



THE HEALTH SCIENCES CENTER CONCEPT FREQUENTLY ASKED QUESTIONS

▼ WHAT IS A HEALTH SCIENCES CENTER?

A health sciences center is a university-based, integrated set of health care professional education and biomedical research initiatives that collaborates with patient care programs and facilities and one or more teaching hospitals. A health sciences center will serve as an umbrella for existing medical and health care professional education programs that will promote greater leadership and planning efficiency and a focused vision for the health of Nevada.

▼ HOW WILL I BENEFIT FROM THE HEALTH SCIENCES CENTER?

All Nevadans share a common goal with regard to their family's health care needs—access to quality, state-of-the-art health care that is provided by compassionate, highly-skilled, and knowledgeable practitioners. The establishment of the center will bring together researchers and health care providers in a setting that will foster new medical developments and delivery of integrated healthcare, as well as educate the next generation of outstanding Nevada health care providers.

Healthcare Providers

Imagine what an additional 800 to 1,000 physicians practicing in Nevada over the next decade will mean to leading a productive and healthy life? Long waits for appointments and trips out of town seeking treatment will be greatly reduced.

Over the same decade another 1,600 to 2,400 bachelor's prepared nurses practicing in the state will ensure quality patient care, and 600 to 700 new pharmacists will mean shorter waiting times at the pharmacy and quicker access to life-saving medicine.

Economic Development

We are in a golden age of medicine. Many diseases that were recently considered a death sentence have been conquered or made manageable. Patients that once suffered from these diseases now lead fulfilling and productive lives. In addition to access to enhanced health care, the creation of a health sciences center will have a tremendous economic impact for Nevada.

Biomedical and pharmaceutical research and related industries often provide the foundation for state financial initiatives and partnerships. Of the 126 medical schools in the US, the University of Nevada School of Medicine ranks 101 in National Institutes of Health research funding. NIH funding is the most common method for analyzing the success of research being conducted at health sciences centers. With a larger faculty and the subsequent funding they will generate, medical and scientific breakthroughs will be accelerated.

Predictive Medicine: The Next Frontier

Predictive medicine, the next great stage in unlocking the mysteries of our medical understanding, will empower physicians to identify and formulate treatment plans that prevent diabetes, hypertension, and genetically-based disorders **before** patients show symptoms.

The future of medicine holds unbelievable hope in that many of the most devastating illnesses are closer to being cured than at any other time in human history. The center will spur cutting-edge discoveries by enhancing access to research-driven and evidence-based care, as well as disease prevention.

v WHAT WILL HAPPEN IF THE HEALTH SCIENCES CENTER CONCEPT ISN'T APPROVED?

The School of Medicine was founded in 1969 as a community-based medical school, with the mission of educating primary care physicians to serve rural Nevada. Over the past 37 years, the school has expanded its mission to meet the needs of the fastest growing population in the US. Our ability to continue to provide excellent and compassionate health care for future generations however is in jeopardy.

By virtue of every benchmark, Nevada’s health care is in critical condition. Despite indicators that have the state ranking near the bottom in major, chronic, and debilitating medical conditions, a health sciences center will play a significant role in reversing these trends and help create a healthy Nevada for everyone.

Nevada simply lags behind other states in the number of specialists, including gastroenterologists, endocrinologists, dentists, neurologists, and radiation oncologists. Patients must wait weeks or travel out of state to receive treatment, incur additional expenses as a result and having to endure the stress of being away from family and friends when emotional support is critical to a positive outcome.

The situation across the rest of the health care landscape is equally troubling as we face a shortage in nurses, speech language pathologists, physical therapists, and pharmacists.

v WILL THE SCHOOL OF MEDICINE EXPAND AND MOVE FORWARD AS DESCRIBED AND CONTINUE ITS STATEWIDE MISSION?

Despite being the smallest state medical school in the country, we provide Nevada a wide-range of services, from collaborating with the University Medical Center to run the fifth busiest trauma center in the nation to identifying and treating victims of radiation exposure.

To continue serving Nevada’s citizens now and in the future, the School of Medicine must expand its mission—failure to do so will ensure further deterioration of health outcomes exacerbated by unprecedented population growth. Nevada’s underserved, from those with no prenatal care to those afflicted with chronic mental illness, will fall through the cracks of an overburdened health care system. This will be costly to taxpayers and intensify the pressure burdening emergency rooms statewide.

v WHAT ROLE WILL THE SCHOOL PLAY IN THE HEALTH SCIENCES CENTER CONCEPT?

We live in a world undergoing rapid change—and there is no better place to experience this than in Nevada. The School of Medicine does not intend to simply accommodate this change—along with our partners, we intend to lead it. The twenty-first century will be a period of immense growth for the school, its partners, and Nevada. The center will have an active role in this change and make the dream of a healthy Nevada a reality.

The concept of UNHSC is envisioned as a vehicle to bring together the health-professional schools in a manner that creates greater focus on Nevada's population health issues, health improvement, and prevention through an interdisciplinary education approach involving the University of Nevada School of Medicine, nursing, public health, allied health and dentistry.

v HOW WOULD THE CENTER IMPACT LAB RESEARCH IN THE TREATMENT OF PATIENTS?

A distinguishing feature of a health sciences center is its mission of discovery, moving from basic science and clinical research to improve patient care. Today University of Nevada School of Medicine researchers are leading the way in promising and cutting-edge work that will save lives.

Trauma physicians Tom Shires, M.D. and John Fildes, M.D. are developing a unique thermal battery fluid heating technology with a nationally-renowned engineering firm to prevent patients from going into shock.

Kent Sanders, M.D., chairman of the medical school's Department of Physiology and Cell Biology, is world-renowned for research on smooth muscle plasticity—what happens to smooth muscles in diseases such as atherosclerosis, diabetes, asthma, and digestive disorders. These are only two examples of the research being conducted by University of Nevada School of Medicine physician-scientists that offer new insight and hope, in the treatment of many of the diseases that plague humankind.

We stand poised to improve our state's health care by providing quicker access to physicians and specialists; developing treatments and speeding up delivery from the laboratory bench to patient bedside; educating the next generation of physicians; and continuing four decades of community service to Nevada. No matter where you live in Nevada, your life will be affected by the medical treatment and research that will be conducted at the health sciences center.

v DOES CREATING THE CENTER MEAN THE SCHOOL OF MEDICINE WILL BE REMOVED FROM THE UNIVERSITY OF NEVADA, RENO?

No.

v WHERE WILL THE CENTER AND ITS PROGRAMS BE LOCATED?

The health sciences center is a concept at this time. Our goal is to integrate health care professional education, research, and patient care initiatives at the University of Nevada Las Vegas and University of Nevada, Reno and NSHE state and community colleges.

Program and service locations will be based on the educational needs of local communities, availability of facilities, and opportunities for acquiring land that can be developed. Existing facilities at both university campuses and new buildings will be used to accommodate growth.

v WHO WILL BE IN CHARGE OF THE CENTER?

Across the country, health sciences centers follow different organizational and leadership models. However a health sciences center is organized and led, the tripartite roles of medical education, patient care, and research are highly-complex and tightly-regulated. Thus the leadership must be able to make decisions and commit resources to better teaching programs and health care services for trainees and patients at the center.

v WILL FACULTY AND STAFF OF CURRENT HEALTH CARE PROFESSIONAL SCHOOLS AND PROGRAMS HAVE A PLACE IN THE NEW STRUCTURE?

Absolutely! The health sciences center is not an attempt to downsize existing health care professional education programs. The health care needs of Nevada are undeniable and will require the redoubled effort of current faculty and staff and the infusion of more health care professionals.

v THE HEALTH SCIENCES CENTER CONCEPT CALLS FOR A MAJOR INCREASE IN MEDICAL SCHOOL FACULTY—WHY? WILL NEW FACULTY BE DIFFERENT FROM THE CURRENT FACULTY?

A mainly part-time and volunteer clinical faculty has made great achievements at the School of Medicine, achievements that the school and the Nevada System of Higher Education can be proud of. However, the business of health care has changed dramatically since the school's founding.

Medical education accrediting agencies demand stability and consistency, as well as significant, time-consuming, and non-reimbursed requirements for teaching and supervision. To meet these requirements, the School of Medicine must expand its faculty to avoid becoming dependent on Nevada's community physicians.

As students have commented, “We appreciate that community physicians are willing to contribute to our education programs, but we also need more medical and surgical specialty and subspecialty faculty to teach their knowledge. We would like to learn directly from the people we read about in the literature.”

v WHAT IS THE ROLE OF COMMUNITY PHYSICIANS IN TEACHING AT THE CENTER?

Initially all medical schools rely on community-based physicians to play a role in teaching students and residents. Community physicians in Nevada have traditionally played an integral role in medical education, especially given the aggressive plans for expanding graduate medical education programs.

Within the context of the center, our success requires a substantially expanded core faculty supplemented by community-based physicians’ support in meeting curriculum requirements. The community physician relationship must be sustainable and based upon physician group commitment to the academic mission without overly depending on any individual in the group.

v WHAT WILL A HEALTH SCIENCES CENTER DO TO ACCOMMODATE THE NEED FOR A TEACHING HOSPITAL? WHERE WILL THE HOSPITAL BE LOCATED? HAS A PARTICULAR HOSPITAL BEEN SELECTED TO FILL THIS NEED? WILL A NEW HOSPITAL BE BUILT?

Nevada System of Higher Education is **not** in the hospital business, nor do these institutions plan to enter the hospital business. Similarly the School of Medicine and the Nevada System of Higher Education are not seeking out-of-state alliances to create a new hospital.

Success of the HSC requires mission integration between the health sciences center and its teaching hospital partners. Health sciences centers require teaching hospital partners that share a common mission—high-quality patient care, education, and research. Each must be committed to their mutual success.

v WHY DOESN'T THE HEALTH SCIENCES CENTER CONCEPT REQUIRE A NEW HOSPITAL?

The School of Medicine and the Nevada System of Higher Education recognize the strength of Nevada’s existing hospitals and its expertise in patient care. The medical school can provide leadership in education and faculty development while the state’s hospitals can provide services for faculty, students, and patients.

v WHAT'S THE COST OF THE SCHOOL OF MEDICINE GROWTH PLAN? HOW MUCH OF THE COST WILL BE SECURED FROM THE BOARD OF REGENTS AND THE HIGHER EDUCATION BUDGET? FROM OTHER SOURCES?

Financial planning has focused on the need to expand the School of Medicine to address the state's health care needs. Over the next ten years, the school plans to:

- increase class size from 52 students to 96 by 2011;
- increase the full-time state-wide faculty from 189 to 500;
- increase the number of resident and fellowship positions from 194 to 444, using projected state needs for specific physician providers to tailor our training programs.

The cost to the public is minimal, as the School of Medicine receives less than 18 cents per dollar of its total budget from the state. Similar to other medical degree granting or allopathic medical schools, the School of Medicine derives most of its annual operating budget from self-generating sources, for instance, clinical practice revenue, research grants, hospital service, and government support for residency programs. Thus, operating support for the majority of this expansion can occur “organically,” with a similar percentage of state support, currently less than 20 cents per dollar of revenue, and a total increase of the state budget from \$27 million to \$53 million in current dollars. This increase will be phased in over a ten-year period.

Facilities or “capital” needs are estimated to total approximately \$300 to \$350 million in current dollars. This funding will come from multiple sources and will also be phased in as the School of Medicine expands. The School of Medicine will also require both capital investment and operating support for other health care professional programs' needs. Continued planning is necessary to quantify the additional financial requirements.

v WHY DOESN'T THE SCHOOL AND OTHER HEALTH CARE PROFESSIONAL PROGRAMS EXPAND RATHER THAN CREATE A HEALTH SCIENCES CENTER CONCEPT?

Fifty to 70 percent of the total health care budget in this country results from care of chronic diseases such as cancer, diabetes, cardiovascular disease and stroke. Patients with chronic diseases are most

effectively cared for by a team of health care providers. In a health sciences center, an integrated approach to education allows trainees to learn to function as a team, reducing duplication and providing additional cost efficiency. The vibrant health sciences center environment attracts the best and brightest faculty and students.

If the state does not address these problems, the current dilemma will become a true medical disaster. With the fastest growing population in the country, Nevada must take bold action now. There will be dire consequences should the School of Medicine fail to expand to accommodate Nevada's health care needs. However the school should not be the state's only solution.

v WHY SPEND TAX MONEY TO EXPAND THE SCHOOL OR CREATE A HEALTH SCIENCES CENTER— WHY NOT ALLOW PRIVATE ENTITIES TO PICK UP THE SLACK?

Nevada benefits from private schools that have stepped in to fill the public's need for health care providers. However, neither the public or private sector can meet the need alone. The role of the School of Medicine needs to evolve from its origin as a provider of primary care physicians for rural Nevada to one that can address the health care needs and education of both rural and urban patients. As a public institution, the School of Medicine has a responsibility to remain an affordable choice for Nevadans.

v WHY IS THE SCHOOL SEEKING \$29 MILLION OVER THE NEXT BIENNIUM?

As the school evolves into a more advanced medical academic institution, the size and breadth of the faculty also needs to grow. Increasing the number of full-time faculty is the core of growth and improvement at the medical school and is essential to expanding graduate medical education programs.

From 2007 to 2009, the School of Medicine expects to increase its faculty to about 80 FTE and the number of graduate medical education positions to 81. Much of this growth will be full-time faculty, correlated with expansion of the graduate medical education programs. Since March 2006 other health sciences center program requests have been more thoroughly developed. Program development in the School of Pharmacy and Pharmaceutical Services, enhanced advanced training programs in the School of Dental Medicine, and growth in nursing programs throughout the state, including graduate programs in nurse education, have come into sharper focus. In total the 2007-08 Legislative request related to the School of Medicine's growth plan is \$14.1 million. For 2008-09, the request is \$14.9 million.

v WHY IS A SCHOOL OF PHARMACY PART OF THE HEALTH SCIENCES CENTER PLAN?

Demand for traditional pharmaceutical care services in Nevada has grown faster in the last decade than predicted and will outpace the number of new pharmacists entering the profession. It is not uncommon for patients to wait five hours or more to get a prescription filled throughout the state. Today there are 1,800 licensed pharmacists serving Nevada's 2.5 million population, but not all practice full-time. In many areas of the state, particularly outside of Reno and Las Vegas, openings for pharmacists go unfilled.

Can't Private Schools Fill this Need?

Private schools cannot meet the growing need for pharmacists in Nevada. Demand for traditional pharmaceutical care services has grown faster in the last ten years than was foreseen. The University of Nevada School of Pharmacy will develop advanced training for clinical pharmacists not available at private schools.

What Economic Benefits Would Accrue from Creating a School of Pharmacy?

Creating a School of Pharmacy will provide direct economic benefit to Nevada, with a projected \$3 million annually in research funding when the faculty is fully staffed. The School of Pharmacy will serve as a statewide resource through the establishment of a drug information and poison control center and an investigational drug studies laboratory.

v DOES THE HEALTH SCIENCES CENTER CONCEPT ADDRESS THE STATE'S NURSING SHORTAGE?

Nevada faces an acute shortage of registered nurses. Current data shows the state lags behind our neighbor states in registered nurses with 514 registered nurses per 100,000 population, ranking dead last in the nation. The national average is 780 registered nurses per 100,000. In terms of nurse practitioners, Nevada ranks 47th among all states with 15 nurse practitioners per 100,000, compared to the national average of 33.

Unless the problem is addressed, this shortage will continue with a potentially horrific impact. As important members of the medical and health care team, nurses play a critical role in patient care and serve as the physician's eyes and ears. Estimates of future workforce needs for nursing personnel in

Nevada are significant and will require further expansion of current programs. Plans underway include doubling enrollment in nursing schools, providing the state an additional 1,600 to 2,400 bachelor's degree prepared nurses and 120 graduate degree nurses over the next decade.

v WHY DOES THE BIENNIAL LEGISLATIVE REQUEST INCLUDE A FUNDING REQUEST FOR THE SCHOOL OF DENTAL MEDICINE?

The current UNLV base budget includes full funding for the dentistry program's D.D.M. degree. The program is fully ramped up and has graduated its first class. The enhancement request is to develop a rural outreach program and four post-graduate training programs to meet Nevada's need for highly-specialized dental services. Rural areas of Nevada are underserved with few dentists choosing to practice in these communities.

Between 1991 and 2001, Nevada experienced a decrease of 16 percent in dentists per capita, due to the state's rapidly expanding population, resulting in it ranking 48th in the US in dentists per capita.

Dentistry specialty rankings:

- With 1.4 oral and maxillofacial surgeons per 100,000 population, Nevada is in a 3-way tie for 48th place with Wyoming and Arizona, only New Mexico has fewer specialists per 100,000 persons. The national average is 2.3 per 100,000.
- In endodontics, Nevada ranks 31st with 1.1 per 100,000 persons but significantly below the national average of 1.5 per 100,000 persons.
- In pediatric dentistry, Nevada ranks 42nd with 1.2 per 100,000 persons compared to the national average of 1.7.
- In periodontics, Nevada ranks 45th in the country with 0.9 per 100,000 persons, half the national average of 1.8 per 100,000 persons.

To meet the needs of rural Nevada and the need for advanced training in dental medicine, the following programs are proposed:

- a rural outreach program where all third-year students would spend time in rural Nevada working in community health centers, US public health services, facilities, and private practices;
- training programs in endodontics, periodontics, oral and maxillofacial surgery, and pediatric dentistry.