sources.[32] The Balanced Budget Act of 1997 placed limitations on the number of federally Medicare-supported resident slots, based on 1996 residency numbers. This no longer adequately addresses current medical school enrollment or future needs of the health care system.

The Association of American Medical Colleges (AAMC) estimates that with full implementation of the Affordable Care Act, the United States will face a shortage of 45,000 primary care physicians over the next 10 years.[33] ACA did not remove caps on Medicare spending for GME support or provide other substantial provisions for supporting additional GME slots. As medical school enrollment continues to increase, it is estimated that by 2017 the number of graduates will exceed the number of GME slots available.

GME location is a strong indicator of where physicians choose to practice. According to AAMC data, 47.4 percent of physicians either stayed or returned to the state where they completed their most recent GME (with 66.6 percent of those who completed both undergraduate and graduate education remaining in-state). AAMC reports that in New Mexico 39.1 percent of physicians who completed GME in the state remained or returned to practice.).[34]

On average, 550 medical residents and fellows are in training at the UNM School of Medicine, and each year, approximately 140 medical residents and fellows complete their training there.[35] New Mexico has funded nine positions for GME education in 2014. It is critical that this funding continue and that further expansion be considered.

New Mexico Primary Care Training Consortium (NMPCTC) – In 2014 the New Mexico Legislature approved a Medicaid Teaching Health Center program, which will provide Federally Qualified Health Centers with payment to develop and operate family medicine and other primary care residency programs. This program does not have a ceiling for development of new primary care resident positions. As a result, there is significant potential to add primary care residents around the state with community health centers as training locations. NMPCTC, comprised of program directors of New Mexico family medicine training programs, provides technical assistance for site development and accreditation processes as well as quality assurance, training standardization and resident recruitment for all family medicine residency

programs. NMPCTC is requesting $285,000 in recurring state general funds to provide support of community-based primary care training. Initial plans are to expand existing programs in Las Cruces, Albuquerque and Santa Fe and develop a new site in Farmington. Future development is planned for southeastern and northeastern New Mexico.

In the absence of substantive federal policy change to increase GME slots, two states, Texas and Georgia, have implemented unique funding mechanisms to increase the number of GME slots in their states.

Case Studies:

- Texas GME Expansion – The Texas Legislature during its 2013 session (83rd Legislature) expanded GME funding to address future physician shortages and the need for keeping medical school graduates in the state. The legislature appropriated $31.8 million for a portfolio of grant programs that target GME expansion via multiple avenues.[36] Planning grants provide funding to hospitals that do not have a GME program to investigate the feasibility of establishing a first-year residency program. The funding is from a general revenue appropriation of $1,875,000 to support up to 12 applicants at $150,000 each for FY 2014 and 2015. Nine hospitals received awards for FY 2014. Grants were also made to fund existing residency programs with unfilled positions, totaling $3.25 million in investment for 50 additional positions over two years, and for providing additional years of residency in disciplines in which the state has less than the 80 percent of the national average per 100,000 population.[37] The expansion also provided $2.1 million to create the Primary Care Innovation Program, which will award incentives to medical schools that demonstrate improvement in graduation rates of physicians who work in primary care following their residency training.[38] The Texas Hospital Association estimates that the expansion will create up to 100 new first-year residency slots in addition to current levels.

- Georgia's Virgin Hospital Start-Up Funding Program – Between 2001 and 2011, Georgia expanded undergraduate medical enrollment by 49 percent to address concerns about physician shortages. In order to match increased enrollment with available GME positions, Georgia created a program to support 400 new GME slots at hospitals that previously did not have residency programs. As so-called "virgin" hospitals, these hospitals are able to apply for Medicare GME funds because their programs were created after the federal freeze on GME instituted in 1997. The Georgia General Assembly committed more than $5 million in start-up funds for FY 13 and FY 14 to support GME at the hospitals until they are eligible for Medicare funds. This represented a short-term financial commitment for the state with the potential for long-term federal support. The program targets hospitals in underserved areas. At least half of the new programs must be in primary care or general surgery, although hospitals can also use start-up funds for chosen specialties. Start-up fund allocation is overseen by the GME Regents Evaluation

and Assessment Team, a subcommittee of the Georgia Board of Regents that determines funding through an application process and has oversight responsibility. Six hospitals were in the process of developing new GME programs as of June 2013. Five competing hospitals that received start-up funds and are located in the state's region of greatest need jointly created their GME programs through the South Georgia Medical Education and Research Consortium, in partnership with local community health centers, Georgia Regents University and the Southwest Georgia AHEC. The first class of residents began their GME in July 2014. [39]

A4. Recommendation: The Community Health Worker certificate should be fully implemented.

Two unique opportunities are converging to develop a diverse workforce of community health workers (CHWs) in New Mexico: 1) a recently enacted state statute (Senate Bill 58) that provides the New Mexico Department of Health (DOH) the authority to establish a formal voluntary certification process for CHWs and; 2) the Affordable Care Act, which provides for the possibility of Medicaid reimbursement for services provided by certified CHWs. The formal training and certification for CHWs as health paraprofessionals may contribute to the health care workforce with a focus on prevention and team-based care systems.

Per SB 58, a community health worker is "a public health worker who applies an understanding of the experience, language and culture of the populations that the individual serves and who provides direct services aimed at optimizing individual and family health outcomes."[40] CHWs most often work with underserved and marginalized communities where people may have limited resources and experience other barriers to accessing health care. Many CHWs work for publicly funded entities, such as health clinics, hospitals, local health departments, tribal health programs or community organizations that provide social or health services. They may provide motivational counseling and education, care coordination and health screenings, while facilitating access to health care and social services.

The rules and regulations pertaining to SB 58 are in the final stages of promulgation. It is expected that the legislation will be fully implanted by spring 2015. The proposed training requirements for CHW certification include 100 hours of instruction and 100 hours of practicum in a health or community setting. There is also a proposal to "grandfather" in CHWs who wish to become certified through a process that recognizes their experiences and abilities. CHW training will be provided by community-based entities, community colleges and DOH, allowing CHWs to be trained where they live and work.

Training will provide a standardized knowledge base and increase CHWs' capacity to work in a variety of settings. Certification will also create job opportunities in health care and promote health career development, particularly in rural and underserved areas.

Approximately 800 CHWs work in New Mexico, according to a 2011 study conducted by DOH, the Office of Community Health Workers and the New Mexico Community Health Worker Advisory Council. Although there are no applicable national metrics, the UNM Office for Community Health estimates that the ideal ratio of CHWs to population is one CHW per 800 residents. Using this ratio, New Mexico would require an additional 1,700 CHWs to meet a projected total of 2,500 workers.

Many groups are poised to assist with recruitment. They include DOH, the New Mexico Community Health Workers Association, Northern/Southern Promotora Committees, the New Mexico Community Health Worker Advisory Council, the New Mexico Tribal Community Health Representative Association, 33 county and eight tribal health councils and the UNM Office for Community Health (which has partnerships with BlueCross BlueShield of New Mexico and Molina Healthcare, Inc.).

UNM and DOH recently obtained funding from the federal Health Resources and Services Administration to support tuition and other training expenses for approximately 210 CHW students over the next three years.

B. Financial Incentives for Addressing Shortages

A number of federal and state-funded programs provide financial incentives for practitioners working in health workforce shortage areas, including loan repayment, financial aid for service and state tax credits. The National Health Service Corps, a model for many state-funded financial incentive programs, was established by the Emergency Health Personnel Act of 1970 to address health workforce shortages and maldistribution. NHSC, administered by the Health Resources and Services Administration, provides scholarships and loan repayment programs for licensed primary care medical, dental, and mental and behavioral health providers who work in designated shortage areas. Both the American Recovery and Reinvestment Act (2009) and the Affordable Care Act (2010) significantly increased NHSC funding, enabling many more practitioners and wider distribution.

One of the most significant changes at the federal level has been reduction in the length of service designated by NHSC's contract renewal process. The length of the service agreement is a critical component of loan-for-service and scholarship programs in the retention and long-term placement of practitioners in a community. NHSC loan repayment contracts are for two years, after which, recipients can apply for a continuation contract. There is no guarantee of an extension, however, and continuations are issued only on a year-by-year basis. The amount of loan payment is also subject to change on a yearly basis. For FY 2015, NHSC participants can apply to receive an additional $20,000 in loan repayment for a one-year continuation of service (up from $15,000 per year).

NHSC previously allowed for awards of up to $170,000 to be distributed over five years, with continuation contracts of three years beyond the initial two-year contracts. NHSC continuation contracts are subject to annual budgetary constraints, which limits financial security for practitioners and may discourage longer-term practice in a community. Newly hired clinicians with only a two-year obligation to serve in a rural area might be inclined to immediately begin looking for other positions to pursue once their service obligation is met. The ideal commitment period should be further considered and remediated as needed.

There is a substantial amount of support in New Mexico for state-funded incentive programs that assist in encouraging providers to practice in rural and underserved areas. In addition to loan repayment and financial aid contracts for service, New Mexico also has a tax credit program to encourage rural practice.

Given that physician retention is not a guarantee, these financial incentive programs should be monitored to gauge impact and offered in tandem with other programs to ensure retention and long-term health workforce stability.

B1. <u>Recommendation</u>: Financial incentives for recruiting health care professionals should be maintained and expanded on the basis of their demonstrated efficacy. The New Mexico Health Care Workforce Committee should be funded to develop appropriate outcome measures of these programs in order to collect data and conduct analyses.

There is little evidence that economic factors such as debt and income potential play a significant role in specialty choice or physicians' practice location choice.[41] However, tuition assistance and debt repayment does serve as prominent consideration of initial practice location. Therefore, financial incentives are an important tool for recruiting physicians to primary care and to rural and underserved areas.[42] The average debt for a medical student at graduation in 2013 was $169,901.[43] Eight-six percent of all graduates had education debt, with 79 percent owing $100,000 or more and 40 percent owing $200,000 or more.

State Programs. New Mexico provides a number of loan-for-service and loan-repayment programs to support medical education.[44] Physician interest in New Mexico's loan repayment programs exceeds the number of slots available. One option would be to explore new repayment models such as public/private partnerships to fund additional programs and slots. For example, Massachusetts, after expanding health coverage in 2006 through its state reform, created a public-private partnership to repay loans for primary care physicians and nurse practitioners working at community health centers. The program is run by the Massachusetts League of Community Health Centers and funded by the state, Bank of America and a number of health plans and health care organizations.[45]

Existing New Mexico programs include:

- **Allied Health Loan for Service Program** – Provides loans for students in allied health professions training programs who intend to practice in underserved areas. Students must be New Mexico residents accepted into or already enrolled in an accredited program to be eligible. A portion of the loan, up to the full amount, is forgiven for each year of service. Eligible professions include physical therapy, occupational therapy, speech-language pathology, audiology, pharmacy, respiratory care, laboratory technology, mental health-social services, emergency medical services, nutrition and dentistry. The award is based on financial need and may not exceed $12,000 per year. Eight students participated during the 2012- 2013 academic year.

- **Medical Student Loan for Service** – Provides loans for UNM School of Medicine students who intend to practice in underserved areas in New Mexico. Eligible students must be New Mexico residents who have been accepted into the School of Medicine. A portion of the award, up to the full amount, is forgiven for each year of service. The award is based on financial need and may not exceed $25,000 per year. There were 14 applicants and 11 awards during the 2012-2013 academic year, with an average of $25,000 per award.

- **Primary Care Tuition Waiver** – Funding covers tuition for medical students who are interested in primary care specialties: family medicine, general internal medicine and general pediatrics. Applicants must be New Mexico residents and have graduated from a New Mexico high school or New Mexico college/university. Recipients must agree to work within a HRSA-designated primary care HPSA. The area must also be medically underserved, as defined by New Mexico's Rural Primary Health Care Act. Recipients can receive up to $30,000 of funding per academic year for up to five years. For each year of the waiver, a recipient is obliged to serve one year of practice as a primary care physician in an underserved area. Recipients who do not meet the service terms upon graduation face a penalty up to three times the principal amount, plus interest.

- **Nursing Student Loan for Service** – Provides loans for students who are New Mexico residents and have been accepted into a nursing program at a New Mexico public college or university on at least a half-time basis. The award is based on financial need and may not exceed $12,000 per year. There were 50 applicants and 26 awards during the 2012-2013 academic year.

- **New Mexico Health Professional Loan Repayment Program** – Provides loan repayment up to $35,000 a year for full-time service in a health professional shortage area. Practitioners must make a two-year commitment and be licensed or certified in the state. Eligible professions include primary care physicians, advanced practice nurses, allied health care providers, dentists, optometrists, osteopathic physicians, physician assistants and podiatrists. There were 131 applicants and 20 awards in FY 2013. The state's budget for this program previously was supplemented by an annual grant of

$200,000 from the Health Resources and Services Administration (HRSA), which was not awarded for 2014-2015. With matching funds from the state, this grant previously provided $400,000 per year for the program. The New Mexico Higher Education Department has budgeted more than $2.2 million for the Health Professional Loan Repayment Program for FY 2015, so the HRSA funding represents a portion of the total funding. *The Higher Education Department has indicated it will maintain its full current and future commitments to these students by offsetting the loss of HRSA grant funding with savings in other areas of its operating budget. However, the renewal of these federal funds should be a priority.*

- **New Mexico Health Service Corps** –To be eligible, the student must be a New Mexico resident and enrolled in or accepted into an accredited program and within 24 months of completion of study. Eligible professions include primary physicians (family practice, internal medicine, Ob/Gyn or pediatrics), family nurse practitioners, physician assistants, dentists, dental hygienists and emergency medical technician-paramedics. Participants must make a two-year commitment to practice in a shortage area in New Mexico. Defaulting on the obligation could result in a penalty of three times the amount of the total stipend, plus 18 percent per year.

Federal programs. There are 250 registered NHSC sites and 173 NHSC-supported providers in New Mexico as of February 2014.[46] This includes clinicians in primary care (CNM, DO, MD, NP, PA; n = 97), dental care (DD, RDH; n = 36), and mental health care (HSP, LSCW, LPC, PNS; n = 41).[1]

Federal investment for NHSC programs has increased significantly over the last five years. Between FY 2009-2013, NHSC supported nearly 14,000 clinicians, including 253 new NHSC loan repayment clinicians in New Mexico. The American Recovery and Reinvestment Act of 2009 committed $300 million over three years (FY 2009-2011) to expand NHSC programs. The Affordable Care Act further expanded the program by providing an additional $1.5 billion of support over five years (FY 2011-FY 2015).[47] Per the ACA, NHSC non-repayment is now non-taxable (in the past, NHSC covered federal income taxes associated with the awards).

The Affordable Care Act also led to programmatic changes: 1) service obligations can now be fulfilled on a part-time vs. full-time basis; 2) the loan repayment maximum benefit was increased from $35,000 to $50,000 and 3) teaching can now be treated as clinical practice for up to 20 percent of the obligation period. It is too soon to know what impact these changes might have on recruitment and retention.

[1] Abbreviations: CNM: certified nurse-midwife; DO: doctor of osteopathy; MD: doctor of medicine; NP: nurse practitioner; PA: physician assistant; DD: doctor of dentistry, including doctor of dental surgery (DDS) and doctor of dental medicine (DMD); RDH: registered dental hygienist; HSP: health service psychologists; LSCW: licensed clinical social worker; LPC: licensed professional counselor; PNS: psychiatric nurse specialist.

Nationally, 82 percent of NHSC clinicians practice in an underserved area for up to one year after completing their service commitments. Fifty-five percent continue to practice in underserved areas 10 years after completing their service commitments.[48] According to NHSC, practitioners are more likely to remain practicing in an underserved area when their, and their family's social, employment and educational needs are met in the community. NHSC has established a number of programs to promote retention, such as alumni activities and an NHSC ambassador program.

NHSC's financial incentive programs include the following:

- **NHSC Loan Repayment Program** – Available to licensed primary care medical, dental, and mental and behavioral health providers. Awardees receive up to $50,000 in exchange for two years of service in a Tier 1 HPSA and up to $30,000 in exchange for two years of service in a Tier 2 HPSA. Twenty-two of New Mexico's counties are considered Tier 1 shortage areas.[49] NHSC's scholarship program pays tuition, fees, and other educational costs and provides a living stipend, in return for a commitment to work at least two years in a medically underserved community. There are 140 loan repayment participants in New Mexico.

- **Students to Service Program** – Accepts students in their last year of medical school and provides tuition and loan repayment assistance. This program was established through increased funding to NHSC from the Affordable Care Act. Awardees receive up to $120,000 in exchange for at least three years of full-time service or six years of half-time service

- **Scholars Program –** Provides tuition, fees, other educational costs and a living stipend to students in MD, DO, dentist, nurse practitioner, certified nurse-midwife and physician assistant training programs. In return, recipients commit to working at least two years at an approved site in a medically underserved community. The scholarship can be awarded for up to four years, with the student agreeing to an additional year of service for each year beyond the first. There are 22 NHSC Scholars in New Mexico.

B2.<u>Recommendation</u>: The state tax incentive program should be evaluated for its impact on recruiting and retaining New Mexico's rural health care workforce, as identified below.

New Mexico provides a personal income tax credit to health care practitioners who provide services in underserved rural areas. The Rural Health Practitioners Tax Credit provides a $5,000 tax credit per year to licensed doctors, osteopathic physicians, dentists, clinical psychologists, optometrists, and podiatrists. Licensed dental hygienists, physician assistants, nurse practitioners, certified nurse midwives, certified registered nurse anesthetists and clinical nurse specialists are eligible for a $3,000 tax credit. Not all health care providers currently qualify for this tax incentive, including pharmacists and a number of allied health professionals.

A total of 1,690 practitioners who submitted applications in tax year 2013 to the Department of Health (to current date) were eligible for the rural tax credit, which would amount to $6.67 million if all were approved at the maximum level. The number of practitioners may increase as additional taxes are processed. To date, the number of health care professionals who submitted qualified applications include: 673 physicians, 55 doctors of osteopathic medicine, 117 physician assistants, 220 nurse practitioners, 29 nurse midwives, 42 nurse anesthetists, 21 advanced practice registered nurses, 235 dentists, 166 registered dental hygienists, 60 psychologists, 54 optometrists and 18 podiatrists.

The actual use of the tax credit in FY 2012 resulted in 1,640 claims, for a total of $6.3 million. Attesting to this program's importance, the numbers of claims have increased each year from 1,276 in FY2008 to 1,640 in FY2012. The details can be found in the *2013 New Mexico Tax Expenditure Report* compiled by the New Mexico Taxation and Revenue Department.

New Mexico physicians, as reported in *The Economic Impact of Physicians in New Mexico* published in 2014 by the American Medical Association, each support 9.4 jobs on average (39,385 total), $773,655 on average in total wages and benefits ($3.2 billion statewide), and $45,665 in local and state tax revenues ($191.2 million statewide).

Analysis is needed to confirm that this tax expenditure supports rural health care practitioner recruitment and retention. Understanding the total impact of tax credits and revenue will require collaboration of the New Mexico Department of Health, New Mexico Taxation and Revenue Department and other agencies. These agencies should also conduct analysis to examine the additional tax revenue that might be generated by the expansion of health insurance coverage in New Mexico and how such funds may be used to expand the health care workforce.

Recommendation: The New Mexico Health Care Workforce Committee recommends that it be funded and tasked, not exclusively, with deriving and compiling information and data as well as evaluating the impact of the Rural Health Practitioners Tax Credit on recruiting and retaining health care professionals in rural New Mexico. The committee also recommends analyses of the potential impact of including other health care professionals in the list of those eligible to apply for the Rural Health Practitioners Tax Credit.

C. Recruitment for Retention in New Mexico Communities

These financial incentives and education and training programs are crucial for cultivating a highly prepared and motivated health professions workforce in the state. However, given the volume needed and complexity of meeting health workforce needs, New Mexico will need to explore additional, more localized strategies for developing a dynamic workforce to meet its health care needs and health challenges. The effort that goes into recruiting practitioners and building a workforce should be met with an equal attention to communities' needs for effective

health care and optimizing the practice environment to encourage practitioners to practice in rural and underserved areas.

Historically, strategies for recruiting health professionals to rural and underserved areas have often been modeled on a "deficit perspective" that frames these communities as difficult or even unfavorable environments for medical practice.[50] Such a perspective, which characterizes practice as a burden or sacrifice, may foster a sense that rural and underserved areas should expect remedial "Band-Aid" solutions and inferior practitioners. Recruitment strategies should instead focus on the benefits to the community of an effective and sustainable health care workforce as well as the potential advantages of rural practice for providers.

Communities and health organizations need to invest in recruiting people whose experiences, training and professional and personal goals are aligned with working in a rural and/or underserved area. At the same time, those involved in recruitment must be transparent about the specific challenges that practitioners may face in their practice and make attempts to address and mitigate these conditions wherever possible.[51]

A number of organizations and programs focus on health workforce recruitment in the state. The Department of Health supports active recruitment of health professionals through multiple mechanisms. Funding for these programs is derived from state general funds through the Rural Primary Health Care Act, county-supported Medicaid and federal funds associated with the state's Office of Primary and Rural Health and HRSA's Office of Rural Health Policy. The Rural Primary Health Care Act also provides funds to community health centers and some rural health centers to supplement recruitment activity and salaries and benefits for basic primary care practitioners.

New Mexico Health Resources, Inc., is a private, non-profit agency contracted by the Department of Health with funds from the Rural Primary Health Care Act to recruit basic primary care providers to community health centers, rural health centers and critical access hospital at no charge to local agencies. The agency's referrals result in an average of 55 placements per year, including physicians, nurse practitioners, physician assistants, dentists and dental hygienists, as well as such allied health professionals as pharmacists, social workers, physical therapists, occupational therapists and speech language therapists. Physicians, dentists and nurse practitioners make up the majority of placements, especially to community health centers.

The agency also assists the state with recruitment for the federal Conrad J-1 Visa Waiver program. International medical students with a J-1 exchange visitor visa are expected upon completion of study to return to their home countries to practice for two years before applying for employment authorization in the United States. The Conrad J-1 Visa Waver program waives the two-year home residency requirement for physicians who agree to practice in a federally designated health professional shortage or medically underserved area. Each state is allowed up

to 30 waivers annually, 20 of which are designated for physicians practicing in rural areas. The program is an important component of physician workforce recruitment to New Mexico. On average, 25 slots are filled this way in New Mexico each year, with more than 400 physicians having been recruited through the Conrad Waiver program in total.

UNM Hospital and UNM Medical Group, Presbyterian Healthcare Services and Lovelace Health System operate throughout the state and have recruitment departments. Presbyterian Medical Services, which consists of 38 Federally Qualified Health Centers, has been working for almost 40 years with the National Health Service Corps to recruit physicians to underserved communities in New Mexico.

Choosing where to practice is a personal decision that is made based on a variety of factors. The New Mexico Health Care Workforce Committee has identified the following recommendations to enhance recruitment of an effective health care workforce for long-term stability and growth, drawing on surveys of practitioners, input from committee members who represent health care organizations across the state and programs established and recently piloted in other states.

C1. Recommendation: Community leaders should be included in the selection process to strengthen local investment in health workforce development and provide candidates with a more realistic view of the community and its values and vision.

Recruitment efforts in rural areas benefit from input from a variety of stakeholders, including clinics, hospital systems, local non-profit and government organizations and businesses. Primary care health clinics and practitioners are vital components of rural communities and, following the example of practices in metropolitan areas, should be more closely integrated with local government and other community resources to ensure the health and wellbeing of residents.

Primary care practice can also play an important role in developing and sustaining local infrastructure. In addition to providing more access to health care and potentially improving community health, primary care practices contribute to the local economy. According to an American Medical Association report, New Mexico physicians each support on average 9.4 jobs. Altogether, New Mexico physicians supported 39,385 jobs and generated $5.5 billion in total benefit, including $191.2 million in state and local taxes.[52] In a small, rural community, a single physician can have a relatively large impact on the local economy.

Involvement of community leaders and other stakeholders is also important to provide potential recruits with a more comprehensive introduction to a community. A recruitment team may help orient potential practitioners to the community by helping them to understand local health priorities and expectations, as well as scope of practice so that practitioners are able to make better-informed decisions about whether the position is a good fit.

Case Studies:

- Hidalgo Medical Services – Center for Health Innovation/FORWARD NM. This program aims to expand health careers workforce development in public schools, undergraduate and graduate programs and resident rotations in underserved communities. Currently serving four southwestern New Mexico counties, FORWARD NM has worked with more than 5,200 students to increase awareness of and preparedness for health careers. The program's summer academies for ninth graders, eleventh graders and undergraduates have resulted in significant increases in ACT and MCAT scores. The program also coordinates 70 to 80 students and resident rotations annually through Hidalgo Medical Services and has developed a family medicine residency program in Silver City that will graduate its first residents in the summer of 2015. The program seeks to expand its career development model to other New Mexico communities.

- Colorado STRIDES (Sustainable Towns: Rural Innovation, Development, Expansion, and Success) – This state-run program connects economic development to primary care health workforce recruitment and retention. Administered by the Colorado Office of Rural Health, the program provides technical assistance for communities and rural health care facilities in three main areas: community needs assessment and action planning, community health needs assessments for 501(c)(3) hospitals and economic impact studies for health care.[53] The assessments are then used to develop collaborative action plans that incorporate business development, health care capacity and housing development.

- West Virginia – Colorado's STRIDES program is based in part on the West Virginia Recruitable Community Project, which takes a community development approach to rural primary care recruitment. The program is a collaboration by the state's Division of Rural Health and Recruitment with community development agencies, local health care facilities and other stakeholders. The program aims to strengthen communities' ability to recruit and retain health professionals by providing education in recruitment strategies and assistance in formulating recruitment plans. A community design team makes an assessment and works with a community to establish a plan for future development. As of 2013, 18 rural West Virginia communities had participated in the program.

  West Virginia's Division of Rural Health and Recruitment also administers the National Health Service Corps, state loan repayment programs and J-1 Visa Waiver programs. Since 2008, 80 percent of providers in these programs have remained at their initial site of practice upon completion of program obligations.[54]

- The University of Iowa College of Dentistry and Dental Clinics, with a grant from Delta Dental of Iowa, created the Office of Iowa Practice Opportunities in 2006 to address the aging of dentists in the state and high number of counties designated at Dental Health Professional Shortage Areas (DHPSAs). The office maintains an online database of

practice opportunities, hosts job fairs with community representatives and practicing dentists, sponsors presentations for dental students, assists local communities in promoting dental practices and works with economic development agencies.[55]

Since the office's establishment, the number of dentists under the age of 40 in Iowa has increased by 77 percent. These dentists make up 29 percent of Iowa's dental workforce and the number of DHPSAs has decreased from 79 to 68.[56]

C2. Recommendation: Recruitment efforts should address social and environmental barriers to successful recruitment.

Personal motives for deciding where to practice include preference for community size and type, proximity of family and friends, climate and geography, recreational and social opportunities and expectations for community involvement. According to New Mexico Health Resources, the most common barriers to practitioner recruitment include lack of job opportunities for significant others and limited school and housing options.

Recruitment can be enhanced by providing individual consultation on such issues as employment opportunities for spouses, housing options and access to education and training. Practitioners (and their spouses and families, where applicable) may need additional support to become part of a community on a long-term basis.

A favorable workplace and clinical environment is important to recruit practitioners and maintain retention in rural areas. Important factors include:

- Sufficient resources and tools for career development
- Opportunity for active participation in decision making and in other administrative activities
- Supervisor mentoring and support
- Opportunities for teaching and research
- Support from co-workers and administration to meet needs of the patient population, including a sufficient staff for operation
- Flexibility in scheduling work hours and patient appointments
- Sufficient space and facilities for conducting clinical and administrative duties
- Culturally inclusive workspace

C3. Recommendation: Explore strategies to help manage workloads for health care practitioners and create professional support networks, particularly in health professional shortage areas.

According to New Mexico Health Resources, too much call frequency is one of the most common barriers to successful recruitment and retention. In shortage areas, practitioners may be particularly vulnerable to burnout, which can be exacerbated by a sense of isolation.

The following strategies should be explored to provide more support to physicians in order to increase recruitment and retention in rural and underserved areas.

a. **UNM Locum Tenens is an important source of primary care practice relief. The program has been under pressure with implementation in 2013 of the 80-hour work week restriction for residents. Consideration of the best strategies for enhancing the effectiveness of this program should be undertaken.**

b. **In communities where there are few practitioners, "teams without walls" should be created to provide relief or on-call services and professional support**.

   Being able to address the needs of patients is crucial to a practitioner's satisfaction. Team-based support can help to reduce isolation and provide access to consultation and specialty care services for patients.

   The "teams without walls" concept describes an integrated model of care in which health care professionals work together to ensure that patients receive the most appropriate level of care, particularly for patients with chronic conditions who may need care from a range of primary care physicians and other specialists.[57] Teams may be comprised of practitioners from multiple institutions and, in addition to physicians, may also include pharmacists, clinical nurses, therapists and other health care practitioners.

c. The NurseAdvice New Mexico model should be supported and expanded to help mitigate workload issues and expand triage services to physicians and patients, particularly in rural areas. NurseAdvice New Mexico is a web-enabled, statewide health advice line staffed by registered nurses and available 24/7 free of charge. The service, created in 2006 with state funding, is operated by public and private health care entities. Current partners include the Department of Health, Indian Health Service, UNM Health Sciences Center, Presbyterian Health Plan, Lovelace Health Plan, Evercare LTC, Primary Care Association, New Mexico Hospital and Health Systems Association, provider groups, community health centers and hospitals throughout the state, as well as Bernalillo and Union counties.

   The NurseAdvice line serves 15,000 people per month on average through its toll-free nurse advice hotline and online support system. Callers receive help in accessing the most appropriate level of care for their symptoms. By providing after-hour access to health triage services, NurseAdvice New Mexico reinforces local health services, reduces emergency department visits and decreases hospital readmission rates. Seventy percent of callers who report that they would have gone to the ER are referred to urgent or primary care centers or provided information on self/home care.

One of NurseAdvice New Mexico's primary goals is to help coordinate medical and behavioral health care services, social services and community resources. This coordination is an important resource to physicians practicing in rural and underserved areas, particularly for physicians who may be new to an area and not fully aware of the social services and community resources available to their patients.

Instituting mentoring and networking programs for rural clinicians may also help to reduce professional isolation.

C4.<u>Recommendation</u>: Enhance linkages between rural practitioners and the UNM Health Sciences Center to improve health care workforce retention.

Professional isolation and a lack of continual educational opportunities are critical barriers to building a stable workforce across New Mexico's geographically dispersed rural communities. Enhancing opportunities for practitioners to maintain and sharpen their medical skills will increase professional satisfaction and retention of a highly skilled health workforce.

Practitioners in rural areas may benefit from training on how to meet the specific needs of rural and/or underserved populations, as well as mentoring and consultation.

a. **Enhance programs that provide formal education and informal consultation and networking opportunities to build skills and statewide support networks, including use of telehealth technologies.** Project ECHO (Extension for Community Healthcare Outcomes), developed at UNM School of Medicine to help rural practitioners care for complex patients, is an internationally-renowned model for improving health care delivery to rural and underserved areas. Through real-time virtual clinics and other telehealth methods, community-based primary care providers work with specialists at UNM to extend their proficiency in treating complex patients. The program reduces the need for patients to travel long distances to see a specialist and provides team-based support and education to primary care practitioners, mitigating some of the stress of isolation while fostering greater satisfaction in rural practice.

   UNM HSC provides other continuing medical education programs that enable New Mexico providers to increase skill levels and reduce isolation. Mini-residencies and refresher courses enable physicians, nurses and other health professionals to improve their skills, learn about the latest clinical innovations and maintain connections to UNM HSC resources. These programs also facilitate collegiality and support networks among rural practitioners. Access to additional academic resources, such as the Health Sciences Library and Informatics Center, and opportunities for faculty appointments with teaching roles, should also be promoted and expanded.

   Training and networking via telehealth/internet technologies should be expanded.

b. **UNM HSC should provide additional consultation services to support local practitioners, practices and hospitals in a community-driven way**. The UNM Physician Access Line Service (PALS) provides consultation and a referral service for connecting primary care physicians to UNM specialists. This service and model could be extended to provide additional referral services for practitioners in rural and underserved communities.

   Consultation services could also help improve the family practice environment and management by providing support to rural practices for running a successful business and technical support for managing electronic health record systems.

c. **The UNM Office for Community Health has expanded its HEROs (Health Extension Rural Offices) program to include Academic Extension Hubs, which can serve as health care workforce retention centers across the state**. In addition to facilitating access to health professions education and health care-related training programs, the hubs provide welcoming inter-professional service and learning environments and provide social support for recruits and their families. Having professional colleagues is a key issue in primary care physician retention, according to New Mexico Health Resources, although the availability of peers within a single clinic, practice or community may be limited.

   Academic Extension Hubs could expand their role in facilitating regional connections among providers who are living and practicing in semi-isolated rural communities. These hubs might also help welcome new recruits and their families and provide an entryway into the community. There are Academic Extension Hubs in Silver City, Hobbs and Taos.

   The Department of Health could seek additional financial support for the further development of FORWARD NM by adding new communities interested in providing health careers development support for students.

D. New Mexico Health Care Workforce Committee

D1.<u>Recommendation</u>: The New Mexico Health Care Workforce Committee should be funded in order to provide and enhance analysis as required. Funding for this committee will allow it to assess the efficacy of health care workforce programs and study in depth the mental health service environment, as well as expand tracking of health care workforce recruitment and retention.

CONCLUSION

The task of building a health care workforce capable of meeting New Mexicans' needs is interwoven with the complex process of determining how many health professionals are practicing in the state, and where. This is a dynamic situation, with people entering and leaving the workforce every day. At best, we hope to produce a focused annual snapshot.

The New Mexico Health Care Workforce Committee, one of only a few such bodies in the nation, is developing an increasingly detailed picture of the state's health care professionals, their practice priorities and their capacity to serve the our population's needs.

In coming years we expect to achieve even higher levels of detail and accuracy. In 2015, appropriate funding will permit detailed analysis of mental and behavioral health care. Ultimately, our modeling will not only include our current circumstances, but also enable us to project the future needs of a growing population amid ongoing changes in health care delivery.

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Appendix

Distribution Analysis

Table 34. New Mexico Estimated Primary Care Physicians per County, 2013

County	Population	PCP Survey Count	Estimated (Non-Surveyed) MD PCPs	Estimated Primary Care DOs	Estimated PCP Count	Percent	per 1,000
Bernalillo	674,221	728	41	86	855	43.69%	1.27
Catron	3,607	2	0	0	2	0.10%	0.55
Chaves	65,823	64	4	5	73	3.73%	1.11
Cibola	27,335	19	1	0	20	1.02%	0.73
Colfax	13,094	8	0	1	9	0.46%	0.69
Curry	50,598	31	0	5	36	1.84%	0.71
De Baca	1,907	1	0	0	1	0.05%	0.52
Doña Ana	213,460	140	6	22	168	8.58%	0.79
Eddy	55,471	29	0	6	35	1.79%	0.63
Grant	29,328	30	0	2	32	1.64%	1.09
Guadalupe	4,551	2	0	1	3	0.15%	0.66
Harding	693	0	0	1	1	0.05%	1.44
Hidalgo	4,654	1	0	1	2	0.10%	0.43
Lea	68,062	24	1	5	30	1.53%	0.44
Lincoln	20,105	9	0	4	13	0.66%	0.65
Los Alamos	17,798	32	0	1	33	1.69%	1.85
Luna	24,659	8	1	1	10	0.51%	0.41
McKinley	73,308	46	2	2	50	2.55%	0.68
Mora	4,704	1	0	0	1	0.05%	0.21
Otero	65,616	33	0	4	37	1.89%	0.56
Quay	8,662	7	0	0	7	0.36%	0.81
Rio Arriba	40,072	25	1	1	27	1.38%	0.67
Roosevelt	19,955	13	0	1	14	0.72%	0.70
San Juan	126,503	80	2	14	96	4.91%	0.76
San Miguel	28,541	24	0	2	26	1.33%	0.91
Sandoval	136,575	91	3	9	103	5.26%	0.75
Santa Fe	147,423	161	8	19	188	9.61%	1.28
Sierra	11,572	8	0	3	11	0.56%	0.95
Socorro	17,584	10	0	2	12	0.61%	0.68
Taos	33,035	34	0	3	37	1.89%	1.12
Torrance	15,717	1	0	0	1	0.05%	0.06
Union	4,370	0	0	0	0	0.00%	0.00
Valencia	76,284	22	0	2	24	1.23%	0.31
Not New Mexico	-	69	0	0	69	3.53%	-
Unknown	-	10	0	0	10	0.51%	-
Total	**2,085,287**	**1,684**	**70**	**203**	**1,957**	**100.00%**	**0.94**

Table 35. New Mexico Certified Nurse Practitioners and Certified Nurse Specialists by County, 2013

County	Population	CNP	CNS	Both CNP and CNS	Total CNP/CNS	Percent
Bernalillo	674,221	454	67	12	533	48.9%
Catron	3,607	0	0	0	0	0.0%
Chaves	65,823	22	2	1	25	2.3%
Cibola	27,335	9	0	0	9	0.8%
Colfax	13,094	5	0	0	5	0.5%
Curry	50,598	19	0	0	19	1.7%
De Baca	1,907	1	0	0	1	0.1%
Doña Ana	213,460	86	20	6	112	10.3%
Eddy	55,471	32	1	3	36	3.3%
Grant	29,328	11	1	0	12	1.1%
Guadalupe	4,551	3	0	0	3	0.3%
Harding	693	0	0	0	0	0.0%
Hidalgo	4,654	0	0	0	0	0.0%
Lea	68,062	26	0	0	26	2.4%
Lincoln	20,105	8	1	0	9	0.8%
Los Alamos	17,798	6	0	0	6	0.6%
Luna	24,659	12	1	0	13	1.2%
McKinley	73,308	13	3	0	16	1.5%
Mora	4,704	4	0	0	4	0.4%
Otero	65,616	9	2	1	12	1.1%
Quay	8,662	8	0	0	8	0.7%
Rio Arriba	40,072	19	4	0	23	2.1%
Roosevelt	19,955	7	0	0	7	0.6%
San Juan	126,503	28	0	0	28	2.6%
San Miguel	28,541	11	1	1	13	1.2%
Sandoval	136,575	28	1	0	29	2.7%
Santa Fe	147,423	75	9	1	85	7.8%
Sierra	11,572	2	0	0	2	0.2%
Socorro	17,584	7	0	0	7	0.6%
Taos	33,035	18	0	0	18	1.7%
Torrance	15,717	4	0	1	5	0.5%
Union	4,370	2	0	0	2	0.2%
Valencia	76,284	18	3	0	21	1.9%
Total	**2,085,287**	**947**	**116**	**26**	**1,089**	**100.0%**

Table 36. Advanced Practice Registered Nurses in New Mexico, 2013

County	Population	All	Primary Care	Ob/Gyn	Psychiatric / Mental Health
Bernalillo	674,221	664	267	106	56
Catron	3,607	0	0	0	0
Chaves	65,823	35	18	4	1
Cibola	27,335	13	6	2	0
Colfax	13,094	10	6	0	0
Curry	50,598	25	13	6	1
De Baca	1,907	1	1	0	0
Doña Ana	213,460	123	41	16	21
Eddy	55,471	43	23	1	4
Grant	29,328	18	7	3	1
Guadalupe	4,551	3	2	0	0
Harding	693	0	0	0	0
Hidalgo	4,654	0	0	0	0
Lea	68,062	29	12	6	0
Lincoln	20,105	13	11	0	0
Los Alamos	17,798	9	4	2	0
Luna	24,659	14	5	2	0
McKinley	73,308	23	11	8	3
Mora	4,704	4	2	0	0
Otero	65,616	21	11	2	1
Quay	8,662	8	4	1	0
Rio Arriba	40,072	26	14	0	2
Roosevelt	19,955	8	6	0	1
San Juan	126,503	46	25	7	3
San Miguel	28,541	20	8	4	4
Sandoval	136,575	39	22	9	2
Santa Fe	147,423	105	56	18	7
Sierra	11,572	2	2	0	0
Socorro	17,584	8	5	0	0
Taos	33,035	26	14	5	0
Torrance	15,717	5	2	0	1
Union	4,370	4	3	0	0
Valencia	76,284	21	12	2	2
Total	**2,085,287**	**1,366**	**613**	**204**	**110**

Table 37. New Mexico Estimated Obstetricians and Gynecologists per County, 2013

County	Population	Female Population %	Ob/Gyn Survey Count	Estimated (Non-Surveyed) Ob/Gyn	Estimated Ob/Gyn Count	Percent	per 1,000 female pop
Bernalillo	674,221	50.9%	120	13	133	51.95%	0.39
Catron	3,607	48.0%	0	0	0	0.00%	0.00
Chaves	65,823	50.2%	8	1	9	3.52%	0.27
Cibola	27,335	49.0%	2	0	2	0.78%	0.15
Colfax	13,094	49.0%	2	0	2	0.78%	0.31
Curry	50,598	48.4%	2	0	2	0.78%	0.08
De Baca	1,907	50.2%	0	0	0	0.00%	0.00
Doña Ana	213,460	50.7%	18	3	21	8.20%	0.19
Eddy	55,471	49.6%	8	1	9	3.52%	0.33
Grant	29,328	50.4%	3	0	3	1.17%	0.20
Guadalupe	4,551	42.8%	0	0	0	0.00%	0.00
Harding	693	47.8%	0	0	0	0.00%	0.00
Hidalgo	4,654	49.2%	0	0	0	0.00%	0.00
Lea	68,062	48.5%	3	0	3	1.17%	0.09
Lincoln	20,105	50.6%	3	0	3	1.17%	0.29
Los Alamos	17,798	49.6%	2	0	2	0.78%	0.23
Luna	24,659	49.8%	4	0	4	1.56%	0.33
McKinley	73,308	51.8%	8	0	8	3.13%	0.21
Mora	4,704	48.5%	0	0	0	0.00%	0.00
Otero	65,616	49.1%	10	1	11	4.30%	0.34
Quay	8,662	51.4%	0	0	0	0.00%	0.00
Rio Arriba	40,072	50.7%	3	0	3	1.17%	0.15
Roosevelt	19,955	49.7%	1	0	1	0.39%	0.10
San Juan	126,503	50.4%	9	0	9	3.52%	0.14
San Miguel	28,541	50.6%	4	0	4	1.56%	0.28
Sandoval	136,575	51.0%	6	1	7	2.73%	0.10
Santa Fe	147,423	51.2%	12	0	12	4.69%	0.16
Sierra	11,572	49.9%	0	0	0	0.00%	0.00
Socorro	17,584	48.9%	4	0	4	1.56%	0.47
Taos	33,035	50.8%	3	0	3	1.17%	0.18
Torrance	15,717	47.9%	0	0	0	0.00%	0.00
Union	4,370	42.3%	0	0	0	0.00%	0.00
Valencia	76,284	49.7%	0	1	1	0.39%	0.03
Not New Mexico	-	-	6	0	6	2.34%	-
Unknown	-	-	0	0	0	0.00%	-
Total	**2,085,287**	**50.4%**	**241**	**21**	**256**	**100.00 %**	**0.24**

Table 38. New Mexico Estimated General Surgeons per County, 2013

County	Population	GS Survey Count	Percent	per 1,000
Bernalillo	674,221	62	36.47%	0.09
Catron	3,607	0	0.00%	0.00
Chaves	65,823	3	1.76%	0.05
Cibola	27,335	1	0.59%	0.04
Colfax	13,094	5	2.94%	0.38
Curry	50,598	9	5.29%	0.18
De Baca	1,907	0	0.00%	0.00
Doña Ana	213,460	11	6.47%	0.05
Eddy	55,471	6	3.53%	0.11
Grant	29,328	4	2.35%	0.14
Guadalupe	4,551	0	0.00%	0.00
Harding	693	0	0.00%	0.00
Hidalgo	4,654	0	0.00%	0.00
Lea	68,062	2	1.18%	0.03
Lincoln	20,105	0	0.00%	0.00
Los Alamos	17,798	6	3.53%	0.34
Luna	24,659	1	0.59%	0.04
McKinley	73,308	7	4.12%	0.10
Mora	4,704	0	0.00%	0.00
Otero	65,616	2	1.18%	0.03
Quay	8,662	1	0.59%	0.12
Rio Arriba	40,072	1	0.59%	0.02
Roosevelt	19,955	1	0.59%	0.05
San Juan	126,503	7	4.12%	0.06
San Miguel	28,541	3	1.76%	0.11
Sandoval	136,575	4	2.35%	0.03
Santa Fe	147,423	11	6.47%	0.07
Sierra	11,572	0	0.00%	0.00
Socorro	17,584	2	1.18%	0.11
Taos	33,035	7	4.12%	0.21
Torrance	15,717	0	0.00%	0.00
Union	4,370	2	1.18%	0.46
Valencia	76,284	0	0.00%	0.00
Not New Mexico	-	12	7.06%	-
Unknown	-	0	0.00%	-
Total	**2,085,287**	**170**	**100.00%**	**0.08**

Table 39. New Mexico Estimated Psychiatrists per County, 2013

County	Population	PSYCH Survey Count	Percent	per 1,000
Bernalillo	674,221	161	51.60%	0.24
Catron	3,607	0	0.00%	0.00
Chaves	65,823	6	1.92%	0.09
Cibola	27,335	1	0.32%	0.04
Colfax	13,094	0	0.00%	0.00
Curry	50,598	4	1.28%	0.08
De Baca	1,907	0	0.00%	0.00
Doña Ana	213,460	23	7.37%	0.11
Eddy	55,471	2	0.64%	0.04
Grant	29,328	5	1.60%	0.17
Guadalupe	4,551	0	0.00%	0.00
Harding	693	0	0.00%	0.00
Hidalgo	4,654	0	0.00%	0.00
Lea	68,062	3	0.96%	0.04
Lincoln	20,105	0	0.00%	0.00
Los Alamos	17,798	1	0.32%	0.06
Luna	24,659	1	0.32%	0.04
McKinley	73,308	7	2.24%	0.10
Mora	4,704	0	0.00%	0.00
Otero	65,616	2	0.64%	0.03
Quay	8,662	1	0.32%	0.12
Rio Arriba	40,072	0	0.00%	0.00
Roosevelt	19,955	0	0.00%	0.00
San Juan	126,503	7	2.24%	0.06
San Miguel	28,541	9	2.88%	0.32
Sandoval	136,575	8	2.56%	0.06
Santa Fe	147,423	47	15.06%	0.32
Sierra	11,572	0	0.00%	0.00
Socorro	17,584	3	0.96%	0.17
Taos	33,035	4	1.28%	0.12
Torrance	15,717	0	0.00%	0.00
Union	4,370	0	0.00%	0.00
Valencia	76,284	7	2.24%	0.09
Not New Mexico	-	10	3.21%	-
Unknown	-	0	0.00%	-
Total	**2,085,287**	**312**	**100.00%**	**0.15**

Gap Analysis

Table 40. New Mexico Estimated Primary Care Physician Shortage, 2013 (Max Assumption)*

County	Population	Estimated PCP Count	Gap
Bernalillo	674,221	855	322
Catron	3,607	2	-1
Chaves	65,823	73	21
Cibola	27,335	20	-2
Colfax	13,094	9	-1
Curry	50,598	36	-4
De Baca	1,907	1	-1
Doña Ana	213,460	168	-1
Eddy	55,471	35	-9
Grant	29,328	32	9
Guadalupe	4,551	3	-1
Harding	693	1	0
Hidalgo	4,654	2	-2
Lea	68,062	30	-24
Lincoln	20,105	13	-3
Los Alamos	17,798	33	19
Luna	24,659	10	-10
McKinley	73,308	50	-8
Mora	4,704	1	-3
Otero	65,616	37	-15
Quay	8,662	7	0
Rio Arriba	40,072	27	-5
Roosevelt	19,955	14	-2
San Juan	126,503	96	-4
San Miguel	28,541	26	3
Sandoval	136,575	103	-5
Santa Fe	147,423	188	72
Sierra	11,572	11	2
Socorro	17,584	12	-2
Taos	33,035	37	11
Torrance	15,717	1	-11
Union	4,370	0	-3
Valencia	76,284	24	-36
Total	**2,085,287**	**1,957**	**306**

***** Gap defined by the national average of 0.79 primary care physicians per 1,000 population, as reported by the Association of American Medical Colleges' *2011 Physician Workforce Data Book*.

Table 41. New Mexico Certified Nurse Practitioners and Certified Nurse Specialists Surplus(+)/Shortage(-) by County, 2013*

County	Population	Total CNP/CNS	Gap
Bernalillo	674,221	533	142
Catron	3,607	0	-2
Chaves	65,823	25	-13
Cibola	27,335	9	-7
Colfax	13,094	5	-3
Curry	50,598	19	-10
De Baca	1,907	1	0
Doña Ana	213,460	112	-12
Eddy	55,471	36	4
Grant	29,328	12	-5
Guadalupe	4,551	3	0
Harding	693	0	0
Hidalgo	4,654	0	-3
Lea	68,062	26	-13
Lincoln	20,105	9	-3
Los Alamos	17,798	6	-4
Luna	24,659	13	-1
McKinley	73,308	16	-27
Mora	4,704	4	1
Otero	65,616	12	-26
Quay	8,662	8	3
Rio Arriba	40,072	23	0
Roosevelt	19,955	7	-5
San Juan	126,503	28	-45
San Miguel	28,541	13	-4
Sandoval	136,575	29	-50
Santa Fe	147,423	85	-1
Sierra	11,572	2	-5
Socorro	17,584	7	-3
Taos	33,035	18	-1
Torrance	15,717	5	-4
Union	4,370	2	-1
Valencia	76,284	21	-23
Total	**2,085,287**	**1,089**	**-121**

***** Gap defined by the national average of 0.58 certified nurse practitioners per 1,000 population, as reported by the Henry J. Kaiser Family Foundation (*State Health Facts*, 2014).

Table 42. New Mexico Estimated Obstetricians/Gynecologists Practice Gap per County, 2013*

County	Population	Estimated Ob/Gyn Count	Gap
Bernalillo	674,221	133	61
Catron	3,607	0	0
Chaves	65,823	9	2
Cibola	27,335	2	-1
Colfax	13,094	2	1
Curry	50,598	2	-3
De Baca	1,907	0	0
Doña Ana	213,460	21	-2
Eddy	55,471	9	3
Grant	29,328	3	0
Guadalupe	4,551	0	0
Harding	693	0	0
Hidalgo	4,654	0	0
Lea	68,062	3	-4
Lincoln	20,105	3	1
Los Alamos	17,798	2	0
Luna	24,659	4	1
McKinley	73,308	8	0
Mora	4,704	0	0
Otero	65,616	11	4
Quay	8,662	0	-1
Rio Arriba	40,072	3	-1
Roosevelt	19,955	1	-1
San Juan	126,503	9	-4
San Miguel	28,541	4	1
Sandoval	136,575	7	-8
Santa Fe	147,423	12	-4
Sierra	11,572	0	-1
Socorro	17,584	4	2
Taos	33,035	3	-1
Torrance	15,717	0	-2
Union	4,370	0	0
Valencia	76,284	1	-7
Total	**2,085,287**	**256**	**36**

* Gap defined by the national average of 0.21 Ob/GYN physicians per 1,000 female population, as reported by the American Congress of Obstetricians and Gynecologists (*The Obstetrician-Gynecologist Workforce in the United States: Facts, Figures, and Implications*, 2011).

Table 43. New Mexico Estimated General Surgeons Practice Gap per County, 2013*

County	Population	Estimated GS Count	Gap
Bernalillo	674,221	68	28
Catron	3,607	0	0
Chaves	65,823	3	-1
Cibola	27,335	1	-1
Colfax	13,094	5	4
Curry	50,598	9	6
De Baca	1,907	0	0
Doña Ana	213,460	12	-1
Eddy	55,471	7	4
Grant	29,328	4	2
Guadalupe	4,551	0	0
Harding	693	0	0
Hidalgo	4,654	0	0
Lea	68,062	2	-2
Lincoln	20,105	0	-1
Los Alamos	17,798	6	5
Luna	24,659	1	0
McKinley	73,308	7	3
Mora	4,704	0	0
Otero	65,616	2	-2
Quay	8,662	1	0
Rio Arriba	40,072	1	-1
Roosevelt	19,955	1	0
San Juan	126,503	7	-1
San Miguel	28,541	3	1
Sandoval	136,575	4	-4
Santa Fe	147,423	12	3
Sierra	11,572	0	-1
Socorro	17,584	2	1
Taos	33,035	7	5
Torrance	15,717	0	-1
Union	4,370	2	2
Valencia	76,284	0	-5
Total	**2,085,287**	**179**	**43**

* Gap defined by the recommendation for minimum need of 6.0 general surgeons per 100,000 population made by the American College of Surgeons Health Policy Research Institute ("Developing an Index of Surgical Underservice," 2011).

Table 44. New Mexico Estimated Psychiatrist Gap per County, 2013*

County	Population	Estimated Psychiatrist Count	Gap
Bernalillo	674,221	174	70
Catron	3,607	0	-1
Chaves	65,823	6	-4
Cibola	27,335	1	-3
Colfax	13,094	0	-2
Curry	50,598	4	-4
De Baca	1,907	0	0
Doña Ana	213,460	23	-10
Eddy	55,471	2	-7
Grant	29,328	5	0
Guadalupe	4,551	0	-1
Harding	693	0	0
Hidalgo	4,654	0	-1
Lea	68,062	3	-7
Lincoln	20,105	0	-3
Los Alamos	17,798	1	-2
Luna	24,659	1	-3
McKinley	73,308	7	-4
Mora	4,704	0	-1
Otero	65,616	2	-8
Quay	8,662	1	0
Rio Arriba	40,072	0	-6
Roosevelt	19,955	0	-3
San Juan	126,503	8	-11
San Miguel	28,541	9	5
Sandoval	136,575	8	-13
Santa Fe	147,423	51	28
Sierra	11,572	0	-2
Socorro	17,584	3	0
Taos	33,035	4	-1
Torrance	15,717	0	-2
Union	4,370	0	-1
Valencia	76,284	8	-4
Total	**2,085,287**	**321**	**-1**

* Gap defined by the NM Health Care Workforce Committee recommendation of 1 psychiatrists per 6,500 population.