Changing Landscape of China’s Pharmaceutical Distribution Industry
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EXECUTIVE SUMMARY

The Chinese healthcare industry has been developing rapidly for the past ten years, and the market continues to show strong growth potential. However, the drug distribution sector is still overly complex, fragmented, and inefficient: more than 13,000 pharmaceutical distributors by 2009, and the top three commands only 22% of the market in 2010. The Chinese Government has launched a drive for industry consolidation, which is now being highlighted in the new Five-Year Plan. The current market leaders—Sinopharm, Shanghai Pharma, Jointown, and China Resources—have grown fast in the last three years by consolidating smaller regional players. The focus has been on staking a claim in new markets, while effective post-merger integration is becoming a more pressing priority. International giants such as Alliance Boots and Cardinal Health have also demonstrated their eagerness to participate in this exciting market through acquisition or joint venture. The Chinese drug distribution industry is still immature by international standards, and now it is getting into a rapidly changing stage which brings both opportunities and challenges to all parties in the health industry value chain.
When it was first established in the 1950s, the China pharmaceutical distribution system was a state controlled allocation system under the planned economy. A key turning point was in 1999, when the former State Economic and Trade Commission issued No. 1055 Document -Guidance on Reform of the Medical Distribution System, which started a new era of the distribution industry with diversified ownership and modernization.

In mature markets, pharmaceutical distribution industry exhibits a high degree of concentration. 40% of worldwide drug sales occur in the US, while the country hosts only 75 wholesalers, of which the top three have a market share of 83%. Japan has 147 distributors, of which the top three enjoy a market share of 74%. In contrast, China’s top three players only had a 22% market share in 2010, far below the level seen in the developed countries (see Exhibit 1).

China’s drug distribution environment is fragmented and complex. It often takes two to three intermediaries to get drugs from the manufacturer to the dispenser. For some products, there can be as many as six intermediaries in the distribution chain (see Exhibit 2). Logistics networks are unevenly developed, because of the sheer size of the country and its gigantic population. Therefore, distribution costs in China are much higher than those in developed countries.

Exhibit 1
Market Share of Top Three Distributors

SELECTED COUNTRIES
2008-2010

USA 85%  
Great Britain 73%  
France 68%  
Germany 47%  
Italy 43%  
China 22%  

Source: Booz & Company
Exhibit 2  
Current Structure of the Chinese Distribution Sector

OVERVIEW OF THE DISTRIBUTION CHAIN  
2010

5,000+ Pharmaceutical Manufacturers

1st Level Distributor  1st Level Distributor  1st Level Distributor

2nd Level Distributor  2nd Level Distributor  2nd Level Distributor

3rd Level Distributor  3rd Level Distributor  3rd Level Distributor

Nth Level Distributor  Nth Level Distributor  Nth Level Distributor

13,000+ drug distributors

— 8,000 Large Hospitals  —100,000 Small Hospitals / Clinics  300,000 Pharmacies

1.4 Billion Potential Patients

Source: Booz & Company

China’s drug distribution environment is fragment and complex.
A few large national players are emerging. Sinopharm and Jointown Pharmaceutical Group have already established national coverage, while Shanghai Pharma has a stronghold in the developed coastal areas. After the China Resources Medication Group completes the acquisition of Beijing Pharma, it is in competition with these three market leaders (see Exhibit 3).

Although all large players are actively building their distribution network, they have different characteristics. Sinopharm is the front runner that has established national coverage, with a large proportion of its sales through second-tier distributors. Shanghai Pharma enjoys higher ratio of direct hospital sales, and has strong manufacturing capability as well. Jointown, another distributor with national coverage, focuses on selling to wholesalers and retail pharmacies which require different product portfolio and capability from hospital markets. There are also large regional players, such as Nanjing Pharma, that enjoy strong positions in hospitals within the regions and government relations.

Distributors make profits from price markups and rebates from manufacturers, and large players have a gross margin of 5~10%. Markup is usually the largest contributor to gross margin, but the situation is varied for different types of customers. Distributors usually face cash flow challenges when selling in hospitals as account receivable can be significant. In Shanghai, where hospital account receivable situation is probably the best in China, distributors still expect a three-month lag in payment, while manufacturers usually grant less than 45 days credit to distributors. This favors those large, well-capitalized distributors with strong relationship with hospitals. Small- and medium-sized distributors usually find it a barrier for rapid growth.

During the upcoming consolidation phase, distributors are expected to face several challenges, particularly how to finance their growth and how to deal with the cash flow issues. They will also have to deal with various post-merger challenges, such as how to harmonize geographically dispersed operations, integrate IT systems, and HR issues. There will also be a need to explore new profit opportunities. Some innovative business models have already begun to emerge, such as third-party logistics for broader portfolio, information services, pharmacy trusteeship (pharmacies operated by distributors within hospitals).

E-commerce has been a developing trend for the industry globally. For example in America, 10% of overall sales volume is now generated through the Internet or mail order. In China, online drug selling just appeared due to regulatory concerns on fake drugs. In the next few years e-commerce will likely become an increasingly important channel. However, current logistics and distribution problems are holding back the development of national online business, especially in lower tier cities and rural areas.

Each distributor’s growth potential is determined not only by shifting consumption patterns, but also by its competitive positioning, its relationships with hospitals, its development of new business models, and its effective use of acquisitions.

Exhibit 3
Regional Markets and Regional Players in China (2010)

<table>
<thead>
<tr>
<th>Region</th>
<th>Fraction of Market</th>
<th>Main Distributors</th>
</tr>
</thead>
<tbody>
<tr>
<td>East</td>
<td>44%</td>
<td>Shanghai Pharma, Sinopharm, Nanjing Pharma, Huadong Medicine, Anhui Huayuan</td>
</tr>
<tr>
<td>North</td>
<td>20%</td>
<td>Beijing Pharma (China Resources Medication Group), Sinopharm, Pacific Group, Tianjin Pharma</td>
</tr>
<tr>
<td>Central-south</td>
<td>20%</td>
<td>Accord Pharmaceutical (Sinopharm), Guangzhou Pharma, Sinopharm, Jointown Pharma, Changsha Double-Crane Medicine</td>
</tr>
<tr>
<td>South-west</td>
<td>8%</td>
<td>Chongqing Medecines, Chongqing TongJunGe, Yunnan Pharma</td>
</tr>
<tr>
<td>North-east</td>
<td>5%</td>
<td>Sinopharm, Harbin Pharma</td>
</tr>
<tr>
<td>North-west</td>
<td>3%</td>
<td>Xinjiang Pharma, Lanzhou Pharma, Qinghai Pharma</td>
</tr>
</tbody>
</table>

Source: Ministry of Commerce of PRC, Booz & Company
CHINA’S LEADING PLAYERS

Establishing a national network will be the main battle for the market leaders in the near future. The major players in China are adopting different strategies towards this goal.

Sinopharm boasts its unique national coverage and brand recognition. As a key player, the company has established good relationships with drug manufacturers and large hospitals. Since going public in 2009, Sinopharm has been increasing its acquisition efforts, and completing its coverage of all provincial cities and municipalities. The company is now shifting its focus from expanding its geographical network to increasing penetration into city- and county-level customers. In 2010, the group realized sales of almost RMB 70 billion and 10% market share.

Shanghai Pharma covers over 3,350 hospital clients in eastern China, where it covers 100% of grade III hospitals, and most of grade II A hospitals. Currently, it generates 75% of sale from direct selling to hospitals and 25% through distributors. Hospital sales will remain its principal focus. In 2011, the company went public in Hong Kong, raising approximately RMB 10 billion, with which it intends to establish a national network through M&A:


- On November 29th 2010, the company announced it had acquired 58% of Zhongxin Pharmaceuticals, one of the three leading distribution firms in Beijing.

- In April 2011, the company signed a comprehensive strategic framework agreement with China Post which will enable its national logistics network to cover over 30,000 distribution locations nationwide, with a focus on large and essential cities.

Jointown Pharmaceutical Group is one of the only two companies in the sector with a national network. Unlike Sinopharm and Shanghai Pharma, it is a wholly privately-run enterprise. Its IPO in 2010 enabled it to secure capital for overcoming operational bottlenecks and expanding its business. Jointown’s goal is to build 20 large, provincial distribution hubs in main urban areas, with around 100 small- and medium-sized, city-level centers around these hubs.

- The company is leveraging small acquisitions in order to build up a strong market presence in prefecture-level cities.
FOREIGN PLAYERS COVETING THE CHINA MARKET

Large foreign pharmaceutical distribution companies are also eager to tapping into the opportunities in Chinese market. In 2007, Alliance Boots invested US$69 million (RMB 545 million) for a 50% share of Guangzhou Pharma, China’s third largest pharmaceutical company at that time. The JV gave Alliance Boots a foothold in the south China market, though the development was not as smooth as expected.

In 2010 Cardinal Health announced its acquisition of Zuellig Pharma China for US$ 470 million. The transaction will the foundation for Cardinal to expand its distribution in China.

• It plans to increase its penetration in hospitals, implementing business development and control systems to cater to hospitals of grade II and above, and hospital-focused teams have been created.

• The company already has 15 distribution hubs and is adding 5 more in 2011. It plans to invest RMB 380 million in a new distribution hub in Wuhan. The project’s total capital investment is expected to reach RMB 600 million (in three phases). It will be the world’s largest drug distribution hub, radiating from the central province of Hubei to the entire country.

China Resources Medication Group (CRMG) was designated as “state-owned medical and pharmaceutical platform” in 2007. It came relatively late in consolidating distribution market, only acquiring Beijing Pharma in 2010, and then started aggressive acquisition in various provinces to expand territory. It plans for an IPO in one to two years.
PRODUCT AND VALUE CHAIN TRENDS

Increase in demand for generics and OTC drugs as well as increase in consumerism are expected to have the most significant impact on the drug distribution industry, as Chinese government continues to develop China’s essential drug system. Large distributors are shifting focus from selling to large hospitals in big cities to broader coverage of lower tier markets and smaller hospitals and community/township healthcare centers (CHCs). Essential drug market represents a low-markup, but high-volume opportunity. The capability to deliver essential drugs directly to hospitals/CHCs become increasing important for distributors.

The bio-pharm sector will be another key growth area, as Chinese government has selected biotechnology as one of seven emerging strategic industries in the 12th Five-Year Plan. Bio-pharm accounted for 7% of overall sales of pharmaceuticals in 2006, and this figure rose to 10% in 2010, and is forecasted to reach 13% by 2015.

Demand for medical devices, health equipment, and health food are also rising fast. It is estimated that sales of medical device will reach RMB 631 billion by 2015. China became the world’s second largest health food market in 2009.

As Chinese become more and more health-conscious, pharmaceutical companies will likely diversify their product offerings to satisfy various consumer needs, and thus will impose higher demands on distributors’ logistics capability:

1. Cold chain: specialty products, particularly biological drugs, require low temperature throughout the supply chain.
2. Extension of distribution system: healthcare products require a broader range of delivery centers than drugs and medical devices.
3. Changes in delivery cycle: different products and product types have different requirements in regard to the timing of delivery, necessitating sophisticated inventory and delivery management capabilities.
4. Service diversification: distributors need to make their service offering more comprehensive in order to satisfy diverse client requirements.
China’s healthcare resources are distributed unevenly: most large hospitals (Grade III hospitals and Grad II A hospitals) are located in large cities and coastal areas, and over half of the drugs as well as most high-end/innovative drugs are sold through those large hospitals.

On the other hand, a large number of smaller hospitals and community and township healthcare centers are located in smaller cities and rural areas. Those hospitals and centers are staffed with less-experienced physicians, using relatively poor equipment, and only attracting a small number of patients.

It has been one of the key objectives for Chinese government to address this issue, and billions of dollars have been invested to improve the grass root health institutions.

Retail pharmacy segment in China is less developed and very fragmented as hospitals are still the main drug dispensing terminals. There are over 300 thousand of retail pharmacies all over China, and top ten players account only around 20% of market share. Most of retailers focus on OTC and nutritional products (see Exhibit 4).

Exhibit 4
Drug Dispensing Terminals

![China Pharmaceutical Market Breakdown by Channel]

**CHINA PHARMACEUTICAL MARKET BREAKDOWN BY CHANNEL**

<table>
<thead>
<tr>
<th></th>
<th>2005</th>
<th>2010</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small Hospitals/ Healthcare Centers</td>
<td>15%</td>
<td>22%</td>
<td>24%</td>
</tr>
<tr>
<td>Retail pharmacy</td>
<td>26%</td>
<td>27%</td>
<td>27%</td>
</tr>
<tr>
<td>Large Hospital</td>
<td>59%</td>
<td>51%</td>
<td>49%</td>
</tr>
</tbody>
</table>

**CAGR**

<table>
<thead>
<tr>
<th></th>
<th>2005-2010</th>
<th>2010-2015F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small Hospitals/ Healthcare Centers</td>
<td>28%</td>
<td>14%</td>
</tr>
<tr>
<td>Retail pharmacy</td>
<td>19%</td>
<td>13%</td>
</tr>
<tr>
<td>Large Hospital</td>
<td>15%</td>
<td>12%</td>
</tr>
</tbody>
</table>

Source: Booz & Company
Policy reforms and market changes are creating a broad space for the distribution industry to develop. Meanwhile, they are also leading to more challenges ahead.

Distributors must be able to anticipate and adapt to the constantly evolving policy landscape, and to changes in the market and competition. They can learn from foreign experience. The leading American distributor McKesson, for example, has demonstrated a very strong capacity in adapting to external changes and continuously transform itself throughout its 100-year history. In the 1960s and 1970s, the company experienced a shift from specialization to diversification, followed by a return to specialization, constantly adjusting its income and profit structure. In the mid-1980s, McKesson embraced a phase of industry consolidation and engaged in dozens of large acquisitions, establishing itself as the industry leader. Now, the company scored over $100 billion in operating revenue and captured 35% of the US market share.

Scale is the most critical factor for competition in the distribution business. When gross profit margins are falling below 10%, consolidation is unavoidable. Only larger distributors can maintain their bargaining power with drug suppliers and control the downstream customer base, so as to secure their position in the industry value chain.

The large American and European distributors are comparable to their largest suppliers in terms of operating revenue, and have achieved a high level of economy of scale and operational
efficiency. For instance, America’s top three players keep their operating costs lower than 2%, which ensure them a net profit of 2% with a gross margin of only 4-5%. This operational efficiency makes it very difficult for any competitors to dislodge them. In the American and European markets, drug manufacturers and hospitals have tried many times to implement direct sale and direct purchase schemes only to see their efforts in avoiding distributors invariably fail.

Scale and efficiency are now seen as basic requirements for leading foreign distributors. Among the big players, today’s competitive differentiator is innovation in distribution models. Leading distributors in America, Europe, and Japan are exploring blue oceans to differentiate themselves and improve their levels of revenue and profit (see Exhibit 5).

Exhibit 5
Strategy of World Leaders in Pharmaceutical Distribution
CONCLUSION

Who will become the ultimate leader in the Chinese distribution sector? Sinopharm, Shanghai Pharma, Jointown, and the China Resources Medication Group are currently heading the pack. However, international experience has revealed a great deal of uncertainties in the pharmaceutical distribution industry.

The current market leaders will continue increasing their operational scale. To get to the top league of the distribution business, their annual revenue must reach at least RMB 30 billion. Sinopharm, the largest player today, is as yet only halfway to that goal. Acquisition is a shortcut to growth, and so more large acquisitions by these players can be expected in the near future.

Currently, the large distributors are focusing on “land-grabbing” in new markets. Their growth to date often consists of simple superposition, and scale effects are not being fully realized. Post-merger integration is becoming a key item in their senior management’s agenda. Every large player will have to implement centralized purchasing and accounting, IT systems integration, and resource optimization. This is not easy, and could be a risk for all these fast growing distributors. Lessons can be drawn from other markets, for example AmerisourceBergen, America’s third largest distributor, eventually achieved significant successes in operational efficiency and new business expansion, but only after struggling in the early phases of post-merger integration.

China’s healthcare market has unique characteristics, which present additional opportunities for innovative business models: for instance, in the fields of real estate, third-party logistics, and whole supply chain integration. This requires distributors to improve their organizational capabilities, management philosophy, and even corporate culture.

In contrast with mature international markets, the Chinese drug distribution industry is entering a fast track of development. In the current phase, the core of competition is within China, but in the future Chinese distributors may begin to play a role on the international stage. Whether they can successfully implement a global strategy will be determined by how well they can obtain key capabilities in culture, organization, and management.
About the Authors

Edward Tse is Booz & Company’s senior partner and chairman for Greater China, specializing in definition and implementation of business strategies, organizational effectiveness, and corporate transformation. He has assisted several hundred companies—headquartered both within and outside China—on all aspects of business related to China and its integration with the rest of the world.

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