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Investing in China Hospital Market

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Executive Summary

Total revenue for hospitals in China passed RMB 1.25 trillion in 2011. Public hospitals still account for over 90 percent of the service value. Nevertheless, private hospitals have been growing rapidly and the number of private hospitals has grown by nearly 50 percent from 2008 to 2011. The Chinese government has set a goal to increase the private hospital service contribution to 20% by 2015 from less than their 10% today.

As the government deepens public hospital reform and releases supporting policies to boost the private hospital investment, several kinds of investors have entered or are showing keen interest in the market. These include private equity and venture capital firms (PE and VC), listed pharmaceutical companies, industrial conglomerates, foreign hospital groups, and local hospital groups.

Broadly speaking, there are several hospital segments that have investment potential. As private hospitals, there are high-end, specialty chain, general, extended care, and group hospitals. In the public sector, there are general hospitals going through privatization. The investment opportunities in the hospital sector tend to emerge in waves. Therefore it is critical that players prepared to make the investment when the right window of opportunity opens:

- *Short Term*: High-end and specialty chain hospitals are leading the first wave of investment opportunities.
- *Medium Term*: High-end and specialty chain hospitals will continue to thrive, while general hospitals (private general and public general going through privatization) will become key investment opportunities. We expect extended care will emerge in the medium to longer term over time.
- *Long Term*: General hospitals will see further growth and large hospital groups should emerge through M&A and industry consolidation.

Investors need to be mindful of the development trends within each segment, and develop a deep understanding of segment-specific requirements, competitive landscape, and key success factors in order to identify the best targets. Following are some of the key considerations:

- *High End Hospitals*: The key to success in the high-end offering is the patient-centric mindset that is based on a very fundamental understanding of the needs of target consumers, which is then reflected in the branding, service and talent requirements.
- *Specialty Chain Hospitals*: Operations that are easily replicable is the cornerstone for chain operations. Strong brand reputation and the ability to develop the talent pool are needed to fuel expansion. Players must develop relevant strengths according to the unique characteristics of each specialty segment.
- *General Hospitals (private general and public general hospitals going through privatization)*: These may be

the most challenging. Comprehensive capabilities are required, ranging from obtaining policy support, general and specialty expertise development and getting the required talent, operation and process management potentially in a transitional labor environment, rebranding or brand building, and finally, maintaining sufficient scale.

- *Extended Care*: Differentiated positioning and scalability enabled by standardization are strongly desired characteristics. Steady access to patients from hospitals is also critical.

- *Hospital Groups*: Besides the comprehensive capability requirements for general hospitals, the ability to realize scale and synergy will be crucial to win.

In addition, the right investment model, deal valuation and management of invested assets are also critical to making a deal successful.

- *Entry Mode*: Investors in hospital market have four typical modes of entry: greenfield or acquisition of private hospitals; privatization or establishment of trusteeship of public hospitals.

- *Valuation*: Some China-specific valuation challenges must be addressed, including opaque hospital financial systems, endemic unethical practices, and uncertainty due to regulatory and HR risks.

- *Management of Invested Assets*: Investors typically need to pull four levers to improve invested assets: hospital governance, operation quality and efficiency, product portfolio, and expansion opportunities.

This report is written by The Boston Consulting Group (BCG), based on the analysis of existing investment cases and potential investment targets. Another related report "Capture the Next Golden Opportunity of China Health Care Reform: The Hospital Market", will help readers better understand the background of the China hospital market, relevant policies, impact of recent hospital reform, and the development of the private hospital sector.

1. Capturing the Opportunity

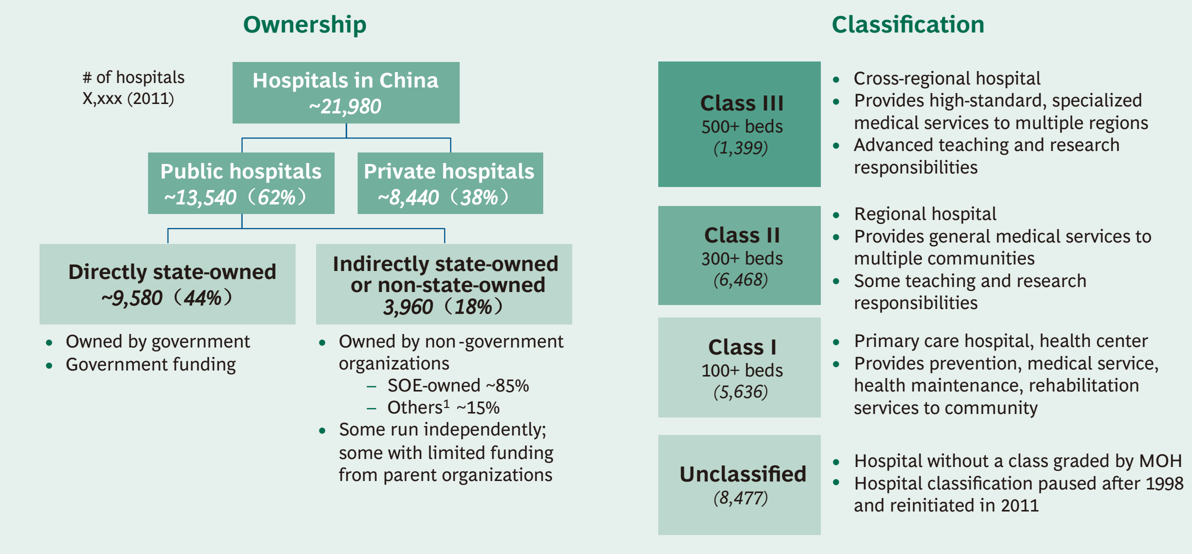
1.1 Promising Market Prospects and Enhanced Policy Support

The China hospital market achieved revenues of RMB 1.25 trillion[1] in 2011, with an 18 percent[2] CAGR from 2004 through 2011. The hospital market is expected to continue its strong growth momentum. China's HC spend is low relative to global standards at only 5.2 percent of GDP.[3] In comparison, HC spending as a percentage of GDP is 17.9 percent in the U.S., 11.1 percent in Germany, 9.3 percent in Japan, and 6.2 percent in Mexico.[3] According to *Health China 2020*, a strategic-analysis report released by China's former Ministry of Health (reorganized as the National Health and Family Planning Commission in March 2013), HC spending is expected to rise to 6.5–7 percent[4] of GDP by 2020.

Hospitals in China can be categorized by both ownership and class. From an ownership perspective, hospitals are classified as public hospitals—including state-owned (owned by government) and indirectly-state-owned or non-state-owned public hospitals—and private hospitals. Class ranking, based on capability and responsibility levels, categorizes hospitals as Class I, II, or III, with Class III the highest rank. (See Exhibit 1.)

China's hospital market is dominated by public hospitals, with very limited market-based

Exhibit 1. Hospital Definition by Ownership and Class



Sources: MOH, China Health Statistical Yearbook 2012; MOH, Measures for the Administration of Hospital Classification (Trial); BCG analysis.
Note: MOH = Ministry of Health; SOE = State-owned enterprise.
[1]For example, hospitals run by social organizations, such as the Red-Cross Association.

competition. Among approximately 21,980 hospitals with official records, 62 percent are public hospitals, while the remaining 38 percent[1] are private hospitals. Most private hospitals are small with limited service volume. In 2011, private hospitals accounted for only 9 percent of the nationwide HC-service volume; public hospitals account for the remaining 91 percent of service volume. Tellingly, only 1 percent of private hospitals in China were Class III hospitals, while 10% of all public hospitals are Class III.[1,5]

However, private hospitals have experienced significant growth in recent years. From 2008 through 2011, the CAGR of private hospitals was 16 percent by number of hospitals and 19 percent by number of beds.[5] Given the Chinese government's aggressive goal to raise private-hospital health service to 20 percent by 2015, private hospitals are expected to see their patient volume grow at a CAGR of 32 percent from 2013 through 2015, which means an increment of 400 million patients.[6] (See Exhibit 2.)

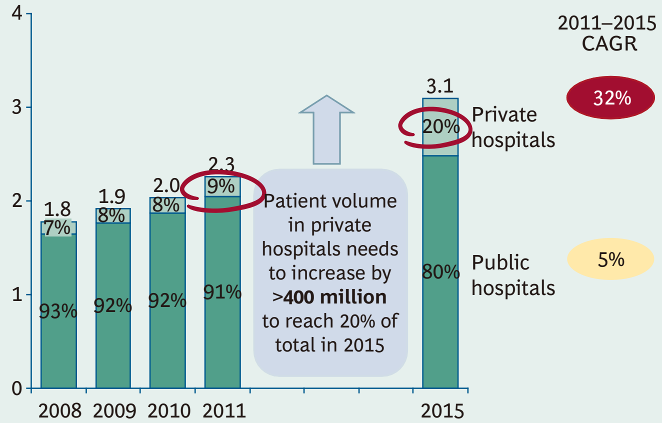
With the release of two documents—*Public Health Development 12th Five Year Planning* (by the State Council) and *Notice by State Council on Further Encouraging and Guiding the Establishment of Medical Institutions by Private Capital* (Article 58.)—along with some other supporting policies, HC provider market reform is now really gaining significant momentum. The reform takes two major directions: first to deepen public-hospital reform, including addressing structural issues and adjusting the distorted financial system, and second to ease entry and improve the business environment for private capital.

The current reform policy is expected to increase market-driven competition in China's HC-provider sector

Exhibit 2. Government Has Set an Aggressive Target to Raise Private Hospital Health Service to 20 Percent in 2015

Private hospital health service currently takes only ~9% but is expected to reach 20% in 2015

# of visits in public and private hospitals (billions, 2008-2015[1])



Government aims to introduce competition to public hospitals

"At present, the number of private hospitals has been close to a third of the medical institutions, that is more than six thousand, but # of beds probably account for 10%, patient volume accounts for 9% of the total medical and health services."
By the end of 2015, private hospital # of beds will rise to 20%, patient volume also will increase to 20% correspondingly.

—Zhu Chen,
Former Minister of Health

Sources: MOH, China Health Statistical Yearbook 2012; BCG analysis.
[1]2015 projection of total patient volume is based on 2008–2011 CAGR.

and lead to more privatization and market consolidation for three key reasons:

- Separating the mixed role of the Bureau of Health (BOH), which currently is both regulator and operator, will gradually eliminate the preferential policies for public hospitals and enable a more equal competition between public and private hospitals.

- Reform of the reimbursement system (global budgets and diagnosis-related groups) will put tremendous pressure on costs at hospitals. As a result, operational efficiency and cost-control capability will become critical competencies for hospitals. These characteristics are often considered the strength of private hospitals instead of public hospitals. International experience (for example, in Germany) suggests that with such strengths, private hospitals potentially have a competitive advantage in the long run.

- The implementation of policies to encourage the private capital investment will lead to a boom in private-sector players. The Chinese government is also promoting the privatization of select public hospitals, which serves as an opportunity for private capital to get quick access to high-quality hospital resources.

The release of Article 58. indicates that the central government is determined to boost the private-hospital sector investment. According to Article 58., priority is given to private capital when adjusting and increasing current hospital resources, establishment of medical institutions by overseas capital is permitted, the restriction on the equity proportion of overseas capital (once at 70 percent[7]) will gradually be removed, and the pilot of wholly foreign-owned medical facilities in China by qualified overseas investors will be allowed.

The document also sets rules to simplify the approval procedure for foreign-funded hospitals: the establishment of Sino-foreign joint venture and cooperative joint venture medical institutions shall be subject to the examination and approval of provincial health departments and commercial departments instead of the central government.

A few uncertainties remain in market entry because interpretation and enforcement of Article 58. will vary at the local level in the near term. For instance, preferential treatment toward public hospitals may still exist in local hospital-resource planning, which may delay approvals for private hospitals.

1.2 Entry of Many Investors to the Hospital Market

Various investor activities are underway. Investors can be categorized into five types: private equity and venture capital firms (PE and VC), listed pharmaceutical companies, industrial conglomerates, foreign hospital groups, and local hospital groups.

- PE and VC have been the most active investors so far, with a focus on private specialty chain hospitals. Most of the approximately 30 deals completed by these investors since 2008 have been relatively small in size. Deals tend to focus on certain specialties: health checkups, obstetrics and gynecology (OB/GYN), and dental. For example, CDH Investments and Tiantu Capital have engaged in several rounds of investment in Ciming Health Checkup.

- Listed companies, especially pharmaceutical-related ones, are expanding downstream in the value chain, with the aim of pursuing synergies with their existing presence in specific specialty areas. Jinling Pharmaceutical Company's 63 percent equity acquisition of Suqian People's Hospital is a typical case.

- Industrial conglomerates are catching up to expand their portfolios. These investors feature solid financial strength, strong government resources, and the ambition and resources for long-term heavy investment. Specific activities include China Resources' 66 percent equity acquisition of Kunming Children's Hospital and Fosun's strategic investment in United Family Healthcare (UFH).

- Some leading foreign HC groups are entering the sector as well. Most of them started with the high-end segment, built up small general hospitals and a network of satellite clinics, and formed joint ventures with local partners. With the increased income level in China, these foreign groups are continually expanding their service offering and geographic presence. Examples are Parkway Health (Singapore) and UFH (U.S.).

- Only a few local HC-groups have been established in China, owing to the immature market environment and the significant capabilities gap. However, relative to foreign groups, more-diversified investment approaches are available to local players, including M&A, greenfield investment, and especially the privatization of public hospitals. Typical cases include Phoenix Healthcare Group investing in public general hospitals through privatization.

Returns on investment have varied significantly. (See Exhibit 3.) Fortune Venture Capital invested in Aier Eye Hospital and generated returns exceeding ten times its investment within just a few years. Jinling Pharmaceutical turned around Suqian People's Hospital after acquisition, achieving a net margin of up to 16 percent in 2011.[8] In contrast, Taiwan's Nanjing BenQ Medical Center has exhibited poor margins since its establishment in 2008. Every successful or unsuccessful story is the result of a set of specific factors.

Exhibit 3. Both Opportunity and Risk Exist

Fortune Capital invested in Aier Eye Hospital	Jinling Pharma acquired Suqian People's Hospital	BenQ Hospital (Nanjing)
Fortune Capital invested RMB 7.2 million for 3 million shares of Aier in 2007 (or RMB 2.4 per share). Aier, a pioneer in China's specialty hospital sector, has a very strong management team and a decent financial performance. Aier was listed in 2009, at the issuing price of RMB 28. Calculated based on this, the investment return is greater than ten times within two years.	Jinling Pharma acquired a 63 percent equity share of Suqian People's Hospital for RMB 70 million in 2003 in a deal that involved Nanjing Gulou Hospital, which will contribute its expertise for 10 percent equity, and Suqian Traffic Investment, which represents local government for the remaining 27 percent equity. Prior to the acquisition, Suqian People's Hospital had faced years of loss because the poor operation and the local government was unable to provide a sufficient fiscal subsidy. With the financial investment from Jinling Pharma, and improved operation thanks to the expertise from Nanjing Gulou Hospital, Suqian People's Hospital is turned around soon, with revenues up to RMB 476 million in 2011 and a net margin of 16 percent.	BenQ Hospital (Nanjing) is established and funded by Taiwan BenQ group and commenced operation in 2008; it currently has 1,500 beds. Because the hospital's pricing level is comparable to that of public hospitals but the hospital has no public-insurance reimbursement, the hospital has very low occupancy. BenQ is also struggling to attract good doctors, due to lack of connections in local market.

Sources: Literature research; expert interviews; BCG analysis.

Prerequisites for success are selecting the right segment, target, and appropriate investment model as well as adopting effective post-investment management.

2. Investing in the Right Segment, the Right Target, at the Right Time

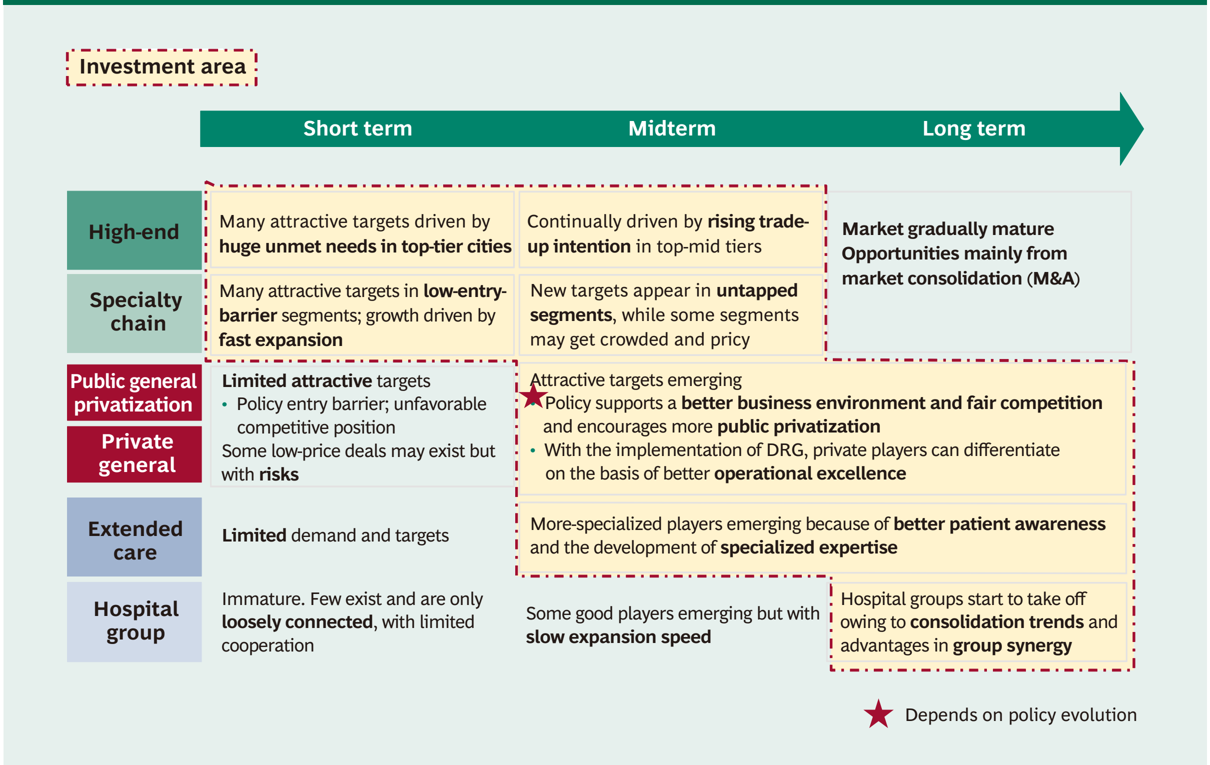
Given the dominant role of public hospitals, uncertainty in policy execution, and the existence of a "glass ceiling" (imposed by factors such as hidden entry barriers, talent- and patient-sourcing bottlenecks, and medical-insurance designation bias), differentiated positioning is the key to success for private hospitals. Depending on the easiness and maturity of differentiation to public hospital offering, we identified six hospital segments with potential for investment.

These six segments are emerging in waves in terms of window for investment. (See Exhibit 4.)

2.1 Short Term: High-End Hospital Segment and Specialty Chain Hospital Segment Leading the First Wave

The Private "High-End" Hospital Segment includes institutions that provide high-quality and high-priced medical services. They target the fast-growing high-income population, and are located in big cities such as Beijing and Shanghai. They typically do not rely on public medical insurance, and often are small in size for now. For instance, UFH set up three small general hospitals (one in Shanghai with 50 beds,

Exhibit 4. Three Waves of Investment



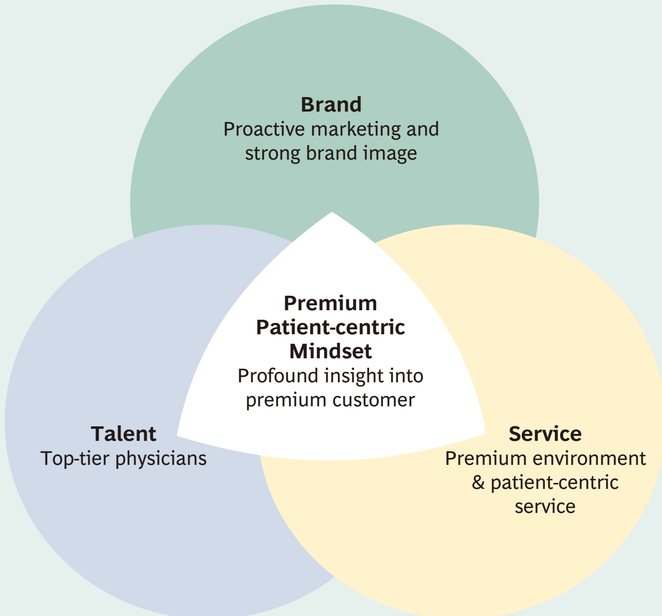
one in Tianjin with 26 beds, and one in Beijing, which recently expanded to 120 beds)[10] and a network of satellite clinics in surrounding areas. Parkway mainly focuses its operations on the clinic network in Shanghai.

China's rising income, increasing health awareness, and emerging commercial insurance contribute to increasing demand for premium HC services. Meanwhile, there appears to be a shortage for these services in the market. Public VIP wards, a direct rival of private high-end hospitals, are constrained from expansion by government policy. As early as 2010, the government HC-reform plan stipulated that VIP service should be no more than 10 percent of the total service of public hospitals. With strong demand growth, the high-end segment should maintain an upward trajectory.

A good investment target in the "high-end" segment should have a patient-centric mindset reflected in its branding, service and talent building. Public VIP wards are backed by the strong brand image of public hospitals and strong professional capability accumulated from a massive patient base and rich clinical experience. In comparison, high-end players of smaller size have no competitive edge in such aspects. The winning enablers for high-end hospitals are building up patient-centric mindset that is based on deep understanding of the needs of target consumers, and reflected in branding, service and talent building. (See Exhibit 5.)

Key Success Factor 1: Brand. Building a premium brand usually requires a long period of proactive marketing. As a leader in high-end HC services in China, UFH started its business presence in 1997 and

Exhibit 5. The Key in the High-End Segment Is a Premium Patient-centric Mindset Reflected in Brand, Talent, and Service



Sources: Literature research; expert interviews; BCG analysis.

leveraged its early-mover advantage to build a strong word-of-mouth reputation. (See the sidebar "High-End HC Leader in China: UFH.") Another example is Amcare, a premium OB/GYN brand that has proactively

High-End HC Leader in China: UFH

United Family Health (UFH) is the HC service business of a U.S.-listed company, Chindex. As early as 1997, the first general hospital of UFH was opened in Beijing. Its HC service revenue in China in 2011 was up to $114 million; EBITDA was up to 9 percent. Now, UFH has three hospitals (one each in Beijing, Shanghai, and Tianjin) and a network of satellite clinics. In recent years, UFH has accelerated its hospital expansion steps, including Beijing New Hope Oncology Center, Beijing Rehabilitation Hospital (expected to open in mid-2013), and Guangzhou UFH. Its target segment is expanding from expatriates in Shanghai and Beijing to the top 3 to 5 percent high-income population in top-ten cities in China (by income).

Foremost among UFH's KSFs is the fact that as a leader in the high-end HC sector, UFH captures an early-mover advantage by developing a very strong premium brand image and positioning. Also, UFH has a best-in-class talent team; today, more than half of the physicians are from overseas. UFH's HR cost represents more than 50 percent of the company's revenues, far higher than the industry average.

With two rounds of investment in 2009 and 2010, Fosun acquired 25 percent equity in Chindex, the parent company of UFH, making Fosun the largest strategic investor in UFH.

leveraged online marketing by partnering with Aibaimm.com, an online community targeting affluent mothers.

Key Success Factor 2: Service. In addition to ensuring quality medical services, it's also important to build up a high-end patient-centric service standard, supported by a premium environment. This is regarded as the key to distinguishing from public competitors. High-end hospitals often invest a lot on decoration, building up service standard, staff training for good services, and providing additional value-added services, for instance, lifelong patient medical records, and a customized treatment plan.

Key Success Factor 3: Talent. A top talent team is another must-have. Professional talent and hospital brand are inseparable. A well-known brand can attract talent; superior talent can, in turn, increase the brand attractiveness of a hospital. Premium hospitals have rigorous requirements for talent. In UFH, more than half of the physicians are from overseas; some premium OB/GYN hospitals arrange for their physicians to go for specific training in the U.S. Many premium hospitals invite top-tier experts from Class III A hospitals to work on a part-time basis.

We observe two potential expansion directions for the high-end segment. First, its portfolio will shift from clinic-based general treatment to more extensive and specialized treatment. Second, its geographic coverage will expand beyond mega-cities such as Beijing and Shanghai to mid-tier cities. For example, in its early days, UFH adopted the model of clinic plus small hospital and served expatriates in Shanghai and Beijing only. Now, UFH is gradually scaling up its general hospital and setting up specialized oncology hospitals and rehabilitation hospitals, targeting not only expatriates but also the local wealthy population in top-ten cities.[10]

The Private "Specialty Chain" Hospital Segment includes hospitals that have a single disease or specialty focus, typically in a chain format.

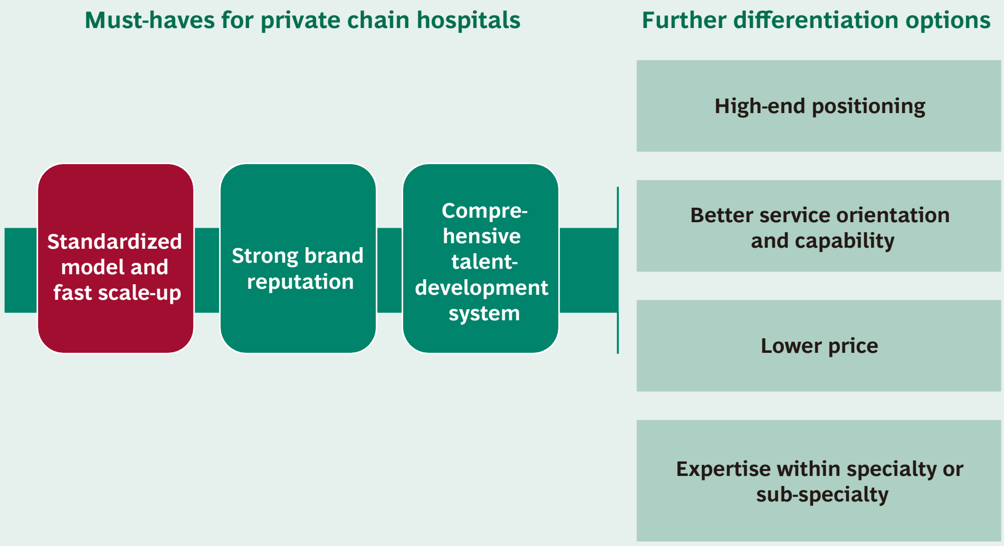
Initially, in order to avoid head-on competition with public hospitals, this segment focused on specialties that were lower priorities in public hospitals and that had relatively low medical barriers such as health checkups, dental, ophthalmology, and OB/GYN. Patients in these specialties particularly value patient-centric service, which tends to be lacking in public hospitals. Private specialty chain hospitals often choose to emphasize their service quality to distinguish themselves from their public hospital competitors.

Owing to the small scale of single specialty hospitals, specialty hospitals and their investors often choose to form chains and grow through geographic expansion. Therefore, standardization, strong brand reputation, and the ability to develop a talent pool are must-haves for private specialty chain hospitals. Moreover, players could pursue differentiation and establish a competitive advantage based on the unique characteristics of each specialty segment. (See Exhibit 6.)

Standardization is the most critical lever in this segment. It could enable easy replication of one hospital's success to various locations and achieve solid quality control and maintenance of brand image across all branches. Standardization could also address the HR bottleneck. Private hospitals are always constrained by the scarcity of top-tier talents, who prefer a career in public hospitals. By establishing a standardized talent-development system, specialty chain hospitals can replicate in-house talent resources in a sustainable way.

Differentiation and competitive advantage can also be developed based on the unique characteristics of each specialty segment. For instance, private specialty chain hospitals can position themselves to serve

Exhibit 6. Private Specialty Chain Players Need a Standardized Model and Fast "Scale Up" Ability to Succeed



Sources: Literature research; expert interviews; BCG analysis.

certain customer segments (such as premium OB/GYN), provide high cost-effective services (such as health checkups), or offer lower prices (for cataract surgery, for example). Take OB/GYN hospitals as an example. In addition to the quality of medical care, patients are willing to pay a premium for considerate patient-centric service (meaning service environment, attitude, and quick access to care) and privacy. Therefore, OB/GYN specialty hospitals often choose to differentiate themselves with superior patient-centric service quality. For health checkups, good service is also important. But because the majority of health check businesses are B2B (corporate group business), corporate clients have strong bargaining power in price negotiations with providers. Thus, highly cost-effective service becomes a key to winning, and it requires health checkup players to develop a strong cost-control capability.

In their expansion efforts, specialty chains need a clear expansion strategy. Expansion to prioritized area with an appropriate speed can be critical. Constrained by local hospital-resource planning, expansion is highly time-sensitive. In addition, early entrants could capture an early-mover advantage by building brands and establishing an impact in a short time. Nevertheless, expansion speed that exceeds internal capabilities may lead to operational issues or even undermine product or service quality and brand image. In hospital market, medical accidents or negative press could have a detrimental impact on a brand.

It should be noted that the persistently low medical barrier could lead to increased competition and excessive supply. For instance, competition in the health checkup market is intensifying, especially in top-tier cities. As a result, competition will inevitably move toward price, causing the market to consolidate.

Going forward, those with higher entry barriers could become the hotspots of the next wave. Unmet demand and effective execution and rollout of supportive policies are the key drivers. Examples of these new areas are oncology, pediatrics, psychiatric disease, and rehabilitation.

To overcome the high entry barriers of these complicated specialties, we identified three potential solutions for investors and operators:

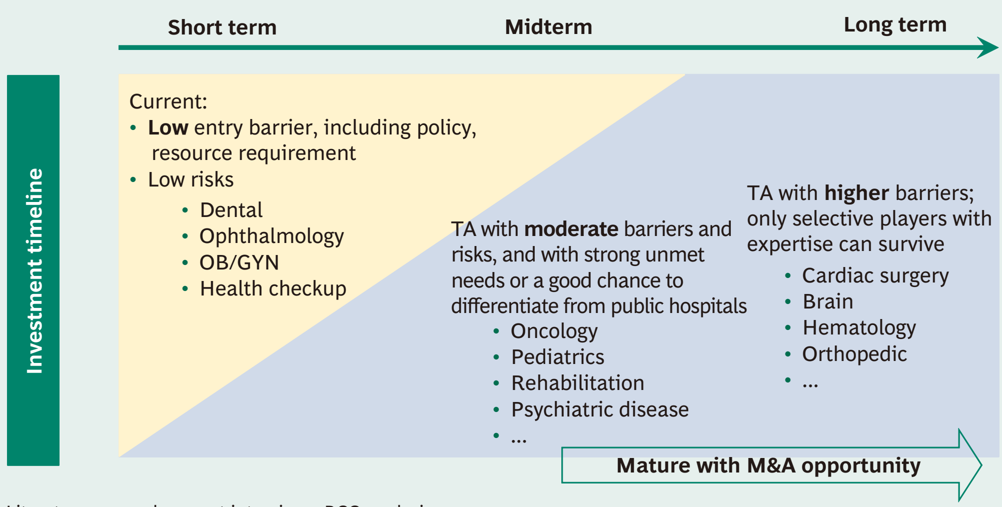
◇ *Establish a strategic partnership with a public hospital*. Leveraging the brand reputation and talent resources of public hospitals, could also get access to patient referrals. For example, Beijing New Century International Hospital for Children (a private hospital) is located close to Beijing Pediatrics Hospital (a public hospital). By establishing a partnership, Beijing New Century International Hospital for Children can get access to patient resources by leveraging the strong brand reputation of Beijing Pediatrics Hospital.

◇ *Specialize in certain simple surgery and HC services*. Develop a focused specialty in services or procedures with lower technical or talent barriers, such as a specialized chemotherapy and radiation therapy center.

◇ *Leverage existing expertise within a specialty segment*. Leverage existing expertise and brand reputation to generate synergies. For example, Concord Medical Services (CMS) leveraged its existing presence in oncology as an operator of radiotherapy and diagnostic-imaging centers to diversify into oncology hospitals. More specifically, CMS developed as a radiotherapy and diagnostic-imaging center operator with 136 centers (most under lease and management-services arrangements) across 76 hospitals in 53 cities by the end of 2012. In 2010, it acquired a 52 percent equity interest in Chang'An CMS International Oncology Center.

When considering entry into high-barrier specialty segments, investors should be aware that expansion via chain business model in these segments won't be as easy to achieve as in low-barrier segments. Therefore, they should carefully evaluate targets' future growth direction and potential before making investment decisions. (See Exhibit 7.)

Exhibit 7. Certain Specialties Are Investment Hotspots Now; Others Will Be the Focus of Future Investment Trends



Sources: Literature research; expert interviews; BCG analysis.

2.2 Mid-Term: General Hospitals Become a Key Area in the Second Wave

The second wave of investment will feature a greater level of activity, as multiple segments of the hospital market evolve. High-end and specialty chains will expand to regions and specialties that have not yet been penetrated by the early movers. General hospitals (including the private general hospital and the "privatized" public general hospital) will become the new investment hotspot in the mid-term because, with the effective execution and rollout of supportive policies for private hospitals, some industry barriers that were in place in the early days (for example, lack of public medical insurance designation, talent constraints) will be removed, thereby opening a significant investment window for private capital.

The "Private General" Hospital Segment is greenfield development by private capital. The ownership structure is clear but the return period is often long (on average, the payback period is eight to nine years). Capital, talent, HR and management capabilities are required.

Private general hospitals have been at a disadvantage when competing with public general hospitals, due to the difficulty to obtain public medical insurance designation and attract good talent. Physicians are often reluctant to work at private general hospitals, because they tend to regard private hospitals with inferior career advancement and research environment opportunities, and afraid of losing the job at the public general hospitals. Unlike the specialty chain hospitals, private general hospitals' large scale requires a lot more talent covering more comprehensive specialties, and unlike high-end hospitals, private general hospitals can't afford to offer high salaries to attract talent from public hospitals.

In the mid-term, easier access to medical-insurance designation and better access to talent resources driven by the rollout of supportive policies will enable private general hospitals to build their brand, attract patients and grow. Private general hospitals with attractive investment potential are expected to continue to emerge with an improving market environment.

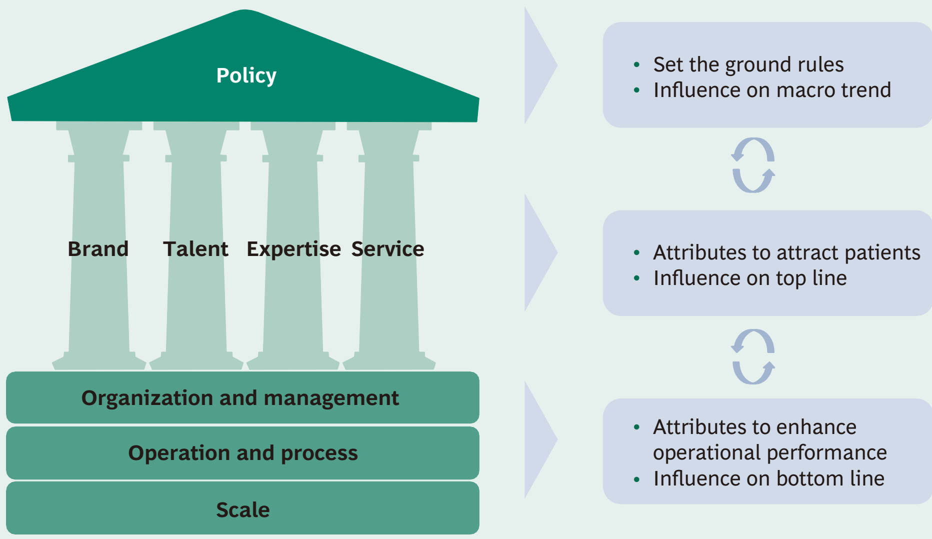
Particular external conditions and comprehensive internal capabilities are required to compete in the general hospital segment. Favorable policy support is critical; the ability to build a brand, talent, and specialty is crucial; and quality of service, organization and management structure, efficient operations and management, and economies of scale will become increasingly important in the near future. (See Exhibit 8.)

When selecting private hospitals, investors should pay special attention to hospitals with a high class ranking and a well-established brand image in the local community. Additionally, the following aspects need to be carefully considered:

- *The Prospect of Local Economic Development*. Hospital service is highly constrained by the radius of coverage. Although specialty expertise can attract some nonlocal patients, considering the impact of the state policy "Treat Serious Disease Without Going Out of the County," local populations are most likely to remain the dominant source of patients. Regional development, population increases, and income level have a great impact on the growth prospects of private hospitals.

- *Local Competitive Landscape*. Public general hospitals are the biggest competitor for private hospitals. If local public hospital resource is limited, private hospitals would even have the chance to dominate local markets. For example, in some new economy-development zones, such as the Xi'an Gaoxin District, very few high-quality public hospitals are available. As a result, the private Xi'an Gaoxin Hospital manages to be the top player and capture the market share in the development zone.

Exhibit 8. Key Success Factors for General Hospitals



Sources: Literature research; expert interviews; BCG analysis.

- *Strategic Establishment of Core Specialties*. General hospitals cover a wide range of specialties, but each hospital often only has strength in a few specific specialties. Those specialties are regarded as the core competency of each hospital. When it comes to making strategic choices on specialties to focus, market demand, competitive landscape, and profitability should be taken into account. Private hospitals with differentiated strength in the high-demand and high-margin specialties would be of top priorities.

The "Privatized" Public General Hospital Segment comprises public general hospitals going through privatization with government approval. These institutions can often inherit established brands, patient sources, physician resources, and public medical-insurance designations. If government retains a fraction of equity in the transformed entity, the new hospital will often have the advantage of strong governmental support.

The Chinese government will further encourage public-hospital privatization, which could serve as a breakthrough for private capital to gain broad access to high-quality investment targets. Based on our understanding, public-hospital privatization will focus on two segments: state-owned-enterprise (SOE) hospitals and hospitals in cities with faster reform steps. China has approximately 4,000 indirectly state-owned or non-state-owned public hospitals, many of which are SOE hospitals.[1] (See Exhibit 1.) The reform to separate public-service functions from SOEs started about ten years ago, aiming to separate public-service functions, such as hospitals and schools, from SOEs' core business to improve enterprise productivity. Many SOE hospitals have experienced various kinds of privatization (for example, onetime ownership privatization or employee stock ownership, trusteeship with professional management companies, handover to government or affiliation with medical schools, and buyout or majority holding by private capital). However, a great number of SOE hospitals are far from thorough privatizations and could be potential investment targets in the next wave. In addition, some cities with faster reform steps are making progress in introducing private capital into the local HC-service sector—for example, Kunming, Chengdu, Luoyang, Beijing, Shanghai, and Shenzhen. For example, Yunan Province set a goal that by 2012, the proportion of private hospitals would exceed 70 percent by asset value and 50 percent by number of beds.

Mid-level (Class II and small Class III) public hospitals merit special attention. Local governments are typically very cautious in public hospital privatization and will always keep their best hospital resources (that is, large Class III hospitals) away from any privatization agenda. Therefore, Class II and small Class III hospitals are the frontier of public hospital privatization. Although many such hospitals may be underperforming in asset quality and operation performance, there is still opportunity for investors to realize value creation through post-investment management. We expect to see more public hospitals going for privatization with relatively lower deal prices. With effective post-investment management, these deals could turn out to be good investment opportunities.

It is noteworthy that investment in general hospitals poses comprehensive requirements for both the target and the investor. Given high construction costs, long return periods, high management complexity, and the significant impact of government support, investors are advised to have strong financial capability, expertise and experience in hospital management, and a good relationship with local government. Pursuing a strategic partnership could be a highly effective way to quickly gain those strengths.

For example, Jinling Pharma acquired Suqian People's Hospital, realizing a win-win situation from a tripartite partnership. The M&A deal involved two other parties: Suqian Traffic Investment Company Nanjing, which represents the local government, and Nanjing Gulou Hospital Group, which contributes hospital management expertise. The joint effort by the three partners brings funding, government connections, and hospital management expertise to the new entity. The hospital was turned around soon after the acquisition and achieved great performance in 2011, with RMB 470 million in revenues and a 16 percent net margin. (See Exhibit 3.)

The "Extended Care" Segment includes entities that focus on the adjacent areas of the hospital market, to meet specific patient requirements. Relative to traditional specialties, these sectors feature low entry barriers and limited requirements for medical expertise.

Patients with certain specialized needs will give rise to some adjacent HC services opportunities, such as postpartum-care and elder-care centers. Relative to traditional specialties, these sectors feature low entry barriers and limited requirements for medical expertise. The government also encourages private capital to participate in these sectors, which are usually beyond the scope of public hospitals. Meanwhile, these sectors typically demand higher service quality, which could serve as a unique opportunity to differentiate private players from their public rivals.

Some conventional hospital functions—such as lab diagnosis, image diagnosis, radiation, chemotherapy, and dialysis—could be outsourced to specialized service suppliers as well. With strength in scale and operation, these providers could offer services of higher quality at lower prices.

In terms of core competencies, the extended-care segment shares some requirements with the rest of the segments (such as differentiated market positioning and scalability enabled by standardization), but also relies on some unique factors. The most critical one is to secure a stable business source from hospitals, which calls for favorable, long-standing partnerships with multiple hospitals.

Each subsector within this segment also has distinctive characteristics. For example, in the elderly homecare sector, scalability is considered important to establish a cost advantage and strong capabilities to provide integrated services; on the other hand, a lab diagnosis center would value a strong brand image to establish credibility in quality and stability. It's critical for investors to select investment targets according to the specific characteristics and competencies of each subsector.

2.3 Long Term: Hospital Groups and Industry M&A Opportunities Emerge in the Third Wave

A Hospital Group is typically composed of multiple general hospitals, with broad expertise or covering several hospitals across multiple class levels. Besides the comprehensive competencies required of general hospitals, achieving economies of scale and synergistic growth is especially critical.

So far, the segment is still at the embryonic stage, with very few established hospital groups in existence. China government is taking initiative to link some Class III public hospitals with Class II public hospitals and community health centers. Those consortiums of public hospitals are far from fully integrated. Despite talent exchange and patient referral to some extent, the level of cooperation and support among hospitals is still limited.

We look at hospital groups as a long-term development direction for general hospitals. In the long run, a more supportive policy environment will give rise to a greater number of private general hospitals. In an environment of intensified competition, the ability to achieve economies of scale will be an increasingly critical success factor for hospitals. Some general hospitals, after a long period of development, are expected to lead industry consolidation and form hospital groups.

The growth model of hospital groups is different from that of the private specialty chain. A long-term commitment to development and cultivation is required. First, the private specialty chain typically has a nationwide presence with a large number of outlets. For example, Aier Eye set up 44 hospitals,[11] covering many provincial capitals. Hospital groups, on the other hand, typically concentrate on a certain region and have only a few outlets. Second, compared with the fast proliferation of the private specialty chain, the expansion of the hospital group is much slower, owing to the higher entry barriers for general hospitals, the longer development cycle, and the hard-to-replicate business model. Finally, the private specialty chain is far more standardized, while the development of general hospitals requires adaptation to the local market, especially a customized portfolio based on the local patient demand and competitive environment.

After a long period of growth, high-end and private specialty chain segments will enter mature stage. Incremental investment opportunities will decrease, with a few remaining in untapped high-barrier specialties such as lung, brain, orthopedics, and hematology. Nonetheless, increasing M&A and consolidation opportunities are expected in both segments. (See Exhibit 4.)

3. Entry Mode, Valuation Challenges, and Management of Invested Assets

3.1 Choose the Right Model to Invest

In China, four major entry modes in hospital market have been observed so far: greenfield or acquisition of private hospitals, and privatization or establishment of trusteeship of public hospitals. These models vary by speed of entry, level of investment required, and nature of ownership. (See Exhibit 9.)

Exhibit 9. Four Major Entry Modes in the Private and Public Sectors Have Been Observed Thus Far

		Ease of entry	Up-front investment	Ownership	Example
Private	Greenfield	Long approval and set-up process	Huge up-front capex	Clear ownership	Taisu Group built Chang Gung Hospital
Private	Acquire existing hospitals (partly or fully acquire)	Fast entry	Huge up-front capex	Clear ownership	999 Medical and Pharma Company acquired Guangzhou Sanjiu Brain Hospital
Public	Privatize public hospitals (partly or fully acquire)	Fast entry but potential approval delay due to policy uncertainty	Moderate up-front capex	Unclear ownership up-front	Phoenix Health-care Group acquired Yanshan Petrochemical Hospital
Public	Trusteeship	Fast entry	Very limited up-front capex	No ownership	Phoenix Health-care Group operates BJ Mentougou district Hospital

Sources: Literature research; expert interviews; BCG analysis.

Greenfield or acquisition of private hospitals: Greenfield private hospitals are characterized by a long approval process and heavy upfront investments, from application for business license, to land acquisition, to construction, and to commencement of business. The advantage of this model is a clear ownership structure that enables strong control by investors. An example is Chang Gung Hospital in Xiamen, funded by Formosa Plastic Group. The hospital filed an application in 2004 and got approved for construction in 2005; the phase I project was commenced in 2008, with a total investment of RMB 1.78 billion.[12] In contrast, acquiring an existing private hospital could allow a much faster entry compared with building from scratch.

Privatization or trusteeship of public hospitals: Privatization of public hospitals is quite different from the greenfield and acquisition of private hospitals. Acquiring a well-established public hospital can accelerate the entry for investors, but uncertainty in local policy and government support could also lead to potential delay. In contrast, the most distinctive characteristic of the trusteeship model is that the investor has no ownership of the target hospital. The trustee is authorized to operate the hospital and charges management fees as agreed. An example is the trusteeship between Phoenix Group and Beijing Mentougou Hospital in 2010. "Trusteeship first and acquisition later" is also observed in the market, as when Phoenix Group established a trusteeship with Wuxi Xinqu Hospital in 2001 and struck a buyout of the hospital in 2005.

Which one is the more appropriate investment mode: public hospital or private hospital? Both choices have pros and cons. The decision must be based on comprehensive consideration of the investor's capability and objectives. Through investing in public hospitals, investors can inherit an established brand name and mature medical professionals and assets, but challenges also lie in the uncertainty of policy on public-hospital privatization, complex ownership structure, and the restructuring of hospital culture to develop a patient-centric service orientation and a modern business-operation mindset. On the other hand, investing in private hospitals features a clear ownership structure, foreseeable investment returns, and easier post investment management. However, investors must keep in mind the current disadvantages of private hospitals in overall capabilities, competitive environment (for example, it takes time to fully execute a supportive policy), and the limited number of quality targets available.

3.2 Challenges in Valuation and Solutions

Unique challenges exist in valuation for investment in Chinese hospitals, including opaque hospital finance systems, prevalent under-the-table rebates, and uncertainty imposed by regulation and HR risks. Investors are advised to anticipate these challenges and prepare accordingly.

First, there is no transparent financial system. Public hospitals often lack basic financial data. Investors can use the "80-20" principle to focus on the valuation of core specialty departments or service lines. Meanwhile, a set of key operation metrics (including average length of stay, average revenue per occupied bed, and bed occupancy ratio) and financial metrics (such as revenue mix [IP/OP], EBITDA margin, and debt/equity ratio) could be used for industry benchmarking to support decision making.

Second, under-the-table rebates in the distribution channel prevail, causing a price bubble in procurement. A considerable portion of the income ("gray income") of hospitals and their employees is from the distribution channel. After an acquisition, investors could enhance management of the procurement practice to lower procurement prices. But investors are not advised to incorporate those additional savings when performing a valuation. These channel margins would eventually go to hospital revenues and employee compensation in other forms, instead of becoming additional returns for investors.

Third, regulation uncertainty remains, including removal of tax benefits and loss of public insurance designation. Foreseeable changes, such as removal of tax benefits, should be fully reflected in valuation. For risks with high uncertainties, such as loss of insurance designation, scenario analysis should be used to establish the best case and the worst case for investment returns.

Fourth, talent turnover risk exists in target hospitals. Prior to the investment, investors should develop a well-designed communication plan and take proactive retention actions (such as retaining original labor contracts) to minimize the talent turnover risk. For public hospitals, investors need to be more careful, as the talent is an even more complex issue given that physicians are considered registered employees in state-run public institutions.

3.3 Management of Invested Assets

How can investors enhance the business and financial performance of their targets throughout the investment life cycle? Investors typically need to pull four levers to improve invested assets: hospital governance, operation quality and efficiency, product portfolio, and expansion opportunities.

- *Strengthen hospital governance*. Set up a modern governance structure, restructure the hospital board and management team, and enhance management capability.

- *Improve operation quality and efficiency*. Improve the quality of treatment and services, enhance procurement and HR management, and optimize both service quality and operational efficiency.

- *Develop a portfolio strategy*. Develop differentiated specialty expertise according to hospital capability, local demand, and the competitive environment.

◇ *Establish an overall strategic expansion plan*. Develop an expansion and M&A strategy and build up relevant capabilities.

The future competition among hospitals will definitely go beyond cost advantage. Value-based health care (VBHC), as an advanced management concept, will diversify the key management levers from just cost control to offering the most valuable HC services at the lowest cost. Through the application of VBHC and relevant tools, many international hospitals will improve their market competitiveness by optimizing cost and maximizing service value.

4. Words for Investors

China's hospital market is approaching the golden era of growth, in which the market is ready to embrace additional private capital. The following tips are recommended to investors:

◇ Select the right segment and target.

◇ Make an early entry to lock up high-quality targets.

◇ Choose the appropriate investment entry mode.

◇ Adopt advanced management of invested assets to improve target value.

In addition, investors are advised to have a strong financial capability, expertise and experience in hospital management, and a good relationship with local government. Strategic partnerships can be leveraged to strengthen the required capabilities and form strong alliances.

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For Further Contact

This report reflects BCG's deep, international experience in hospital management and operation improvement. Should you find yourself interested in this topic, please contact one of the authors for further discussion.

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