

Vision 2020 Measures University of New Mexico's Success by Health of Its State

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The University of New Mexico Health Sciences Center (UNMHSC) adopted a new Vision to work with community partners to help New Mexico make more progress in health and health equity than any other state by 2020. UNMHSC recognized it would be more successful in meeting communities' health priorities if it better aligned its own educational, research, and clinical missions with their needs. National measures that compare states on the basis of health determinants and outcomes were adopted in 2013 as part of Vision 2020 target measures for gauging progress toward improved health and health care in New Mexico. The Vision focused the institution's resources on strengthening community capacity and responding to community priorities via pipeline education, workforce development programs, community-driven and community-focused research, and community-based clinical service innovations, such as telehealth and "health extension." Initiatives with the greatest impact often cut across institutional silos in colleges, departments, and programs, yielding measurable community health benefits. Community leaders also facilitated collaboration by enlisting University of New Mexico educational and clinical resources to better respond to their local priorities. Early progress in New Mexico's health outcomes measures and state health ranking is a promising sign of movement toward Vision 2020.

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The leadership of the University of New Mexico Health Sciences Center (UNMHSC) decided in 2009 to unite the center's component parts around a common purpose of high value to the state. The resulting concept, "Vision 2020," states:

The University of New Mexico Health Sciences Center will work with community partners to help New Mexico make more progress in health and health equity than any other state by 2020.

University of New Mexico is New Mexico's flagship university, located in the largest city of an ethnically diverse, minority–majority rural state with some of the nation's worst health outcomes and socioeconomic risk factors. The burden of adverse social determinants in New Mexico is captured in the Annie E. Casey Foundation's *2013 Kids Count Data Book*, which ranks it last

among all states in child well-being.¹ UNMHSC is the state's only academic health center, home to the only Level I Trauma Center, and the leading center for treating complex diseases. Although many programs and faculty have long worked to improve the state's health outcomes, UNMHSC's missions—education, clinical service, and research—lacked coordination and tended to be confined within silos, with little coordination or alignment. The size and specialties of its graduate education programs more reflected departmental and teaching hospital service priorities than New Mexico's health workforce needs.

Background

Vision 2020 arose from a series of serious criticisms of UNMHSC that were expressed by rural and urban communities, as well as a concern within the institution about how it would respond to a changing healthcare environment. For example, many rural legislators felt that their state's sole public academic health center was not sufficiently responsive to their communities' concerns. This perception was underscored by a 2009 survey of residents around the state to learn how the HSC was perceived and how well it was addressing community

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needs. The responses were generally positive and instructive, but there were some recurrent criticisms:

- UNM is often characterized in rural New Mexico as “the University of Albuquerque.”
- UNMHSC comes to a community with a grant and disappears when the grant goes away, exhibiting no long-term commitment.
- UNMHSC seldom responds to communities’ priorities, wisdom, or leadership.
- UNM’s reputation for working with communities does not compare well with that of New Mexico State University, the land-grant university in southern New Mexico that oversees a very popular and effective agricultural cooperative extension service.

In adopting Vision 2020, UNMHSC committed itself to being more directly accountable to New Mexico communities and to aligning the center’s service, education, and research missions with the health and well being of the state’s residents. Vision 2020 unified existing programs toward a common goal, and encouraged the pursuit of new innovations. UNMHSC also relied on strong community partners, whose examples and counsel helped inform Vision 2020’s community engagement. The launch of Vision 2020 in 2009 laid the foundation for the UNMHSC Strategic Plan and its associated outcome measures, which were initiated in 2013. System-wide integration under the banner of Vision 2020 has encouraged more collaboration and inter-professionalism. Now, the School of Medicine, College of Nursing, College of Pharmacy, and other units all contribute to meeting Vision 2020 goals, whether through clinical care, health prevention outreach, workforce programs, or biomedical discovery. Each strategic goal addresses UNMHSC’s role in improving health and health equity measures and addresses the unique function that academic health centers play as educational institutions, health systems, and engines for innovation.

Linking Vision and Goals Through Measures of Success

To link Vision 2020 to strategic goals, UNMHSC adopted a set of measures in 2013 that track both improvement in health and healthcare delivery, as well as national rankings that reflect UNMHSC’s impact on social determinants of health (Table 1). These measures align with key determinants and disparity measures in the USDHHS’s *Healthy People 2020* initiative.² This balance of metrics has enabled the development of programs that bolster UNMHSC’s healthcare network and improve community health. Here we describe initiatives to

improve healthcare delivery, impact social determinants of health, and support research initiatives.

National measures of health factors and outcomes from America’s Health Rankings offer a standardized comparison of data between states and counties³ and provide concrete indicators of health and social determinants of health to assess priorities and the impact of UNMHSC’s programs (Table 2). The institution’s leaders were initially concerned that for many measures, such as high school graduation rate or lack of health insurance, UNMHSC might be held accountable for outcomes for which it exerted little control. However, committing to these metrics obliged the institution to expand innovative programs like UNMHSC’s pipelines to health careers, which have been shown to improve high school graduation rates, while building important partnerships with communities and other stakeholders.⁴ Similarly, the rollout of the federal Patient Protection and Affordable Care Act (PPACA) led the New Mexico Health Insurance Exchange to contract with UNMHSC and its partners to inform rural and college-age residents about the value of health insurance enrollment.

University of New Mexico Health Sciences Center also began producing annual health report cards for each of the state’s 33 counties.⁵ These report cards include demographic information, local provider organizations, mortality data, and existing workforce numbers, while tracking UNMHSC’s contributions to each county in education, services, and research. They provide a detailed picture of UNMHSC’s involvement in health-related activities at a local level (e.g., the number of patients and hours spent for specialized clinics and telehealth, educational outreach, residency programs, and research). The county health report cards, which are freely available on UNMHSC’s website, also help to disseminate vital information about the health of New Mexico’s residents and Vision 2020–related initiatives.

Opportunities, Interventions, and Outcomes

Health Extension Rural Offices and Hubs

Prior to Vision 2020, UNMHSC had created Health Extension Rural Offices (HEROs), based on the familiar agricultural cooperative extension service model⁶ in which a land-grant university stations agents in each county to share its educational programs, technical assistance, and new discoveries with farmers and their families.

Health Extension Rural Office agents were hired to link their community’s health priorities with UNMHSC resources. As shown in Figure 1, HEROs serve in ten regions and ethnic populations—rural, urban, and

Table 1. Selected examples of UNMHSC strategic goals with measures and targets

Goal	Selected measures	Baseline measures FY 2013	Target for FY 2016	Target for FY 2018
Improve public health and health care	State rank	36	30	28
	Depression screening: percentage of patients ≥ 12 years old screened for clinical depression using an age-appropriate standardized tool and follow-up plan documented	Very low ^a	50	80
	Diabetes composite: percentage of patients 18 to 75 years of age with diabetes mellitus who had HbA1c less than 8.0% and greater than 9%	60/26	69/20	75/16
	Pediatric obesity: percentage of NM high school students who are obese	14	13	12
Build workforce	Reduce areas qualifying as health professional shortage areas (%)	46	43	41
Foster innovation and discovery	Continual development of NCI-Designated CC and CTSA	Have both CC and CTSA	Renewal of CC and CTSA	Renewal/ continual funding for CC and CTSA
	Increase technology transfer, as indicated by number of startups from HSC-developed technologies (FY 2016 and 2018 targets are cumulative)	2 in FY 2013	8	12
Nurture an environment of diversity	Increase the percentage of faculty and students from underrepresented minorities, to align with New Mexico demographics: 47.0% H; 2.4% A; 10.2% N ^b	Faculty Student H 12.0 H 33 A 1.6 A 1.9 N 1.7 N 4.7	Faculty Student H 15 H 3.6 A 1.8 A 2.2 N 1.8 N 5.8	Faculty Student H 17.0 H 40 A 2.0 A 2.4 N 2.0 N 7.0

^aData in this area was not previously tracked, although screening is expected to have been at a very low occurrence.

^bSource: U.S. Census Bureau: State and County QuickFacts (quickfacts.census.gov/qfd/states/35000.html); baseline and target numbers are within select health care professions.

A, African American; CC, Cancer Center; CTSA, Clinical and Translational Science Award; FY, fiscal year; H, Hispanic; HbA1c, glycosylated hemoglobin; N, Native American; NCI, National Cancer Institute; UNMHSC, University of New Mexico Health Sciences Center.

tribal—working with Federally Qualified Health Centers, nonprofits, and MCOs to train and supervise community health workers.⁷ HEROs tackle important community concerns, including those that are not strictly related to medical care, such as access to healthy foods, school retention, and economic development.

The HEROs network enabled UNMHSC to more quickly coordinate Vision 2020–related activities with community partners, and the program’s mission has expanded as a result. HERO agents now also coordinate “Academic Extension Hubs,” helping local health institutions, community colleges, service agencies, and civic

Table 2. Sample of three measures required to improve New Mexico’s state ranking

Determinant/outcome (from America’s health rankings)	2013 Value	NM’s rank	Value for no. 1 state	Target value for NM ^a	What this means
High school graduation (percent of incoming ninth graders)	67.3	48	91.4	69.9	Approximately 780 more students graduating ^b
Lack of health insurance (percent without health insurance)	20.7	48	3.8	19.2	Approximately 30,900 more people insured ^c
Primary care physicians (per 100,000 population)	113.5	27	196.1	117.9	Approximately 91 more primary care physicians ^c

^aValue of state ranked three levels above New Mexico’s rank in 2013.

^bCalculation based on 30,026 9th grade students, U.S. Department of Education.

^cCalculation based on 2,059,179; NM population in 2010, U.S. Census Bureau.

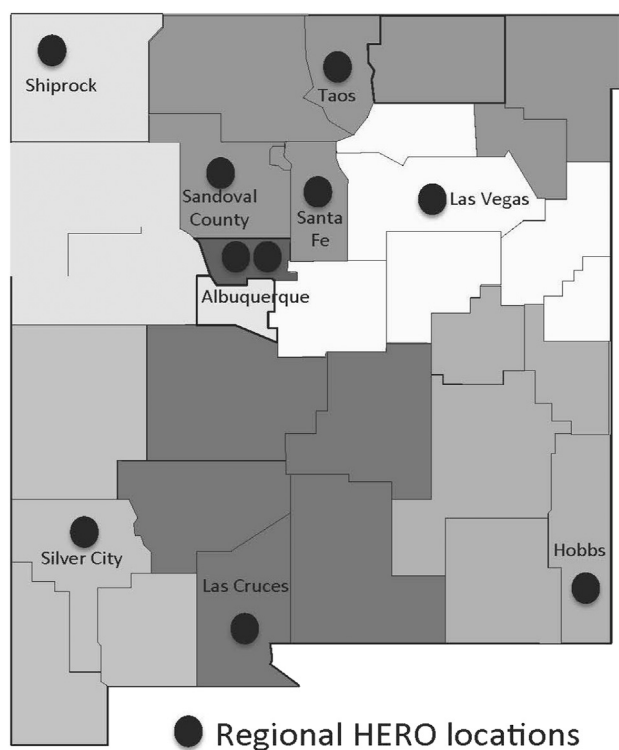


Figure 1. Location of Health Extension Rural Offices (HEROs) by region

organizations to access UNMHSC resources. Although the emphasis previously was on extending UNMHSC resources to communities across the state, HEROs now more actively assist UNMHSC in making clinical and educational innovations that improve access to care and health outcomes for those living in underserved areas. Federal and state policy makers have taken notice. Section 5405 of the PPACA, “Primary Care Extension Program,” was partly based on the UNM HERO model.⁸ Today, a national “Health Extension” movement has emerged in 18 states, with a shared online toolkit.⁹

Creating the Health Workforce Appropriate for New Mexico

The New Mexico Legislature created the Center for Health Workforce Analysis in 2012, moving all of the state’s health workforce data collection to the HSC.¹⁰ This database helps UNMHSC to identify unmet current and future health workforce needs, make recommendations to address these needs, and integrate these recommendations into the institution’s educational mission. The center provides data for an annual evaluation of UNMHSC’s progress in supplying an adequate health-care workforce (a key metric of Vision 2020), including an accurate count of the number of health practitioners in each county in different fields (Table 3).

Thirty-two of New Mexico’s 33 counties are classified as full or partial Health Professions Shortage Areas. Health workforce data show that for rural and tribal communities, “growing one’s own” health workforce helps to create culturally and linguistically competent health professionals who are more likely to return and practice in rural, tribal, and underserved urban communities. Diversity in New Mexico’s health workforce is essential to achieving Vision 2020’s goals.

The UNMHSC Office for Diversity offers a sequence of programs, from middle school through post-baccalaureate, to develop a diverse health workforce. This pipeline, collectively titled Hope, Enrichment, and Learning Transform Health in New Mexico (HEALTH NM), provides academic enrichment to students from communities traditionally under-represented in the health professions to help them gain interest in the field and the skills necessary to pursue a career in health care or the biomedical sciences.

The UNM College of Pharmacy has collaborated with other higher education institutions in New Mexico to implement pipeline programs for middle and high school students to create a pharmacy workforce that reflects the state’s demographics and rural healthcare needs. At the undergraduate and medical student level, the combined Bachelor of Arts/Doctor of Medicine program addresses physician shortages by educating diverse students from rural backgrounds, two of the factors that predict whether someone will practice in a rural community.¹¹

To improve rural access to care, UNMHSC’s Family Medicine Residency program grew from 36 to 76 residents, half of whom train in Albuquerque and half at three rural sites. Although 27% of UNM’s Albuquerque-based family medicine residents practice

Table 3. Sample of health professional shortages tracking, Lea County, New Mexico

Health profession	Estimated no. needed	No. licensed, residing in county	Provider gap
Physicians	108	60	48
Nurse practitioners	54	17	37
Physician assistants	54	6	48
Physical therapists	22	15	7
Dentists	39	7	32
Registered nurses	466	379	87

Source: New Mexico Center for Health Workforce Analysis, 2012.

in rural New Mexico after graduation, approximately 70% of graduates from the three rural programs currently practice in rural New Mexico.¹²

The UNMHSC College of Nursing addressed nursing shortages by leading the creation of the New Mexico Nursing Education Consortium, a statewide network of nursing education programs focused on providing an accessible, resource-efficient baccalaureate program. Students can seamlessly transfer across nursing programs, and nursing faculty share resources for teaching, curriculum oversight, and program evaluation.¹³ Meanwhile, the UNM School of Medicine implemented an innovative public health curriculum to prepare physicians for a greater role in population health. All medical students now must complete a 15-credit public health certificate, which is integrated into basic and clinical science experiences.¹⁴

Clinical Service Innovations Adapted to a Rural, Underserved State

Vision 2020 has driven several initiatives aimed at expanding traditional clinical roles to serve communities outside the clinic or hospital. Vision 2020 increased awareness and use of existing UNMHSC telehealth and web-based programs, which reduce health disparities by extending access and specialty care across a large, rural state. Examples include:

- The New Mexico Poison and Drug Information Center and the New Mexico Nurse Advice Line, the largest of UNM's telehealth programs. Available 24 hours a day, these programs play a vital public health role by reducing morbidity, mortality, and unnecessary emergency room visits, while collectively handling approximately 200,000 calls a year.¹⁵ They also coordinate their surveillance efforts and interventions to promote the safe use of medications and address New Mexico's very high rate of drug overdose deaths.
- The UNMHSC Center for Telehealth facilitates long-distance specialty care provided to patients in clinics and hospital across the state, including telestroke, telepsychiatry, and teledermatology services. This approach is also used to provide remote care of such patients as those with developmental disabilities, or acutely ill children in rural hospitals.
- Project Extension for Community Healthcare Outcomes (ECHO) educates primary care providers to manage complex chronic diseases using a nationally recognized telehealth model. UNM specialists discuss clinical cases with practitioners via a videoconferencing system, enhancing local providers' skills and reducing the need for patient referrals to the HSC in Albuquerque, which may be hundreds of miles from their home.¹⁶

Rural and urban inner-city health needs cannot be adequately addressed within the bounds of clinic walls, nor solely through provision of medical services. The "Health Commons" concept was developed by the UNMHSC Department of Family and Community Medicine with two partner Federally Qualified Health Centers—Hidalgo Medical Services and First Choice Community Health. These health commons address broad needs by inviting community and public health partners to collaborate in designing and providing services.¹⁷ Six Health Commons models in New Mexico share most of these features: (1) one-stop shopping for primary care, behavioral health, oral health, and case management; and (2) clinic–community links by integration of public health and community health workers into clinical settings.

Research Driven by Priority Questions from New Mexico's Communities

University of New Mexico Health Science Center has long been recognized for conducting innovative community-based research. The Research Involving Out-patient Settings Network is a practice-based research network that includes more than 200 primary care providers, predominantly in community health centers, Indian Health Service facilities, and at UNMHSC.¹⁸ UNMHSC also has a national reputation for helping define the elements and range of community-based participatory research, providing local, national, and international training in this method.¹⁹ Vision 2020 required building upon these initiatives, engaging each school and department to align investigators' priorities with those of patients and communities.

Academic health center research agendas usually focus on such areas as cancer, brain and behavioral health, and cardiovascular and metabolic diseases, which neatly match NIH funding categories. In New Mexico, however, these diverge from community health priorities. New Mexico has more than 30 county and tribal health councils tasked by the state Department of Health with mobilizing communities, identifying local health needs and resources, and coordinating solutions. These councils review state and county health data and record their community members' perceived health needs, deriving a set of county health priorities that help determine the allocation of services. They consistently identified the following priorities (listed in order of importance): substance abuse, teen pregnancy, obesity, access to care, violence, and diabetes.

Responding to these community priorities, UNMHSC now persistently seeks funding from sources other than the NIH. For example, funding made available through

the PPACA supports patient-centered and comparative effectiveness research, aligning with UNMHSC's efforts to study health interventions within communities. The move toward more community-oriented research challenged some faculty by altering established methods for defining research protocols and requiring greater community engagement in the planning process. The UNMHSC Office of Research has addressed this by providing grant seminars to faculty and facilitating collaborations to pursue these new funding sources. Between fiscal years 2010 and 2013, UNMHSC obtained \$31.7 million in PPACA funding (with a 50% success rate in the number of submitted applications).

In 2010, UNMHSC was awarded an NIH Clinical and Translational Science Award, underscoring the importance of translating research outcomes at the community level and providing an institutional platform for interdepartmental collaboration. Vision 2020 helped to shape the development of the UNMHSC Clinical and Translational Science Center (CTSC), charged with accelerating health discoveries and disseminating research into local communities. In a CTSC partnership with the HEROs program, each HERO agent now fulfills a bidirectional role, alerting their regions to research opportunities and alerting researchers to community priorities that need to be addressed. CTSC also makes additional training and services available to faculty for conducting community-based research, including participant recruitment, focus groups and interviewing, data management, quantitative and qualitative analysis, and assistance with grant applications. CTSC pilot funding has been awarded for studies initiated by HSC researchers in such areas as adolescent obesity, diabetes in Native American communities, health literacy in urban Hispanic populations, and behavioral health interventions.

Case Examples: Integrating All Mission Areas—the Community Drives the Agenda

When communities are empowered to drive the health agenda, they often help the HSC transcend its internal silos in education, clinical service, and research by integrating resources in a unique, community-responsive manner. Two very different communities illustrate the range of interventions that reflect Vision 2020's influence.

- **Hidalgo Medical Services.** Hidalgo Medical Services (HMS) serves rural U.S.—Mexican border counties in southwestern New Mexico and collaborated with UNMHSC to create a set of educational and service models that attracted major federal research grants. These programs address the following local priorities: access to health services, diabetes, and substance abuse:

Forward NM: Pathways to Health Careers—HMS created a community-based model of training, recruitment, and retention to “grow its own” healthcare workforce, including middle school and high school pipelines, health professions training, and dental and primary care residency training. Last year, 204 medical residents and health science students spent 1 month or more training in Silver City. Recruitment of graduates was so successful that virtually all HMS clinical positions were filled.

La Vida—a community health worker program formed the core of HMS's Family Support Service. These workers now address social determinants of health in conjunction with clinical services, using prevention and control of type 2 diabetes as an intervention model. This program generated favorable patient outcomes²⁰ and became the basis of a large federal Racial and Ethnic Approaches to Community Health (REACH) 2010 grant from CDC.

HERO—Translating Research into Localities (TRaILs)—CTSC researchers received a federal Agency for Healthcare Research and Quality grant to study the impact of having HEROs work with HMS primary care providers to adopt evidence-based practices for prescribing opiates.

- **Hobbs, New Mexico.** Hobbs is the seat of Lea County, in the southeastern corner of the state, which faced a major deficit in its health workforce. The local Maddox Foundation asked UNMHSC for help in recruiting and retaining health professionals. Although the area is the greatest oil and gas producer in the state, its population of 53,000 exhibits considerable disparities in wealth. The majority of the population is Hispanic and African American, with many living in poverty. The county has one of the lowest primary care physician to population ratios, the highest teen pregnancy rate, and the highest rate of hospitalization for asthma in the state. Interventions in Hobbs include:

Center for Health Workforce Training—a four-way agreement was created between the Maddox Foundation, Lea Regional Hospital, New Mexico Junior College, and UNMHSC. The Foundation funded a suite of dorm rooms at the college to provide free housing for UNMHSC students or residents rotating in the community, and Lea Regional Hospital provided free meals. UNMHSC also assigned a local HERO to coordinate its learners' rotations. Within 2 years, Hobbs became one of the most popular training sites, thanks to support from the local

community and the unique training opportunities. Three years after program implementation, two family medicine residents and two physician assistant, two nursing, and four pharmacy graduates have been recruited to work in Lea County. Community Education and Teen Pregnancy—students rotating in Hobbs conducted studies and offered community health education based on local health priorities. An important target was teen pregnancy.

Asthma intervention—UNMHSC pulmonary specialists created a program in conjunction with the state Department of Health and local healthcare providers to train local school nurses in asthma treatment guidelines.

Impact of Vision 2020 on Outcome Measures

Since the baseline data were collected in 2009, these UNMHSC programs have contributed to significant institutional and statewide progress on a number of outcomes. Examples include:

- Diversity of the medical student body—in 2009, 38% of the student body was New Mexico under-represented minorities (Hispanic, Native American, and African American). By 2013, 53% of the student body represented these ethnic groups.²¹
- Immunization rates—standard immunization rates in 19- to 35-month-olds increased from 68.2% in 2009 to 76.1% in 2012.²²
- Primary care to population ratio—in 2009, there were 105.19 primary care physicians for every 100,000 people in New Mexico. By 2014, that number had risen to 116.20.²³
- Percentage of New Mexicans lacking health insurance—the rate of uninsured increased from 19.6% in 2009 to 21.9% in 2012. However, thanks in part to UNMHSC's involvement with the implementation of Medicaid expansion and a health insurance exchange, more than 120,000 people enrolled in Medicaid (a 28% increase) and approximately 35,000 enrolled through the health insurance exchange in 2013–2014, reducing the state's uninsured rate.^{24,25}
- Impact of Nurse Advice Line on emergency department visits—calls to the 24/7 Nurse Advice Line grew to approximately 15,000 per month. When callers were later interviewed, 70% who planned to go to the emergency department were diverted to a more appropriate and less costly lower level of care, saving an estimated \$3.5 million per year in care cost.¹⁵
- National state health ranking—The United Health

Foundation's annual *America's Health Rankings*, released in December 2013, revealed that New Mexico had made more progress in health than 46 states, rising in rank from 36th in 2012 to 32nd in 2013.²⁶ UNMHSC contributed in varying degrees to many of the measured determinants and outcomes that led to this improvement in ranking.

Discussion and Lessons Learned

An unprecedented level of collaboration among UNMHSC entities in conjunction with external partners will be required for Vision 2020 to be realized. Gauging institutional success using population health metrics poses challenges, because major progress in population health cannot be achieved without a concerted effort to address the social determinants of health and health equity. Debates persist about whether UNMHSC should be held accountable for metrics upon which it has little direct control and whether UNMHSC can afford to reallocate resources from clinical and research programs to commit to the often-slow process of community engagement.

An academic health center must be mindful not only of the needs of local communities, but its reputation as a community partner. Despite UNMHSC's commitment to Vision 2020, potential partners were skeptical of offers of engagement. A history of abandonment, fear of takeover, and competition for scarce resources kept these communities at arm's length until trust could be established. UNMHSC had to demonstrate that it was in it for the long term, with the understanding that local health priorities trumped those of the university.

Vision 2020 has taught the university to expand the scope of its programs through effective partnership and alignment with local residents. UNMHSC's pipeline and workforce programs, community-based HEROs and Area Health Education Centers programs, and contributions to the state's biomedical technology sector have spurred both employment and economic development, in turn affecting broader social and economic determinants of health. As the case studies illustrate, an empowered community that draws upon and creates synergy between different programs within the academic health center is a valuable force for integrating efforts.

Public academic health centers generally experience great external pressure from local communities and their state legislatures to demonstrate locally relevant outcomes in clinical care, education, and research missions. In the case of UNMHSC, Vision 2020 strengthened the institution's ability to respond to this call for public accountability. UNMHSC's vision and strategic goals also align well with U.S. healthcare reform and with the

nation's increasing investments in evidence-based medicine, prevention, and community-based approaches to health care.

One limitation of this work as a model for other academic health centers relates to the unique programs developed over many years that were stitched together under the banner of Vision 2020. Can a robust set of innovative programs be created on the basis of a broad goal such as Vision 2020, or must there be an existing set of programs for the success of such a Vision? In addition, the fact that UNMHSC is the only academic health center and a public institution in a rural state raises questions about whether a similar Vision could be replicated in urban, private academic health centers that compete with other institutions in their states.

However, many lessons learned can be generalized across urban as well as rural, private as well as public, institutions. Many Vision 2020 successes resulted from activities that opened lines of communication and strengthened collaboration between UNM, health-related entities, and community members. All healthcare institutions must find a way to survive in a changing and challenging “accountable care” environment. Incentives must increasingly align with investments in keeping patients well, but doing so requires greater “upstream” investment in addressing social determinants of health. Federal grants increasingly favor institutions that have invested in genuine community engagement, which requires aligning institutional resources with community health priorities. Cross-institutional and cross-state learning communities have an important role to play in rapidly disseminating strategies for change.

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References

1. Annie E. Casey Foundation. 2013 Kids Count data book: state trends in child well-being. 2013. datacenter.kidscount.org/files/2013kidscount_databook.pdf.
2. USDHHS, Office of Disease Prevention and Health Promotion. Healthy People 2020. 2013. <http://www.healthypeople.gov/2020/>
3. Robert Wood Johnson Foundation and University of Wisconsin Population Health Institute. County health rankings & roadmaps: 2013 rankings, New Mexico. Madison WI: University of Wisconsin Population Health Institute, 2013. www.countyhealthrankings.org/sites/default/files/states/CHR2013_NM_0.pdf.
4. Winkleby MA. The Stanford Medical Youth Science Program: 18 years of a biomedical program for low-income high school students. *Acad Med* 2007;82(2):139–45.
5. Office for Community Health. County health report cards. Albuquerque NM: University of New Mexico Health Sciences Center, 2014. hsc.unm.edu/community/InTheCommunity/common/docs/CountyReportsFY13.pdf.
6. Kaufman A, Powell W, Alfero C, et al. Health extension in New Mexico: an academic health center and the social determinants of disease. *Ann Fam Med* 2010;8(1):73–81.
7. Johnson D, Saavedra P, Sun E, et al. Community health workers and Medicaid managed care in New Mexico. *J Community Health* 2012;37(3):563–71.
8. Phillips RL, Kaufman A, Mold JW, et al. The primary care extension program: a catalyst for change. *Ann Fam Med* 2013;11(2):173–8.
9. Health Extension Tool Kit. Tools for implementing the health extension model. 2013. www.healthextensiontoolkit.org.
10. The Health Care Work Force Data Collection, Analysis and Policy Act. 2013 New Mexico Statute. Passed legislation 24-14C-6.
11. Cosgrove E, Harrison GL, Kalishman S, et al. Addressing physician shortage in New Mexico through a combined BA/MD program. *Acad Med* 2007;82(12):1152–7.
12. Pacheco M, Weiss D, Vaillant K, et al. The impact on rural New Mexico of a family medicine residency. *Acad Med* 2005;80(8):739–44.
13. New Mexico Nursing Education Consortium. Annual Report FY 2012. Albuquerque NM: Nursing Education Consortium, 2012. www.nmneec.org/uploads/FileLinks/933875ef41ef4474b4e844f09423bbef/2012_NEC_Annual_Report.pdf
14. Geppert CMA, Arndell CL, Clithero A, et al. Reuniting public health and medicine: the University of New Mexico School of Medicine Public Health Certificate. *Am J Prev Med* 2011;41(4 S3):S2114–S2119.
15. Bissell E, Fiorenzio C, Johnson A, et al. Effectiveness of a 24/7 nurse advice line in reducing non-emergent visits to the emergency room in rural New Mexico. Proceedings of the Western Regional Meeting of the American Federation for Medical Research 2010:27–30, Carmel, CA.
16. Arora S, Thornton K, Murata G, et al. Outcomes of treatment for hepatitis C infection by primary care providers. *N Engl J Med* 2011;364(23):2199–207.
17. Kaufman A, Derksen D, Alfero C, et al. The Health Commons and care of New Mexico's uninsured. *Ann Fam Med* 2006;48(1):S22–S27.
18. Williams RL, Shelley BM, Sussman AL. The marriage of community-based participatory research and practice-based research networks: can it work? A research involving outpatient settings network (RIOS Net) study. *J Am Board Fam Med* 2009;22(4):428–35.
19. Wallerstein N, Duran B. Using community-based participatory research to address health disparities. *Health Promot Pract* 2006;7(3):212–23.
20. McCloskey J. Promotores as partners in a community-based diabetes intervention program targeting Hispanics. *Fam Community Health* 2009;32(1):48–57.
21. University of New Mexico Health Sciences Center. Databook. 2013. <http://hsc.unm.edu/about/databook.shtml>.
22. CDC. New Mexico and US immunization coverage data 2002–2012. Atlanta GA: CDC, 2013.
23. New Mexico Center for Health Workforce Analysis. 2013 Annual Report. www.nmms.org/sites/default/files/images/2013_annual_report_new_mexico_health_workforce_committee.pdf.
24. Kaiser Family Foundation. State health facts: health insurance coverage of the total population. 2013. <http://kff.org/other/state-indicator/total-population/>
25. New Mexico Health Insurance Exchange. NMHIX Be Well NM. 2013. bewellnm.com/wp-content/uploads/2013/12/NMHIX_-_bewell_outreach_presentation.pdf.
26. United Health Foundation. America's health rankings: a call to action for individuals and their communities. 2013. cdnfiles.americashealthrankings.org/SiteFiles/Reports/AHR-AnnualReport2013.pdf.