



A HEALTHIER NEVADA

STATEWIDE PLAN FOR PUBLIC MEDICAL EDUCATION EXPANSION

NOVEMBER 14, 2014



University of Nevada
School of Medicine

UNLV | School of
MEDICINE

EXECUTIVE SUMMARY

Vision: Achieving a Healthier Population and Stronger Economy in Nevada

In September 2013, the Nevada System of Higher Education (NSHE) Board of Regents Health Sciences System (HSS) Committee made the bold move to identify the critical need to expand public medical education in the state of Nevada. A cornerstone of this initiative stressed the vital importance and significance of coordination and collaboration among the System's university presidents to build on this idea. Shortly after, the Board of Regents (BOR) directed Chancellor Daniel Klaich to work with the leadership of the University of Nevada Las Vegas (UNLV), University of Nevada, Reno (UNR), and community business leaders in a Statewide Public Medical Education Expansion Steering Group (SSG) to develop a collaborative and comprehensive plan for public medical education expansion in Nevada.

After more than a year of planning and coordination, the BOR approved of a statewide public medical education expansion plan focused on the elements required to support two separately-accredited, fully-developed, and financially sustainable schools of medicine. Both universities have formally joined forces through a statewide approach facilitated by the NSHE to:

- **Develop** a separately accredited, full-scale, research-intensive, M.D.-granting (allopathic) medical school at UNLV;
- **Strengthen** the University of Nevada School of Medicine (UNSOM) to allow for a research-intensive program where the majority of Undergraduate Medical Education (UME) is accomplished in northern Nevada; and
- **Expand** Graduate Medical Education (GME) residency and fellowships through the continued sponsorship of UNSOM and future sponsorship of the UNLV School of Medicine.

The vision to expand public medical education statewide by establishing a separately-accredited, full-scale, four-year M.D.-granting (allopathic) medical school at the UNLV, along with continued development of a comparable full-scale, four-year medical school at the UNSOM presents a critical opportunity to elevate the state economically and to significantly improve health care statewide. The educational mission is to train, lead, inspire, and facilitate new entrants into the health care workforce in Nevada.





Need: Support for the Statewide Medical Education Expansion Plan

1. Nevada Needs More Doctors

In 2012, Nevada ranked 46th out of 50 states in the number of physicians per 100,000 population and 48th in the United States in the number of primary care physicians per 100,000 population.¹ These numbers illuminate an immediate opportunity to improve quality of care issues which are ever-present in the Nevada health care economy that will, in turn, support growing economic development and diversification of this significant sector.

2. Nevada's Health Care Infrastructure Lags Far Behind Population Growth

Nevada reached a current population figure of 2.8 million as of July 8, 2014, and the population is expected to grow to nearly 3.7 million by 2030.² This increase in population will further stress the state's already over-capacity health care infrastructure. The limited class-size capacity at UNSOM, growing physician shortages, projected population growth, complex state and federal health care reform, aging physician workforce, and physician work hours cumulatively present ongoing challenges to the Nevada physician workforce.

Nevada is in a challenging position to support the current health care needs of its citizens today, and, as well, in projecting future needs with anticipated population increases. This position requires additional infrastructure to meet these demands. Dramatically increasing the supply of Nevada-educated physicians via simultaneous expansion of medical education and GME programs is one way to increase access to quality health care options for its citizens.

PUTTING IT IN PERSPECTIVE — THE SCHOOL OF DENTAL MEDICINE AT UNLV DELIVERED

For instance, to address the chronic lack of dentists in Nevada, the University of Nevada Las Vegas School of Dental Medicine (UNLV SDM) was developed in 2001. Currently, Nevada is above average in dentists per capita (100,000 population) from an increase of 55% in 2000 to 96% in 2014. In other words, the creation of the UNLV SDM did in fact deliver to provide Nevadans with more dentists.

¹ Population estimates are from the U.S. Census Bureau (July 2014) and physician data are from the 2013 AAMC State Physician Workforce Data Book.

² U.S. Census Bureau.

³ <http://brookings.edu/research/reports/2013/07/01-healthcare-metro-monitor>

⁴ http://www.diversifynevada.com/uploads/studies/2012_NVGOED_StatePlan_Full.pdf

⁵ Brookings Mountain West SRI Report (2011) and Brookings Mountain West Mountain Monitor: Tracking Economic Recession and Recovery in the Intermountain West's Metropolitan Areas (2013).

⁶ Tripp Umbach Analysis-2013 Economic Impact of Medical Education Expansion in Nevada.

3. Public Medical Education Expansion Will Strengthen the Health Care Economy

The health care economy is the fastest growing sector in the U.S. today, and Nevada stands to benefit from this reality.³ In fact, the health care sector is listed as one of the top priorities in the most recent Nevada State Economic Development plan.⁴ As a timely and strategic focus on improved quality of care and access to health care services is pursued, a congruent pathway of economic and workforce development opportunities will emerge for the state and its citizens.

Within this context, it is important to note that public medical education expansion has the potential to become a centerpiece asset, with dynamic abilities to leverage existing health care investments consisting of the hospitals, clinics, labs, and diagnostic centers throughout urban and rural Nevada. The impact for greater learning and community health services through such a concerted effort is immense. This enhanced coordination between health care assets will also stimulate the development of new infrastructure to meet the needs of the existing and burgeoning patient population, with a special ability to focus on the underserved populations throughout the state.

Providing a statewide public medical education program will have a direct positive economic impact on Nevada's economy. As identified in a recent Brookings Mountain West/SRI Report⁵, more than \$2 billion in health care spending annually "leaks" out of Nevada and is spent in neighboring states. In addition, Las Vegas has the smallest share of its economy tied to health services in comparison to any of the other top 100 U.S. metropolitan areas. **Las Vegas is also the largest U.S. metropolitan area without an M.D.-granting (allopathic) medical school.** Strong academic medical centers have the ability to develop needed programs and services within the state, thereby reducing the number of persons who must leave the state for highly specialized care. In addition, successful academic medical centers such as the UCLA Medical Center serve as magnets for patients from neighboring states, which adds millions of fresh dollars to California.

Las Vegas is also the largest U.S. metropolitan area without an M.D.-granting (allopathic) medical school⁶.

Plan: Guiding Principles of the Statewide Public Medical Education Expansion Plan

The following principles and commitments will guide the development of public medical education expansion in Nevada:

- **Programs and Facilities:** Decisions regarding the development of future medical education programs and facilities will be made with input from both the UNSOM and the UNLV School of Medicine in order to serve the fundamental mission of improving health and health care throughout the state of Nevada. Facility planning will be based on needs assessments of the short- and long-term space requirements which will be needed to support programmatic expansion.
- **Faculty:** Joint faculty appointments that benefit the joint teaching and/or research enterprises of UNSOM and UNLV School of Medicine will be encouraged.
- **Students:** All NSHE teaching institutions will collaborate closely to develop notably productive and high-yield pipeline programs that will increase the size of the applicant pool for both UNSOM and the UNLV School of Medicine, especially among under-represented and educationally underserved student populations.
- **Residency, Fellowship, and GME:** Medical students from both UNSOM and the UNLV School of Medicine will be encouraged to apply to all GME programs in Nevada.
- **Research:** A major benefit of having two academic medical institutions in the state is the potential for collaboration in research. The BOR will provide appropriate policies that encourage and facilitate collaborative research, including grants, administration policies, financial management, and joint faculty appointments.
- **Administration:** A high priority will be given to minimizing duplication of administrative structures and maximizing efficiency in infrastructure costs.

Plan: Specific Institutional Plans to Achieve a Common Statewide Goal

UNSOM Expansion

UNSOM Class Size

UNSOM will continue its development as a research-intensive, primary care-focused school of medicine in Reno. UNSOM will maintain a full, four-year campus with a class size of 70 students. Through its continued collaboration in residency training throughout the state and a renewed commitment to rural outreach, UNSOM will selectively strengthen the training of medical students in their third- and fourth-year in Las Vegas, initially for UNSOM, and eventually primarily for UNLV School of Medicine students. Under this plan, the most appropriate and highest quality teaching and clinical affiliations will be located strategically throughout the state. This structure provides the greatest value for taxpayers and the highest level of synergy in using statewide resources in the most efficient fashion.

UNSOM Facilities

To complete training for students in their third and fourth year in Reno, clinical clerkships will need to significantly expand in partnership with community faculty at Renown Regional Medical Center in Reno as well as with other teaching partners. In Las Vegas, it is necessary for the expansion of facilities to accommodate training for third- and fourth-year students, which will include leasing additional space primarily for GME at MountainView Hospital. The expansion efforts will allow students to conduct their entire four-year education in Reno, with selective experiences and electives in Las Vegas for a minority of students, which will allow students to gain exposure to urban underserved clinical experiences.

Simulation Centers in Reno and Las Vegas will require growth in personnel since they are critical components of the UME and GME educational experience. The growth in the use of the multi-institutional Simulation Center in Las Vegas will require a Medical Director and coordinator for the education/simulation center activities.

UNSOM Instruction and Faculty

Expansion of clinical faculty is required to teach all four-years in Reno and to selectively strengthen the third- and fourth-year in Las Vegas, initially for UNSOM, and eventually primarily for UNLV School of Medicine students. To have all four years of UME in Reno, significant recruitment and investment in clinical faculty throughout the school and community will need to be completed for the block sessions.* It is necessary that protected time is provided for block coordination as well as recruitment of clinical faculty for teaching. Recruitment of faculty will commence in FY14-15 with the goal to have them on board during FY15-16.

UNSOM Academic Curriculum and Research

UNSOM's mission is to improve the health of Nevada's diverse population through an innovative curriculum, competitive residency and fellowship programs, and world-class biomedical research that complement a statewide network of urban and rural clinical facilities. Through targeted growth and investment in education, clinical services and research, UNSOM is a resource for improving health care regionally and across the country. The faculty clinical practices will be expanded, as will innovative collaborations with community physicians in both Reno and Las Vegas, to further fulfill the needs of patients in these diverse communities.

The Office of Statewide Initiatives will continue to expand the use of telehealth, which is used by physicians to service the rural community through Project ECHO. Project ECHO provides specialty care to the rural communities, minimizing the need for rural patients to travel long distances to obtain the care they need.

UNSOM Student Services

The continued recruitment of 70 primarily in-state students by UNSOM will require substantial investment in the pipeline (student pool), including marketing, recruiting, and admissions. Matriculation of a new class will require increased staffing of the current pipeline, recruitment, and admissions offices starting for the 2015-16 recruitment season. UNSOM will also require additional funding for student services (academic support, financial aid, and enrollment) as well as advisement, and career development.

* Block sessions are periods of time through the academic year ranging from 4-12 weeks where students study different systems within the body and are led by block directors.



UNSOM's Community Partnerships

It is necessary to establish and maintain close ties with clinical partners to provide the support for clerkships and residency training for the medical students. The statewide public medical education expansion plan is grounded in establishing clinical partnerships.

Two examples of established partnerships include:

1. UNSOM's proposed affiliation agreement with the Renown Health System in Reno, which was recently approved by the Renown Health Board of Trustees. The agreement creates a platform for new teaching and clinical programs.
2. A recently-signed Memorandum of Understanding between UNSOM and MountainView Hospital in Las Vegas commits to developing a large set of primary care and specialty residency and fellowship programs.

Over the next 10 years, the UNSOM promises to be a research-intensive, primary care school of medicine that will:

- **Focus** on training primary care physicians;
- **Graduate** 70 students a year;
- **Produce** approximately 50 new physicians each year who will remain in Nevada;
- **Expand** community-based teaching, biomedical programs, and clinical research programs;
- **Recruit** mostly in-state students starting in the 2015-16 recruitment season;
- **Recruit and Train** 100-150 new volunteer community physician faculty members, primarily to support the development of full required clinical clerkships in Reno;
- **Increase** total federal and external research funding from \$25M/year to \$35M/year;
- **Generate** 3,400 new jobs by 2025, growing to 4,560 jobs by 2030; and
- **Generate** an economic impact of \$510 million per year by 2025, growing to \$684 million by 2030.

A New Medical School at UNLV

UNLV School of Medicine Class Size

The UNLV School of Medicine will be developed in close collaboration with UNSOM, as well as other existing medical schools, health systems, and medical practices in Nevada. The UNLV School of Medicine, in partnership with economic, development, and community organizations in Las Vegas, is leading the operational launch efforts of the new entity.

The UNLV School of Medicine will have an inaugural class of 60 students. The class will enter the school as early as 2017, with a long-term growth plan capacity of 120 students by year 2021. With its institutional longevity, excellent reputation, commitment to academic excellence, strong governance, and administration, the UNLV School of Medicine is fully capable of meeting Liaison Committee on Medical Education (LCME) requirements.

UNLV School of Medicine Facilities

UNLV's campus includes general and clinical teaching facilities, library, and other structures for the purpose of providing students with high-quality medical education. The UNLV School of Medicine will need to build an approximately 150,000- to 170,000-square-foot medical education building with facilities to support all aspects of medical education. Multiple locations for the UNLV School of Medicine are currently being explored. Funding for the initial building is requested from private funds and space for interim use in lieu of a permanent location is now being secured.

Interdisciplinary education with students from nursing and the other health profession schools at UNLV is also an essential element to the program. A second adjoining educational building for nursing and other health professions will also be required, enabling the sharing of space and resources. A third research building of approximately 120,000 square feet will be required to pursue new and to grow existing research initiatives while looking to recruit the most talented faculty members in these areas.

The next-generation health sciences library consists of high-level technology while remaining high-touch among students, faculty, and librarians. Students and faculty will benefit from a computing infrastructure able to translate to collections of all formats: books, journal articles, videos, and data sets delivered digitally in a cross-platform cloud environment. Physical and virtual learning communities will be created to support evidence-based, interdisciplinary discovery of the latest research information. Physical learning spaces will incorporate multimedia for both exploration and discovery, but also in support of the creation of new knowledge. Library experts will be available as guides and teachers to provide research consultation in real and virtual spaces. The library's institutional repository will capture and disseminate scholarly UNLV School of Medicine papers, research, and conference proceedings to showcase the intellectual output of its health sciences faculty and scholars for the world to discover and use.

UNLV School of Medicine Instruction and Research

Education at the UNLV School of Medicine will introduce students to a problem-solving and team-based curriculum whose experience will better prepare their post graduate and future success as practicing physicians. Students will learn how to effectively provide care in conjunction with various types of health professionals including nurses, nurse practitioners, dentists, physical therapists, social workers, occupational therapists and others within a rigorous academic environment that mirrors a clinical experience.

The UNLV School of Medicine education will emphasize the basics of medicine by building on the classic "history and physical exams" approach while employing the most technologically advanced equipment and genomic data. It will address health care costs and how patient treatment is impacted by the ever-increasing time demands on physicians and a dependence upon a system that encourages a wide series of tests instead of a thorough analysis of historical and physical stages of treatment.

The UNLV School of Medicine will be an innovative center for teaching a diverse group of future Nevada doctors how to work in health care teams, apply cutting-edge technology, and develop novel, yet classically-based treatment solutions for diseases of the present and future. In addition to the usual medical educational content, **six specialty programs** will be offered as core blocks for all students and over time, certificate programs in these areas will be developed that will be open to health care professionals at any level and to the public, if they qualify. The six specialty programs include: **Community and Public Health, Clinical Research, Bioethics, Business and Finance, Leadership and Community, and Mental Health and Addiction.**

The UNLV School of Medicine will build on areas of current strength and also greatest community need. Current strengths include neuroscience, cardiology, and cancer; the greatest needs are mental health and addiction. Two other areas of strength at UNLV include radio-pharmacology and computational science with large databases. Additional medical research in these areas would complement the UNLV School of Medicine and be of great value to the medical community.

UNLV School of Medicine's Community Partnerships

The UNLV School of Medicine will work collaboratively with existing Las Vegas institutions to establish Las Vegas as a world-class medical destination, providing the highest levels of clinical care. Additionally, partnering with key physicians in the community to educate medical students, medical residents, and fellows will be essential to the future ability of Las Vegas to keep physician graduates practicing in Nevada. Currently, many patients are required to leave Las Vegas for treatment because there are not enough physicians who specialize in various diseases.

The UNLV School of Medicine will develop programs that are led by faculty with specialties and subspecialties that help fill health care voids. For instance, Las Vegas currently has two liver-transplant surgeons practicing at University Medical Center (UMC). The surgeons are faculty from the UNSOM. They perform kidney transplants, but there is no fully established program to allow them to perform liver and pancreas transplants. Partnering with UMC to supplement this program will benefit the community and increase available services.

GME programs to be developed will include, at a minimum, all types of primary specialty residencies, and the major subspecialties of internal medicine and pediatrics. In the Las Vegas area, these programs will have administrative support and faculty leadership of the UNLV School of Medicine in partnership with regional hospitals, outpatient facilities, and physicians. Planning for these programs will begin in 2015.

The UNLV School of Medicine plans to also partner with other private hospitals in Las Vegas. Through this business model, the UNLV School of Medicine will not build a new hospital – traditionally a huge cost and greater risk for medical schools – which will save money to be utilized elsewhere.

Both the UNLV School of Medicine and UNSOM will continue to work closely to ensure coordination to promote efficient and effective public medical education in Nevada. For example, the two universities have partnered to work on a clinical and transitional research project through the National Institute of General Medical Sciences. Both institutions are committed to continue to collaborate to ensure that the entire state has the best health care possible.

Further, the UNLV School of Medicine will work closely with UNLV's William F. Harrah Hotel College of Administration and its excellent program on customer satisfaction and customer service. The UNLV School of Medicine plans to emulate the Hotel College's standards of quality, service, and excellence and build these core values into newly developed programs. In this way, it will position itself to seamlessly become a key part of the medical tourism business proposed for Las Vegas.

Over the next 10 years, the UNLV School of Medicine promises to be a powerhouse academic medical center that will:

- **Educate** and train doctors for urban practice;
- **Gain** full accreditation;
- **Graduate** 60 students a year to start, growing to 120 by 2021;
- **Produce** approximately 100 new physicians each year who will remain in Nevada;
- **Increase** the number of physicians staying or returning to Las Vegas after they complete residency programs;
- **Generate** up to \$50 million dollars of external research grants and contracts per year;
- **Recruit** 120 new faculty physicians and scientists;
- **Generate** 5,300 new jobs by 2025, growing to 8,000 jobs by 2030; and
- **Generate** an economic impact of \$800 million per year by 2025, growing to \$1.2 billion by 2030.

Statewide GME Expansion

Currently, UNSOM trains 267 medical students and supports the training of 362 residents and fellows. While the number of residents and fellows grew from 150 to more than 360 during a 10-year period between 2002 and 2012, the state of Nevada remains in the lowest quintile among all 50 states in the number of residents and fellows per capita.

Clinical expansion is necessary in order to train and retain physicians within the state to meet the health care needs of the citizens of Nevada. GME programs are important drivers of health care quality, access, and economic development. Tripp Umbach estimates that each resident (physician in training) in a community-based residency program generates \$200,000 in annual economic benefits to their community while in their program and \$1.5 million in economic benefits every year when they remain in the area to practice after training. Since funding for resident training comes largely from outside sources, residents represent fresh dollars in the local economy.

Expansion of residency and fellowship programs, whose graduates are poised to join the workforce, are planned across the state to meet both the state's primary care and specialty physician needs. Expansion of current programs requires not only support from partner hospitals for salary/benefit/operations expenses, but also requires expanding the size and breadth of the UNSOM and eventually the UNLV School of Medicine faculty so as to provide teaching, mentorship, research support, and new clinical expertise.

The state currently has 12 residency training programs in nine specialties. Training in all basic specialties is not available on both campuses, with Reno lacking pediatrics, neurology, and almost all medical subspecialties. Both campuses lack several other specialties including neurology, orthopedic surgery, urology, pathology, dermatology, anesthesiology, radiology, and ophthalmology, among others. Studies have shown that students who complete both their UME and GME in Nevada have an 80% chance of remaining in the state. Students that only complete GME in Nevada have only a 60% chance of remaining in the state, and students who only graduate from medical school in a state have only a 40% of remaining to practice.⁷ Diversifying residency training opportunities in Nevada is critical to expanding the physician workforce and improving the health of Nevadans.

Statewide Public Medical Education GME Expansion Plan

The Reno GME request supports the initiation of residency programs in pediatrics, neurology, family medicine (rural) and family medicine with the fourth-year option to obtain a master's degree in Public Health and continued expansion of the internal medicine residency program. The enhancement request supports the initiation of fellowships in psychiatry – addictions and gastroenterology.

The Las Vegas GME request supports initiation of residency programs in orthopedic surgery and neurology and expansion of the psychiatry program. The enhancement request also supports the initiation of fellowships in child psychiatry, pediatric emergency medicine, rheumatology, allergy/immunology, and maternal fetal medicine.

The UNLV School of Medicine will begin planning for GME management as soon as possible. The first step is application for institutional accreditation to proceed with Las Vegas-based sponsor programs. This will begin once private support is secured. This will fund the designated institutional office and required faculty recruitment to educate residents destined for the new programs. Hospital partnerships are being developed to support these new programs and will also support the gradual transfer of select existing programs.

Having a balance of fellowships in several disciplines across the state will improve the reputation of both public medical schools and assist with residency recruitment, increase the specialty workforce in Nevada, and support the development of clinical research. The statewide GME plan will begin in 2015-16, and will include the addition of several new residency and fellowship programs listed above, totaling as many as 300 new positions by the full build-out in 2021. This plan is critical to the long-term success of both publicly supported medical schools. The established GME partnerships through teaching hospitals, UNSOM and UNLV School of Medicine, encompassing both northern and southern Nevada, will dramatically increase the number of physicians who will train and stay in Nevada.⁸

⁷ 2013 Association of American Medical Colleges State Physician Workforce Data Book.

⁸ <http://medicine.nevada.edu/about/expansion>

Statewide Public Medical Education Expansion Biennial Budget Request

- The 2015-17 biennial budget requests \$42.9 million to support the statewide public medical education expansion plan.
- The 2015-17 biennial budget requests \$5.1 million to support UNSOM's expansion and \$26.7 million to support UNLV School of Medicine's start-up.
- The 2015-17 biennial budget requests that the State of Nevada will invest \$9.9 million to support the critical immediate need for GME expansion statewide.
- The 2015-17 biennial budget requests that the State of Nevada will provide a one-time contribution of \$1.3 million in start-up funding for instructional technology to support current and future needed GME growth in Las Vegas.

| 2015-17 BIENNIUM BUDGET REQUEST | FY 16 | FY 17 | BIENNIAL TOTAL |
|---------------------------------|--------------|--------------|---------------------|
| UNLV UME Start-Up Funds | \$7,097,569 | \$19,567,702 | \$26,665,271 |
| UNSOM UME Increase | \$ 1,513,655 | \$3,571,567 | \$5,085,222 |
| GME LAS VEGAS Expansion | \$ 1,986,454 | \$4,472,893 | |
| GME RENO Expansion | \$442,249 | \$2,977,991 | |
| GME Expansion Total | \$2,428,703 | \$7,450,884 | \$9,879,587 |
| One-Time Request | \$575,000 | \$733,000 | \$1,308,000 |
| TOTAL STATE REQUEST | | | \$42,938,080 |

Economic Impact of Statewide Public Medical Education Expansion Plan

The statewide public medical education expansion plan will generate a dramatic impact on economic development, job creation, and government revenue statewide. Beyond the impact of the expansion of UNSOM and development of UNLV School of Medicine, the expansion of medical education statewide will be a springboard for biomedical and other health-industry businesses. Demonstrating the economic impact of the statewide public medical education plan on regional economic development will be instrumental in securing both public and private funding.

Expanding public medical education statewide will be a major driver of the regional economy, creating jobs, and generating millions in annual net impact to the state.

By 2030, the proposed plan will:

- **Expand** the statewide economy by more than \$1.9 billion;
- **Sustain** more than 12,560 jobs;
- **Generate** more than \$94 million in annual state tax revenue; and
- **Produce** approximately 150 physicians who will have an annual economic impact of \$228 million and support approximately 2,000 new health care jobs in Nevada.⁹

Figure 1: Projected Total Economic Impact of UNSOM and UNLV School of Medicine 2020-2030

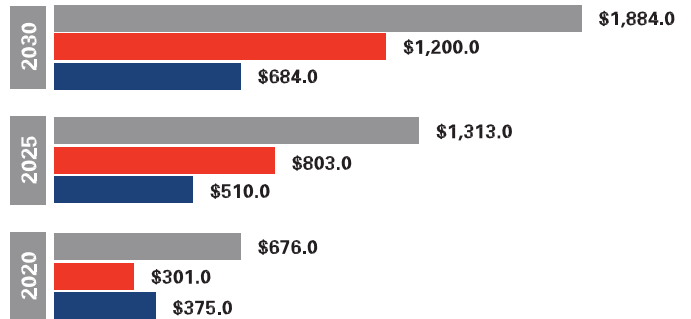


Figure 2: Projected Total Employment Impact of UNSOM and UNLV School of Medicine 2020-2030

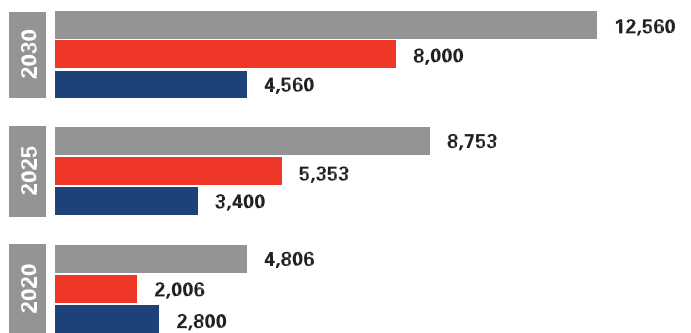
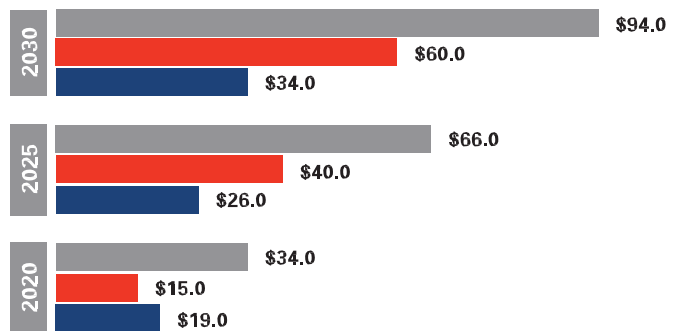


Figure 3: Projected Total Government Revenue Impact of UNSOM and UNLV School of Medicine 2020-2030



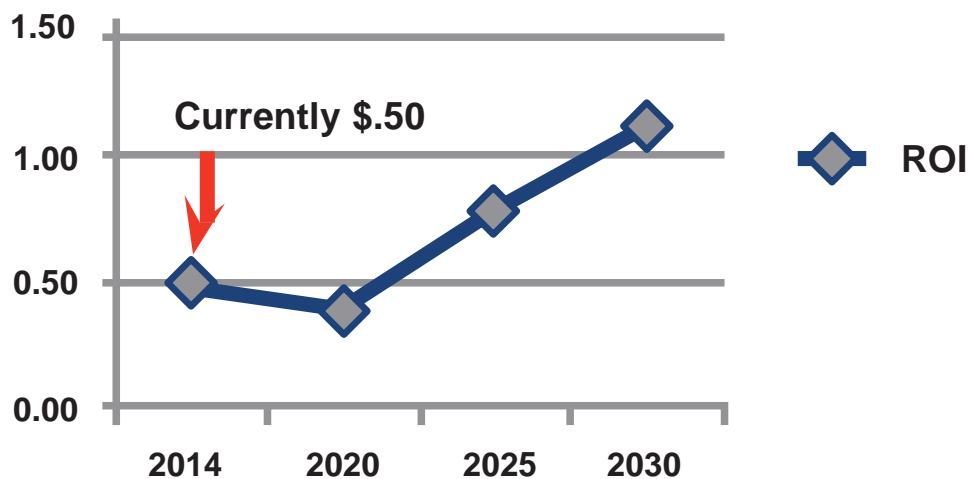
TOTAL UNLV School of Medicine UNSOM

Return on Investment (ROI) of Public Funding by Medical Schools

The \$42.1 million biennial budget request will be followed by three additional biennial requests to adequately fund Nevada’s public medical education expansion program. It is anticipated that by 2023 and beyond, the state of Nevada will provide \$82.1 million annually to support two public medical schools.

Medical Schools generate significant economic impact and state general fund revenue. According to Tripp Umbach, approximately 1 in every 20 dollars generated by UNSOM flow directly into the state’s general fund.¹⁰ Nationally, allopathic medical schools generated more than \$5.2 billion in state general fund revenue in 2012 and received approximately \$4.5 billion in that same year from their home states – resulting in a positive return of \$1.16 returned to the states for every dollar invested in their medical schools. The return on investment for an academic medical center, which includes the education, clinical research, and commercial spin-off activities, has a positive return to the states in which they operate of more than \$4 for every \$1 invested.¹¹

Currently, UNSOM generates \$15.4 million in general fund revenue and receives approximately \$31.5 million from the State of Nevada – resulting in a return of approximately \$.50 for every dollar provided to the medical school from the state general fund. In 2030, Tripp Umbach estimates UNSOM will generate \$34 million in government revenue and the UNLV School of Medicine is projected to generate \$60 million in government revenue. With annual return to the state general fund estimated at \$94 million in 2030, medical schools in Nevada are expected to produce a positive return on state investment (see Figure 3). It is important to note that UNSOM activities currently provide \$15.4 million to the state general fund, so approximately \$78.6 million in fresh revenue will be added annually by 2030.



ROI will grow to \$1.15 on the dollar by 2030. While, the ROI will drop by 2020 to \$.40 on the dollar as large investments in medical education are made.

9 Tripp Umbach Analysis-2013 Economic Impact of Medical Education Expansion in Nevada

10 The \$131.4 billion dollars in the Nevada economy in 2013 generated \$6.4 billion for the State General Fund – resulting in 4.89% of all fresh dollars generated in the economy flowing to the State General Fund-Tripp Umbach 2014.

11 AAMC Economic Impact of Medical Schools and Teaching Hospitals 2012.

CONCLUSIONS:

Bold leadership, supplemented by the creation of a powerful, collaborative vision with implementation now underway has led Nevada to an opportunity to provide an impactful and sustainable solution to the current and growing health care infrastructure challenges faced by the state and by so many of its citizens today. Nevada is unable to meet the current health care needs of its citizens, and the proposed statewide public medical education expansion plan will improve access to high-quality health care throughout Nevada, meet market demand for future physicians, increase the number of medical specialists, generate high-level clinical care and specialty care, attract more high-quality businesses to Nevada, attract fresh revenue, advance the innovation economy, and contribute to the quality of life for all Nevadans.

Expanding both UME and GME through a coordinated statewide approach is the most successful model for increasing the physician workforce. The UNLV School of Medicine will produce additional physicians who will matriculate into expanded publically sponsored GME positions and then remain in the state to practice medicine. Medical students who leave the state for training possess a mere 40% likelihood of returning, whereas those who stay in Nevada to train maintain an 80% chance of staying at the conclusion of their residency¹². There are multiple important benefits resulting from expanding both UME and GME which include:

- increasing the quality of health care;
- expanding access for underserved populations;
- eliminating the need for Nevada citizens to go outside of the state for health care;
- increasing economic development through the attraction of federal and private research dollars; and
- attracting new industries that are drawn to regions with superior health care that could eventually lead to Nevada being a destination for advanced medicine.

Strong medical schools attract new practicing physicians, educate new physicians, cultivate research, attract federal funds and private philanthropy, and spur medical innovations that drive the statewide economy. The University of Alabama Birmingham Medical Center is an ideal model to emulate, as it has grown to meet the needs of the citizens of Alabama and countless communities in the Southeastern U.S., added billions of dollars annually to the Alabama economy, and today is ranked as providing the greatest return on investment of all U.S. public medical schools. In addition, a new medical school at the University of Central of Florida in less than five years has achieved an economic impact in excess of \$400 million per year and is on track to have an economic impact of more than \$1.5 billion dollars by 2025.¹³

Nevada citizens, employers, investors, and public officials would benefit from such an investment, which would ensure the health of generations of Nevadans, while at the same time strengthening the economy by keeping health care dollars within state borders. Lack of action would, by contrast, be characterized by a Nevada falling further behind in terms of lost care for its citizens, lost opportunity for economic development, and lost dollars in existing health care spending sent to other states. In the words of Ben Franklin, “a nation’s health is its wealth.” Nevada stands at an important crossroads and is poised to make a great investment, one that would help transform and improve the health, well-being, and lives of all Nevadans.

¹² 2013 Association of American Medical Colleges State Physician Workforce Data Book.
¹³ AAMC Economic Impact of Medical Schools and Teaching Hospitals 2012.



RECOMMENDED NEXT STEPS

- 1. Approval of Statewide Public Medical Education Expansion Plan:** The statewide public medical education expansion plan will be approved by NSHE on or before December 31, 2014.
- 2. Secure State Funding:** Secure \$42.9 million in funds from the State of Nevada during the 2015-2017 biennium.
- 3. Regularly Scheduled SSG Meetings:** The SSG will continue to provide advisory direction to the ongoing collaborative planning for the statewide public medical education expansion plan.
- 4. Facility and Program Planning:** The UNLV School of Medicine will continue to develop its plans for short-term and long-term facilities to meet its programmatic needs. The UNLV School of Medicine will retain the services of a medical facility planning and architecture firm to ensure that the facility and/or temporary facilities for teaching are established prior to the final LCME site visit.
- 5. Fundraising Strategy:** It is necessary that private support for the proposed public medical education plan be secured. Extensive effort should continue to be placed into securing ongoing financial support from the community to support the facilities and ongoing operations of the school of medicine. Tripp Umbach recommends forging new and strengthening existing relationships with community organizations, economic development entities, and foundations.
- 6. Community Outreach and Awareness Strategy:** Extensive efforts are needed to raise awareness of the statewide public medical education expansion plan and its multiple health care and economic benefits to Nevada.
- 7. Hospital Collaboration:** The statewide public medical education plan recommends that both UNSOM and the UNLV School of Medicine play a lead role in developing and strengthening additional collaborative agreements with hospitals and health systems within each region and statewide to expand GME and develop hospital support and funding.