Board of Supervisors Memorandum

September 21, 2010

Status Report
Transition of the Former Kino Community Hospital Campus to a Stable, Viable and Necessary Component of a Two-hospital Academic Medical Teaching System Affiliated with The University of Arizona College of Medicine

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I. Introduction

As I reported to you in my communications of April 8, 2010 and June 15, 2010, the Arizona Board of Regents (ABOR), The University of Arizona College of Medicine (UACOM), University Physicians Healthcare (UPH), management of the UPH Hospital and University Medical Center (UMC) committed to a series of actions including a major restructuring of their enterprise to achieve an integrated clinical system. These commitments formed the basis of my recommendation to enter an Intergovernmental Agreement (IGA) for Fiscal Years (FYs) 2010, 2011 and 2012 with ABOR and the new corporation responsible for clinical operations (UA Healthcare, Inc.) through which the County would commit to additional funding for the UPH Hospital.

Strengthening the medical and mental health service delivery institutions at the Kino campus will require the full expertise and cooperation of UACOM, UPH, UMC and their respective management teams. The restructuring of this enterprise commits the parties to a level of cooperation for mutual benefit that has not existed for some time.

I am pleased to report that leadership has accomplished nearly all aspects of the restructuring except those requiring additional attention from a legal perspective. This restructuring solidifies the commitment to ongoing integration of the clinical operations within a framework through which three functions critical to the University health colleges can occur with increasing efficiency and effectiveness: delivery of patient care, teaching the healthcare workforce of the future, and health research. All of the University's health colleges (Medicine, Pharmacy, Nursing and Public Health), as well as the hospitals and physician faculty and their practices, will benefit from the actions underway. The entire clinical enterprise has the opportunity to penetrate new patient markets, reduce costs and increase revenues through integration of administrative and support services, as well as service operations, while ultimately improving patient access to care in an era of healthcare transformation. I expect these actions will accelerate the financial stabilization of UPH Hospital.

The following report describes the extent to which the UPH Hospital transition has progressed, the actions being taken to achieve the vision for this campus and some of the challenges facing both ABOR and UA Healthcare, Inc. (UAHC) during the continuing adverse economic environment at the local, state and federal levels. It reflects County staffs' analysis of operational performance data.

II. Overview and Summary

Considerable progress has been made in terms of revitalization of the hospital on the Kino campus, improved financial management of the operation, and most significantly, the alignment of incentives and opportunities for the University system through the restructuring of the academic medical center's clinical programs. An independent not-for-profit (soon to be 501(c)(3)) company known as UA Healthcare, Inc. with an annual operating budget of $1.2 billion has been formed to focus solely on supporting the University in its healthcare missions. An integrated system is now possible; enabling the two hospitals, the physician practice and the health plan to mutually benefit and improve patient care through efficiencies gained from streamlining operations and coordinating patient care delivery systems. An ABOR UA Med Strategic Taskforce is focused on accomplishing an integrated clinical enterprise to support education, research and patient care to establish the foundation for a top tier medical school. Leadership of the University is demonstrating it is fully engaged in the transformation and integration of the system.

The leadership of UPH Hospital continues to execute strategies to maintain and achieve the financial improvements required to operate within the available funding. Financial benchmarks have been established and are continually monitored by experienced hospital management committed to the financial improvement of UPH Hospital. For the first time in its six years of operating UPH Hospital, management reported an operating gain for FY

2010 of $2.3 million. During the last six months of FY 2010, the changes by management led to an improvement over the first six months of FY 2010 of six percent in net revenue per adjusted patient day (from $1137.78 to $1201.08) and three percent in operating costs per adjust patient day (from $1832.42 to $1782.07). With only a 5.4 percent increase in volume between these periods, most of it in outpatient services, the annualized improvement as a result of the work over the last six months represents $2.8 million.

Improvements are ongoing to the cost structure, the revenue and the patient volumes. The management team continues to meet the benchmarks for staffing, the largest component of cost, with levels safely reduced to 4.43 full time equivalents (FTEs) per adjusted patient bed in the second half of FY 2010 from 4.93 in the first six months of FY 2010. During FY 2011, planned initiatives will improve productivity to achieve 4.25 FTEs per adjusted occupied bed.

A number of department efficiency standards are being met or exceeded. Revenues have increased through identification of payer sources at the point of service, more effective coding of services rendered to assure payment for the acuity of care provided and favorable renegotiation of payer contract terms and conditions. In spite of the adverse economic situation, self-pay levels have declined. For example, for the month of June 2010, Emergency Department visits recorded as self-pay were at six percent; previously they were reported at 13 percent. For FY 2010, the indigent care level decreased by almost $1 million from FY 2009 with this improvement achieved during the last six months of the fiscal year under the new management team.

Patient volumes between FY 2005 and FY 2010, measured by adjusted patient days, have increased by 75 percent. While the rate of growth slowed between FY 2009 and FY 2010 as a result of the economy and its direct effect on access to healthcare by individuals who are now unemployed and without insurance, the expectation is that outpatient volumes will continue to grow, and some inpatient improvement is definitely possible.

Similarly, the census is increasing, though at a much slower rate as the number of individuals who are insured has decreased, thereby reducing elective procedures and services. Ideally, the hospital needs to increase its inpatient census by 21 percent (from 92 in July 2010 to 111) to achieve optimal service viability as budgeted in FY 2011. UMC is experiencing the same reduced census phenomenon, and the leadership teams are working together to develop re-branding and marketing strategies to address the need for patient volumes.

Services at the Kino campus continue to expand with more than 600 emergency management (EMS) transports arriving monthly. Emergency and urgent care service volumes remain constant at more than 40,000 visits per year. Surgical volumes, which have increased 200 percent since FY 2005, declined in the last year. However, the

hospital has recently recruited five new surgeons dedicated to the Kino campus specializing in orthopedics, gastroenterology, urology, and general surgery.

In March 2010, UPH Hospital, working collaboratively with UMC, opened a surgery clinic in Green Valley. The clinic sees 114 patients per month and refers 17 patients per month to UPH Hospital for a variety of procedures.

Cardiology services continue to expand with the efforts of the three interventional cardiologists who are trained in complex interventions that are not readily available throughout the region. A gastroenterology lab is planned. Inpatient units are being equipped with telemetry capabilities to permit patients requiring extensive and ongoing monitoring to be admitted throughout the facility. Collaborative planning and operational strategies are underway with the local Regional Behavioral Health Authority (RBHA) for a one-stop continuum of care developed utilizing a holistic model melding medical and behavioral health care for individuals with behavioral health needs.

Hospital leadership is also partnering well with the University in its cosponsored Graduate Medical Education (GME) program. The cosponsors continue to confirm their goal of training 106 or more physicians through the University's newest program based at the Kino campus. This program began in FY 2008 with 17 residents in two specialties (internal medicine and psychiatry). Currently, the hospital program is training 68 residents in six specialty programs (emergency medicine, family medicine, internal medicine, neurology, ophthalmology and psychiatry). Surgery is the remaining program awaiting approval by the accrediting body and is expected to begin during FY 2012. Additionally, 31 resident FTEs enrolled in the University program based at UMC are training at UPH Hospital. Particularly unique is the dual residency program in both pediatrics and emergency medicine providing a considerably different level of expertise than other hospitals for children presenting in the emergency rooms at both the Kino campus and UMC. In fact, it is one of only three such residencies in the country.

The collaboration to secure federal funds by leveraging the County funding for this initiative, along with University funds to secure a 3:1 match in federal funds, continues to be increasingly successful. New federal funding received for costs associated with all GME initiatives at both UPH Hospital and UMC for FY 2008 through FY 2010 totals nearly $61 million. Additional funding of approximately $1.5 million to restore partial payments related to FY 2010 costs known as Disproportionate Share Hospitals (DSH) payments are anticipated from this initiative.

Future plans include recruitment of 95 physicians in 23 specialties for the Kino campus between FY 2011 and FY 2013. These physicians will contribute to the financial viability of UPH Hospital and support the vision of a 300-bed hospital at this site. County staff is working with the physicians and hospital leaders to complete plans for housing the Family

and Community Medicine practice, the Diabetes and Wellness Center, and the Toxicology Center on the second floor of the Abrams Building. Discussions are also underway to complete plans to house the Critical Path Institute (C-Path) on the fourth floor of the Abrams Building.

UPH Hospital is currently the clinical site for two University Centers of Excellence. These centers are The University of Arizona National Center of Excellence in Women's Health and the Sonoran University Center of Excellence in Developmental Disabilities (Sonoran UCEDD). For the future, The University of Arizona is proposing creation of three additional Centers of Excellence at the Kino Campus: a center for Prevention and Treatment of Diabetes, a center for Behavioral Health and a center for Toxicology.

The leadership of Carondelet Health System [represented by Ruth Brinkley, Chief Executive Officer (CEO)] and the University (represented by Dr. William Crist, Vice President for Health Affairs] are forming the Diabetes Prevention and Treatment Alliance. This Alliance will unite the resources of both organizations across competitive boundaries to address the significant impacts diabetes and obesity have on our community.

The Behavioral Health Center for Excellence will be based on the philosophy that emphasizes the importance of aggressive crisis care and linkages with community mental health providers. It reflects a significant change from the current philosophy of care and offers individuals with behavioral health conditions a medical home and a holistic approach to their care in which medical and behavioral services are available with a "no wrong door" philosophy so that regardless of where in the system a patient presents, they can access needed services.

The Occupational Toxicology Center will be the only center of its type in Arizona. It will serve as a referral source of business to the hospital and will respond to an array of occupational exposures as well as provide follow-up services for rattlesnake and scorpion bites and respond to the increase in opiate overdoses.

Additionally, the Emergency Department, in coordination with the Department of Surgery and the UMC trauma service, is designing a program that meets the Level III trauma designation. The existing Emergency Department will be relocating to space in the new psychiatric pavilion and expects to achieve Level III Trauma designation for this service within 90 days of relocation. As UMC is the only Level I Trauma center in Tucson, the development of this program will result in an expanded, integrated trauma system available through UAHC, benefiting Pima County and southern Arizona.

Challenges facing healthcare organizations today are significant. Economic conditions at the federal, state and local levels continue and present barriers to sustaining financial and operational stability in healthcare. Severe cuts have been made by the State to medical

and behavioral health services reimbursed by the Arizona Health Care Cost Containment System (AHCCCS) program. These cuts will ultimately lead to higher costs for hospitals and physicians responding to the conditions of the individuals with reduced services. The State has eliminated funding for GME, forcing hospitals to reconsider whether they can absorb the costs of continuing physician training. Federal healthcare reform requires hospitals and physicians in particular to change their systems to focus on the "pay for value" or "pay for performance" goals the reform seeks to achieve.

While these challenges are significant, the leadership of this integrated University system has identified opportunities to partner with other organizations in unique alliances such as the one focusing on Diabetes Treatment and Prevention. This proactive approach to challenges, combined with the accomplishments achieved to date, convince me that the University system as it is restructured will leverage its considerable talent and resources to meet those challenges and continue to implement its vision to include the one described for the Kino Campus on August 18, 2010 at its showcase event. To assure the Board has an opportunity to hear first hand the status and vision for this community, Dr. William Crist and his leadership team will personally present to you at the September 21, 2010 Board of Supervisors meeting.

The following sections of this report provide further details on the organizational restructure, integration activities, operational and financial improvements, GME expansion and funding, future plans for the Kino campus and the challenges facing the organizations.

III. Restructuring

The University, UPH, and UMC have successfully restructured to form an integrated system currently named UA Healthcare, Inc. (UAHC). UAHC comprises the entire clinical entity supporting the University in its healthcare improvement efforts. It is comprised of three divisions: hospital and clinic, practice plan for University physicians, and a health plan. The physician Practice Plan reports through Dean Steve Goldschmid MD. The two-hospital system reports through the Senior Vice President of Clinical Operations for UMC Hospital, Karen Mlawsky, and the CEO for UPH Hospital, Diane Rafferty. Ms. Mlawsky and Ms. Rafferty are leading the integration of hospital operations. The health plan reports through the CEO for University Physicians Health Plans, Kathy Oestreich.

UAHC is an independent not-for-profit (soon to be 501(c)(3)) company with a primary purpose to support the University in its healthcare missions. UAHC's first Interim CEO is Kevin Burns (formerly CEO of UMC). Jean Tkachyk is the Vice President of Health System Integration. UAHC reports to its 26-member Board of Directors recently appointed by ABOR. Officers have been elected and include Granger Vinall, Chair; Steve Goldschmid,

MD, Vice Chair; and Ed Jenkins, Secretary. ABOR also approves all UAHC officer appointments and memberships for its Executive Committee.

UAHSC in Tucson has three affiliated teaching hospitals: UMC, UPH Hospital (soon to be renamed "The UA Medical Center at Kino" if Pima County and the University agree), and the Veterans Administration Medical Center. The UAHSC in Tucson is jointly governed by Vice President for Health Affairs, Dr. William Crist representing University President Dr. Robert Shelton; Interim CEO Kevin Burns of UA Healthcare; and Dr. Steve Goldschmid, Dean of UACOM. The UAHSC also has an additional medical center in downtown Phoenix. The UAHSC facilities in Tucson and Phoenix link with 170 sites throughout Arizona to provide teleconsultation and online continuing health education throughout the state.

Attached for your reference is the most recent organization chart for UAHC depicting the full array of reporting relationships to both ABOR and UA leadership (Attachment A). This chart illustrates the Tucson initiative depicting single corporate oversight over the three UAHC divisions and clear involvement of ABOR and University leaders. The chart excludes the third Tucson-based hospital relationship in the University hospital teaching program, which exists with the Veterans Administration Hospital.

Leadership is developing a plan to re-brand the enterprise and market the full array of services as well as fully integrate the services within the system. As reported in the *Arizona Daily Star* on Sunday, August 29, 2010, UAHC is a $1.2 billion system with 6,000 employees, making it one of the largest employers in southern Arizona. I anticipate this integrated healthcare system will not only enhance the community workforce, but will also expand services to better address the overall community healthcare needs. This is particularly critical in geographic locations federally designated as medically underserved and health professional shortage areas, which surround the Kino Campus, as well as rural areas. The integrated system will increase access to a broader array of primary care and specialty services and physicians for our community's diverse population including access via the University's telemedicine program.

IV. Integration Activities

The service integration plan for this enterprise is well underway. An ABOR UA Med Strategic Taskforce has been formed. This taskforce is charged with engaging, assisting and advising those individuals responsible for implementing the merger of UMC and UPH to form the new UAHC and to create an integrated clinical enterprise to support the UACOM in its missions of education, research and patient care.

The benefits of this integrated system are tremendous, in that they include improved patient satisfaction, streamlined operations, greater leverage in contract and related

negotiations, an integrated care management system, and clinical foundation for a "top tier" medical school. The taskforce has established a specific integration timeline with milestone markers to be monitored by senior personnel in the organization. I anticipate County staff will update me based on regular communication with the system leadership and that reports will include clear financial benefit of the economies of scale, efficiencies and improved patient systems.

Established integration goals and associated teams include operations such as contracting, purchasing, quality management, patient accounting, compliance, financial systems, risk/claims management, care management and credentialing among many others. Integration meetings are occurring on a routine basis. Included in these meetings are discussions regarding identification of optimal criteria for triaging patients requiring various services to both reduce wait time and more efficiently utilize the physicians and facilities at each location. Additionally, discussions continue regarding cross training of staff to permit them to float or transfer between the two hospitals as patient volume fluctuates, thereby providing both hospitals a stable pool of personnel.

One result of the enterprise is the creation of a joint physician recruitment plan to support the needs identified in the soon to be developed joint Medical Staff Plan. Plans are also underway to join forces in efforts to increase patient volume across the enterprise. The development of primary care will be key as healthcare reform and other forces require primary care practices to assume the responsibility for management of chronic care conditions and to evolve more fully into true medical homes for patients. In addition, focus is being placed on improving systems and communications between UMC and UPH Hospital and the more than 450 physicians they employ to increase the number of direct admits by physicians rather than relying so heavily on admissions resulting from patients presenting in the Emergency Department.

Consolidation of Behavioral Health Services onto the Kino Campus

The University expects to establish behavioral health services at this site as a regional Center of Excellence. A stepping stone to achieving this designation is the consolidation of UMC behavioral health services at the Kino campus. On October 31, 2010, the County will receive a plan from UAHC for the relocation of the psychiatric services to the Kino campus.

Oversight Committee Meetings

Pursuant to the IGA requirements, the Oversight Committee meetings, which originally included leadership from the University, UPH Hospital and Pima County, have continued on a biweekly basis. I am pleased to report that leadership from UMC has also begun participating in some of these meetings. I expect these meetings will continue and prove

to be invaluable for the integrated system as they serve as a forum for discussion of current operations, financial performance, integration of the two-hospital system, new or expanded clinical programs, GME programs, current or upcoming initiatives and matters of interest or concern among the parties, including Pima County.

V. Operational Improvements at UPH Hospital

For the first time in its six years of operating the hospital at the Kino campus, UPH Hospital management reported an operating gain for FY 2010 of $2.3 million. This figure is after recognition of the $25 million in County financial participation, as well as approximately $4.5 million, which is the hospital's portion of the federal funds generated through the maximization of the County and University funds, as the State match to secure the federal funds.

CEO Diane Rafferty and Chief Financial Officer Tim Kares joined the UPH Hospital management team mid to late November 2009. After adopting the Chartis targets, they implemented initiatives beyond those detailed by Chartis to improve operational performance. They have met or exceeded Chartis targets since February 2010 through the combination of cost controls as well as revenue enhancements. During the last six months of FY 2010, the changes by management led to an improvement over the first six months of FY 2010 of six percent in net revenue per adjusted patient day (from $1137.78 to $1201.08) and three percent in operating costs per adjust patient day (from $1832.42 to $1782.07).[1] With only a 5.4 percent increase in volume between these periods, most of it in outpatient services, the annualized improvement as a result of the work over the last six months represents $2.8 million. As performance initiatives continue to be implemented and improved and efforts to increase volumes succeed, we can expect even greater improvement in the financial performance of UPH Hospital.

While inpatient volumes have been less than anticipated for both July and August, Ms. Rafferty and Mr. Kares continue to confirm that they fully expect to meet the overall budget objective, which is to breakeven or achieve a slight gain after County contributions of $20 million for FY 2011. Three new Operations Improvement Committee (OIC) subcommittees are in effect to accelerate focus on business process and policy, revenue cycle operations, and systems technology and data flow. Financial objectives will be achieved while planning for the opening of the programs and services in the new structures under construction on the Kino campus during FY 2012 when the County's contribution is further reduced to $15 million.

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[1]University Physicians Healthcare Hospital Financial Operations Report to the Arizona Board of Regents, September 2010.

A. Management of Costs

UPH Hospital management continues their practice of hospital-wide tracking of personnel levels in relation to patient volumes. Daily monitoring systems and processes, including standardization of performance reporting, communication, physician interaction, strategic planning and a myriad of key actions, are becoming a way of life at the hospital. Other initiatives continue in Pharmacy, Dietary, Radiology, Laboratory, Administration, and Supply expenditures resulting in projected annual cost reductions of $1.6 million.

Daily, weekly and monthly tracking of personnel is a priority as personnel is the single largest cost component. As of January 10, 2010, UPH Hospital management had reduced and otherwise identified 72 FTEs for reduction in force effective pay period ending January 23, 3010 and estimated a reduction in annual labor costs of $3.3 million. The FTE levels have declined from 4.93 in December 2009 to 4.43 during the last six months of FY 2010. Policies are in effect effective January 10, 2010 eliminating $1.5 million in annual contract labor costs in clinical nursing services. FY 2011 initiatives will improve further to 4.25 per adjusted occupied bed. Management recognizes the change in performance thus far is only the beginning of a sustainable process that will carry the hospital successfully into the future.

Uncompensated Care

While UPH Hospital's indigent care percentage remains significantly higher than other area hospitals, efforts to reduce the level of uncompensated care are evident in the following table. Uncompensated care is a particular focus of the County and hospital leadership. UPH Hospital's FY 2010 indigent care percentage (uncompensated care exclusive of bad debt) was 8.4 percent, representing $11,262,000. For FY 2009, it was 10.3 percent, representing $12,237,254. The indigent care percentage improved by 1.9 percent and nearly $1 million.

Table 1: UPH Hospital – Percentage of Uncompensated Care

Fiscal Year	Percent of Cost Associated with Uncompensated Care, Exclusive of Bad Debt
2005	11.2
2006	7.0
2007	10.4
2008	10.0
2009	10.3
2010	8.4

Source Data: ADHS-Hospital Uniform Accounting Report FY 2007-2009 and UPH Hospital Summary of Performance Observations and Initiatives as of June 30, 2010.

While several factors impact UPH Hospital's indigent care level, a major factor contributing to the considerable disparity in indigent care between UPH Hospital and other area hospitals is its cost to charge ratio. The cost to charge ratio reflects the level of costs in comparison to the charges of a hospital. The higher ratio at UPH Hospital in comparison to other hospitals is reflective of the continuing transformation of the hospital as it rebuilds its service base and increases patient volumes to more completely utilize the actual hospital capacity. Typically, as utilization of hospital capacity increases, the cost to charge ratio decreases.

The following table illustrates the positive changes in the cost to charge ratio at UPH Hospital between FY 2005 and FY 2010. The cost to charge ratio in FY 2005 when the main services at the hospital were inpatient behavioral health and limited Emergency Department/urgent care was .942 – considerably higher than the estimated rate of .515 for FY 2010 when overall service volume as measured by adjusted patient days increased by 75 percent from the FY 2005 level.

Table 2: Trend in Cost to Charge Ratio at UPH Hospital

	2005	2006	2007	2008	2009	2010
UPH Hospital Cost to Charge Ratio	0.9423	0.7592	0.6946	0.6336	0.5886	0.5147
Average cost to charge ratio for all community hospitals excluding UPH	0.3162	0.3076	0.3014	0.2813	0.2660	Not available

Data Source: UPH Hospital, ADHS – Hospital Uniform Accounting Report 2005-2009 as of 01/07/10, FY 2010 Cost to Charge Ratio as reported by Tim Kares, CFO of UPH Hospital – Uncompensated Care Services as of June 30, 2010.

Pursuant to the IGA requirements, by December 31, 2010, UAHC and the County will determine a reasonable level of uncompensated care at UPH Hospital given the patient and payer mix of the hospital.

B. Patient Volumes

As can be seen in the following table, overall patient volume at UPH Hospital has increased 75 percent between FY 2005 and FY 2010, as measured by adjusted patient days (APDs). These volumes are being generated by the 98 physicians compensated for work on the Kino campus. The rate of growth slowed between FY 2009 and FY 2010 reflecting in large part the national and local economic realities. The hospital's FY 2011 Operating Budget projects over 74,000 adjusted patient days for the fiscal year, which is seven percent more than FY 2010. If the FY 2011 budget is achieved,

UPH Hospital will have achieved a volume growth of 88 percent from FY 2005 service levels.

Hospital senior management, has indicated the average daily census at UPH Hospital ideally needs to increase 21 percent (from 92 in July 2010 to 111) to achieve optimal service viability as budgeted in FY 2011. Increasing patient volumes is one of the single most important goals the new enterprise needs to achieve both for UPH Hospital and for UMC, which also has empty beds largely due to the economic situation.

Table 3: UPH Hospital Key Statistical Profile FY05 through FY10

Key Indicators	FY05	FY06	FY07	FY08	FY09	FY10	% Change from FY05 to FY10	% Change from FY09 to FY10
Adjusted Patient Days	39,440	50,744	60,487	65,160	68,370	69,102	75	1
Average Daily Census	65	81	101	106	106	99	52	-7
Emergency Department and Urgent Care Visits	30,356	37,417	38,999	40,983	41,356	40,604	34	-2
Physician Clinic Visits-All Clinics (see Notes 1 and 2)	48,830	59,640	61,025	71,618	95,357	126,880	160	33
Total Surgical Procedures	662	1,442	1,930	2,103	2,216	1,991	200	-10

Data Source: UPH Hospital Statistical Matrix
Note 1: The increase in clinic volume between FYs 2008 and 2009 is driven primarily by the UPH decision to include Alvernon Family and Community Medicine clinics as part of the UPH Hospital business operation as a provider based clinic.
Note 2: The increase in clinic volume between FYs 2009 and 2010 is driven primarily by the startup of new clinics (psychiatry) and conversion of existing clinics (ophthalmology at Alvernon and rheumatology infusion therapy at Wilmot) to provider based clinics within the UPH Hospital business operation.

The Intensive Care Unit (ICU) has reopened at the hospital, and base hospital status for the Emergency Department has been restored. UPH Hospital is contracted as a base hospital with the following agencies: Southwest Ambulance, Tucson Airport Authority Fire Department, Tucson Air National Guard Fire Department, San Manuel Fire Department and Mount Lemmon Fire Department. Additionally, Southwest Ambulance has a hub of operation located on the west side of the hospital. There are more than 600 emergency management (EMS) transports arriving monthly, indicating an increased level of confidence in Emergency Department operation and the hospital overall. Emergency and urgent care service volumes remain constant at more than 40,000 visits per year but with the increase in EMS transports the clinical leadership for the Emergency Department has noted they are receiving patients with greater acuity of illness. In addition to treating the patients presenting to the Emergency Department and urgent care, Emergency Department personnel also provide training to 400 paramedics throughout various agencies in the community.

In spite of these changes, overall inpatient census for FY 2010 (and the first two months of FY 2011) continues to be lower than the three prior years. The decrease in inpatient volumes is consistent with the national and state trends occurring primarily as a result of the economic environment as discussed further in this report in the section titled Continuing Challenges (Section IX).

Outpatient services in the form of clinic visits, which are approximately 127,000 visits per year, continue to increase. Clinic visits are expected to exceed 133,000 if the FY 2011 Operating Budget projection is achieved.

Surgical volumes in FY 2010 have increased 200 percent since FY 2005 but declined 10 percent between FY 2009 and FY 2010. Surgical volumes continue to be lower than anticipated. Increasing the volume of general surgeries and recruitment of dedicated general surgeons is essential to achieving accreditation for the surgery GME program as well as any strategy to increase overall service volumes for the hospital. In an effort to increase patient volumes, UPH Hospital has recently recruited five new surgeons dedicated to the Kino campus: Dr. Latt, Orthopedics; Dr. Chilvers, Orthopedics; Dr. Funk, Urology; Dr. Trowers, Gastroenterology; and Dr. Guerrero, Surgery.

Strategies to Increase Patient Volume

Strategies to increase patient volumes are under development system wide. Since FY 2005, significant capital and program investments have been made at UPH Hospital totaling approximately $40 million, better positioning the hospital to respond to patient needs. A few of the major capital investments include the following:

- A $2.5 million dollar capital investment was made to construct a cardiac catheterization lab that opened in June 2008 and continues to exceed volume projections through the efforts of its three interventional cardiologists. These unique and highly skilled cardiologists are trained to do complex interventions that are not available throughout the region, including interventions for unprotected left main disease, cardiac catherizations done at the wrist and not the groin, percutaneous interventions in patients with severe heart failure, correction of structural heart abnormalities and peripheral vascular procedures.
- Approximately $6.5 million were invested to upgrade imaging equipment, including the acquisition of a 64-slice CT scan unit that is able to image any region in the body during a single breath hold, an upgrade to the MRI machine and the introduction of digital mammography capabilities.
- Nearly $6 million has been spent on expansion of surgical services, including the creation of three additional operating rooms, one of which is a digital operating room. The digital operating room (DOR) is designed to reduce the length of operating time and increase the surgical teams' efficiency and control of the operating room. In addition, the DOR allows UPH orthopedic surgeons to broadcast real-time high quality audio/video and digital images to the conference room located in the UPH Arizona Institute for Sports Medicine. This connectivity facilitates and enhances training by allowing residents and other physicians to observe and discuss the procedures.
- Development of an Outpatient Psychiatric Clinic.
- Equipping the inpatient units with telemetry capabilities.

Surgery is also a gateway for admissions to the hospital. Hospital management is monitoring the surgical procedures daily by physician within specialty to identify and resolve critical patient access issues that may present barriers to the physicians as they try to schedule and perform surgeries at this site.

Further, renovations of the operating rooms are currently in the planning process. These renovations will result in improved patient flow, increased efficiency of the staff and greater physician satisfaction. In addition, there is a perioperative services planning committee chaired by Rafferty and Karen Mlawsky to review the overall perioperative services within the integrated system. The focus is to better utilize existing operating rooms at all locations, including the Ambulatory Surgery Center at Alvernon, UPH Hospital and UMC.

In March 2010, UPH Hospital, in collaboration with UMC, opened a surgery clinic in Green Valley. This has proved to be a successful initiative as evidenced by the number of clinical appointments and surgical procedures performed at UPH Hospital

as a result of the referrals from the Green Valley clinic. The following table illustrates the number of patient appointments at the Green Valley clinic by specialty, by month and the number of surgical procedures performed from the referrals to the hospital. During the six month period the clinic has been opened, there were 682 appointments resulting in 99 procedures performed at UPH Hospital. On average, the specialists rotating through the Green Valley Clinic see 114 patients per month and refer 17 patients per month to UPH Hospital for procedures.

Table 4: Green Valley Clinic Appointments and Surgeries Generated from March 1, 2010 to August 31, 2010*

Specialty	March 2010	April 2010	May 2010	June 2010	July 2010	August 2010	Total	Average per month
Gastroenterology	14	26	17	14	20	19	110	18
General Surgery	26	19	16	23	17	13	114	19
Neurology	19	24	20	25	8	9	105	18
OB/GYN	25	39	19	32	37	27	179	30
Orthopedics	10	0	0	0	7	11	28	5
Surgical oncology	0	0	0	0	0	0	0	0
Urology	16	15	17	24	18	31	121	20
Pain Management**	-	-	-	-	0	25	25	13
Monthly Total	110	123	89	118	107	135	682	114
# of procedures performed at UPH Hospital generated by Green Valley Clinics	18	17	12	14	16	22	99	17
Percentage of total appointments	16.3	13.8	13.5	11.9	15.0	16.3	14.5	

Source: Data provided by UPH Hospital.
*Clinic opened in March 2010.
**Pain Management Clinic opened in July 2010.

Arizona Department of Corrections

During FY 2010, UPH Hospital experienced the impact of changes made in the management of prisoners of the Arizona Department of Corrections (ADOC). ADOC relocated prisoners with significant medical issues to its Wilmot location and began utilizing UPH Hospital as it is the site closest to the Wilmot facilities. As a result of the unexpected influx of this patient population, hospital leadership developed extensive

protocols for management of the population in the Emergency Department as well as on inpatient units. Additionally, contracts were negotiated with ADOC to compensate for both inpatient and outpatient workloads for this patient population. Physical modifications were made in coordination with ADOC to a secure unit in the facility for licensing as a specialized correctional health unit. Licensing was approved and the unit officially opened on July 26 permitting segregation of the ADOC correctional population from other patients. Census has varied since the opening of the unit but there is capacity for additional correctional patients. As a result UPH Hospital management is negotiating favorable reimbursement rates with federal authorities to treat their prisoners who are already being sent to the hospital. As a rule federal reimbursement is better than that of the State, so hospital management reports it does not anticipate any adverse financial impact.

C. Revenue Improvements

Hospital leadership for the past six months routinely focused on the Chartis performance targets pinpointing certain unit cost and revenue targets necessary to sustain financial viability. In FY 2009, the hospital's annual performance against these targets was unfavorable. Improvements were initiated in mid January 2010 targeting over $13 million in annual efficiency improvements and increases in unit net revenues. For the four months ending May 2010 the hospital has exceeded these targets. If sustained, this performance represents an annual financial gain of between $10 million and $14.4 million. Hospital leadership has confirmed they are confident the culture of the organization has sufficiently changed to assure continued achievement of this financial gain.

Significant improvement in revenue has occurred as a result of renegotiation of payer contracts, improved collections and verification of third party payer at the point of service, and the comprehensive approach developed for the hospital utilizing the consulting firm LexiCode focused on the impact proper clinical documentation and health record coding have on net patient revenue.

CFO Kares has worked in other hospitals with LexiCode for more than 25 years. Shortly after arriving and performing a preliminary review of key indicators, he advocated the hospital retain LexiCode to fully examine the coding, clinical documentation and associated staff and physician training that impact revenue performance of the hospital. During their review, LexiCode identified 21 performance issues on which the UPH Hospital team has focused intensively. The LexiCode initiative identified gaps in the employees' knowledge and facility processes related to coding for services performed based on the service documentation. As a result, the hospital was performing services for which it was not being fully reimbursed.

LexiCode has been conducting staff training and continues to test staff competencies to assure that personnel coding the claims are capturing the full range of service and acuity to avoid loss of revenue on procedures performed as a result of inadequate coding. These standards are to be tied to employee performance evaluations. Improvements in revenue are evident in the comparison of revenues collected per adjusted patient day to prior years. The focus on revenue has complemented the cost controls in achieving the improved financial performance. Discussion is underway to determine if UMC could also benefit from this aggressive and comprehensive approach to health information management.

Commercial payer contracts continue to be renegotiated by UPH Hospital. Self-pay levels have declined in the Emergency Department as well as outpatient clinics, illustrating the success of point-of-service data verification and collections efforts. For example, for the month of June 2010, the percentage of self pay Emergency Department visits was six percent compared to a high of 13 percent earlier in the year. These efforts are clearly reflected in the reduction in indigent care dollars. Once again, the economic impact is evident in the shifting payer mix with AHCCCS increasing in its role as a payer while commercial and Medicare business is declining.

VI. Graduate Medical Education Startup and Expansion

The newest GME program, cosponsored by the University and UPH, based at UPH Hospital, began in July 2008 with 17 residents in two specialty programs (internal medicine and psychiatry). Table 5 below depicts the evolution of the GME projected program positions. Today, at the beginning of the third year of the GME program, there are six specialty programs (emergency medicine, family medicine, internal medicine, neurology, ophthalmology, and psychiatry), training a total of 68 residents. Surgery is the one remaining program awaiting approval and is expected to begin during FY 2012. With the full complement of programs accredited and actively training residents, the target number of residents in training is 106.

In addition to the 68 residents training in the University/UPH GME program, 31 resident FTEs enrolled in the University/UMC GME program are training at UPH Hospital as their primary site. Of particular note is the group of residents rotating at both UMC and UPH Hospital who are participating in a dual residency in pediatrics and emergency medicine. This program is one of only three such programs in the country. It also is the first training program to require proficiency in “medical Spanish.”

Table 5: Summary of Projected GME Program Positions

Specialty	Status	Start Date	Term (years)	Positions Filled			Current Projection
				FY09	FY10	FY11	
Emergency Medicine	Approved	July 2010	3	-	-	10	18
Family Medicine	Approved	July 2010	3	-	-	12	24
Internal Medicine	Approved	July 2008	3	11	16	19	24
Neurology	Approved	July 2009	4	-	4	6	8
Ophthalmology	Approved	July 2009	3	-	4	5	6
Psychiatry	Approved	July 2008	3	6	11	16	16
Surgery	Awaiting Approval	Pending Oct 2010	5	-	-	-	10
		TOTALS		**17**	**35**	**68**	**106**

Source: Data Provided by UPH Hospital.

In FY 2009, the University/UPH GME program graduated its first class with two residents. This number tripled in FY 2010 to six graduates and is projected to be nine in FY 2011. Of the two FY 2009 graduates, one accepted a position at UPH Hospital and one returned to Chicago to practice. Of the six FY 2010 graduates, one remained at The University of Arizona for a fellowship position, one remained with UPH as Chief Resident, and one moved to Oregon but will be returning to the University for a fellowship. The remaining three graduates of FY 2010 took positions out of state (one left to practice in their home state and two left Arizona to be closer to family). I anticipate UPH and The University of Arizona will be monitoring the retention carefully and tracking the factors contributing to residents leaving the state to develop an effective retention plan.

There are four potential initiatives underway that could positively impact the GME program. First, as part of federal healthcare reform initiatives, Medicare plans to identify approximately 700 funded residency positions nationally that are not filled and redistribute these positions to states with hospitals that meet specific requirements. Arizona is among the states that have been identified to receive additional resident positions. Of the redistributed positions, 75 percent must be used for primary care (internal medicine, family medicine, pediatrics or geriatrics) or general surgery. This potential increase in the number of residents training in the University/UPH GME program as well as the University/UMC

GME program would have a significant, favorable impact on the healthcare workforce shortage in our community.

Second, a request is planned to seek the accrediting body's approval for an increase in the psychiatry complement from 16 to 24. The completion of the two new psychiatric buildings positions this campus not only as a Center of Excellence but also to be nationally recognized for its unique training opportunity for psychiatry residents utilizing a holistic model that address both the medical and behavioral health needs of an individual within a full continuum of services.

Third, an investigation is underway to determine the feasibility of the establishment of a toxicology fellowship once the new toxicology program has fully developed. While this program is in the early stages, approval will permit an additional one to two fellows annually to train in the University/UPH GME program.

Fourth, temporary complement increase may be used to increase the resident cap in emergency medicine. The emergency medicine program was successful in securing a temporary (one year) increase of four additional positions increasing the number of first year residents in training from six to 10. The Accreditation Council for Graduate Medical Education (ACGME) determines the cap by multiplying the number of residents by the term of the program (6 residents x 3 years = 18 cap). If the ACGME were to continue to allow the increase in positions, the cap could be 30 (10 residents x 3 years). UPH is working to identify ways these positions could be converted from temporary slots to permanent slots.

Even without these four initiatives, this program continues to be a successful expansion strategy for The University of Arizona College of Medicine, training 106 and potentially more physicians of the future once fully implemented. This expansion will aid in alleviating the existing and growing physician shortage that adversely impacts access to care by individuals who choose to live in this region of the state.

VII. Continuing Success of Southern Arizona Collaborative in Securing Federal Funds

Table 6 attached (Attachment B) depicts the three-year success by the parties working collaboratively with the County to leverage local and University funds as match to secure a 3:1 match in federal funds for the GME program. The funding distribution for FY 2010 by AHCCCS is expected sometime in late September or early October, after the federal approval of the State Plan Amendment filed by AHCCCS. For FY 2010, $11,128,009 in local (County) and University funds will be provided as match, generating $35,103,851 in new federal funds for GME. The percentage distribution between UPH and UMC is altered

in FY 2010. A new agreement between the parties reflects anticipated restoration of DSH payments at FY 2009 levels.

For FYs 2008 and 2009, the initiative was limited to Indirect Medical Education (IME). Late in FY 2010, legislation was approved to include a second initiative referred to as Restoration of Direct Graduate Medical Education (Direct GME). Utilizing that legislation, AHCCCS sought and successfully secured federal approval to utilize local and University funds to restore direct GME funding, which was eliminated in the last round of state budget cuts. The amount of Restoration Funding is shown separately in Table 6 below.

For the three years during which this initiative has been active, a total of $60,796,368 in new federal funding has been generated for GME from the collaboration of the members of UAHC, the University and the County and the combined contributions by the County and the University totaling $20,651,145. For its contribution, the County utilized payments agreed to in its existing contractual commitments to UPH, and more recently UAHC and ABOR.

Disproportionate Share Hospital (DSH)

Discussions are ongoing between AHCCCS and the federal agency, Centers for Medicare & Medicaid Services (CMS), with respect to the possibility of permitting the use of local and University funds to secure federal funds for DSH payments, similar to the GME initiative.

The legislation passed late in the 2010 session included a provision to permit use of local funds as match to secure federal funds for DSH payments to hospitals. AHCCCS submitted to CMS a change in their waiver proposing an additional pool of funds be established allowing local governments and universities to use their funds in place of the State to draw down federal funding and federal review continues at this time. AHCCCS leadership expects to receive approval from CMS before the end of December 2010 to further leverage County and University funds and secure federal funding for DSH costs incurred in FY 2010. AHCCCS leadership indicates it is probable the FY 2010 DSH payment will be the same as last year, if not more. In FY 2009, UMC and UPH Hospital received approximately $1,256,000 and $386,000, respectively. However, the FY 2009 levels represent a decrease of $1.7 million or 82 percent for UPH Hospital from FY 2007 levels, and it is not clear how that gap will be addressed through the local match initiative.

VIII. Future Plans for the Kino Campus

The vision for the Kino campus has been and continues to be focused on patient care and healthcare workforce development. Critical to this vision are the physicians and a system-

wide consolidated Medical Staff Development Plan targeting needs for physicians across the system including the GME program.

A. Medical Staff Development Plan, Recruitment and Commitment and Space Needs

Leadership of UPH Hospital developed a detailed methodology that incorporates inpatient and outpatient volume by physician, market share by zip code performance analysis, physician productivity, physician compensation, industry standards data, physician to population studies by medical specialty, and other supporting data and methodologies, to determine the net community need and the targeted number of new physicians the enterprise should recruit for the campus. The expectation is that the physicians would be "dedicated" to this campus meaning they would devote at least 60 percent of their clinical time to patient services at this site.

While there is not yet a Medical Staff Development Plan for the entire UAHC enterprise, UPH Hospital proceeded to develop their plan for presentation and discussion with the physician and UMC leadership teams. The final product reflects the input and approval of the system leadership. Additionally, the team is examining the productivity levels of physicians and current compensation as it relates to the national and regional standards for academic medicine.

UPH Hospital projects an overall need for as many as 137 physicians across 23 medical specialties at the Kino campus over the next three fiscal years (FY 2011 through FY 2013). This figure includes assumptions related to retention and succession planning as well as Chair accountability for the successful recruitment to the Kino campus. A 100 percent rate of recruitment is rarely, if ever, accomplished. Therefore, UPH Hospital has developed several likely scenarios for recruitment from which to estimate clinical space and other infrastructure necessary to support the physicians who realistically can be expected to join the campus during the coming years (FYs 2011 through 2013).

The specialties for which the highest patient demand is projected are primary care (including the practices of family medicine, internal medicine, pediatrics and OB/GYN), general surgery, anesthesiology, and psychiatry. Recruitment will focus on these specialties.

Critical to supporting successful recruitment is properly configured clinical space for patient care and administrative functions related to teaching and/or research. UPH Hospital is targeting as most likely a 70 percent success rate in recruitment. With this recruitment success rate, UPH Hospital expects to recruit 25 physicians in FY 2011, 46 in FY 2012 and 23 in FY 2013 for a total recruitment of 95 physicians on the campus by FY 2013. These physicians can be expected to increase patient volume (as

measured by adjusted patient days) by another 37,491 adjusted patient days or 54 percent more than the 69,102 reported for FY 2010. Requirements for this level of recruitment include 165,000 square feet of space, equipment and other capital improvements of $16 million. The net operating income for UPH Hospital in FY 2013 expected to be generated by these physicians is projected to be nearly $9 million.

To maximize medical staff recruitment and retention, the UPH Hospital team has identified several other actions that must be taken. These actions include: improvement in physician satisfaction and patient access issues that inhibit increased volume; establishment by FY 2010 of productivity targets by physician tied to the median productivity standards of the Academic Medical Group Management Association (AMGMA); appropriate allocation of expectations for individual physicians across clinical services, teaching and research; and development of an effective compensation incentive program that ties productivity to compensation.

Ultimately this plan for medical staff development aligns with the vision described by the University leadership for the Kino campus on which a 300-bed hospital exists with a clear focus on behavioral health and treatment of certain chronic diseases, including diabetes, in an environment that is also designed to be particularly supportive of Hispanic and American Indian patient needs.

Plan for Physician Clinics on the Second Floor of the Abrams Building

On October 6, 2009, the Board of Supervisors approved the dedication of $3.5 million in 2006 bond funds for capital improvements, including furniture, fixtures and equipment for space to house physician clinics in the 23,500 square feet of unfinished space on the second floor of the Herbert K. Abrams Public Health Center. This space is across the hall from approximately 13,556 square feet of space currently leased to the University for physician offices.

This commitment of $3.5 million was conditioned upon development of a plan by the joint leadership of the University, the physicians and UPH Hospital that demonstrated it would meet a community need while also improving the financial performance of the hospital. Such a plan has been developed.

The three programs to be located in the Abrams space are Family and Community Medicine, the Diabetes and Wellness Center, and the Toxicology program. The Abrams Family and Community Medicine space will include 37 exam rooms to accommodate nearly 58 physicians, interns, and residents in FY 2012 growing to 74 by FY 2014. Projected patient volume by FY 2014 is nearly 43,000 visits, a 287 percent increase from FY 2010 volume of 11,103. By FY 2014, net income from patient visits to the practice and referrals to the hospitals is projected to be $1.9 million.

This primary care practice expansion is critical as the future management of the chronic patient is reliant on the primary care physicians. A holistic approach to programming with a focus on establishing a medical home for adults with diabetes and other chronic diseases can be expected.

The Family and Community Medicine practice is one of the largest UACOM training programs with two residency programs. The practice goal is to retain 40 percent of residents training in their GME program, of which 80 percent are targeted to remain in Pima County.

The Diabetes and Wellness Center will bring together in a single location an array of specialists, including endocrine, cardiovascular, renal hypertension, podiatry and ophthalmology. This patient focused center will be comparable to that of the Texas Diabetes Institute in San Antonio, Texas and the Joslin Clinic in Boston, Massachusetts, providing access not only to these specialties but also diabetes education, physical education and nutritional counseling. This center will be a resource for all community physicians whose patients can benefit from easy access to this site for the complex, ongoing management of this challenging disease. Further, this site will provide a setting for translational research and the development of new approaches to prevent, monitor and treat diabetes and its complications.

Once fully operational in FY 2014, this center will house 10 exam rooms to accommodate 13 physicians, interns and residents. Projected volume by FY 2014 is 8,300 visits. By FY 2014, net income from patient visits to the practice and referrals to the hospitals is projected to be $766,000.

The Diabetes Center on the Kino campus will be critical to the success of the Diabetes Prevention and Treatment Alliance currently being developed as it supports the goal of establishing centers that are easily accessible throughout the region. The Diabetes Prevention and Treatment Alliance is discussed in more detail in a following section.

The remainder of the $3.5 million in bond funds will be used to establish an Occupational Toxicology Center. Toxicology is a referral source of business to the hospital. Banner Health System's center in Phoenix is the sole toxicology site for the State, and it does not serve individuals with occupational exposures such as those experienced in manufacturing and agriculture. Approximately 10,000 incidences occur annually across Arizona – many in the business environment. While the Center will do follow-up services for rattlesnake and scorpion bites, for example, a major focus will be occupational exposures. Additionally, the Center will respond to increased incidences of opiate overdose. The Center for Disease Control (CDC) reports that death by

overdoses of opiates has surpassed trauma for individuals ages 35 to 55, which further elevates the focus on toxicology services.

This program will operate under the oversight of Dr. Mazda Shirazi, Chief of Staff and Vice Chair for Emergency Medicine at UPH Hospital. Ultimately, two certified toxicologists will be on the staff of this center, which will operate in collaboration with the University's College of Pharmacy. Projected volume by FY 2014 is 3,600 annual visits. By FY 2014, net income from patient visits to the practice and referrals to the hospital is projected to be $600,000.

I have instructed County staff to begin work on the facilities plan to house these programs in the second floor space at the Abrams Building.

Plan for UA Expansion on the Fourth Floor of the Abrams Building

In June 2010, The University of Arizona College of Medicine submitted two proposals to the County focused on expanding clinical research. The proposals included a request for space on the fourth floor of the Abrams Building. The following is a brief description of the two proposals.

Critical Path Institute (C-Path) is a Tucson-based firm with a footprint in Phoenix focused on expediting the time from research to production for new drugs. C-Path is an independent, nonprofit organization formed by scientists from The University of Arizona and US Food and Drug Administration (FDA) regulators to help in the development of new testing methods and policies that enable drugs, medical devices and biological products to reach patients faster and with greater safety. C-Path acts as a neutral third party for companies willing to share pre-competitive knowledge and collaborate on projects of high public health priority. Since its inception in 2005, C-Path has facilitated working relationships between stakeholders from academia, government, and biotechnology and pharmaceutical industries from around the nation and received $30 million in grants and contributions for its efforts.

Space needs include approximately 4,400 square feet with specially designed hoods and specimen areas. Meetings are underway between County staff and the University to reach agreement on the specifics and a timeline for completion of the space.

Additionally, UPH and the College of Agriculture and Life Sciences Department of Nutritional Sciences and Center for Physical Activity and Nutrition, along with the Center of Excellence in Women's Health and Pima County, have entered into a partnership to conduct physical activity, nutrition and wellness research in the neighborhoods surrounding the Kino campus. The Kino Partnership is designed to expand education and training opportunities for physicians and affiliated workforce,

bring physicians into the communities, development of accessible fee-for-service programs in diet, physical activity and wellness, and effectively complementing the Diabetes Center planned for the second floor of the Abrams Building. Clinical programs will provide tailored diet and physical activity programming, and education and outreach services. This initiative will bring more physicians to the Kino campus, improve access to health care, promote community engagement, and could effectively rebrand UPH Hospital as a regional resource for wellness. This initiative will be part of the space planning discussion of the Diabetes Center.

B. Service Enhancements

A Center of Excellence is a formally appointed body of knowledge and experience on a particular subject area. It is a place where the highest standards of achievement are the goal, and it is a prestigious designation. Centers of Excellence at the University are organizations that bring talented professionals from many areas within the University and from other sites to focus on a major area of great importance such as diabetes. Proposals to form new centers require a detailed plan, including needs for space and funding. The proposals must be reviewed and approved by the University and ABOR. Approval by national agencies may also be sought and can provide differentiation from others claiming such status.

Existing and Continuing Centers of Excellence

UPH Hospital is currently the clinical site for two University Centers of Excellence: The University of Arizona National Center of Excellence in Women's Health and the Sonoran University Center of Excellence in Developmental Disabilities (Sonoran UCEDD).

In October 2003, The University of Arizona received the designation of a National Center of Excellence in Women's Health from the Office on Women's Health, US Department of Health and Human Services. The satellite clinic, the Women and Families Health Center at University Physicians Healthcare at Kino, is operated by family practitioners, gynecologists and obstetricians. The mission of this Center of Excellence is to provide comprehensive care that is women-centered, evidenced based, culturally competent and community responsive. Clinical care emphasizes prevention and early detection with the goal of providing appropriate care for women in a setting that delivers the best clinical outcomes.

The Sonoran UCEDD, University of Arizona Department of Family and Community Medicine, is recognized on the National Network of University Centers for the Excellence in Developmental Disabilities Education, Research and Services by the US Department of Health and Human Services. The Sonoran UCEDD, as part of The University of Arizona, was awarded a grant to support the operation and administration

of the center, and additional funds are leveraged to implement the core activities of: interdisciplinary training, community services, research and information dissemination. The Sonoran UCEDD has two programs at UPH Hospital: a healthcare home for adults with developmental disabilities by Family and Community Medicine and Project Search, a job internship program for young adults with developmental disabilities.

Family and Community Medicine has served as a medical home for individuals with developmental disabilities for approximately three years. Currently 65 to 70 individuals with developmental disabilities receive services from the Family and Community Medicine Center. Individuals with developmental disabilities generally have a high level of need and usually receive care in silos, having to seek treatment from various specialists at different locations. Through this program available on the Kino Campus, an individual is provided a medical home and can receive a full array of services in one location. For example, an individual with cerebral palsy can be seen on the Kino Campus and receive services for physical, educational and social needs.

Project Search, implemented in August 2009, is a one-year job training program for young adults with developmental disabilities. The training provided at UPH Hospital encompasses a wide variety of skills sets and job types. Examples include medical records, patient transport, dietary and material management. The specialized training provides young adults with the skill set necessary to be successful in their job. Project Search graduated its first class this year, a class size of six. The current class consists of 13 high school students and six young adults.

Proposed Centers of Excellence

The University of Arizona has proposed creation of three additional Centers of Excellence at the Kino Campus: a Center for Prevention and Treatment of Diabetes, a Center for Behavioral Health and a Center for Toxicology. The Diabetes and Toxicology Center are part of the space expansion currently underway on the second floor of the Abrams Building. The Behavioral Health Center of Excellence is discussed in the following section.

Behavioral Health Center of Excellence

Construction will be complete next summer on the two new behavioral health buildings at the Kino campus. These structures will contain space designed for an array of services, including outpatient clinics, crisis services with 23-hour observation beds, psychiatric emergency services and at least two levels of inpatient care. The University's Department of Psychiatry, UPH Hospital management and the local RBHA, Community Partnership of Southern Arizona (CPSA), are engaged a joint redesign of the

philosophy of care that features a focus on recovery and a holistic approach that incorporates treatment of both the behavioral health and medical conditions.

This philosophy highlights the importance of aggressive crisis care and linkages with community mental health providers and reflects a significant practice change away from inpatient admission to promote functioning in the community. This transition in treatment philosophy benefits both the community and the University. The community will benefit from the array of less restrictive and lower cost services essential as third party payers, including the State, continue to reduce benefits available to individuals with behavioral health conditions, including those who are considered Seriously Mentally Ill (SMI). Beginning July 1, 2010, benefits including case management and inpatient hospitalization, among others, have been eliminated for approximately 3,500 individuals in Pima County who are SMI, leaving them with primarily crisis and medication benefits.

The transition in treatment philosophy uniquely positions the University in terms of its physician training programs. It will be able to offer a training program for psychiatrists unlike most across the nation where training occurs primarily in the inpatient model. At the Kino campus, training will occur across the expanding continuum of behavioral healthcare services and will be linked to the primary and specialty care medical services also needed by this population.

The University and CPSA are developing an agreement I anticipate will describe their joint commitment to the new philosophy of care as well as a plan for UPH Hospital to provide the full range of behavioral health services on the Kino campus, including the youth and adult crisis services as well as the sub-acute unit – both of which are to operate in the Crisis Response Center under contract with CPSA. Additionally, the parties will agree on the recovery model for service delivery and the clinical training at the core of the GME physician training program operating at that site. I applaud the University's further commitment described in their August 18 presentation to seek approval from the accrediting body to expand the number of physicians training as psychiatrists on this campus from 16 to 24.

Diabetes Prevention and Treatment Alliance

Data presented by the leadership in the August 18 Kino Campus Showcase shows that over the past decade, the incidence of diabetes has risen more than 40 percent, and the prevalence of obesity has risen 37 percent. Arizona is ranked eighth in the United States for the incidence of diabetes. In 2006, the direct medical cost of diabetes in Arizona was $2.3 billion, and indirect costs associated with the loss of productivity were $1.1 billion. This places a $3.4 billion financial burden on the State's economy.

Southern Arizona, including Pima County, has been called an "epicenter of diabetes," due to the high incidence levels of both diabetes and obesity (closely linked to incidence of diabetes) in two major populations: Hispanics and Native Americans, both of whom are twice as likely to develop diabetes as Caucasians.[2] It is estimated that 50 percent of Tohono O'odham adults are battling diabetes. The Tohono O'odham community is believed to suffer from the highest incidence rates of diabetes in the world.[3]

The National Institute of Health reports cardiovascular disease is a major complication of diabetes and a leading cause of death for individuals with diabetes. Sixty-five percent of people with diabetes die from heart disease and stroke.

In recognition of this pressing regional need, the leadership of Carondelet Health System (represented by CEO Ruth Brinkley) and the University (represented by Dr. William Crist), are forming the Diabetes Prevention and Treatment Alliance. This alliance is currently being developed to unite the resources of clinical care, community, patient and professional education, research and advocacy, and the data systems to significantly improve the health of residents and reduce the cost of healthcare throughout Pima County and possibly the southwestern United States. The potential for considerably reduced financial and human costs as a result of this alliance are considerable. For example, research performed by Carondelet and The University of Arizona Eller School of Business indicates the annual cost for a patient with a well-controlled (low risk) diabetic condition is $1,621, while the annual cost for a patient who is not well-controlled (high blood pressure and hemoglobin) averages $21,003.

This is a unique, private-public partnership that crosses competitive systems of healthcare delivery in this region focusing on a united development of primary care physician protocols, consistent data collection, research, patient care, diabetes self-management and wellness and prevention education and services. The primary care physicians of both the Carondelet and University systems have already agreed on a common set of protocols, including data elements to be tracked. These protocols have been shared with the specialty physicians' practices for comment.

Work is underway with the medical information technology leadership at both organizations. Dr. Peter Catinella, Chief Medical Information Officer for the University, and Tony Fonze, Chief Information Officer of Carondelet, are working to identify the manner in which the electronic medical records will be modified across organizational systems to assure collection of this critical data that can accelerate research by

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[2] Robert Wood Johnson University, Diabetes Statistics.

[3] Reader, Tristan. 2010. *The Traditional Tohono O'odham Food System: A Short History.* Tohono O'odham Community Action website: Sells, AZ. Accessed on August 27, 2010. URL: < http:www.tocaonline.org>.

reducing the time lag from as much as 10 years to as little as two years, thereby improving patient care and outcomes. University leaders are engaged in dialogue with nationally recognized leaders with financial resources, expertise and relationships with those driving the national healthcare reform to gain their support for this initiative as a model that could be considered a demonstration project. If successful, the Diabetes Prevention and Treatment Alliance will clearly improve the outcome for citizens in this community and potentially lead the way for national changes for individuals with diabetes and produce an effective model of care supporting healthcare reform across the United States.

Gastroenterology (GI) Lab

Architectural plans have been developed for a new GI Lab at UPH Hospital. UPH Hospital leadership is currently developing a plan to vacate existing physical therapy (PT) space on the main floor and relocate to the PT space in the Sports Medicine Clinic. This move would allow for the construction of a new GI Lab, which would significantly expand the capacity for the GI volume and net revenues to the hospital.

For FY 2010, a total of 483 GI procedures were performed compared to 300 in FY 2009. This 61 percent volume increase is due to the addition of Dr. Trowers, who began caring for patients at UPH Hospital in December 2009.

In the meantime, UPH Hospital leadership and the GI physicians are developing a short-term strategy to meet patient demands.

Medical Psychiatry

With the opening of the new Behavioral Health Psychiatric Pavilion, UPH Hospital will have space in the existing hospital for the expansion of medical services. UPH Hospital is exploring the feasibility of opening a medical/psychiatric unit. This unit will treat patients with a behavioral health condition also suffering from medical conditions. This initiative is directly in line with the County's commitment to a holistic treatment model. Healthcare services on this unit would be provided by an interdisciplinary team, and the unit would be set up as a medical unit with psychiatric safeguards and expertise.

Geriatrics

An additional opportunity for expansion of medical services in the existing hospital space is the development of a medical geriatric unit. A study performed by the Administration on Aging, US Department of Health and Human Services, states the population age 65 and over is expected to increase from approximately 40 million in 2010 to 55 million in 2020 (a 36 percent increase for that decade). By 2030,

Arizona's population of residents age 65 and older is expected to increase to 22 percent of the total population, resulting in Arizona having the 14th highest level in the country[4]. It is anticipated that by 2020, the number of Arizonans over the age of 85, the age group recognized as having the highest utilization of health services, will to 2.6 percent of the State's population, the highest level of any western state.[5]

The College of Medicine recently received grant funding through the Arizona Center on Aging to establish a geriatric unit. One of the potential locations for this site is UPH Hospital. The goal of this initiative is to provide environmental resources and the patient care needed to prevent elderly patients' functional decline during hospitalization and maximize independence. Locating a medical geriatric unit on the Kino campus is optimal as UPH Hospital is the only Level I acute hospital with such an extensive psychiatric geriatric unit.

Cardiology

UPH Hospital leadership is also reviewing the feasibility of expanding cardiology services on the Kino campus. As stated previously, there are three, highly skilled cardiologists performing procedures at UPH Hospital that are not widely available locally. Expansion considerations include a second cardiac catheterization lab and additional testing capabilities. Leadership is analyzing the community need and anticipated volumes for cardiology services to determine if this expansion is a sound clinical and business decision.

Telemedicine

The IGA between Pima County and ABOR requires expansion of telemedicine and targets the detention centers and Posada del Sol, the 149-bed skilled nursing facility operated by the County. To focus the work effort, County staff completed a detailed study of the offsite services for the adult and juvenile detention centers. A similar study is underway for Posada del Sol.

For adult detention, the highest volume of offsite services was dental surgery and radiology procedures for females, followed by orthopedics, optometry, Emergency Department consults, and ophthalmology. In juvenile detention, the highest volume of offsite transports was for radiology services, primarily x-rays.

Utilizing the information from these studies, County and University telemedicine leadership convened meetings with representatives from the University's clinical

[4] US Census Bureau, *Population Division, Interim State Population Projections*, 2005.
[5] US Census Bureau, *Population Projections for States by Age, Sex, Race, and Hispanic Origin: 1993 to 2020*, 1994.

practices, the Sheriff's Department and Conmed, Inc., our correctional health vendor. The initial focus of discussion was ophthalmology service. This practice is actively engaged with County staff to determine the financial and clinical feasibility of establishing a digital diabetes retinal screening service for the diabetics in the adult detention center. On any given day, 13 percent of the detainees with a chronic medical health condition are under treatment for their diabetes and may be candidates for these screens.

Use of telemedicine and onsite consults will reduce costly high risk transports of detainees into the community for health services. I expect further updates on the progress in expanding telemedicine or arranging onsite services to avoid offsite transports into the community.

Integrated and Differentiated Trauma Care

The Emergency Department leadership is working with the Department of Surgery and the UMC trauma service to design a program that meets the Level III trauma designation. Once the construction is completed on the two new buildings at the Kino campus, the existing Emergency Department will be relocating into space on the first floor of the psychiatric pavilion. The goal is to secure the Level III trauma designation for this service within 90 days of relocation. Pursuant to the terms of the IGA, a plan is to be provided to the County by October 1, 2010 that includes a business and financial assessment related to achieving this designation for the new Emergency Department. It is anticipated this designation will be achieved around November 2010. UMC Emergency Department continues to be the sole Level I trauma center for all of southern Arizona. Achievement of the Level III designation by UPH Hospital, designed as part of an integrated trauma service with the Level I center, will expand the scope of trauma services the University system provides not only in Pima County but to the region.

IX. Challenges

Economic conditions continue to present increasing barriers to financial and operational well-being. Nationally, inpatient admissions have been decreasing on average by five percent[6], with some hospitals seeing as much of a decrease as 25 percent[7]. This has been attributed to an increase in the number of individuals who do not have insurance as a result of job loss (which ultimately means loss of insurance coverage) and individuals opting to postpone elective or non-emergency procedures. UPH Hospital has seen a seven

[6] HFMA's Healthcare Financial Pulse: Impact of Shifting Patient Volumes. July 2009.
[7] Hess, C. Area Hospital Admissions Drop in 2010. Business Journal of Milwaukee. June 24, 2010.

percent decrease in the past fiscal year (2010) from the levels experienced in FYs 2008 and 2009.

The State of Arizona anticipates a budget shortfall in FY 2011 of at least $3.2 billion.[8] In attempts to address this budget shortfall, the State has made severe cuts to health and human services provision. Reductions include the elimination of certain services in the adult benefit package for those who are AHCCCS eligible. Services that will be eliminated October 1, 2010 include, but are not limited to, well visits; podiatrist services, including those essential to individuals with diabetes; and insulin pumps[9]. The elimination of these services will adversely impact care, particularly for diabetics, and will ultimately place a burden on hospitals as individuals not receiving adequate care (particularly preventive care) will become more ill and require a higher acuity of care when presenting in area Emergency Departments.

Similarly, the State has instituted further cuts to coverage and related funding for behavioral health services, eliminating all but crisis services and generic medication to those individuals with serious mental illness who do not qualify for AHCCCS[10]. This reduction in services results in a nearly 55 percent decrease in publicly funded behavioral health benefits since 2008. It is anticipated that 14,000 Arizonans with serious mental illness, 3,500 of whom reside in Pima County, will go without case management, inpatient hospitalization and other supportive services as they are transitioned to generic medication(s) that may or may not be effective. This cut in benefits will likely result in an increased number of individuals experiencing behavioral health crises and a surge in costly psychiatric interventions, including involuntary commitment under Title 36 and those that will occur in a correctional setting as some number of the population enter the criminal justice system.

While the University and UAHC make plans for expansion of the cosponsored GME program, the State, during this last session, made $10 million in funding cuts to the program resulting in a loss of more than $20 million in matching federal funds resulting in the elimination of all GME funding except that achieved through the collaboration effort leveraging County and University funds. At this time, the State has eliminated funding for GME, forcing hospitals to reconsider their commitments to be a clinical training site for The University of Arizona College of Medicine.

Additionally, while the federal government has recognized Arizona legislation permitting the use of local or tribal government funds along with University funds as state match to secure federal funds for GME, continued State cuts in programs and services such as those

[8] Brewer, J. Arizona Executive Budget: FY 2011.
[9] AHCCCS Provider Notification Memo re: AHCCCS Benefit Changes Effective October 1, 2010, August 2, 2010.
[10] Brewer, J. Arizona Executive Budget: FY 2011.

at the University or cost shifts to counties may limit the ability of local and/or tribal governments and the University to provide funds as match.

Also on the horizon is the impact of federal healthcare reform initiatives. Every healthcare provider and organization is in the process of assessing the impact on future financial viability but with varying degrees of success as the nuances of the changes are not immediately evident. The emphasis appears to be on initiatives that can be identified as pilots or demonstration projects for replication elsewhere in the nation meeting the "pay for value" or "pay for performance" goals the reform seeks to achieve. Through the leadership of the University, clinical leaders in this system have the opportunity to become visible to the current federal administration elevating awareness of local initiatives that meet these goals. Visibility of programs such as the Arizona Diabetes Prevention and Treatment Alliance in which the University system is "partnering" with the Carondelet Health System to address diabetes offers opportunities to be recognized for cutting edge thinking on how to achieve better patient outcomes while reducing costs for patients with this disease.

To leverage its strengths in inter-professional education essential for the affordable, accessible, efficient, high quality, and safe care for patients with chronic illnesses who require 85 percent of dollars spent on healthcare today, the University is partnering with three nonprofit 501(c)(3) medical institutes to better address three areas of healthcare that represent extraordinary opportunities to further improve the health of our people. These nonprofits are the Healthcare Transformation Institute (HTI), Translation Genomics Institute (TGen), and C-Path.

HTI directs its efforts at healthcare transformation to improve our health system in innovative ways. The leadership of HTI consists of Patrick Soon-Shiong, MD, CEO and Denis Cortese, MD, President. Mr. Soon-Shiong is also the CEO of Abraxis BioScience Inc., a fully integrated biotechnology company. Abraxis BioScience is dedicated to delivering progressive therapeutics and core technologies that offer patients and medical professionals safer and more effective treatments for cancer and other critical illnesses and is committed to accelerating the delivery of breakthrough therapies that will transform the lives of patients who need them. Mr. Cortese is the former CEO of Mayo Clinic System, the Chair of Committee for Healthcare Transformation Institute of Medicine and the Director of Health Care Policy Institute at Arizona State University.

TGen focuses on personalized medicine to develop earlier diagnostics and smarter treatments. TGen uses genetic information and applies it to developing diagnostics, prognostics and therapies for cancer, neurological disorders, diabetes and other complex diseases. Dr. Jeff Trent is the President of TGen.

C-Path focuses on reducing the time it takes to get drugs or medical devices from the laboratory to the bedside. Dr. Raymond Woosley is the founding President and Chairman

of the Board of C-Path. Dr. Woosley is also the Director of the Arizona Center for Education and Research on Therapeutics that is funded by a grant to C-Path from the Agency for Healthcare Research and Quality. C-Path was discussed previously in this report as it is one of the proposals submitted by the University for space on the fourth floor of the Abrams Building.

Each of these remarkable organizations will work with the University, including its teaching hospitals, to rapidly test new ways to improve healthcare and to disseminate the worthy ideas statewide and nationwide. This innovative thinking may open doors to funding essential for major system improvements such as those required for information systems.

Recommendation

I recommend the Board of Supervisors receive, at its September 21, 2010 meeting, a presentation from Dr. William Crist and his leadership team regarding the status and vision of a two-hospital academic medical teaching system affiliated with The University of Arizona College of Medicine.

Respectfully submitted,

C.H. Huckelberry
County Administrator

CHH/mjk – September 13, 2010

Attachment

c: Dr. Robert Shelton, President, The University of Arizona
Meredith Hay, *Executive Vice President/Provost,* Office of Academic Affairs, The University of Arizona
Dr. William Crist, Vice President for Health Affairs, The University of Arizona Health Sciences Center
Dr. Steven Goldschmid, Dean, College of Medicine, The University of Arizona
Kevin Burns, Chief Executive Officer, UA Healthcare, Inc.
Karen Mlawsky, Interim Chief Executive Officer, University Medical Center
Diane Rafferty, Chief Executive Officer, University Physicians Hospital
Tim Kares, Chief Financial Officer, University Physicians Hospital
Dennis Douglas, Deputy County Administrator for Medical & Health Services
Honey Pivirotto, Assistant County Administrator for Health Policy

ATTACHMENT A

University of Arizona Health Sciences Center (UAHSC)
Tucson, Arizona 2010
Proposed Reorganization

DRAFT

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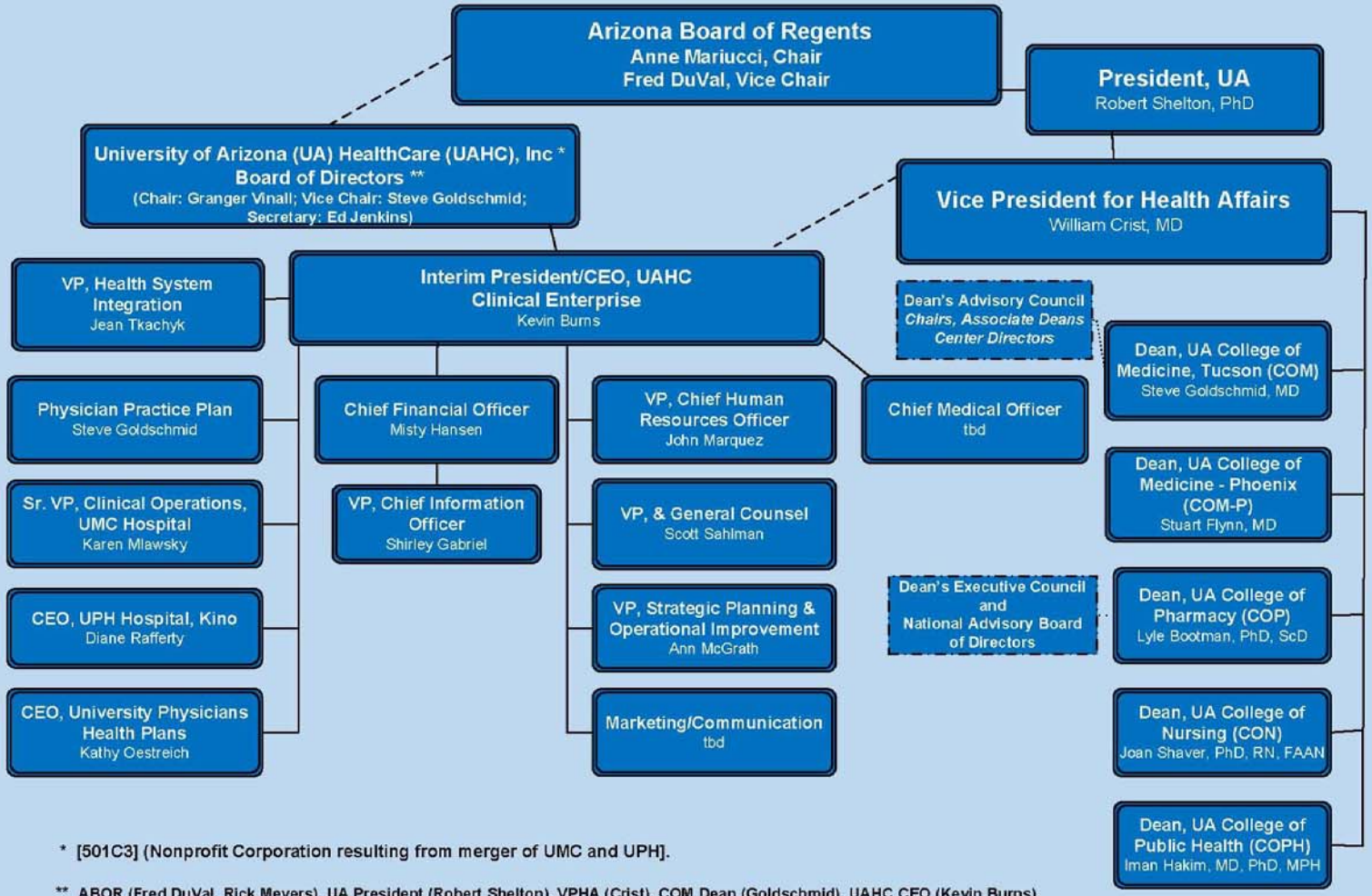

* [501C3] (Nonprofit Corporation resulting from merger of UMC and UPH].

** ABOR (Fred DuVal, Rick Meyers), UA President (Robert Shelton), VPHA (Crist), COM Dean (Goldschmid), UAHC CEO (Kevin Burns), Marc Berg, Fayez Ghishan, Kathy Reed, David Labiner, Judy Gignac, Ed Jenkins, Granger Vinall, Martha Guilland, Laura Eberly, John Bernal, Edmundo Hidalgo, Steve Lynn, Leo Brennan, Gary Munk, Bruce Nordstrom, Barbara Peck, Ed Parker.

Revised 8/24/10

ATTACHMENT B

Table 6: Summary of GME Support Dollars Distribution FY 2008 - FY 2010: UPH and UMC

	2008			2009			2010		
	UPH	UMCC	Total	UPH	UMCC	Total	UPH	UMCC	Total
Initiative 1									
Total IME Distribution	$7,872,654	$2,965,403	$10,838,054	$15,744,573	$8,633,326	$24,377,899	$22,136,136	$15,466,207	$37,602,343
Local Share	-$1,827,838	-$1,827,838	-$3,655,676	-$2,933,880	-$2,933,880	-$5,867,760	-$4,545,442	-$4,545,442	-$9,050,884
New Federal Funds	$6,044,816	$1,137,565	$7,182,378	$12,810,693	$5,699,466	$18,510,139	$17,610,694	$10,940,765	$28,551,459
Percentage of Total	84	16	100	69	31	100	62	38	100
Initiative 2									
Direct GME Restoration	-	-	-	-	-	-	$1.571.750	$7,057,767	$8,629,517
Local Share	-	-	-	-	-	-	-$378,320	-$1,698,805	-$2,077,125
New Federal Funds	-	-	-	-	-	-	$1,193,429	$5,358,962	$6,552,392
Percentage of Total	-	-	-	-	-	-	18	82	100
Totals									
Available Distribution	$7,872,654	$2,965,403	$10,838,054	$15,744,573	$8,633,326	$24,377,899	$23,707,886	$22,523,974	$46,231,860
Local Share	-$1,827,838	-$1,827,838	-$3,655,676	-$2,933,880	-$2,933,880	-$5,867,760	-$4,903,762	-$6,224,247	-$11,128,009
New Federal Funds	$6,044,816	$1,137,565	$7,182,378	$12,810,693	$5,699,466	$18,510,139	$18,804,124	$16,299,727	$35,103,851
Percentage of Total	84	16	100	69	31	100	52	48	100

Three Year Total Distribution	$81,447,813
Three Year Total Local Share	-$20,651,445
Three Year Total New Federal Funding Generated	$60,796,368

Source: Data provided by UMC.

Note 1: Pima County and The University of Arizona each contribute 50 percent of the local share.