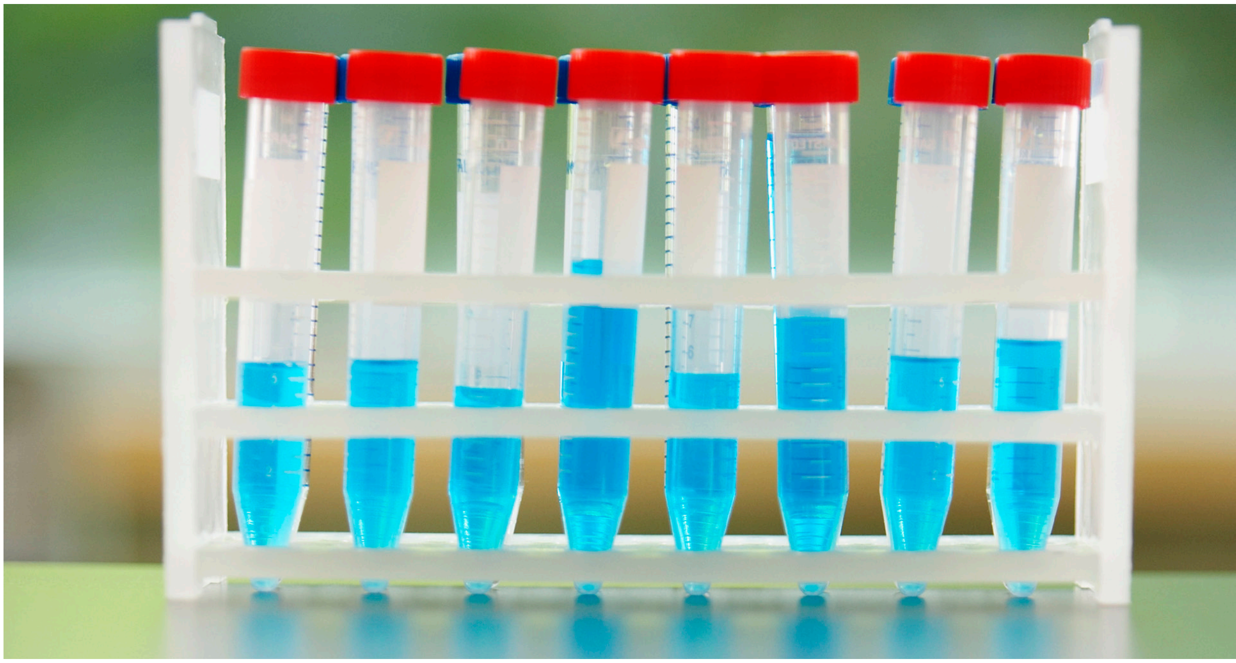
Fortune Favors the Bold
Reaching New Markets



Foreword

As Deloitte reported in The Next Phase: Opportunities in China's Pharmaceuticals Market (November 2011), China will soon be the Asia Pacific region's leading market for health care — a widely anticipated result given the country's unrelenting socioeconomic growth trends. However, the past 24 months have seen a rapid acceleration in the development of the life sciences and health care market in China. With this acceleration comes rising uncertainty about where the market is headed and how it will impact the companies that operate within the health care system. This uncertainty comes from the unprecedented demographic changes and continued experimentation from the government as it seeks to expand the quality of care while also controlling expenditures.

Many pharmaceutical companies are now looking at China's health care market and asking themselves, where next? The opportunities that drive growth are less clear now than in the previous decade and the risks in the market are substantially higher than ever before. Finding a path forward that delivers the returns and performance companies want will not be easy in this environment.

This report highlights major events of the past 24 months in the health care market and explores one of the key questions facing pharmaceutical companies as they think about their future in China: How can we efficiently and cost-effectively expand to the lower-tier cities?

The answers to this question will impact the success of pharmaceutical companies moving forward and help determine who wins and who loses in China's health care market. The opportunity is large but so is the challenge.

We believe that fortune favors the bold in China and those companies who take decisive action today will be the ultimate winners, while companies who seek gradual change will be left behind as the market passes them by.

Yvonne Wu
Managing Partner, Deloitte China Life Sciences and Health Care
Shanghai, China

Reaching New Markets

Dialogues about future customer models in China's health care market frequently focus on inefficiencies of the traditional, high-density, sales-rep model when engaging smaller, heterogeneous markets in lower-tier cities, where individual accounts have lower potential, physicians and patients have different needs, and ability to pay is more constrained than in upper-tier markets. Other conversations focus on markets in upper-tier cities, which are experiencing a shift from the traditional sales-led model to a new balance involving more marketing, medical, market access and government affairs.

Companies that successfully shift their business model will realize disproportionate rewards in both upper and lower-tier markets, while those that do not will gradually be sidelined in a market increasingly dominated by highly sophisticated competitors.

Establishing profitable operations in lower-tier geographies

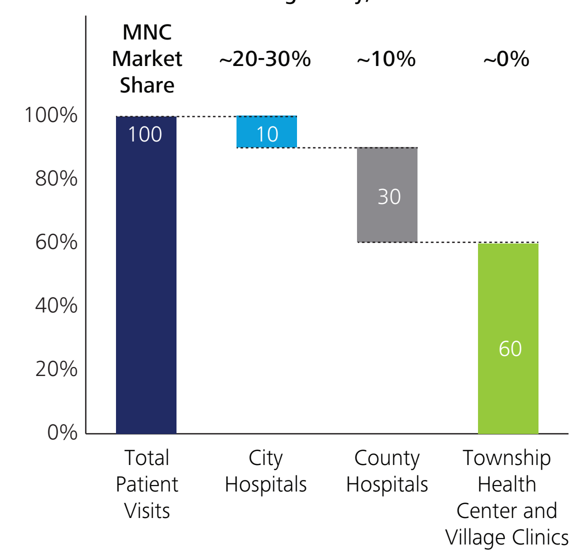
One of the government's key priorities for recent health care reform has been to extend health care access to all geographies in China. While the government has successfully ensured 95% of the population has access to some form of insurance coverage, for many patients, convenient physical access to high-quality care is limited.

This is changing rapidly, however, as major government investments in primary care, Community Health Centers (CHC) and increasing the number of health workers have come to fruition. The resulting prescription volume and associated health care expenditure in county hospitals, township health centers and village clinics is expected to reach 170 billion RMB by 2015 and roughly 250 billion by 2020. Together these prescription volumes would represent almost 60% of the expected growth in the Chinese pharmaceuticals market over the coming decade[28].

Currently, most MNCs focus primarily on Tier 1 and 2 cities[29]. Though these geographies cover 33-45% of China's patient population, they receive a much higher percentage of China's patient visits because of those traveling from lower-tier cities to seek better medical care. Coverage for most domestic companies is even more limited, as many focus regionally or locally, with few operating nationally or across multiple provinces[30]. However, it is estimated that by 2020, nearly 50% of all patient visits in China will occur in facilities not currently covered by MNCs (Figure 18). While the promise of this segment has been well-documented, to date, few companies have successfully entered the lower-tier market because most have sought to recreate high-cost models better suited to developed health care markets.

Figure 18: Patient Visits Occurring in Facilities Not Currently Covered by MNCs

Patient Visit Share in Changde City, Hunan Province



Source: Monitor Deloitte research and analysis

Companies must fundamentally rethink how they do business to succeed in lower-tier markets. A renewed focus on creating fit-for-purpose customer models, optimizing product portfolios and building strong strategic partnerships will be critical to winning in these markets. Approaching these markets with a 'business-as-usual' mindset is sure to end in failure as lower-tier markets simply cannot support a traditional pharmaceutical model.

---

28 Citi Investment Research, China Health Care Sector Handbook. 2010.

29 Monitor Deloitte analysis.

30 Monitor Deloitte research.

Why is expansion in lower-tier markets challenging?

Lower-tier markets are fundamentally different from their upper-tier counterparts. Where upper-tier markets often resemble more developed health care markets like the US or Europe, those of lower tiers represent a spectrum of markets, ranging from those approaching developed status, to those merely emerging as health care markets. The differences among these markets can be categorized along four themes:

- Substantial differences in ability to pay between and within tiers
- Lack of disease awareness and understanding leads to low diagnosis and compliance
- Geographic dispersion limits productivity of traditional model
- Operational complexity is substantially higher

These themes provide a foundational understanding for how companies should approach lower-tier markets, and help inform the critical choices they have to make about the customer model they will use to serve these markets.

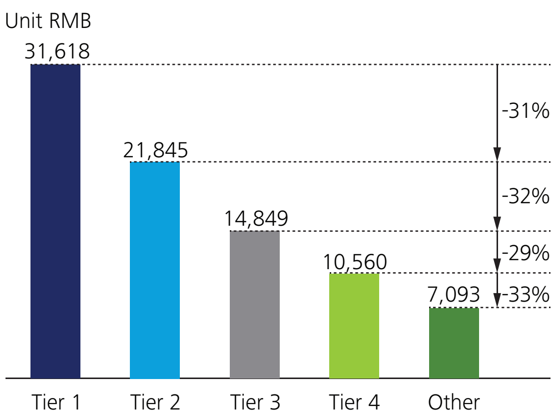
Substantial differences in ability to pay between and within tiers

Ability to pay varies substantially between lower and upper-tier geographies, as well as among different lower-tier markets (Figure 19). These differences are affected by incongruities in the provincial reimbursement lists. For instance, in Shanxi, the antibiotic Cefaclor is reimbursed at 80% of cost while in Hebei it is reimbursed at 95%.
Far fewer people in lower-tier cities are willing, and able, to afford premium health care offerings from MNCs or domestic companies[31]. Although incomes in China's lower-tier cities have increased substantially in recent years, a 30-50% difference in average incomes persists between top-tier and lower-tier cities[32]. This presents a unique challenge because patients and institutions are looking to lower the cost of care, but are frequently unwilling to make a corresponding trade-off in product efficacy or features.

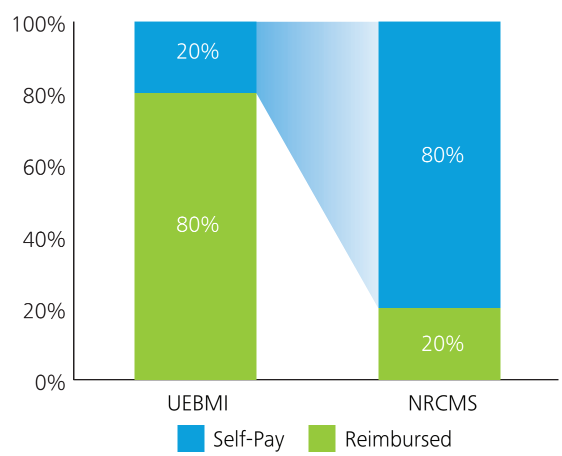
Significant differences among the several types of BMI add another layer of complexity to lower-tier markets. As Figure 19 illustrates, patients who are not eligible for the

Figure 19: Differences in Income and BMI Reimbursement Across Tiers

Estimated Average Disposable Income by City Tier



Average Outpatient Drug Reimbursement: UEBMI vs. NRCMS



[31] National Bureau of Statistics of China, China Statistical Yearbook 2012, 2012; investment bank reports; Nielsen Research; Monitor Deloitte analysis.
[32] National Bureau of Statistics of China, China Statistical Yearbook 2012, 2012.

Urban Employee Basic Medical Insurance (UEBMI) scheme, which covers 80% of reimbursable expenses, are forced to use the New Rural Cooperative Medical Scheme (NRCMS), which covers only 20% of medical expenditures[33]. This difference in coverage forces patients and physicians to make trade-offs and seek alternative health care solutions to optimize care.

Some patients' relatively lower ability to pay forces companies to approach decisions about pricing, product portfolio, operational model and market selection to control costs while maintaining price integrity across markets to justify investment of capital in lower-tier markets.

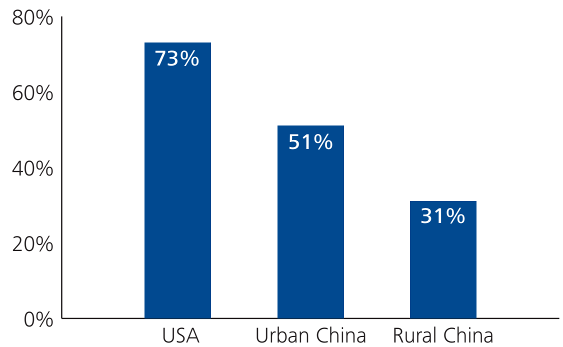
Lack of disease awareness and understanding leads to low diagnosis and compliance

A relatively less health-aware population in lower-tier markets creates a significant barrier to the potentially large volume of patients in these cities. A lack of awareness means fewer patients seek, and ultimately receive, treatment, resulting in a massive reduction in the number of potential patients for a given therapy.

For example while there is still a gap in the diabetes diagnosis rate between the United States and urban China, in rural China, this rate can be as low as 30%[34]. This represents almost a 100% difference in the rate at which patients enter the treatment process. (Figure 20)

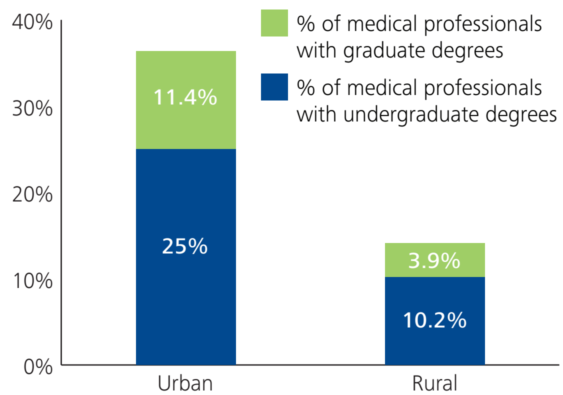
Similar gaps exist in terms of physician awareness and capabilities. While efforts are being made to address this issue, substantial differences remain between upper and lower-tier markets. For example, almost all of the roughly 200,000 medical professionals with postgraduate degrees work in Class III hospitals, which are exclusively located in top-tier cities. In contrast, only about 6% of medical professionals employed outside of a Class III hospital have a post-graduate education (Figure 21)[35]. The result is significant gaps in awareness of new diagnostic capabilities, treatment options and protocols and patient needs between upper and lower-tier cities.

Figure 20: Comparison of Diagnosis Rates for Diabetes



Source: Richard Sicree et al., The Global Burden: Diabetes and Impaired Glucose Tolerance, IDF Diabetes Atlas 4th Edition, International Diabetes Federation, 2009; Dong Y. et al., Prevalence of Type 2 Diabetes in Urban and Rural Chinese Populations in Qingdao, China, Diabetic Medicine: a Journal of the British Diabetic Association, 2005; Monitor Deloitte Analysis

Figure 21: Comparison of Physician Education Levels



Source: Zhang, Junhua, Ministry of Health — Health Human Resources Development Center, Management and Organization of Health Professionals, and Health Human Resource Management in China, 2012

Given these differences in awareness, education and capabilities, manufacturers must pursue a substantially different dialogue with physicians and patients in lower-tier cities from those in upper-tier cities. Medical education, patient awareness and support services and marketing that shape physician and patient behaviors are substantially more important in lower-tier markets than they are in those of upper tiers. Tailoring messaging, materials, advisory boards

---

[33] Ministry of Human Resources and Social Security; Monitor Deloitte interviews and literature review.

[34] Alcorn T. et al., The Lancet, Diabetes Saps Health and Wealth from China's Rise, 2012; Yang W, Diabetes Leadership Forum 2009 China, Diabetes, the Hidden Pandemic and its Impact on China, 2009; Monitor Deloitte analysis.

[35] China Ministry of Health report, 2010.

and education events to these needs is crucial to success as manufacturers seek to build operations in these markets.

Geographic dispersion limits productivity of traditional models

Markets in lower-tier geographies are characterized by a lower density of potential prescription drug sales compared to their upper-tier counterparts. Sales reps in lower-tier markets must cover larger numbers of institutions and greater geographic areas to achieve the same sales productivity as reps in larger cities.

A sales force large enough to serve the lower-tier markets is unwieldy, costly and difficult to staff with qualified professionals. In the face of a potential EDL mandate — where drug prices further decrease and hospital usage changes dramatically — the return on expanding sales force into lower-tier markets is even more difficult to gauge. As a result, companies must seek new ways to engage customers in appropriate dialogues, as promotional and education efforts are crucial to lower-tier market success. A combination of high-impact, low-cost tactics is critical to achieving success.

Geographic dispersion, whether it includes expanding a sales force in geographic scope or just in number of reps, raises the risk for legal compliance issues. Geographic distance from sales managers, the anonymity that comes with a larger sales force or the nuanced regulatory and political environments of new markets make ensuring legal compliance much more difficult. While compliance is not a measure for growth it should be a significant consideration while expanding to new markets.

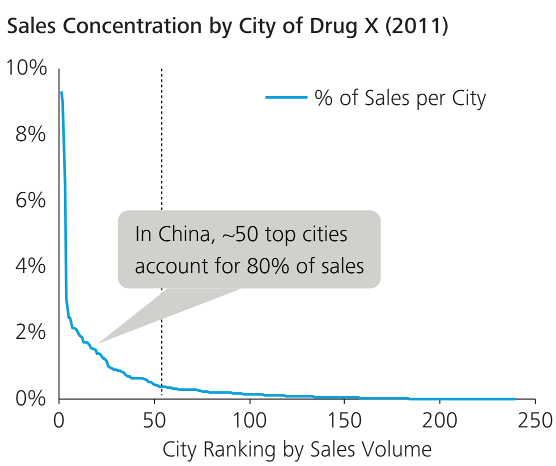
Operational complexity is substantially higher

Although categorizing cities below Tier 3 as lower-tier markets can be an attractive simplification, it is in fact too broad a generalization and ignores the nuances of each individual market. Substantial differences in the dynamics can be found among lower-tier markets, creating a need to tailor operations to the individual characteristics of each. As a result, companies seeking to operate in the lower-tier cities of China face a myriad of complexities including:

- Dependence on relationships with multiple distributors or partners to gain access to lower-tier markets
- Significant differences across markets in access environment, including tender processes, hospital listing and administration and regional health policies
- Differences in competitive set and treatment criteria that require tailored messaging to maximize effectiveness
- The need for a field force with a broader skill set, as a typical rep will have to carry more products in their bag to be economically viable

These challenges require companies to develop a method for categorizing and approaching lower-tier markets to simplify operational complexity, while acknowledging the unique differences and characteristics of each market.

Figure 22: Economics of Sales Force Deployment



Source: Monitor Deloitte research

Key Implications

- A typical brand team may have up to 100 sales reps covering the top 20 cities, with annual cost of at least 35 Mn RMB
- Using the same deployment model to China's 170 cities with more than 1 Mn inhabitants will require a sales force of over 800, and cost more than 300 Mn RMB

Building a successful model for the lower tiers

To build a profitable, successful model for the lower tiers, companies must focus on seven critical areas:

1) Develop differentiated, holistic insight about each market

Successful expansion will come from an ability to generate a comprehensive understanding of individual markets' systems of care, key decision makers and their priorities while also categorizing these markets in to clusters. Based on a market's level of maturity, physicians, hospital administrators and patients are faced with different trade-offs in lower-tier markets and face health care issues that are vastly different from their upper-tier counterparts. Furthermore, these issues vary by city and require a greater depth of understanding.

Companies looking to effectively operate in lower-tier markets must understand the needs of individual decision makers and actively seek to develop unique, innovative solutions that create value for the overall health care system. Clustering markets based on their level of maturity will allow companies to make expansion decisions more effectively. Moreover, a strong understanding for individual markets means tighter targeting and overall success.

2) Look at geography as a portfolio decision based on market maturity

Because markets in lower-tier cities are heterogeneous, so too are the opportunities they provide. An optimized geographic portfolio contains a mix of markets with various levels of maturity. While more mature markets present low-risk opportunities, too often early entrants to nascent markets capture much of the value, leaving others to struggle due to late market entry.

Using the cluster method, companies should assess the relative maturity of each market based on the overall evolution of its health care system. Using this information, companies can establish portfolios of geographies, grouping markets by their various maturity levels: those that have developed; those that are developing; and those that are emerging. Selecting a portfolio of geographies from different clusters allows companies to grow with the market by slowly adding the requisite capabilities and assets to serve individual markets as they mature, thus driving greater cost effectiveness.

3) Selectively design an appropriate product portfolio for each market

The ability to pay attention to the needs of patients, physicians and hospitals is markedly different in lower-tier markets, which have a broader range of demands than in their upper-tier counterparts. Companies must select a unique basket of products that reflect both the varying needs of markets in lower-tier cities and their ability to pay. Designing a product portfolio that reflects the relative stage of maturity of an individual market and its unique disease profile will help companies have the greatest success in meeting the needs of patients, physicians and hospitals. It may be necessary to design uncommon product baskets for reps to maintain profitability and sales volumes (e.g., some reps may simply have to carry products from multiple therapeutic areas to be viable).

4) Focus on innovative access solutions

Developing access solutions in lower-tier markets is unique because of the particular emphasis on hospital administrators and provincial reimbursement bodies. Solutions must reflect the differences in trade-offs these stakeholders are willing to make and appropriately tailor value offerings for the overall health care system. Pharmaceutical companies need to acknowledge that these solutions may vary greatly among geographies and clusters.

5) Create engagement and awareness through education

Substantial incongruities in physician and patient awareness persist in lower-tier markets. Often, the most impactful actions include providing continuing education services to physicians, patients and payers to drive greater disease awareness. Specific topics that are most relevant include diagnosis and symptom identification, treatment protocols and improving compliance. While the opportunity in lower-tier markets is attractive, participants will need to shape these markets' development; ensuring greater numbers of patients seek and receive treatment for their conditions.

6) Move beyond the sales call for greater effectiveness and efficiency

While market education is important, promotional activity will remain a critical component of success in these markets. Physicians in lower-tier markets will require greater disease and product education, more scientific dialogue and information about therapeutic value and cost-benefit ratios. Companies need to move beyond simply using sales reps to deliver information and consider using digital channels, medical field force, interactive workshops and training sessions to engage physicians in the dialogues in which they are most interested.

7) Experiment to achieve operational efficiency

While experimentation with market access and customer models is a critical strategy for adapting to China's evolving pharmaceutical market, it plays a different, if not more important, role in lower-tier markets. While pharmaceutical companies should rapidly design and test pilot programs, and be ready for them to fail quickly, the array of variables to consider is different, as is the ability to apply successful models to different geographies. What may be effective in one geography, or cluster, may or may not work in another. Experimentation is a key factor in understanding and being successful in these markets.

Contact information

For more information about this paper, please contact:

Yvonne Wu
Managing Partner
Deloitte China Life Sciences and Health Care
Tel: +86 21 6141 1570
Email: yvwu@deloitte.com.cn

Sheryl Jacobson
Partner
Greater China Life Sciences and Health Care Consulting Practice Leader
Monitor Deloitte
Tel: +86 21 6141 8888
Email: sherylljacobson@deloitte.com.cn

Angus Cole
Associate Director
Monitor Deloitte
Tel: +86 21 6141 8888
Email: anguswcole@deloitte.com.cn

Eric He
Associate Director
Monitor Deloitte
Tel: +86 21 6141 8888
Email: erhe@deloitte.com.cn

Henry Li
Associate Director
Monitor Deloitte
Tel: +86 21 6141 8888
Email: henryhli@deloitte.com.cn

Ben Pan
Manager
Monitor Deloitte
Tel: +86 21 6141 8888
Email: benpan@deloitte.com.cn

Carol Fang
Senior Consultant
Monitor Deloitte
Tel: +86 21 6141 8888
Email: carolxfang@deloitte.com.cn

Jason Xu
Senior Consultant
Monitor Deloitte
Tel: +86 21 6141 8888
Email: jasonjxu@deloitte.com.cn