

CLINICAL COMMENTARY

UCLA Health's Cardiovascular Service Line Integration in the North Valley

James S. Lee, MD, Behi Rabbani, MD, Ravi Dave, MD

Over the past year UCLA has opened offices in the Northern San Fernando Valley, Porter Ranch and Santa Clarita, offering both primary and subspecialty care services more than 25 miles from Ronald Reagan Medical Center. An important aspect of this expansion has been the affiliations that have developed with the community hospitals and UCLA Health System. Health systems developed through US academic medical centers are not new. The Cleveland Clinic and Mayo Clinic integrated local community hospitals with satellite offices and have expanded to other states and other countries. More recently, Vanderbilt University announced one of the largest integrated healthcare systems complimented by its own health insurance plan. Southern California is home to Kaiser Permanente, one of the largest managed care healthcare systems within the US. Health care reform has encouraged hospitals and physicians to further develop health care systems in order to optimize quality and efficient care. The fragmentation of our healthcare system continues to be a challenge despite efforts to initiate electronic medical record systems. There are few publications addressing the integration of academic medical centers within communities. The UCLA cardiovascular service line has helped advance this integration in the North Valley.

Along with the Thousand Oaks and Westlake Village offices, the Porter Ranch and Santa Clarita offices have been growing rapidly. In the first year, over 100 invasive cardiac procedures and more than 500 non-invasive cardiac procedures have been coordinated within the four offices and surrounding community hospitals, which include Northridge Hospital and Henry Mayo Hospital. In 2005, the Brigham and Women's Hospital published their experience integrating a local community hospital into their network, documenting the details of this transition¹. Although the current healthcare environment differs greatly from Massachusetts, similar challenges remain today. Tertiary academic medical centers are noted for higher costs associated with patient care in comparison to community hospitals. The current healthcare environment has put pressures on academic medical centers to optimize cost of care

without compromising quality of care². One of the biggest challenges in developing affiliation programs has been to avoid duplication of services and optimizing a complimentary relationship between hospitals and offices. In the past there were more distinct boundaries between capabilities of community hospitals and academic hospitals, but more recently programs once only offered at tertiary centers are expanding rapidly into the community. Plans exist for a structural heart program involving a transcatheter aortic valve replacement (TAVR) program in a community hospital in Los Robles and hybrid operating rooms are developing in the community. A state of the art hybrid operating room with biplane imaging has already opened in Northridge hospital.

In 1996 the University of Florida described a five-year integration of their cardiovascular service line with a community hospital in Brevard County³. The community hospital recognized the potential benefits of an academic affiliation in improving clinical quality and further expansion of their services by establishing relationships with defined educational and research programs. This project led to a 300% increase in overall volume for the cardiovascular service line over the initial 5 years³. Interestingly the local medical community did not initially support the integration, but embraced the partnership over time as the research, educational, and clinical programs increased the quality of the programs. The University of Cincinnati embarked on a similar venture and increased medical education in the community, increased referrals to the system, which benefited both hospitals and physicians with high quality, cost effective care⁴. They recognized that despite the different missions and cultures of academic health centers and community hospitals, the changes in the health care environment has made them natural partners.

A primary objective of UCLA expansion will be to develop community affiliations to extend teaching and educational programs to impact health in the community. Integrating residency and fellowship programs into the community will further diversify the experience and strengthen primary care training at UCLA. Columbia University described their process

with their Pediatrics program and outlined steps in developing a successful partnership between an academic center and community hospital⁵. Balancing the structural differences to obtain a shared mission through a genuine relationship based on trust and commitment appeared to have been key factors to success. One of the biggest challenges to integration is the fragmentation of information systems in individual community hospitals with limited interchange with UCLA Healthcare's system. As our electronic medical systems continue to advance, more interfaces will develop to further integrate patient care. Avoiding duplication of clinical services due to the geographic distances of each of the offices and proximity to local hospitals with emphasis on prioritizing patient satisfaction, access, quality of care, financial efficiency, and evidence based medicine will be critical components to continued success.

In December of 2013, UCLA supported Henry Mayo hospital, a community hospital in Valencia, to receive designation as a ST elevation myocardial infarction (STEMI) receiving center by the Los Angeles County Emergency Medical Services Agency. UCLA Cardiologists cover fifty percent of the hospital's cardiovascular emergency room admissions and have been directly involved in optimizing operations, cost, and quality of care within the Cardiovascular department. At Northridge Hospital, our Cardiologists have helped coordinate care with the UCLA hospitalists and have served on the hospital's committees recently to redefine hospital wide protocols for preoperative management of anticoagulation and antithrombotic agents to minimize post-operative bleeding and also developed hospital policy and protocols to introduce the Abiomed Impella[®] left ventricular assist device to improve survival rates for high risk cardiac patients. The impact of our new offices is extending even beyond their local communities. The offices in the North Valley have cared for patients who reside out of the state and several international patients. The UCLA health system is affecting the quality of care in the community, redefining the experience of integrated healthcare. As the expansion progresses, we continue to witness a potential new model for healthcare delivery in line to complement our nation's health care reform.

REFERENCES

1. **Sussman AJ, Otten JR, Goldszer RC, Hanson M, Trull DJ, Paulus K, Brown M, Dzau V, Brennan TA.** Integration of an academic medical center and a community hospital: the Brigham and Women's/Faulkner hospital experience. *Acad Med.* 2005 Mar;80(3):253-60. PubMed PMID: 15734807.
2. **Rosenthal GE, Harper DL, Quinn LM, Cooper GS.** Severity-adjusted mortality and length of stay in teaching and nonteaching hospitals. Results of a regional study. *JAMA.* 1997 Aug 13;278(6):485-90. PubMed PMID: 9256223.
3. **Lambert CR, Bunker S, Garrison LF, Means MD, Pepine CJ, Conti CR, Dewar MA, Goldfarb T.** An academic-community cardiovascular service line affiliation: design, implementation, and performance. *Am Heart Hosp J.* 2006 Spring;4(2):86-94. PubMed PMID: 16687952.
4. **Redington TJ, Lippincott J, Lindsay D, Wones R.** How an academic health center and a community health center found common ground. *Acad Med.* 1995 Jan;70(1):21-6. PubMed PMID: 7826437.
5. **Meyer D, Armstrong-Coben A, Batista M.** How a community-based organization and an academic health center are creating an effective partnership for training and service. *Acad Med.* 2005 Apr;80(4):327-33. Review. PubMed PMID: 15793014.

Submitted on July 29, 2014