

DRAFT
Westlake Forum IV:
Strengthening China's Academic Health Systems
Shanghai, November 17-18, 2012

The Westlake Forum

The Westlake Forum, jointly initiated by Zhejiang University and the China Medical Board, aims to periodically bring health academic and policy leaders together for exchange on China's major health challenges. Three Forums have been thus far conducted: (1) 2007 "Health Equity and Health Security Systems in Hangzhou; (2) 2009 "Healthy China 2020: Policy and Action" in Hangzhou; and (3) 2011 "Comparing China and USA Health Reforms: Similarities, Differences, and Challenges" at Emory University in Atlanta, USA.

This announces that Westlake IV - organized by Fudan University, the Shanghai Bureau of Health, Zhejiang University, and the China Medical Board - will be held in Shanghai on November 17-18, 2012 with the theme "Strengthening China's Academic Health Systems" (AHS, 教育研究型医疗体系).

The theme is considered timely, vital, and opportune for China because both education and health reforms have recently sparked reconsideration of the integration of medical universities into comprehensive universities as well as deepening reform of China's public hospitals. The definition, history and alignment of Academic Health Systems (see Annex) to China's development will guide this Westlake IV. Although the full complexities of China's hospital reforms are beyond the scope of Westlake IV, the Forum will nevertheless provide an important opportunity for participants to examine the critical relationship between medical universities and their affiliated hospitals and service systems at community and other levels to simultaneously advance medical education, research, and services.

Academic Health Systems in China

AHSs evolved from the earlier concepts of Academic Medicine (AM) that emphasizes the mission of research, education and services. Academic Health Centers (AHC) have become in many countries the principal vehicle of integrating these triple functions. Expanding on the pursuit of the AHCs for scientific, educational and tertiary care excellence, AHS promotes a third generation of integrated medical education, research, and service functions as systems that are vertically integrated from primary to tertiary curative and preventative care and horizontally from within-university to across-university partnerships in the context of global collaboration.

Although the concepts of AM, AHC and AHS is new in China, in substance Chinese medical institutions have historically demonstrated significant progress toward AHSs. Government education and hospital reforms have shaped AHS development and will certainly affect its future in China. The recent education reform has both promoted and weakened the development of AHC and the transformation of AHC to AHS. After the founding of the People's Republic of China, medical education followed the Soviet model of independent stand-alone medical universities, forming what's defined in USA as AHCs with various health sciences schools and

affiliated teaching hospitals. But the merger of medical universities in 2000, while promoting some medical faculty outreach to other liberal arts and sciences may have disrupted AHC's ability to foster partnerships across medical faculties and hospitals due to the loss of independence in policy, financing, and human resources.

Similarly, Chinese AHS development has been affected by the health reforms, especially hospital reforms and the changing needs of the health system for more primary care professionals in response to challenges in access and affordability of healthcare. Many university hospitals have experienced explosive growth in the scope and depth of services and research, continuing to attract patients who bypass primary care institutions. The success of university-affiliated hospitals is important, because they serve as models for broader public hospital reform. To address the access and affordability of care, mega-hospitals must strive to build stronger ties with their medical universities and with primary care institutions in research, education and services.

Recent reforms in China's education and health sectors have made understanding and strengthening AHSs critical priorities. In this context, medical universities and their affiliated hospitals will have to achieve a new balance in their shared goals of advancing in an integrated manner medical education, research, and services. Informed by international experiences, Westlake IV will bring together China's leading medical and hospital leaders and policy-makers to discuss issues and challenges.

Goals of Westlake IV

The goals of Westlake IV are to (1) introduce the concepts of Academic Medicine, Academic Health Centers, and Academic Health Systems into the dialogue on health and educational reforms; (2) draw upon Chinese and international experiences to explore the desirability and applicability of AHS in China; (3) facilitate exchange on practical methods for better integrating medical education, research, and service functions; and (4) advance partnerships between medical universities and affiliated hospitals and the health and educational systems in which they are imbedded.

Key questions center on practical issues of integrating medical education, research, and services:

1. How can the flow of education from classroom to clinical settings be improved?
2. Which resources, services, and people can be shared for mutual benefit?
3. How might primary care be better integrated into medical education and hospital systems?
4. How can residency programs achieve uniform and better quality standards?
5. What lessons from international experiences of AHS might be applicable to the Chinese case?

Annex

Academic Health Systems

The Lancet Commission for the Education of Health Professionals for the 21st Century, led by CMB President Lincoln Chen and Harvard School of Public Health's Dean Julio Frenk, recommended the development of the third generation of Academic Health Systems (AHS) building upon the earlier first generation of *Academic Medicine* (AM) and second generation of *Academic Health Centers* (AHC). The first generation of Academic Medicine (学术型医学) is the “added value” that is produced by interrelationships among the “traditional tripartite mission” of medical teaching, research, and service.¹ Academic Medicine is fundamentally the “discovery and development of basic principles, effective policies, and best practices that advance research and education in the health sciences, ultimately to improve the health and wellbeing of individuals and population.”² The second generation, AHC, is usually not a single institution, but rather a “constellation of functions and organizations committed to improving the health of patients and populations through the integration of their roles in research, education, and patient care.”³

The Commission recommended a “systems approach” breaking out of the “ivory towers” of AM and AHC by integrating vertically and horizontally the research, education, and service functions. Vertical integration would take AHS from tertiary and specialized care into community health and primary care. Horizontal integration would come from networking across institutions for learning, exchange, and joint work. AHC have become increasingly detached from their local communities and prioritized specialized functions over serving the primary care health needs of the community. Maintaining an isolated center has prohibited AHCs from horizontal networking in today's global era that can facilitate shared learning and joint work.

As a systems approach, AHS has three important elements. First, AHS stresses that existing medical education, research, and service institutions must be vertically and horizontally integrated. Various components of the system must not exist independent from each other; instead, they must network closely for integrated development. Second, at its core, AHS necessitates the constant coordination of higher-level education and health care systems, which in turn must adapt according to the needs of the population. The health care system must flexibly provide the most equitable and effective service to the population, with the academic system contributing relevant health professionals, medical evidence, and knowledge innovation. Finally, AHS promotes “systems” thinking. Those within the system—institutions and individuals—are encouraged to guide research, education, and service functions according to a more holistic, integrated approach. For instance, in the event of individual error, those within the system should not only assess individual responsibility, but also consider and look to correct systemic factors that might have contributed to the problem.

¹ Steven L. Kanter, “What is Academic Medicine?” *Academic Medicine* Vol. 83 Issue 3 (March 2008), p. 205-6. http://journals.lww.com/academicmedicine/Fulltext/2008/03000/What_Is_Academic_Medicine_.1.aspx.

² Ibid.

³ National Research Council, “Introduction,” *Academic Health Centers: Leading Change in the 21st Century* (Washington, DC: The National Academies Press, 2004), p. 20.

As an integrated system, AHS includes many different organizational and functional elements. From an organizational perspective, medical universities and their affiliated hospitals form the core of AHS. However, AHS integrates all organizations related to health and medicine. Therefore, AHS is comprised of regionally integrated medical schools, affiliated hospitals, and health related agencies and institutions that provide comprehensive health education, research, and service functions. This includes medical units (hospitals at all levels, community service centers, medical websites, and private hospitals and clinics); care and rehabilitation organizations (nursing homes, hospice and rehabilitation centers); disease prevention organizations (CDC, health education, family planning, maternal and child health organizations, endemic and infectious disease centers); research institutions; and even pharmaceutical companies and medical equipment suppliers. These health-related organizations may be closely or loosely connected with the core universities and affiliated hospitals through formal affiliation, collaborative programming, or frequent contact and information sharing.

From a functional perspective, AHS extends beyond AHC by integrating education, research, and health services from the most basic to the most advanced levels. In education, AHS encompasses the training of medical, pharmaceutical, dental, public health, and nursing professionals as well as other health-related personnel (allied health professionals) such as technicians, nutritionists, optometrists, physical therapists, and so on, at the undergraduate, postgraduate (residency training), and continuing education levels. In research, AHS includes traditional biomedical research but also emphasizes translational and applied research, health policy and systems sciences research, and health services research. Lastly, in its service function, AHS seeks to provide comprehensive and relevant care from the most basic, primary level to the highest level of specialization, from a person's birth (or even pre-birth through prenatal care) to death. AHS thus integrates a wide-ranging set of organizational units to accomplish its education, research, and service functions.

Academic Health Systems in America

In America, the AHC developed out of a series of events during the 20th century beginning with the Flexner Report of 1910. This report called for major reforms in medical education, including the creation of a standard 4-year curriculum with 2 years of basic sciences and 2 years of clinical teaching, university affiliation, and requirements for entrance to medical schools, and active learning and problem solving over rote memorization and lecture-style teaching.⁴ Medical education reform necessitated hospital training. Additionally, during World War II, the government made substantial investment in research laboratories to support the war effort; this investment, along with National Institutes of Health (NIH) grants to researchers at universities, helped the growth of Academic Health Centers.⁵ Finally, in 1965 the passage of Medicare and Medicaid, government-sponsored insurance programs for the elderly and poor, guaranteed revenues for many patient care services that had previously been provided as charity care, helping AHC develop a more steady stream of revenue.⁶ The AHC continued to develop

⁴ National Research Council, "Introduction," *Academic Health Centers: Leading Change in the 21st Century* (Washington, DC: The National Academies Press, 2004), p. 21.

⁵ Ibid.

⁶ Ibid.

throughout the second half of the 20th century; AHC continue to provide important health and economic benefits to American society.

However, recent changes to the American healthcare landscape have called the fate of Academic Health Centers into question. During the 1990s, rapid increases in the costs of medical care forced the government to implement changes in healthcare cost control and payment methods. Government-sponsored Medicare introduced a comprehensive package using set systems for classifying treatment groups, services, and procedures—Diagnosis-Related Groups (DRG) and Ambulatory Patient Classifications (APC)—which replaced traditional “fee for service” payment structures. Managed care organizations grew, and the role of primary care physicians as “gatekeepers” to limit access to hospitals and more specialized medical care increased. The affects of these changes on AHC are still uncertain. Some experts, like Columbia University’s Lee Goldman, MD, MPH, predict that these reforms might jeopardize the survival of the AHC’s teaching and research functions.⁷ Goldman argues that AHC, faced with a shrinking volume of patient visits and the need to compete with less expensive non-teaching systems, AHC might sacrifice research and education functions to increase efficiency.⁸

At the same time, others have suggested that American AHCs are “ivory towers,” highly-specialized institutions isolated from their communities because they neglect primary care and community health. The solution to this problem, again, seems to be further integration. The Lancet Commission suggests that a “systems” approach of more integrated education, research, and service functions might restore the balance among these functions and help ensure more equitable, high quality health services for the entire population. In their view, ACH should be part of the ACS, with primary health-care training “seamlessly integrated into the overall health system, including the academic system.”⁹ Creating a “system” through collaboration and networking is an important mechanism for increasing engagement with local communities and guaranteeing more equitable care.

⁷ Lee Goldman, “The Academic Health Care System: Preserving the missions as the Paradigm Shifts,” *JAMA* Vol. 273, No. 19 (May 1995), p. 1551.

⁸ *Ibid.*

⁹ Julio Frenk, Lincoln Chen, et. al, “Health professionals for a new century: transforming education to strengthen health systems in an interdependent world,” *The Lancet* Vol. 376 No. 9756 (December 2010), p. 22.