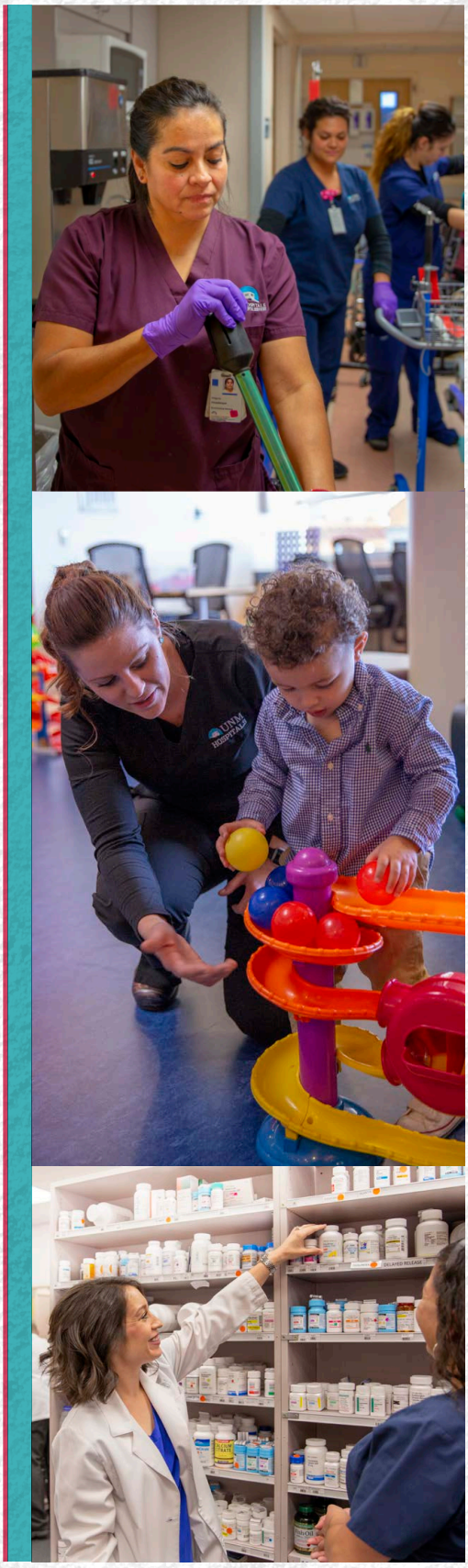

New Mexico Health Care Workforce Committee

2018 ANNUAL REPORT

OCTOBER 1, 2018

New Mexico Health Care Workforce Committee 2018 Annual Report

October 1, 2018

This publication was developed as a white paper to report on the status of the New Mexico health care workforce during the period 1 January 2017 – 31 December 2017. Where appropriate for continuity and clarity, key language has been repeated or excerpted verbatim from prior years' reports.[1–5] For the purposes of attribution and authorship, the New Mexico Health Care Workforce Committee suggests the following citation:

Farnbach Pearson AW, Reno JR, New Mexico Health Care Workforce Committee. 2018 Annual Report. Albuquerque NM: University of New Mexico Health Sciences Center, 2018.

From the Chair of the New Mexico Health Care Workforce Committee

The New Mexico Health Care Workforce Committee is pleased to provide this annual October 1 report to the Legislature of its analysis of the state's licensed health professionals and where they practice.

New Mexico has long led the nation in health care workforce studies. The action of the Legislature requiring relicensure surveys of all state licensed health professionals beginning in 2012 has created the necessary infrastructure to study provider shortages. On an annual basis, the committee oversees the efforts of staff to maintain and analyze received from the state's health professional licensing boards. This analysis informs the committee's recommendations for measures to improve access to health care in New Mexico's rural and underserved areas.

This year's report updates the twelve professions included in 2017, allowing for greater understanding of the distribution of the state's health care providers and how this has changed over time. The committee also began a review of the surveys required by licensing boards for their fulfillment of the core essential data set detailed in the 2012 Health Care Work Force Data Collection, Analysis and Policy Act, as well as instances where the work of the committee could benefit from alignment among licensing boards' surveys.

This year, as in past years, the committee offers recommendations aimed at reducing workforce shortages. We include broad recommendations, intended as groundwork for future initiatives, even if it is not possible to fulfill all fourteen recommendations due to the state's funding limitations.

We would also like to take this opportunity to commend the Legislature and the state for their action on past recommendations. We present this informational report with our thanks as you work to meet the ongoing challenges our state faces in making high-quality health care accessible for all New Mexicans.

Sincerely,

Richard S. Larson, MD, PhD
Chair, New Mexico Health Care Workforce Committee
Executive Vice Chancellor, UNM Health Sciences Center

Summary of the 2018 Recommendations of the New Mexico Health Care Workforce Committee

For detailed descriptions of these recommendations, please see Section II.G (page 81, Recommendations 1 through 8), Section III.C (page 87, Recommendations 9 through 13) and Section IV.C (page 93, Recommendation 14)

Rec. 1	Identify funding for efforts to support the New Mexico Nursing Education Consortium (NMNEC).
Rec. 2	Direct RLD to correct their information technology system changes so that all survey responses can be provided to the University of New Mexico Health Sciences Center and the committee.
Rec. 3	Continue funding for expanded primary and secondary care residencies in New Mexico.
Rec. 4	Increase funding for state loan-for-service and loan repayment programs, and consider restructuring them to target the professions most needed in rural and underserved areas, rather than prioritizing those with higher debt.
Rec. 5	Request that the Department of Health add pharmacists, social workers and counselors to the health care professions eligible for New Mexico's Rural Healthcare Practitioner Tax Credit program.
Rec. 6	Create a committee tasked with examining future health care workforce needs related to the state's changing demographics.
Rec. 7	Provide funding for the New Mexico Health Care Workforce Committee.
Rec. 8	Establish a tax credit for health care professional preceptors who work with public institutions.
Rec. 9	Require that licensed behavioral health professionals receive three hours of continuing education credits each licensure cycle in the treatment of substance use disorders.
Rec. 10	Finalize and promulgate changes to the New Mexico Medicaid Behavioral Health Regulations to reimburse Medicaid services when delivered by behavioral health interns in community settings.
Rec. 11	Finalize and promulgate changes to the New Mexico Medicaid Behavioral Health Regulations to identify physician assistants as a behavioral health provider type, which will allow Medicaid reimbursement of services when delivered by physician assistants in behavioral health settings.
Rec. 12	Expedite direct services via telehealth by participating in the PSYPACT interstate licensing compact.
Rec. 13	Fund an infrastructure through the New Mexico Hospital Association for a centralized Telebehavioral Health Program to provide direct care to rural communities.
Rec. 14	Direct the pertinent professional licensing boards to make the necessary changes to align their surveys with legislative requirements and other boards' surveys.

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Section I

Introduction

I.A. Background

Since the passage of the New Mexico Health Care Work Force Data Collection, Analysis and Policy Act of 2011, New Mexico has been a national leader in health workforce data collection, analysis and planning.[6] With this Act, the New Mexico Legislature required all health care boards to collect a core essential data set at the time of license issue and/or renewal and established a broad stakeholder committee – the New Mexico Health Care Workforce Committee – tasked with analysis of these data and recommendations to improve access to health care for New Mexicans.

The 2012 amendment of the Act specified that the University of New Mexico Health Sciences Center serve as the data repository and lead the committee, bringing to bear the unique strengths of the state's only academic health center in building this statewide planning initiative. From the committee's first annual report in 2013 through this, the sixth, analysis has expanded from just six professions (licensed practical nurses, registered nurses, advanced practice registered nurses, primary care physicians, psychiatrists and dentists) to 12, and begun to examine workforce trends over time.

In addition to the annual report, the New Mexico Health Care Workforce Committee conducts research on a range of narrower topics of interest to the committee and to the nationwide health workforce research community. This research is disseminated through research publications and conference presentations. Since completion of the 2017 annual report, New Mexico health care workforce data formed the basis of two peer-reviewed journal articles, one letter to the editor of *JAMA*, three conference presentations, and one conference poster.[7–13] Such research offers deeper insights into the state's health care workforce needs, as well as increasing awareness of New Mexico as a national leader in this area of research. The results of these studies are included in the discussions of the relevant sectors of the New Mexico health care workforce in Section II.

The data available for analysis expand each year as the state's established health care professionals complete new license renewal surveys and new providers renew for the first time. This increased breadth and time depth will allow the committee close examination of health care professionals' geographic distribution, plans for future need and successes in recruitment or retention. We regret that this year, the committee was unable to conduct the in-depth analysis of the behavioral health workforce that was possible in 2016 and 2017 due to a sharp reduction in the number of surveys by these professionals transferred from the New Mexico Regulation and Licensing Department. This is discussed further in Section I.B.4 and Section III.B.

I.B. Methodology

This year's report draws upon seven full years of data collection and committee activities. The Act requires surveys at license renewal for all health care professionals licensed through the state, including medical, dental, nursing, behavioral and allied health professions. The surveys are administered by each profession's licensing board, and must include questions on demographics, practice status, education and

training, practice activities, hours and weeks worked, acceptance of Medicare/Medicaid, near-future practice plans and the effects of professional liability insurance on planned changes to practice. In addition, boards may choose to include questions tailored to their profession.

In this document, we report estimates of the number of health care professionals practicing in New Mexico during any part of calendar year 2017 in the following professions:

1. **Primary Care Physicians:** Includes all medical doctors (MDs) and doctors of osteopathy (DOs) who specialize in family practice, family medicine, general practice, general pediatrics or general internal medicine.
2. **Certified Nurse Practitioners (CNPs) and Clinical Nurse Specialists (CNSs):** Includes CNPs and CNSs in the practice areas of community/public health, geriatrics, medical/surgical, obstetrics/gynecology, pediatric/child maternal, special care units and other. Not included in this count are psychiatric CNPs and CNSs, certified registered nurse anesthetists (CRNAs) and certified nurse-midwives (CNMs) who are not also CNPs.
3. **Physician Assistants (PAs):** Includes all providers licensed as physician assistants by the Board of Medicine or Board of Osteopathy.
4. **Obstetrics and Gynecology Physicians (OB-GYNs):** Includes all MDs and DOs who specialize in obstetrics and/or gynecology.
5. **Certified Nurse-Midwives (CNMs):** Includes all individuals licensed as CNMs by the Department of Health, whether CNM only or CNM and CNP.
6. **Licensed Midwives (LMs):** Includes all individuals licensed as LMs by the Department of Health.
7. **General Surgeons:** Includes all MDs and DOs who specialize in general surgery.
8. **Psychiatrists:** Includes all MDs and DOs who list psychiatry as their primary specialty.
9. **Dentists:** Includes all licensed dentists.
10. **Pharmacists:** Includes all licensed registered pharmacists.
11. **Registered Nurses:** Includes all individuals licensed as RNs by the Board of Nursing, excluding those also licensed as CNMs, CNPs, CNSs and/or CRNAs.
12. **Emergency Medical Technicians (EMTs):** Includes all individuals licensed as EMT-Basic, EMT-Intermediate or EMT-Paramedic.

I.B.1. Practitioner Estimates

In order to provide the most accurate and complete understanding possible of New Mexico's health care workforce, the number of licensed providers practicing in each county were estimated by linking licensure data (name, date of birth, mailing address and credentials) with license renewal survey responses. By combining these two data sets, we ameliorate many limitations inherent in relying on either type of data alone.

Licensure data lack crucial information necessary for accurate estimation of the workforce, including state- and county-level practice locations. Health care professionals may maintain licensure in multiple states, and may choose to receive their license at an address other than where they practice, such as their residence or post office box. For example, of the 9,585 physicians with active New Mexico licenses

during 2017, only 5,498 (57.4%) report practice addresses in New Mexico in response to the license renewal survey (Table 1.1).

Table 1.1. Number of Health Professionals with New Mexico Licenses Practicing in the State

Profession	Percent Practicing in NM, 2016	Total Licensed in NM	Estimated Total Practicing in NM	Percent Practicing in NM, 2017
All MDs/DOs	57.5%	9,585	5,498	57.4%
Primary Care Physicians	64.8%	3,664	2,360	64.4%
CNPs/CNSs	68.4%	2,152	1,453	67.5%
Physician Assistants	75.7%	1,051	792	75.4%
OB-GYN Physicians	65.1%	424	282	66.5%
CNMs	84.8%	187	178	95.2%
Licensed Midwives	55.9%[a]	80	42	52.5%
General Surgeons	59.9%	322	194	60.2%
Psychiatrists	58.1%	582	332	57.0%
Dentists	74.8%	1,599	1,215	76.0%
Pharmacists	62.8%	3,354	2,003	59.7%
RNs	64.0%	27,119	18,173	67.0%
EMTs	96.2%	6,879	6,364	92.5%

[a] This value has been modified from that reported in 2017 to remove apprentice midwives.

In addition, relying on licensure data alone may overestimate practitioner counts for professions that commonly maintain multiple levels of licensure. New Mexico's nurses, dentists, and emergency medical technicians commonly carry several concurrent licenses, such as a CNP who is also an RN, but are only counted once at the highest level of licensure. The exception in our analysis is CNPs who are also CNMs; these levels of licensure are considered equal and these individuals are accordingly counted as both CNPs and CNMs.

Survey data that distinguish between specialty and subspecialty further allow correction of another source of double-counting, physician specialties. General internal medicine or pediatric physicians who subspecialize as cardiologists or endocrinologists do not practice as primary care physicians, and are able to be correctly allocated among the state's specialists, rather than the primary care workforce.

Because many of the health professional boards require surveys only at license renewal, some practitioners have been licensed but not surveyed. Physicians (MDs and DOs), for example, are not surveyed upon initial licensure. After their initial license renewal, they are required to renew their licenses and complete surveys every three years. As a result, a full three-year cycle is necessary to collect surveys across all physicians, and it is important to remember that practice changes such as reducing hours or moving counties will not be registered until the physician next renews his or her license. At the time of this report, 77.7% of physicians in New Mexico had completed a survey. The remaining 22.3% is made up largely of physicians who have not yet renewed their New Mexico licenses, and thus have not yet had the opportunity to respond to the survey.

Practitioner estimates have been adjusted to account for unsurveyed individuals. Practitioners who have completed a survey were allocated to New Mexico counties by self-reported practice location ZIP codes;

practitioners with blank, out-of-state or unrecognized ZIP codes were not considered to practice in New Mexico. For those practitioners who have not yet completed a survey, practice locations were estimated from license mailing address ZIP codes. This is a reasonable approximation for this limited subset of providers, as most health professions show a high correlation between mailing and practice counties, particularly in rural areas.

Additional profession-specific methodology can be found in those professions' subsections in Section II. See also Appendix C for a table of progress in obtaining survey data for all licensed health professionals.

I.B.2. Comparison to National Practitioner Benchmarks

For each profession analyzed, the estimated number of health care providers working in each county is compared with national benchmarks. These are national averages and/or recommendations of practitioners per population. This comparison allows both state- and county-level assessment of New Mexico's health care workforce and identification of counties that may be targets for recruitment and/or retention activities due to exceptionally low numbers of providers. Maps for each profession illustrate each county's workforce in comparison to these national benchmarks, allowing county-to-county comparison of health care professions.

Table 1.2 summarizes the national benchmarks to which New Mexico's health care workforce was compared. County-level population estimates from the U.S. Census Bureau were used to calculate practitioner to population ratios for each county.[14]

Table 1.2. Practitioner to Population Benchmarks Used to Assess the New Mexico Health Care Workforce

Profession	National Benchmark	Benchmark per 10,000 Population
Primary Care Physicians[15]	0.79 per 1,000 population	7.9 per 10,000 population
Certified Nurse Practitioners and Clinical Nurse Specialists[16]	0.59 per 1,000 population	5.9 per 10,000 population
Physician Assistants[17]	0.303 per 1,000 population	3.03 per 10,000 population
Obstetrics and Gynecology Physicians[18]	2.1 per 10,000 female population	2.1 per 10,000 female population
Certified Nurse-Midwives[19, a]	7.05 per 100,000 female population	0.705 per 10,000 female population
Licensed Midwives[20]	1.7 per 100,000 female population	0.17 per 10,000 female population
General Surgeons[21] **Critical Need** **Minimum Need** **Optimal Ratio**	 3.0 per 100,000 population 6.0 per 100,000 population 9.2 per 100,000 population	 0.3 per 10,000 population 0.6 per 10,000 population 0.92 per 10,000 population
Psychiatrists[22]	1 per 6,500 population	1.54 per 10,000 population
Dentists[23, a]	1 per 2,500 population	4 per 10,000 population
Pharmacists[24]	0.78 per 1,000 population	7.8 per 10,000 population
Emergency Medical Technicians[25, a]	28.7 per 10,000 population	28.7 per 10,000 population

[a] See our 2017 Annual Report for additional detail on the calculation of these benchmarks from the listed source.[1]

I.B.3. Understanding the Data

Maps similar to that shown in Figure 1.1 are included for each profession analyzed. This guide explains how to interpret each element of these maps.

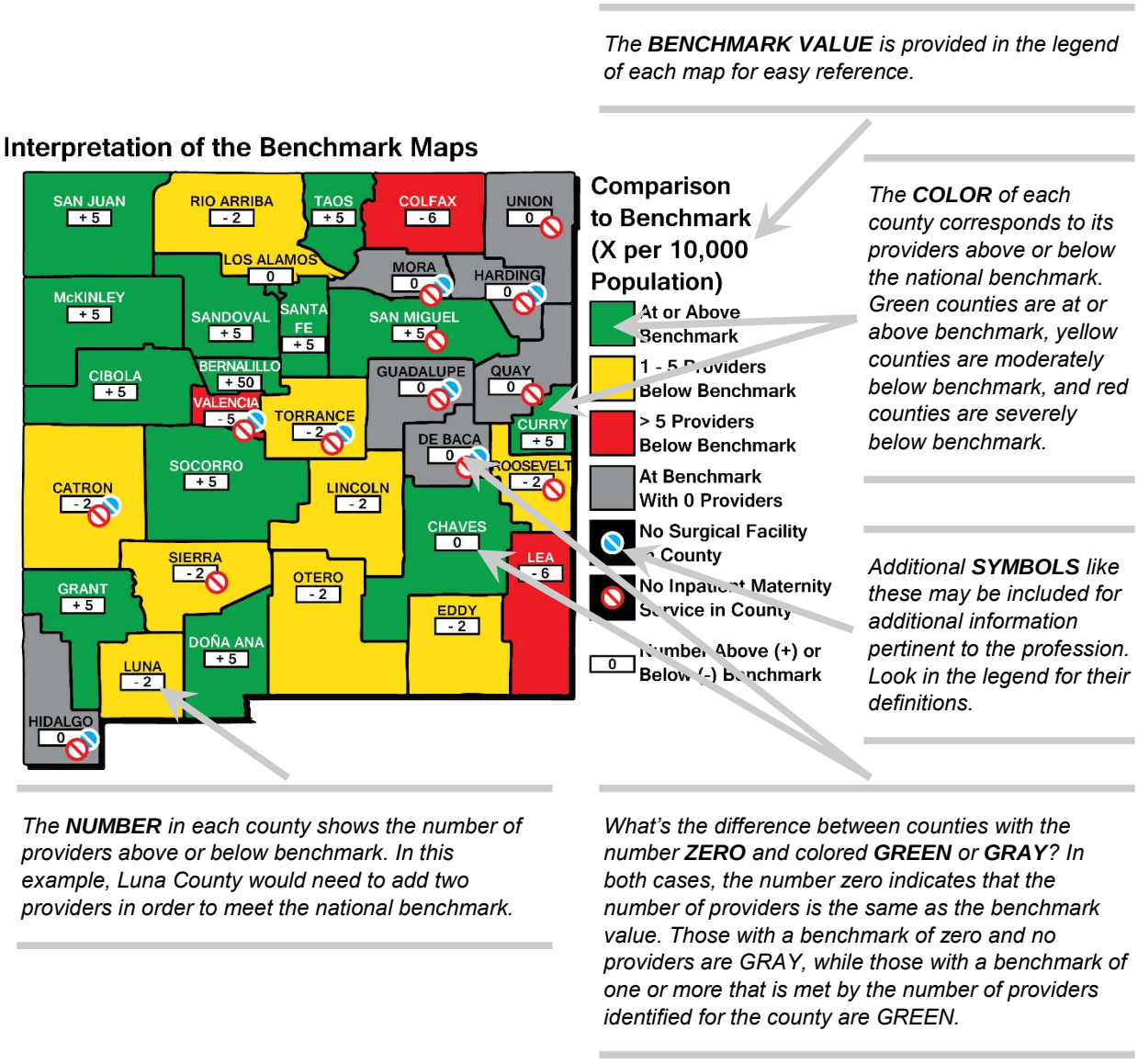

Figure 1.1. Maps similar to this one are included for each profession analyzed in Section II. The text boxes here highlight the key points to be taken from these benchmark maps. For maps with different coloration or format, keys to interpretation can be found in the figure captions.

Although the national benchmarks and county-level benchmark maps provide an accurate and easily understood snapshot of health care workforce in the state, it is important to remember when reviewing Section II that ***the number of health care professionals above or below benchmark is not a direct measure of the population's access to health care, or whether the workforce is sufficient to meet the health care needs of the county***. These county-level provider to population ratios do not take into account

the distribution of health care providers, distribution of the population or the population's health care needs. Factors such as practitioner work hours, patient utilization, severity of illness, driving distance to the nearest provider and other factors are assumed homogeneous using this method.

As a result, provider to population ratios have been selected as the best available metric for national and county-level workforce comparisons, and should be considered an indicator that an area may be in need of additional resources rather than a measure of workforce adequacy.

I.B.4. Limitations of the Data

While New Mexico is unique in the quality and robustness of its workforce data, the practitioner surveys cannot capture certain aspects of the health professional workforce. *First, it must be noted that this year the New Mexico Regulation and Licensing Department (RLD) was unable to provide the expected number of survey responses to the University of New Mexico Health Sciences Center for analysis.* For each year from 2013 to 2016, the survey data provided by RLD has included distinct survey responses with sufficient information to be matched with licensure data for more than 8,000 individuals. For 2017, RLD was able to deliver only 5,461 distinct, identifiable survey responses. Appendix B summarizes the survey response rates by profession, disregarding surveys older than one full licensure cycle. Of the professions analyzed by the committee to date, the most affected were behavioral health professions: the proportion surveyed of Alcohol and Drug Counselors, Clinical Mental Health Counselors, Licensed Mental Health Counselors, Marriage and Family Therapists, Psychologists, and Substance Abuse Associates all decreased by 33 to 68 percent (Table 1.3). It is critical that RLD continue their efforts to resolve this issue.

Table 1.3. Change in Cumulative Percent of Licensed Health Professionals' Surveys Received from RLD Since 2017

Profession	% Surveyed, 2017	% Surveyed, 2018	Change
Marriage and Family Therapist	71.7%	3.3%	-68.4
Clinical Mental Health Counselor (LPCC)	70.9%	4.3%	-66.6
Alcohol and Drug Counselor	60.3%	6.2%	-54.1
Psychologist	87.5%	36.3%	-51.2
Licensed Mental Health Counselor	57.0%	13.9%	-43.1
Substance Abuse Associate	46.3%	13.4%	-32.9
Physician (MD and DO)	86.4%	77.7%	-8.7
Licensed Independent Social Worker	70.3%	69.2%	-1.1
Professional Mental Health Counselor	69.4%	68.6%	-0.8
Psychologist Associate	55.6%	55.6%	0
Physician Assistant	65.3%	66.6%	1.3
Licensed Baccalaureate Social Worker	64.8%	67.1%	2.3
Registered Independent Counselor	14.3%	16.7%	2.4
Licensed Clinical Social Worker	4.6%	9.1%	4.5
Licensed Masters Social Worker	62.4%	67.0%	4.6
Dentist	56.1%	71.0%	14.9

Second, we noted last year that implementation of the registered pharmacist survey fell short of legislative requirements. We are grateful to the Board of Pharmacy and RLD for their prompt action in aligning the registered pharmacist survey with the Act. The first survey responses under the new system have been received from RLD and we look forward to the more detailed analyses and increased accuracy that this change will make possible.

Third, all survey data are subject to uncertainty introduced by variation among respondents; the state's health care professional licensure survey data is no exception. Providers may differ in their interpretation of a survey question, which in turn shapes their response. For example, New Mexico physicians are asked what proportion of their work hours are spent in direct patient care. While one respondent may include only time in the exam room, another may include interpretation of laboratory results, writing up notes and other patient care activities beyond that spent face-to-face with patients.

Beyond this, the surveys administered by different licensure boards vary both within and outside the required core data set. While nurses are asked their race and ethnicity in a single survey question, physicians are asked their race separately from their ethnic identity. Where data from the professions' differing surveys could not be aligned, as for this example, we have presented the data separately. This year, we have begun to examine each profession's survey for completeness with respect to the required core data set and alignment among professions. The results of this analysis are presented in Section IV, along with a recommendation to the boards for both necessary and optional changes to bring their surveys into alignment with the requirements of the Act and with each other.

Finally, we remind the reader that national benchmarks do not measure workforce adequacy, surplus or shortage. For the majority of the professions included, no optimal provider-to-population ratio has been identified. Variation in factors such as population density, health care needs and insurance coverage make it unlikely that a single optimal provider-to-population ratio exists for any health care profession. In addition, the available national comparators combine practice specialties in a manner that is appropriate to the large-scale analysis undertaken here, but may obscure details of the population's health care needs. For example, primary care physicians include both adult and pediatric primary care providers; a county above benchmark for primary care physicians could host many adult providers and few pediatricians.

Because of this, provider counts above benchmarks throughout Section II should not be assumed to represent surplus, or even a sufficient number of health professionals. Patients in these areas are still likely to experience barriers to access, such as long waits for appointments, difficulty finding in-network providers or those who accept Medicaid, among other challenges. There are additional facets of health care that our data does not seek to measure: facility adequacy, employer demand and hiring practices, and patient satisfaction with the care they receive.

Even acknowledging these limitations, New Mexico's health care workforce survey data remain unparalleled nationally, and offer a powerful tool for examining the density of health care providers statewide and informing solutions to the health care challenges facing our state.

I.C. Summary of New Mexico's Health Care Workforce

The New Mexico Health Care Workforce Committee has estimated that in 2017, there were practicing in the state 2,360 primary care physicians (PCPs), 1,453 certified nurse practitioners and clinical nurse specialists (CNPs/CNSs), 792 physician assistants (PAs), 282 obstetrics and gynecology physicians (OB-GYNs), 178 certified nurse-midwives (CNMs), 42 licensed midwives (LMs), 194 general surgeons, 332

psychiatrists, 1,215 dentists, 2,003 pharmacists, 18,173 registered nurses (RNs) and 6,394 emergency medical technicians (EMTs) (Table 1.4).

Our multiyear analysis of these professions shows continued growth in many types of providers. Since 2016, New Mexico has gained providers in 10 of the 12 professions examined: 284 PCPs (13.7% increase), 74 CNPs/CNSs (5.4%), 46 PAs (6.2%), nine OB-GYNs (3.3%), 22 CNMs (14.1%), four LMs (10.5%), six general surgeons (3.2%), 44 dentists (3.8%), 954 RNs (5.5%) and 263 EMTs (4.3%). The state has had no change in the number of psychiatrists and has lost ten pharmacists (-0.5%).

Despite these gains, many of New Mexico's counties continue to show health professionals below benchmarks. Our analysis indicates that without redistributing the current workforce, to bring all counties to benchmarks would require an additional 126 PCPs, 147 CNPs/CNSs, 113 PAs, 30 OB-GYNs, 11 CNMs, four LMs, 12 general surgeons, 111 psychiatrists, 46 dentists, 258 pharmacists, 3,022 RNs and 415 EMTs.

Table 1.4. Summary of Statewide Health Care Professionals Since 2013

Profession Metric	2013	2014	2015	2016	2017	Net Change Since 2013
PCP						
# in New Mexico	1,957	1,908	2,073	2,076[b]	2,360	403
Total Below Benchmark[a]	153	145	125	139	126	-27
Counties Below Benchmark	23	22	17	22	16	-7
CNP/CNS						
# in New Mexico	1,089	1,228	1,293	1,379	1,453	364
Total Below Benchmark[a]	271	197	201	142	147	-124
Counties Below Benchmark	25	20	19	18	17	-8
PA						
# in New Mexico	ND[c]	694	717	746	792	98
Total Below Benchmark[a]		136	136	119	113	-23
Counties Below Benchmark		21	22	22	20	-1
OB-GYN						
# in New Mexico	256	236	253	273[b]	282	26
Total Below Benchmark[a]	40	43	36	31	30	-10
Counties Below Benchmark	14	14	12	9	11	-3
CNM						
# in New Mexico	ND	ND	ND	156	178	22
Total Below Benchmark[a]				12	11	-1
Counties Below Benchmark				9	9	0
LM						
# in New Mexico	ND	ND	ND	38[d]	42	4
Total Below Benchmark[a]				4	4	0
Counties Below Benchmark				4	4	0
General Surgeons						
# in New Mexico	179	162	177	188[b]	194	15
Total Below Benchmark[a]	21	18	16	14	12	-9
Counties Below Benchmark	12	8	8	7	7	-5
Psychiatrists						
# in New Mexico	321	289	302	332[b]	332	11
Total Below Benchmark[a]	104	109	111	106	111	7
Counties Below Benchmark	25	26	26	26	26	1
Dentists						
# in New Mexico	ND	1,081	1,131	1,171	1,215	134
Total Below Benchmark[a]		73	67	55	46	-27
Counties Below Benchmark		18	20	18	17	-1
Pharmacists						
# in New Mexico	ND	1,928	1,911	2,013	2,003	75
Total Below Benchmark[a]		293	292	257	258	-35
Counties Below Benchmark		26	28	26	27	1
RNs						
# in New Mexico	15,713[e]	NA[f]	NA[f]	17,219	18,173	2,460
Total Below Benchmark[a]	4,269[e]			3,361	3,022	-1,247
Counties Below Benchmark	30[e]			30	29	-1
EMTs						
# in New Mexico	ND	ND	ND	6,101	6,364	263
Total Below Benchmark[a]				475	415	-60
Counties Below Benchmark				12	11	-1

[a] Total below benchmark reflects the number of providers needed to bring all counties below benchmarks to national provider to population values without reducing workforce in counties above benchmarks.

[b] This is the first year for which DO specialties were analyzed, correcting prior years' overestimation of DOs in primary care and underestimation in OB-GYN, general surgery, and psychiatry.

[c] ND indicates survey data were not yet available.

[d] This value has been modified from that reported in 2017 to remove apprentice midwives.

[e] RNs were last analyzed for 2012; these data are from that year.

[f] NA indicates this profession was not analyzed in the years indicated.

I.C.1. Uneven Distribution of Providers

Access to health care for New Mexicans statewide is complicated by the state's large rural and frontier areas. Thirty-four percent of New Mexico's 2.1 million residents reside in rural or frontier counties (Figure 1.2), which tend to have lower densities of health professionals.

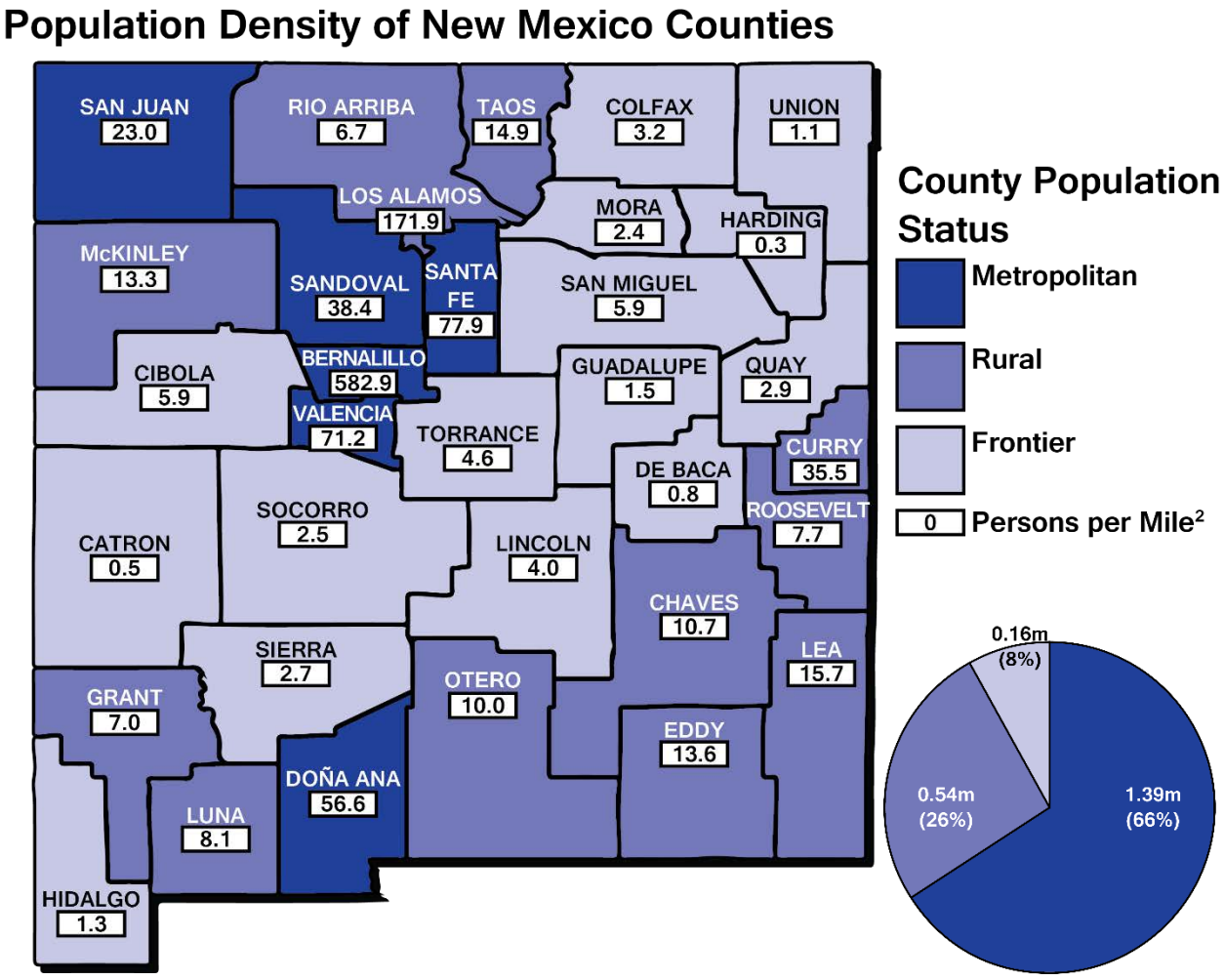

Figure 1.2. Each county's color indicates its classification as frontier (light), rural (medium) or metropolitan (dark); the white boxes show the population density (persons per square mile). The pie chart shows the proportion of the state's population residing in metropolitan, rural or frontier counties.

In Section II of this report, readers will note that many counties have provider counts far below benchmarks, while others have providers equal to or exceeding benchmark values. This uneven distribution – or maldistribution – of providers across the state underscores the need to evaluate workforce distribution. Counties that meet or exceed benchmarks tend to be those with urban areas and/or close proximity to training and major health care facilities. Because we do not anticipate substantial relocation of providers from better-served to poorer-served counties, we state for each profession the

number of providers that would allow New Mexico counties to meet national benchmarks ***assuming no redistribution of practitioners from counties with above-benchmark numbers to those with fewer.***

In addition, New Mexico faces substantial health disparities related to income inequality and other social determinants of health. Meeting or exceeding benchmarks for providers does not indicate that all county residents have adequate access to health care and health professionals.

Section II

State Workforce Distribution by Profession

II.A. The Primary Care Workforce

A primary care workforce that is adequate to the needs of the population it serves promotes health and prevents disease and disability by improving access to comprehensive, high-quality health care services.[26] This key sector of the health care workforce is made up of physicians, advanced practice registered nurses and physician assistants. In this section, we examine New Mexico's physicians in primary care specialties (Section II.A.1). In addition, we analyze the state's entire complement of certified nurse practitioners and clinical nurse specialists (CNPs/CNSs) (Section II.A.2) and physician assistants (PAs) (Section II.A.3), regardless of specialty. In Section II.A.4, we present estimates of the state's primary care CNPs/CNSs and PAs alongside primary care physicians for a broader understanding of this sector of the workforce as a whole.

II.A.1. Primary Care Physicians

II.A.1.a. Executive Summary

In 2017, there were an estimated 2,360 PCPs practicing in New Mexico, 284 more than in 2016 (Figure 2.1, Appendix A.1). Table 2.1 tracks changes in each county's PCP workforce since 2013. Of the 2017 total, 47.6 percent practice in Bernalillo County, which has 588 more PCPs than the national average (Table 2.2). Other counties with the most above-average PCP to population ratios include Santa Fe (+104), Doña Ana (+30), Chaves and Sandoval (each +24). The counties most below benchmark are Luna (-10), Eddy (-12), Lea (-13), Otero (-19) and Valencia (-37) (Table 2.2). The state as a whole has 711 more PCPs than the national benchmark, yet ***assuming no redistribution of the current workforce, an additional 126 PCPs would be needed for all New Mexico counties to meet the national benchmark (0.79 per 1,000 population).***

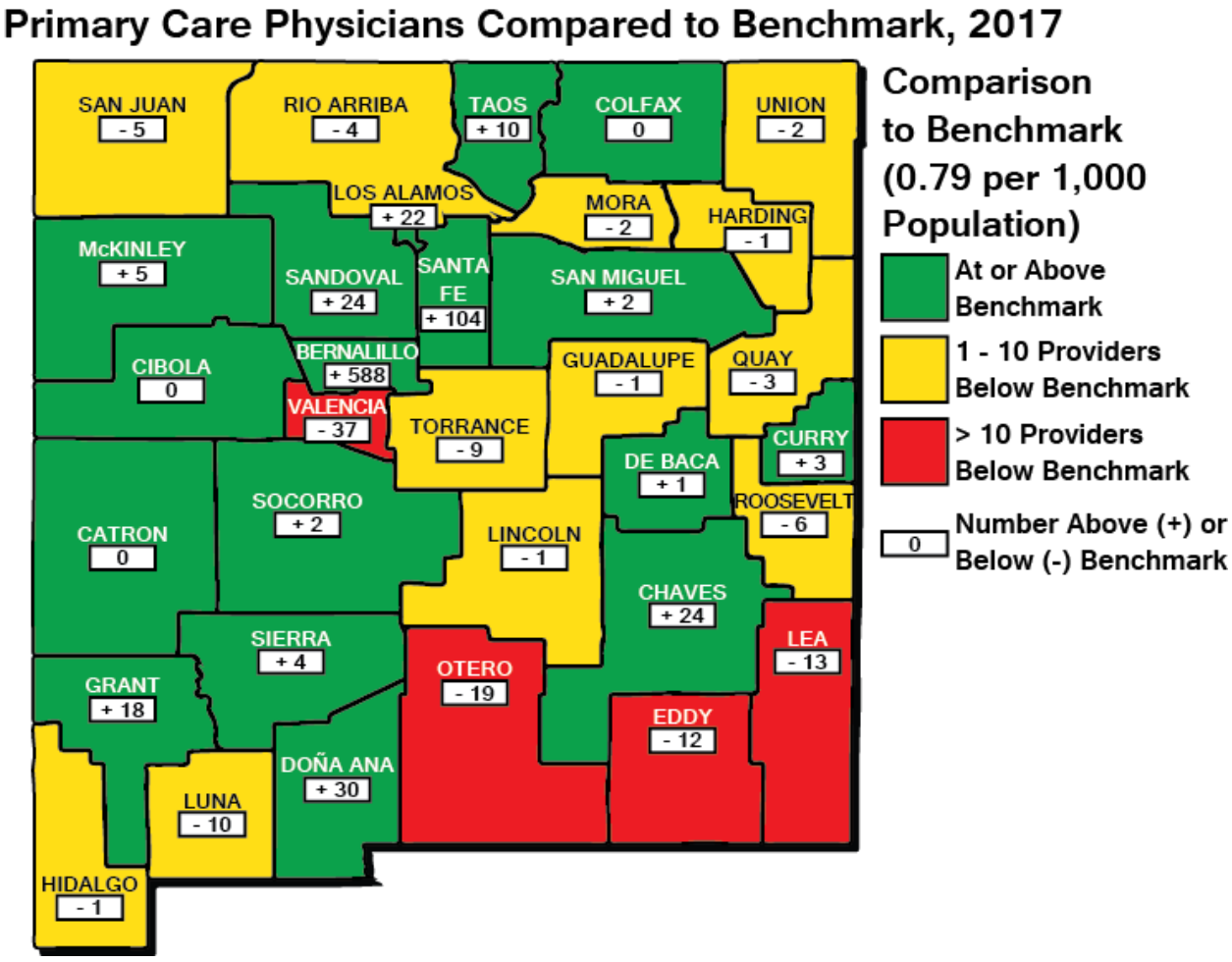

Figure 2.1. Primary care physician workforce relative to the national benchmark of 0.79 PCPs per 1,000 population is shown in the white boxes. Each county's color indicates whether it is at or above benchmark (green), below benchmark by 10 or fewer providers (yellow), or below benchmark by more than 10 providers (red).

Table 2.1. Primary Care Physician Distribution by New Mexico County Since 2013

County	2013	2014	2015	2016	2017	Net Change Since 2013
Bernalillo	855	807	936	946	1,123	268
Catron	2	3	3	2	3	1
Chaves	73	71	75	63	75	2
Cibola	20	19	19	21	21	1
Colfax	9	9	11	7	10	1
Curry	36	36	39	36	42	6
De Baca	1	2	1	1	2	1
Doña Ana	168	162	182	185	200	32
Eddy	35	37	39	36	33	-2
Grant	32	34	38	39	40	8
Guadalupe	3	3	3	2	2	-1
Harding	1	0	0	0	0	-1
Hidalgo	2	2	1	1	2	0
Lea	30	29	35	36	41	11
Lincoln	13	13	14	12	14	1
Los Alamos	33	33	32	31	37	4
Luna	10	10	9	8	9	-1
McKinley	50	50	62	59	62	12
Mora	1	2	2	1	2	1
Otero	37	42	37	34	33	-4
Quay	7	7	5	6	4	-3
Rio Arriba	27	29	28	26	27	0
Roosevelt	14	13	14	13	9	-5
San Juan	96	93	95	86	95	-1
San Miguel	26	24	22	19	24	-2
Sandoval	103	104	101	111	137	34
Santa Fe	188	183	185	203	222	34
Sierra	11	12	11	11	13	2
Socorro	12	13	16	16	15	3
Taos	37	36	33	34	36	-1
Torrance	1	2	2	2	3	2
Union	0	0	1	2	1	1
Valencia	24	28	24	27	23	-1
STATE TOTAL	**1,957**	**1,908**	**2,075**	**2,076**	**2,360**	**403**

Table 2.2. Counties with the Greatest PCP Differences from National Benchmark

County	Practitioners Above Benchmark	County	Practitioners Needed to Meet Benchmark
Bernalillo	588	**Valencia**	37
Santa Fe	104	**Otero**	19
Doña Ana	30	**Lea**	13
Chaves	24	**Eddy**	12
Sandoval	24	**Luna**	10

II.A.1.b. Methodological Notes

We estimate as PCPs MDs and DOs who specialize in family medicine, general practice, general internal medicine and general pediatrics. Neither internal medicine nor pediatrics physicians who subspecialize (e.g., cardiology, immunology) are counted among New Mexico's PCPs.

Some organizations include obstetrics and gynecology physicians (OB-GYNs) in their primary care estimates; however, we report OB-GYNs as a separate health workforce category. We do so in order to examine features unique to this specialty, such as their need for specialized facilities and practice limited to a specific segment of the population. In so doing, our analysis also matches that of the Association of American Medical Colleges benchmark we use in assessing PCPs, which also excludes OB-GYNs from the national PCP-per-population ratio (0.79 per 1,000 population).[15]

Our PCP estimates include PCPs employed strictly in acute care (i.e., hospital emergency department and inpatient services), again in order to align our analysis with the Associate of American Medical Colleges methodology used to establish our PCP benchmark. Research in this area indicates that approximately 30 percent of general internal medicine physicians work as hospitalists and seven percent of family medicine physicians work in emergency departments.[27] In prior years, we have found a comparable proportion of New Mexico's PCP workforce practicing as hospitalists.[5]

Our estimated PCP counts are based on 9,585 MDs and DOs with active licenses in New Mexico during 2017. These comprise 6,838 surveyed MDs, 2,033 MDs with active license but no survey (including those newly licensed in the state), 612 surveyed DOs and 102 unsurveyed DOs. For both MDs and DOs, primary care specialty (family practice, general practice, general pediatrics or general internal medicine) was determined first by self-reported specialty on the individual's most recent survey. For unsurveyed physicians and those for whom the only survey available was 2015 (the year for which the specialty item was omitted from the survey), specialty was identified through licensure and/or board certification. Surveyed PCPs were allocated to counties by the five-digit ZIP code of their self-reported primary practice location; for unsurveyed individuals, the county was identified by the licensure address ZIP code.

II.A.1.c. Discussion

Figure 2.1 shows the county-level comparison of New Mexico's PCPs to the national benchmark of 0.79 PCPs per 1,000 population. For the state as a whole, the estimated 2,360 PCPs practicing in New Mexico in 2017 represent a statewide PCP to population ratio of 1.13 per 1,000, or 711 above the national benchmark. However, 16 counties (48.5%) were below benchmark. The five counties with the greatest numbers of practitioners above benchmark – Bernalillo, Santa Fe, Doña Ana, Chaves and Sandoval (Table 2.2) – together account for nearly three-quarters (74.4%) of the state's PCPs (see PCP counts

reported in Table 2.1). The five counties most below benchmark were Valencia, Otero, Lea, Eddy and Luna, and together would require 91 PCPs to achieve benchmark PCP to population ratios. For the state as a whole, and assuming no redistribution of the current workforce, an additional 126 PCPs would be required to meet the national benchmark in all counties.

This year saw a substantial increase in New Mexico's PCP workforce compared to prior years: of the 403 PCPs added since 2013, 284 were added in 2017. More than 90 percent of this most recent increase occurred in just six counties – Bernalillo (177 PCPs added in 2017), Sandoval (26), Santa Fe (19), Doña Ana (15), Chaves (12) and San Juan (9) – with more modest increases in an additional 17 counties, three counties stable since 2016, and losses in seven counties. The added PCPs in Chaves and San Juan counties offset losses of similar magnitude in 2016.

As mentioned in the discussion of data limitations in Section I.B.4, it is important to remember that counties shown in Figure 2.1 as having PCPs above benchmark are not necessarily free of health access issues. Health systems factors such as wait times to see physicians, insurance restrictions and the distribution of PCP specialties within a county (i.e., having many adult PCPs but few pediatricians), may seriously hamper the population's access to care.

One way in which the distribution of PCP specialties can limit a population's access to care is having many adult PCPs but few pediatricians. In one special-focus study conducted in late 2017, Farnbach Pearson et al. examined ratios of pediatric and adult PCPs relative to each other and to the population across communities classified as metropolitan (population 50,000 or more), micropolitan (population between 10,000 and 50,000), small town (population between 2,500 and 10,000) or rural (population less than 2,500).[11] The state's PCPs were allocated as adult or pediatric PCPs according to specialty: physicians specializing in general internal medicine were classified as adult PCPs and general pediatrics physicians were classified as pediatric PCPs. Family medicine and general practice physicians were allocated as 85 percent adult and 15 percent pediatric, following the proportion reported by Shipman et al. for family medicine physicians.[28]

When the contributions to pediatric care of family medicine and general practice physicians were taken into account, only rural communities had a smaller proportion of pediatric PCPs than the proportion of under-18 population. That is, across all sizes of community, New Mexico's population was made up of approximately 25 percent individuals under-18 and 75 percent adults. Among metropolitan, micropolitan and small town communities, 25 percent of the PCP workforce was estimated to provide pediatric care – including all general pediatricians and 15 percent of family medicine and general practice physicians – and 75 percent adult care. In rural communities, however, the only physicians available to provide pediatric care were family medicine and general practice PCPs. These physicians likely face increased demand for pediatric care in their practice, potentially creating difficulty in accessing care for both adult and pediatric patients.[11]

At the same time, although the 25 percent/75 percent ratio of child to adult population and pediatric to adult PCPs held across many New Mexico communities, the number of PCPs per resident – suggestive of demand for and access to care – decreased with decreasing community size. In metropolitan communities statewide, there were approximately 12 PCPs per 10,000 population (for both adults and children). This decreased progressively across micropolitan, small town and rural settings, reaching the equivalent of two pediatric PCPs (a fraction of the family medicine and general practice physicians in these communities) per 10,000 children and five adult PCPs per 10,000 adults in rural communities. With decreasing community size, there are fewer PCPs available to treat both the adult and child population.[11]

When the smaller number of PCPs per 10,000 residents in rural communities is taken into account alongside the smaller proportion of those PCPs estimated availability to provide pediatric care, it highlights the challenges facing rural PCPs and the rural population alike. Without general pediatricians to share the patient load, family medicine and general practice PCPs in rural communities likely face conflicting demands on their patient care time in order to meet the needs of both their pediatric and adult patients. The scarcity of PCPs in these areas compounds this difficulty.[11] The health care needs of special populations, including not only children but also the elderly, will be critical to consider in the coming years: it is predicted that by 2030, approximately half of the state's population will be over 65 or under 18.[29]

In a separate study, Farnbach Pearson et al. examined the demographics of New Mexico's PCPs across metropolitan, micropolitan, small town and rural communities.[10] This research reiterated the finding above that PCP to population ratios decreased significantly with decreasing population density. In addition, the mean age of PCPs increased significantly with decreasing population density: the mean age of PCPs was 51.4 in metropolitan communities, 53.8 in micropolitan and small town settings, and 57.9 in rural areas. Female PCPs were most likely to practice in metropolitan settings, making up 45.6 percent of the PCP workforce in these areas compared to 40.5 percent in rural communities.

When race and ethnicity were analyzed, Hispanic PCPs were underrepresented compared to the population as a whole across all types of community, as were Native American PCPs. The scarcity of Native American PCPs was particularly stark in small town and rural settings, where the population is 22.5 percent and 30.6 percent Native American, respectively – Native Americans make up 9.3 percent of New Mexico's population statewide. Conversely, the state's Hispanic population makes up a larger proportion of metropolitan and micropolitan residents, making Hispanic PCPs most underrepresented in denser population settings. In small town and rural communities, white PCPs were overrepresented compared to the underlying racial diversity in these areas. Patients seeing physicians of the same race or ethnicity has been shown to impact patient use of, compliance with, and satisfaction in medical treatment. As a result, these findings highlight the pressing need for more Hispanic and Native American PCPs in the state and the importance of training, recruitment and retention efforts aimed at these groups.[10]

Beyond these details, it is important to note that health care providers are not distributed evenly within counties. Whether a county is above or below benchmark, its providers may be concentrated within metropolitan areas, leaving large rural areas short of providers. It is furthermore likely that residents of counties short of providers travel to better-served counties or out of state to receive health care services; as a result, the population served by health professionals in a given county may be larger than just that county's residents. This is particularly true for counties with large medical systems and hospital complexes, such as Bernalillo and Chaves.

II.A.2. Certified Nurse Practitioners and Clinical Nurse Specialists

II.A.2.a. Executive Summary

In 2017, there were an estimated 1,453 CNPs/CNSs practicing in New Mexico, 74 more than in 2016 (Figure 2.2, Appendix A.2). Table 2.3 tracks changes in each county's CNP/CNS workforce since 2013. Of the 2017 total, 48.4 percent practice in Bernalillo County, which has 393 more CNPs/CNSs than the national average (Table 2.4). Other counties with the most above-average CNP/CNS to population ratios include Santa Fe (+24), Eddy (+15), Doña Ana (+13) and Quay (+8). The counties most below benchmark are Otero (-9), McKinley (-12), Valencia (-26), Sandoval (-31) and San Juan (-34) (Table 2.4). The state as a whole has 241 more CNPs/CNSs than the national benchmark, yet ***assuming no redistribution of the current workforce, an additional 147 CNPs and CNSs would be needed for all New Mexico counties to meet the national benchmark (0.59 per 1,000 population).***

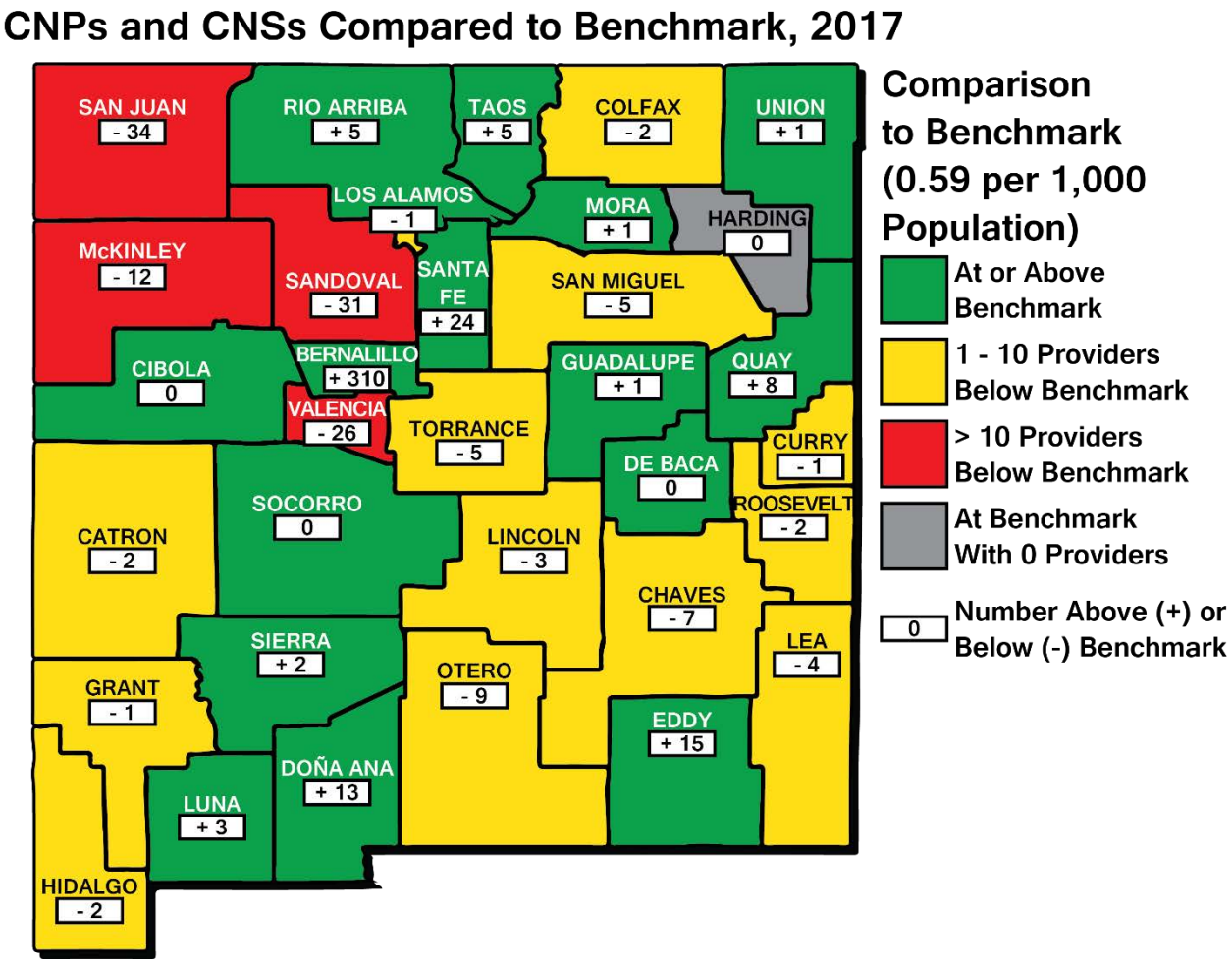

Figure 2.2. Certified nurse practitioner and clinical nurse specialist workforce relative to the national benchmark of 0.59 CNPs/CNSs per 1,000 population is shown in the white boxes. Each county's color indicates whether it is at or above benchmark (green), below benchmark by 10 or fewer providers (yellow), or below benchmark by more than 10 providers (red). Gray counties have no providers and benchmark values of zero. A benchmark of zero occurs when the county population multiplied by the benchmark results in a value less than 0.50.

Table 2.3. CNP/CNS Distribution by New Mexico County Since 2013

County	2013	2014	2015	2016	2017	Net Change Since 2013
Bernalillo	533	595	636	643	703	170
Catron	0	0	0	0	0	0
Chaves	25	31	27	29	31	6
Cibola	9	9	12	13	16	7
Colfax	5	7	7	10	5	0
Curry	19	23	22	28	28	9
De Baca	1	2	2	1	1	0
Doña Ana	112	125	130	131	138	26
Eddy	36	33	44	45	48	12
Grant	12	14	14	17	15	3
Guadalupe	3	3	3	3	4	1
Harding	0	1	0	0	0	0
Hidalgo	0	0	0	0	0	0
Lea	26	24	28	33	36	10
Lincoln	9	6	7	10	8	-1
Los Alamos	6	8	9	8	10	4
Luna	13	14	16	15	17	4
McKinley	16	21	25	26	30	14
Mora	4	3	4	4	4	0
Otero	12	18	22	28	29	17
Quay	8	7	11	13	13	5
Rio Arriba	23	21	24	20	28	5
Roosevelt	7	8	10	9	9	2
San Juan	28	33	28	43	40	12
San Miguel	13	15	15	14	11	-2
Sandoval	29	54	37	56	52	23
Santa Fe	85	91	96	112	110	25
Sierra	2	1	5	6	8	6
Socorro	7	9	8	9	10	3
Taos	18	18	23	27	24	6
Torrance	5	10	5	5	4	-1
Union	2	3	3	2	3	1
Valencia	21	21	20	19	18	-3
STATE TOTAL	**1,089**	**1,228**	**1,293**	**1,379**	**1,453**	**364**

Table 2.4. Counties with the Greatest CNP/CNS Differences from National Benchmark

County	Practitioners Above Benchmark	County	Practitioners Needed to Meet Benchmark
Bernalillo	310	**San Juan**	34
Santa Fe	24	**Sandoval**	31
Eddy	15	**Valencia**	26
Doña Ana	13	**McKinley**	12
Quay	8	**Otero**	9

II.A.2.b. Methodological Notes

The breadth and depth of data available for New Mexico's nurses is exceptional, due to the efficiency with which New Mexico's Board of Nursing instituted their required survey following the New Mexico Health Care Work Force Data Collection, Analysis and Policy Act of 2011. Data from the survey of New Mexico's nurses were the first to be made available to the New Mexico Health Care Workforce Committee, and remain an exemplar for professions developing or updating their surveys.

Certified nurse practitioners (CNPs) and clinical nurse specialists (CNSs) are advanced practice registered nurses with independent authority to diagnose and prescribe within their scope of practice. Advanced practice registered nurses include certified registered nurse anesthetists (CRNAs) and certified nurse-midwives (CNMs) in addition to CNPs and CNSs. However, it was necessary to adjust the advanced practice registered nurse count in order to evaluate this sector of the health care workforce consistent with our national benchmark.[16]

The national benchmark excludes CRNAs and CNMs who are not also CNPs, as well as CNPs/CNSs practicing in behavioral health. Thus, it was necessary to reduce the total of 2,946 advanced practice registered nurses with active New Mexico licensure by 471 CRNAs, 173 CNMs, and 150 CNPs/CNSs reporting a practice area of behavioral health. Our analysis in this section includes the remaining 2,152 CNPs/CNSs; the contributions of CNMs are discussed in Section II.B.2. While behavioral health advanced practice registered nurses play an important role in the state's workforce, we were unable to analyze them in the larger context of the state's behavioral health workforce this year due to the greatly reduced data set for other behavioral health professions received from RLD.

Because nurses are surveyed at initial licensure as well as renewal, there are no unsurveyed CNPs/CNSs. CNPs/CNSs were allocated to counties by their self-reported practice five-digit ZIP code. Of the 2,152 CNPs/CNSs consistent with the national benchmark criteria, 1,453 identified a New Mexico practice location in the survey.

The New Mexico Board of Nursing survey asks area of specialty. CNPs/CNSs were grouped by self-reported practice areas as follows: obstetrics and gynecology (responses of obstetrics/gynecology), behavioral health (responses of psychiatric/mental health), primary care (responses of other, other-position, nurse-practitioner or pediatric/child maternal) and other (responses of community/public health, consultant, geriatric, medical/surgical, N/A or special care unit and those without responses to the practice area item). However, with the exception of behavioral health – excluded from the benchmark counts as discussed above – these practice areas are not reflected in our benchmark calculations because the national benchmark does not distinguish among advanced practice nursing specialties.

II.A.2.c. Discussion

Figure 2.2 shows the county-level comparison of New Mexico's CNPs/CNSs to the national benchmark of 0.59 CNPs/CNSs per 1,000 population. For the state as a whole, the estimated 1,453 CNPs/CNSs practicing in New Mexico represent a statewide CNP/CNS to population ratio of 0.70 per 1,000, or 241 above the national benchmark. However, 17 counties (51.5%) were below benchmark. The five counties with the greatest numbers of practitioners above benchmark – Bernalillo, Santa Fe, Doña Ana, Eddy and Quay – together account for over two-thirds (69.6%) of the state's CNPs/CNSs (see CNP/CNS counts reported in Table 2.3). The five counties most below benchmark were Otero, McKinley, Valencia, Sandoval and San Juan, and together would require 112 CNPs/CNSs to achieve benchmark CNP/CNS to population ratios. For the state as a whole, and assuming no redistribution of the current workforce, an additional 147 CNPs/CNSs would be needed to meet the national benchmark in all counties.

Since 2013, net decreases in the CNP/CNS workforce have been observed in only four counties: Lincoln, San Miguel, Torrance and Valencia. All other counties have remained stable (six counties) or increased (23 counties). The largest gains since 2013 have occurred in Bernalillo, Doña Ana, Santa Fe, Sandoval and Otero counties. These observations have held true since last year's report.[1]

As discussed in Section II.A.2.b, New Mexico's CNPs/CNSs report practice areas on the licensure survey. By practice areas, there are 698 CNPs/CNSs practicing in primary care, 97 practicing in obstetrics and gynecology – excluding those who are CNMs but not also CNPs – and 658 in other practice areas. In addition, 132 behavioral health CNPs/CNSs are practicing in the state.

II.A.3. Physician Assistants

II.A.3.a. Executive Summary

In 2017, there were an estimated 792 PAs practicing in New Mexico, 46 more than in 2016 (Figure 2.3, Appendix A.3). Table 2.5 tracks changes in each county's PA workforce since 2014. Of the 2017 total, 51.6 percent practice in Bernalillo County, which has 204 more PAs than the national average (Table 2.6). Other counties with the most above-average PA to population ratios include Santa Fe (+30), Grant, Sandoval and Taos (+9 each). The counties most below benchmark are Eddy (-8), Lea (-10), McKinley (-12), Valencia (-15) and Doña Ana (-21) (Table 2.6). The state as a whole has 161 more PAs than the national benchmark, yet ***assuming no redistribution of the current workforce, an additional 113 PAs would be needed for all New Mexico counties to meet the national benchmark (0.303 per 1,000 population).***

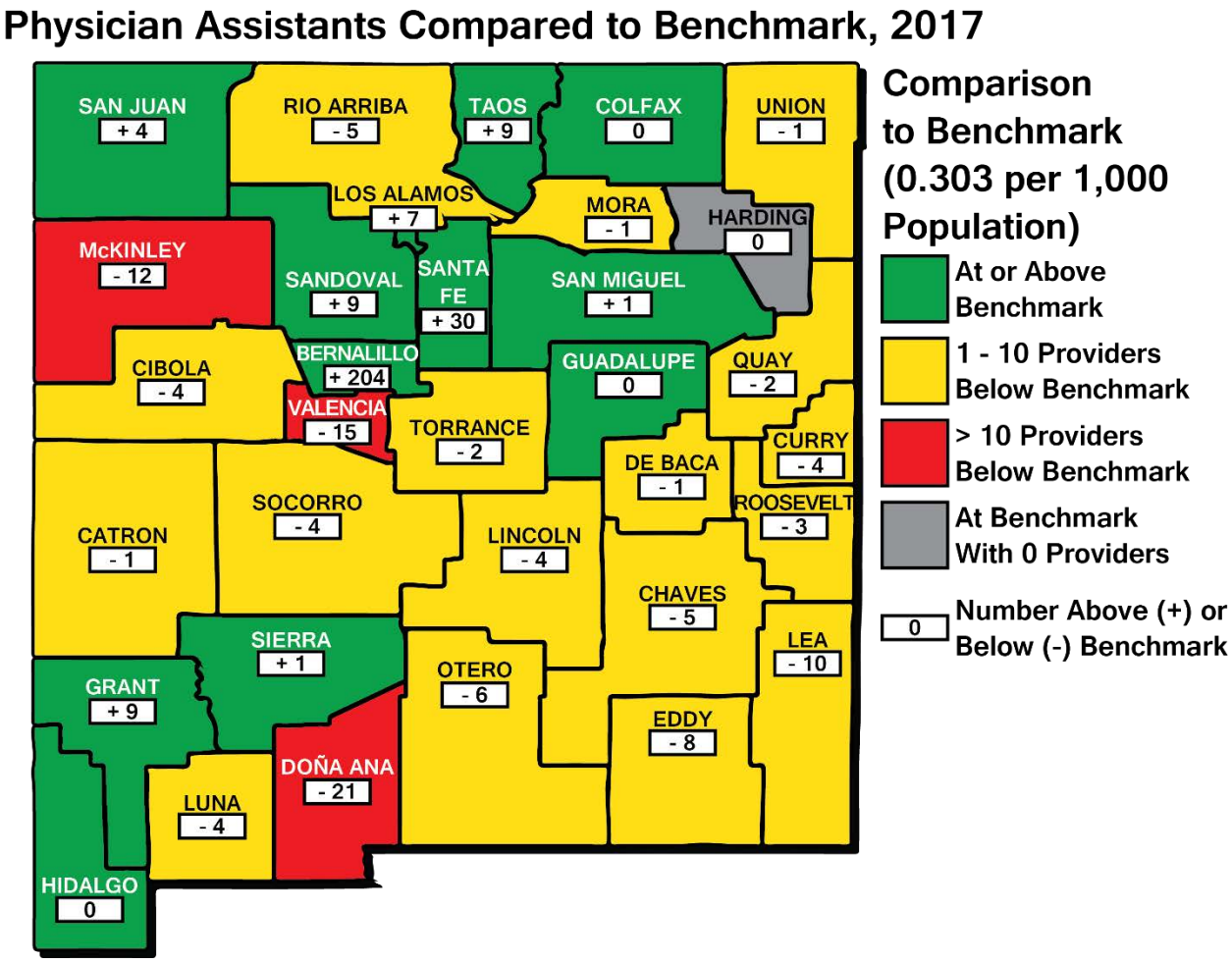

Figure 2.3. Physician assistant workforce relative to the national benchmark of 0.303 PAs per 1,000 population is shown in the white boxes. Each county's color indicates whether it is at or above benchmark (green), below benchmark by 10 or fewer providers (yellow), or below benchmark by more than 10 providers (red). Gray counties have no providers and benchmark values of zero.

Table 2.5. Physician Assistant Distribution by New Mexico County Since 2014

County	2014	2015	2016	2017	Net Change Since 2014
Bernalillo	351	358	391	409	58
Catron	0	0	0	0	0
Chaves	14	12	13	15	1
Cibola	0	4	5	4	4
Colfax	4	4	3	4	0
Curry	6	9	12	11	5
De Baca	0	0	0	0	0
Doña Ana	33	35	38	44	11
Eddy	6	10	10	9	3
Grant	18	18	15	17	-1
Guadalupe	1	0	0	1	0
Harding	0	0	0	0	0
Hidalgo	1	2	2	1	0
Lea	10	9	9	11	1
Lincoln	1	1	2	2	1
Los Alamos	6	11	11	13	7
Luna	3	3	3	3	0
McKinley	12	13	12	10	-2
Mora	0	1	1	0	0
Otero	11	14	14	14	3
Quay	0	0	0	1	1
Rio Arriba	8	10	10	7	-1
Roosevelt	3	3	2	3	0
San Juan	38	35	36	42	4
San Miguel	8	7	7	9	1
Sandoval	54	45	53	52	-2
Santa Fe	66	58	61	75	9
Sierra	4	5	4	4	0
Socorro	3	2	2	1	-2
Taos	19	19	19	19	0
Torrance	0	2	3	3	3
Union	0	0	0	0	0
Valencia	14	8	8	8	-6
STATE TOTAL	**694**	**698**	**746**	**792**	**98**

Table 2.6. Counties with the Greatest PA Differences from National Benchmark

County	Practitioners Above Benchmark	County	Practitioners Needed to Meet Benchmark
Bernalillo	204	**Doña Ana**	21
Santa Fe	30	**Valencia**	15
Grant, Sandoval, Taos	9 each	**McKinley**	12
		Lea	10
		Eddy	8

II.A.3.b. Methodological Notes

Estimated counts of PAs are based on 1,051 PAs with active license in New Mexico, comprising 700 surveyed PAs and 351 PAs who have an active license but no survey. County-level counts include all PAs regardless of specialty, consistent with our national benchmark metric. As for PCPs, surveyed PAs were allocated to counties by the five-digit ZIP code of their self-reported primary practice location; for unsurveyed PAs, the county was identified by the licensure address ZIP code.

II.A.3.c. Discussion

Figure 2.3 shows the county-level comparison of New Mexico's PAs to the national benchmark of 0.303 PAs per 1,000 population. For the state as a whole, the estimated 792 PAs represent a statewide PA to population ratio of 0.38 per 1,000, or 161 above the national benchmark. However, 20 counties (60.6%) were below benchmark. The five counties with the greatest number of practitioners above benchmark – Bernalillo, Santa Fe, Grant, Sandoval and Taos – together account for 72.2 percent of the state's PAs (see PA counts reported in Table 2.4). The five counties most below benchmark were Eddy, Lea, McKinley, Valencia and Doña Ana, and together would require 66 PAs to achieve benchmark PA to population ratios. For the state as a whole, and assuming no redistribution of the current workforce, an additional 113 PAs would be needed to meet the national benchmark in all counties.

Since 2014, net decreases in PA workforce have been observed in six counties: Grant, McKinley, Rio Arriba, Sandoval, Socorro and Valencia. Twelve counties have remained stable and 15 have increased. The largest gains since 2014 have occurred in Bernalillo, Doña Ana and Santa Fe counties. This year, changes to PA practice regulations became law that make provisions for collaborative practice, a licensure designation available to PAs who have practiced under supervision for at least three years that allows more independence of practice and billing.[30] We are optimistic that this change will have a positive impact on the state's PA workforce.

PA specialties are not reflected in the estimated counts described above, in order to match the inclusion criteria of our benchmark metric. According to the National Commission on Certification of Physician Assistants, approximately 40 percent of PAs work in primary care fields, indicating that there could be 317 PAs providing primary care in New Mexico. In 2017 the PA survey was amended to include an item asking respondents' specialties; as a result, we anticipate being able to report more in-depth information on PAs' specialties in the near future.

II.A.4. Discussion of the Primary Care Workforce

II.A.4.a. Executive Summary

New Mexico had an estimated 3,375 primary care providers in 2017. Of these, 2,360 were physicians, 698 were CNPs/CNSs and 317 were PAs. This represents an increase of 382 from 2016, when there were an estimated 2,993 primary care providers in the state. Figure 2.4 shows how primary care provider to population ratios compare among New Mexico's 33 counties.

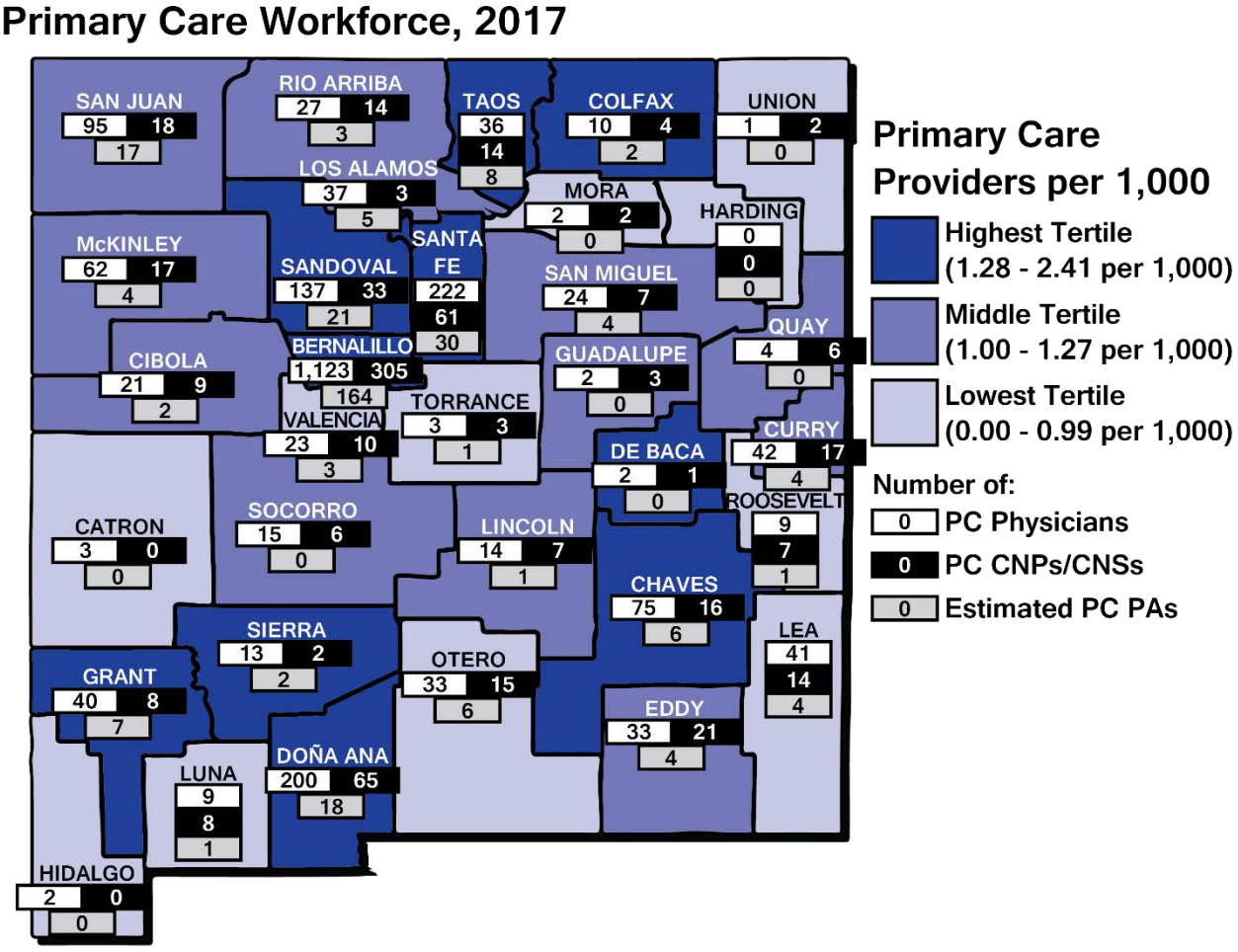

Figure 2.4. Shown in each county's boxes are the number of primary care physicians (white), primary care CNP/CNS (black) and estimated primary care PAs (gray). Each county's color indicates whether it falls in the top (dark), middle (medium), or bottom (light) third of counties for total primary care providers per 1,000 population.

Table 2.7. Primary Care Practitioners by County

County	Physicians	CNP/CNS	PA	TOTAL	Net Change, 2015 - 2017
Bernalillo	1,123	305	164	1,592	205
Catron	3	0	0	3	2
Chaves	75	16	6	97	28
Cibola	21	9	2	32	1
Colfax	10	4	2	16	5
Curry	42	17	4	63	9
De Baca	2	1	0	3	2
Doña Ana	200	65	18	283	13
Eddy	33	21	4	58	0
Grant	40	8	7	55	1
Guadalupe	2	3	0	5	2
Harding	0	0	0	0	0
Hidalgo	2	0	0	2	0
Lea	41	14	4	59	9
Lincoln	14	7	1	22	4
Los Alamos	37	3	5	45	7
Luna	9	8	1	18	5
McKinley	62	17	4	83	10
Mora	2	2	0	4	2
Otero	33	15	6	54	3
Quay	4	6	0	10	-4
Rio Arriba	27	14	3	44	9
Roosevelt	9	7	1	17	-2
San Juan	95	18	17	130	20
San Miguel	24	7	4	35	9
Sandoval	137	33	21	191	10
Santa Fe	222	61	30	313	8
Sierra	13	2	2	17	2
Socorro	15	6	0	21	-2
Taos	36	14	8	58	2
Torrance	3	3	1	7	0
Union	1	2	0	3	-2
Valencia	23	10	3	36	-6
STATE TOTAL	**2,360**	**698**	**317**	**3,375**	**351**

II.A.4.b. Methodological Notes

Physicians, certified nurse practitioners and physician assistants all contribute greatly to New Mexico's primary care workforce. To analyze this sector of the health care workforce, we identified 1) primary care physicians, that is, MDs and DOs with specialties of family medicine, general practice, general internal medicine and general pediatrics; 2) primary care advanced practice registered nurses, that is, CNPs/CNSs who self-reported a practice area of nurse-practitioner, pediatric/child-maternal, other, or other position; and 3) an estimated 40 percent of PAs. We anticipate refining the primary care PA estimate in future years, as specialty data for these providers was collected beginning in 2017.

It is important to note that the estimates do not account for the number of estimated primary care providers who may be working in settings outside of primary care, such as hospitalists. See Sections II.A.1 – II.A.3 above for discussion of the individual professions and additional detail regarding how counts are determined.

County comparisons for primary care workforce were made using the total of physicians, CNPs/CNSs and PAs estimated to be specializing in primary care per 1,000 population. The counties were then ranked to determine whether each fell in the top, middle or bottom third of counties for primary care practitioners per population. Note, as for all the maps included in this report, that a county falling in the top category does not necessarily have adequate numbers of practitioners. In this case, the county has a large number of primary care practitioners *relative to other counties in the state*.

II.A.4.c. Discussion

We estimated that New Mexico had 3,375 primary care providers in 2017. Of this total, 2,360 were physicians, 698 were CNP/CNS and 317 were PAs. The total primary care workforce has rebounded from the modest decrease observed for 2016, changing from an estimated 3,024 total primary care providers in 2015 to 2,993 in 2016 and 3,375 in 2017. The net increase since 2015 has been 351 providers. Five counties have seen a net loss of primary care: Quay, Roosevelt, Socorro, Union and Valencia. Despite this, Quay and Socorro counties remain in the middle third of counties for total primary care providers per 1,000 population. Four counties – Eddy, Harding, Hidalgo and Torrance – have had no net change, and 24 (72.7%) have shown increases since 2015. The most substantial increases have been in Bernalillo, Chaves and San Juan counties, which together account for 253 of the 351 providers added since 2015.

II.B. The Women's Health and Birth Attendant Workforce

As in last year's report, we were able to analyze this year not only obstetrics and gynecology physicians OB-GYNs), but also certified nurse-midwives (CNMs) and licensed midwives (LMs). All three types of provider contribute substantially to women's health in New Mexico.

OB-GYNs are physicians specially trained to treat obstetric (pregnancy- and birth-related) and/or gynecological (related to the female reproductive system) health issues. OB-GYNs provide prenatal care and attend births at hospitals for both normal and high-risk pregnancies, perform Caesarian sections if the need arises, and provide the full spectrum of women's health care.

Certified nurse-midwives have undergone training in both nursing and midwifery; they are educated at a master's degree level in both nursing and midwifery and certified by the American College of Nurse Midwives. The care CNMs provide includes prenatal care and birth attendance in hospitals, birthing centers and homes, as well as routine well-woman care and treatment for minor gynecological conditions.

Licensed midwives are sometimes called direct-entry midwives. Direct-entry midwives may be trained through self-study, apprenticeship or a school of midwifery. New Mexico is one of 27 states that license direct-entry midwives. In New Mexico, all LMs are required to be certified professional midwives – a certification overseen by the North American Registry of Midwives. This certification requires training and education (through apprenticeship or an accredited program such as the National College of Midwifery in Taos), supervised clinical experience and a written exam. LMs provide prenatal care and birth attendance in homes and birthing centers. They may not prescribe medications, but they do have limited authority to administer them.

New Mexico has the highest proportion of midwife-attended births in the United States. CNMs attend eight percent of births in the nation as a whole, while in New Mexico, 26 percent of births are attended by CNMs.[31] This is thought to be due to the autonomy of practice allowed CNMs in the state, the official recognition and licensure of direct-entry midwives (LMs) and our history as a frontier state.

In addition to the above practitioners, it is important to note that physicians specializing in family medicine may also provide obstetric and gynecological care to New Mexico's women. These providers are included among the primary care physicians discussed in Section II.A.1; we have not included them here due to the difficulty of quantifying their relative contributions to primary care (for both children and adults) and obstetrics and gynecology.

In this section, there is analysis of all three types of providers exclusively practicing in women's health and birth attendance. OB-GYNs are discussed in Section II.B.1, CNMs in Section II.B.2, and LMs in Section II.B.3. Finally, in Section II.B.4, we discuss what the distribution of all three provider types indicates for the health care of New Mexican women.

II.B.1. Obstetrics and Gynecology Physicians

II.B.1.a. Executive Summary

In 2017, there were an estimated 282 OB-GYNs practicing in New Mexico, nine more than in 2016 (Figure 2.5, Appendix A.4). Table 2.8 tracks changes in each county's OB-GYN workforce since 2013. Of the 2017 total, 53.5 percent practice in Bernalillo County, which has 79 more OB-GYNs than the national average (Table 2.9). Other counties with the most above-average OB-GYN to population ratios include Colfax, Lea (+3 each), Los Alamos and Socorro (+2 each). The counties most below benchmark are Roosevelt, Torrance (-2 each), San Juan, Sandoval (-6 each) and Valencia (-8) (Table 2.9). The state as a whole has 62 more OB-GYNs than the national benchmark, yet ***assuming no redistribution of the current workforce, an additional 30 OB-GYNs would be needed for all New Mexico counties to meet the national benchmark (2.1 per 10,000 female population).***

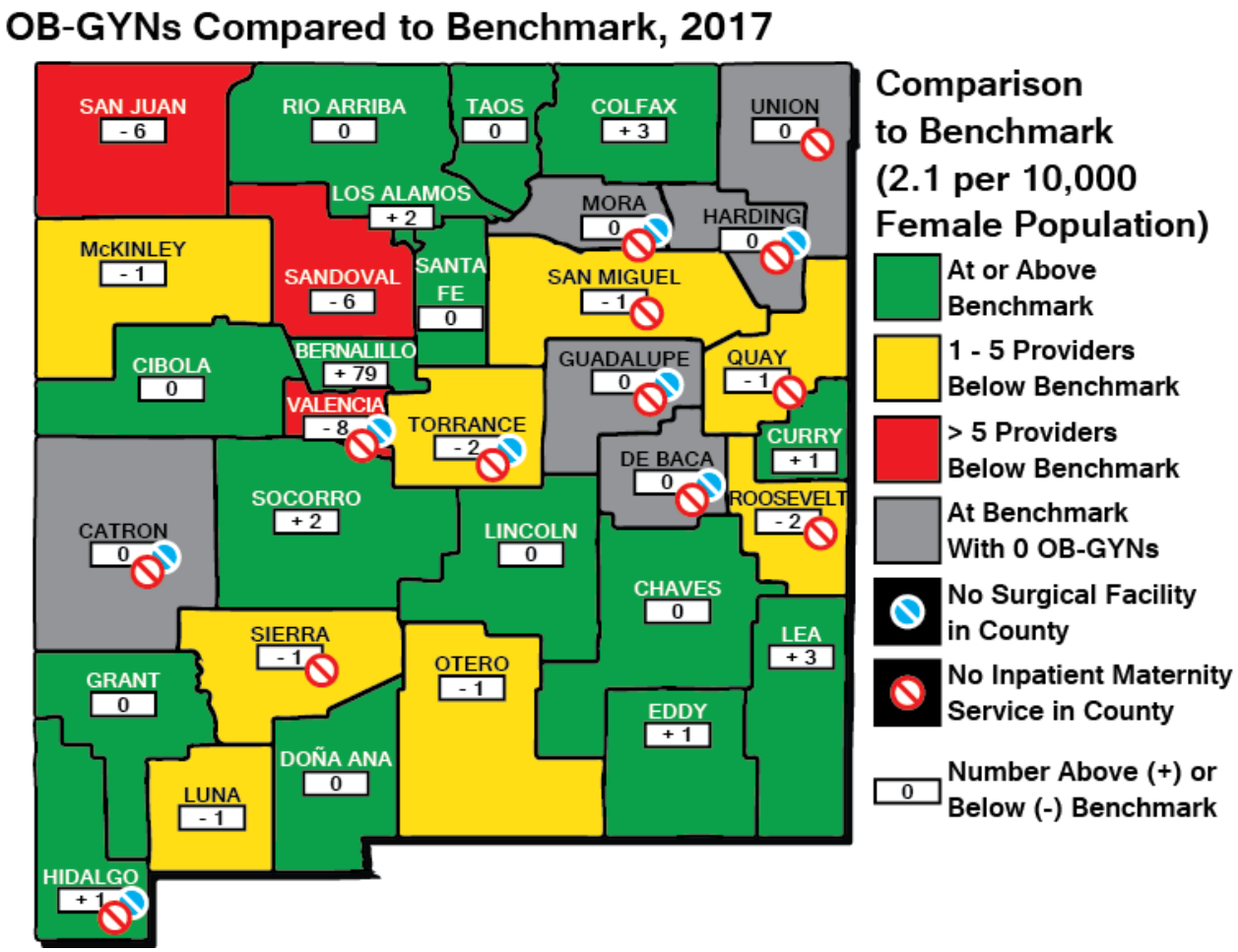

Figure 2.5. OB-GYN workforce relative to the national benchmark of 2.1 OB-GYNs per 10,000 female population is shown in the white boxes. Each county's color indicates whether it is at or above benchmark (green), below benchmark by five or fewer providers (yellow), or below benchmark by more than five providers (red). Gray counties have no providers and benchmark values of zero. Red "no" symbols denote counties without inpatient labor and delivery facilities; blue "no" symbols denote counties without surgical facilities.

Table 2.8. OB-GYN Physician Distribution by New Mexico County Since 2013

County	2013	2014	2015	2016	2017	Net Change Since 2013
Bernalillo	133	119	133	144	151	18
Catron	0	0	0	0	0	0
Chaves	9	7	7	7	7	-2
Cibola	2	2	2	3	3	1
Colfax	2	2	2	4	4	2
Curry	2	2	3	5	6	4
De Baca	0	0	0	0	0	0
Doña Ana	21	20	23	26	23	2
Eddy	9	7	9	7	7	-2
Grant	3	3	3	3	3	0
Guadalupe	0	0	0	0	0	0
Harding	0	0	0	0	0	0
Hidalgo	0	0	0	0	1	1
Lea	3	3	6	7	10	7
Lincoln	3	2	2	2	2	-1
Los Alamos	2	3	2	3	4	2
Luna	4	4	3	2	2	-2
McKinley	8	10	9	9	7	-1
Mora	0	0	0	0	0	0
Otero	11	10	8	8	6	-5
Quay	0	0	0	0	0	0
Rio Arriba	3	3	3	5	4	1
Roosevelt	1	1	1	1	0	-1
San Juan	9	9	7	6	7	-2
San Miguel	4	4	3	3	2	-2
Sandoval	7	7	6	7	9	2
Santa Fe	12	11	13	13	16	4
Sierra	0	0	0	0	0	0
Socorro	4	4	4	3	4	0
Taos	3	3	4	5	4	1
Torrance	0	0	0	0	0	0
Union	0	0	0	0	0	0
Valencia	1	0	0	0	0	-1
STATE TOTAL	**256**	**236**	**253**	**273**	**282**	**26**

Table 2.9. Counties with the Greatest OB-GYN Differences from National Benchmark

County	Practitioners Above Benchmark	County	Practitioners Needed to Meet Benchmark
Bernalillo	79	**Valencia**	8
Colfax, Lea	3 each	**San Juan, Sandoval**	6 each
Los Alamos, Socorro	2 each	**Roosevelt, Torrance**	2 each

II.B.1.b. Methodological Notes

Our estimates of the New Mexico OB-GYN workforce include MDs and DOs who specialize in obstetrics and/or gynecology. As for PCPs, the estimated counts of OB-GYNs are based on 9,585 MDs and DOs with active license in New Mexico, comprising 6,838 surveyed MDs, 2,033 MDs who have an active license but no survey, 612 surveyed DOs and 102 unsurveyed DOs. For both MDs and DOs, obstetrics and/or gynecology specialty was determined first by self-reported specialty on the individual's most recent survey. For unsurveyed physicians and those for whom the only survey available was 2015 (the year for which the specialty item was omitted from the survey), specialty was identified through licensure and/or board certification. Surveyed OB-GYNs were allocated to counties by the five-digit ZIP code of their self-reported primary practice location; for unsurveyed OB-GYNs, the county was identified by the licensure address ZIP code.

Using this methodology, we identified a total of 424 actively licensed physicians specializing in obstetrics and/or gynecology. Of these, 335 MDs and 15 DOs (82.5%) were surveyed.

II.B.1.c. Discussion

Figure 2.5 shows the county-level comparison of New Mexico's OB-GYNs to the national benchmark of 2.1 OB-GYNs per 10,000 female population. For the state as a whole, the estimated 282 OB-GYNs represent a statewide OB-GYN to female population ratio of 2.7, or 62 above the national benchmark. However, 11 counties (33.3%) were below benchmark, and an additional six counties had no OB-GYNs and a benchmark value of zero. The five counties with the greatest number of practitioners above benchmark – Bernalillo, Colfax, Lea, Los Alamos and Socorro – together account for 61.3 percent of the state's OB-GYNs (see OB-GYN counts reported in Table 2.8). The five counties most below benchmark were Roosevelt, Torrance, San Juan, Sandoval and Valencia, and together would require 24 OB-GYNs to achieve benchmark OB-GYN to female population ratios. For the state as a whole, and assuming no redistribution of the current workforce, an additional 30 OB-GYNs would be needed to meet the national benchmark in all counties.

Since 2013, 10 counties have shown net decreases in OB-GYN workforce: Chaves, Eddy, Lincoln, Luna, McKinley, Otero, Roosevelt, San Juan, San Miguel and Valencia. Eleven counties have remained stable – nine of these with no OB-GYNs – and 12 have increased. Bernalillo County has gained 18 OB-GYNs since 2013, and the Lea County OB-GYN workforce has grown by seven; all other increases have been changes of five or fewer practitioners. In total, the state has gained 26 OB-GYNs since 2013.

During 2017, Farnbach Pearson et al. and Moffett et al. conducted more in-depth analysis of the state's OB-GYN workforce.[9,32] This research, first discussed in our 2017 report,[1] identified a number of demographic and practice differences between OB-GYNs working in metropolitan and rural counties: New Mexico's rural OB-GYNs were significantly more likely to be male, to work 40 or more hours weekly, work in a hospital outpatient setting and work with four or fewer physicians in the same practice.

They were furthermore significantly less likely to identify as Hispanic and were 4.3 years older than metropolitan OB-GYNs, on average.

This research further found that practice facilities and infrastructure are critical to recruit and retain OB-GYN workforce, as the counties without OB-GYNs were also without inpatient labor and delivery facilities. At that time, the only counties with practicing OB-GYNs but no labor and delivery facilities were Roosevelt, where prenatal care is provided at a family health center, and San Miguel.[9,32] The single OB-GYN in Roosevelt County has since left, but in 2017 Hidalgo County gained an OB-GYN despite having no inpatient maternity service.

In San Miguel County, labor and delivery facilities at Alta Vista Regional Hospital in Las Vegas were closed in 2016 due to a shortage of staff; as of 2018, they have reopened following the successful recruitment of the necessary workforce. This closure is reflected in the net loss of two OB-GYNs from San Miguel County since 2013; we anticipate this count rebounding in upcoming years.

As was discussed in our 2017 annual report,[1] these observations are suggestive of the types of individuals working in rural settings (non-Hispanic, older males) and the practice conditions they encounter there (long hours, smaller practices and hospital settings), which may be informative in shaping future recruitment and retention efforts.

II.B.2. Certified Nurse-Midwives

II.B.2.a. Executive Summary

In 2017, there were an estimated 178 CNMs practicing in New Mexico, 22 more than in 2016 (Figure 2.6, Appendix A.5). Table 2.10 tracks changes in each county's CNM workforce since 2016. Of the 2017 total, 58.4 percent practice in Bernalillo County, which has 80 more CNMs than the national average (Table 2.11). Other counties with the most above-average CNM to female population ratios include Santa Fe (+9), Doña Ana (+6), McKinley and San Juan (+4 each). The counties most below benchmark are Lea, Valencia (-2 each), Eddy, Lincoln, Luna, Otero, Roosevelt Socorro and Torrance (-1 each) (Table 2.10). The state as a whole has 104 more CNMs than the national benchmark, yet ***assuming no redistribution of the current workforce, an additional 11 CNMs would be needed for all New Mexico counties to meet the national benchmark (7.05 per 100,000 female population).***

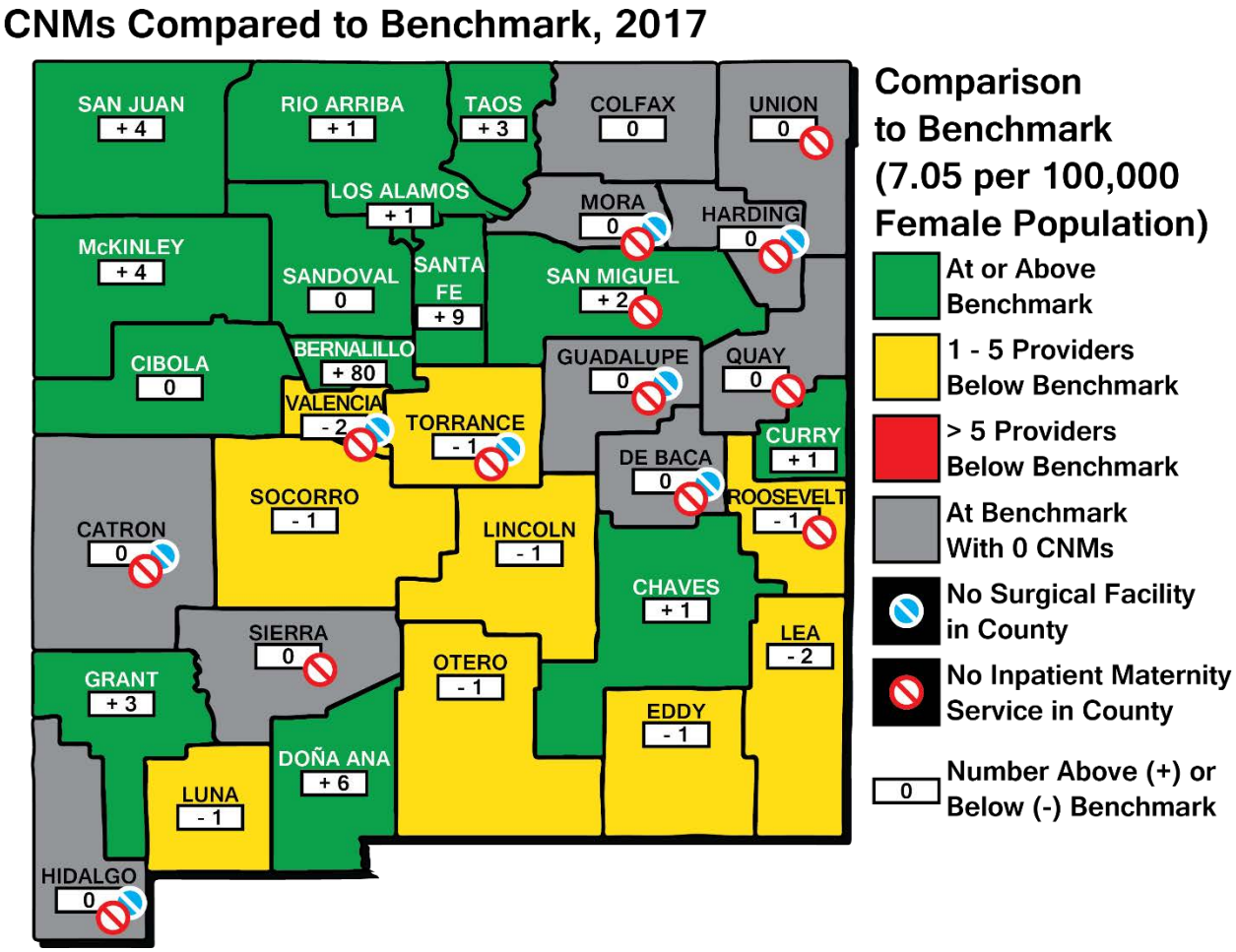

Figure 2.6. CNM workforce relative to the national benchmark of 7.05 CNMs per 100,000 female population is shown in the white boxes. Each county's color indicates whether it is at or above benchmark (green), below benchmark by five or fewer providers (yellow), or below benchmark by more than five providers (red). Gray counties have no providers and benchmark values of zero. Red "no" symbols denote counties without inpatient labor and delivery facilities; blue "no" symbols denote counties without surgical facilities.

Table 2.10. CNM Distribution by New Mexico County Since 2016

County	2016	2017	Net Change Since 2016
Bernalillo	89	104	15
Catron	0	0	0
Chaves	2	3	1
Cibola	1	1	0
Colfax	0	0	0
Curry	3	3	0
De Baca	0	0	0
Doña Ana	9	14	5
Eddy	1	1	0
Grant	4	4	0
Guadalupe	0	0	0
Harding	0	0	0
Hidalgo	0	0	0
Lea	0	0	0
Lincoln	0	0	0
Los Alamos	1	2	1
Luna	0	0	0
McKinley	7	7	0
Mora	0	0	0
Otero	1	1	0
Quay	0	0	0
Rio Arriba	0	2	2
Roosevelt	0	0	0
San Juan	6	9	3
San Miguel	3	3	0
Sandoval	8	5	-3
Santa Fe	16	14	-2
Sierra	0	0	0
Socorro	1	0	-1
Taos	4	4	0
Torrance	0	0	0
Union	0	0	0
Valencia	0	1	1
STATE TOTAL	**156**	**178**	**22**

Table 2.11. Counties with the Greatest CNM Differences from National Benchmark

County	Practitioners Above Benchmark	County	Practitioners Needed to Meet Benchmark
Bernalillo	80	**Valencia, Lea**	2 each
Santa Fe	9	**Eddy, Lincoln, Luna, Otero, Roosevelt, Socorro, Torrance**	1 each
Doña Ana	6		
McKinley, San Juan	4 each		

II.B.2.b. Methodological Notes

CNM licensure and survey data from the New Mexico Department of Health were merged with Board of Nursing licensure and survey data for analysis of CNMs. The estimated counts of CNMs are based on New Mexico's 187 actively licensed CNMs, of whom 178 were found to practice in New Mexico. As for CNPs/CNSs, CNMs were allocated to counties by their self-reported practice five-digit ZIP code from the Board of Nursing survey.

II.B.2.c. Discussion

Figure 2.6 shows the county-level comparison of New Mexico's CNMs to the national benchmark of 7.05 CNMs per 100,000 female population. For the state as a whole, the estimated 178 CNMs practicing in New Mexico represent a statewide CNM to female population ratio of 16.9 per 100,000 – over twice the national benchmark – or 104 above the national benchmark. This is to be expected, given the substantial contributions made by CNMs to women's health in New Mexico.

However, nine counties (27.3%) were below benchmark. The five counties with the greatest number of practitioners above benchmark – Bernalillo, Santa Fe, Doña Ana, McKinley and San Juan – together account for 83.1 percent of the state's CNMs (see CNM counts reported in Table 2.10). For the state as a whole, and assuming no redistribution of the current workforce, an additional 11 CNMs would be needed to meet the national benchmark in all counties.

Since 2016, net decreases in the CNM workforce have been observed in only three counties: Sandoval, Santa Fe and Socorro. All other counties have remained stable (23 counties) or increased (seven counties). Substantial gains have been observed in Bernalillo and Doña Ana counties, with increases of 15 and 5 CNMs, respectively.

Additional research conducted by Farnbach Pearson et al. and Reese et al.[12,13] found that New Mexico's 2016 CNMs practiced exclusively in counties with hospital maternity services that are also staffed by OB-GYNs; however, Valencia County has since gained a CNM. This underscores both the difficulty accessing health care providers faced by individuals living in rural and frontier counties and the importance of facilities and infrastructure to successful recruitment and retention of health care workforce.

II.B.3. Licensed Midwives

II.B.3.a. Executive Summary

In 2017, there were an estimated 42 LMs practicing in New Mexico, four more than in 2016 (Figure 2.7, Appendix A.6). Table 2.12 tracks changes in each county's LM workforce since 2016. Of the 2017 total, only 23.8 percent practice in Bernalillo County, which has four more LMs than the national average (Table 2.13). Other counties with the most above-average LM to female population ratios include Santa Fe, Taos (+6 each), Doña Ana, Rio Arriba and San Miguel (+3 each). The counties below benchmark are Chaves, Lea, McKinley and San Juan (-1 each) (Table 2.12). The state as a whole has 26 more LMs than the national benchmark, yet ***assuming no redistribution of the current workforce, an additional 4 LMs would be needed for all New Mexico counties to meet the national benchmark (1.7 per 100,000 female population).***

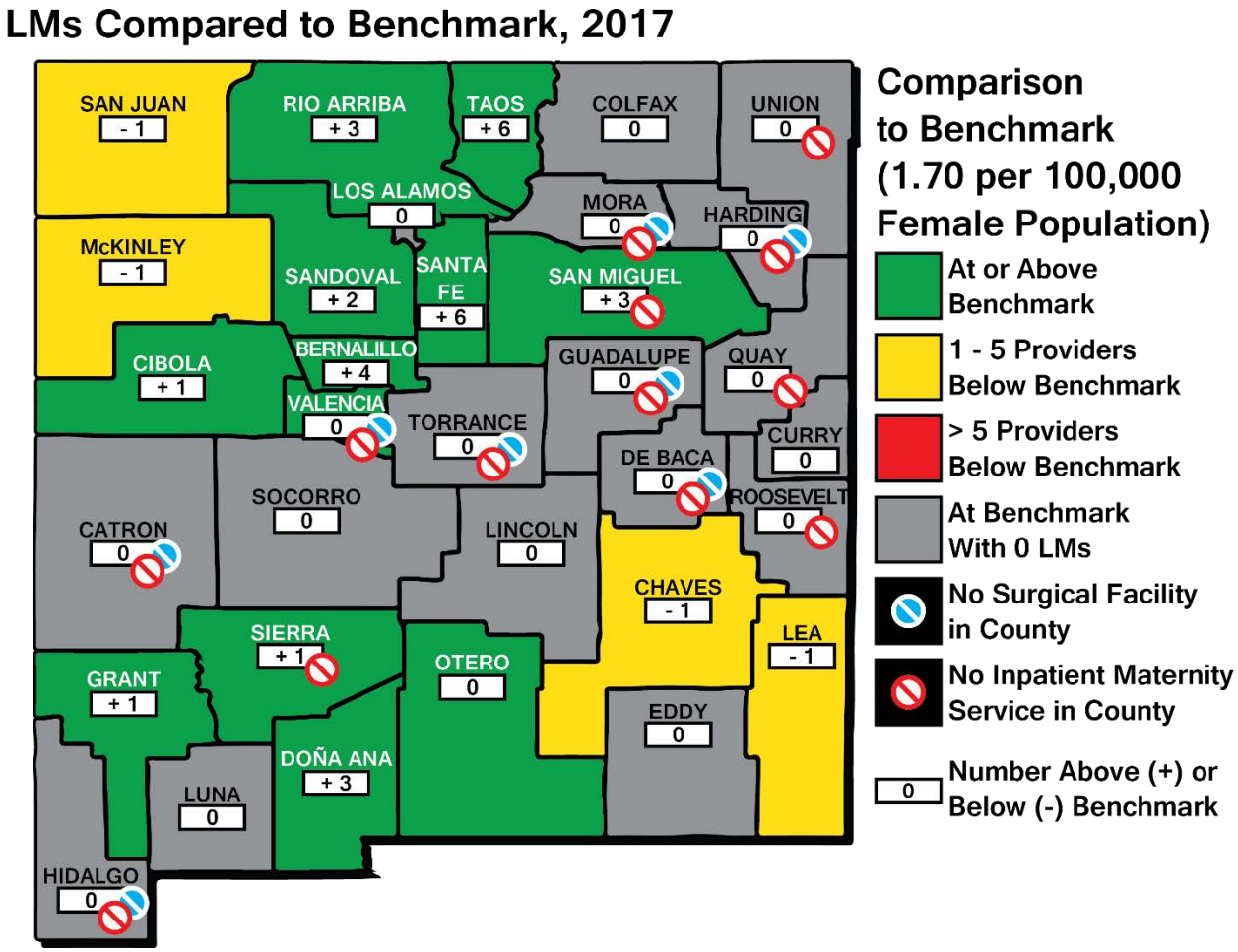

Figure 2.7. LM workforce relative to the national benchmark of 1.7 LMs per 100,000 female population is shown in the white boxes. Each county's color indicates whether it is at or above benchmark (green), below benchmark by five or fewer providers (yellow), or below benchmark by more than five providers (red). Gray counties have no providers and benchmark values of zero. Red "no" symbols denote counties without inpatient labor and delivery facilities; blue "no" symbols denote counties without surgical facilities.

Table 2.12. LM Distribution by New Mexico County Since 2016

County	2016[a]	2017	Net Change Since 2016
Bernalillo	10 (2)	10	0
Catron	0	0	0
Chaves	0	0	0
Cibola	1	1	0
Colfax	0	0	0
Curry	0	0	0
De Baca	0	0	0
Doña Ana	4 (1)	5	1
Eddy	0	0	0
Grant	1 (2)	1	0
Guadalupe	0	0	0
Harding	0	0	0
Hidalgo	0	0	0
Lea	0	0	0
Lincoln	0	0	0
Los Alamos	0	0	0
Luna	0	0	0
McKinley	0	0	0
Mora	0	0	0
Otero	1	1	0
Quay	0	0	0
Rio Arriba	2 (2)	3	1
Roosevelt	0	0	0
San Juan	0	0	0
San Miguel	1	3	2
Sandoval	3 (1)	3	0
Santa Fe	7 (1)	7	0
Sierra	1	1	0
Socorro	0	0	0
Taos	6	6	0
Torrance	0	0	0
Union	0	0	0
Valencia	1 (1)	1	0
STATE TOTAL	**38 (10)**	**42**	**4**

[a] Numbers in parentheses indicate the number of apprentice LMs included in the 2016 LM counts.

Table 2.13. Counties with the Greatest LM Differences from National Benchmark

County	Practitioners Above Benchmark	County	Practitioners Needed to Meet Benchmark
Santa Fe, Taos	6 each	**Chaves, Lea, McKinley, San Juan**	1 each
Bernalillo	4	***No other counties are below benchmark for LMs.***	
Doña Ana, Rio Arriba, Sandoval	3 each		

II.B.3.b. Methodological Notes

In analyzing the 2016 LM workforce for the 2017 report, both regularly licensed and apprentice midwives were counted. For 2017 and future analyses, only regularly licensed LMs will be counted. Where 2016 counts are included in this report, numbers have been corrected to exclude apprentices. Because the 2016 apprentice midwives practiced exclusively in counties that also had regularly licensed midwives, this change does not affect the previously reported number of counties below national benchmark or the number of LMs needed to bring all below-benchmark counties to benchmark.

The estimated counts of LMs are based on New Mexico's 80 actively licensed LMs, of whom 33 (41.3%) have been surveyed and 47 are unsurveyed. Forty-two were found to practice in New Mexico. LMs were allocated to counties by their city and state as reported on the Department of Health LMs roster.

II.B.3.c. Discussion

Figure 2.7 shows the county-level comparison of New Mexico's LMs to the national benchmark of 1.7 LMs per 100,000 female population. For the state as a whole, the estimated 42 LMs represent a statewide LM to female population ratio of 4.0 per 100,000, or 26 above the national benchmark. Only four counties (12.1%) were below benchmark. The six counties with the greatest number of practitioners above benchmark – Santa Fe, Taos, Bernalillo, Doña Ana, Rio Arriba and San Miguel – together account for 81 percent of the state's LMs (see LM counts reported in Table 2.12). For the state as a whole, and assuming no redistribution of the current workforce, an additional four LMs would be needed to meet the national benchmark in all counties.

Since 2016, no county has seen a decrease in LM workforce. Thirty counties have remained stable and three have increased. These gains have occurred in Doña Ana, Rio Arriba and San Miguel counties.

The large number of gray counties shown in Figure 2.7 highlights the relative scarcity of LMs, both in the state and nationwide. However, it is important to note that in Sierra County, an LM practices as the only birth attendant. Valencia County shared this distinction in our 2017 annual report,[1] but has since gained a CNM. Sierra County is also without a hospital maternity service, a reflection of LMs' predominately home-birthing attendance.

II.B.4. Discussion of the Women's Health and Birth Attendant Workforce

Table 2.14 shows the counts of all three types of women's health providers and birth attendants by county. Notable is the absence of all three types of providers from nine counties: Catron, De Baca, Guadalupe, Harding, Mora, Quay, Roosevelt, Torrance and Union. That is, 27.3 percent of New Mexico counties have no women's health specialists at all. These nine counties have changed slightly since 2016, as Hidalgo has gained one OB-GYN and Roosevelt has lost its single OB-GYN.

Table 2.14. Women's Health Providers and Birth Attendants by County

County	OB-GYN Physicians	CNMs	LMs	TOTAL	Net Change Since 2016
Bernalillo	151	104	10	265	22
Catron	0	0	0	0	0
Chaves	7	3	0	10	1
Cibola	3	1	1	5	0
Colfax	4	0	0	4	0
Curry	6	3	0	9	1
De Baca	0	0	0	0	0
Doña Ana	23	14	5	42	3
Eddy	7	1	0	8	0
Grant	3	4	1	8	0
Guadalupe	0	0	0	0	0
Harding	0	0	0	0	0
Hidalgo	1	0	0	1	1
Lea	10	0	0	10	3
Lincoln	2	0	0	2	0
Los Alamos	4	2	0	6	2
Luna	2	0	0	2	0
McKinley	7	7	0	14	-2
Mora	0	0	0	0	0
Otero	6	1	1	8	-2
Quay	0	0	0	0	0
Rio Arriba	4	2	3	9	2
Roosevelt	0	0	0	0	-1
San Juan	7	9	0	16	4
San Miguel	2	3	3	8	1
Sandoval	9	5	3	17	-1
Santa Fe	16	14	7	37	1
Sierra	0	0	1	1	0
Socorro	4	0	0	4	0
Taos	4	4	6	14	-1
Torrance	0	0	0	0	0
Union	0	0	0	0	0
Valencia	0	1	1	2	0
STATE TOTAL	**282**	**178**	**42**	**502**	**35**

As has been noted in the previous three sections, additional research by Farnbach Pearson et al.[12] and Reese et al.[13] has further explored the distribution and demographics of New Mexico's women's health and birth attendant workforce. As of 2016, obstetric needs were served only by OB-GYNs in five counties and only by LMs in two.[12,13] In 2017, OB-GYNs were the sole obstetric practitioners in six counties and LMs in one. Of the three types of provider, CNMs were least likely to practice in rural counties: in 2016, 18 percent of CNMs practiced in rural counties, compared with 28 percent of OB-GYNs and 35 percent of LMs.[12]

Twelve counties had no hospital maternity services in 2017, although, as noted above, San Miguel county's Alta Vista Regional Hospital has reopened their labor and delivery service as of 2018. Eight counties lack surgical facilities in which to perform Caesarean sections. It is a great boon to the state that the inpatient maternity service has reopened in San Miguel County, as it is the only such service in the entire northeast quadrant of the state.

The needs of rural hospitals to balance costly facilities and services with their relatively low demand due to low population density make it challenging to maintain maternity services, and some degree of regionalization of care is perhaps unavoidable due to these economic pressures. Nonetheless, it will be important to explore ways to ease access to maternity and particularly prenatal care for women in these underserved counties.

II.C.1. General Surgeons

II.C.1.a. Executive Summary

In 2017, there were an estimated 194 general surgeons practicing in New Mexico, six more than in 2016 (Figure 2.8, Appendix A.7). Table 2.15 tracks changes in each county's general surgeon workforce since 2013. Of the 2017 total, 43.3 percent practice in Bernalillo County, which has 43 more general surgeons than adequate (Table 2.16). Other counties with the most above-adequate general surgeon counts include Curry, Santa Fe (+5 each), Los Alamos and Taos (+4 each). The counties most below benchmark are Valencia (-5), San Miguel (-2), Chaves, Lea, Otero, Sandoval and Torrance (-1 each) (Table 2.16). The state as a whole has 69 more general surgeons than adequate, yet ***assuming no redistribution of the current workforce, an additional 12 general surgeons would be needed for all New Mexico counties to meet the national benchmark (six per 100,000 population).***

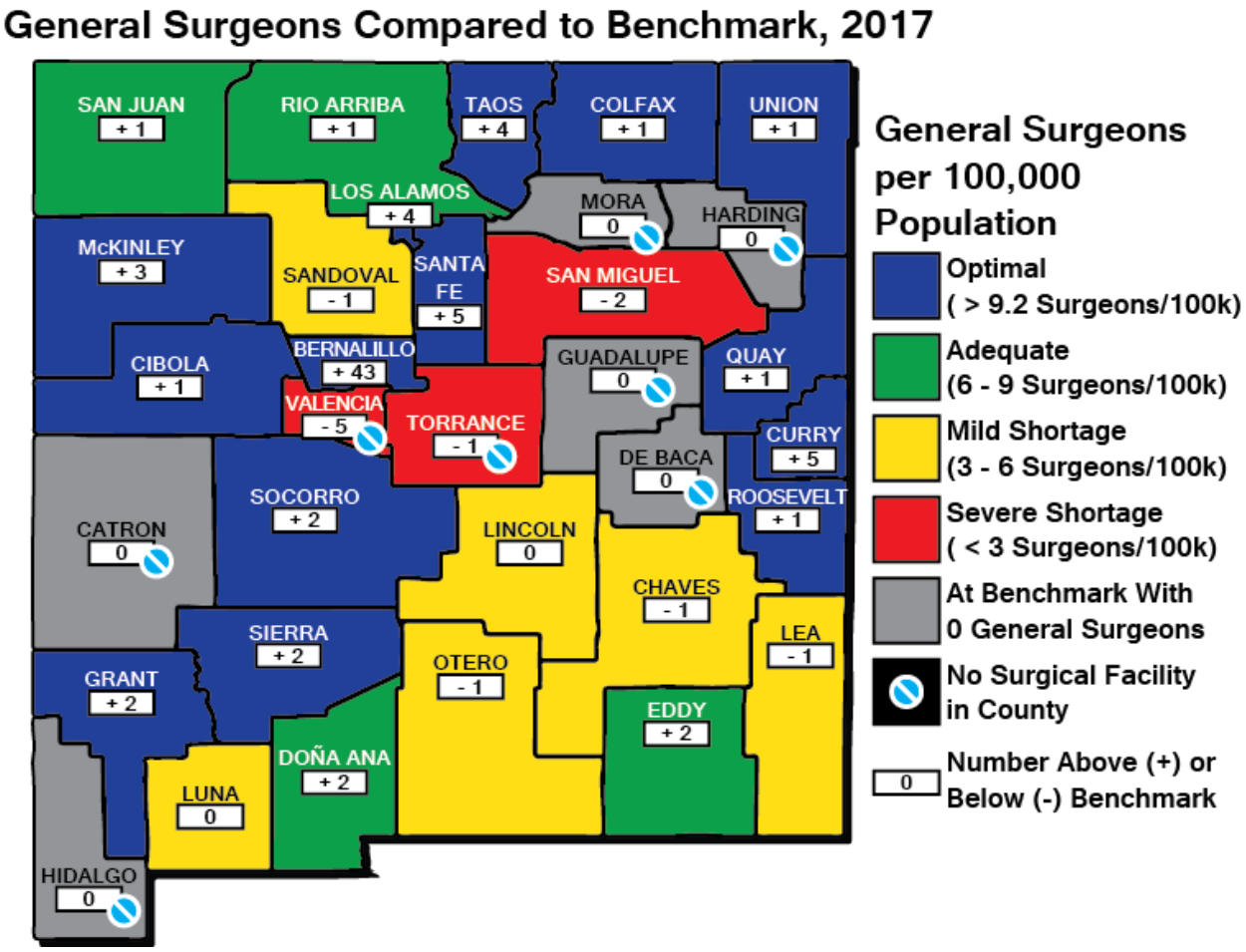

Figure 2.8. General surgeon workforce relative to the national benchmark of more than six general surgeons per 100,000 population is shown in the white boxes. Each county's color indicates whether the count of general surgeons per 100,000 population is considered optimal (blue), adequate (green), a mild shortage (yellow) or a severe shortage (red). Gray counties have no providers and benchmark values of zero. Blue "no" symbols denote counties without surgical facilities.

Table 2.15. General Surgeon Distribution by New Mexico County Since 2013

County	2013	2014	2015	2016	2017	Net Change Since 2013
Bernalillo	68	60	74	75	84	16
Catron	0	0	0	0	0	0
Chaves	3	4	4	4	3	0
Cibola	1	2	2	3	3	2
Colfax	5	4	4	3	2	-3
Curry	9	9	9	9	8	-1
De Baca	0	0	0	0	0	0
Doña Ana	12	11	13	13	15	3
Eddy	7	5	8	8	5	-2
Grant	4	5	3	2	4	0
Guadalupe	0	0	0	0	0	0
Harding	0	0	0	0	0	0
Hidalgo	0	0	0	0	0	0
Lea	2	2	2	2	3	1
Lincoln	0	0	0	0	1	1
Los Alamos	6	5	4	5	5	-1
Luna	1	1	1	1	1	0
McKinley	7	8	8	9	7	0
Mora	0	0	0	0	0	0
Otero	2	2	2	2	3	1
Quay	1	1	2	2	1	0
Rio Arriba	1	2	3	3	3	2
Roosevelt	1	1	1	2	2	1
San Juan	7	7	6	10	9	2
San Miguel	3	3	2	2	0	-3
Sandoval	4	4	5	6	8	4
Santa Fe	12	15	17	17	14	2
Sierra	0	0	0	1	3	3
Socorro	2	3	2	4	3	1
Taos	7	7	4	5	6	-1
Torrance	0	0	0	0	0	0
Union	2	1	1	0	1	-1
Valencia	0	0	0	0	0	0
STATE TOTAL	**179**	**162**	**177**	**188**	**194**	**15**

Table 2.16. Counties with the Greatest General Surgeon Differences from National Benchmark

County	Practitioners Above Benchmark	County	Practitioners Needed to Meet Benchmark
Bernalillo	43	**Valencia**	5
Curry, Santa Fe	5 each	**San Miguel**	2
Los Alamos, Taos	4 each	**Chaves, Lea, Otero, Sandoval, Torrance**	1 each

II.C.1.b. Methodological Notes

Our estimates of the New Mexico general surgeon workforce include MDs and DOs who specialize in general surgery. Thresholds for optimal, adequate, mild shortage and severe shortage are taken from Ricketts et al.[21]

The estimated counts of general surgeons are based on 9,585 MDs and DOs with active license in New Mexico, comprising 6,838 surveyed MDs, 2,033 MDs who have an active license but no survey, 612 surveyed DOs and 102 unsurveyed DOs. For both MDs and DOs, general surgery specialty was determined first by self-reported specialty on the individual's most recent survey. For unsurveyed physicians and those for whom the only survey available was 2015 (the year for which the specialty item was omitted from the survey), specialty was identified through licensure and/or board certification. General surgeons were allocated to counties by the five-digit ZIP code of their self-reported primary practice location; for unsurveyed physicians, the county was identified by the licensure address ZIP code.

A total of 322 general surgeons with active New Mexico licensure were identified. Of these, 246 MDs and 17 DOs (81.7%) were surveyed.

II.C.1.c. Discussion

Figure 2.8 shows the county-level comparison of New Mexico's general surgeons to the national benchmark of six general surgeons per 100,000 population. For the state as a whole, the estimated 194 general surgeons practicing in New Mexico represent a statewide general surgeon to population ratio of 9.3 per 100,000, or 69 above the national benchmark. However, seven counties (21.2%) were below benchmark. The five counties most above benchmark – Bernalillo, Curry, Santa Fe, Los Alamos and Taos – together account for 60.3 percent of the state's general surgeons (see general surgeon counts reported in Table 2.15). For the state as a whole, and assuming no redistribution of the current workforce, an additional 12 general surgeons would be needed to meet the national benchmark in all counties. However, it is important to note that two of the nine counties below benchmark do not have surgical facilities – these are Torrance and Valencia counties, which together are six general surgeons below benchmark.

Since 2013, net decreases in the general surgeon workforce have been observed in seven counties: Colfax, Curry, Eddy, Los Alamos, San Miguel, Taos and Union. Thirteen counties have remained stable, and an additional 13 have increased. The largest gains have been in Bernalillo and Sandoval counties. As noted in Section II.B.1 regarding OB-GYNs, the eight counties without surgical facilities will remain unstaffed by general surgeons.

II.C.2. Psychiatrists

II.C.2.a. Executive Summary

In 2017, there were an estimated 332 psychiatrists practicing in New Mexico, equal to the number reported in 2016 (Figure 2.9, Appendix A.8). Table 2.17 tracks changes in each county's psychiatrist workforce since 2013. Of the 2017 total, 56.6 percent practice in Bernalillo County, which has 84 more psychiatrists than benchmark (Table 2.18). Other counties with psychiatrist counts above benchmark include Santa Fe (+29) and San Miguel (+6). The counties most below benchmark are Sandoval (-12), San Juan (-11), McKinley (-8), Doña Ana, Eddy, Lea and Valencia (-7 each) (Table 2.18). The state as a whole has eight more psychiatrists than the national benchmark, yet ***assuming no redistribution of the current workforce, an additional 111 psychiatrists would be needed for all New Mexico counties to meet the national benchmark (one per 6,500 population).***

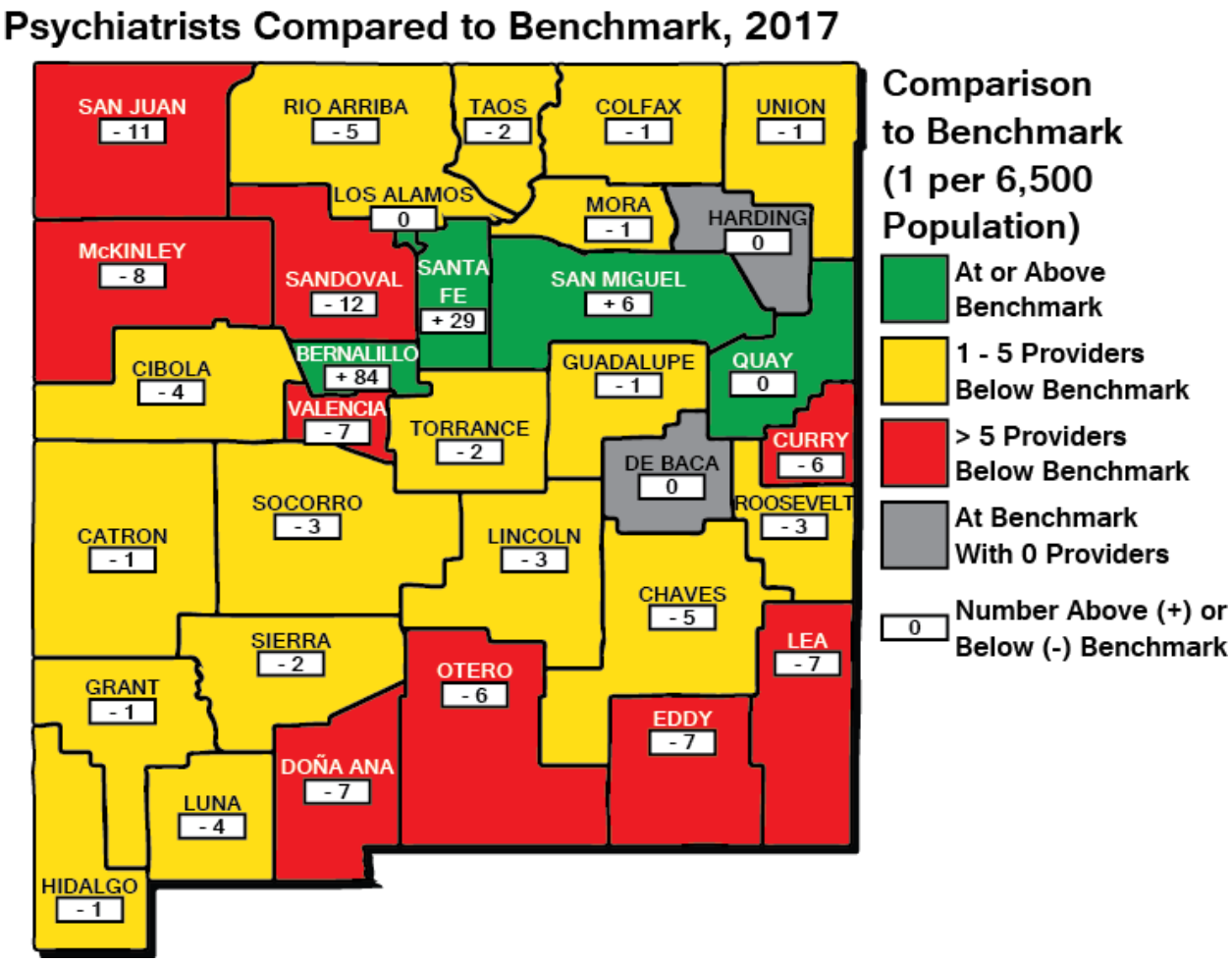

Figure 2.9. Psychiatrist workforce relative to the national benchmark of one psychiatrist per 6,500 population is shown in the white boxes. Each county's color indicates whether it is at or above benchmark (green), below benchmark by five or fewer providers (yellow), or below benchmark by more than five providers (red). Gray counties have no providers and benchmark values of zero.

Table 2.17. Psychiatrist Distribution by New Mexico County Since 2013

County	2013	2014	2015	2016	2017	Net Change Since 2013
Bernalillo	174	150	167	183	188	14
Catron	0	0	0	0	0	0
Chaves	6	6	5	4	5	-1
Cibola	1	1	1	0	0	-1
Colfax	0	0	0	0	1	1
Curry	4	4	4	3	2	-2
De Baca	0	0	0	0	0	0
Doña Ana	23	25	21	22	26	3
Eddy	2	2	4	3	2	0
Grant	5	4	3	3	3	-2
Guadalupe	0	0	0	0	0	0
Harding	0	0	0	0	0	0
Hidalgo	0	0	0	0	0	0
Lea	3	3	4	4	4	1
Lincoln	0	0	0	0	0	0
Los Alamos	1	1	3	3	3	2
Luna	1	1	1	1	0	-1
McKinley	7	7	5	6	3	-4
Mora	0	0	0	0	0	0
Otero	2	2	2	3	4	2
Quay	1	1	1	1	1	0
Rio Arriba	0	0	1	1	1	1
Roosevelt	0	0	0	0	0	0
San Juan	8	6	8	11	9	1
San Miguel	9	9	9	10	10	1
Sandoval	8	6	8	10	10	2
Santa Fe	51	48	51	53	52	1
Sierra	0	0	0	0	0	0
Socorro	3	2	1	1	0	-3
Taos	4	4	3	4	3	-1
Torrance	0	0	0	0	0	0
Union	0	0	0	0	0	0
Valencia	8	7	7	6	5	-3
STATE TOTAL	**321**	**289**	**309**	**332**	**332**	**11**

Table 2.18. Counties with the Greatest Psychiatrist Differences from National Benchmark

County	Practitioners Above Benchmark	County	Practitioners Needed to Meet Benchmark
Bernalillo	84	**Sandoval**	12
Santa Fe	29	**San Juan**	11
San Miguel	6	**McKinley**	8
No additional counties are above benchmark for psychiatrists.		**Doña Ana, Eddy, Lea, Valencia**	7 each

II.C.2.b. Methodological Notes

Our estimates of the New Mexico psychiatrist workforce include MDs and DOs who specialize in psychiatry. The estimated counts of psychiatrists are based on 9,585 MDs and DOs with active license in New Mexico, comprising 6,838 surveyed MDs, 2,033 MDs who have an active license but no survey, 612 surveyed DOs and 102 unsurveyed DOs. For both MDs and DOs, psychiatry specialty was determined first by self-reported specialty on the individual's most recent survey. For unsurveyed physicians and those for whom the only survey available was 2015 (the year for which the specialty item was omitted from the survey), specialty was identified through licensure and/or board certification. Surveyed psychiatrists were allocated to counties by the five-digit ZIP code of their self-reported primary practice location; for unsurveyed psychiatrists, the county was identified by the licensure address ZIP code.

A total of 582 psychiatrists with active New Mexico licensure were identified. Of these, 433 MDs and 30 DOs (79.6%) were surveyed.

II.C.2.c. Discussion

Figure 2.9 shows the county-level comparison of New Mexico's psychiatrists to the national benchmark of one per 6,500 population. For the state as a whole, the estimated 332 psychiatrists practicing in New Mexico represent a statewide psychiatrist to population ratio of 1.03 per 6,500, or eight above the national benchmark. However, 26 counties (78.8%) were below benchmark. The three counties above benchmark – Bernalillo, San Miguel and Santa Fe – together account for 75.3 percent of the state's psychiatrists (see psychiatrist counts reported in Table 2.17). The counties most below benchmark were Sandoval, San Juan, McKinley, Valencia, Lea, Eddy and Doña Ana, and together would require 59 psychiatrists to achieve benchmark psychiatrist to population ratios. For the state as a whole, and assuming no redistribution of the current workforce, an additional 111 psychiatrists would be needed to meet the national benchmark in all counties.

Since 2013, net decreases in the psychiatrist workforce have been observed in nine counties: Chaves, Cibola, Curry, Grant, Luna, McKinley, Socorro, Taos and Valencia. Thirteen counties have remained stable and 11 have increased. The most substantial gain since 2013 has been in Bernalillo County, which has added 14 psychiatrists. All other counties' growth has been changes of three or fewer providers.

II.D.1. Dentists

II.D.1.a. Executive Summary

In 2017, there were an estimated 1,215 dentists practicing in New Mexico, 44 more than in 2016 (Figure 2.10, Appendix A.9). Table 2.19 tracks changes in each county's dentist workforce since 2014. Of the 2017 total, 43.9 percent practice in Bernalillo County, which has 262 more dentists than benchmark (Table 2.20). Other counties with the most above-benchmark dentist to population ratios include Santa Fe (+57), San Juan (+38), Doña Ana (+23) and Sandoval (+20). The counties most below benchmark are Lea, Eddy (-6 each), Otero (-5), Roosevelt, Torrance and Valencia (-4 each) (Table 2.20). The state as a whole has 378 more dentists than the national benchmark, yet ***assuming no redistribution of the current workforce, an additional 46 dentists would be needed for all New Mexico counties to meet the national benchmark (one per 2,500 population).***

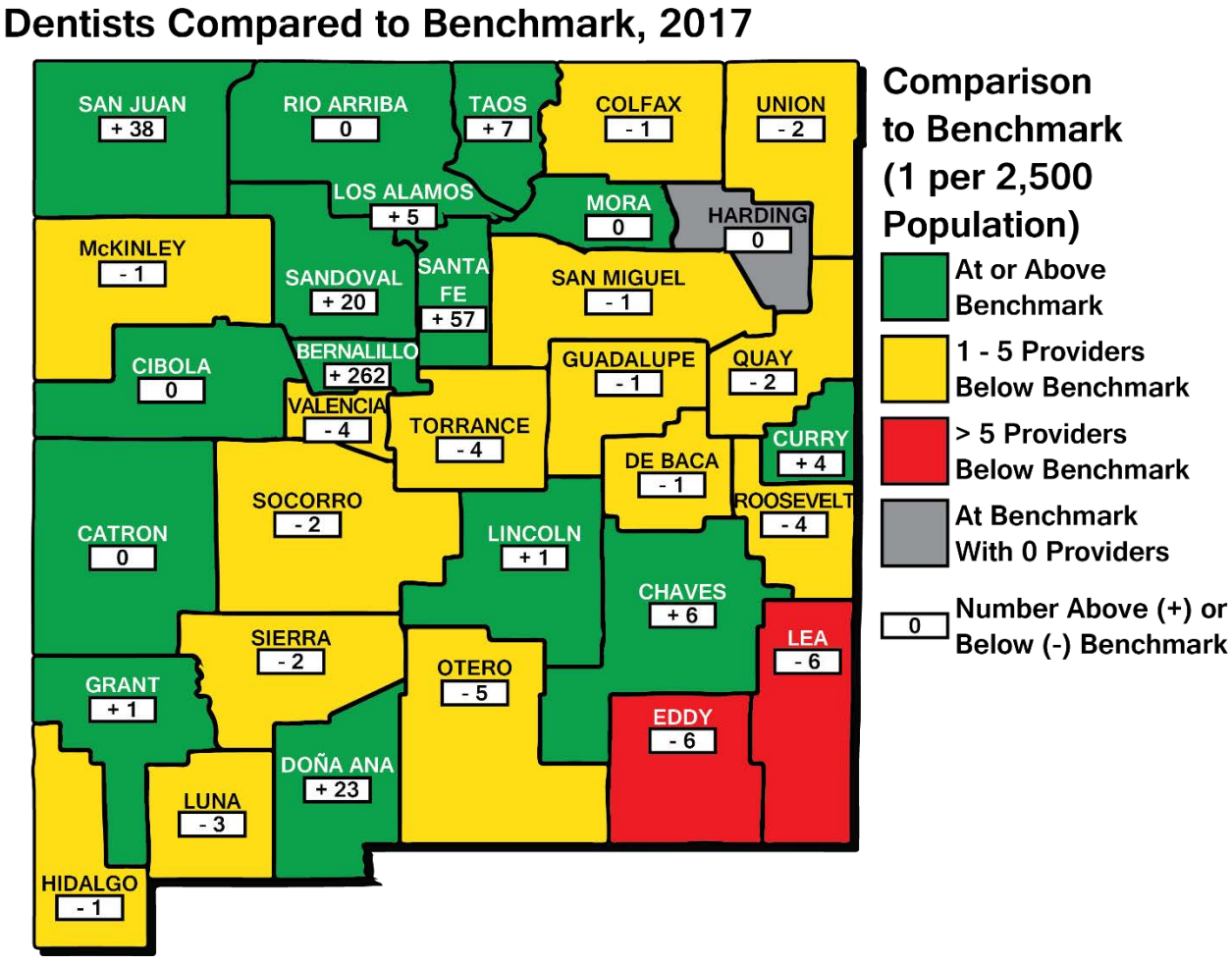

Figure 2.10. Dentist workforce relative to the national benchmark of one dentist per 2,500 population is shown in the white boxes. Each county's color indicates whether it is at or above benchmark (green), below benchmark by five or fewer providers (yellow), or below benchmark by more than five providers (red). Gray counties have no providers and benchmark values of zero.

Table 2.19. Dentist Distribution by New Mexico County Since 2014

County	2014	2015	2016	2017	Net Change Since 2014
Bernalillo	480	504	508	533	53
Catron	1	1	1	1	0
Chaves	21	24	28	32	11
Cibola	8	8	9	11	3
Colfax	4	4	4	4	0
Curry	25	29	27	24	-1
De Baca	0	0	0	0	0
Doña Ana	95	104	106	109	14
Eddy	15	19	19	17	2
Grant	13	11	13	12	-1
Guadalupe	1	1	2	1	0
Harding	0	0	0	0	0
Hidalgo	0	0	0	1	1
Lea	19	17	23	22	3
Lincoln	8	10	8	9	1
Los Alamos	16	15	14	12	-4
Luna	7	7	8	7	0
McKinley	32	31	29	28	-4
Mora	1	1	2	2	1
Otero	19	18	17	21	2
Quay	1	1	1	1	0
Rio Arriba	10	11	14	16	6
Roosevelt	3	3	5	4	1
San Juan	71	78	88	89	18
San Miguel	12	10	9	10	-2
Sandoval	60	60	69	77	17
Santa Fe	112	114	121	117	5
Sierra	6	4	3	2	-4
Socorro	4	4	4	5	1
Taos	15	17	16	20	5
Torrance	2	2	2	2	0
Union	0	0	0	0	0
Valencia	20	23	21	26	6
STATE TOTAL	**1,081**	**1,131**	**1,171**	**1,215**	**134**

Table 2.20. Counties with the Greatest Dentist Differences from National Benchmark

County	Practitioners Above Benchmark	County	Practitioners Needed to Meet Benchmark
Bernalillo	262	**Eddy, Lea**	6 each
Santa Fe	57	**Otero**	5
San Juan	38	**Roosevelt, Torrance, Valencia**	4 each
Doña Ana	23		
Sandoval	20		

II.D.1.b. Methodological Notes

New Mexico has 1,599 actively licensed dentists, of whom 1,136 (71.0%) have completed a license renewal survey. Surveyed dentists were allocated to counties by the five-digit ZIP code of their self-reported primary practice location; for unsurveyed dentists, the county was identified by the licensure address ZIP code.

II.D.1.c. Discussion

Figure 2.10 shows the county-level comparison of New Mexico's dentists to the national benchmark of one per 2,500 population. For the state as a whole, the estimated 1,215 dentists practicing in New Mexico represent a statewide dentist to population ratio of 1.5 per 2,500, or 378 above the national benchmark. However, 17 counties (51.5%) were below benchmark. The five counties most above benchmark – Bernalillo, Santa Fe, San Juan, Doña Ana and Sandoval – together account for over three quarters (76.1%) of the state's dentists (see dentist counts reported in Table 2.19). The counties most below benchmark were Eddy, Lea, Otero, Roosevelt, Torrance and Valencia, and together would require 29 dentists to achieve benchmark dentist to population ratios. For the state as a whole, and assuming no redistribution of the current workforce, an additional 46 dentists would be needed to meet the national benchmark in all counties.

Since 2014, net decreases in the dentist workforce have been observed in six counties: Curry, Grant, Los Alamos, McKinley, San Miguel and Sierra. Nine counties have remained stable and 18 have increased. The most substantial gains have been in Bernalillo, Chaves, Doña Ana, San Juan and Sandoval counties.

II.D.2. Pharmacists

II.D.2.a. Executive Summary

In 2017, there were an estimated 2,003 pharmacists practicing in New Mexico, 10 fewer than in 2016 (Figure 2.11, Appendix A.10). Table 2.21 tracks changes in each county's pharmacist workforce since 2014. Of the 2017 total, 55.6 percent practice in Bernalillo County, which has 586 more pharmacists than benchmark (Table 2.22). Other counties with the most above-benchmark pharmacist to population ratios include Sandoval (+42), De Baca, Grant and Taos (+1 each). The counties most below benchmark are Doña Ana (-34), San Juan (-32), McKinley (-29), Rio Arriba (-24) and Otero (-23) (Table 2.22). The state as a whole has 373 more pharmacists than the national benchmark, yet ***assuming no redistribution of the current workforce, an additional 258 pharmacists would be needed for all New Mexico counties to meet the national benchmark (0.78 per 1,000 population).***

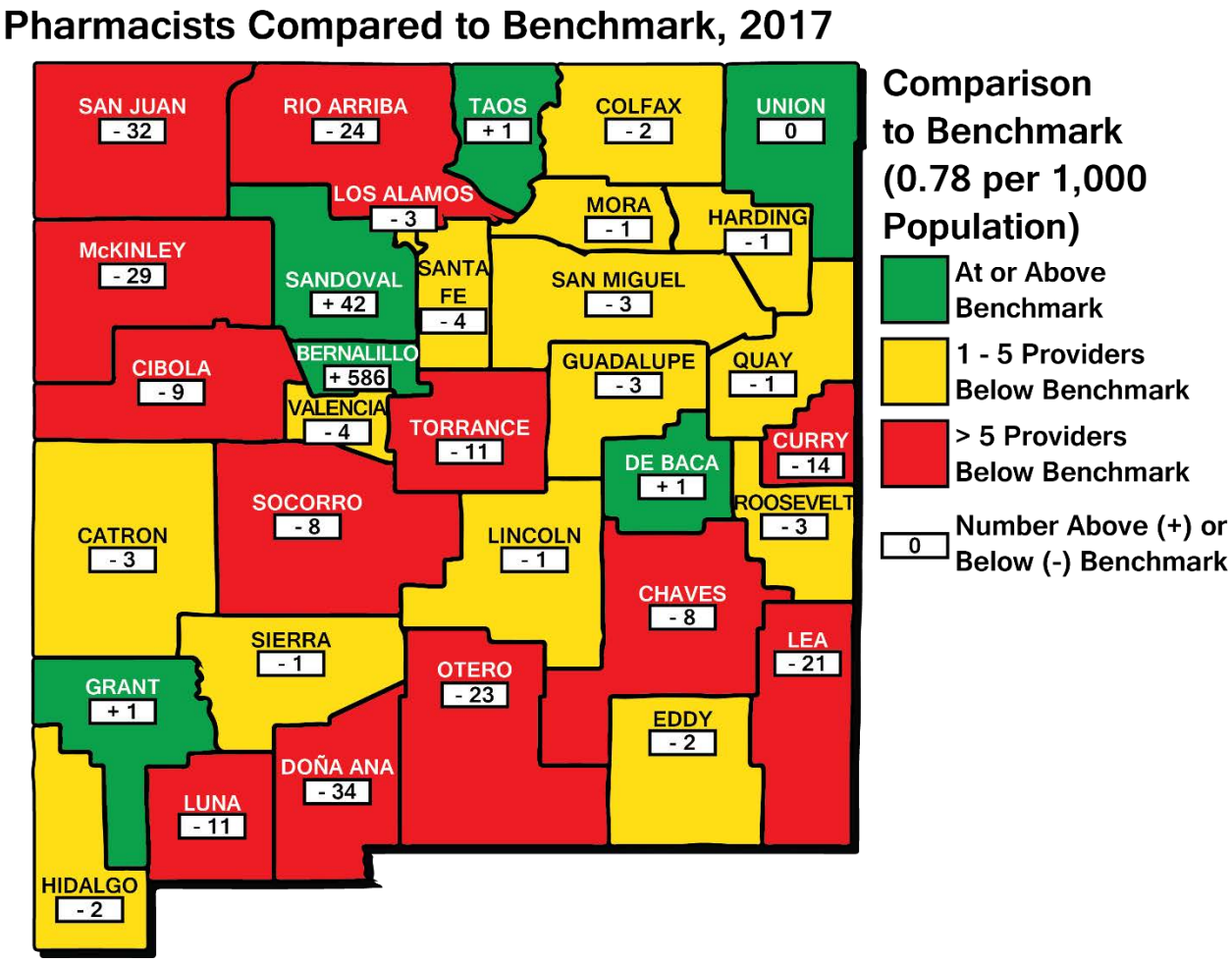

Figure 2.11. Pharmacist workforce relative to the national benchmark of 0.78 pharmacists per 1,000 population is shown in the white boxes. Each county's color indicates whether it is at or above benchmark (green), below benchmark by five or fewer providers (yellow), or below benchmark by more than five providers (red).

Table 2.21. Pharmacist Distribution by New Mexico County Since 2014

County	2014	2015	2016	2017	Net Change Since 2014
Bernalillo	1,079	1,070	1,137	1,114	35
Catron	0	0	0	0	0
Chaves	40	40	40	43	3
Cibola	13	13	11	12	-1
Colfax	10	9	8	7	-3
Curry	25	26	28	25	0
De Baca	2	2	2	2	0
Doña Ana	123	121	132	134	11
Eddy	38	40	42	42	4
Grant	20	21	21	23	3
Guadalupe	0	0	0	0	0
Harding	0	0	0	0	0
Hidalgo	1	1	1	1	0
Lea	27	26	33	33	6
Lincoln	18	15	14	14	-4
Los Alamos	12	13	15	12	0
Luna	6	6	8	8	2
McKinley	25	23	26	28	3
Mora	3	3	3	3	0
Otero	22	24	27	28	6
Quay	6	6	5	5	-1
Rio Arriba	9	9	8	7	-2
Roosevelt	14	14	13	12	-2
San Juan	65	66	65	67	2
San Miguel	19	18	18	19	0
Sandoval	143	142	146	153	10
Santa Fe	112	108	110	112	0
Sierra	6	6	6	8	2
Socorro	2	2	4	5	3
Taos	26	24	27	27	1
Torrance	2	2	1	1	-1
Union	3	3	3	3	0
Valencia	57	58	59	55	-2
STATE TOTAL	**1,928**	**1,911**	**2,013**	**2,003**	**75**

Table 2.22. Counties with the Greatest Pharmacist Differences from National Benchmark

County	Practitioners Above Benchmark	County	Practitioners Needed to Meet Benchmark
Bernalillo	586	**Doña Ana**	34
Sandoval	42	**San Juan**	32
De Baca, Grant, Taos	1 each	**McKinley**	29
		Rio Arriba	24
		Otero	23

II.D.2.b. Methodological Notes

The registered pharmacist survey was transitioned to the RLD platform in late 2017, making this analysis the first using survey data collected using the new platform. New Mexico has 3,354 actively licensed registered pharmacists, of whom 326 (9.7%) have completed a licensure survey. Surveyed pharmacists were allocated to counties by the five-digit ZIP code of their self-reported primary practice location; for unsurveyed pharmacists, the county was identified by the licensure address ZIP code.

II.D.2.c. Discussion

Figure 2.11 shows the county-level comparison of New Mexico's pharmacists to the national benchmark of 0.78 per 1,000 population. For the state as a whole, the estimated 2,003 pharmacists practicing in New Mexico represent a statewide pharmacist to population ratio of 0.96 per 1,000, or 373 above the national benchmark. However, 27 counties (81.8%) were below benchmark. The five counties most above benchmark – Bernalillo, Sandoval, De Baca, Grant and Taos – together account for 65.9 percent of the state's pharmacists (see pharmacist counts reported in Table 2.21). The counties most below benchmark were Doña Ana, San Juan, McKinley, Rio Arriba and Otero, and together would require 143 pharmacists to achieve benchmark pharmacist to population ratios. For the state as a whole, and assuming no redistribution of the current workforce, an additional 258 pharmacists would be needed to meet the national benchmark in all counties.

Since 2014, net decreases in the pharmacist workforce have been observed in eight counties: Cibola, Colfax, Lincoln, Quay, Rio Arriba, Roosevelt, Torrance and Valencia. Eleven counties have remained stable and 14 have increased. Bernalillo, Doña Ana, Lea and Sandoval counties have seen the most substantial increases.

II.D.3. Registered Nurses

II.D.3.a. Executive Summary

In 2017, there were an estimated 18,173 RNs practicing in New Mexico, 954 more than in 2016 (Figure 2.12, Appendix A.11). Table 2.23 tracks changes in each county's RN workforce since 2012. Of the 2017 total, 48.9 percent practice in Bernalillo County, which has 3,048 more RNs than the national average (Table 2.24). Other counties with above-average RN to population ratios include Grant (+84), San Miguel (+20) and Los Alamos (+4). The counties most below benchmark are Valencia (-475), Sandoval (-347), Doña Ana (-294), Lea (-226) and Otero (-175) (Table 2.24). The state as a whole has 134 more RNs than the national benchmark, yet ***assuming no redistribution of the current workforce, an additional 3,022 RNs would be needed for all New Mexico counties to meet the national benchmark (8.64 per 1,000 population).***

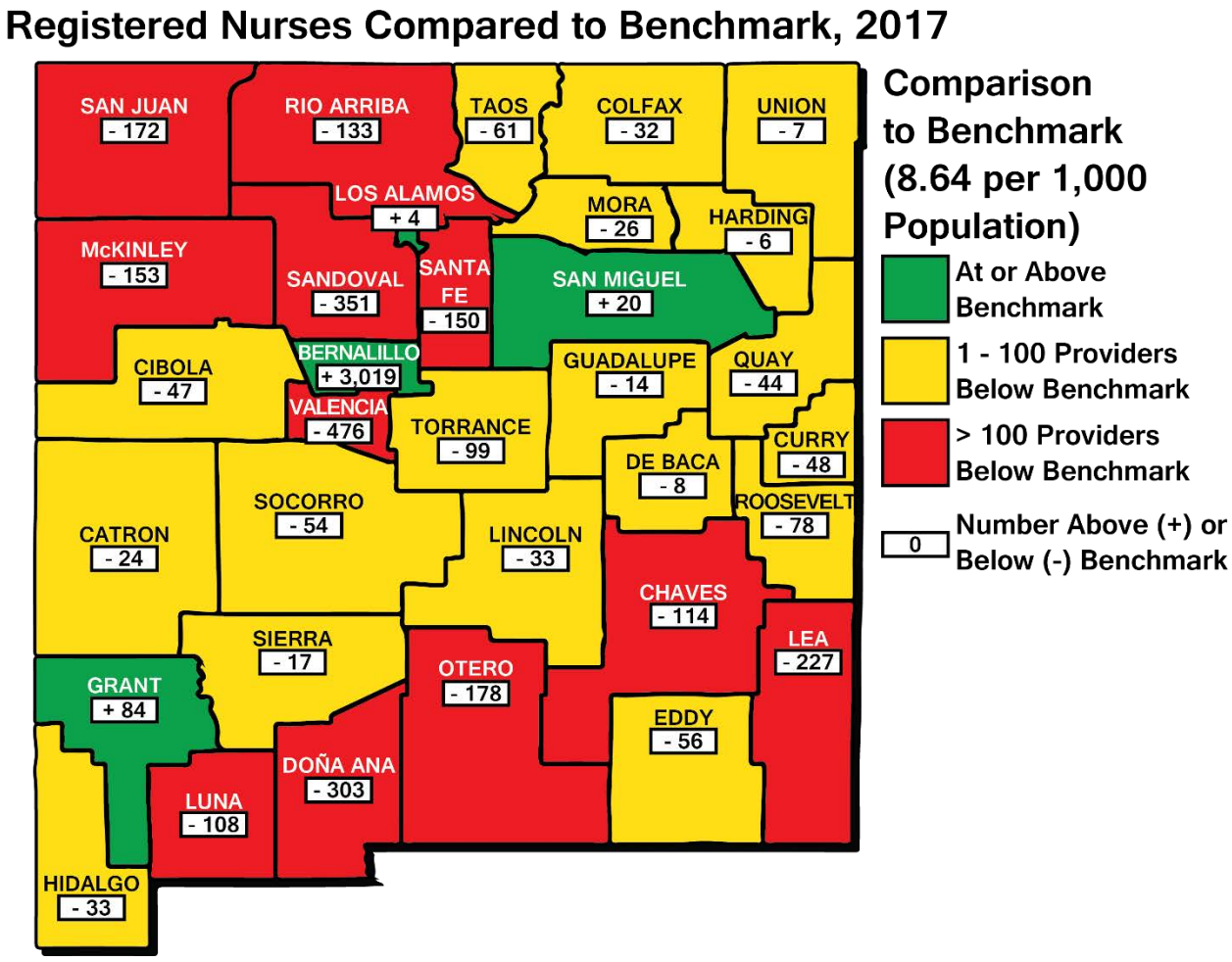

Figure 2.12. Registered nurse workforce relative to the national benchmark of 8.64 RNs per 1,000 population is shown in the white boxes. Each county's color indicates whether it is at or above benchmark (green), below benchmark by 100 or fewer providers (yellow), or below benchmark by more than 100 providers (red).

Table 2.23. RN Distribution by New Mexico County Since 2012

County	2012[a]	2016	2017	Net Change Since 2012
Bernalillo	7,725	8,344	8,895	1,170
Catron	9	10	7	-2
Chaves	422	442	449	27
Cibola	125	170	185	60
Colfax	69	65	73	4
Curry	312	345	383	71
De Baca	6	7	8	2
Doña Ana	1,403	1,490	1,569	166
Eddy	390	412	437	47
Grant	304	325	323	19
Guadalupe	17	19	24	7
Harding	1	0	0	-1
Hidalgo	7	4	4	-3
Lea	344	359	368	24
Lincoln	120	123	135	15
Los Alamos	152	150	166	14
Luna	81	104	100	19
McKinley	428	457	474	46
Mora	8	15	13	5
Otero	388	384	394	6
Quay	34	35	28	-6
Rio Arriba	176	182	206	30
Roosevelt	70	81	85	15
San Juan	845	881	927	82
San Miguel	259	266	260	1
Sandoval	379	800	884	505
Santa Fe	1,087	1,129	1,138	51
Sierra	66	70	79	13
Socorro	82	81	91	9
Taos	192	215	222	30
Torrance	22	35	36	14
Union	37	25	29	-8
Valencia	153	194	181	28
STATE TOTAL	**15,713**	**17,219**	**18,173**	**2,460**

[a] Registered nurse data were not analyzed for 2013 – 2015.

Table 2.24. Counties with the Greatest RN Differences from National Benchmark

County	Practitioners Above Benchmark	County	Practitioners Needed to Meet Benchmark
Bernalillo	3,048	**Valencia**	475
Grant	84	**Sandoval**	347
San Miguel	20	**Doña Ana**	294
Los Alamos	4	**Lea**	226
No additional counties are above benchmark for RNs.		**Otero**	175

II.D.3.b. Methodological Notes

As discussed in Section II.A.2.b above, the New Mexico Board of Nursing is to be commended on the quality of the nurses' survey and the efficiency with which it was instituted. The estimated counts of RNs are based on New Mexico's 27,119 RNs *who were not also licensed at a higher level*. That is, RNs who were also CNPs, CNSs, CRNAs, or CNMs were excluded from the RN count. Of these 27,119 RNs, 18,173 identified a New Mexico practice location in the survey. As for CNPs/CNSs, RNs were allocated to counties by their self-reported practice five-digit ZIP code.

II.D.3.c. Discussion

Figure 2.12 shows the county-level comparison of New Mexico's RNs to the national benchmark of 8.64 per 1,000 population. While in 2016 the state was affected by an overall shortage of nurses, in 2017 the RN workforce has risen slightly above benchmark for the state as a whole. The estimated 18,173 RNs practicing in New Mexico represent a statewide RN to population ratio of 8.7 per 1,000, or 134 above the national benchmark. However, 29 counties (87.9%) were below benchmark. The four counties above benchmark – Bernalillo, Grant, San Miguel and Los Alamos – together account for 53.1 percent of the state's RNs (see RN counts reported in Table 2.24). The counties most below benchmark were Valencia, Sandoval, Doña Ana, Lea and Otero, and together would require 1,517 RNs to achieve benchmark RN to population ratios. For the state as a whole, and assuming no redistribution of the current workforce, an additional 3,022 RNs would be needed to meet the national benchmark in all counties.

Since 2012, net decreases in the RN workforce have been observed in five counties: Catron, Harding, Hidalgo, Quay and Union. The remaining 28 have increased, with the most substantial increases in Bernalillo, Sandoval and Doña Ana counties.

Given the large number of RNs still needed to bring all New Mexico counties to the national benchmark, it continues to be necessary to identify effective recruitment and retention strategies for this profession. We commend the Legislature's rapid action to join the Enhanced Nurse Licensure Compact, which will improve New Mexico employers' ability to recruit nursing staff from other states. At the same time, the Enhanced Nurse Licensure Compact allows nurses to practice in New Mexico without establishing in-state licensure. This may negatively impact our ability to survey and track long-term recruits.

Critically important to preparing future New Mexico nurses will be funding the New Mexico Nursing Education Consortium (NMNEC), which makes it possible for students throughout the state to obtain an associate's degree and bachelor's degree in nursing without relocating. The future of this successful program is at risk, and among the committee's recommendations is sustained funding for NMNEC to continue its work in communities statewide.

II.D.4. Emergency Medical Technicians

II.D.4.a. Executive Summary

In 2017, there were an estimated 6,364 EMTs practicing in New Mexico, 263 more than in 2016 (Figure 2.13, Appendix A.12). Table 2.25 tracks changes in each county's EMT workforce since 2016. Of the 2017 total, 35.2 percent practice in Bernalillo County, which has 300 more EMTs than the national average (Table 2.26). Other counties with the most above-average EMT to population ratios include Sandoval (+71), Los Alamos (+68), Lincoln (+45) and Taos (+38). The counties most below benchmark are Doña Ana (-151), Otero (-57), San Miguel (-43), Valencia (-42) and Lea (-34) (Table 2.26). The state as a whole has 372 more EMTs than the national benchmark, yet ***assuming no redistribution of the current workforce, an additional 415 EMTs would be needed for all New Mexico counties to meet the national benchmark (2.87 per 1,000 population).***

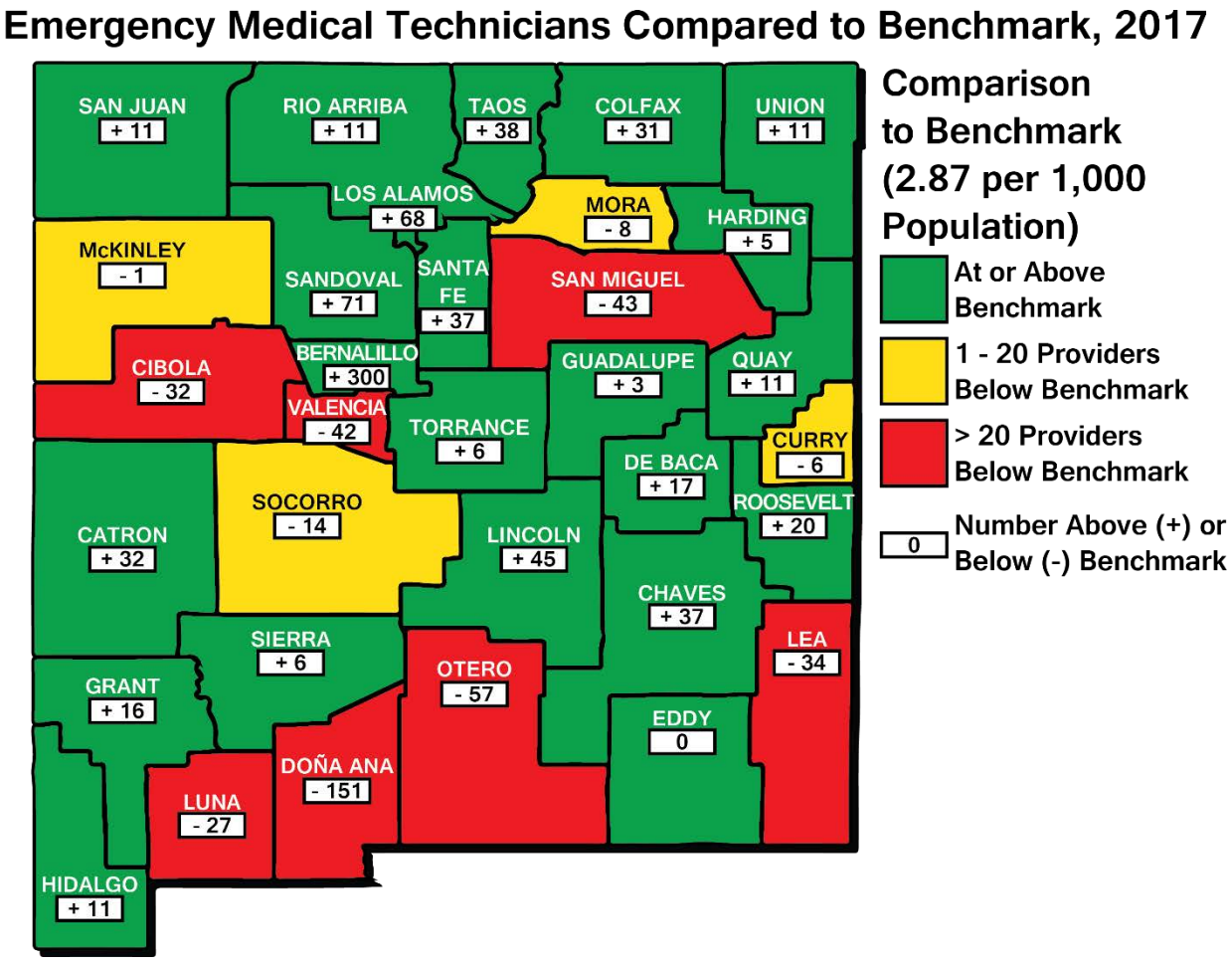

Figure 2.13. EMT workforce relative to the national benchmark of 2.87 EMTs per 1,000 population is shown in the white boxes. Each county's color indicates whether it is at or above benchmark (green), below benchmark by 20 or fewer providers (yellow), or below benchmark by more than 20 providers (red).

Table 2.25. EMT Distribution by New Mexico County Since 2016

County	2016	2017	Net Change Since 2016
Bernalillo	2,031	2,242	211
Catron	39	42	3
Chaves	216	223	7
Cibola	45	45	0
Colfax	65	66	1
Curry	120	137	17
De Baca	22	22	0
Doña Ana	469	468	-1
Eddy	166	164	-2
Grant	94	95	1
Guadalupe	20	16	-4
Harding	6	7	1
Hidalgo	26	23	-3
Lea	142	163	21
Lincoln	109	101	-8
Los Alamos	85	122	37
Luna	45	42	-3
McKinley	194	207	13
Mora	5	5	0
Otero	127	132	5
Quay	27	35	8
Rio Arriba	131	123	-8
Roosevelt	78	74	-4
San Juan	364	375	11
San Miguel	39	37	-2
Sandoval	553	480	-73
Santa Fe	397	464	67
Sierra	47	38	-9
Socorro	32	34	2
Taos	126	132	6
Torrance	57	51	-6
Union	17	23	6
Valencia	207	176	-31
STATE TOTAL	**6,101**	**6,364**	**263**

Table 2.26. Counties with the Greatest EMT Differences from National Benchmark

County	Practitioners Above Benchmark	County	Practitioners Needed to Meet Benchmark
Bernalillo	300	**Doña Ana**	151
Sandoval	71	**Otero**	57
Los Alamos	68	**San Miguel**	43
Lincoln	45	**Valencia**	42
Taos	38	**Lea**	34

II.D.4.b. Methodological Notes

Because our identified benchmark metric includes only EMTs of license type basic, intermediate and paramedic (EMT-B, EMT-I and EMT-P),[25] our analysis only includes individuals with these licenses. New Mexico also issues dispatcher and first responder licenses, but these individuals were excluded from the EMT counts.

The estimated counts of EMTs are based on New Mexico's 7,768 actively licensed EMTs, of whom 6,879 (88.6%) are of license types EMT-B, EMT-I and EMT-P. EMTs complete surveys at initial licensure and license renewal; as a result, survey responses are available for all licensees. EMTs were allocated to counties first by self-reported employment county. Where this information was not available, the county was identified by the licensure address ZIP code.

II.D.4.c. Discussion

Figure 2.13 shows the county-level comparison of New Mexico's EMTs to the national benchmark of 2.87 EMTs per 1,000 population. For the state as a whole, the estimated 6,364 EMTs practicing in New Mexico represent a statewide EMT to population ratio of 3.05 per 1,000, or 372 above the national benchmark. However, 11 counties (33.3%) were below benchmark. The five counties most above benchmark – Bernalillo, Sandoval, Los Alamos, Lincoln and Taos – together account for 48.4 percent of the state's EMTs (see EMT counts reported in Table 2.25). The counties most below benchmark were Doña Ana, Otero, San Miguel, Valencia and Lea, and together would require 327 EMTs to achieve benchmark EMT to population ratios. For the state as a whole, and assuming no redistribution of the current workforce, an additional 415 EMTs would be needed to meet the national benchmark in all counties.

Since 2016, net decreases in the EMT workforce have been observed in 13 counties. Three counties have remained stable, and 17 have increased. The most substantial decreases were observed in Sandoval and Valencia counties (losses of 73 and 31 EMTs, respectively) while the largest increases occurred in Bernalillo, Santa Fe and Los Alamos counties (gains of 211, 67 and 37, respectively).

EMTs continued to show a bimodal distribution relative to benchmark, with 17 counties falling more than 10 EMTs above benchmark and seven falling more than 20 below benchmark. In addition, this second year of survey data for EMTs revealed notable volatility in county-level workforce. Since 2016, five counties (Bernalillo, Curry, Lea, Los Alamos and Santa Fe) have shown gains of more than 20 EMTs, and two counties (Sandoval and Valencia) have shown losses greater than 20 EMTs.

Table 2.27 details the sources of these changes. Losses from a county could result from an EMT being no longer active in New Mexico – that is, no longer licensed as EMT-B, EMT-I or EMT-P in New Mexico,

or no longer practicing in the state – or changing his or her practice address to another county. Gains to a county could result from an EMT becoming newly active in New Mexico or changing his or her practice address from another county.

Table 2.27. Sources of County-Level EMT Changes, 2016 – 2017

County	2016 Count	No Longer Active in NM	No Longer in County	Newly Active in NM	New to County	2017 Count	Net Change
Bernalillo	2,031	-61	-321	+92	+501	2,242	211
Catron	39	-1	-7	+2	+9	42	3
Chaves	216	-3	-41	+15	+36	223	7
Cibola	45	0	-11	+3	+8	45	0
Colfax	65	0	-21	+9	+13	66	1
Curry	120	0	-22	+17	+22	137	17
De Baca	22	0	-7	+1	+6	22	0
Doña Ana	469	-9	-121	+48	+81	468	-1
Eddy	166	-3	-50	+7	+44	164	-2
Grant	94	0	-27	+8	+20	95	1
Guadalupe	20	0	-8	+1	+3	16	-4
Harding	6	0	-1	+1	+1	7	1
Hidalgo	26	0	-10	+1	+6	23	-3
Lea	142	-2	-41	+14	+50	163	21
Lincoln	109	-3	-30	+4	+21	101	-8
Los Alamos	85	-5	-27	+12	+57	122	37
Luna	45	-2	-12	+4	+7	42	-3
McKinley	194	-9	-45	+27	+40	207	13
Mora	5	0	0	0	0	5	0
Otero	127	-5	-33	+8	+35	132	5
Quay	27	0	-5	0	+13	35	8
Rio Arriba	131	-4	-43	+13	+26	123	-8
Roosevelt	78	-2	-23	+4	+17	74	-4
San Juan	364	-10	-94	+48	+67	375	11
San Miguel	39	-1	-9	+3	+5	37	-2
Sandoval	553	-13	-204	+26	+118	480	-73
Santa Fe	397	-6	-96	+22	+147	464	67
Sierra	47	-2	-18	+1	+10	38	-9
Socorro	32	0	-10	+3	+9	34	2
Taos	126	-1	-32	+10	+29	132	6
Torrance	57	-3	-20	+6	+11	51	-6
Union	17	0	-4	+3	+7	23	6
Valencia	207	-7	-66	+2	+40	176	-31
STATE TOTAL	**6,101**	**-152**	**-1,459**	**+415**	**+1,459**	**6,364**	**263**

EMTs entering or leaving practice in New Mexico accounted for a relatively small change overall. For the state as a whole, 152 EMTs who were active in New Mexico in 2016 were no longer active in the state in 2017, while 415 EMTs became newly active in 2017 – resulting in a net gain of 263 EMTs in 2017 compared to 2016. Twenty-nine counties saw a net gain with respect to EMTs new to New Mexico, with the greatest being a net gain of 39 EMTs in Doña Ana County (nine EMTs lost and 48 gained). Two counties had no change from EMTs entering and leaving the state, and two (Sierra and Valencia) showed a net loss of one and five EMTs respectively from this type of change.

The larger portion of county-level changes in EMT workforce comprised moves of licensed EMTs between counties. A total of 1,459 EMTs changed their county of practice between 2016 and 2017. Eight counties saw a net influx of EMTs from other counties, some sizeable: Bernalillo (180), Santa Fe (51), Los Alamos (30), Lea (9), Quay (8), Union (3), Otero (2) and Catron (2). These gains were made at the expense of 22 counties that had net losses of EMTs to other counties. The largest of these losses were Sandoval (-86), Doña Ana (-40), San Juan (-27), Valencia (-26) and Rio Arriba (-17). Three counties had a net change of zero from losses to and gains from other counties.

It is important to remember that across all of the professions analyzed, the practitioner counts are based upon active licenses to match the national benchmarks used; the proportion of these individuals' time spent on health care activities is not examined. With respect to EMTs, it is thought that many maintain certification to practice on a volunteer rather than full-time professional basis. Alternatively, it may be that more EMTs are needed in New Mexico than in the average state. With our scant and maldistributed workforce for many other health professions, these individuals may serve a larger role in New Mexico communities than in states better-supplied with health workforce. In future years, we will explore this phenomenon in greater depth.

II.E. Other Features of the Health Care Workforce

II.E.1. Executive Summary

The demographic data collection required under the Work Force Data Collection, Analysis and Policy Act is a tremendous resource for workforce analysis and planning. In this section, we present for New Mexico's physicians (MDs and DOs), CNPs/CNSs and PAs three demographic categories important for state workforce planning efforts: gender, race/ethnicity and age.

In each table, the total practitioner counts indicate the number of practitioners who completed a survey and/or completed the relevant survey item; as a result, these counts may differ from the counts presented earlier in Section II. In comparison to New Mexico's population, the physician workforce is more likely to be male, Asian or (to a lesser extent) Black and non-Hispanic. While New Mexico's physicians continue to be older than the national average, their median age (53.8) has remained stable for the second year in a row.

In contrast, New Mexico's CNPs/CNSs and PAs are more likely than the state's population as a whole to be female; they are also more likely than the state's population to be non-Hispanic and Asian or (for PAs) white. CNPs/CNSs and PAs are both younger than the state's physicians: CNPs/CNSs by 18 months (median age 52.3) and PAs by a full nine years (median age 44.7). Both of these professions are younger relative to physicians than in 2016, indicating a greater influx of younger practitioners for CNPs/CNSs and PAs than physicians.

II.E.2. Gender

Across all specialties, 35.8 percent of New Mexico's physicians were female and 64.2 percent male in 2017 (Table 2.28). These proportions do not reflect the state's population as a whole, but compare favorably to the national median of 33.8 percent female and 66.2 percent male.[33] Female physicians make up 42.4 percent of PCPs, 57.1 percent of OB-GYNs and 40.8 percent of psychiatrists, but only 22.0 percent of general surgeons. The gender distribution of New Mexico's physicians continues to remain stable: in 2012, MDs were 35.1 percent female and 64.8 percent male.

Table 2.28. Gender of Surveyed New Mexico Physicians

Gender	NM Pop.	All MDs and DOs		Primary Care		OB-GYN		General Surgeons		Psychiatrists	
	%	Count	%	Count	%	Count	%	Count	%	Count	%
Female	50.5%	1,676	35.8%	864	42.4%	144	57.1%	37	22.0%	118	40.8%
Male	49.5%	3,009	64.2%	1,172	57.6%	108	42.9%	131	78.0%	171	59.2%
TOTAL		**4,685**		**2,036**		**252**		**168**		**289**	

Table 2.29 shows the gender proportions of New Mexico's CNPs/CNSs and PAs. Unlike physicians, these practitioners are more commonly female, with 87.7 percent of state CNPs/CNSs and 61.3 percent of state PAs reporting female gender.

Table 2.29. Gender of Surveyed New Mexico CNPs/CNSs and PAs

Gender	NM Pop.[24]	CNPs/CNSs		PAs	
	%	Count	%	Count	%
Female	50.5%	1,274	87.7%	400	61.3%
Male	49.5%	179	12.3%	252	38.7%
TOTAL		**1,453**		**652**	

II.E.3. Race and Ethnicity

Diversity of the health care workforce directly affects patient access to care, and is important for meeting the health care needs of New Mexico's racially and ethnically diverse population, especially in rural and underserved communities.

Table 2.30 shows the racial diversity of New Mexico's physicians compared to the state's population as a whole. Compared to the state's population, physicians practicing in-state are less likely to be American Indian or Alaska Native, two or more races or other races. New Mexico's physicians are more likely than the state population as a whole to be Asian or Pacific Islander, Black or African American or white. PCPs and psychiatrists showed a slightly different racial makeup than physicians as a whole: New Mexico's PCPs were more frequently other races and less frequently white than the state as a whole, and psychiatrists were less frequently Black or African American.

Table 2.31 shows the racial diversity of the state's CNPs/CNSs and PAs compared to New Mexico's population as a whole. Individuals reporting a race of American Indian or Alaskan Native were underrepresented among both CNPs/CNSs and PAs; PAs were more likely than the state as a whole to report being white.

Table 2.32 shows the self-reported ethnicity of New Mexico's physicians, CNPs/CNSs and PAs compared to the state's population as a whole. Hispanic individuals were underrepresented across all three professions relative to the state's population; one in five or fewer of these health professionals self-classified as Hispanic, compared to nearly one in two in the New Mexico population.

Table 2.30. Race of Surveyed New Mexico Physicians Compared to New Mexico's Population

	Total Count[a]	American Indian or Alaska Native	Asian or Pacific Islander	Black or African American	White	Other	Two or more
NM Population[24]	**2,082,669**	**193,295 (9.3%)**	**30,508 (1.5%)**	**41,957 (2.0%)**	**1,530,636 (73.5%)**	**218,476 (10.5%)**	**67,797 (3.3%)**
All Physicians	**4,354**	38 (0.9%)	471 (10.8%)	143 (3.3%)	3,260 (74.9%)	355 (8.2%)	87 (2.0%)
Primary Care	**1,841**	26 (1.4%)	224 (12.2%)	75 (4.1%)	1,264 (68.7%)	207 (11.2%)	45 (2.4%)
OB-GYN	**243**	3 (1.2%)	22 (9.1%)	13 (5.3%)	186 (76.5%)	15 (6.2%)	4 (1.6%)
General Surgeons	**169**	1 (0.6%)	24 (14.2%)	6 (3.6%)	121 (71.6%)	13 (7.7%)	4 (2.4%)
Psychiatrists	**256**	5 (2.0%)	24 (9.4%)	3 (1.2%)	203 (79.3%)	14 (5.5%)	7 (2.7%)

[a] For the rows pertaining to New Mexico's health care workforce, the total count represents those who answered the survey item pertaining to race.

Table 2.31. Race of Surveyed New Mexico CNPs/CNSs and PAs Compared to New Mexico's Population

	Total Count	American Indian or Alaska Native	Asian or Pacific Islander	Black or African American	White	Other	Two or more[b]	Hispanic[a]
NM Population[24]	**2,082,669**	**193,295 (9.3%)**	**30,508 (1.5%)**	**41,957 (2.0%)**	**1,530,636 (73.5%)**	**218,476 (10.5%)**	**67,797 (3.3%)**	**NA**
CNPs/CNSs	**1,437**	24 (1.7%)	37 (2.6%)	28 (1.9%)	986 (68.6%)	99 (6.9%)	[b]	263[a] (18.3%)
PAs	**499**	19 (3.8%)	17 (3.4%)	11 (2.2%)	411 (82.4%)	25 (5.0%)	16 (3.2%)	NA

[a] The nursing survey options for race and ethnicity are as follows: African American/Black, American Indian/Alaska Native, Asian/Pacific Islander, Caucasian/White, Other and Hispanic.

[b] Per the note above, there is no "Two or More" option on the nursing survey.

Table 2.32. Ethnicity of Surveyed New Mexico Physicians, CNPs/CNSs and PAs Compared to New Mexico's Population

	Total Count[a]	Hispanic or Latino
NM Population[24]	**2,082,669**	**995,831 (47.8%)**
All Physicians	4,065	654 (16.1%)
Primary Care	1,725	360 (20.9%)
OB-GYN	223	30 (13.5%)
General Surgeons	160	29 (18.1%)
Psychiatrists	241	40 (16.6%)
CNPs/CNSs	1,437	263 (18.3%)
PAs	484	99 (20.5%)

[a] For the rows pertaining to New Mexico's health care workforce, the total count represents those who answered the survey item pertaining to ethnicity.

II.E.4. Age

The age distribution of New Mexico physicians is shown in Table 2.33. The median age of New Mexico physicians was 53.8 in 2017, comparable to the median ages in 2016 (53.5), 2015 (53.6) and 2012 (53.4). The state's average physician remains more than two years older than the average for the nation as a whole: New Mexico physicians averaged 53.5 years of age, while the national average is 51.3.[34] Nationally, New Mexico also continues to have the highest percentage of physicians aged 60 or older (37.0 percent, compared to 30.3 percent nationally).[33]

Table 2.33. Age of Surveyed New Mexico Physicians

Age	All Physicians		Primary Care		OB-GYN		General Surgeons		Psychiatrists	
	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	426	7.7%	207	8.8%	14	5.0%	8	4.1%	10	3.0%
35-44	1,281	23.3%	570	24.2%	74	26.2%	55	28.4%	60	18.1%
45-54	1,204	21.9%	525	22.2%	54	19.1%	44	22.7%	66	19.9%
55-64	1,362	24.8%	569	24.1%	70	24.8%	38	19.6%	103	31.0%
65+	1,204	21.9%	481	20.4%	69	24.5%	48	24.7%	92	27.7%
Unknown	21	0.4%	8	0.3%	1	0.4%	1	0.5%	1	0.3%
TOTAL	**5,498**		**2,360**		**282**		**194**		**332**	
Median Age		**53.8**		**52.7**		**54.8**		**53.8**		**58.0**

The age distribution of the state's CNPs/CNSs and PAs is shown in Table 2.34. New Mexico's CNPs/CNSs are comparable in age to the state's physicians with a median age of 52.3. In contrast, PAs in the state are substantially younger (median age 44.7).

Table 2.34. Age of Surveyed New Mexico CNPs/CNSs and PAs

Age	CNPs/CNSs		PAs	
	Count	Percent	Count	Percent
<25	1	0.1%	2	0.3%
25-34	159	10.9%	210	26.5%
35-44	317	21.8%	193	24.4%
45-54	351	24.2%	163	20.6%
55-64	425	29.2%	158	19.9%
65+	200	13.8%	66	8.3%
Unknown	0	0.0%	0	0.0%
TOTAL	**1,453**		**792**	
Median Age		**52.3**		**44.7**

II.F. Discussion

Health workforce planning requires efforts to ensure that the right professionals – and combination of professionals for effective teams – are available when and where they are needed to meet a population's health care needs.

We have been pleased this year to be able to update all 12 of the professions included in the 2017 report. In addition to these, there are 24 licensed health professions in the state that have implemented survey requirements (see Appendix C). We look forward to continuing to add professions and to expand our more detailed analyses – as for primary care physicians and the women's health workforce in recent years – and develop recommendations for training, recruitment and statewide innovations.

In order to do so, it is imperative that the committee, via the University of New Mexico Health Sciences Center as the legislatively designated data steward – continue to receive the full complement of licensure and survey data in future years. As has been discussed, a reduced number of survey responses were received from RLD this year, jeopardizing our analysis both for this year and for the next several years until the individuals whose surveys are missing renew their licenses again. It is critically important that RLD resolve the difficulties they encountered this year in providing complete survey data to the committee.

Knowing the number of health professionals and where they are practicing is only the first step – though a very important one – in being able to plan for current and future health care workforce needs. The national averages and standard ratios that we are using as benchmarks are meant to be tools for comparison and for representing the distribution of professionals across the state. The analyses based on these metrics do not represent access to care, i.e., whether New Mexico's residents are able to consult health professionals where and when the need arises.

Many factors influence access to care and the capacity of the workforce to meet the population's needs. People living in an area with practitioner to population ratios above benchmark values may nevertheless lack access to care for a number of reasons. They might be unable to afford care, for example. Even with affordable health care, they might find that it takes a month or more to get an appointment with a new primary care physician or to see a specialist. Health system issues – including the time needed for preauthorization, to process billing, and for other scheduling matters – also greatly affect sufficiency in all areas of the state.

The benchmarks themselves are also inadequate for examining the dynamic nature of the health care workforce under national health care reform and new team-based care models. These new variables underscore the need to know not just the number of professionals, but also what capabilities exist in the workforce and the interconnections between professional roles and potential reconfigurations to enhance quality and capacity.

The report serves as a snapshot of how many health care professionals are practicing in New Mexico and where they are concentrated or lacking – and as a launching point for asking more specific questions about the state's health care workforce and what actions should be taken to enhance access to care for all residents.

II.G. Policy Recommendations Related to All Health Professions

Recommendation 1

Identify funding for efforts to support the New Mexico Nursing Education Consortium (NMNEC).

Funding streams from the Robert Wood Johnson Foundation and the New Mexico Board of Nursing are no longer available beginning in 2018. Therefore, we recommend at a minimum that in the interim legislative process, NMNEC testimony be provided to the Legislative Health & Human Services Committee and Legislative Education Study Committee.

We furthermore recommend that over the course of 2019 the New Mexico Legislature explore adding an additional line item of $380,000 to support the operations for sustained support of existing NMNEC programs, onboarding the remainder of state-supported nursing programs and preserving the NMNEC curriculum integrity. This funding would strengthen the New Mexico partnership model between universities and community colleges to increase the academic preparedness of the nursing workforce.

In 2010, the Institute of Medicine recommended an increase in the proportion of nurses with a baccalaureate degree to 80 percent by 2020.[35] According to the American Association of Colleges of Nursing (AACN), many hospitals and other medical facilities are following the IOM guidelines and strongly encourage associate degree in nursing-prepared RNs to earn their bachelor of science in nursing (BSN) within five years of graduation.

For the past 10 years, AACN research has shown that higher education does make a difference in the quality of clinical practice. Evidence shows that nurses with a BSN give better care. The studies show that patients in the care of nurses with a BSN have better outcomes, including lower rates of mortality. Also, research shows that nurses who have a BSN or higher training are more proficient in making diagnoses and evaluating the results of interventions.[36]

NMNEC has been successful in addressing the IOM reports recommendation of increasing nurses with BSN degrees for New Mexico's nursing workforce. Funding support for NMNEC is essential to continue to build partnerships between universities and community colleges to expand the BSN degree option, increase BSN-prepared nurses for New Mexico, improve efficiency, quality and educational outcomes of nursing education, increase workforce diversity by improving nursing education for minorities, particularly in rural areas, and maintain the NMNEC curriculum integrity.

Recommendation 2

Direct RLD to correct their information technology system changes so that all survey responses can be provided to the University of New Mexico Health Sciences Center and the committee.

As discussed above, responses to the surveys administered to many of New Mexico's health professions is collected by RLD. This year, due to staffing changes, survey changes and information technology system changes, RLD was not able to return to the committee the expected number of survey responses. The 2017 data set received by the University of New Mexico Health Sciences Center lacked more than 2,500 responses, compared to the data received in prior years. It will be critically important for RLD to resolve these issues in order to ensure complete, high-quality data and an accurate analysis of the state's health care workforce.

Recommendation 3

Continue funding for expanded primary and secondary care residencies in New Mexico.

In 2014, 2016 and 2017, the committee recommended that the state explore options for increasing the number of funded Graduate Medical Education (residency) positions. We reiterate our recommendation that the Legislature continue to fund expanded primary and secondary care residencies, particularly for practice in areas that are rural and/or underserved, as residency service in such areas can be a powerful recruitment tool.

Recommendation 4

Increase funding for state loan-for-service and loan repayment programs, and consider restructuring them to target the professions most needed in rural and underserved areas rather than prioritizing those with higher debt.

Rural clinics and hospitals face tremendous challenges in recruiting and retaining medical staff sufficient to maintain standards of care; for example, see the discussion of the maternity service closure at Alta Vista in Section II.B. Eligibility of their employees for state loan repayment is a valuable recruitment tool for qualified sites (for additional information on these programs, please see Appendix B). We recommend that these programs be expanded and restructured with an eye toward recognizing and ameliorating the existing dearth of health professionals in rural and frontier areas.

With respect to funding levels, we note that the primary barrier to effectiveness of these state programs is the small number of practitioners they are able to benefit given current funding levels; we encourage the Legislature to increase their funding.

We first recommended these programs' restructuring in our 2015 report. Shifting selection of practitioners for these programs from emphasizing providers' level of debt to prioritizing the professions most needed in rural areas would more effectively recruit necessary practitioners to shortage areas. In addition, there are a variety of methods to potentially expand the current loan repayment program that include increasing funding to individuals through the current system or passing increased loan repayment funds through hospitals and other health care organizations.

Recommendation 5

Request that the Department of Health add pharmacists, social workers and counselors to the health care professions eligible for New Mexico's Rural Healthcare Practitioner Tax Credit program.

The professions currently eligible include licensed dental hygienists, physician assistants, certified nurse-midwives, certified registered nurse anesthetists, certified nurse practitioners and clinical nurse specialists. Pharmacists are urgently needed in many areas of the state, and counselors and social workers made up nearly 80 percent of our state behavioral health workforce in 2016.[1] They are not included in this program, which is an effective recruitment and retention tool to increase providers in rural settings.

Recommendation 6

Create a committee tasked with examining future health care workforce needs related to the state's changing demographics.

The state population is projected to age rapidly over the coming decades, with 32.5 percent of the state's population aged 60 or older by 2030, putting New Mexico third in the nation for this demographic.[37] Meeting the changed health care needs of this changed population will require proactive planning. The committee recommends Legislative action to create a committee, "Projection of Health Care Needs Towards 2030," to be tasked with projecting health care needs responsive to the state's changing demographics and developing recruitment and retention measures to meet them.

Recommendation 7

Provide funding for the New Mexico Health Care Workforce Committee.

To date, the work of this committee has not been supported with funding from the state. The analyses that can be conducted, the dissemination of these findings, and the research support that can be provided to efforts to mitigate New Mexico's shortages of health professionals through recruitment and retention is limited as a result. Data stewardship and analysis are currently carried out by faculty and staff of the University of New Mexico Health Sciences Center, although these activities are not functions of the university per se. State funding for this committee in the amount of $350,000 will allow for more in-depth analysis of the state's health care workforce and the efficacy of recruitment and retention programs.

Recommendation 8

Establish a tax credit for health care professional preceptors who work with public institutions.

Community-based clinical training preceptors play an important role in the clinical education of health professionals, including physicians, advanced practice registered nurses and physician assistants. These practicing health care professionals provide trainees with clinical experience and mentoring. They are located outside of the academic medical sites where the majority of training takes place: for example, preceptors for the University of New Mexico School of Medicine are located in 77 communities and 30 of New Mexico's 33 counties.[38] As a result, preceptors provide a diversity of patients, cases and settings – both metropolitan and rural – that broaden students' clinical knowledge and can be instrumental in their decision to practice in rural areas.

Despite the important role they play and time they commit to training, however, preceptors for public institutions are typically unpaid. Tax incentives are available for uncompensated preceptors in Colorado, Georgia, Hawaii and Maryland and are pending or have been considered in Kentucky, Minnesota, New York and South Carolina.[39] Currently available programs typically offer each preceptor a $1,000 tax credit per student, capped at one (Colorado), five (Hawaii) or 10 (Maryland) credits.[40–43] These programs are limited to preceptors who are not otherwise compensated for this teaching, and may be limited to individuals practicing in rural or underserved areas. Hawaii has allocated $1.5 million per year for this credit, while Maryland has capped expenditures for this program at $100,000 each for precepting physicians and nurse practitioners. We recommend that the Legislature establish a similar tax credit in New Mexico to aid in the recruitment of health care professional preceptors for public institutions.

Section III

New Mexico's Behavioral Health Workforce

III.A. Behavioral Health Needs in New Mexico

A robust behavioral health workforce continues to be an important need for New Mexico. As a state, we continue to experience critical health disparities related to behavioral health outcomes. In 2016, New Mexico's drug overdose rate was approximately 25% higher than the U.S. national average.[44] New Mexico continues to have the highest alcohol-related mortality rate in the country.[45] Mortality rates from suicide continue to be 50% higher than U.S. national rates.[46] Although these disparities are alarming, the treatment that is available in New Mexico is generally effective. When individuals receive treatment for behavioral health conditions in New Mexico, a higher percentage report improved functioning as a result of treatment received compared to national rates.[47] Therefore, strategies to expand the workforce are an important need for our state.

A recent survey of 80 behavioral health clinical directors across New Mexico identified the limitations of the behavioral health workforce as the biggest barrier in providing quality behavioral health care in the state.[48] In this same survey, respondents were asked open-ended questions regarding perceived barriers to strengthening the workforce. Table 3.1 summarizes their answers.

Table 3.1. Summary of Open-Ended Responses Regarding Barriers to Behavioral Health Workforce

In your opinion, what is the greatest barrier to acquiring quality behavioral health care workforce members in New Mexico?		
Response	**Frequency**	**Percent**
Salaries and benefits	29	36.3%
Quality education programs and supervisory training	20	25.0%
Reimbursement rates	13	16.3%
High need / high stress / impoverished populations	9	11.3%
Licensing / credentialing requirements	8	10.0%
Supervision for unlicensed clinicians	8	10.0%
Geographic location	6	7.5%
Changes in state policies / administrations	6	7.5%
Cultural training needs (particularly with Native American populations)	4	5.0%
Need for bilingual / multilingual providers	3	3.8%

The New Mexico Health Care Workforce Committee, the New Mexico Behavioral Health Services Division, and the New Mexico Children, Youth & Families Department have collaborated to convene the New Mexico Behavioral Health Workforce Coalition, which meets monthly and has hosted three statewide summits to bring together stakeholders to identify potential policy solutions. This year's policy recommendations to enhance the state behavioral health workforce are listed in Section III.C below.

III.B. Data Received from RLD Were Insufficient for Analysis

As discussed in Section I.B.4, Limitations of the Data, the behavioral health survey responses received from RLD for 2017 were insufficient to update our behavioral health analysis. It will be critical to resolve this issue as quickly as possible in order to continue to develop our understanding of the distribution and demographics of the state's behavioral health workforce.

III.C. Policy Recommendations Related to Behavioral Health

Recommendation 9

Require that licensed behavioral health professionals receive three hours of continuing education credits each licensure cycle in the treatment of substance use disorders.

This continuing education requirement brings behavioral health professionals on par with prescribers in New Mexico, who are mandated to receive five hours of continuing education in the treatment of addictions and safer opioid prescribing. These hours should be required as part of the total continuing education hours already required by the pertinent licensing boards, rather than expanding the total hours required for relicensure. We recommend a statute that requires the licensing boards to promulgate this continuing education requirement in a manner tailored to the needs of their profession. This mechanism would increase the capacity of our entire workforce to treat substance use disorders.

Recommendation 10

Finalize and promulgate changes to the New Mexico Medicaid Behavioral Health Regulations to reimburse Medicaid services when delivered by behavioral health interns in community settings.

A student intern is an individual who is currently enrolled in a health profession training program for counseling, psychology or social work that has been approved by the appropriate board, is performing the duties assigned in the course of training, and is appropriately supervised according to the standards set by the appropriate board and the training program. Many states have developed Medicaid reimbursement codes that allow community agencies to receive reimbursement for health care services delivered by trainees such as social work students, counseling students, psychology interns and psychology postdoctoral students who are receiving proper supervision. Eighteen states have adopted this practice for psychology interns and psychology post-doctoral fellows. Additionally, Michigan, Vermont and Wisconsin have expanded this practice to allow Medicaid billing through the supervisor's National Provider Identifier for counseling and social work interns. This change requires three components:

1. The internship or clinical program must be an accredited educational program;
2. The clinical supervision of the interns must be approved by the relevant board; and
3. The clinical supervisor is an approved New Mexico Medicaid provider.

Because site of clinical training is a predictor of ultimate practice locations,[49] adoption of this practice in New Mexico could facilitate the development of sustainable internship sites in underserved communities that would enhance recruitment to these practice settings. Additionally, this change would increase access to care. The estimated annual cost of enacting this recommendation is $1,765,072.

This provision is slated for inclusion in Centennial Care 2.0. The New Mexico Board of Psychologist Examiners stands ready to implement the change as soon as it is finalized and promulgated.

Recommendation 11

Finalize and promulgate changes to the New Mexico Medicaid Behavioral Health Regulations to identify physician assistants as a behavioral health provider type which will allow Medicaid reimbursement of services when delivered by physician assistants in behavioral health settings.

Currently, New Mexico Medicaid does not recognize physician assistants as behavioral health providers. Physician assistants can deliver behavior health treatment in primary care settings under the supervision of a physician, but are not recognized by Medicaid if they were to deliver these interventions in specialized behavioral health settings. Adapting the current Medicaid regulations would allow further flexibility for physician assistants who have an interest in specializing in behavioral health and would work under the supervision of a qualified physician.

Recommendation 12

Expedite direct services via telehealth by participating in the PSYPACT interstate licensing compact.

Interstate licensure compacts allow licensed behavioral health clinicians to provide direct telehealth services in participating compact states, promoting the mobility of health professionals and decreasing barriers and obstacles for licensure in order to increase access to care to underserved populations and in rural areas. The New Mexico Legislature is currently considering the Psychology Interjurisdictional Compact (PSYPACT). PSYPACT allows for ethical and legal psychological practice across state boundaries. PSYPACT authorizes psychologists from a compact state to provide HIPAA-compliant electronic psychological services to patients in another compact state without having to obtain licensure in that remote jurisdiction. It also enables psychologists from a compact state to provide temporary in-person, face to face psychological service across state boundaries for up to 30 days within a calendar year. Arizona, Utah and Nevada have enacted PSYPACT legislation, and it is strongly being considered by Texas and several other Western states. Both the New Mexico Psychological Association and the New Mexico Board of Psychologist Examiners strongly support PSYPACT for New Mexico. The approximate annual cost of participating in this compact is $6,000.

The New Mexico Health Care Workforce Committee recommends adopting this compact specifically, and may endorse other appropriate interstate and telemedicine licensure compacts on a case-by-case basis as they become available in the future.

Recommendation 13

Fund an infrastructure through the New Mexico Hospital Association for a centralized Telebehavioral Health Program to provide direct care to rural communities.

Both North Carolina and South Carolina have developed statewide networks to provide psychiatric coverage to emergency departments in order to improve the psychiatric crisis system across their states. The South Carolina program has increased access to psychiatric emergency services, reduced the length of stay in emergency departments and has decreased the cost of mental health care by decreasing the utilization of sheriff deputies, probate judges and designated examiners.[50] North Carolina developed a similar initiative in response to state legislation, for an estimated cost savings of $15,066,000 since the program began in 2013.[51] The New Mexico Hospital Association has identified inadequate access to

behavioral health providers as key missing element in emergency departments across the state. A centralized telehealth network with access to behavioral health clinicians could provide real-time consultations to individuals with behavioral health crises. The estimated cost of this initiative to New Mexico is $1.5 million dollars annually.

Section IV

Recommended Changes to Align New Mexico's Health Professional Surveys with Legislation and One Another

IV.A. Introduction

This year, a subcommittee of the New Mexico Health Care Workforce Committee examined the surveys administered to the state's certified nurse-midwives, emergency medical technicians, licensed midwives, nurses, pharmacists and physicians for their fulfillment of legislative requirements and alignment with other professions. *The committee has not yet had the opportunity to analyze the surveys administered to professions beyond the six listed here.*

As specified under the Act,[6] all New Mexico health care workforce licensing or regulatory boards:

> *Shall collect a core essential data set at the time of new licensure or licensure renewal, including, but not limited to, a provider's:*
>
> 1. *Demographics, including race, ethnicity and primary and other languages spoken;*
> 2. *Practice status, including, but not limited to:*
>   a. *Active practices in New Mexico and other locations;*
>   b. *Practice type; and*
>   c. *Practice settings, such as hospitals, public schools, higher education institutions, clinics and other clinical settings;*
> 3. *Education, training and primary and secondary specialties for all health professions as appropriate;*
> 4. *Average hours worked per week and the average number of weeks worked per year in the licensed profession over the past twelve months;*
> 5. *Percentage of practice engaged in direct patient care and in other activities, such as teaching, research and administration, in the licensed profession;*
> 6. *Practice plans for the next five years, including retiring from a health care profession, moving out of state or changing health care work hours; and*
> 7. *Professional liability insurance costs and availability as they relate to barriers to practice.*

In addition, certain survey items, such as those dealing with race and ethnicity, would benefit from alignment to allow for cross-profession comparisons. In the sections that follow, we summarize for each survey analyzed any shortcomings relative to the required core essential data set that must be remedied, as well as any non-required changes that will allow for easier interpretation and cross-profession comparison of the survey data.

IV.B. Required and Recommended Changes to Selected Health Care Professionals Surveys

The surveys administered to New Mexico's licensed certified nurse-midwives, emergency medical technicians, licensed midwives, nurses, pharmacists and physicians were analyzed with the results summarized below. Because the committee has not yet had the opportunity to analyze additional professions' surveys, a profession's absence from the list below should not be taken as an indication that their survey has no omissions.

IV.B.1. Certified Nurse-Midwives Survey

Missing Required Elements

- Practice address
- Education and training
- Practice plans item asks about changes in the next two years, instead of the specified five years

Suggested Improvements

- Align options for percentage of practice engaged in direct patient care and other activities between the certified nurse-midwives and licensed midwives surveys

IV.B.2. Emergency Medical Technicians Survey

Missing Required Elements

- Practice address item asks only for the agency and county
- Respondents not asked regarding active practices in New Mexico and other states
- Education and training
- Average number of weeks worked per year
- Percentage of practice engaged in direct patient care and other activities

Suggested Improvements

- Enhance language item to specify primary and secondary/other languages
- Separate race and ethnicity to align with other professions and the United States Census

IV.B.3. Licensed Midwives Survey

Missing Required Elements

- Practice address
- Practice settings, such as hospital, clinic or other clinical settings
- Education and training
- Practice plans item asks about changes in the next two years, instead of the specified five years

Suggested Improvements

- Align options for percentage of practice engaged in direct patient care and other activities between the certified nurse-midwives and licensed midwives surveys

IV.B.4. Nurses Survey

Suggested Improvements

- Separate race and ethnicity to align with other professions and the United States Census

IV.B.5. Pharmacists Survey

The Board of Pharmacy adopted the physician survey in late 2017; thus, all identified issues with the physicians survey discussed below apply to pharmacists as well.

IV.B.6. Physicians Survey

Missing Required Elements

- Primary and other languages spoken
- Practice plans item asks about changes in the next year, instead of the specified five years

IV.C. Policy Recommendation for Correction and Alignment of New Mexico's Health Professionals Surveys

Recommendation 14

Direct the pertinent professional licensing boards to make the necessary changes to align their surveys with legislative requirements and other boards' surveys.

The committee recommends that the professional licensing boards be directed to make the necessary changes identified to align their surveys with the mandatory core essential data set, and invited to make the suggested improvements identified. As these changes do not affect the current wording of the Health Care Work Force Data Collection, Analysis and Policy Act, such direction would be regulatory rather than legislative.

Section V

Update on Previous Recommendations of the New Mexico Health Care Workforce Committee

V.A. Introduction

Beginning with its 2014 report, the New Mexico Health Care Workforce Committee has made recommendations for solutions to the issues highlighted in its annual analysis of the state's health care providers. These recommendations have included both items actionable by the Legislature and more general recommendations for communities and health professional training programs. Here, we review prior years' recommendations and their status.

V.B. Status of 2014 Recommendations

V.B.1. 2014 Education and Training Recommendations

Rec. 2014.1

Health professions training programs should be enhanced, 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 similar to UNM's BA/MD program. As the state invests in these programs, the New Mexico Health Care Workforce Committee will need expanded tracking to analyze how many graduates practice in New Mexico.

ACTION: Supplemental appropriations to institutions for nursing program expansion increased from $1.81 million in FY 2014 to $8.39 million in FY 2016, with a decrease to $7.70 million in FY 2018. The Legislative Finance Committee reported that the number of nursing degrees awarded has increased from 932 in 2011 to 1,062 in 2014. It notes that "additional evaluation work is needed … to fully assess whether investments in expanding nurse education is working as intended."[52]

The first graduates from UNM HSC's expanded pediatric nurse practitioner, family nurse practitioner and certified nurse-midwife programs joined the workforce in 2017. These graduates' entry into the workforce will provide an opportunity to analyze the impact of training program expansion on the state's need for advanced practice registered nurses.

Rec. 2014.2

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.

ACTION: The Legislature fully funded nine residency slots each year in FY 2015 and FY 2016, with an emphasis on internal medicine, family medicine, general surgery and psychiatry. For these 18

slots, $1.65 million was appropriated to UNM HSC in FY 2018. Additional slots were not funded in either FY 2017 or FY 2018.

The Legislature also appropriated $399,500 in FY 2015 and FY 2016 to support primary care residencies at Hidalgo Medical Services, a Federally Qualified Health Center in southwestern New Mexico.

The 2014 Legislature also advanced the creation of primary care residency slots by leveraging state Medicaid funds.[53] This program is still in development; if successful, primary care residency development under this program could be supported through the base Medicaid funding budget for residency slots at Federally Qualified Health Centers in New Mexico primary care shortage areas.

Rec. 2014.3

The Community Health Worker certificate should be fully implemented.

ACTION: We have reiterated this recommendation (Rec. 2016.17).

V.B.2. 2014 Financial Incentives for Addressing Shortages

Rec. 2014.4

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 in order to collect data, conduct analyses and develop appropriate outcome measures of these programs.

ACTION: In 2015, the LFC reported several state investments in health care workforce financial aid.[52] The Legislature appropriated $3.9 million for loan-for-service or loan repayment programs in FY 2016, an increase over FY 2014 levels. This included $200,000 to compensate for funds previously received from a U.S. Department of Health and Human Services matching grant that was not renewed for FY 2014 – 2015. However, we commend the state for their successful efforts to secure this grant again for FY 2019. The amount allocated to loan-for-service or loan repayment programs in FY 2018 has been reduced to $2.9 million.

In addition, the state expanded funding for Western Interstate Commission for Higher Education positions, which allow students from New Mexico to pay in-state tuition at affiliated dental and veterinary schools in exchange for three years of service in New Mexico. Funding was expanded from $1.15 million in FY 2015 to $2.27 million in FY 2016, but as of FY 2018 stands at $750,000.

Rec. 2014.5

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

ACTION: We have reiterated this recommendation (Rec. 2015.13).

V.B.3. 2014 Recruitment for Retention in New Mexico Communities

Rec. 2014.6

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

ACTION: The non-profit New Mexico Health Resources has continued to support recruitment of health professionals to underserved areas. In 2015 – 2016, this organization placed 62 health professionals and 30 physicians with Conrad J-1 Visa Waivers in the state.

Rec. 2014.7

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

ACTION: Several successful New Mexico programs that foster health professions career development in rural areas – including Hidalgo Medical Services, UNM Locum Tenens, the UNM Physician Access Line and UNM's Health Extension Rural Offices – continue to help manage workloads and create professional support networks, as we reported in 2014 and 2015.

Rec. 2014.8

Enhance linkages between rural practitioners and the UNM Health Sciences Center to improve health care workforce retention.

ACTION: As we reported in 2015, telehealth technologies and virtual clinic platforms such as Project ECHO have continued to enhance primary care practice in rural New Mexico.

V.B.4 2014 New Mexico Health Care Workforce Committee

Rec. 2014.9

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.

ACTION: We have reiterated this recommendation (Rec. 2015.14, 2016.18, 2017.8 and 2018.7).

V.C. Status of 2015 Recommendations

V.C.1. 2015 Behavioral Health Recommendations

Rec. 2015.1

With additional funding, UNM HSC can expand statewide access to telehealth consultation with behavioral health clinicians.

ACTION: We recognize the ongoing need to expand telehealth access to direct clinical services and real-time consultation. Given the tight fiscal environment, we will defer this recommendation for the future. In 2016, we instead recommended commencing planning for a statewide telehealth infrastructure to expand behavioral health access (Rec. 2016.8).

Rec. 2015.2

Request that the New Mexico Counseling and Therapy Practice Board and the Board of Psychologist Examiners re-examine their requirements for face-to-face mentoring (to be replaced by tele-mentoring) in order to minimize the barriers to rural practice.

ACTION: As of 2015, the New Mexico Counseling and Therapy Practice Board, the Board of Psychologist Examiners and the Board of Social Work Examiners have agreed to expand or examine expanding the definition of supervised practice toward independent licensure to include tele-mentoring.

Rec. 2015.3

Request that the New Mexico Counseling and Therapy Practice Board, the Board of Social Work Examiners and the Board of Psychologist Examiners eliminate barriers in reciprocity (e.g., eliminate requirements for time practiced in a particular state) to make New Mexico more competitive in recruiting new practitioners.

ACTION: As above, these boards have agreed to examine ways to lessen or eliminate reciprocity barriers to improve practitioner recruitment.

Rec. 2015.4

Request that the New Mexico Behavioral Health Collaborative develop reimbursement mechanisms for services delivered by psychology interns, social work interns and counseling interns when participating in electives in the public behavioral health system.

ACTION: We have reiterated this recommendation (Rec. 2016.2, 2017.10, 2018.10).

Rec. 2015.5

Request that all publicly funded higher education institutions release their licensure board pass rates to the New Mexico Behavioral Health Collaborative and the respective professional licensing boards so that the

state can identify areas of continuous quality improvement to ensure that graduates are adequately prepared for licensing board examinations.

ACTION: In 2016, the New Mexico Behavioral Health Collaborative commenced discussions with Higher Education Department to facilitate this action.

Rec. 2015.6

The New Mexico Behavioral Health Collaborative should establish financing systems that promote sustainability and employee retention. Request that the Behavioral Health Collaborative disseminate a strategic plan on this topic by the end of FY 2016.

ACTION: The New Mexico Behavioral Health Collaborative developed and disseminated a strategic plan on sustainable financing systems (see http://www.newmexico.networkofcare.org/content/client/1446/4.-Strategic-Plan-Implementation-Updated.pdf).

Rec. 2015.7

Request that the Department of Health add social workers and counselors to the list of health care professions who are eligible for New Mexico's Rural Healthcare Practitioner Tax Credit program.

ACTION: See update below at Rec. 2015.15.

Rec. 2015.8

Support recruitment mechanisms by expanding the Rural Primary Health Care Act to include behavioral health and contracting with a non-profit entity for recruitment services.

ACTION: We continue to recognize the ongoing need to support recruitment of behavioral health clinicians. A centralized job board has been created for all New Mexico agencies to recruit for behavioral health clinicians (see http://www.newmexico.networkofcare.org/mh/nocJobBoard/).

The Rural Primary Care Act needs to be expanded to include a specialized behavioral health entity to support recruitment and contracting. Given the tight fiscal environment, we will defer this recommendation for the future.

V.C.2. 2015 Recommendations for Other Health Professions

Rec. 2015.9

We strongly recommend that the Higher Education Department take full advantage of the next opportunity to reinstate the U.S. Department of Health and Human Services matching grant to support New Mexico's loan repayment program.

ACTION: We commend the Higher Education Department for their successful work to reinstate this funding. The funding was secured in 2018.

Rec. 2015.10

We strongly recommend that the Legislative Health and Human Services (LHHS) and Legislative Finance Committees (LFC) support funding for loan-for-service and loan repayment programs and consider increasing funding levels to enhance rural health care practice.

ACTION: LHHS supported this recommendation in 2015. We have reiterated this recommendation (Rec. 2016.12, 2017.5 and 2018.4)

Rec. 2015.11

We recommend that loan-for-service and loan repayment programs be structured to target the professions most needed in rural areas, rather than prioritizing practitioners with the highest levels of debt.

ACTION: We have reiterated this recommendation (Rec. 2016.13, 2017.5 and 2018.4).

Rec. 2015.12

We recommend that telehealth services be encouraged and funded to assist rural physicians in managing workload and treating complex cases.

ACTION: In 2015, the LHHS endorsed $3 million in appropriations for Project ECHO. However, no additional funding was provided in the 2016 legislative session due to budgetary constraints. An additional $50,000 appropriation was made to Project ECHO in FY 2018; however, due to the across the board cuts, Project ECHO's FY 2018 appropriation is less than the FY 2017 appropriation.

Rec. 2015.13

We recommend that the Department of Health cooperate with the Taxation and Revenue Department so that the New Mexico Health Care Workforce Committee can analyze the impact of the Rural Health Care Tax Credit on retention.

ACTION: LHHS requested the LFC update the 2011 study of the tax credit. As of August 2016, the Department of Health and Taxation and Revenue Department have initiated analysis of the retention impact of the Rural Health Care Tax Credit.

Rec. 2015.14

We recommend that the Legislature support funding the New Mexico Health Care Workforce Committee to study whether residents have adequate access to the various types of providers.

ACTION: The LFC has recommended supporting the committee's workforce analysis initiatives. LHHS endorsed the 2016 Senate Bill 150 to provide $300,000 to support the work of the New Mexico Health Care Workforce Committee. However, this bill did not pass. We have reiterated this recommendation (Rec 2016.18, 2017.8 and 2018.7).

Rec. 2015.15

We recommend that pharmacists, counselors and social workers be added to the list of health care practitioners eligible for the Rural Health Care Tax Credit.

ACTION: The 2017 House Bill 68 would have equalized the tax credit among all practitioners at the $5,000 level and added licensed counselors, pharmacists and social workers. However, this bill did not pass. We have reiterated this recommendation (Rec. 2016.5, 2017.6 and 2018.5).

V.D. Status of 2016 Recommendations

V.D.1. 2016 Behavioral Health Recommendations

Rec. 2016.1

In compliance with Chapter 61 of NMSA 1978, expedite implementation of professional licensure by endorsement for social workers, counselors and therapists.

ACTION: We defer this recommendation to a future year.

Rec. 2016.2

Develop reimbursement mechanisms through Medicaid for services delivered by trainees in community settings.

ACTION: We have reiterated this recommendation (Rec. 2017.10, 2018.10).

Rec. 2016.3

Identify funding for efforts to support and prepare candidates from diverse backgrounds to complete graduate degrees in behavioral health fields.

ACTION: This recommendation is deferred, given current fiscal constraints.

Rec. 2016.4

Support Medicaid funding for community-based psychiatry residency programs in Federally Qualified Health Centers.

ACTION: The 2014 Legislature also advanced the creation of psychiatry residency slots by leveraging state Medicaid funds.[53] Through this program, psychiatry residency development will be supported through the base Medicaid funding budget for residency slots at Federally Qualified Health Centers in New Mexico primary care shortage areas.

Rec. 2016.5

Request that the Department of Health add social workers and counselors to the list of health care professions who are eligible for New Mexico's Rural Healthcare Practitioner Tax Credit program.

ACTION: As noted for Rec. 2015.15, 2017 HB 68 would have equalized the tax credit among all practitioners at the $5,000 level and added licensed counselors, pharmacists and social workers. However, this bill did not pass. We have reiterated this recommendation (Rec. 2017.6 and 2018.5).

Rec. 2016.6

Explore opportunities to leverage federal funding for the Health Information Exchange and adoption of electronic health records for behavioral health providers.

ACTION: This recommendation is deferred, as the New Mexico Human Services Department focuses on the update of Centennial Care 2.0.

Rec. 2016.7

Bring licensing boards together to create a unified survey and dataset for behavioral health care providers.

ACTION: The Board of Psychologist Examiners is piloting an updated behavioral health survey with expanded fields to better understand the needs of behavioral health providers.

Rec. 2016.8

Convene a planning group to develop statewide telehealth infrastructure to deliver behavioral health services via telehealth to rural communities.

ACTION: The New Mexico Hospital Association has convened a planning group to explore the financing and sustainability of a statewide emergency telepsychiatry network to provide emergency consultations to patients in emergency departments.

Rec. 2016.9

Support the Collaborative Advanced Psychiatric-Education Exchange Program.

ACTION: The UNM College of Nursing was successful in receiving Health Resources and Services Administration funding to develop a post-master's certificate in psychiatric and mental health through the Collaborative Advanced Psychiatric – Education Exchange initiative.

V.D.2. 2016 Recommendations for Other Health Professions

Rec. 2016.10

Correct the recent omission by the Regulation and Licensing Department of the practice specialty item from the physicians' online license renewal survey platform.

ACTION: We commend the New Mexico Regulation and Licensing Department for their prompt and effective response to this recommendation. The omission was resolved in January 2017.

Rec. 2016.11

Enhance the Physician Assistants' survey with an added practice specialty item.

ACTION: The practice specialty item has been incorporated into the Physician Assistants' license renewal survey in 2017.

Rec. 2016.12

Maintain funding for the loan-for-service and loan repayment programs at their current levels.

ACTION: The Higher Education Department's application to reinstate federal funds was approved by the U.S. Department of Health and Human Services in 2018. Nonetheless, we reiterate our recommendation that funding for these programs be maintained or expanded (Rec. 2017.5, 2018.4).

Rec. 2016.13

Restructure loan-for-service and loan repayment programs to target the professions most needed in rural areas, rather than prioritizing practitioners with the highest levels of debt.

ACTION: We have reiterated this recommendation (Rec. 2017.5 and 2018.4).

Rec. 2016.14

Position the Higher Education Department to take full advantage of the 2017 opportunity to reinstate the U.S. Department of Health and Human Services matching grant to support New Mexico's loan repayment program.

ACTION: We commend the Higher Education Department for their successful application to reinstate these funds in 2018.

Rec. 2016.15

Continue funding for expanded primary and secondary care residencies in New Mexico.

ACTION: No further action has occurred since that described above for Rec. 2014.2. We have reiterated this recommendation (Rec. 2017.2 and 2018.3).

Rec. 2016.16

Support further exploration of Medicaid as an avenue for expanding residencies in New Mexico.

ACTION: See update above at Rec. 2014.2. We have reiterated this recommendation (Rec. 2017.3).

Rec. 2016.17

Continue support for the Community Health Workers certification program to promote consistency among training programs for these health professionals.

ACTION: This support continues to be needed.

Rec. 2016.18

Provide funding for the New Mexico Health Care Workforce Committee.

ACTION: We have reiterated this recommendation (Rec. 2017.8 and 2018.7).

V.E. Status of 2017 Recommendations

V.E.1. 2017 Recommendations for All Health Professions

Rec. 2017.1.

Identify funding for efforts to support the New Mexico Nursing Education Consortium (NMNEC).

ACTION: We have reiterated this recommendation (Rec. 2018.1).

Rec. 2017.2.

Continue funding for expanded primary and secondary care residencies in New Mexico.

ACTION: We have reiterated this recommendation (Rec. 2018.3).

Rec. 2017.3.

Support further exploration of Medicaid as an avenue for expanding residencies in New Mexico.

ACTION: This avenue for expanding residencies continues to progress at the state level. We encourage continuation of this discussion.

Rec. 2017.4.

Position the Higher Education Department to take full advantage of the next opportunity to reinstate the U.S. Department of Health and Human Services matching grant to support New Mexico's state loan repayment program.

ACTION: We commend the Higher Education Department for their successful work to reinstate this funding. The funding has been secured in 2018.

Rec. 2017.5.

Increase funding for state loan-for-service and loan repayment programs, and consider restructuring them to target the professions most needed in rural and underserved areas rather than prioritizing those with higher debt.

ACTION: We have reiterated this recommendation (Rec. 2018.4).

Rec. 2017.6.

Request that the Department of Health add pharmacists, social workers and counselors to the health care professions eligible for New Mexico's Rural Healthcare Practitioner Tax Credit program.

ACTION: We have reiterated this recommendation (Rec. 2018.5).

Rec. 2017.7.

Remedy the pharmacists' survey.

ACTION: We commend the Board of Pharmacy and the Regulation and Licensing Department for their prompt action in correcting the registered pharmacists' survey.

Rec. 2017.8.

Provide funding for the New Mexico Health Care Workforce Committee.

ACTION: We have reiterated this recommendation (Rec. 2018.7).

V.E.2. 2017 Behavioral Health Recommendations

Rec. 2017.9.

Require that licensed behavioral health professionals receive three hours of continuing education credits each licensure cycle in the treatment of substance use disorders

ACTION: This issue has been discussed with the relevant professional boards, who are in support of this measure. We have reiterated this recommendation (Rec. 2018.9).

Rec. 2017.10.

Develop reimbursement mechanisms through Medicaid for services delivered by behavioral health interns in community settings

ACTION: This recommendation has been included in Medicaid's proposed rule, which is currently being promulgated but is not yet finalized. We have reiterated this recommendation (Rec. 2018.10).

Rec. 2017.11.

Create a state Behavioral Health Workforce Center of Excellence

ACTION: We defer this recommendation.

Rec. 2017.12.

Expedite direct services via telehealth by participating in interstate licensing compacts when available

ACTION: We have modified this recommendation to specifically support enacting PSYPACT (Rec. 2018.12).

Section VI

2018 Recommendations of the New Mexico Health Care Workforce Committee

VI.A. 2018 Recommendations for All Health Professions

For detailed descriptions of these recommendations, please see Section II.G.

Recommendation 1

Identify funding for efforts to support the New Mexico Nursing Education Consortium (NMNEC).

Recommendation 2

Direct RLD to correct its information technology system deficiencies so that all survey responses can be provided to the University of New Mexico Health Sciences Center and the committee.

Recommendation 3

Continue funding for expanded primary and secondary care residencies in New Mexico.

Recommendation 4

Increase funding for state loan-for-service and loan repayment programs, and consider restructuring them to target the professions most needed in rural and underserved areas rather than prioritizing those with higher debt.

Recommendation 5

Request that the Department of Health add pharmacists, social workers and counselors to the health care professions eligible for New Mexico's Rural Healthcare Practitioner Tax Credit program.

Recommendation 6

Create a committee tasked with examining future health care workforce needs related to the state's changing demographics.

Recommendation 7

Provide funding for the New Mexico Health Care Workforce Committee.

Recommendation 8

Establish a tax credit for health care professional preceptors who work with public institutions.

Recommendations continue on the following page.

VI.B. 2018 Recommendations for Behavioral Health Professions

For detailed descriptions of these recommendations, please see Section III.C.

Recommendation 9

Require that licensed behavioral health professionals receive three hours of continuing education credits each licensure cycle in the treatment of substance use disorders.

Recommendation 10

Finalize and promulgate changes to the New Mexico Medicaid Behavioral Health Regulations to reimburse Medicaid services when delivered by behavioral health interns in community settings.

Recommendation 11

Finalize and promulgate changes to the New Mexico Medicaid Behavioral Health Regulations to identify physician assistants as a behavioral health provider type which will allow Medicaid reimbursement of services when delivered by physician assistants in behavioral health settings.

Recommendation 12

Expedite direct services via telehealth by participating in the PSYPACT interstate licensing compact.

Recommendation 13

Fund an infrastructure through the New Mexico Hospital Association for a centralized Telebehavioral Health Program to provide direct care to rural communities.

VI.C. 2018 Recommendation for Correction and Alignment of New Mexico's Health Professional Surveys

For a detailed description of this recommendation, please see Section IV.C.

Recommendation 14

Direct the pertinent professional licensing boards to make the necessary changes to align their surveys with legislative requirements and other boards' surveys.

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Appendix A

Benchmark Gap Analyses for New Mexico Health Professions

Table A.1. Benchmark Gap Analysis of New Mexico Primary Care Physicians

County	Population	Estimated Primary Care Physicians	Above (+) / Below (–) Benchmark
Bernalillo	676,773	1,123	588
Catron	3,587	3	0
Chaves	64,866	75	24
Cibola	26,853	21	0
Colfax	12,174	10	0
Curry	49,812	42	3
De Baca	1,829	2	1
Doña Ana	215,579	200	30
Eddy	56,997	33	-12
Grant	27,687	40	18
Guadalupe	4,429	2	-1
Harding	692	0	-1
Hidalgo	4,305	2	-1
Lea	68,759	41	-13
Lincoln	19,395	14	-1
Los Alamos	18,738	37	22
Luna	24,078	9	-10
McKinley	72,564	62	5
Mora	4,551	2	-2
Otero	65,817	33	-19
Quay	8,306	4	-3
Rio Arriba	39,159	27	-4
Roosevelt	18,847	9	-6
San Juan	126,926	95	-5
San Miguel	27,748	24	2
Sandoval	142,507	137	24
Santa Fe	148,750	222	104
Sierra	11,116	13	4
Socorro	16,798	15	2
Taos	32,795	36	10
Torrance	15,506	3	-9
Union	4,187	1	-2
Valencia	75,940	23	-37
STATE TOTAL	**2,088,070**	**2,360**	**711**

Table A.2. Benchmark Gap Analysis of New Mexico Certified Nurse Practitioners and Clinical Nurse Specialists

County	Population	Estimated CNPs and CNSs	Above (+) / Below (–) Benchmark
Bernalillo	676,773	703	310
Catron	3,587	0	-2
Chaves	64,866	31	-7
Cibola	26,853	16	0
Colfax	12,174	5	-2
Curry	49,812	28	-1
De Baca	1,829	1	0
Doña Ana	215,579	138	13
Eddy	56,997	48	15
Grant	27,687	15	-1
Guadalupe	4,429	4	1
Harding	692	0	0
Hidalgo	4,305	0	-2
Lea	68,759	36	-4
Lincoln	19,395	8	-3
Los Alamos	18,738	10	-1
Luna	24,078	17	3
McKinley	72,564	30	-12
Mora	4,551	4	1
Otero	65,817	29	-9
Quay	8,306	13	8
Rio Arriba	39,159	28	5
Roosevelt	18,847	9	-2
San Juan	126,926	40	-34
San Miguel	27,748	11	-5
Sandoval	142,507	52	-31
Santa Fe	148,750	110	24
Sierra	11,116	8	2
Socorro	16,798	10	0
Taos	32,795	24	5
Torrance	15,506	4	-5
Union	4,187	3	1
Valencia	75,940	18	-26
STATE TOTAL	**2,088,070**	**1,453**	**241**

Table A.3. Benchmark Gap Analysis of New Mexico Physician Assistants

County	Population	Estimated PAs	Above (+) / Below (–) Benchmark
Bernalillo	676,773	409	204
Catron	3,587	0	-1
Chaves	64,866	15	-5
Cibola	26,853	4	-4
Colfax	12,174	4	0
Curry	49,812	11	-4
De Baca	1,829	0	-1
Doña Ana	215,579	44	-21
Eddy	56,997	9	-8
Grant	27,687	17	9
Guadalupe	4,429	1	0
Harding	692	0	0
Hidalgo	4,305	1	0
Lea	68,759	11	-10
Lincoln	19,395	2	-4
Los Alamos	18,738	13	7
Luna	24,078	3	-4
McKinley	72,564	10	-12
Mora	4,551	0	-1
Otero	65,817	14	-6
Quay	8,306	1	-2
Rio Arriba	39,159	7	-5
Roosevelt	18,847	3	-3
San Juan	126,926	42	4
San Miguel	27,748	9	1
Sandoval	142,507	52	9
Santa Fe	148,750	75	30
Sierra	11,116	4	1
Socorro	16,798	1	-4
Taos	32,795	19	9
Torrance	15,506	3	-2
Union	4,187	0	-1
Valencia	75,940	8	-15
STATE TOTAL	**2,088,070**	**792**	**161**

Table A.4. Benchmark Gap Analysis of New Mexico Obstetricians and Gynecologists

County	Population	Female Population	Estimated OB-GYNs	Above (+) / Below (–) Benchmark
Bernalillo	676,773	345,154	151	79
Catron	3,587	1,707	0	0
Chaves	64,866	32,692	7	0
Cibola	26,853	13,239	3	0
Colfax	12,174	6,014	4	3
Curry	49,812	23,960	6	1
De Baca	1,829	982	0	0
Doña Ana	215,579	109,514	23	0
Eddy	56,997	28,214	7	1
Grant	27,687	14,010	3	0
Guadalupe	4,429	1,851	0	0
Harding	692	337	0	0
Hidalgo	4,305	2,187	1	1
Lea	68,759	33,417	10	3
Lincoln	19,395	9,814	2	0
Los Alamos	18,738	9,125	4	2
Luna	24,078	12,135	2	-1
McKinley	72,564	37,516	7	-1
Mora	4,551	2,203	0	0
Otero	65,817	32,053	6	-1
Quay	8,306	4,170	0	-1
Rio Arriba	39,159	19,932	4	0
Roosevelt	18,847	9,386	0	-2
San Juan	126,926	63,844	7	-6
San Miguel	27,748	13,791	2	-1
Sandoval	142,507	72,536	9	-6
Santa Fe	148,750	76,458	16	0
Sierra	11,116	5,614	0	-1
Socorro	16,798	8,214	4	2
Taos	32,795	16,791	4	0
Torrance	15,506	7,458	0	-2
Union	4,187	1,846	0	0
Valencia	75,940	37,818	0	-8
STATE TOTAL	**2,088,070**	**1,053,981**	**282**	**62**

Table A.5. Benchmark Gap Analysis of New Mexico Certified Nurse-Midwives

County	Population	Female Population	Estimated CNMs	Above (+) / Below (–) Benchmark
Bernalillo	676,773	345,154	104	80
Catron	3,587	1,707	0	0
Chaves	64,866	32,692	3	1
Cibola	26,853	13,239	1	0
Colfax	12,174	6,014	0	0
Curry	49,812	23,960	3	1
De Baca	1,829	982	0	0
Doña Ana	215,579	109,514	14	6
Eddy	56,997	28,214	1	-1
Grant	27,687	14,010	4	3
Guadalupe	4,429	1,851	0	0
Harding	692	337	0	0
Hidalgo	4,305	2,187	0	0
Lea	68,759	33,417	0	-2
Lincoln	19,395	9,814	0	-1
Los Alamos	18,738	9,125	2	1
Luna	24,078	12,135	0	-1
McKinley	72,564	37,516	7	4
Mora	4,551	2,203	0	0
Otero	65,817	32,053	1	-1
Quay	8,306	4,170	0	0
Rio Arriba	39,159	19,932	2	1
Roosevelt	18,847	9,386	0	-1
San Juan	126,926	63,844	9	4
San Miguel	27,748	13,791	3	2
Sandoval	142,507	72,536	5	0
Santa Fe	148,750	76,458	14	9
Sierra	11,116	5,614	0	0
Socorro	16,798	8,214	0	-1
Taos	32,795	16,791	4	3
Torrance	15,506	7,458	0	-1
Union	4,187	1,846	0	0
Valencia	75,940	37,818	1	-2
STATE TOTAL	**2,088,070**	**1,053,981**	**178**	**104**

Table A.6. Benchmark Gap Analysis of New Mexico Licensed Midwives

County	Population	Female Population	Estimated LMs	Above (+) / Below (–) Benchmark
Bernalillo	676,773	345,154	10	4
Catron	3,587	1,707	0	0
Chaves	64,866	32,692	0	-1
Cibola	26,853	13,239	1	1
Colfax	12,174	6,014	0	0
Curry	49,812	23,960	0	0
De Baca	1,829	982	0	0
Doña Ana	215,579	109,514	5	3
Eddy	56,997	28,214	0	0
Grant	27,687	14,010	1	1
Guadalupe	4,429	1,851	0	0
Harding	692	337	0	0
Hidalgo	4,305	2,187	0	0
Lea	68,759	33,417	0	-1
Lincoln	19,395	9,814	0	0
Los Alamos	18,738	9,125	0	0
Luna	24,078	12,135	0	0
McKinley	72,564	37,516	0	-1
Mora	4,551	2,203	0	0
Otero	65,817	32,053	1	0
Quay	8,306	4,170	0	0
Rio Arriba	39,159	19,932	3	3
Roosevelt	18,847	9,386	0	0
San Juan	126,926	63,844	0	-1
San Miguel	27,748	13,791	3	3
Sandoval	142,507	72,536	3	2
Santa Fe	148,750	76,458	7	6
Sierra	11,116	5,614	1	1
Socorro	16,798	8,214	0	0
Taos	32,795	16,791	6	6
Torrance	15,506	7,458	0	0
Union	4,187	1,846	0	0
Valencia	75,940	37,818	1	0
STATE TOTAL	**2,088,070**	**1,053,981**	**42**	**26**

Table A.7. Benchmark Gap Analysis of New Mexico General Surgeons

County	Population	Estimated General Surgeons	Above (+) / Below (–) Benchmark
Bernalillo	676,773	84	43
Catron	3,587	0	0
Chaves	64,866	3	-1
Cibola	26,853	3	1
Colfax	12,174	2	1
Curry	49,812	8	5
De Baca	1,829	0	0
Doña Ana	215,579	15	2
Eddy	56,997	5	2
Grant	27,687	4	2
Guadalupe	4,429	0	0
Harding	692	0	0
Hidalgo	4,305	0	0
Lea	68,759	3	-1
Lincoln	19,395	1	0
Los Alamos	18,738	5	4
Luna	24,078	1	0
McKinley	72,564	7	3
Mora	4,551	0	0
Otero	65,817	3	-1
Quay	8,306	1	1
Rio Arriba	39,159	3	1
Roosevelt	18,847	2	1
San Juan	126,926	9	1
San Miguel	27,748	0	-2
Sandoval	142,507	8	-1
Santa Fe	148,750	14	5
Sierra	11,116	3	2
Socorro	16,798	3	2
Taos	32,795	6	4
Torrance	15,506	0	-1
Union	4,187	1	1
Valencia	75,940	0	-5
STATE TOTAL	**2,088,070**	**194**	**69**

Table A.8. Benchmark Gap Analysis of New Mexico Psychiatrists

County	Population	Estimated Psychiatrists	Above (+) / Below (–) Benchmark
Bernalillo	676,773	188	84
Catron	3,587	0	-1
Chaves	64,866	5	-5
Cibola	26,853	0	-4
Colfax	12,174	1	-1
Curry	49,812	2	-6
De Baca	1,829	0	0
Doña Ana	215,579	26	-7
Eddy	56,997	2	-7
Grant	27,687	3	-1
Guadalupe	4,429	0	-1
Harding	692	0	0
Hidalgo	4,305	0	-1
Lea	68,759	4	-7
Lincoln	19,395	0	-3
Los Alamos	18,738	3	0
Luna	24,078	0	-4
McKinley	72,564	3	-8
Mora	4,551	0	-1
Otero	65,817	4	-6
Quay	8,306	1	0
Rio Arriba	39,159	1	-5
Roosevelt	18,847	0	-3
San Juan	126,926	9	-11
San Miguel	27,748	10	6
Sandoval	142,507	10	-12
Santa Fe	148,750	52	29
Sierra	11,116	0	-2
Socorro	16,798	0	-3
Taos	32,795	3	-2
Torrance	15,506	0	-2
Union	4,187	0	-1
Valencia	75,940	5	-7
STATE TOTAL	**2,088,070**	**332**	**8**

Table A.9. Benchmark Gap Analysis of New Mexico Dentists

County	Population	Estimated Dentists	Above (+) / Below (–) Benchmark
Bernalillo	676,773	533	262
Catron	3,587	1	0
Chaves	64,866	32	6
Cibola	26,853	11	0
Colfax	12,174	4	-1
Curry	49,812	24	4
De Baca	1,829	0	-1
Doña Ana	215,579	109	23
Eddy	56,997	17	-6
Grant	27,687	12	1
Guadalupe	4,429	1	-1
Harding	692	0	0
Hidalgo	4,305	1	-1
Lea	68,759	22	-6
Lincoln	19,395	9	1
Los Alamos	18,738	12	5
Luna	24,078	7	-3
McKinley	72,564	28	-1
Mora	4,551	2	0
Otero	65,817	21	-5
Quay	8,306	1	-2
Rio Arriba	39,159	16	0
Roosevelt	18,847	4	-4
San Juan	126,926	89	38
San Miguel	27,748	10	-1
Sandoval	142,507	77	20
Santa Fe	148,750	117	57
Sierra	11,116	2	-2
Socorro	16,798	5	-2
Taos	32,795	20	7
Torrance	15,506	2	-4
Union	4,187	0	-2
Valencia	75,940	26	-4
STATE TOTAL	**2,088,070**	**1,215**	**378**

Table A.10. Benchmark Gap Analysis of New Mexico Pharmacists

County	Population	Estimated Pharmacists	Above (+) / Below (–) Benchmark
Bernalillo	676,773	1,114	586
Catron	3,587	0	-3
Chaves	64,866	43	-8
Cibola	26,853	12	-9
Colfax	12,174	7	-2
Curry	49,812	25	-14
De Baca	1,829	2	1
Doña Ana	215,579	134	-34
Eddy	56,997	42	-2
Grant	27,687	23	1
Guadalupe	4,429	0	-3
Harding	692	0	-1
Hidalgo	4,305	1	-2
Lea	68,759	33	-21
Lincoln	19,395	14	-1
Los Alamos	18,738	12	-3
Luna	24,078	8	-11
McKinley	72,564	28	-29
Mora	4,551	3	-1
Otero	65,817	28	-23
Quay	8,306	5	-1
Rio Arriba	39,159	7	-24
Roosevelt	18,847	12	-3
San Juan	126,926	67	-32
San Miguel	27,748	19	-3
Sandoval	142,507	153	42
Santa Fe	148,750	112	-4
Sierra	11,116	8	-1
Socorro	16,798	5	-8
Taos	32,795	27	1
Torrance	15,506	1	-11
Union	4,187	3	0
Valencia	75,940	55	-4
STATE TOTAL	**2,088,070**	**2,003**	**373**

Table A.11. Benchmark Gap Analysis of New Mexico Registered Nurses

County	Population	Estimated RNs	Above (+) / Below (–) Benchmark
Bernalillo	676,773	8,895	3,048
Catron	3,587	7	-24
Chaves	64,866	449	-111
Cibola	26,853	185	-47
Colfax	12,174	73	-32
Curry	49,812	383	-47
De Baca	1,829	8	-8
Doña Ana	215,579	1,569	-294
Eddy	56,997	437	-55
Grant	27,687	323	84
Guadalupe	4,429	24	-14
Harding	692	0	-6
Hidalgo	4,305	4	-33
Lea	68,759	368	-226
Lincoln	19,395	135	-33
Los Alamos	18,738	166	4
Luna	24,078	100	-108
McKinley	72,564	474	-153
Mora	4,551	13	-26
Otero	65,817	394	-175
Quay	8,306	28	-44
Rio Arriba	39,159	206	-132
Roosevelt	18,847	85	-78
San Juan	126,926	927	-170
San Miguel	27,748	260	20
Sandoval	142,507	884	-347
Santa Fe	148,750	1,138	-147
Sierra	11,116	79	-17
Socorro	16,798	91	-54
Taos	32,795	222	-61
Torrance	15,506	36	-98
Union	4,187	29	-7
Valencia	75,940	181	-475
STATE TOTAL	**2,088,070**	**18,173**	**134**

Table A.12. Benchmark Gap Analysis of New Mexico Emergency Medical Technicians

County	Population	Estimated EMTs	Above (+) / Below (–) Benchmark
Bernalillo	676,773	2,242	300
Catron	3,587	42	32
Chaves	64,866	223	37
Cibola	26,853	45	-32
Colfax	12,174	66	31
Curry	49,812	137	-6
De Baca	1,829	22	17
Doña Ana	215,579	468	-151
Eddy	56,997	164	0
Grant	27,687	95	16
Guadalupe	4,429	16	3
Harding	692	7	5
Hidalgo	4,305	23	11
Lea	68,759	163	-34
Lincoln	19,395	101	45
Los Alamos	18,738	122	68
Luna	24,078	42	-27
McKinley	72,564	207	-1
Mora	4,551	5	-8
Otero	65,817	132	-57
Quay	8,306	35	11
Rio Arriba	39,159	123	11
Roosevelt	18,847	74	20
San Juan	126,926	375	11
San Miguel	27,748	37	-43
Sandoval	142,507	480	71
Santa Fe	148,750	464	37
Sierra	11,116	38	6
Socorro	16,798	34	-14
Taos	32,795	132	38
Torrance	15,506	51	6
Union	4,187	23	11
Valencia	75,940	176	-42
STATE TOTAL	**2,088,070**	**6,364**	**373**

Appendix B.

Background on New Mexico's Loan-for-Service and Loan Repayment Programs

The information in Appendix B is taken from pages 46 – 48 of the committee's 2014 annual report.[3]

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 actual 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.[54]

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 Waver** – 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.
- **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.

Appendix C.

Survey Collection Progress, 2010 – 2017

Table C.1 depicts the state's progress in obtaining survey data for licensed health professionals. Survey data for physicians is not collected up to a year after they obtain their license. The New Mexico Medical Board requires physicians to renew their license in the following renewal cycle after a license is issued, at which time they are required to submit a survey. After the initial renewal, they are required to renew every three years.

The New Mexico Nursing Board was the first board to implement survey collection upon licensure, and the board requires completion of a survey at the time of initial licensure in order to collect demographic data. As a result, all licensed nursing professionals in the state have completed a licensure survey and are not included in Table C.1.

As noted in the main text of this report, for many professions the percentage of licensed practitioners surveyed has decreased since 2016. This is due to the curtailed data set provided by RLD, which contained more than 2,500 fewer survey responses for 2017 than the committee received in prior years. We have recommended that RLD work to resolve this issue as quickly as possible to limit the impact on future years' reports.

Table C.1. Health Care Professionals' License Renewal Surveys Obtained Since 2010

License Type	License Count	Survey Count	Percent
Alcohol Abuse Counselor	2	0	0.0%
Alcohol and Drug Counselor	568	35	6.2%
Anesthesiologist Assistant	42	0	0.0%
Art Therapist	100	4	4.0%
Associate Marriage & Family Therapist	35	0	0.0%
Audiologist	167	25	15.0%
Clinical Mental Health Counselor (LPCC)	2,113	90	4.3%
Dental Assistant	2,912	1,976	67.9%
Dental Hygienist	1,049	721	68.7%
Dentist	1,599	1,136	71.0%
Doctor of Chiropractic	575	30	5.2%
Doctor of Chiropractic APC	118	3	2.5%
Doctor of Naprapathy	26	0	0.0%
Doctor of Osteopathy	714	612	85.7%
Licensed Baccalaureate Social Worker	554	372	67.1%
Licensed Clinical Social Worker	1,936	177	9.1%
Licensed Independent Social Worker	169	117	69.2%
Licensed Masters Social Worker	1,840	1,232	67.0%
Licensed Mental Health Counselor	1,148	159	13.9%
Licensed Midwife	80	33	41.3%
Marriage and Family Therapist	336	11	3.3%
Medical Doctor	8,871	6,838	77.1%
Occupational Therapist	1,019	897	88.0%
Occupational Therapy Assistant	486	395	81.3%
Physical Therapist	2,000	165	8.3%
Physical Therapist Assistant	801	97	12.1%
Physician Assistant	1,051	700	66.6%
Podiatrist	138	15	10.9%
Professional Mental Health Counselor	194	133	68.6%
Psychologist	808	293	36.3%
Psychologist Associate	9	5	55.6%
Registered Independent Counselor	6	1	16.7%
Registered Pharmacist	3,354	326	9.7%
Speech-Language Pathologist	1,708	191	11.2%
Substance Abuse Associate	344	46	13.4%
Telemedicine	773	3	0.4%
TOTAL	**37,645**	**16,838**	**44.7%**

Appendix D.

Members of the New Mexico Health Care Workforce Committee, 1 October 2018

Name	Organization
Richard Larson, Chair	University of New Mexico Health Sciences Center
Charlie Alfero	Center for Health Innovation, Hidalgo Medical Center
Caroline Bonham	UNM HSC, Representing the Behavioral Health Subcommittee
Albert Bourbon	NM Medical Board *and* NM Academy of Physician Assistants
Travis Dulany	NM Legislative Finance Committee
Doris Fields	NM NAACP
Joie Glen	NM Association for Home and Hospice Care
Tomas Granados	NM Board of Psychologist Examiners
Jerry Harrison	NM Health Resources
Michael Hely	NM Legislative Council Service
Ellen Interlandi	NM Organization of Nurse Leaders
Ben Kesner	NM Board of Pharmacy
Beth Landon	NM Hospital Association
Wayne Lindstrom	NM Division of Behavioral Services
Timothy Lopez	NM Department of Health
Steve Lucero	NM Hispanic Medical Association
Michael Moxey	NM Dental Association
Matthew Probst	NM Academy of Physician Assistants
Joseph Sanchez	UNM College of Nursing
Sandy Stewart	NM Center for Nursing Excellence
Eugene Sun	Blue Cross Blue Shield of NM
Leonard Thomas	U.S. Indian Health Service
Dale Tinker	NM Pharmacists Association
Donna Wagner	NMSU College of Health and Social Services
Deborah Walker	NM Nurses Association
Barbara Webber	Health Action NM
Sandra Whisler	NM Medical Society

Staff

Carlotta Abeyta	UNM Health Sciences Center
Megan Bateman	UNM Health Sciences Center
Amy Farnbach Pearson	UNM Health Sciences Center
Michael Haederle	UNM Health Sciences Center
Vanessa Hawker	UNM Health Sciences Center
Jessica Reno	UNM Health Sciences Center

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