# DISCUSSION

# PLAN STRATEGICALLY TO WORK GLOBALLY

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**ABSTRACT: Health care leaders have an opportunity to influence systems and create new care delivery locally, nationally and internationally. Global collaboration can greatly benefit individual leaders, host institutions and partner institutions. Rapid development of health care in China offers an interesting and fast-growing platform for potential collaboration as it approaches a 2020 deadline for reform. The benefits are numerous, but international collaboration requires due diligence, careful execution and continual re-evaluation.**

**PHYSICIANS AND OTHER HEALTH CARE** leaders from a variety of backgrounds long have been involved with global health development. This work includes direct provision of clinical care in underserved regions or areas of conflict, application of lessons learned to other systems in a collaborative fashion (systems development), engagement to improve health (political advocacy) and participation in peace-through-health activities.[1]

There also are opportunities for physicians, medical experts and health care delivery systems to provide consultative and strategic planning services and to engage in joint ventures or manage facilities abroad with international partners. Programmatic success requires deep subject matter expertise and a sensitivity to local conditions. Whether local, national or global, leadership in new initiatives requires a sophisticated understanding of the social, political and medical circumstances in complex, multiple-stakeholder environments.

As with any organizational decision, effective strategic planning in a global partnership requires analysis of one's own objectives; a deep appreciation of current local health care practice as well as social, cultural, political and financial opportunities and challenges; a detailed analysis of risks and benefits; and expert analysis of legal, tax, trademarking and regulatory requirements of both sides. Partnerships with reliable individuals and organizations and a process for effective due diligence are critical.

China provides an interesting example of potential for engagement in global health leadership. The country's ongoing health care reform presents numerous opportunities for collaboration of significant benefit to all parties.

The structure of health care, the delivery models and the expectations of patients and providers in the world's most populous country are changing very rapidly. The Chinese government released a major reform plan in 2009 with the stated goal of providing safe, effective, convenient and affordable basic medical care for all citizens by 2020.[2] According to a 2016 report jointly produced by the World Bank Group, the World Health Organization and the Chinese government, health insurance coverage is now almost universal, but only very basic health needs are covered.[3]

The same report finds, "At the moment, weakness in primary care, hospital centrism, lack of integration, volume-based incentives, and uneven quality all contribute to important health system shortcomings that are an impediment to achieving better health outcomes and higher returns to investments in health."

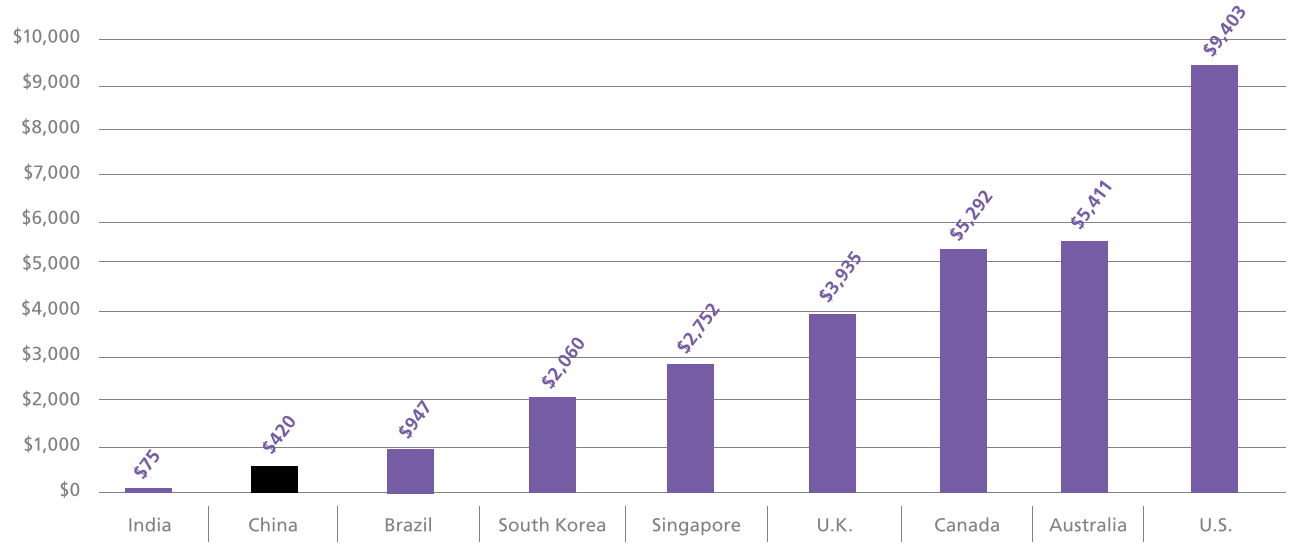
## EVOLUTION OF CHINA'S HEALTH SYSTEM

The Chinese health care system has undergone several transitions since the middle of the last century. In the 1950s and '60s, when access to basic health care was nearly universal with a focus on prevention, and during a period of general economic improvement and stability after times of war, the health of the Chinese people improved.[4] This was reflected in a reduction in infant mortality, from 200 per 1,000 live births to 34 per 1,000, and an increase in life expectancy, from 35 years (in 1952) to 68 years (in 1982).[5] As of 2015, life expectancy for Chinese women was 78 years and 75 years for men.[6]

As part of the sweeping economic reforms put in motion in the late 1970s, the government shifted from a primarily centrally planned health care financing and delivery system to one that required greater financial participation of local authorities and patients. Between 1980 and 2000, as

**FIGURE 1: HEALTH CARE EXPENDITURE**

Per capita, 2014. Figures represent U.S. dollars.




*Source: The World Bank (worldbank.org)*

government spending on health care was reduced, out-of-pocket health care costs rose significantly, from 21 percent to nearly 60 percent.[7]

By the late 1990s, more than 40 percent of urban Chinese had health care coverage, primarily through the state enterprises that employed them, while less than 10 percent of the 800 million people living in rural areas were insured.[8] Discontent with access to care, especially in less-affluent rural areas, led to public protests and even physical attacks on physicians.[9]

Over the last 15-plus years, China has revamped its health insurance system. In 2003, less than 30 percent of citizens had coverage; by 2011, with 95 percent of the population covered, China achieved near-universal health coverage, which the World Bank has described as "unparalleled."[10] However, payments to institutions and physicians are low by Western standards and benefits are limited, while copayments and other out-of-pocket costs are high, at 32 percent of total health spending in 2014.[3] That year, China spent $420 per capita on health care, compared with $9,403 per capita in the United States *(see Figure 1)*.[11]

The Organization for Economic Cooperation and Development predicts a threefold increase in government expenditures over the next four decades, to nearly 10 percent of gross domestic product, in the absence of adequate reforms.[12] Inpatient services are expected to account for more than 60 percent of the increase. China has the opportunity to achieve significant savings, equivalent to 3 percent of GDP, by achieving a better balance of health services through decreased use of hospital care in favor of outpatient and primary health care.[3]

Economic prosperity, rapid urbanization and industrialization currently are altering the risk factors for disease, while the one-child policy, in effect from 1979 until 2015, has shaped the demographics. Like the United States and other high-income countries, China is faced with an aging population and the associated challenges. More than 140 million Chinese are older than 65, and this group likely will reach 230 million by 2030.[3] Additionally, the same forces that catapulted China to the world's second-largest economy are transforming the country's disease burden. The noncommunicable diseases common in high-income countries increasingly are prevalent in China: cardiovascular disease, diabetes and cancer. Diabetes now affects more than 9 percent of Chinese adults, similar to the numbers seen in the United States.[13,14]

When considering health care transformation in China, it is reasonable to focus on maximizing health promotion and thoughtful health care delivery, as opposed to simply delivering more — or more expensive — care. Creating "value," a term that can be defined in various ways, is one of the key messages in the 2016 joint report. In the health care setting, value has been succinctly defined as health outcomes relative to cost,[15] and as a concept that combines outcomes, quality and patient safety and cost.[16]

The report authors define it this way: "Value means working toward three goals simultaneously: better health for the population, better quality and care experience for individuals and families, and affordable costs for individuals and the government." They conclude that with proper delivery systems reforms these goals are all well within China's reach.[3]

## PROMOTING PRIVATE INVESTMENT

In 2012, the Chinese government broadened its health reform efforts to include and encourage development of a private health care sector. Private participation was further encouraged in 2015, when the Chinese State Council issued new directives that relaxed entry barriers and facilitated investment in hospitals and other facilities.[17] "Limited in size but rapidly growing in market share, private investment is set to transform the health market in China," according to the 2016 joint report. "Occupying a space created by the overworked and crowded public system, the private sector offers alternatives to those seeking more and better medical products and services."[3] A number of U.S.-based consulting, accounting and law firms now advertise advisory services for health care-related partnerships in China.

Public hospitals are the cornerstone of health care in China. Patients from all parts of the country flock to the top-ranked hospitals in major cities, where long waits and overcrowding are common. These Class 3-designated hospitals have the most-advanced technology, leading many patients to bypass Class 1 and 2 hospitals. Although Class 3 hospitals account for only 8 percent of all Chinese hospitals, approximately 48 percent of hospital visits each year take place at these institutions.[18]

The Chinese health care system also includes more than 10,000 private hospitals. Most are small, with fewer than 100 beds. By comparison, Class 1 hospitals typically have more than 100 beds, Class 2 hospitals have a few hundred beds, and Class 3 hospitals frequently have more than 500 — some, as many as 3,500.[19]

Private hospitals, which often have more advanced technology, currently account for less than 15 percent of the country's hospital beds, but they are positioned to play a bigger role in health care delivery. In 2010, the Chinese State Council identified private hospitals as the preferred ownership structure for new health care institutions; in 2012, it declared 20 percent of all health care services should be provided by private hospitals by 2015.[20] While this goal likely was not achieved,[3] private hospitals have seen significant growth.[21]

## GLOBAL HEALTH DEVELOPMENT

For clinicians and medical institutions, global health care can take many forms, such as humanitarian missions, research collaborations and medical education. In some cases, that can include sophisticated consulting engagements with global partners.

A number of U.S. entities are working with Chinese counterparts. Columbia HeartSource partnered with DeltaHealth, a Chinese health care provider, to develop DeltaHealth Hospital Shanghai, which opened in 2016 and specializes in cardiovascular care.[22] Also that year, the University of Pittsburgh School of Medicine announced its third major agreement with a Chinese partner, a subsidiary of First Investment Holding Group, which owns three hospitals in Hainan, China's smallest province.[23] Xiangya International Medical Center, a hospital that UPMC helped to develop and now supports, earned the Joint Commission International Gold Seal of Approval in 2016.[24]

In 2017, Massachusetts General Hospital, part of Partners HealthCare and a sister institution to Brigham and Women's Hospital, announced a strategic collaboration with Jiahui Health Network, which is building the 300-bed Jiahui International Hospital in Shanghai, China's largest city.[25] This agreement marks the continuation of a partnership that started in 2012, when MGH began advising on the design and space planning for the new hospital, whose initial focus will be cancer care and research. Following a signing ceremony in January 2017, Weill Cornell Medicine announced that it will help develop another hospital in Shanghai under an agreement with Tahoe Investment Group Co. Ltd., part of a leading Chinese real estate company.[26]

Since 2015, Brigham Health, which comprises Brigham and Women's Hospital, Brigham and Women's Faulkner Hospital, and Brigham and Women's Physician's Organization and affiliated practices, has been engaged in a strategic collaboration with Evergrande Health Industry Group, a Chinese company that is building a nationwide health care network. Brigham Health is advising and providing guidance on health care network design, including system planning, application of population health management principles, consideration of reimbursement models, value and quality management, access to sophisticated second opinions, and U.S. referrals for care. In addition, through Dana-Farber/Brigham and Women's Cancer Center, Brigham Health and Dana-Farber Cancer Institute are partnering to develop a multidisciplinary model of care for Evergrande's first hospital, Boao Evergrande International Hospital, which is located in Hainan and will specialize in cancer care. This effort has involved more than 50 experts across 20 clinical specialties and hospital functions from Brigham Health.

Taking a strategic approach to health care system and care delivery design is critical in China, just as it is in the United States. Success will depend on the ability to move from a model of disease management by a few institutions to a broad strategy emphasizing health promotion and wellness while collaborating on advancing capacities in care delivery.

## DISTANCE TECHNOLOGY RELATIONSHIPS

Telehealth capacities are advancing rapidly and take many forms. Types of programs include doctor-to-doctor second-opinion services, ancillary service interpretation support (radiology and, more recently, telepathology), and direct patient care, which, in most cases, requires at a minimum that the nonresident provider have a medical license in the area where the patient physically sits during opinion/care provision.

U.S. hospitals are actively partnering with Chinese institutions on telemedicine initiatives. Since 2012, UPMC has been involved in a telemedicine collaboration with KingMed Diagnostics, the largest independent diagnostic laboratory in China. Glass slides are scanned in China, and the high-resolution digital slides are presented to pathologists at UPMC through a secure web-based portal, which is then used to convey second opinions to KingMed.[27] A review of 1,500 pathology cases submitted over a three-year period showed consultation with UPMC pathologists resulted in significantly

altered treatment plans for more than half of the cases in which a patient's primary diagnosis had been provided from referring hospitals in China.[28]

Hospitals are also partnering directly with Chinese hospitals on telemedicine initiatives. Among these is UCLA Ronald Reagan Medical Center, which has established telepathology and telemedicine partnerships with several hospitals in China.[29] Brigham Health provides physician-to-physician second-opinion services through its Partners Connected Health site[30] and soon will provide expanded teleradiology and telepathology services.

In addition to strategic advising and telehealth support activities, physicians and U.S. institutions care for a fast-growing number of patients referred from China. The U.S. Cooperative for International Patient Programs[31] is an organization of professionals focused on care of international patients traveling to the United States for medical evaluation and treatment.

## PLANNING FOR GLOBAL PARTNERSHIPS

International engagement requires a careful plan with frequent analysis of successes and challenges. It is crucial to have capacity for real-time modification of the operational paradigm. A partial list of questions and actions regarding strategic planning and operations includes:

### ANALYSIS:

- Is engagement in international health care work consistent with the mission/goals/strategic plan of my organization? Do the missions/goals/strategic plan of the potential partner align with my organization? Where are there synergies? Where might there be tensions?
- What are the specific objectives of the potential global partnership/collaboration?
- Are there any "red flags," such as lack of clarity of source of financing or stability and capacities of local partners, that need to be explored before establishing a relationship?
- Where do the interests of internal stakeholders overlap among vertically oriented groups?
- Where do the interests of internal stakeholders overlap with host and partner institutions?
- Does my organization have the capacity to effectively partner with an international group (human resources, technical capacities, legal support, understanding of local regulations and tax implications)?
- What is the model for partnership and will it evolve over time (e.g., advisory, joint venture)?
- How is success measured?

### OPERATIONS:

- Identify staffing needs: internal stakeholders and those of partners.
- Identify and engage legal and tax expertise (local and in district of engagement).
- Engage stakeholders.
- Develop reporting and continual re-evaluation plan.
- Conduct periodic formal assessments.
- Continue to re-examine objectives, allowing for growth and modification as needed.

## DUE DILIGENCE AND CAUTIONS

It is critical that health care leaders working abroad be intimately familiar with U.S. and host country laws and regulations, in addition to cultural norms. This includes research regarding the background of the proposed partner, their funding sources, mission/margin objectives, stability (of the institution and region), safety, travel restrictions, and legal and tax issues (foreign and domestic).

Visits to the potential partner site are necessary, but not a complete part of this process. Of particular importance: adherence to the Foreign Corrupt Practices Act, enacted to prevent interested parties — including hospitals — from engaging in certain activities with foreign officials in order to obtain or retain business.[32]

## CONCLUSION

Health care leaders have an opportunity to demonstrate leadership in collaboration with global partners in a manner that is consistent with home institution and potential partner objectives. Engagement in global health can take many forms, including collaborative health care leadership in quickly growing countries. Success requires a thoughtful plan, careful execution, a detailed understanding of U.S. and partner regulations and tax structures, and a commitment to outstanding execution with procedures for continual re-evaluation of partnerships.

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