NEW MEXICO
LEGISLATIVE
FINANCE
COMMITTEE

Program
Evaluation
Unit

Program Evaluation: Nursing Expansion and Workforce

July 16, 2020

Report #20-03

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July 16, 2020

Dr. Sasha Poole, Executive Director
New Mexico Board of Nursing
6301 Indian School Rd. NE, Suite 701
Albuquerque, NM 87110

Mr. Mario Suazo, Chief of Staff
Higher Education Department
2044 Galisteo St., Suite 4
Santa Fe, NM 87505

Dear Dr. Poole and Mr. Suazo:

The Legislative Finance Committee (Committee) is pleased to transmit the evaluation, *Nursing Expansion and Workforce.* The evaluation examined nursing education funding, degree production, and workforce and licensing supply and demand issues. Exit conferences were conducted with the Board of Nursing and Higher Education Department to review the contents of the report.

The report will be presented to the Committee on July 16, 2020. The Committee would like plans to address the recommendations within this report from the Board of Nursing and Higher Education Department within 30 days from the date of the hearing.

I believe this report addresses issues the Committee asked us to review and hope your department will benefit from our efforts. We very much appreciate the cooperation and assistance we received from your staff.

Sincerely,

David Abbey, Director

Cc: Senator John Arthur Smith, Chair, Legislative Finance Committee
        Representative Patricia A. Lundstrom, Vice-Chair, Legislative Finance Committee
        Ms. Debbie Romero, Acting Secretary, Department of Finance and Administration
        Mr. John Bingaman, Chief of Staff, Office of the Governor
        Dr. Paul Roth, Chancellor, University of New Mexico Health Sciences Center
        Ms. Kathy Kunkel, Secretary, Department of Health
        Ms. Stephanie Rodriguez, Education Policy Advisor, Office of the Governor

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New Mexico is Succeeding at Producing More Nurses, But Unmet Demand Persists

Over the past two decades, the Legislature has invested nearly $120 million in efforts to increase the production of nursing degrees and expand the nursing workforce in response to shortages. These "nurse expansion" appropriations contributed to growth of 141 percent in nursing bachelor's degrees awarded since FY12 and an approximate doubling of the number of licensed nurses in the state. Still, with an aging population, Medicaid expansion, and increased insurance coverage contributing to more demand on the health care system, the number of nurses needed in the state is expected to continue to rise into the middle of this decade.

Despite rising enrollment in nursing programs at the state's public higher education institutions, many programs, especially those serving rural areas, face persistent difficulties in attracting and retaining faculty, securing clinical placements in the field for students, and admitting students who are adequately prepared for the rigors of a nursing curriculum. Rather than targeting initiatives to address these specific areas of need, the bulk of nurse expansion funding essentially supplements the state's instruction and general (I&G) formula to cover core program costs, leading to an inefficient funding process for nursing education programs. Further contributing to these barriers is a general lack of any statewide data on the full extent of clinical placement need and academic preparedness. Additionally, uncertainty and precautions around the COVID-19 pandemic are leading to new constraints and challenges.

Once nurses are working in New Mexico, there is a geographical mismatch between supply and demand, with many nurses educated outside the Albuquerque metropolitan area migrating there for jobs. This leaves higher rates of unmet demand among employers of nurses in other parts of the state, especially northern New Mexico. Nurse practitioners can be particularly crucial to filling gaps in primary and behavioral health care, sectors in which most of the state outside Bernalillo County remains underserved. Effective implementation of nurse residencies and transition-to-practice programs at hospitals and healthcare providers may help with retention in these places, but this has been limited to date in New Mexico.

Key Findings

Nurse expansion appropriations helped increase nursing graduates, enrollment, and faculty salaries, but continuing nursing funding could be streamlined for more efficiency.

Efforts to increase nursing bachelor's degrees are successfully responding to projected growth in demand.

Expanding targeted financial aid programs for nurses could increase retention.

Evaluation Objectives
1. Assess the effectiveness of nurse expansion appropriations on degree production, employment, and retention
2. Assess whether New Mexico's nurse education and training programs is aligned to the needs of the healthcare system

Limited availability of clinical placements outside major, urban hospitals constrains program capacity.

Applicant preparedness remains an obstacle to expanding the capacity of nursing education in New Mexico.

New Mexico's nursing workforce is nearing benchmarks for supply, but existing reporting lacks context.

Growth in advanced practice nurses, critical for access to underserved primary and behavioral health fields, still falls well short of employer demand.

The Albuquerque metro area disproportionately draws nurses from other regions with unmet demand.

Most New Mexico nursing graduates stay in the state to work, but targeted initiatives can improve retention in certain settings.

Key Recommendations

The Legislature should consider
- Putting future nurse expansion funds into the program development enhancement fund for HED to award grants on a competitive basis.
- Increasing targeted financial aid for nurses by approximately $750 thousand in FY22 or future fiscal years to meet demand, including loan repayment for practicing in rural or medically underserved areas.
- Amending Chapter 24, Article 14C NMSA 1978 to require the Healthcare Workforce Committee to work with the Department of Workforce Solutions to leverage demand-side data, such as vacant positions, to enhance knowledge of the need for nurses and other healthcare professionals.

The Higher Education Department should
- Modify administrative rules so I&G-related RPSPs are rolled into main I&G appropriations if an RPSP's funding has remained flat for three or more consecutive years and consider all requests for nurse expansion based on addressing identified capacity building needs.
- Leverage data matches with the Department of Workforce Solutions to regularly analyze in-state workforce retention of New Mexico-educated nurses and share this analysis with nursing programs, the Healthcare Workforce Committee, and the Board of Nursing.

The Higher Education Department and higher education institutions should
- Work with the Legislative Finance Committee and the Department of Finance and Administration to develop performance metrics tied to nurse expansion appropriations that measure in-state and regional retention of nursing graduates, including for advanced practice nurses in federally designated provider shortage areas.

The Board of Nursing should
- Work with pre-licensure nursing programs to develop standardized measures to quantify and track clinical placements and identify providers with which nursing programs have clinical placement agreements, and quantify and track academic preparedness of admitted and denied nursing students.

- Consider promulgating a rule creating a data system for employers to voluntarily report the employment of nurses whose primary residence and state of licensure is outside New Mexico.

The New Mexico Nursing Education Consortium should
- Work with the Board of Nursing to leverage collection of data and evaluate clinical placements and academic preparedness at NMNEC programs and set outcome-oriented objectives for these in its requests for state funding.

The Health Care Workforce Committee should
- Reassess its benchmark for nurses to encompass additional factors beyond per-capita employment rates, including provider demand and population health characteristics.

New Mexico Has More Licensed Nurses Than Ever to Tackle Healthcare Challenges

The number of nurses licensed in New Mexico has nearly doubled over the past 25 years, reaching nearly 29 thousand in FY19 (Appendix B). Demographic changes, including an aging population contributing to growing disease burden, coupled with increased insurance and Medicaid coverage under the federal Affordable Care Act, have contributed to a shifting healthcare landscape driving the need for care.

The federal Health Resources and Services Administration (HRSA) estimates the national demand for registered nurses (RNs) will grow by 28 percent from 2014 to 2030 due to growth in need resulting from Medicaid expansion and increased insurance coverage. Meanwhile, the number of graduates from nursing programs is increasing nationwide and in New Mexico. The largest nursing program in the state, at the University of New Mexico (UNM), has seen a 95 percent increase in its student headcount since 2014. Overall, the number of students taking nursing courses at public institutions in New Mexico (including pre-nursing students) grew by 31 percent since FY14.

Previous State and National Reports Have Sought to Address Challenges in the Healthcare Workforce, Including Nursing
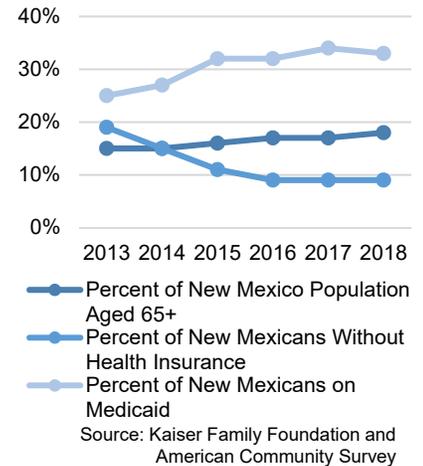
A seminal 2011 report from the Institute of Medicine (IOM), in partnership with the Robert Wood Johnson Foundation, has driven much of the effort to expand the nursing workforce nationally. New Mexico has addressed at least two of its eight recommendations in having full practice authority for nurse practitioners and implementing statewide healthcare workforce data collection infrastructure (see Appendix E).

A 2013 LFC evaluation and follow-up progress report in 2015 examined the adequacy of New Mexico's healthcare workforce, including RNs and certified nurse practitioners (CNPs). Key findings included a shortage of registered nurses and nurse practitioners, a need for improved service delivery models, and opportunities for educational strategies to mitigate workforce shortages. Since 2013, the New Mexico Health Care Workforce Committee has also issued annual reports identifying the areas of greatest need for different types of healthcare providers and making recommendations for addressing shortages.

Overview of Nurse Licensure and Education

In New Mexico, the Nursing Practice Act (Chapter 61, Article 3 NMSA 1978) lays out the requirements for each level of nursing, including scope of practice and minimum educational requirements. All nurses certified as a licensed practical nurse or above must be licensed by the Board of Nursing (BON). The Department of Health (DOH) licenses certified nurse midwives, who must also be licensed by BON as a registered nurse.

Chart 1. Aging and Health Insurance Trends in New Mexico

- Percent of New Mexico Population Aged 65+
- Percent of New Mexicans Without Health Insurance
- Percent of New Mexicans on Medicaid

Source: Kaiser Family Foundation and American Community Survey

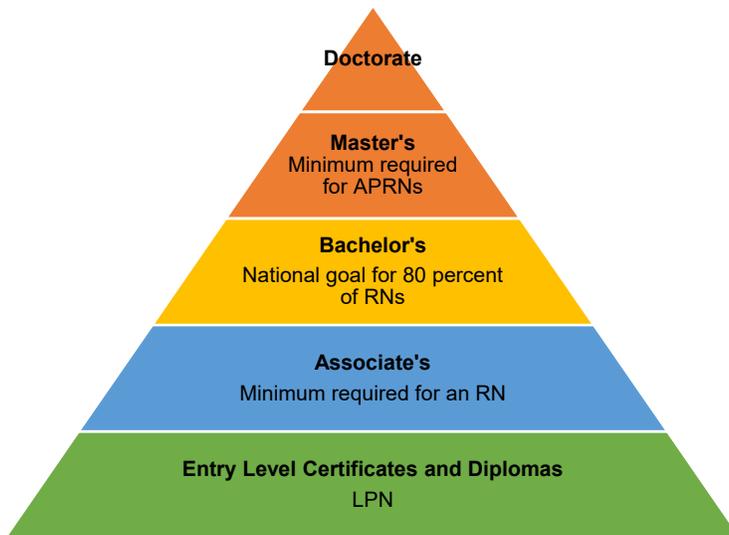*Statute requires the New Mexico Health Care Workforce Committee to collect data and report annually on the state's supply of health practitioners.*

Figure 1. Nurse License Abbreviations

RN: Registered nurse

LPN: Licensed practical nurse

CNP: Certified nurse practitioner

CNS: Clinical nurse specialist

CRNA: Certified registered nurse anesthetist

CNM: Certified nurse midwife

Figure 2. Levels of Nursing Degrees and Licensure

Doctorate

Master's
Minimum required
for APRNs

Bachelor's
National goal for 80 percent
of RNs

Associate's
Minimum required for an RN

Entry Level Certificates and Diplomas
LPN

Source: BON

Licensed Practical Nurse (LPN) certificates are non-degree credentials providing a fast way to enter the profession without a college degree. These certificates can take over 12 months to complete from a community college or vocational school. As of March 2020, LPNs comprised roughly 9 percent of licensed nurses in New Mexico. A greater share of LPNs (36 percent) worked in nursing homes or assisted living facilities than any other setting, while 11 percent worked in home health, 9 percent in hospitals, and the remainder spread across other settings.

Registered nurses (RNs) make up 82 percent of the state's licensed nurses and require at least an Associate's degree in nursing (ADN**)**. An ADN can take two to three years to complete from a community college, while a Bachelor's of science in nursing (BSN) is a four-year degree with both academic and clinical training offered by colleges and universities. "Bridge programs" such as LPN-to-BSN and RN-to-BSN can more quickly advance students to the BSN level by allowing students to transfer previously earned credits and count them toward a BSN degree. Over half (55 percent) of RNs work in hospitals, followed by ambulatory care (11 percent), home health (5 percent), education (5 percent), and nursing homes or assisted living (4 percent).

Advanced practice registered nurses (APRNs) are nurses with graduate degrees who perform more specialized and advanced care, include certified nurse practitioners (CNPs), certified nurse midwives (CNMs), clinical nurse specialists (CNSs), and certified registered nurse anesthetists (CRNAs). These positions typically require at least a master of science in nursing (MSN) degree and licensure as an RN.

Doctorate degrees such as the doctor of nursing practice (DNP), doctor of nurse anesthesia practice (DNAP), and doctor of philosophy (Ph.D) in nursing require additional academic and research work. Nurses holding graduate degrees may serve in clinical settings as well as teach or conduct research, depending on qualifications and expertise.

To obtain an initial license as an LPN or RN, new nursing graduates must pass the National Council Licensure Examination (NCLEX), a national standardized exam. Licensure by endorsement is for nurses already licensed within another state but applying to practice within a new jurisdiction. Certain APRNs can also apply for licensure to prescribe medication if they meet requirements laid out in state statute or rule.

The BON also approves all pre-licensure nursing education programs in New Mexico. Currently, the state has 21 such programs, with 17 of these housed at public institutions. All programs have received full board approval, but Northern New Mexico College has a warning due to two consecutive years of NCLEX pass rates below 80 percent (see Appendix F).

While not required to obtain BON approval, other institutions offer RN-to-BSN programs for nurses who have already obtained an RN license. New Mexico Highlands University offers bachelor's degrees to existing RNs, but not a pre-licensure program for new nursing students. Other programs are offered through existing, approved pre-licensure programs, such as the partnership between Central New Mexico Community College (CNM) and the University of New Mexico College of Nursing that allows students who obtain an associate of applied science in nursing degree to count their credits toward a BSN from UNM.

New Mexico participates in the multistate Nurse Licensure Compact.
New Mexico is part of the Enhanced Nursing Licensure Compact (eNLC) with 32 other states, which allows eligible nurses to obtain multistate licensure across participating states. The compact establishes a uniform set of standards and criteria for nurse licensure that enables LPNs and RNs, but not APRNs, to work across state lines. The original compact began in 2000; New Mexico joined in 2003. In 2015, the National Council of State Boards of Nursing developed an Enhanced Nursing Licensure Compact, with additional requirements and standards, to replace the original compact. In 2018, New Mexico enacted legislation allowing the state to transition from the original compact to the new eNLC (Laws 2018, Chapter 1; Senate Bill 1).

Figure 3. State Funding for Higher Education Institutions
(Excludes Student Financial Aid)

Instruction and General (I&G) Funding: The Legislature provides each higher education institution with a main state appropriation for its instruction and general (I&G) operations. Legislative and Executive branch staff have developed their recommendations for I&G appropriations based on an outcomes-based funding formula since FY13. The Boards of Regents and governing boards of the higher education institutions have broad legal authority over how to manage their I&G funds.

Research and Public Service Projects (RPSPs): The Legislature provides additional line-item appropriations to higher education institutions for special research and public service projects. Higher education institutions can either request such line-item appropriations through a Higher Education Department process or the Legislative process itself.

Capital Outlay Funding: The state provides higher education capital outlay funding through special appropriations in the state budget and legislation authorizing the issuance of bonds.

Source: LFC files

Figure 4. States Participating in Enhanced Nursing Licensure Compact, July 2020

Source: National Council of State Boards of Nursing (NCSBN)

State Investment Has Yielded More New Mexico-Educated Nurses, But Could Better Target Barriers to Further Growth

Nurse Expansion Appropriations Helped Increase Nursing Graduates, Enrollment, and Faculty Salaries, but Funding Could Be Streamlined for More Efficiency

Chart 2. Legislative Line-Item Appropriations for College Nursing Programs
(in thousands)

■ Appropriations to HED program development enhancement fund
■ Appropriations directly to HEIs

Source: LFC files

Over the past two decades, the Legislature has invested a cumulative $119.5 million in targeted appropriations to higher education institutions (HEIs) or the Higher Education Department (HED) for nursing program expansion. Since appropriating $348 thousand to the UNM Health Sciences Center in FY01 for a nurse midwifery program, the Legislature has significantly increased and proliferated its nurse expansion appropriations across the state's higher education system. [1]

Table 1. Nursing Line-Item Appropriations, Course Enrollment, and Graduates

Category	FY14	FY15	FY16	FY17	FY18	FY19	FY14-FY19 Change	
							#	%
Nursing Line-item Appropriations (in millions)	$4.3	$8.0	$8.4	$7.8	$7.7	$7.7	$3.4	78%
Fall Nursing Course Enrollment	5,683	5,950	6,838	7,095	7,443	7,434	1,751	31%
Nursing Program Graduates (Associates Degree and Above)	1034	987	980	1182	1283	1383	349	34%

Source: LFC analysis of HED data.

As nurse expansion appropriations have grown, so has the number of students enrolled in nursing courses and the number of nursing program graduates. In FY20 the Legislature appropriated $8.8 million to 18 higher education institutions explicitly for nursing programs through research and public service project (RPSP) appropriations. From FY14 through FY19, nursing line-item appropriations increased by roughly 78 percent and nursing course enrollment and degrees increased by 31 percent and 34 percent, respectively." By comparison, from Fall 2014 to Fall 2019, total student headcount across all majors and programs at public and tribal HEIs decreased by 15 percent (22.3 thousand students).

Chart 3. New Mexico Higher Education Nursing Program Expenditures

■ Faculty Salaries ■ Other Salaries ■ Other Expenditures
■ Supplies ■ Fringe Benefits ■ Travel

Source: LFC staff analysis of HED financial reports of actuals.

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[1] Historically, these appropriations have either gone directly to HEIs or the HED-administered program development enhancement fund. The Legislature created the program development enhancement fund in 2003 (Laws 2003, Chapter 389) to allocate funding (through an HED competitive grant application process) to higher education programs addressing critical state needs.

Nurse expansion appropriations increased the competitiveness of average nursing faculty salaries, but they remain below those for clinical positions. Between FY14 and FY19, the average nursing faculty salary at the state's public institutions increased by 17 percent ($10.1 thousand) from $59.9 thousand to $70 thousand. This is just below the 2018 median state salary of about $71 thousand for registered nurses, and $39 thousand below the 2018 state median for nurse practitioners. Meanwhile, the total number of full-time nursing faculty remained relatively flat, decreasing by 0.6 percent, or 1.5 full-time equivalent employees.[2]

Nursing expansion appropriations fund over a quarter of core program operations. In FY19, RPSP appropriations for nurse expansion equaled a statewide total of $7.7 million across 20 HEIs, or 27 percent of all nursing program revenues. According to financial reports of actuals from HED, college nursing programs spent a statewide total of $28.3 million in FY19. From FY18 to FY19, 19 out of the 20 nurse expansion line-item appropriations (or 95 percent) maintained flat budgets. These data indicate nurse expansion appropriations fund ongoing core operational programming after initial implementation.

The Legislature has directed instructional funding to nursing programs through line-item appropriations. Going forward, the Legislature will need to decide to what extent college nursing programs should be funded through earmarked line-item appropriations and instruction and general (I&G) budgets.

HED reviews of RPSP line-item appropriations could identify which continuing nursing expansion appropriations to incorporate into I&G funding. Every year HED is required to prepare a recommendation to LFC and the Department of Finance and Administration for higher education funding (Section 21-1-26 NMSA 1978). HED is also responsible for conducting reviews of RPSP line-item appropriations and deciding whether or not to recommend sunsetting any appropriations (Section 5.3.5.12 NMAC).

As part of its oversight and review functions, HED could modify its annual budget recommendation process to ensure that ongoing, instruction-related RPSPs are regularly identified and incorporated into I&G funding. An advantage of this would be administrative efficiency, but on the other hand, it would be up to HEIs to determine internally whether nursing programs would continue to receive the same level of funding they receive through RPSPs.

In 2017, HED staff identified 62 instruction-related RPSP line-item appropriations, including nursing expansion appropriations, for potential aggregation into I&G appropriations for FY18. However, no RPSP line-item appropriations were aggregated into I&G appropriations during the 2017 regular and special legislative sessions.

Chart 4. New Mexico Statewide Nursing Program Expenditures and Revenue, FY19
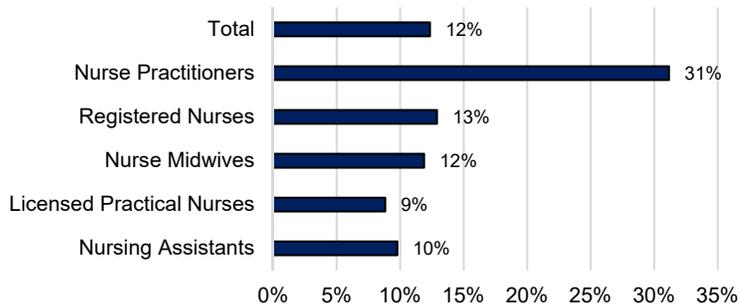

Note: Other revenues include tuition and fees, state I&G appropriations, property tax levies, and federal funding. Revenues are not disaggregated at the instructional program level in reports of actuals.
Source: LFC analysis of HEI reports of actuals and LFC budget files.

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[2] Some of this decline in nursing faculty FTE came from the closure of a nursing program with 6 nursing FTE at New Mexico State University Alamogordo branch campus in FY14.

Efforts to Increase Nursing Bachelor's Degrees Are Successfully Responding to Projected Growth in Demand

Chart 5. Projected Growth in Employment Opportunities for New Mexico Nurse Occupations, 2016 to 2026
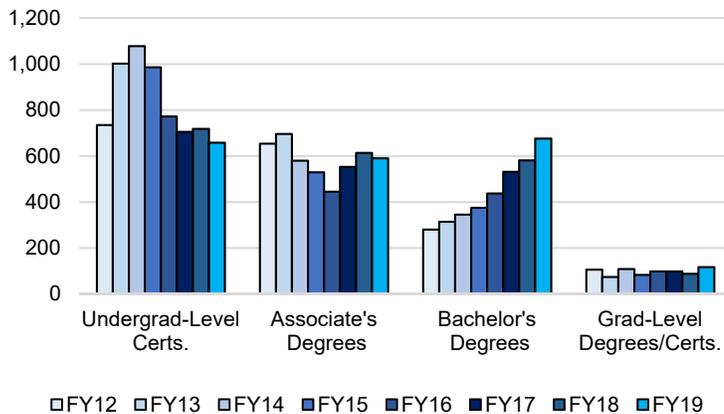
Occupation	Growth
Total	12%
Nurse Practitioners	31%
Registered Nurses	13%
Nurse Midwives	12%
Licensed Practical Nurses	9%
Nursing Assistants	10%

Source: DWS data

The 2011 *Future of Nursing* report recommended 80 percent of nurses attain a bachelor of science in nursing (BSN) degree by 2020. New Mexico has yet to achieve this goal, but has succeeded in growing its share of RNs with a BSN degree from 46 percent in 2010 to 55.5 percent in 2017, just under the national average of 56 percent.

The Department of Workforce Solutions (DWS) projects nurse employment opportunities in New Mexico will continue to increase through the middle of this decade, growing 12 percent overall between 2016 and 2026. This includes projected growth among RNs of 13 percent or about 2,300 nurses, and growth among NPs of 31 percent, or 282 nurses.

New Mexico nursing students are earning more bachelor's degrees and fewer undergraduate certificates. The number of bachelor's degrees awarded grew by 141 percent between 2012 and 2019, while LPN and other undergraduate certificates declined. In FY19, New Mexico nursing programs awarded 2,041 total credentials, of which 676, or 33 percent, were bachelor's degrees, compared with 280, or 16 percent in 2012.

Chart 6. Nursing Credentials awarded from New Mexico Higher Education Institutions, FY12-FY19

Source: LFC analysis of HED data.

Graduate-level degrees and certificates, however, which are often required for advanced practice registered nurses, have remained relatively flat, making up between 4 percent to 6 percent of nursing credentials awarded annually. However, the growing pool of bachelor's educated nurses creates more supply from which these advanced degree programs can draw students, as evidenced by recent initiatives to create and expand nurse practitioner programs such as those at Western New Mexico University, New Mexico State University, and New Mexico Highlands University.

Some New Mexico nursing programs have recognized the heightened need for advanced practice nurses in underserved fields. Western New Mexico University (WNMU) is launching a nursing masters' degree focusing on rural and frontier health. One goal of this program is to create a braided family nurse practitioner (FNP) program in collaboration with a psychiatric mental health program at New Mexico State University (NMSU) to allow students to obtain a dual FNP and behavioral health certification.

In the FY21 general appropriation act, the Legislature appropriated $1 million for NMSU's mental health nurse practitioner program and $170 thousand for a new nurse practitioner doctorate at New Mexico Highlands University. Pursuant to budget adjustments in the 2020 special session, these appropriations were each reduced by 6 percent.
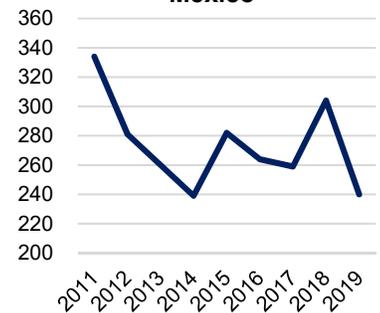
The New Mexico Nursing Education Consortium (NMNEC) has helped increase the number of BSN-prepared nurses, but could do more to respond to the needs of the rest of the nursing workforce. NMNEC, an independent collaborative of state- and tribal-funded pre-licensure nursing programs, was founded in 2009 to address the goal of graduating more BSN-prepared nurses in New Mexico. NMNEC established a common pre-licensure curriculum for students pursuing a BSN degree, and also supports additional pathways to a BSN for licensed practical nurses and associate's-prepared registered nurses (see Appendix G).

With forecasted growth across all levels of nursing, NMNEC could leverage its experience with BSN curricula to develop common, statewide pathways to other levels of nursing. For example, since 2011, New Mexico has seen a 28-percent decline in new licensed practical nurses, on whom nursing homes, assisted living facilities, and home health providers rely heavily. Beginning in fall 2020, NMNEC is offering a pathway for New Mexico Junior College nursing students to earn an LPN credential and work as an LPN as part of its RN program. But considering growth in the number of nurse practitioners is forecast to outstrip LPNs (282 versus 193), additional pathways into master's degrees and advanced practice nursing may also be warranted.

NMNEC's common curriculum has been fully implemented at 12 HEIs throughout the state. In FY20, the Legislature appropriated $800 thousand to NMNEC, including $500 thousand from the general fund for an RPSP through and $300 thousand from Board of Nursing license fees. The Legislature reduced the general fund appropriation to $250 thousand in FY21.

Three of NMNEC's five stated objectives as part of its RPSP funding request involve holding meetings rather than specifying concrete, outcome-oriented goals for curriculum implementation or capacity building. NMNEC should consider including clear, quantifiable, outcome-oriented goals in future funding requests, such as leveraging its Program Evaluation Committee to

Chart 7. New LPN Licenses issued in New Mexico

Source: BON 2019 annual report.

New Mexico's nursing education programs face interruptions and challenges during the COVID-19 pandemic. HEIs and other institutions have been forced to adapt to new circumstances to minimize the risk of coronavirus transmission. Nursing program administrators and faculty interviewed by LFC staff have implemented online classes, although they are not uniformly adopted across courses and certain lab or hands-on classes pose unique challenges to virtual learning. Not all instructors or students are accustomed to this teaching and learning modality. Additionally, some students may not have reliable computers nor dependable access to internet connectivity necessary for effective distance learning.
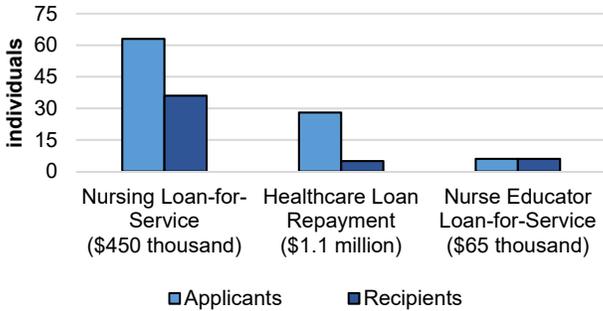
Hospitals, long-term care facilities and other clinical placement sites are pivoting their attention to the national emergency, interrupting clinical training. While this may help curb the spread of the virus, postponing, cancelling or broadly curtailing the important learning opportunities in these settings may slow down the production of new nurses entering the workforce. In New Mexico, up to 50 percent of nursing students' clinical education experience may use simulation programs and practices (16.12.3.7 NMAC). However, due to the pandemic, nursing schools are relying on virtual rather than laboratory-based simulation, further distancing students from hands-on clinical experience. Lastly, the testing vendor that administers the nursing licensure exam (NCLEX) has limited the availability of testing during the pandemic, potentially delaying nurses' entry into practice and creating a backlog of applicants for nurse licenses.

In New Mexico, the Board of Nursing has taken certain measures to mitigate the pandemic's workforce effects, including issuing guidance allowing out-of-state nurses to practice without obtaining a New Mexico license during the public health emergency, and issuing graduate permits for new, not-yet-licensed graduate nurses to practice under supervision.

work with the Board of Nursing's data collection on initiatives to track clinical placements and academic readiness at NMNEC programs.

Expanding Targeted Financial Aid Programs for Nurses Could Increase Retention

Chart 8. Nurse Applicants and Recipients of State Financial Aid, FY20

Source: LFC analysis of HED data.

Applications for state financial aid programs targeted at nurses exceed available funding. In FY20, the total amount available was approximately $1.6 million. Fifty-seven percent of the applicants for nursing loans-for-service and 18 percent of advanced practice nurses applying for loan repayments received financial aid, while all six applicants for the nurse education loan-for-service program received funding, at a total cost of approximately $523 thousand. HED data indicate that the proportions of financial aid applicants to recipients for these programs has been consistent from FY15 through FY20.

A 2005 LFC program evaluation identified targeted financial aid for nurses as a strategy to alleviate nursing shortages. The report recommended that the state expand student financial aid for nurses and tailor the funding to meet demand. Based on the proportion of applicants funded and average award amounts in FY20, nursing financial aid would need an additional approximately $754 thousand to fund all applicants.

Loan repayment programs help participants pay back existing student loans in exchange for working in designated healthcare shortage areas.

Loan-for-service programs offer new loans to students in exchange for future service in shortage areas.

Research evidence suggests loan repayment and loan-for-service programs are effective at increasing the availability of healthcare professionals in underserved areas. Information in the Pew Charitable Trusts' Results First Clearinghouse Database points to evidence indicating higher education financial incentives are effective in recruiting and retaining healthcare professionals, and the 2019 New Mexico Healthcare Workforce Committee Report recommended the state increase its funding for healthcare loan repayment and loan-for-service programs.

Loan repayment programs have better participant retention and a better return on investment than loan-for-service programs. A 2012 multistate study found 70 percent of loan repayment participants planned to continue working past their required service commitment while only 36 percent of loan-for-service planned to stay at their service sites after their required service commitment.[3] In 2013, HED reported loan-repayment program participants were less likely to default than loan-for-service recipients, and 98 percent of loan-repayment recipients completed their service obligations.[4] In 2009, LFC found loan repayment programs are more efficient and require less administration than loan-for-service programs.[5]

The Board of Nursing could raise additional funds for nursing financial aid and initiatives. State law authorizes the board to impose a surcharge of up to $20 for each nursing license renewal to support nursing financial aid or other

[3] Pathman, et al. (2012). "Findings of the First Year Retention Survey of the Multi-State/NHSC Retention Collaborative." Retrieved from https://chcworkforce.org/sites/default/files/Findings%20of%20Multi-State%20NHSC%20Collaborative.pdf
[4] LFC. (2013). "Adequacy of New Mexico's Healthcare Workforce Systems." Report #13-03. p.35.
[5] LFC. (2008). "Program Evaluation: Review of HED Financial Aid Programs." Report #08-13. p.17

nursing recruitment and retention initiatives through the Nurse Excellence Fund, and requires the transfer of 50 percent of these revenues to HED to repay loans for advanced practice nurses who practice in underserved areas. (Section 61-3-10.5 NMSA 1978). In FY19, the fund included 20 $1,000 Nightingale scholarships through the Center for Nursing Excellence and eight $2,000 Native American nursing scholarships. BON currently imposes a surcharge of $5 per license renewal, for a total of $80 thousand in revenue in FY19. A $2 increase in the license renewal surcharge would have provided an additional $16 thousand in FY19 for Board of Nursing-directed financial aid, professional development, or other programming, which could fund an additional 16 $1,000 scholarships or eight $2,000 Native American scholarships. An additional $16 thousand would have supported APRN loan repayments through HED.

Table 2. Nurse Excellence Fund, FY19		
Starting Balance		$45,929
Revenue	License Renewal Surcharges	$80,026
	Reversion from NMNEC	$7,548
Expenses	Financial Aid and Scholarships	$74,741
	NMNEC Statewide Planning	$11,546
	Nursing Education Summit	$7,435
Ending Balance		$39,781

Note: Financial aid and scholarships includes $29.2 thousand for the HED loan repayments, $23 thousand for general scholarships and $22.5 thousand for Native American scholarships. Source: BON FY19 Financial Audit.

Limited Availability of Clinical Placements Outside Major, Urban Hospitals Constrains Program Capacity

New Mexico Administrative Code requires that nursing schools provide clinical experiences for their students for the application of theory into practice.[6] Up to 50 percent of these experiences can be completed via simulation and student/faculty ratios in client care clinical settings may not exceed 8:1.

While all nursing programs have access to clinical simulation equipment, these cannot replace experience in the field. Finding clinical placement sites for nursing students can be difficult, particularly for those outside of metropolitan areas with academic medical centers. The National League of Nursing identified the lack of clinical placement sites as the greatest barrier to increasing enrollment capacity nationwide, and the US Department of Health and Human Services reported in 2018 that hospital consolidation coupled with increases in healthcare students have led to a decline in the availability of hospital-based clinical sites for nursing students.[7] With more community-based clinics used for healthcare delivery, the Institute of Medicine argued that students should be trained in community-based settings.[8] However, these smaller sites usually are not as well-equipped to spare staff to oversee students nor accustomed to the work of teaching nursing students.

Figure 5. Key Constraints to Clinical Placements in New Mexico

- There is **no centralized system that coordinates clinical placements** between higher education institutions and providers. An association could serve this role.
- There are **not sufficient part-time faculty to serve as clinical faculty** at clinical sites.
- **LPNs have the hardest time finding clinical placement sites**. It can take creativity to identify new kinds of clinical placement sites, such schools or daycare centers.
- **Finding clinical placement sites outside of metro areas and hospital settings is the most challenging**. Rural hospitals and providers often lack capacity to accommodate students.

Source: LFC structured interviews or written surveys with UNM, CNM, NMSU, NMSU-DACC, WNMU, Navajo Tech, NMNEC, and NM Hospital Association

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[6] NMAC 16.12.3.12 B (4)

[7] Advisory Committee on Interdisciplinary Community- Based Linkages (ACICBL), "Enhancing Community-Based Clinical Training Sites: Challenges and Opportunities," January 2018: Sixteenth Annual Report to the Secretary of the U.S. Department of Health and Human Services and the U.S. Congress.

[8] IOM (Institute of Medicine). (2011.) The Future of Nursing: Leading Change, Advancing Health. Washington, DC: The National Academies Press

Statewide data on clinical placements could help coordinate efforts and alleviate shortages. In New Mexico, the placement process can be administratively burdensome with each nursing education program needing to establish individual agreements or contracts with clinical providers. Currently, no entity tracks the number of clinical placements or in what settings they occur. The Board of Nursing requires all approved pre-licensure nursing programs to provide a written summary of qualitative or quantitative issues with securing clinical placements, but how these are completed is up to the programs themselves, and some do not report on them at all. LFC staff interviews with administrators and faculty at selected nursing programs reveal programs outside the state's urban centers face challenges in ensuring adequate numbers of clinical placements because of insufficient faculty and other factors, which in turn can constrain how many students they can admit.

With no central data repository to quantify and match available clinical placement slots against the supply of students and faculty across providers and institutions, the full extent of New Mexico's clinical placement shortage is unknown. However, some other states have adopted data systems for this purpose, encompassing a regional, statewide or even multistate area. For example, in Massachusetts, the Department of Higher Education created its own stand-alone software system (Centralized Clinical Placement) that, in addition to scheduling and management, offers comprehensive and consistent clinical orientation materials for nursing students as well as a clinical faculty database to address their faculty shortage. In California, a statewide nonpartisan nonprofit in partnership with a foundation spearheaded the creation of an online tool to reduce placement processing time and costs for both schools and clinical providers. The system is now used in nine regions across the country.

The Board of Nursing requires pre-licensure nursing programs to report their clinical preceptors annually starting with FY20.

National research points to a shortage of preceptorships as a potential bottleneck in growing the supply of qualified nurses. Preceptors are experienced practicing nurses who provide mentorship and real-world training to student nurses or those newly graduated and licensed. In New Mexico, state regulations administered by the Board of Nursing require preceptorships for certified nurse practitioners (CNPs), but not for any other level of nursing. No data is currently available on the number of preceptors in New Mexico, but beginning in FY20, BON is requiring approved nursing programs to provide a list of their clinical preceptors as part of their annual reporting to the board.

A 2018 federal report noted the national supply of nursing preceptors is shrinking, and the bulk of preceptorships occur in urban hospital settings close to the largest nursing education programs, limiting opportunities for students to gain experience in rural, primary care, and safety net settings.[9] A review by the University of Washington's Center for Health Workforce Studies found RNS are more likely to practice in a rural setting if they had a rural upbringing or rural clinical training, but incentives may be necessary to encourage other nurses to choose a rural practice.[10]

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[9] Advisory Committee on Interdisciplinary, Community-Based Linkages (2018). *Enhancing Community-Based Clinical Training Sites: Challenges and Opportunities. Sixteenth Annual Report to the Secretary of the U.S. Department of Health and Human Services and the U.S. Congress.*

[10] Skillman, S. et al. (2015) *Incentives for Nurse Practitioners and Registered Nurses to Work in Rural and Safety Net Settings.* Center for Health Workforce Studies, University of Washington.

The right incentives can encourage nurses to become preceptors. In general, preceptors are not paid for their teaching and mentorship duties above and beyond their normal salaries. However, precepting can pose a significant demand on the time and productivity of experienced nurses that has the potential to detract from regular patient care.
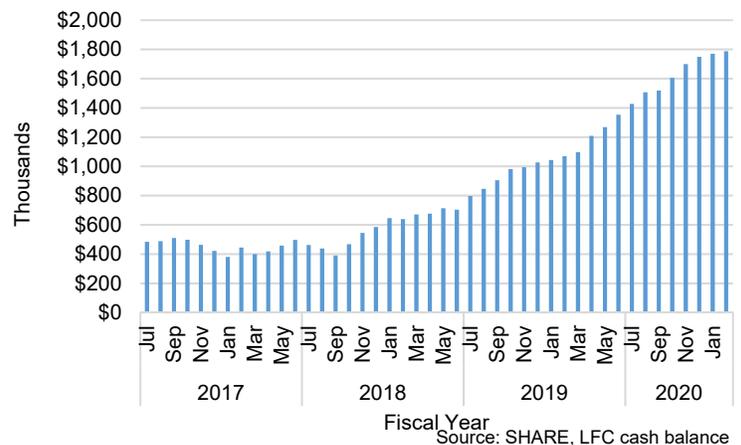
Some providers offer certain incentives for staff nurses to precept. For example, University of New Mexico Hospital reports to LFC staff that historically its nurses could earn additional compensation for activities such as precepting, but this program is currently under review. Four states (Colorado, Georgia, Hawaii and Maryland) have passed legislation to create preceptor tax credits. To date, Colorado is the only state that evaluated the program and found it to be meeting its goals "to some extent."[11] (See Appendix H). Evidence also suggests non-monetary incentives can be an effective strategy to increase the supply of preceptors. These may include time or tuition for continuing education, opportunities for career advancement, increased involvement in the employing hospital, professional acknowledgement and well-supported training programs.[12]

A Board of Nursing pilot to waive fees for first-time applicants may be better directed toward preceptors instead. In 2019, the Board of Nursing approved a pilot to permit first-time RN or LPN applicants who graduated from a US program to waive the initial $150 fee for licensure by examination. While approved to begin July 1, 2019, the pilot waiver has yet to be implemented. BON estimates foregone licensing fee revenue of $172.5 thousand annually for each of the four years of this pilot, or a total of $690 thousand through FY23. BON has been carrying a substantial and growing cash balance since FY17, increasing from approximately $484 thousand in July 2016 to nearly $1.8 million in February 2020. The estimated cost of the pilot would likely serve to reduce this balance closer to historical levels by its end in FY23.

Chart 9. Board of Nursing Operating Fund Cash Balance, FY17-FY20 YTD

Source: SHARE, LFC cash balance

In justifying the program, the board argues the fee waiver could help to remove barriers to entering the workforce, but does not cite any evidence that licensing fees themselves have been such a barrier. LFC staff have also not identified any research conclusively showing license fees to be a deterrent to nursing practice.

Given the upward trend of newly graduated and licensed nurses prior to the pilot's implementation, and pending evidence revealing an impact of the fee waiver on further increasing new licensees, the board should consider redirecting its pilot instead to waive renewal fees for nurses who serve as preceptors and review its effectiveness as an incentive to this end.
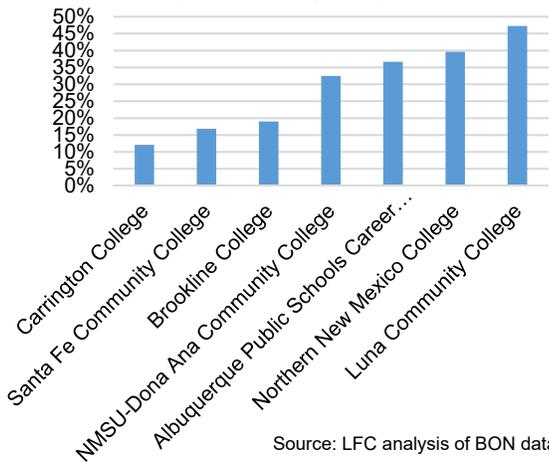
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[11] Tax Expenditures Compilation Report, Colorado Office of the State Auditor, 2019, p.180.
[12] Dilbert, C., Goldenberg, D., 1995. Preceptors' perceptions of benefits, rewards, supports and commitment to the preceptor role. *Journal of Advanced Nursing* 21, 1144–1151.

Applicant preparedness remains an obstacle to expanding the capacity of nursing education in New Mexico.

FY19 data reported to the BON by pre-licensure nursing programs indicate unqualified applicants not meeting benchmarks in reading, math and science are an obstacle to expanding nursing enrollment, an entrenched problem dating back at least to a 2009 HED report. Of the 2,500 FY19 nursing program applicants, roughly 40 percent were not admitted due to either a lack of program capacity or not meeting admissions requirements such as minimum GPAs, admission entrance exam scores or prerequisite coursework.

Chart 10. Percent of Nursing Applicants Who Did Not Meet Admissions Requirements (2019)

Source: LFC analysis of BON data

Unfortunately, disaggregated data on reasons for denied admission is not available for all institutions, and institutions do not consistently report this data to the BON. Just seven out of 21 nursing programs reported the percentage of applicants who were unqualified in 2019, ranging from 12 percent at the private, proprietary Carrington College to 47 percent at Luna Community College. In its FY19 report to the board, Santa Fe Community College noted, "New Mexico high school students are chronically unprepared for the competition to get into nursing programs." Additionally, as a result of low applicant preparedness, Luna Community College initiated free test-preparation courses to pre-nursing students for the nursing admissions exam. Requiring additional and specific quantitative data from nursing programs in future BON education reports would serve to better define the problem of applicant preparation and plan for solutions.

Attrition rates of nursing students are lower than for the general college student population, but Native American students leave nursing programs at a disproportionately higher rate. Nursing programs at UNM-Main and NMSU-Main report losing only 1 percent of students to attrition during 2019, compared with 26 percent of full-time students schoolwide at either institution.[13] Attrition in nursing programs is largely involuntary and due to poor academic performance rather than voluntary reasons such as financial strain or personal circumstances.[14]

Chart 11. Attrition Rates in Public Nursing Programs vs Schoolwide (2019)

■ Nursing School Attrition Rate   ■ Schoolwide Attrition Rate

Source: LFC analysis of BON reports

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[13] Attrition rates included students who left both voluntary and involuntary reasons.
[14] Survey of schools, New Mexico Nursing Education Consortium, 2019.

When nursing student populations are disaggregated based on race and ethnicity, Native American nursing students experience disproportionately higher rates of attrition (18 percent) and make up a disproportionately lower percentage of the nursing student body of New Mexico Nursing Education Consortium (NMNEC) schools (7 percent), than in the state's general population (11 percent).

Having struggled with faculty retention and low NCLEX pass rates, Navajo Technical University (NTU) is working to reinstate its pre-licensure nursing program; it is currently only offering a pre-nursing program. An FY21 legislative appropriation of $225 thousand to HED to support NTU would support this pending program but funding remains uncertain given current fiscal constraints. The landmark Institute of Medicine *Future of Nursing* report called for more racial, ethnic, and gender diversity among nurses to improve quality of care and reduce health disparities. Additionally, the 2013 New Mexico Health Care Workforce report cited the need to enhance underrepresented minority participation in the nursing workforce. Ensuring greater representation of Native Americans in nursing programs and greater success among those students who enroll could be important to help reduce disparities in New Mexico.

Table 3. Race/Ethnicity of Nursing Students in NMNEC Programs 2019

Race/Ethnicity	Students Taking Courses in 2019	Students graduated	Students who Involuntarily Left Program
White	37%	40%	36%
Black/African American	2%	3%	5%
Native American	7%	6%	18%
Asian	4%	4%	4%
Two or more races	3%	3%	4%
Hispanic	46%	42%	31%
Unknown	1%	2%	3%
Total	**100%**	**100%**	**100%**

Source: LFC Analysis of NMNEC data

Recommendations

The Legislature should consider

- Putting future nurse expansion funds into the program development enhancement fund for HED to award grants on a competitive basis.
- Increasing targeted financial aid for nurses by approximately $750 thousand in FY22 or future fiscal years to meet demand, including loan repayment for practicing in rural or medically underserved areas.

The Higher Education Department should

- Modify administrative rules so I&G-related RPSPs are aggregated into main I&G appropriations if an RPSP's funding has remained flat for three or more consecutive years and consider all requests for nurse expansion based on addressing identified capacity building needs.

The Board of Nursing should

- Work with pre-licensure nursing programs, as part of the annual data collection process, to develop standardized measures to do the following:
  - Quantify and track the number and availability of clinical placements and identify providers with which nursing programs have clinical placement agreements, and
  - Quantify and track academic preparedness of admitted and denied nursing students.
- Consider increasing the nursing license renewal surcharge from $5 per license renewal to $7 per license renewal and review the appropriateness and impact of the surcharge annually.

The New Mexico Nursing Education Consortium should

- Work with the Board of Nursing to leverage collection of data and evaluate clinical placements and academic preparedness at NMNEC programs and set outcome-oriented objectives for these in its requests for state funding.

As the state's supply of nurses grows, more work is needed to align it with demand

New Mexico's Nursing Workforce is Nearing Benchmarks for Supply, but Existing Reporting Lacks Context

Since 2012, the New Mexico Health Care Workforce Committee has produced the state's statutorily mandated analysis of need for nurses and other healthcare professions.[15] Using a benchmark based on national averages of nurses per capita, the Committee's reports have shown an overall increase in nursing supply.[16] Over the last seven years of the Committee's reports, the gap between the number of practicing registered nurses (RNs) and the needed to meet the committee's benchmark statewide has shrunk by 75 percent, from roughly 2,300 in 2012 to 587 in 2018.

Chart 12. State Supply and Benchmarked Need for RNs in New Mexico

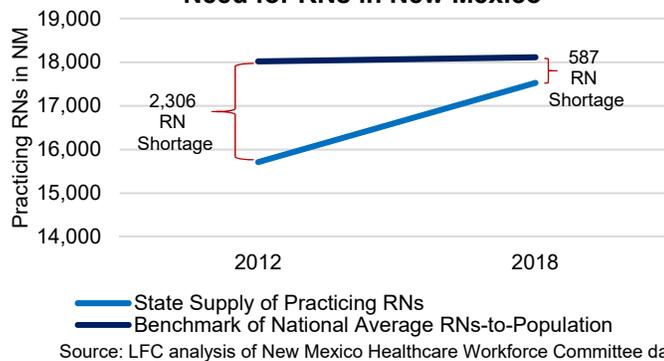Source: LFC analysis of New Mexico Healthcare Workforce Committee data.

As the committee acknowledges, while the statewide gap appears small, many more RNs would be needed – roughly 3,700 in 2018 – to ensure all counties can meet the committee's supply benchmark. Out of the state's 33 counties, the committee reported 30 counties (90 percent) were below its benchmark in 2012 and 31 counties were below the benchmark in 2018. This points to an uneven and inequitable geographic distribution of nurses, with sparsely populated counties with few providers well below the benchmark and a much higher concentration in Bernalillo County and the surrounding area.

Existing state benchmarks do not offer a full picture of nursing demand. While the Healthcare Workforce Committee offers insightful data on the supply of nurses in clinical settings, additional detail could inform strategies to connect supply with unmet demand. The committee's supply-side data and per-capita benchmarks are not accompanied by demand-side information on unfilled vacancies that could serve to connect unmet need with available nursing supply. Additionally, the current benchmark has not changed since 2011, before the implementation of the Affordable Care Act resulted in Medicaid expansion and wider health insurance coverage.

No single metric has been adopted by the states or the federal government as an ideal measure of what constitutes an adequate nursing workforce. While a standard per-capita ratio is the most straightforward, other factors – where health-industry employers are located, population age, income, birth rates, rates of substance abuse, and other characteristics – may all affect the nursing workforce. For example, California published a forecast of its RN workforce in 2018 that adopted a regional approach including inflows and outflows of
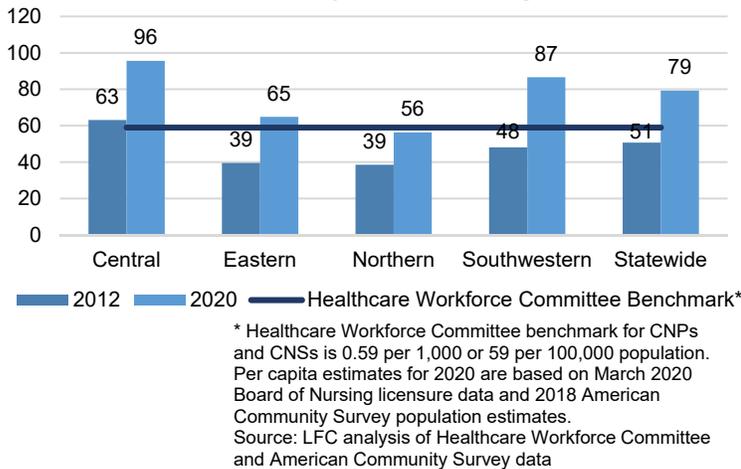
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[15] Section 24-14C-6 NMSA 1978

[16] The New Mexico Healthcare Workforce Committee's benchmark for a U.S. national average of 8.64 RNs per 1,000 population comes from an average of a 2011 Kaiser Family Foundation estimate (8.74 RNs per 1,000 population) and a 2013 Health Resources and Services Administration estimate (8.54 RNs per 1,000 population).

nurses and demand estimates based on calculations of hospital patient days needed. [17]

Growth in Advanced Practice Nurses, Critical for Access to Underserved Primary and Behavioral Health Fields, Still Falls Well Short of Employer Demand.

About 41 percent of certified nurse practitioners (CNPs) and clinical nurse specialists (CNSs) in New Mexico practiced in ambulatory care facilities or community health centers as of March 2020. This is especially important in New Mexico because all or part of 32 of the state's 33 counties lie within a primary care health professional shortage area (HPSA) as designated by the federal Health Resources and Services Administration (see map in Appendix K).

The number of CNPs and CNSs working in the state grew by 59 percent between 2012 and March 2020, the result of years of efforts among New Mexico's nursing programs and healthcare community to increase the production and recruitment of advanced practice nurses. Every workforce region in the state saw growth in its per capita supply during this period, and by March 2020, all except the Northern region exceeded the Healthcare Workforce Committee's supply benchmark.

Chart 13. CNPs and CNSs per 100,000 Population by Workforce Region

Legend: 2012 | 2020 | Healthcare Workforce Committee Benchmark*

* Healthcare Workforce Committee benchmark for CNPs and CNSs is 0.59 per 1,000 or 59 per 100,000 population. Per capita estimates for 2020 are based on March 2020 Board of Nursing licensure data and 2018 American Community Survey population estimates.
Source: LFC analysis of Healthcare Workforce Committee and American Community Survey data

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During the COVID-19 pandemic, policies flex to accommodate telehealth delivery but limited rural broadband restricts access. Because CNPs in New Mexico have full practice authority, they can take advantage of federal and state actions to broaden access to telehealth so patients can receive safe care without having to travel. In March 2020, the Centers for Medicare and Medicaid Services allowed payment parity between telehealth and in-person visits and also lowered technology requirements to comply with federal patient privacy laws.

While the statutory landscape adapts to telehealth delivery, broadband access remains an obstacle in rural New Mexico. A 2019 LFC evaluation on broadband identified the northwest counties of New Mexico as having the highest need for additional broadband development. Notably, these counties have also experienced among the highest rates of COVID-19 cases and have a low supply of advanced practice nurses. The FCC has characterized access to broadband as a "super-determinant of health," or a condition that exacerbates already existing disparities. The federal pandemic stimulus bill, the CARES Act, includes $128 million in funding for its COVID-19 Telehealth Program for measures including network upgrades, equipment purchases and other telehealth platform improvements. Only one provider in New Mexico has received a federal grant, First Choice Community Healthcare South Valley Family Health Commons in Albuquerque for $376 thousand.

In the realm of behavioral health, the northern workforce region has some of the most challenging outcomes in the state. McKinley County has the state's highest rate of alcohol-related deaths, Cibola and McKinley counties rank among the highest in youth suicide attempts, and the three-county Northwest public health region has the state's highest rate of adult depression. This 10-county region had just 19 behavioral health CNPs and CNSs, or 3.7 per 100
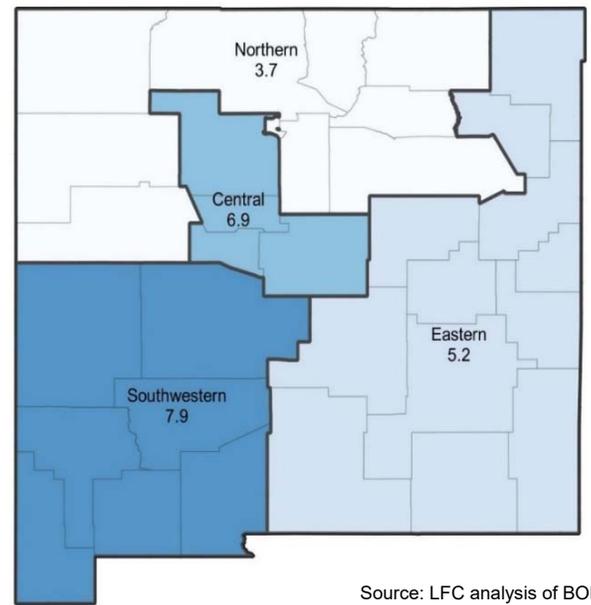
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[17] Spetz, J. (2018). Regional Forecasts of the Registered Nurse Workforce in California. Healthforce Center at UCSF.

thousand residents, substantially below all other regions of the state. Statewide, New Mexico had 125 CNPs or CNSs employed in the psychiatric, mental health, or substance abuse field as of March 2020. As with primary care, the vast majority of New Mexico is covered by a federally designated Health Professional Shortage Area (HPSA) for mental health (see map in Appendix L).

Unmet demand for all types of nurses is greatest in Northern New Mexico. For the first three months of 2020, fewer than one unemployed nurse was available per advertised job opening in each of the state's four workforce regions.[18] The Northern region, consisting of 10 counties (Cibola, Colfax, Los Alamos, McKinley, Mora, Rio Arriba, San Juan, San Miguel, Santa Fe, and Taos), had the lowest ratio of unemployed nurses to job openings for each of the three largest categories of nursing (RN, LPN, and CNP).
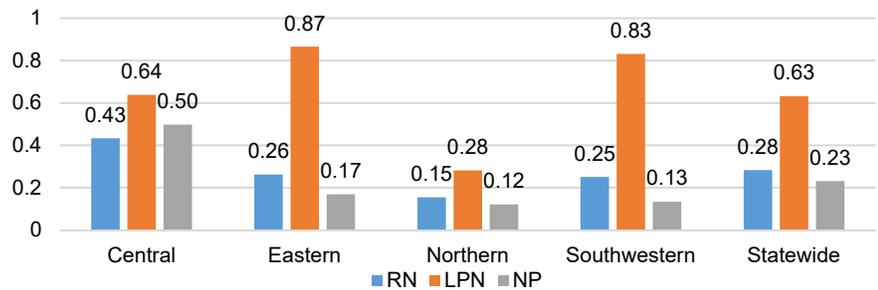
The relative lack of candidates for open positions illustrates the limitations of the Healthcare Workforce Committee's per-capita benchmark. For example, although the supply of CNPs and CNSs appears to be exceeding the committee's benchmark in most regions, it is still very low relative to the demand for these nurses.

Figure 6. Psychiatric, Mental Health, and Substance Abuse CNPs and CNSs per 100,000 Population by Workforce Region

Source: LFC analysis of BON data

Chart 14. Estimated Candidates* per Nursing Job Opening by Region and Nurse Type (2020 Q1 Monthly Average)

Region	RN	LPN	NP
Central	0.43	0.64	0.50
Eastern	0.26	0.87	0.17
Northern	0.15	0.28	0.12
Southwestern	0.25	0.83	0.13
Statewide	0.28	0.63	0.23

*Estimated candidates include licensed nurses in the Board of Nursing database with an employment status of "unemployed, seeking work as a nurse."
Source: LFC analysis of DWS and BON data

New Mexico's statewide ratio of school nurses-to-students meets recommended levels, but rural districts often need to share school nurses. According to the PED and DOH Annual School Health Services Summary Report for 2018-2019, New Mexico has a statewide ratio of nurses to students of 1:620 students, better than the American Association of School Nurses recommendation of 1:750. However, 18 out of 89 (1 out of every 5) state school districts reported having less than one full-time school nurse in FY19.

Rural school districts sometimes contract nursing services through Regional Education Cooperatives (RECs), sharing full-time school nurse positions with other small school districts. Some school districts also leverage the state's 73 federal- and state-funded school-based health centers to provide health services to students. For FY20, the Legislature appropriated $1 million for RECs and $1.4 million for school-based health centers to supplement their services to public schools.

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[18] These estimates are likely high, as they reflect nurses' self-reported employment status, which is updated at the time of license issuance or renewal, and can also be (but is not required to be) updated by nurses as needed.

The Albuquerque Metro Area Disproportionately Draws Nurses From Other Regions With Unmet Demand.

Chart 15. Regional Distribution of Nurses by Employment Setting, March 2020
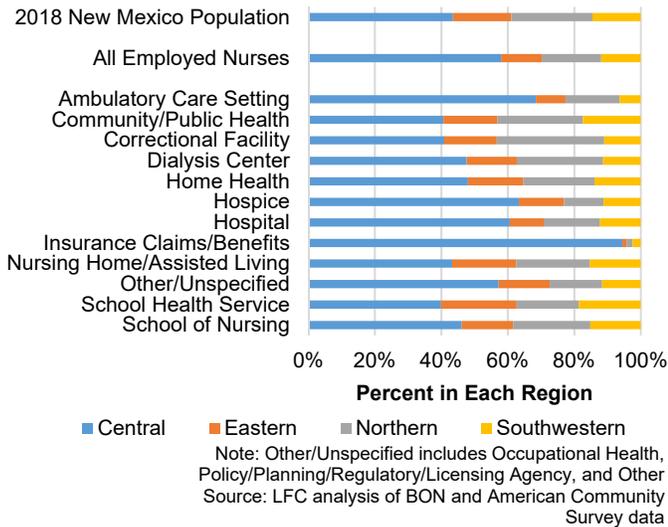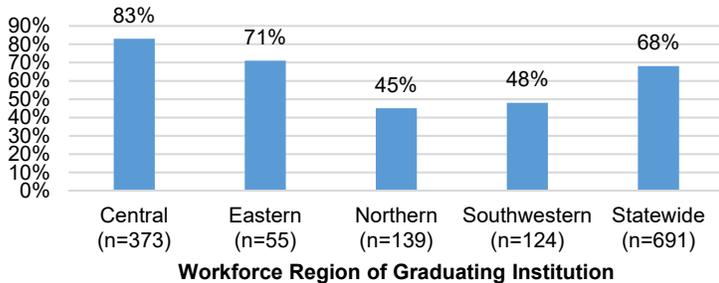
Categories (top to bottom):
2018 New Mexico Population
All Employed Nurses
Ambulatory Care Setting
Community/Public Health
Correctional Facility
Dialysis Center
Home Health
Hospice
Hospital
Insurance Claims/Benefits
Nursing Home/Assisted Living
Other/Unspecified
School Health Service
School of Nursing

X-axis: Percent in Each Region (0% – 100%)

Legend: ■ Central ■ Eastern ■ Northern ■ Southwestern

Note: Other/Unspecified includes Occupational Health, Policy/Planning/Regulatory/Licensing Agency, and Other
Source: LFC analysis of BON and American Community Survey data

Chart 16. Percent of Nurses Working in the Same Region as Graduating Institution*

Region	Percent
Central (n=373)	83%
Eastern (n=55)	71%
Northern (n=139)	45%
Southwestern (n=124)	48%
Statewide (n=691)	68%

X-axis: Workforce Region of Graduating Institution

* Reflects the percentage of nurses in BON's licensure and workforce database who (1) earned their primary nursing degree or credential from a public institution in New Mexico, (2) have an initial licensure date for their current level of licensure in 2017, and (3) have an active license as of March 2020.

Source: LFC analysis of BON data

Over half (57 percent) of all nurses practicing in New Mexico work in the four-county Central workfore region consisting of Bernalillo, Sandoval, Torrance, and Valencia counties. The region accounts for 43 percent of the state's population, but significant majorities of nurses practicing in four settings: hospitals (61 percent), hospice (63 percent), ambulatory care (68 percent), and insurance claims and benefits (93 percent).
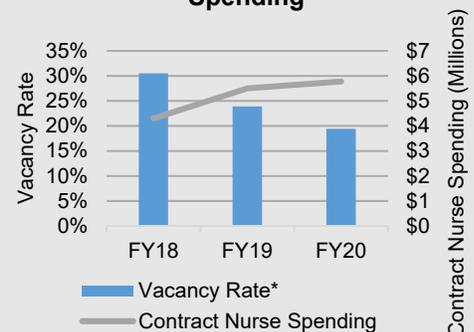
Reflecting this disproportionate concentration of nursing employment relative to the population, newly licensed nurses are more likely to remain in the Central region if they were educated there and less likely to remain in other regions of the state. An LFC analysis of Board of Nursing data found that 83 percent of nurses educated in the Central region and who received their first New Mexico license in 2017 were employed there after their first license renewal. By contrast, just 45 percent of those graduating from a program in the Northern region and 48 percent of those graduating in the Southwestern region were employed in the same region after their first license renewal. The Eastern region had the fewest graduates licensed in 2017, but 71 percent of them continued to work there after their first renewal.

Additionally, nurses with a BSN are more likely to work in urban areas, and hospital settings, which may impact shortages in rural areas and non-hospital-settings as a growing proportion of new nurses attain BSNs. Of the 391 BSN students and the 478 associate's degree in nursing (ADN) students who graduated from New Mexico nursing programs in FY18 and ended up working in the state's healthcare sector, 85 percent of the BSN graduates and 75 percent of the ADN graduates reported

The Department of Health has reduced nurse vacancies through increased compensation, but still spends substantial amounts on contract nurses. The total number of nonadministrative nursing positions at DOH grew 18 percent between July 1, 2018 and May 1, 2020. Meanwhile, the vacancy rate for these positions decreased from nearly 31 percent at the beginning of FY19 to 19 percent as of May 2020. During the same period, the average hourly wage for these positions grew by 7 percent.

Despite these improvements, DOH continues to spend heavily on contract nurses, an issue pointed out in previous LFC reports. Total contract amounts grew by 39 percent since FY14, from $4.2 million to nearly $5.8 million, indicating the state has further progress to make on competing with the private sector for highly qualified staff in the nursing profession.

Chart 17. Vacancy Rate of DOH Nursing Staff and Contract Nurse Spending

Left Y-axis: Vacancy Rate (0% – 35%)
Right Y-axis: Contract Nurse Spending (Millions) ($0 – $7)
X-axis: FY18, FY19, FY20

Legend: ■ Vacancy Rate* — Contract Nurse Spending

*Note: Vacancy rate as of June 30, except FY20 which is as of May 1
Source: LFC analysis of SPO data

working in an urban county (Bernalillo, Santa Fe, and Doña Ana) one year after graduation. RN salaries in Albuquerque were roughly 4 percent higher than the statewide average in 2018 (see Appendix M).

Most New Mexico Nursing Graduates Stay in the State to Work, But Targeted Initiatives Can Improve Retention in Certain Settings.
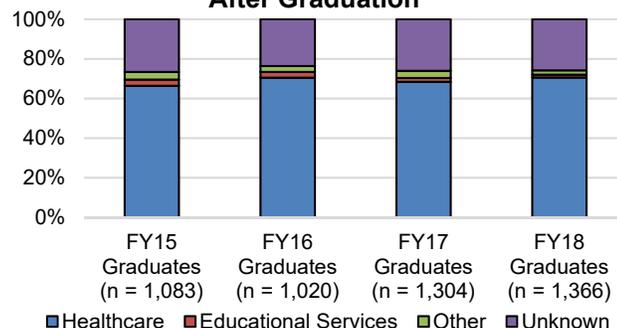
Over 65 percent of each of the nursing graduating cohorts from New Mexico's public colleges and universities between FY15 and FY18 were employed in the New Mexico healthcare sector within one year after graduation. Around a quarter of each cohort either left New Mexico, were not employed, or worked for a federal or military employer.[19]

However, national data suggests New Mexico can improve in-state retention of nurses. In the most recent National Sample Survey of Registered Nurses (NSSRN) from 2018, 731 actively licensed nurses who responded said that they completed their RN education in New Mexico.[20] Of these, 92 percent were first licensed in New Mexico, but just 75 percent reported that they practiced in the state at the time of the survey. Additionally, a lower percentage of nurses in New Mexico responded that they practice in the same state where they completed their RN program compared with the nation as a whole. Sixty percent of all respondents nationwide reported practicing in the state where they received their RN credential, compared with 52 percent of respondents in New Mexico. This may be an indicator of poor retention or that homegrown programs in New Mexico are not meeting the demand for nurses in the state.

Transition-to-practice (TTP) programs such as nurse residencies can improve retention of new RNs, but are not as effective in nonhospital settings. In New Mexico, various organizations and healthcare providers have instituted or attempted nurse residency programs with varying degrees of success and permanence. These programs are designed to provide newly graduated nurses, usually RNs, with skill building and clinical experience in a variety of disciplines as they transition from the academic environment to real-world practice. In addition to pairing new graduates with experienced staff nurses (preceptors) and rotations through different specialties, programs also include continuing instruction on skills such as clinical decision-making, incorporating research into nursing practice, and other competencies.
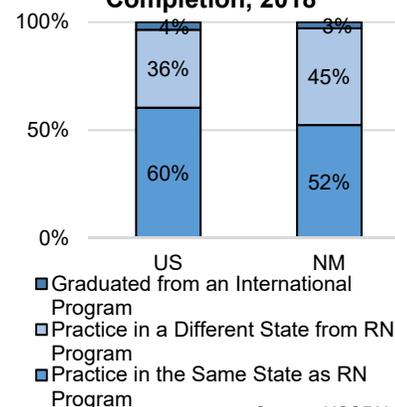
Currently, there are three nurse residency programs in New Mexico accredited by either the American Association of Colleges of Nursing (AACN) or Commission on Collegiate Nursing Education (CCNE). San Juan Regional Medical Center in Farmington is the only one outside the Albuquerque metropolitan region, with the other two being University of New Mexico Hospital (UNMH) and UNM Sandoval Regional Medical Center. UNMH's

Chart 18. Employment Sector of New Mexico Nursing Graduates One Year After Graduation

Source: LFC analysis of HED-DWS data.

Chart 19. Percent of Nurses Practicing in the State of RN Program Completion, 2018

Source: NSSRN

Table 4. Accredited Nurse Residency Programs in New Mexico

Hospital	Location
UNM Hospital	Albuquerque
UNM Sandoval Regional Medical Center	Rio Rancho
San Juan Regional Medical Center	Farmington

Source: AACN, CCNE

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[19] Unemployment insurance data for federal and military employees were not available from the state DWS because of federal compensation for federal and military employees.

[20] The NSSRN is conducted periodically by the National Center for Health Workforce Analysis, a federal agency within the Health Resources and Services Administration (HRSA). The most recent survey was in 2018. Data cited in this analysis is unweighted and based on raw response totals only.

Chart 20. UNMH Nurse Residency Program Retention Rates

```
100%
 80%
 60%
 40%
 20%
  0%
        Average 1-Year    Average 3-Year
         Retention          Retention
        (2013-2017)        (2012-2016)
```

Source: UNM HSC

RN residency program covers the first year of employment for new graduates, retaining 92 percent of participants after one year and 69 percent after three years, on average.

Presbyterian Health Services also offers nurse residencies focusing on different specialties, and in October 2019, partnered with the UNM College of Nursing to administer a $3.2 million federal grant from HRSA for the establishment of a new rural nurse practitioner residency program. Under this arrangement, UNM nurse practitioner graduates will spend their first year of practice in one of Presbyterian's rural clinics. The New Mexico Center for Nursing Excellence formerly coordinated a rural nurse residency program, but this program ended in 2014 when the federal grant that funded these residencies expired.

Reviews of different nurse residency programs have found them to result in reduced turnover, increased skill confidence, cost savings, and improved quality of care and patient safety.[21] TTP implementation in nonhospital settings, including nursing homes, public health, and home health settings, has been less successful, with research finding that new graduates did not complete the training, the preceptors did not have adequate time to connect with the nurses, and TTP programs must be tailored to the facility where they will be used.[22]

It is impossible to know whether New Mexico's participation in the Nurse Licensure Compact results in a net gain or loss of nurses. New Mexico is part of the Enhanced Nursing Licensure Compact (eNLC), with 32 other states, allowing eligible nurses to obtain multistate licensure across participating states. Under the eNLC, nurses who reside in member states only have to obtain a multistate license from their home state, and do not have to register in any other Compact state. Because of this, no centralized database exists that can show how many nurses working in New Mexico hold licenses from other Compact states. Put another way, it is impossible to know if New Mexico's nursing workforce has gained nurses as a result of the compact, or if more nurses have left to work in other compact states while maintaining a New Mexico license.

At least one compact member state, Louisiana, requires its Board of Nursing to create a voluntary reporting system for employers to report the geographic representation of nurses with multistate licenses and for nurses to voluntarily report their own employment.[23]

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[21] Goode, C.J. et al. (2018). Requiring a nurse residency for newly licensed registered nurses. *Nursing Outlook 66*, 329-332.
[22] Spector, N. et al. (2015). Transition to practice in nonhospital settings. *Journal of Nursing Regulation 6(1)*, 4-13.
[23] LA R.S. 37:1020.

Recommendations

The Legislature should consider
- Amending Chapter 24, Article 14C NMSA 1978 to require the Healthcare Workforce Committee to work with the Department of Workforce Solutions to leverage demand-side data, such as vacat positions, to enhance knowledge of the true need for nurses and other healthcare professionals.

The Health Care Workforce Committee should
- Reassess its benchmark for nurses to encompass additional factors beyond per-capita employment rates, including provider demand and population health characteristics.

The Higher Education Department should
- Leverage data matches with the Department of Workforce Solutions to regularly analyze in-state workforce retention of New Mexico-educated nurses and share this analysis with HEI nursing programs, the Healthcare Workforce Committee, and the Board of Nursing.

The Higher Education Department and higher education institutions should
- Work with the Legislative Finance Committee and the Department of Finance and Administration to develop performance metrics tied to nurse expansion appropriations that measure in-state and regional retention of nursing graduates, including for advanced practice nurses in federally designated provider shortage areas.

The Board of Nursing should
- Consider promulgating a rule creating a data system for employers to voluntarily report the employment of nurses whose primary residence and state of licensure is outside New Mexico.

NEW MEXICO BOARD OF NURSING

Governor Michelle Lujan Grisham
Jonathan Palmer, MSN, APRN, FNP, Board Chair
Sasha N. Poole, PhD, RN, Executive Director

Mission: Protect the public safety through effective regulation of nursing care and services.

The Honorable
John Arthur Smith
New Mexico Senate
325 Don Gaspar
Suite 101
Santa Fe, NM 87501

Dear Senator Smith:

The New Mexico Board of Nursing would like to thank you for the opportunity to participate in the program review of nursing expansion and workforce. In general, agency staff agree with the findings of the program evaluation report and the recommendations addressed to the Board of Nursing.

The statutory charge given to the Board of Nursing is to "promote, preserve and protect the public health, safety, and welfare by regulating the practice of nursing, schools of nursing, hemodialysis technicians and medication aides in the state" (61-3-2 NMSA 1978). The statutory authority in the Nursing Practice Act [NPA] is limited to pre-licensure nursing programs only. These are programs designed to prepare a graduate to sit for the NCLEX-PN© or NCLEX-RN© and licensure as a licensed practical nurse or registered nurse. There is no statutory authority over RN to BSN/MSN programs or programs designed to prepare a graduate for licensure as an advance practice registered nurse.

When discussing the discipline of nursing, the public and other healthcare professionals are often confused about the various levels and educational requirements for nurses. Please refer to attachment A for a full description. Another item related to nursing education is the completion of a RN-to-BSN or RN-to-MSN program does not result in an additional RN. That graduate was already a licensed RN trained at the diploma or ADN level who returned to school to earn a BSN or MSN. Although the MSN may prepare the graduate for an APRN role, which could result in a new APRN but not a new RN.

REPORT RECOMMENDATIONS
The Board of Nursing could raise additional funds for nursing financial aid and initiatives. Agency staff agrees that additional funds could be designated as the Nurse Excellence Fund surcharge. Due to a law passed (Laws 2017, Chapter 91, Senate Bill 333) a $2 increase nets the Nurse Excellence Fund only $1 as the other $1 must go to the New Mexico Higher Education Department for its APRN loan repayment program. The long-term impact of this recommendation is unknown.

The Board of Nursing should work with pre-licensure nursing programs, as part of the annual data collection process, to develop standardized measures to do the following:
- **Quantify and track the number and availability of clinical placements and identify providers with which nursing programs have clinical placement agreements, and**
- **Quantify and track academic preparedness of admitted and denied nursing students.**

Agency staff agrees with this recommendation. Over the last three years, the Director of Education & Practice has worked to make the nursing programs' annual reports a more meaningful tool to evaluate

compliance with rules promulgated by the Board of Nursing. The newly requested self-reported information may allow for the identification of trends to guide policy in the future.

The Board of Nursing should consider promulgating a rule creating a data system for employers to voluntarily report the employment of nurses whose primary residence and state of licensure is outside New Mexico.
Agency staff is amenable to this recommendation although a voluntary rule does is not enforceable. An amendment to the NPA mandating employer reporting may result in more compliance. An available platform, Nursys e-Notify for institutions (see https://www.nursys.com/EN/ENAbout.aspx?KEY=I), allows the Board of Nursing to see the number and state of licensure of nurses employed by an institution with a Compact license from another state. This would be at no cost to the employer and provides additional benefits to the employer. Alternatively, the agency could develop a reporting tool on the Board of Nursing website to allow employers to report directly to the agency.

A Board of Nursing pilot to waive fees for first-time applicants may be better directed toward preceptors instead.
While finding *high-quality* nurse preceptors for pre-licensure nursing students can be difficult at times, it is important to understand that not all nursing programs use preceptors. And preceptors are not used at all levels of pre-licensure nursing education. Generally, preceptorships are completed towards the end of the nursing program when students are transitioning from the role of student to that of graduate nurse.

The current Board of Nursing rules regarding preceptors used in pre-licensure nursing programs are rather easy to meet. Before a plan to provide renewal waivers for preceptors of pre-licensure students is implemented, a more stringent set of rules must be promulgated to make sure that individuals are qualified to serve in the role of preceptor as there is a concern that individuals without the experience or temperament to serve as a preceptor will want to do so to simply to receive a free renewal. Additionally, agency staff does not think that any fee waiver should extend to preceptors used in programs not regulated by the Board of Nursing.

ADDITIONAL REPORT FINDINGS
Clinical experiences are a vital part of nursing education. Meaningful clinical experiences, where students are allowed to do more than simply observe the actions of the nurses, provide students the opportunity to develop critical thinking skills. Clinical placement for nursing (pre-licensure, post-licensure, and APRN) students will continue to be a struggle until the healthcare industry begins to value nurses as much as physicians are valued.
Agency staff is supportive of a centralized clinical placement system. The infrastructure needed to create a system does not currently exist nor does the agency have authority to allocate clinical placements. In addition, the agency does not have authority over clinical facilities.

Related to the attrition of nursing students, agency staff is considering recommendations to the Board of Nursing that would eliminate practices in pre-licensure nursing programs with the goal of shifting the burden of program outcomes away from the students and return them to the program itself.

I look forward to working towards the recommendations outlined in the program evaluation.

Respectfully,

Sasha N. Poole, PhD, RN
Executive Director,
New Mexico Board of Nursing

http://nmbon.sks.com/

Attachment A

There are three levels of nurses in the United States.

- Licensed Practical Nurse (LPN; called licensed vocational nurse, LVN, in other states): Requires approximately 15 months of full-time education resulting in an earned certificate or diploma. Must pass the NCLEX-PN© as a condition of licensure.
- Registered Nurse (RN): Four educational pathways available. Must pass the NCLEX-RN© as a condition of licensure.
    - *Diploma program*- A three-year program resulting in an earned diploma. Most common in states such as Virginia, Pennsylvania, and New York.
    - *Associate Degree in Nursing* (ADN): A two-year program resulting in an earned ADN.
    - *Bachelor of Science in Nursing* (BSN): A four-year program resulting in an earned BSN.
    - *Master of Science in Nursing* (MSN): Generally, an option for individuals already holding a bachelor's degree in another field. A two-year master's entry into nursing profession/practice (MEPN) program resulting in an earned MSN.
- Advanced Practice Registered Nurse (APRN): Educational preparation must be at the graduate level with the trend of terminal degrees. Must pass a board certification exam for role and population foci as a condition of licensure. The four APRN roles are *Certified Nurse Midwife* (CNM; regulated by the New Mexico Department of Health), *Certified Nurse Practitioner* (CNP), *Certified Registered Nurse Anesthetist* (CRNA), *Clinical Nurse Specialist* (CNS).

NEW MEXICO HIGHER EDUCATION DEPARTMENT

MICHELLE LUJAN GRISHAM
GOVERNOR

Dear Chairman Smith and Director Abbey,

The Department first wants to recognize the admirable work of the Legislative Finance Committee staff and our appreciation for the collaborative efforts working with Higher Education Department (HED) staff in generating this report. We appreciate the opportunity to respond with the Department's perspective on the recommendations contained within this report.

Student success is the primary lens through which all HED's work is focused, and our comments are based on that focus. The Department is well aware that student preparedness, persistence, and completion are key to improving New Mexicans' health outcomes through higher education's preparation of the nursing workforce. The problems of preparation, recruitment, and retention are not limited to health care and are broadly experienced in all of New Mexico's academic and workforce needs. HED remains committed to improving student outcomes through its work in incentivizing student outcomes in the funding formula; continued refinement of a common course numbering system; cross-institutional efficiencies, and other initiatives. We have reviewed the report in its entirety and are enthusiastic about opportunities to partner with other entities in responding to recommendations – our responses are limited to those within the immediate purview of the Department's activities.

HED Responses to Agency-Specific Recommendations:

Expanding Targeted Financial Aid for Nursing
New Mexico's Nursing Loan for Service, Nurse Educator Loan for Service, and Health Professional Loan Repayment Programs have been extremely successful in supporting students and professionals as they train, enter, and practice in the workforce. While it is true that post-degree loan repayment programs require less administration, and have higher service completion rates, loan-for-service programs remain an important component of supporting students to degree completion, especially for low income and rural students. With the rare exception of the Nurse Educator Loan for Service program, demand for New Mexico's nursing and other healthcare financial aid programs have always exceeded available appropriations. While the Department welcomes additional nursing appropriations, we caution that additional funding should be carefully balanced with other priorities in the state budget without reducing other critical student financial aid programs.

Modify administrative rules for Instruction and General (I&G)-related Research and Public Service Projects (RPSPs)
As the report correctly notes, there are numerous RPSP lines within the General Appropriation Act (GAA) that may be better incorporated into the Instruction and General line appropriations to HEIs – this category is not limited to Nurse Expansion RPSPs. While this would simplify comprehensive funding recommendations, and allow institutions more flexibility in how those funds are spent, it removes the incentive for institutions to develop meaningful RPSP performance measures and for HED to review projects for their programmatic and budgetary impact to the state. This could be alleviated by a stronger involvement of entities such as the Healthcare Workforce Committee (HCWC) and the New Mexico Nursing Education Consortium (NMNEC) as data-sharing partners in evaluating statewide needs and impacts. HED recommends that any changes to the RPSP submission process, and review of projects as candidates for incorporation into I&G appropriations, be examined carefully

with ample opportunity for stakeholder input. Moreover, the process should be comprehensive across all I&G related projects and institutions and not limited to any one particular set of programs.

Leverage data matches with the Department of Workforce Solutions
HED concurs with this recommendation and is already actively enhancing its data-matching abilities with DWS to identify workforce outcomes for not only nursing but in other high-need and/or high-demand areas. Collaborative analysis and sharing of mutually-gathered data will assist the Department and other stakeholders in identifying specific gaps – geographically, programmatic, and otherwise – and assist the Department and its partners in targeting its activities to those areas most in need. The appropriation recently received by HED for Statewide Longitudinal Data System (SLDS) development will considerably accelerate these efforts.

Development of performance metrics tying appropriations to in-state and regional retention
HED recognizes the importance of useful quantitative and qualitative performance measures for all recipients of state appropriations. These measures should be meaningful and within the immediate control of the agency or institution responsible. Nurse Expansion and/or other RPSPs that are incorporated into the I&G lines of the state budget could require additional performance measures within the framework of the General Appropriation Act.

The problem of placement and retention of qualified health practitioners in rural and/or underserved areas remains a challenge. HED welcomes the opportunities for new data sharing agreements and partnerships to address this challenge and accomplish the goals of a healthier New Mexico through measurable and attainable goals set for every stakeholder.

****

In conclusion, HED again thanks the Legislative Finance Committee staff for the opportunity to collaborate and comment on the recommendations of this report. The state's efforts in expanding the nursing workforce have been successful in no small part due to the support of the Legislature and its collaborative efforts with all of the dedicated advocates and professionals who contributed to this report. We recognize that the time has come to re-examine and revise our efforts in the interest of enhanced nursing workforce development and placement, increased efficiencies, and broader positive health impacts. Enacting some of these changes may be technically and perhaps politically challenging and will require care and time in development. We look forward to our continued collaboration in developing a deliberative process that is not only best for the health and well-being of the people of New Mexico, but also serves as a model to the rest of the nation.

Appendix A: Evaluation Scope and Methodology

Evaluation Objectives.
- Assess the effectiveness of nurse expansion appropriations on degree production, employment, and retention
- Assess whether New Mexico's nurse education and training programs is aligned to the needs of the healthcare system

Scope and Methodology.
- Reviewed applicable laws and regulations, including the Nurse Practice Act, and LFC file documents
- Analyzed data from and reported by the Board of Nursing, Higher Education Department, Healthcare Workforce Committee, and higher education institution nursing programs
- Interviewed, surveyed, or gathered information from staff of relevant agencies, institutions, and other organizations, including
  - The Board of Nursing, HED, nursing education programs, NM Nursing Education Consortium, NM Healthcare Workforce Committee, and the Department of Workforce Solutions
  - New Mexico Nurses Association, New Mexico Nurse Practitioners Association, New Mexico Center for Nursing Excellence, New Mexico Hospital Association, New Mexico Primary Care Association, and New Mexico Health Resources
- Reviewed relevant performance measures, administrative data, and related documents
- Researched evaluation reports from other states and national groups as well as academic literature

Evaluation Team.
Brian Hoffmeister, Lead Program Evaluator
Clayton Lobaugh, Program Evaluator
Catherine Dry, Program Evaluator

Authority for Evaluation. LFC is authorized under the provisions of Section 2-5-3 NMSA 1978 to examine laws governing the finances and operations of departments, agencies, and institutions of New Mexico and all of its political subdivisions; the effects of laws on the proper functioning of these governmental units; and the policies and costs. LFC is also authorized to make recommendations for change to the Legislature. In furtherance of its statutory responsibility, LFC may conduct inquiries into specific transactions affecting the operating policies and cost of governmental units and their compliance with state laws.

Exit Conferences. The contents of this report were discussed with Board of Nursing staff on June 30, 2020 and Higher Education Department staff on July 1, 2020.

Report Distribution. This report is intended for the information of the Office of the Governor, Department of Finance and Administration, Office of the State Auditor, and the Legislative Finance Committee. This restriction is not intended to limit distribution of this report, which is a matter of public record.

Jon Courtney
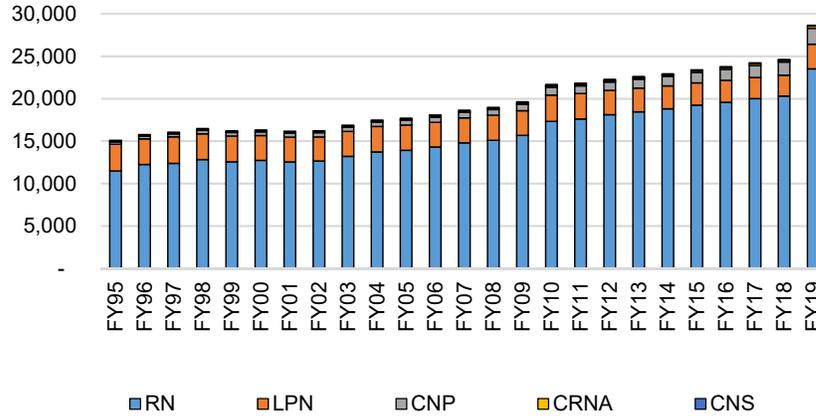Deputy Director for Program Evaluation

Appendix B. Active Nurse License Trend

**Chart X. New Mexico Residents
with Active Nursing Licenses, FY95-FY19**

Notes: Nurses with active licenses include retired or unemployed nurses.
Advanced practice nurses with CNP, CRNA, and CNS licenses
must also have RN licenses, but are only counted once in this chart
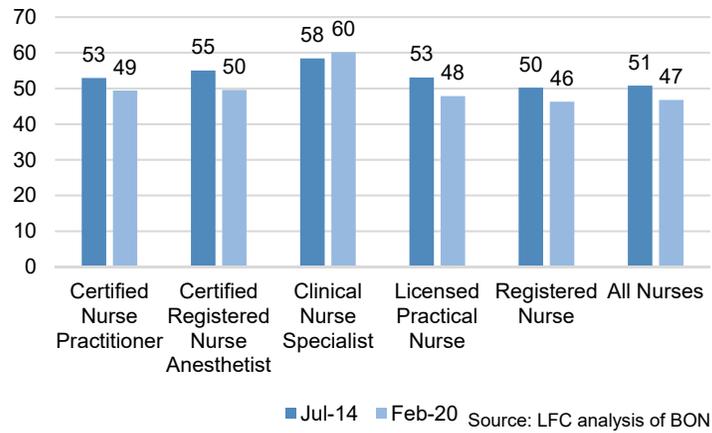Source: LFC analysis of Board of Nursing data.

Appendix C. Recommendations of the Future of Nursing Report

Figure X. Recommendations from the National Academy of Medicine's 2011 *Future of Nursing* Report

1. Remove scope-of practice barriers for advanced practice registered nurses;
2. Expand opportunities for nurses to lead;
3. Implement nurse residency programs;
4. Increase the proportion of nurses with a baccalaureate degree to 80 percent by 2020;
5. Double the number of nurses with a doctorate by 2020;
6. Ensure that nurses engage in lifelong learning;
7. Prepare and enable nurses to lead change to advance health;
8. Build an infrastructure for the collection and analysis of interprofessional healthcare workforce data

Source: IOM (2011) Future of Nursing: Leading Change, Advancing Health.
Note: The National Academy of Medicine was formerly the Institute of Medicine.

Chart xx. Average Age of Actively Licensed Nurses Working as a Nurse in New Mexico, July 2014 and February 2020

■ Jul-14 ■ Feb-20 Source: LFC analysis of BON

Appendix E. Map of Nurse Practitioner Practice Authority by State and Territory

Figure X. Nurse Practitioner Scope of Practice Authority by State in 2020

- Full Practice
- Reduced Practice
- Restricted Practice

Source: American Association of Nurse Practitioners

Appendix F. List of Board of Nursing Approved Pre-Licensure Programs

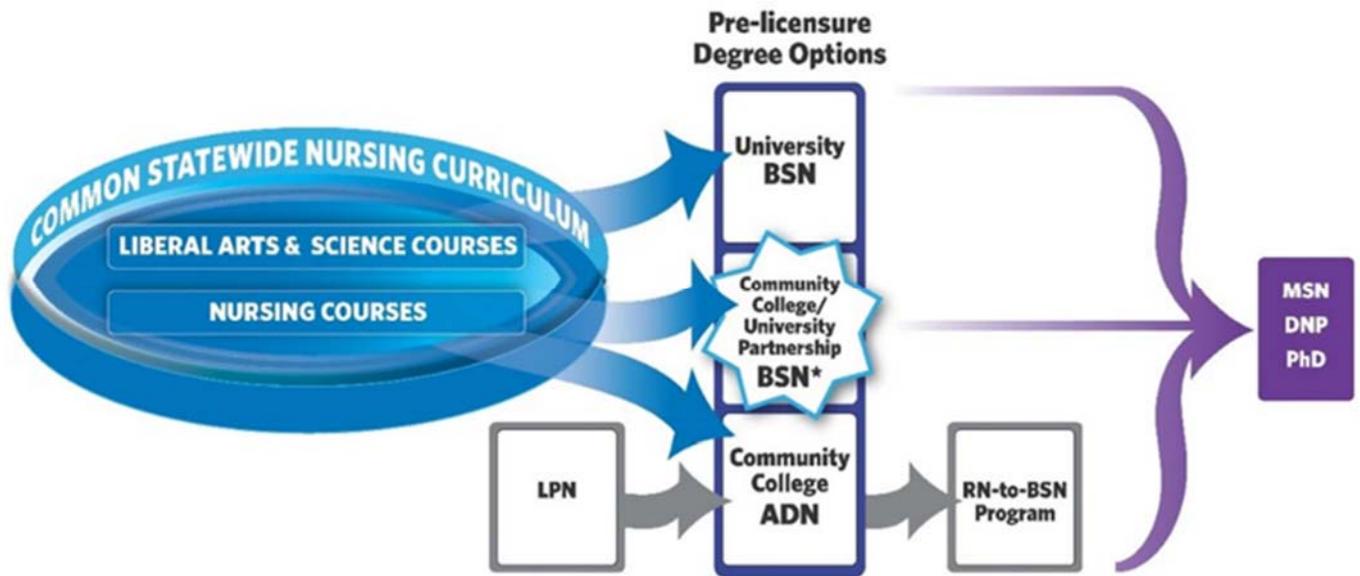**Table x. Board of Nursing Approved Pre-Licensure Programs and First-Time Licensure Pass Rates**

Level	Institution	Public/Private	2018 NCLEX First-Time Pass Rate
Practical Nurse Programs (Certificates Only)	Albuquerque Public Schools Career Enrichment Center	Public	86.2%
	Vista College Computer Career Center	Private	93.3%
	Pima Medical Institute	Private	66.7%
Career Ladder (1-Year Practical Nurse Certificate/2-Year Associate Degree)	Clovis Community College	Public	90.0%
	New Mexico State University - Carlsbad	Public	100.0%
	New Mexico State University - Doña Ana	Public	95.0%
	Northern New Mexico College	Public	67.0%
Associate Degree	Carrington College	Private	91.3%
	Central New Mexico Community College	Public	88.5%
	Eastern New Mexico University - Roswell	Public	95.8%
	Luna Community College	Public	95.4%
	New Mexico Junior College	Public	85.7%
	San Juan College	Public	91.3%
	Santa Fe Community College	Public	71.4%
	University of New Mexico - Gallup	Public	85.2%
	University of New Mexico - Taos	Public	100%
	University of New Mexico - Valencia	Public	100%
Bachelor's Degree	Brookline College	Private	76.0%
	New Mexico State University	Public	79.6%
	University of New Mexico	Public	94.5%
	Western New Mexico University	Public	83.3%

Source: BON information and data.

Note: Prelicensure nursing programs face additional scrutiny, warning, or possible closure if NCLEX pass rates are less than 80 percent for multiple years. Over the past five years, nine programs have been placed on warning due to low NCLEX pass rates. Northern New Mexico College is currently under warning, but has submitted an approved corrective action plan to the BON.

Appendix G. NMNEC Curriculum Pathway

**Figure X. New Mexico Nursing Education Curriculum (NMNEC)
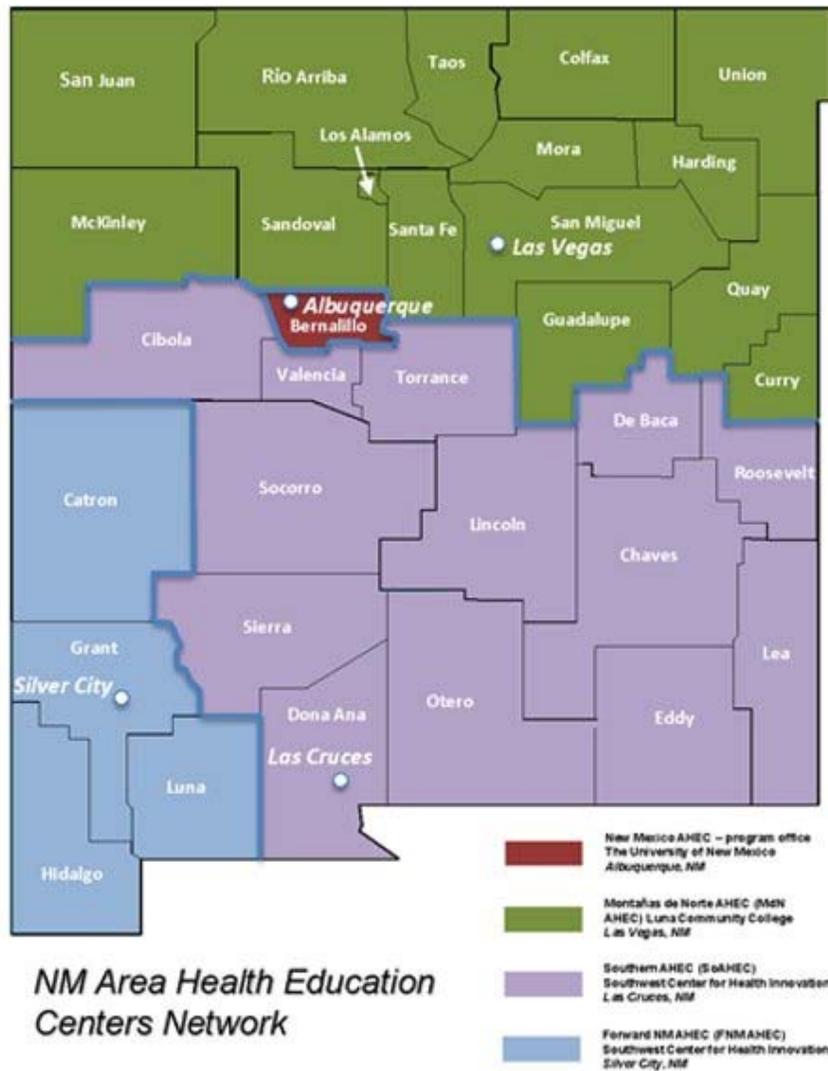Common Nursing Curriculum (in Blue)**

Source: NMNEC

Appendix H. Preceptor tax credits in other states

Table X. Comparison of State Preceptor Tax Credit Programs

State	Max Credit Per Preceptor Per Year	Total Amount State Will Award in a Taxable Year	Year Enacted
Colorado	$1,000	$200,000	2016
Georgia	$6,375 (for APRN)	Unspecified	2019 (deduction converted into a credit)
Hawaii	$5,000	$1,500,000	2018
Maryland	$10,000, with a min. of $3,000	$100,000	2016

Source: LFC analysis of state programs

Appendix I: Map of New Mexico AHECs

NM Area Health Education Centers Network

Source: New Mexico AHEC Program Office

Appendix J. School Districts and Charter Schools Participating in AHEC Pipeline Activities

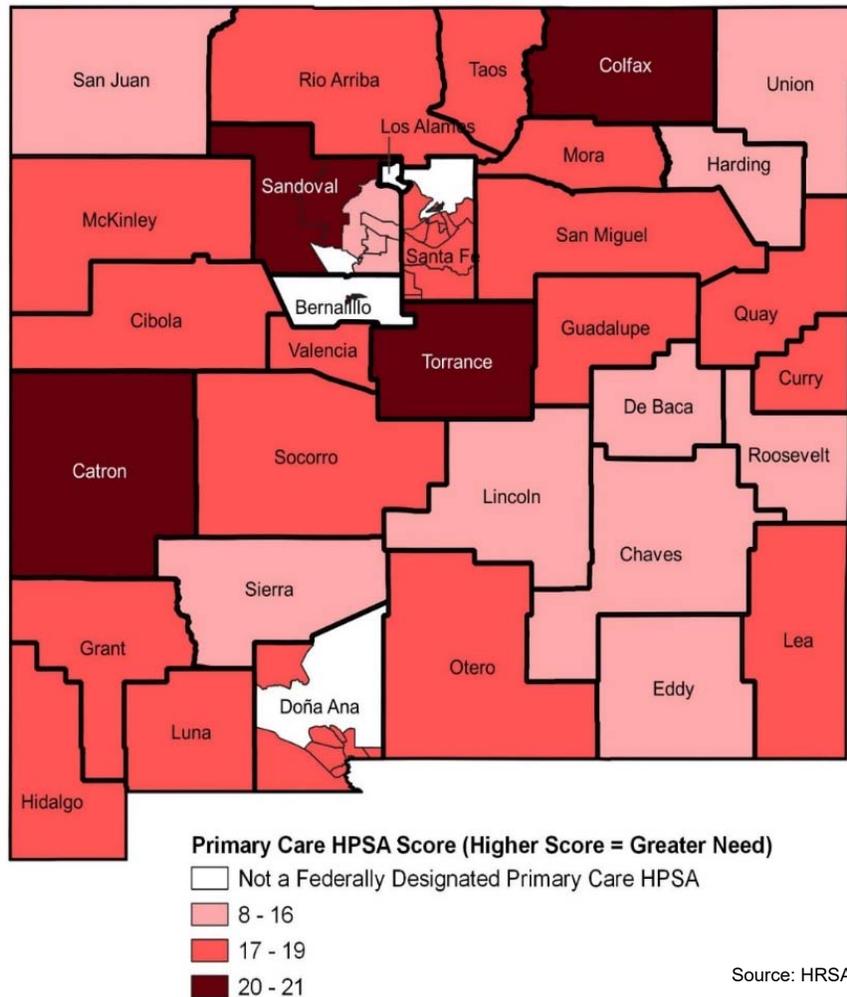**Table X. Public School Districts and Charter Schools Participating in AHEC Pipeline Activities**

Aldo Leopold Charter
Animas Public Schools
Carlsbad Municipal Schools
Cobre Consolidated Schools
Deming Public School
Espanola Public Schools
Grants - Cibola County Schools
Gadsden Independent School
Las Cruces Public Schools
Las Vegas City Public Schools
Lordsburg Municipal Schools
New America School-Las Cruces
Penasco Independent Schools
Quemado Independent Schools
Reserve Public School
Silver Consolidated Schools
Socorro Consolidated School
Springer Municipal Schools
Taos Municipal Schools
West Las Vegas Public Schools

Source: AHEC Program Office

Appendix K. Map of Federally Designated Primary Care Health Practitioner Shortage Areas
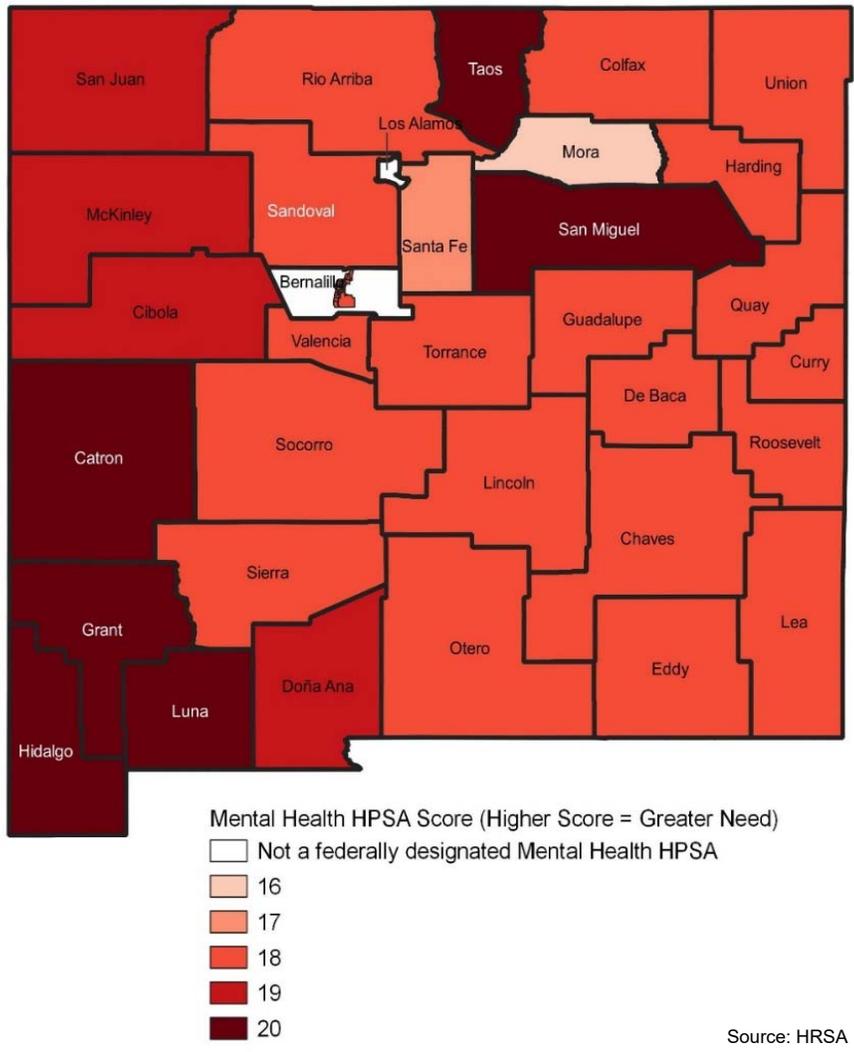
Figure xx. Federally Designated Primary Care Health Professional Shortage Areas in New Mexico

HPSA scores reflect one measure of the need for personnel in an area, taking into account factors such as provider-to-population ratio, poverty rates, infant health index, and travel time to the nearest source of care. Higher scores indicate greater need.
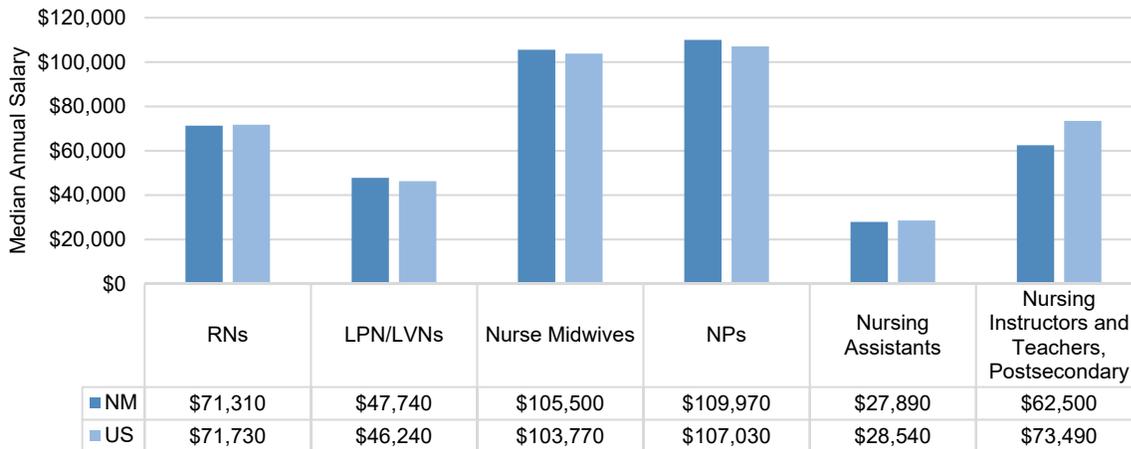
Appendix L. Map of Federally Designated Mental Health Practitioner Shortage Areas

Figure xx. Mental Health Professional Shortage Areas in New Mexico by Score

Mental Health HPSA Score (Higher Score = Greater Need)

☐ Not a federally designated Mental Health HPSA
☐ 16
☐ 17
☐ 18
☐ 19
☐ 20

Source: HRSA

Chart xx. Median Nursing Salaries in New Mexico and the U.S., 2018

	RNs	LPN/LVNs	Nurse Midwives	NPs	Nursing Assistants	Nursing Instructors and Teachers, Postsecondary
NM	$71,310	$47,740	$105,500	$109,970	$27,890	$62,500
US	$71,730	$46,240	$103,770	$107,030	$28,540	$73,490

Note: Nurse anesthetist data unavailable for New Mexico; national median salary is $167,950.

Chart xx. Median Annual Salary of Nursing Professions by New Mexico Metropolitan Area, 2018

	RNs	LPNs/LVNs	NPs	Nursing Assistants
Albuquerque	$74,310	$48,120	$111,720	$29,910
Farmington	$68,770	$53,500	$96,670	$27,970
Las Cruces	$67,080	$46,760	$121,640	$24,180
Santa Fe	$70,530	$39,000	$84,790	$31,390
Eastern New Mexico nonmetropolitan area	$66,140	$50,680	$114,360	$26,230
Northern New Mexico nonmetropolitan area	$65,730	$43,950	$107,030	$28,030

Source: Bureau of Labor Statistics