

**The University of Arizona
College of Medicine
Tucson Program**

**Clinical Vision and Strategic Priorities
2005-2010**

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University of Arizona College of Medicine Clinical Vision and Strategic Priorities 2005-2010

Introduction

This *Clinical Vision and Strategic Priorities* for the University of Arizona (UA) College of Medicine (COM) articulates a direction for growth and broad clinical priorities of the COM over the next five years.¹ The outcome of this clinical planning process will be integrated with the results of similar planning efforts underway for the research and educational missions of the COM. (A description of the planning process is included in Appendix A.)

Academic Medical Centers (AMCs)² like the COM and its clinical partners – University Medical Center (UMC), University Physicians Healthcare (UPH) and the Southern Arizona VA Health Care System (SAVAHCS) – have a complex and overlapping set of missions, including **education**, **research**, and **clinical care**. In the latter domain, AMCs are the nation's leaders in advancing clinical care, introducing new technologies, treating patients with complex problems, and caring for the underinsured. In order to fulfill our obligations in these areas and achieve national and regional excellence, we must make strategic decisions in resource allocation, specifically focusing on those categories most essential to achieving our vision.

The implementation of the clinical vision and strategic priorities of the COM is dependent in large measure upon its clinical partners. Further, it is the revenue that UPH and UMC generate that fuels the economic engine of the COM clinical programs and to some degree its education and research as well. Therefore, much of the implementation of this vision and strategic priorities will be addressed through the joint planning undertaken by the COM's clinical partners, as outlined in the principles and assumptions below.

Principles and Assumptions

The following principles and assumptions have been adopted to guide the growth of clinical programs between the COM, UMC, UPH, and SAVAHCS:

¹ The COM is expanding its program in the Phoenix metro area, and COM plans for Phoenix and Tucson must ultimately complement each other. However, this vision and strategic priorities for the clinical enterprise deals solely with programs and services emanating from Tucson.

² An Academic Medical Center is defined as a medical school, its teaching hospital(s), and faculty practice plan(s). An academic health center (AHC) includes the above, plus other health professional schools, e.g., pharmacy, nursing, and public health. This plan deals only with the UA COM and its clinical partners, not the entire AHSC.

Principles

1. *Transparency in strategic and financial planning among UMC, UPH and the COM is necessary to achieve success in our academic missions.*
2. *Plans should be implemented with explicit benchmarks to monitor progress and determine success in achieving the stated goals.*
3. *Good performance will be incentivized and rewarded. There will be a clear line of sight, and alignment, between goals and incentives.*
4. *Prioritization is necessary and appropriate to achieve our goals. Opportunity costs will be explicitly addressed, and emphasized. Resources are finite. Allocation of funds for a high priority initiative means that those funds are not available for a lower priority initiative.*
5. *Duplication of fixed costs will be minimized wherever possible. Economies of scope and scale will be maximized wherever possible.*
6. *Investments in infrastructure, especially information technology, will be made in a fashion that optimizes information exchange across the entities, and optimizes transparency of financial and strategic planning.*

Clinical Strategic Planning Assumptions

This plan is built on several planning assumptions. These include:

Growth

1. Growth in the clinical arena is necessary for the provision of additional excellent clinical care, including excellent service (to our customers – providers, patients, and ourselves), clinical education, and clinical research, as required by the population of southern Arizona and the State.
2. Clinical program growth will provide the majority of resources needed to advance the multiple missions of the COM.
3. Planning and implementation of this growth agenda must be prompt.
4. UMC and UPH must be able to grow to generate capital for the clinical needs of the COM. This requires at least 3 percent “profitability” each year to pay for growth in facilities, equipment, and people and to provide adequate capital for debt capacity.

Strategic Alignment and Priorities among Programs and Services

1. Clinical resource allocation priorities will include:

- Programs that will enhance our COM missions: excellence in clinical care, education, research and service
 - Programs that will serve community or regional needs
 - Programs that will be financially successful
 - Programs that will bring national recognition
2. UMC and UPH planning and support of COM clinical programs will be coordinated.
 3. SAVAHCS and COM clinical planning will be coordinated.
 4. Thematic groups/focused clinical programs will be strategically assigned to the AHSC, UMC North, SAVAHCS, and UPH Hospital campuses. All clinical programs will have a primary home on one or more Tucson area campuses.
 5. Clinical strategic planning will be coordinated with research and educational strategic planning.
 6. All program growth should be assessed and supported by the UPH/UMC/COM leadership with special consideration of multidisciplinary interdependence (e.g., any growth in cardiothoracic surgery, cardiology, cardiac anesthesia, or CCU/OR/facilities would need to consider the effects of growth on the other system components, and their concurrent growth needs).

Financial Investment and Performance

1. The combined investments of the three organizations should be made with the intention that programs will be financially viable in "X" years, and thereafter provide additional capital for new programs ("X" should be decided *a priori* for each investment).
2. Every clinical program must have a clinical "profit" of X percent [to be determined] of revenue (or cost) in order to support and sustain its growth. Each practice-based clinical program (and its leader) is expected to find a way to meet these financial goals, for example: new entrepreneurial programs, research support, better billing, better collections, greater efficiency, greater effectiveness, downsizing, or eliminating unprofitable programs.
3. Elimination of unprofitable programs and the redistribution of money within the UPH/UMC/COM enterprise must be reviewed and accepted by the COM/UPH/UMC leadership.

4. Clinical program leaders will be held accountable for excellence, and it will be defined by external and internal benchmarks.

Mission Statement

To continually improve the diagnosis, treatment and prevention of disease for the people of Arizona, through education, research, and clinical care.³

While this document deals primarily with clinical services, what distinguishes the clinical services delivered by an AMC from those offered by community health providers are teaching, research, and a commitment to leading edge clinical care. This “core mission” of the COM lies at the intersection of education, clinical care, and research, as shown in Figure 1.

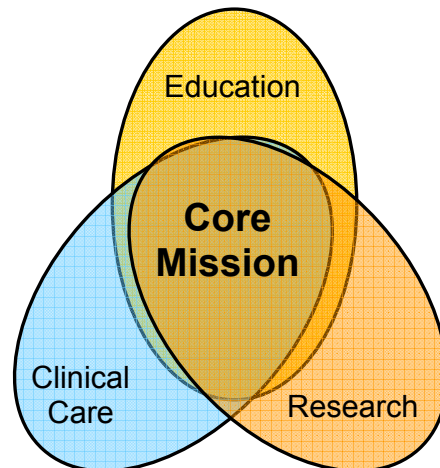


Figure 1. Core Mission of the COM

Accordingly, this plan for clinical services will dovetail with the COM *Strategic Plan for Research and ArizonaMed: Physicians for the 21st Century*, the major curriculum redesign plan for the COM.

Five-Year Vision

Our five year vision for the clinical component of the core mission of the UA College of Medicine is to be recognized as a national leader in selected areas (“focused excellence”) where we can or have achieved greatness and as the regional leader in developing new models and the highest standards of care for

³ This revision to the COM mission was proposed by Dean Keith Joiner to the UA COM faculty on May 25, 2004.

all of our clinical efforts. To meet our goals for national prominence, we must make targeted investments in chosen areas, including the development and introduction of cutting-edge technologies to implement our new models and standards of care. To meet the goals for regional prominence, we must grow by at least 50 percent⁴ in order to have a broad foundation across all clinical departments and in all medical specialties. By achieving our regional and national goals, we will simultaneously meet our obligations to the patients we serve, and position the College of Medicine for continued progress towards greatness in our core mission.

Opportunities for Excellence

How Do We Compare as an AMC?

We are a good, small AMC. Our clinical faculty members are mostly clinician-teachers, many of whom are respected as regional leaders in their fields, and many are nationally prominent. However, many clinical departments and sections have too few members to allow them the depth and breadth they need to excel in meeting the needs of the residents of Arizona by providing care, teaching, and doing research (see Appendix B for details).

We have a good reputation in education and are in the process of redesigning our curriculum to meet the physician needs of the 21st Century. However, we are only 44th in the nation's states in terms of medical student to population ratios, and we need to train substantially more residents to meet the physician needs of our state (Appendix B).

In NIH research rankings we are average (55th out of 125) when compared with all US medical schools; however, we are ranked second among all schools with less than 500 faculty members. This means our faculty compete successfully for grants, yet there are too few for us to achieve higher national rankings (Appendix B).

Excellence Requires Growth to Achieve our Vision

The general conclusion is that we need to increase the size of our clinical faculty, value and nurture them, and provide them with expanded infrastructure, technology and facilities to provide excellent patient care, teach, and do world-class research. The COM needs a larger critical mass of faculty physicians in most departments and sections in order to:

- *Provide excellent, cutting-edge tertiary and quaternary clinical care*

⁴ It is anticipated that the size of the faculty and programs will need to double over 2005 levels by 2020.

- *Develop the new models and standards of care*
- *Lead clinical and service quality improvement and safety initiatives*
- *Meet the expectations of patients and referring physicians for timely access to care*
- *Teach the expanding student and resident base*
- *Provide adequate coverage within specialties*
- *Increase the amount of translational and clinical research*

This growth needs to occur in three fundamental areas of the COM clinical enterprise, including UMC and UPH: 1) national leadership programs, 2) regional leadership programs, and 3) infrastructure.

1. *National leadership programs* are defined as those clinical areas in which the COM, UPH, and UMC already are strong throughout Arizona and the region and further aspire to national/international recognition as “great” (see Appendix C) among other academic health centers.

For national leadership the COM competes with other academic health centers for national and international rankings. Benchmarks will be established using rankings, both for clinical services (e.g., *U.S. News and World Reports*) and research (e.g. NIH) (Appendix D).

2. *Regional leadership programs* are those tertiary and quaternary services that exist at the level above what is offered by community health care providers. They are recognized throughout Arizona and the region⁵ for their excellence in research, teaching and clinical care.
3. *Infrastructure* is comprised of those programs that are required to support all of the clinical partners (e.g., common information systems and other enabling technologies), programs that enhance clinical quality and safety, or personnel that are required to provide critical leadership and/or clinical support (e.g., clinical department heads).

Excellence Requires Excellent People and a Commitment to Diversity

We need an environment that will attract and retain the people who will make us great, with a special emphasis on valuing, developing, and supporting strong clinician-teachers, clinical researchers, and leaders – both formal and informal. Most clinical faculty members at the COM (and most other medical schools) are clinician-teachers. We must continue to attract and retain these highly valued individuals. Achieving excellence also requires that we place a priority on achieving diversity – among

⁵ The “Region” is defined as: the southwestern US including Arizona, New Mexico, western Texas, Colorado, Nevada and Utah.

patients, among students and residents, and among faculty and staff (see Appendix E for details).

COM Clinical Strategic Priorities 2005-2010

National Leadership Programs

Based on existing strengths in research, education, and clinical care the COM has established the following priority, five-year national leadership goals (see Appendix F for additional background on priority National Leadership Programs).

1. To raise the *clinical cancer programs* to a top 10 program⁶ within five years.
 - Complete the cancer clinical facility development at the UMC North campus.
2. To raise the *clinical pediatric programs* to a top 20 program⁷ within five years.
 - Substantially upgrade the outpatient and inpatient clinical pediatric programs.

Enabling Technologies

3. To maintain and enhance our leading-edge telemedicine program for clinical care, education, and research in the US.
4. To develop synergies between existing UA optics and biomedical imaging expertise to become one of the top ten medical imaging programs for clinical care, education, and research in the US.

Potential National Leadership Opportunities

The following three programs have the potential to become top priorities for the COM, depending upon their development over the next five years:

Cardiovascular

The cardiovascular programs at the COM and UMC have achieved national and international recognition in a few key areas, most notably the bridge to transplant, artificial heart, and sudden death/CPR programs. With further growth of nationally

⁶ As measured by *U.S. News and World Reports* and/or other appropriate indices (see Appendix D).

recognized research, the cardiovascular programs should be included as a highest COM clinical priority.

Respiratory

The respiratory research programs at the COM have achieved national and international recognition in a few key areas, most notably asthma and chronic lung disease. With substantial growth of excellent clinical services, the respiratory programs should be included as a highest COM clinical priority.

Native American Health and Health Care

A critical mass of clinical programs and research dedicated to Native American health and health care may be present at the COM, UMC, UPH as well as other programs at the UA. Examples include diabetes research and treatment, the Native American cardiology program, the use of telemedicine by several tribes in Arizona, and a surgical residency at Tuba City, Arizona. These programs and others may be able to coalesce into a major new initiative that could build on the synergies between existing programs.

Emerging Programs

In addition to the general growth in programs and faculty, clinical departments, sections and centers have identified clinical areas in which they have or hope to achieve regional and/or national recognition during the next five years (see Appendix G for details). To be included among national leadership programs in the future, emerging programs will need to define how they could become "great" among AMCs and nationally known for the clinical care and associated research that they deliver. The fundamental question to answer is, what is the breadth and depth that needs to be developed that would put the program on the map in the next five to ten years – that would make others say: "the UA is the leader in this arena?"

Emerging programs are grouped below and include:

- Arthritis/Immune-Mediated Inflammatory Disease
- Chronic Kidney Disease
- Clinical Neurosciences (including Psychiatry and Pain Mgmt)
- Diabetes
- Emergency Medicine/Trauma
- Genetics
- Geriatrics
- GI and Liver Disease
- Hispanic Health and Health Care
- Integrative Medicine

- Personalized Medicine/Prospective Medicine⁷
- Sports Medicine, Hand Surgery, and Spine Programs
- Transplantation
- Valley Fever
- Women's Health

While these programs have not been included in the current top priorities of the COM, they have the potential to develop even greater regional and/or national excellence and recognition for their leadership over the coming years. This will be measured through their national rankings in commonly used clinical and research benchmarks, such as: *U.S. News* and NIH research rankings (see Appendix D).

In addition there are a number of areas of surgical research and clinical excellence associated with the regionally and nationally recognized programs listed above that may achieve national leadership over the next five years. Which of these will excel will depend in part upon priorities established by a yet-to-be-named department head for the Department of Surgery, to be hired in 2005.

Regional Leadership Programs

1. To increase faculty size by 150-180 based on clinical and financial needs
 - Clinical departments have identified over 130 new faculty recruitments that must be in place to begin this expansion over the next five years.
 - Enhancing surgical programs, e.g., ENT, and recruiting a new department head for Surgery is a high priority.
2. To increase the size of the Tucson-based residency programs by substantial numbers of residents in order to meet the current and future physician needs for Arizona.
3. To provide sufficient clinical programs and facilities in Tucson for training of medical students and residents at the Tucson campuses, for example:
 - Increase the size of UMC to 500 beds.
 - Develop the UPH Hospital campus as a major academic health center facility, with 260 beds (including psychiatry) and associated clinical, education, and clinical research programs.
 - Develop UMC North campus as a coordinated UPH/UMC outpatient facility

⁷ For descriptions see e.g.: James H. Thrall, "Personalized Medicine," *Radiology*, 231 (2004):613-616; Ralph Snyderman and R. Sanders Williams, "Prospective Medicine: The Next Health Care Transformation," *Academic Medicine*, 78 No.11 (2003): 1079-1084.

- Develop more integrated clinical partnerships with the SAVAHCS
4. To increase the number of patients coming to the COM and its affiliated clinical programs for excellent teaching, state-of-the-art clinical care, and clinical research.
 5. To develop medical informatics, simulation, and robotic systems and infrastructure in support of clinical, research and educational programs.

Mechanisms for Growth

UPH and UMC jointly generate almost \$500 million each year (Appendix B). Most of that clinical revenue will continue to be used to operate the existing and expanding clinical enterprise.

The COM, UMC and UPH will jointly agree on the funding for national leadership programs. *Priority will be assigned to those programs that demonstrate the greatest academic, clinical, and financial return on investment.* For those infrastructure projects that fund people (e.g., recruitment of a new department head) or enabling technologies (e.g., information technology), additional priority will be given to those that support the missions of all three organizations.

All clinical programs will continue to have numerous opportunities to fund faculty and programs. Potential sources include:

- Additional clinical faculty recruited based on sound business plans, documenting unmet patient demand and projected growth of clinical income, i.e., the typical UPH process for hiring new faculty members
- UPH Fund "B" – a clinical departmental reserve fund
- Pima County funds available via UPH Hospital
- Industry, foundation, and government grants and contracts, e.g., clinical trials
- Strategic relationships with industry, e.g., the Department of Radiology/UMC/Toshiba partnership for digital imaging in the 1980s; current IBM/UA partnership for mass data storage
- Development and other fundraising, e.g., to use for endowing chairs
- State/federal legislative support, e.g., Telemedicine
- Linkages with national leadership programs