

University of Nevada Health Sciences Center

Strategic Vision and Plan

Board of Regents Presentation

March 17, 2006

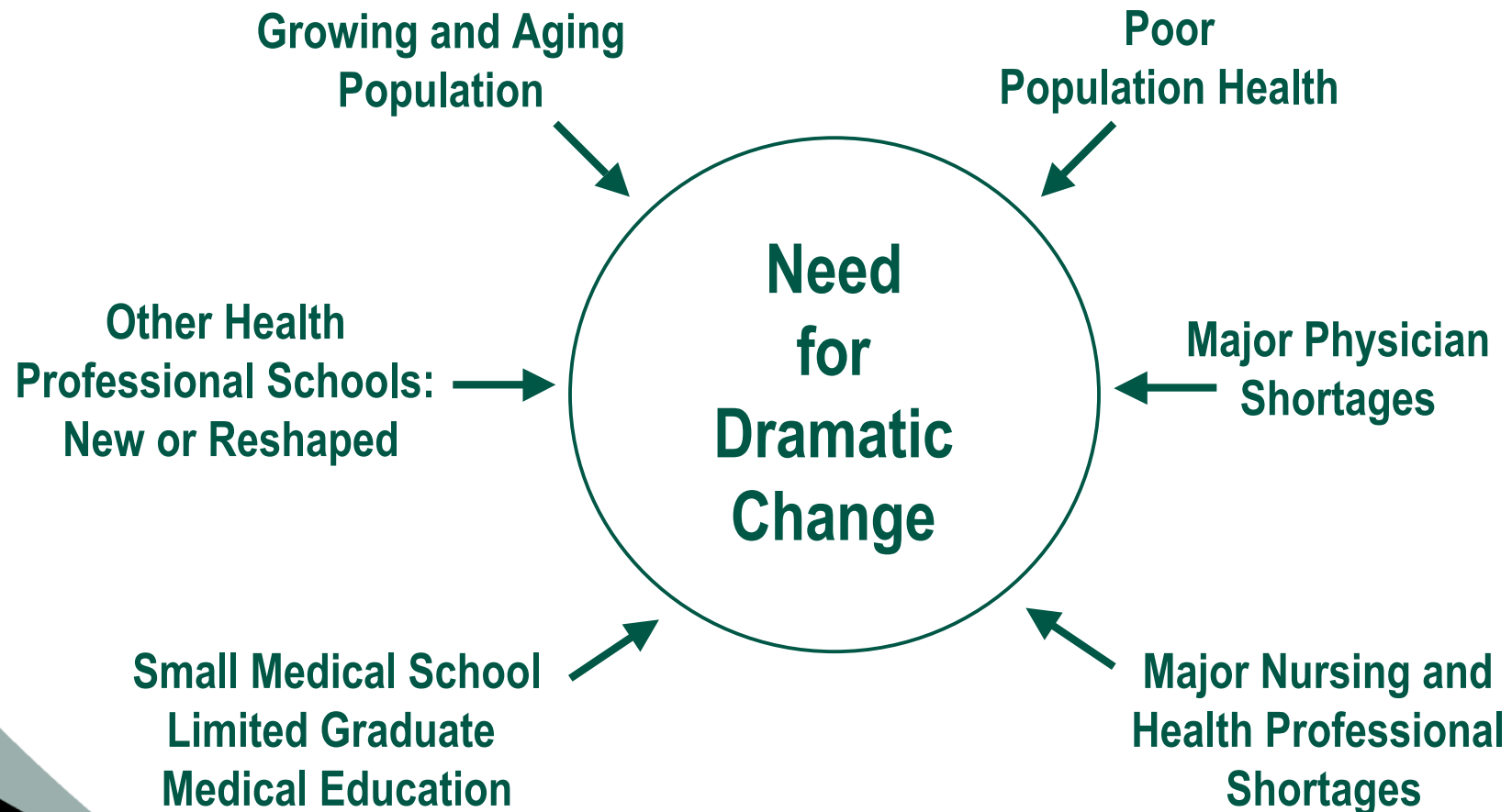
LarsonAllenSM

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How we reached this point in the dialogue

- Chancellor Rogers charged UNR and UNLV to work collaboratively to explore health sciences concept based on Arizona model
- LarsonAllen selected as consultant based on reputation, resources, and availability
- Charge: “Tell us your recommendations for NSHE’s health care education programs at UNR and UNLV based on the current condition of the health professional schools and Nevada’s needs”

The Need for Change



Nursing Workforce: Improved Access to Care

- In 2000, Nevada lagged behind all bordering states in RNs per 100,000 population with 514.4 RNs/100,000 population as well as being significantly below the National average of 780.2— **Ranked 50th amongst states**



Source: Department of Health and Human Services – HRSA State Health and Attendant Workforce Profiles, published 2004.

Physician Workforce: Improved Access to Care

The physician to population ratio in Nevada is one of the lowest in the nation, resulting in difficulty for many in achieving timely, adequate access to care.

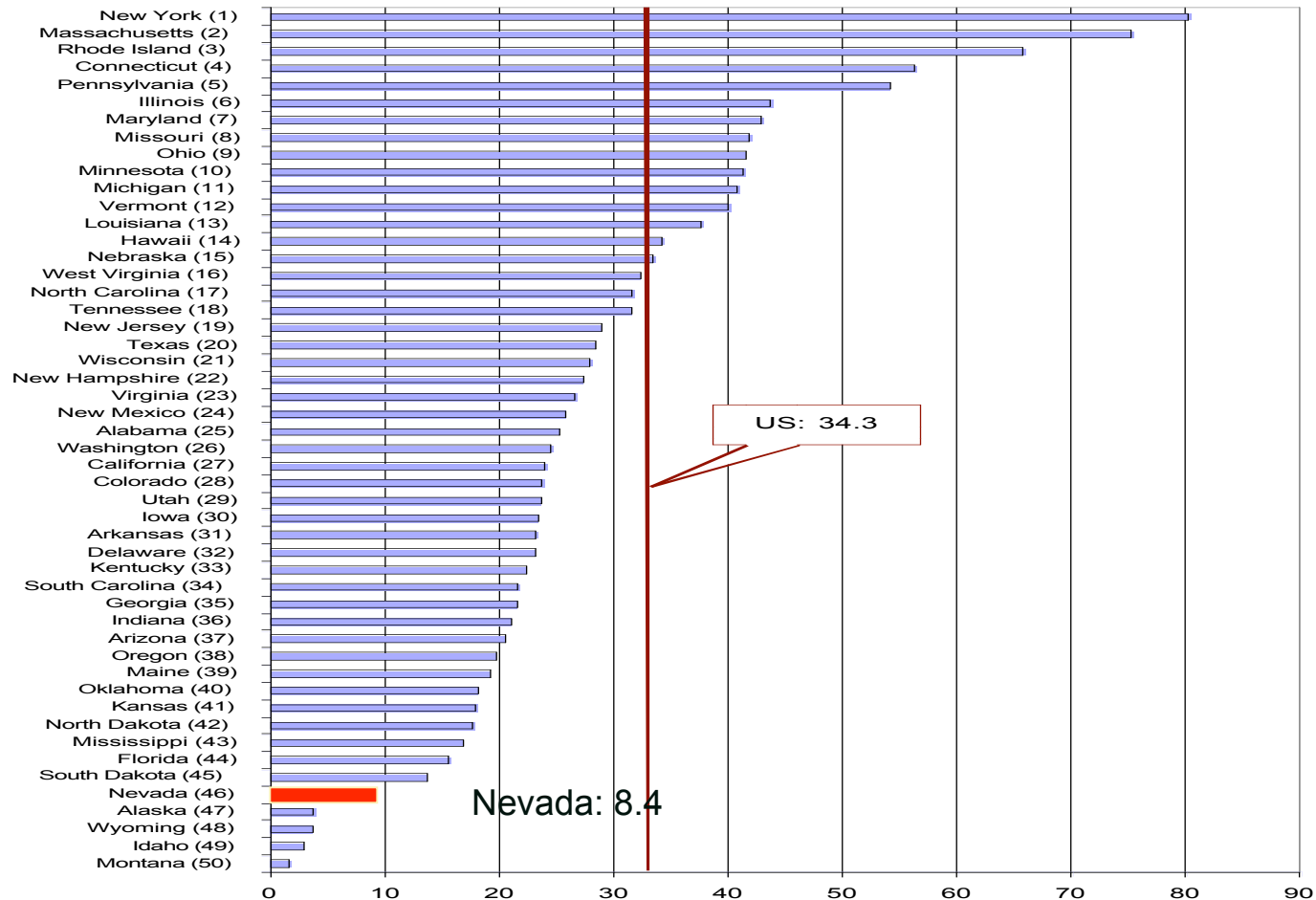
Patient Care Physicians/ Population Ratios for Selected States

	<u>Non-Federal Physicians per 100,000 Civilian Population</u>	<u>State Rank</u>
Nevada	172	47
Arizona	189	44
Texas	189	45
Utah	190	42
Kansas	201	38
New Mexico	212	31
Michigan	213	30
Delaware/Florida--Median	222	25/26
Louisiana	239	15
Maryland	339	3

Source: American Medical Association (AMA) Physician Characteristics and Distribution in the US, 2006 Edition

Physician Workforce: Improved Access to Care

The number of physicians in residency training – the “pipeline” for the future physician workforce in Nevada – is among the lowest in the country:



Source: American Association of Medical Colleges (AAMC) 2004 Data

Graduate Medical Education: Residency Program Comparison

By comparison, the following Residency programs are offered by medical schools in neighboring states:

<u>PROGRAM</u>	<u>NEVADA</u>	<u>NEW MEXICO</u>	<u>ARIZONA</u>	<u>UTAH</u>
Family Medicine	Dark Blue	Light Blue	Dark Red	Green
Internal Medicine	Dark Blue	Light Blue	Dark Red	Green
Surgery	Dark Blue	Light Blue	Dark Red	Green
OB/Gyn	Dark Blue	Light Blue	Dark Red	Green
Psychiatry	Dark Blue	Light Blue	Dark Red	Green
Plastic Surgery	Dark Blue	White	White	Green
Dentistry	Dark Blue	White	White	Green
Pediatrics	Dark Blue	Light Blue	Dark Red	Green
Anesthesiology	White	Light Blue	Dark Red	Green
Dermatology	White	Light Blue	Dark Red	Green
Diagnostic Radiology	White	Light Blue	Dark Red	Green
Radiation Oncology	White	White	Dark Red	Green
Emergency Medicine	White	Light Blue	Dark Red	Green
Neurology	White	Light Blue	Dark Red	Green
Neurosurgery	White	Light Blue	White	Green
Occupational Medicine	White	White	White	Green
Ophthalmology	White	White	Dark Red	Green
Orthopedics	White	Light Blue	Dark Red	Green
Otolaryngology	White	Light Blue	White	Green
Pathology	White	Light Blue	Dark Red	Green
Physical Medicine/Rehab	White	White	White	Green
Preventative Medicine	White	White	Dark Red	Green
Cardiothoracic Surgery	White	Light Blue	Dark Red	Green
Urology	White	Light Blue	Dark Red	Green
Vascular Surgery	White	White	Dark Red	Green

Source: Accreditation Council for Graduate Medical Education (ACGME)

Graduate Medical Education: Fellowship Program Comparison

By comparison, the following Fellowship programs are offered by medical schools in neighboring states:

<u>PROGRAM</u>	<u>NEVADA</u>	<u>NEW MEXICO</u>	<u>ARIZONA</u>	<u>UTAH</u>
Family Medicine-Sports Medicine	Dark Blue			Green
Family Medicine-Obstetrics	Dark Blue			Green
Hand Surgery	Dark Blue	Light Blue		Green
Trauma	Dark Blue			
Critical Care	Dark Blue	Light Blue		
Anesthesiology/Critical Care	Dark Blue	Light Blue	Dark Red	
Cardiology		Light Blue	Dark Red	Green
Cardiac Transplant			Dark Red	
Child & Adolescent Psychiatry		Light Blue	Dark Red	Green
Endocrinology		Light Blue	Dark Red	Green
Forensic Pathology		Light Blue		
Gastroenterology			Dark Red	Green
Geriatric Psychiatry		Light Blue		
Geriatrics		Light Blue	Dark Red	Green
Hematology/Oncology		Light Blue	Dark Red	Green
Hematopathology		Light Blue		
Infectious Disease		Light Blue		Green
Integrative Medicine		Light Blue	Dark Red	
Interventional Radiology		Light Blue	Dark Red	Green
Neurology		Light Blue	Dark Red	
Neurosurgery		Light Blue	Dark Red	
Neonatology		Light Blue		Green
Nephrology		Light Blue	Dark Red	Green
Neurological Radiology				Green
Pain Management		Light Blue	Dark Red	
Pediatric Cardiology				Green
Pediatric Endocrinology				Green
Pediatric Hematology/Oncology		Light Blue	Dark Red	Green
Pediatric Neurology		Light Blue		Green
Pediatric Neurosurgery		Light Blue	Dark Red	Green
Pediatric Orthopedics				Green
Pediatric Pulmonary			Dark Red	Green
Pulmonary/Critical Care		Light Blue		Green
Rheumatology		Light Blue		Green
Surgical Oncology			Dark Red	

Source: Accreditation Council for Graduate Medical Education (ACGME)

Physician Workforce: Improved Access to Care

State	Population (millions)	Medical School Class	Residency & Fellowship Programs	Total Residents & Fellows	Faculty	Percent of Pop. Below Federal Poverty
New Mexico	1.9	76*	45	479	617	23
Utah	2.4	104	48	534	906	14
Arizona	5.6	107	37	348	645	18
Nevada	2.3	52	14	194	189	15

Note: New Mexico is increasing its entering class size by 25 students beginning 2006-2007; after a 4-year transition New Mexico's class size will be 101

Sources: AAMC 2005, Kaiser State Health Facts 2003-2004

Core Conclusions

- Nevada's health care needs have changed dramatically: The many positive accomplishments of the faculty notwithstanding, UNSOM and the other health professional schools need to do more to meet the growing and changing needs of Nevada.
- A small medical school with limited programs is not meeting and will not meet the needs of Nevada. While the primary care, rural health mission of UNSOM should continue to be a foundation, a new, expanded vision needs to be aggressively pursued: that of the University of Nevada Health Sciences Center.

Core Conclusions (continued)

- The component parts of the University of Nevada Health Sciences Center – UNSOM and the other health professional schools – need to collaboratively plan and grow as an integrated whole to meet the needs of the State.
- Collaboration by the University of Nevada Health Sciences Center outside of the University is also essential – the vision cannot be executed isolated from the larger community.
- The starting point for a great Health Sciences Center is great people: development of a more robust faculty should be the #1 priority.
- NSHE will need to implement the vision of the University of Nevada Health Sciences Center through creative funding approaches to resource development and with help – from the State, from the business community, from the philanthropic community. Those stakeholders should expect and demand quality results and meaningful collaboration.

The UNHSC Strategic Plan: Overview

Needs

- Physician Workforce

-
- Nursing and other health professional workforce

-
- State health outcomes and community health improvement

-
- Increased research: economic development

Actions

- A more complete School of Medicine
- Increase UNSOM class size
- Increase GME program scope
- Strengthen community relationships and partnerships
- Increase faculty breadth and depth

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- Increase class sizes and scope of programs
 - Initiate School of Pharmacy
 - Increase faculty breadth and depth
 - Strengthen community relationships

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- Enhance community health education, research, and service initiatives
 - Focus efforts across UNHSC on distinct education, research, and service initiatives and the needs of Nevada
 - Collaborate with other agencies
 - Target improved national competitiveness and funding

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- Focus research investments
 - Increase faculty depth and breadth
 - Build community partnerships
 - Use UNHSC as integrating vehicle

The UNHSC Strategic Plan: Overview (continued)

- No Health Sciences Center has the resources to fund top-tier programs in all disciplines and areas of research and development. Nevada, in particular, will need to focus its investments to advance quality growth.
- Key programmatic investment themes for UNHSC could include (requires continuing discussion):
 - Neurosciences
 - Cancer
 - Maternal-Child Health
 - Infectious Diseases / Microbial Defense
 - Healthy Aging
 - Nevada Community Health Solutions (Community Health)
 - Molecular Medicine
 - Clinical and Translational Research
- The integration represented by the Health Sciences Center will greatly facilitate progress on this agenda

What is a Health Sciences Center?

A Health Sciences Center is a University-based, integrated set of health professional education and biomedical research programs, aligned with supportive patient care programs and facilities.

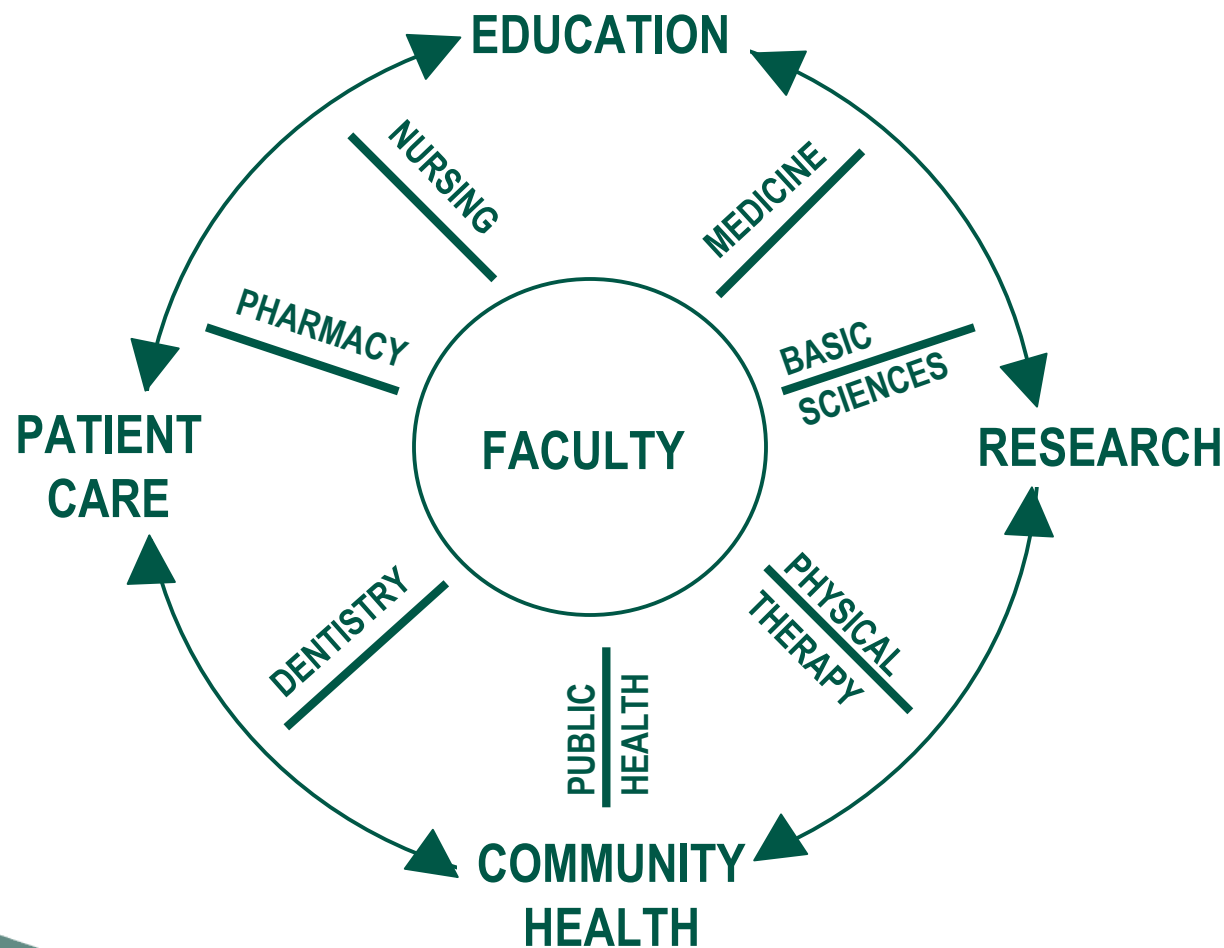
A Health Sciences Center has:

- Missions of health professional education, biomedical research, patient care, and community health improvement
- A medical school and other health professional schools (Nursing, Public Health, Pharmacy, Dentistry, etc.)
- An aligned teaching hospital (or more than one), deeply committed to the success of the academic programs and faculty
- A unifying leadership and organizational structure

Health Sciences Centers, on a national basis, are highly diverse, take many forms, and fulfill their missions in a variety of ways.

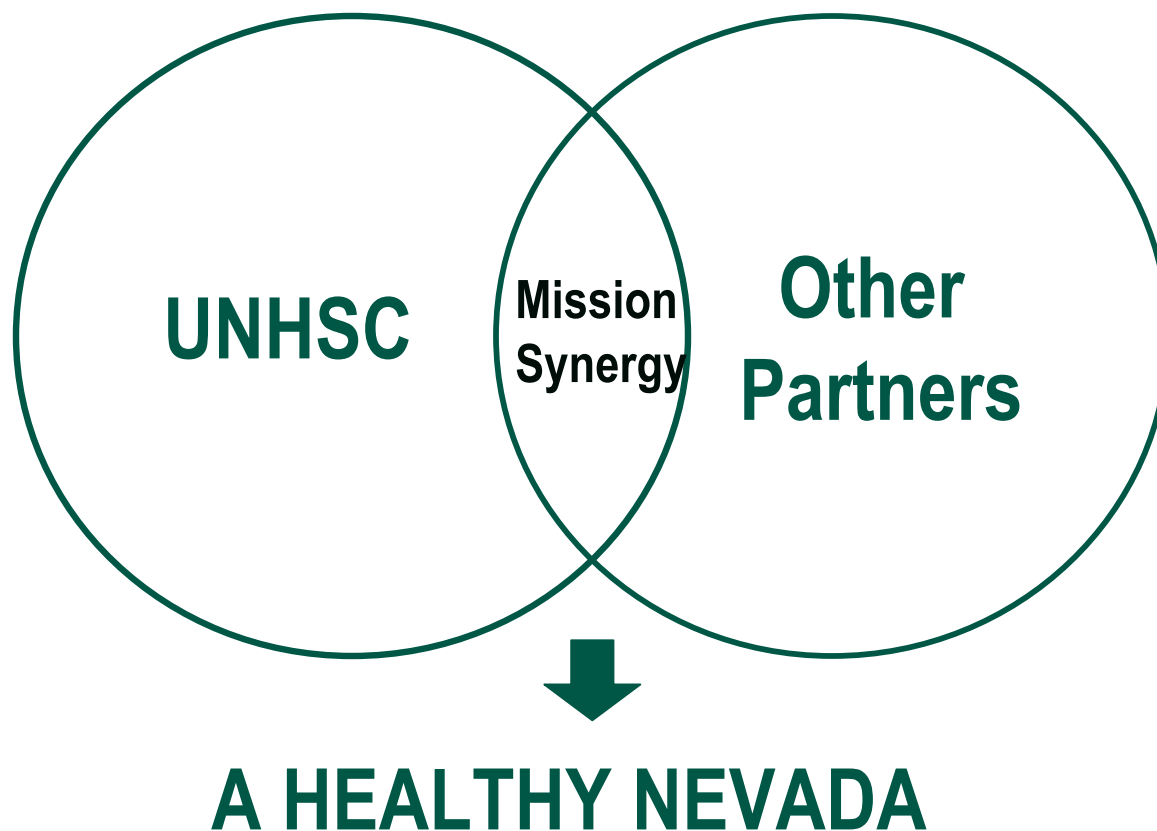
What is a Health Sciences Center?

Quality faculty – with breadth and depth across the disciplines and passionate career commitments to teaching and research – form the core of a Health Sciences Center.



Partnerships: A Critical Need for UNHSC and Nevada

There is a great opportunity and need for UNHSC to collaborate with other resources in Nevada in order to most effectively meet Nevada's needs.



UNSOM Expansion: Economic Benchmarks

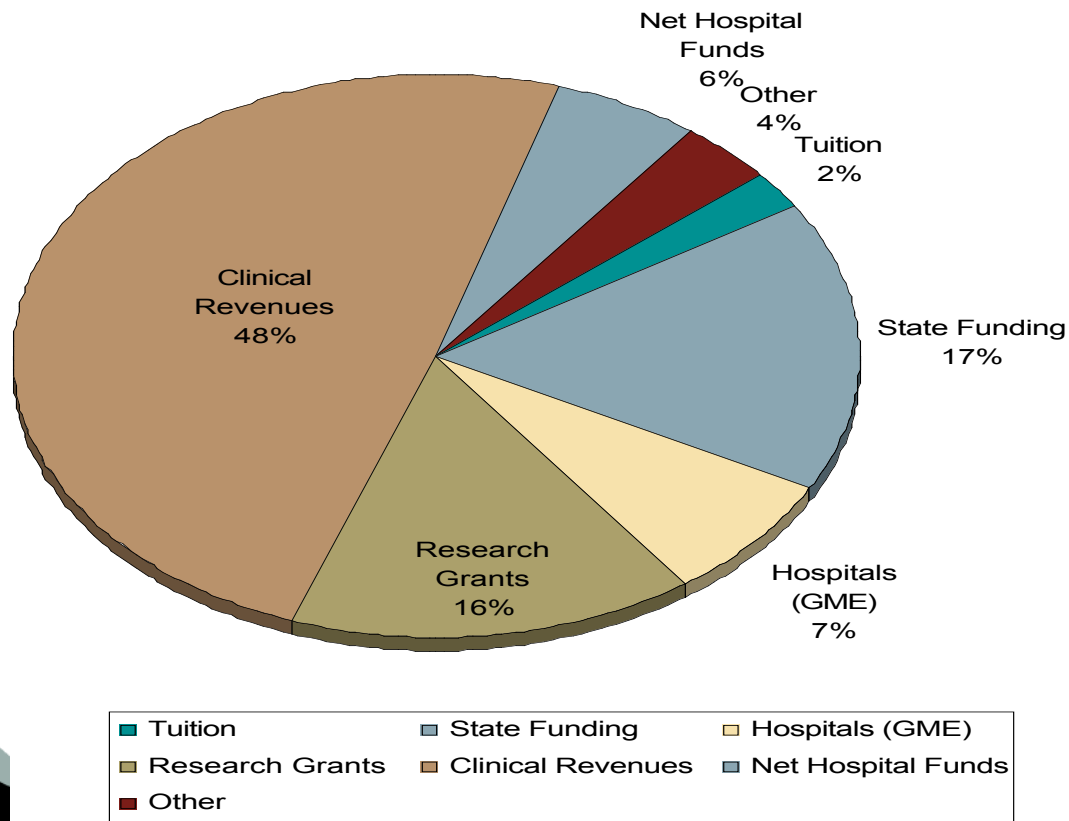
	<u>Students</u>	<u>Residents/ Fellows</u>	<u>Faculty</u>	<u>Research (000s)</u>	<u>State Support (000s)</u>	<u>Tot. Rev. Exc. Clinical (000s)</u>
Nevada (2004)	208	194	189	\$14,800	\$24,042	\$83,743
Nevada (future)	384	444	500	\$48,000	\$53,000	\$157,000
Arizona	428	348	645	\$66,148	\$46,695	\$223,163
New Mexico	304*	479	617	\$44,421	\$56,136	\$238,037
Utah	416	534	906	\$77,778	\$23,360	\$304,711

Note: New Mexico is increasing its entering class size by 25 students beginning 2006-2007; after a 4-year transition New Mexico's total students will number 404

Source: AAMC, 2004

UNSOM Expansion: Investments and Economics

- Based on internal UNSOM analysis and comparisons with other medical schools, a future (10 years forward) operating budget (in non-inflated dollars) could be portrayed as follows:



Total current annual operating budget
\$137 Million

Projected annual operating budget approximately
\$307 Million

State funding would grow from \$27 Million to approximately \$53 Million over 10 years (in current dollars)

UNSOM Expansion: Capital Investment

The planned expansion of programs and faculty at UNSOM will require additional space for classrooms, research laboratories, outpatient clinical facilities, student support functions, faculty offices, and other needs. Using benchmark space data provided by the Innova Group, it is estimated that a \$300 to \$350 Million capital investment will need to be made over the next 10 years.

Capital will be invested in both Las Vegas and Reno.

The above estimates do not include capital costs for parking, student housing, and other auxiliary services, which are assumed to be developed through private or other non-State financing mechanisms.

The above capital estimates are in current dollars and do not include land acquisition costs.

Other Health Professional Schools Student Growth

- In total, significant growth in student enrollment is required in each of the health sciences schools in order to meet the needs of the State of Nevada
- As enrollment grows in the Schools of Nursing, Dentistry, Public Health and Pharmacy at UNR and/or UNLV, the faculty will also need to grow
- Preliminary planning indicates the following growth will be required in order to effectively meet Nevada's needs:

Total Health Professional School	Current	Year 5	Year 10	Year 10-15
Student Growth	2,823	4,221	5,526	6,800
Faculty Growth	175	272	376	450

Potential Financial Requirements: Sources of Funding

Requirement	Potential Funding Sources										
	Tuition	Pt. Care Revenue	Debt	Philanthropy	Federal	State	Local	Teaching Hospitals	VA	Developers	Venture & Industry
Expand Class Size	Shaded			Shaded		Shaded					
Expand GME Programs		Shaded			Shaded	Shaded		Shaded	Shaded		
Expand Faculty		Shaded		Shaded	research		Shaded	Shaded	Shaded		Shaded
Capital: Facilities		Shaded		Shaded	research	Shaded	Shaded	Shaded		Shaded	
Capital: Technology			Shaded	Shaded	research	Shaded					Shaded
Capital: Student Housing										Shaded	

How Will Nevada Benefit?

Improved access to care for a growing and aging population

- 800 to 1000 new physicians practicing in Nevada over 15 years
- 1600 to 2400 new Bachelors prepared nurses practicing in Nevada over 15 years
- 600 to 700 new pharmacists practicing in Nevada over 15 years

Economic development

- Biomedical research increase of \$40 to \$45 Million in annual sponsored research

Improved community health

- Focused research, education, and service programs directed at Nevada's public health issues

Enhanced access to research driven, evidence based care and disease prevention

Enhanced state reputation and pride in its health care

The Chancellor's Request to the Board of Regents

1. Accept the report
2. Endorse the vision and direction for the health sciences center as described in the report
3. Direct management to develop further detailed analysis and recommendations including:
 - Operating and capital budget request for the next legislative session
 - Continued dialogue with stakeholders
 - Recommended organizational principles and design
 - Continued planning with other health professional schools
 - Refined requirements for continuing consultant support