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Pharmaceutical and Medical Products Practice

# India Pharma 2020 Propelling access and acceptance, realising true potential

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# Executive summary

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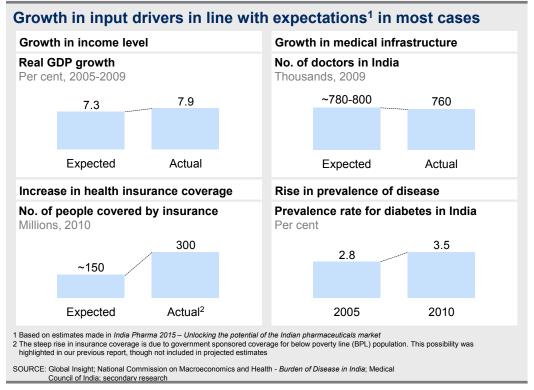
Global pharmaceutical markets are in the midst of major discontinuities. While growth in developed markets will slow down, emerging markets will become increasingly important in the coming decade. The Indian pharmaceuticals market, along with the markets of China, Brazil and Russia, will spearhead growth within these markets.

The Indian pharmaceuticals market has characteristics that make it unique. First, branded generics dominate, making up for 70 to 80 per cent of the retail market. Second, local players have enjoyed a dominant position driven by formulation development capabilities and early investments. Third, price levels are low, driven by intense competition. While India ranks tenth globally in terms of value, it is ranked third in volumes. These characteristics present their own opportunities and challenges.

In 2007, we undertook an exercise to assess the potential of the market by 2015. At that time, the country was beginning to witness greater affordability and higher spending across a range of categories driven by a decade of reforms. The total market for healthcare products and services had grown at a compounded annual growth rate of 14 per cent from 2000 to 2005. The pharmaceutical industry had grown at a compounded annual growth rate of 9 per cent during that period. We felt in 2007 that the Indian pharmaceutical market was poised for a clear and discernable step-up in its growth trajectory.

In our earlier report, *India Pharma 2015 – Unlocking the Potential of the Indian Pharmaceutical Market*, we projected that the market would grow at a compounded annual growth rate of 12 to 14 per cent to become a USD 20 billion to USD 24 billion market by 2015. This growth would be driven primarily by rising incomes, and be supported by five other factors: enhanced medical infrastructure; rise in the prevalence and treatment of chronic diseases; greater health insurance coverage; launches of patented products; and new market creation in existing white spaces.

These factors are now bearing fruit, and market growth has kept pace with projections. Various industry reports suggest that the industry has been growing at 13 to 14 per cent over the last 5 years—a sharp rise from the 9 per cent compounded annual growth rate between 2000 and 2005. Most of the growth drivers have kept pace with expectations (Exhibit 1). India's GDP from 2005 to 2009 grew at about 8 per cent. Growth in medical infrastructure and health insurance coverage has been in line with expectations. The treatment of chronic diseases has gone up. The remarkable success of a few recent launches has demonstrated the true potential of patented products.



While the market has gained in confidence, it is also facing a period of flux. First, the broader healthcare sector is experiencing discontinuous development. Manifold rise in public healthcare spending, rising patient awareness, expanding insurance coverage across the income pyramid and the emergence of new hospital formats illustrates this flux. Second, in the past 3 to 4 years, industry structure in pharmaceuticals has changed with remarkable shifts in the leader board. Four of the top ten players, including the market leader, are new entrants. Finally, traditional sources of growth are making room for newer ones. For example, while new products will cease to drive growth, existing large brands would need to make up the gap.

Rising income levels and enhanced medical infrastructure have underpinned the step-up in growth trajectories. This growth has been broad-based across therapy and geography segments. Several leading players are beginning to focus on new and emerging opportunities. The pace of innovation in business models has been unprecedented. The launch of branded generics businesses and significant expansion of market coverage by multinationals illustrates this point. As a result, the expectations from the India businesses have risen and aspirations have become bolder.

Along with the change in growth momentum, the central question about the Indian pharmaceutical market has changed as well. "Is it worth our while to make a serious play in India?" is no longer the central question. Instead, industry is deliberating over, "How can the Indian market scale up to an even higher growth trajectory, and achieve its full potential?" CEOs are asking, "How can we establish undisputed leadership in this important market?"

In addition to these, several specific questions arise:

- How can industry stimulate growth drivers to expand the market faster? What are the risks to growth and how should these be managed?
- What are the most attractive opportunities in the Indian market? What are their unique characteristics that will demand localised business models?
- Which capabilities will differentiate the leaders of tomorrow, and which will be 'tickets to play'? What will be the relative importance of sales force coverage versus sales force capabilities? How can brand building capabilities be enhanced in view of diminishing new product launches?
- Would the way organisations are structured and managed need to change as the portfolio of opportunities becomes more diverse? To what extent will industry need to attract talent from outside?

To answer these questions, McKinsey and Company's Pharmaceutical and Medical Products Practice undertook a research project to examine the future of the Indian pharmaceuticals market over the next decade. We built a model to estimate market growth, considering four demand drivers: epidemiological factors, drivers of affordability, drivers of accessibility, and drivers of acceptability. Subsequently, we distributed this forecast across therapy, geography and demand segments. Moreover, we estimated the growth potential of five emerging opportunities (i.e., patented products, consumer healthcare drugs, biologics, vaccines, and the public health market).

We supplemented this analytical modelling with three other sources of insights: a series of deliberations with our steering committee comprising of industry veterans; field work across the country with physicians, chemists and sales forces; and case examples and lessons from other country markets.

We fully expect this market to evolve constantly, and the central questions to change every few years. Hence, we view this report, and the previous one, as periodic endeavours to take stock of the present and throw light on the evolving future. Our analysis shows that the Indian pharmaceuticals market will grow to USD 55 billion by 2020 driven by a steady increase in affordability and a step jump in market access. At the projected scale, this market will be comparable to all developed markets other than the US, Japan and China. Even more impressive will be its level of penetration. In terms of volumes, India will be at the top, a close second only to the US market. This combination of value and volume provides interesting opportunities for upgrading therapy and treatment levels.

Pricing controls and an economic slowdown can wean away investments and significantly depress the market, allowing it to reach only USD 35 billion by 2020. On the other hand, the market has the potential to reach USD 70 billion provided industry puts in super normal efforts behind the five emerging opportunities, and enhances access and acceptability in general.

The mix of therapies will continue to gradually move in favour of specialty and super-specialty therapies. Notwithstanding this shift, mass therapies<sup>1</sup> will constitute half the market in 2020. Metro and Tier-I markets<sup>2</sup> will make significant contributions to growth, driven by rapid urbanisation and greater economic development. Rural markets will grow the fastest driven by step-up from current poor levels of penetration. On balance, Tier-II markets will get marginally squeezed out. The hospital segment will increase its share and influence, growing to 25 per cent of the market in 2020, from the current 13 per cent. Finally, the five emerging opportunities will grow much faster than the market, and will have the potential to become a USD 25 billion market by 2020.

Over the past 5 years, the distinction between local players and multinational companies has increasingly blurred. We believe that if market leadership is the aspiration, the implications and imperatives will be common for both groups of players. They will need to strengthen three sets of commercial capabilities: marketing excellence, sales force excellence, and commercial operations. In addition, players will need to put in place two enablers: strengthen the organisation to be able to sustain performance and manage rising complexity; and collaborate with stakeholders within and outside the industry to drive access and shape the market. The government will need to make investments to expand access to healthcare, while ensuring that industry remains viable and competitive.

<sup>1</sup> The definitions of therapy areas have been kept consistent with our earlier report. Mass therapies have more than 50 per cent of prescriptions generated by GPs and CPs, while specialty therapies have 50 to 80 per cent prescriptions originating from specialist physicians.

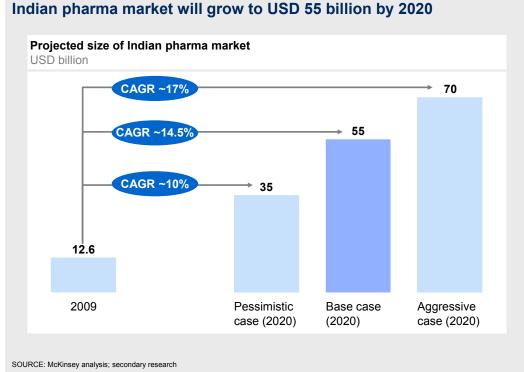
<sup>2</sup> We define metros as cities with population of over 1 million, Tier-I as cities with population between 0.1 million and 1 million, Tier-II as towns with populations between 5000 and 0.1 million, and rural areas as villages with population less than 5000.

We briefly outline these findings below. Readers interested in the detailed results and analysis should see the main chapters of the report, while those interested in the details of our approach are directed to the appendix.

### A USD 55 BILLION MARKET BY 2020 WITH POTENTIAL FOR MORE

From a market size of USD 12.6 billion in 2009, the Indian pharmaceutical market will grow to USD 55 billion by 2020, with the potential to reach USD 70 billion in an aggressive growth scenario. In a pessimistic scenario characterised by regulatory controls and economic slowdown, the market will be depressed and is expected to reach USD 35 billion (Exhibit 2).





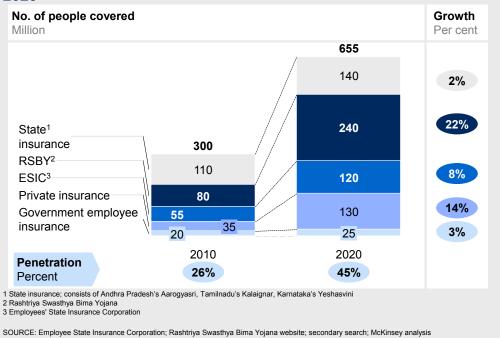
With market diversity on the rise, the drivers of growth have proliferated and become more nuanced. We identified 11 drivers of growth grouped under four dimensions: epidemiological factors, increasing affordability, enhanced accessibility, and rising acceptability.

First, population growth at around 1.3 per cent every year and a steady rise in disease prevalence will increase the patient pool by nearly 20 per cent by 2020.

Second, the affordability of drugs will rise due to sustained growth in incomes and increases in insurance coverage. With real GDP growing at nearly 8 per cent over the next decade<sup>3</sup>, income levels will rise steadily. Rising incomes will drive 73 million households into the middle and upper income segments<sup>4</sup>. In addition to income growth, health insurance coverage will augment affordability. By 2020, nearly 650 million people will enjoy health insurance coverage. Private insurance coverage will grow by nearly 15 per cent annually till 2020. However, the largest impact will be seen through government sponsored programmes that are largely focused on the 'below poverty line' (BPL) segment<sup>5</sup>, and are expected to provide coverage to nearly 380 million people by 2020 (Exhibit 3).

#### Exhibit 3

Health insurance penetration to increase to ~45% of population by 2020



Third, accessibility to drugs will expand due to growth in medical infrastructure, new business models for Tier-II towns and rural areas, launches of patented products, and greater government spending on healthcare. Medical infrastructure will experience dramatic growth over the next decade, with over USD 200 billion

<sup>3</sup> India's urban awakening: Building inclusive cities, sustaining economic growth, page 14, Box 1.

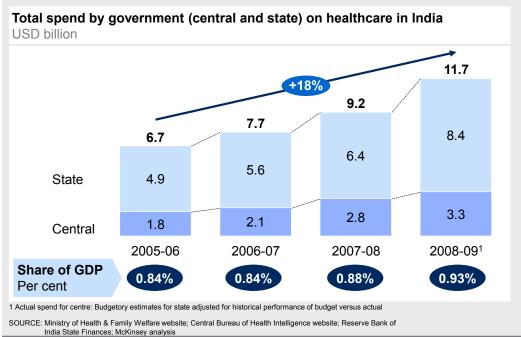
<sup>4</sup> We define 'upper income' households as those with annual incomes above INR 5 lakh and 'middle income' households as those with annual incomes between INR 2 lakh and INR 5 lakh at 2001 prices.

<sup>5</sup> Government sponsored programmes for BPL segments, including the Rashtriya Swasthya Bima Yojana (RSBY) and state-specific programmes (e.g., Aarogyasri in Andhra Pradesh and Kalaignar in Tamil Nadu), are expected to provide coverage to nearly 380 million people by 2020.

being invested in creating and upgrading medical infrastructure. As a result, over 160,000 beds will be added every year across different segments of hospitals. This infrastructure creation will need to be supported by the creation of 'soft' capacity in terms of doctors and other healthcare professionals.

Furthermore, non-traditional business models will drive access in Tier-II and rural areas. This, in turn, will reduce the gap in per capita spend on pharmaceuticals between rural and urban areas (i.e., USD 1.8 in rural markets in 2007 vis-à-vis USD 15.6 in urban markets). Patented products will also drive growth in select therapeutic areas. While the number of launches since 2005 has been limited, the recent successes of Januvia and Galvus indicate that patented products can drive tremendous growth in a few disease areas. Finally, government spending in healthcare will increase significantly (Exhibit 4). It has been growing at 18 per cent annually since 2005 to 2006, and is translating into a higher level of access in Tier-II and rural markets. In addition, this will create a USD 4.5 billion segment of pharmaceutical products within the government's public health spending.

#### Exhibit 4



Healthcare spend by government in India on a steady upward trajectory

Fourth, the acceptability of modern medicine and newer therapies will increase due to aggressive market creation by players, an increased acceptance of biologics and preventive medicine, and a greater propensity to self-medicate. Players will shape the patient funnel, especially for chronic therapies such as cardiovascular and neuropsychiatry. Investments in increasing patient awareness and education

will impact diagnosis and treatment levels. In addition, patients will show greater propensity to self-medicate. The consumer healthcare segment has the potential to grow at over 14 per cent annually, provided players make the larger OTC brands easily available to consumers, differentiate their products, and establish an emotional connection with patients. Finally, the acceptance of biologics and preventive medicine will rise. Vaccines can grow at over 20 per cent over the next decade. The biologics market will also grow rapidly to become a 3 billion segment by 2020.

In the base case scenario, all the important growth drivers will witness robust progress. The market will grow more than four times to reach USD 55 billion by 2020. This will imply that the market will sustain a CAGR of 14.5 per cent, similar to the growth witnessed during the past 4 years.

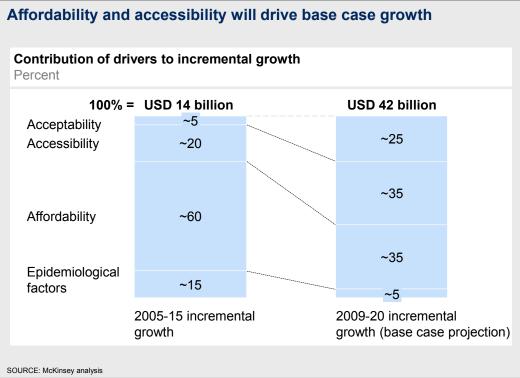
This scenario will be characterised by strong growth in GDP and incomes, insurance coverage, and government and private sector spending on healthcare. Over the next decade, India's population is expected to grow at 1.3 per cent; the prevalence of diseases such as diabetes and cancer will increase by 25 to 40 per cent; GDP will grow at close to 8 per cent; the Rashtriya Swasthya Bima Yojana (RSBY) will cover 75 per cent of the BPL population; 1.9 million hospital beds will be added; and innovators will launch at least 25 per cent of their patented products, resulting in 7 to 9 patented product launches every year. Quite importantly, by 2020, the government will increase its spending on healthcare to 1.5 per cent of GDP. Players will step up investments in consumer healthcare, biologics and vaccines. Moreover they will influence the patient funnel by increasing awareness and treatment, thereby increasing the patient pool by 15 per cent.

The contribution of growth drivers will undergo a shift. During the period between 2005 and 2015, rising affordability will account for 60 per cent of the incremental USD 14 billion market opportunity<sup>6</sup>. On the other hand, during the period between 2009 and 2020, accessibility will become equally important. Together, these two factors will account for nearly 70 per cent of the incremental USD 42 billion market opportunity. Increased acceptability will account for another 25 per cent (Exhibit 5).

External shocks, particularly price controls and economic slowdowns, will severely impact growth. First and foremost, further pricing controls will significantly impair the viability of the industry and dampen investments. Such controls alone have the potential to wipe out a USD 10 billion market opportunity by 2020. Such an eventuality, combined with economic slowdown, will lead to a negative sentiment and stymie investments in market shaping and emerging high potential segments. Such decline will, in turn, take away another USD 10 billion market opportunity.

<sup>6</sup> India Pharma 2015 – Unlocking the Potential of the Indian Pharmaceutical Market, page 54.

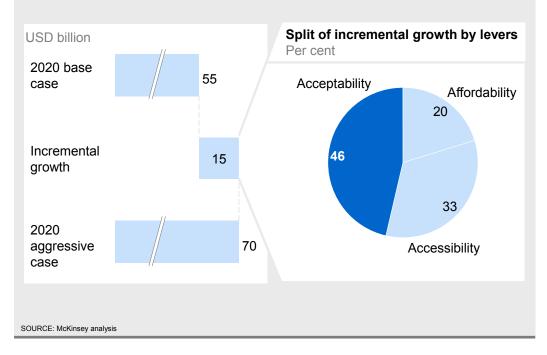




Consequently, in this pessimistic scenario, growth would slow down to 10 per cent, resulting in a USD 35 billion market in 2020. In effect, the Indian pharmaceutical market would have to forfeit more than USD 20 billion in market opportunity by 2020.

On the other hand, an aggressive case scenario, spurred by external conditions and purposeful industry actions, is definitely possible. In this scenario, GDP is expected to grow at around 8.3 per cent; insurance coverage would grow to cover the entire Indian population below the poverty line; providers would invest in an additional 500,000 beds over and above the 1.9 million beds expected to be added in the base case; and the government's spending in healthcare would reach 2 per cent of the GDP by 2020. Spurred by greater affordability and infrastructure, players will intensify their actions. Industry would focus more aggressively on biologics, vaccines and consumer healthcare; and players would invest more aggressively to drive diagnosis and treatment rates resulting in an additional 20 per cent increase in the patient pool. The market could grow at a compounded annual growth rate of 17 per cent to reach USD 70 billion in 2020 (Exhibit 6). At this scale, the market will be comparable to the current pharmaceutical market in Japan. Quite importantly, more than half of the total gap of USD 15 billion between the base and aggressive growth scenario will be filled by the added growth in the five

# Acceptability will be the primary driver of growth in aggressive case



non-traditional opportunities; the remaining USD 7 billion could result primarily from market shaping activities to drive diagnosis and treatment.

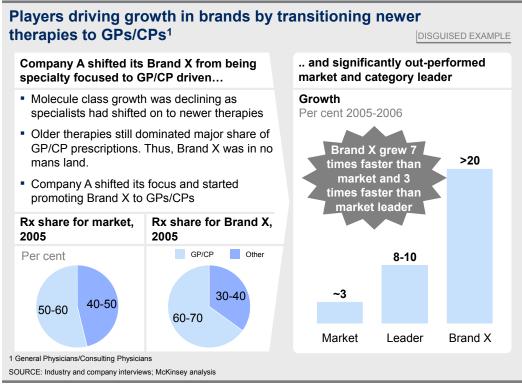
### MASS THERAPIES WILL REMAIN IMPORTANT EVEN THOUGH SPECIALTY THERAPIES WILL INCREASE SHARE

In our earlier report, we had projected that specialty and super-specialty therapies will grow faster than the market even though mass therapies will continue to be the largest segment. The past few years have affirmed this trend. We also observe that the therapies have segmented further, unfolding diverse opportunities.

Mass therapies have evolved to comprise two differing opportunity areas. The first, which makes up the majority of the opportunity, is acute indications within therapeutic areas such as respiratory and gastro-intestinal that have been traditionally treated by general practioners (GPs) and consulting physicians (CPs). This segment is increasingly being driven towards the OTC or OTX route, caused by greater patient awareness and a propensity to self-medicate. The proton-pump inhibitor (PPI) category is a case in point. The second segment comprises older therapies in chronic indications such as diabetes, hypertension and epilepsy. For example, calcium channel blockers, despite being a hypertension therapy, fall into the mass segment. Growth in this segment is being driven by percolation down

the physician pyramid, and older established molecules have been adopted in earnest by GPs and CPs (Exhibit 7). We expect mass therapies to grow at a few percentage points below the market and account for half the market by 2020.





Specialty therapies have grown at rates well above the market, and now account for more than one-third of the market. While this segment includes drugs for several chronic conditions, it also comprises drugs for several niche acute conditions. We see this market evolving in three ways. First, therapies will undergo upgradation, often driven by the launch of patented products. The dramatic rise of the DPP IV category in diabetes is a case in point. Second, there will be increased awareness and treatment of nuanced medical indications, such as in the case of metabolic disorders. Third, treatment protocols will get firmed up, particularly for critical and life saving procedures and associated treatment. We expect specialty therapies to increase their share and reach a scale comparable to that of the mass therapies by 2020.

Super-specialty therapies comprise of therapeutic areas such as oncology, urology, and nephrology that are considerably niche and derive less than 20 per cent of their prescriptions from generalists. Though these therapies comprise a small part of the market, they have grown at nearly double the market growth rate over the last few years. We expect super-specialty therapies to maintain the current growth momentum, and become a market in excess of USD 5 billion by 2020, driven by

three factors. First, private investments will spur growth in tertiary and quaternary care capacity in the metros. Second, we expect introductions of New Molecular Entities (NMEs) in these therapeutic areas. Third, we expect increases in private insurance coverage to play an important role in enhancing affordability for high cost therapies, including for biologics.

The fast-changing and accelerating trends in the therapies throw up two major implications for players as they look to capture the opportunities. If players want to maintain market leadership, they can not limit their focus only to increasing share in existing markets. Instead, they would need to constantly anticipate and shape the evolution of the market. For instance, in mass therapies, players will need to consciously move down the physician pyramid to drive growth in the chronic segments. These decisions are non trivial and will involve trade-offs between a much greater scale and near-term dips in profitability. In addition, they would also need to develop new capabilities. For instance, players will need to collaborate with payors and providers to reduce the total cost of treatment in super-specialty therapies.

### METRO AND TIER I MARKETS WILL DRIVE GROWTH WHILE RURAL MARKET WILL INCREASE ITS SHARE

Metro and Tier-I markets each account for about 30 per cent of the Indian pharmaceuticals market. Mass therapies constitute a majority of this market. During the last 5 years, metro and Tier-I markets have grown at an estimated rate of 14 to 15 per cent, in line with the overall market. We expect the current momentum to continue, and this segment to become a USD 33 billion market by 2020.

Growth in metro and Tier-I markets will be driven by three factors. First, rapid urbanisation will lead to 250 million people moving from rural areas to urban centres during the next two decades, with a majority of them moving to the top 70 cities (Exhibit 8). Second, medical infrastructure will expand in terms of scale and scope. Corporate hospital chains will extend their hospital network in the top 70 cities; innovative formats will plug gaps in healthcare delivery in Tier-I markets; and hub and spoke delivery models providing access to higher secondary care procedures will rise within the top 200 to 250 towns. Third, compliance has the potential to rise sharply driven by organised initiatives. While diagnosis and treatment levels in metros and Tier-I markets are 30 to 40 per cent higher than in rural areas, compliance levels remain similar.

Driven by income growth and greater penetration, rural markets have grown a few percentage points above the overall market (Exhibit 9). Going forward, the share of rural markets will move up to 25 per cent by 2020, up from the estimated

# Driven by growing urbanisation, metro and Tier-I towns will continue to be significant drivers for growth

Growth in urban population Million Share of India's GDP 590 Per cent; USD billion, real 2008 +250% 340 290 100% = 647 1,090 5,290 31 42 Rural 46 2001 2008 2030 Urbanisation 30 40 rate<sup>1</sup> 28 Per cent Growth in urban real income levels 69 Per capita, USD 58 Urban 54 2,480 +207% 810 600 2001 2008 2030 2001 2008 2025 1 Defined as the ratio of urban to total population based on the census definition of urban areas; population >5,000; density >400 persons per square km; 75% of male workers in non-agricultural sectors; and other statutory urban areas. SOURCE: McKinsey Global Institute- India Urbanization Econometric Model

Exhibit 9

#### Disposable income levels set to rise significantly in rural markets Annual per capita disposable income in rural regions Changing income pyramid in rural India Per cent 153 161 165 631 100% 1 ≕0≕ 1 ≓1 ≡ 1 2 7 Globals 12 516 ·54 Strivers 41 Seekers 411 50 Aspirers 51 Deprived 53 41 33 2010 2015 2020 2010 2015 2020

SOURCE: McKinsey Global Institute - The Bird of Gold: The Rise of India's Consumer Market

20 per cent currently. Tier-II markets, in contrast, will get marginally squeezed out. However, given their important role in providing rural access<sup>7</sup>, they will stay relevant.

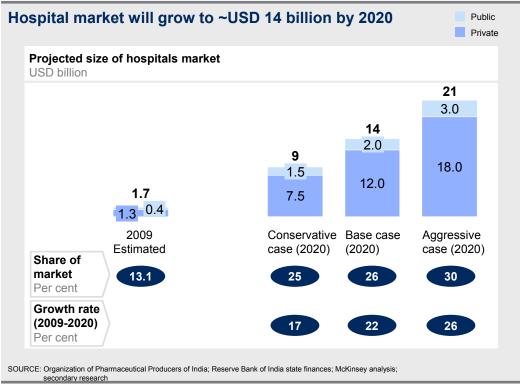
Affordability increases will be the single largest driver of growth. More than 28 million households, nearly 20 per cent of all households in rural areas, will climb out of the deprived income class in rural areas during the next decade. In addition, health coverage through RSBY will further enhance the affordability for healthcare, and enable rural patients to be treated for serious illnesses and higher cost procedures. These markets could grow further if the shortage of doctors and other care delivery points is addressed. There are 0.33 allopathic physicians per thousand people in rural areas which is half the national average. While the government has announced plans of upgrading infrastructure at primary health centres (PHCs) and community health centres (CHCs), the shortage of manpower continues to be a bottleneck.

# HOSPITAL CHANNEL WILL INCREASE SIGNIFICANTLY IN INFLUENCE, THOUGH RETAIL WILL STAY IMPORTANT

Currently, as much as 80 to 85 per cent of the market is being accounted for by the retail segment. Even in 2020, we expect the retail segment to remain the mainstay of the market. However, consumption in hospital settings will rise to a considerable 25 to 30 per cent share of the market. India will continue to witness a remarkable rise in medical infrastructure throughout the next decade. Not only will there be a dramatic rise in infrastructure, the nature and mix of hospitals and care delivery centres will undergo major shifts. As a result, we expect the hospital segment of the pharmaceuticals market to grow at well above 20 per cent and reach a size of USD 14 billion by 2020 (Exhibit 10).

There are several noteworthy aspects of how care delivery is likely to evolve in hospital settings. First, the market will see a proliferation of hospital formats with distinctly different value propositions, such as specialty centres for higher secondary procedures (e.g., for eye procedures, kidney and gall bladder stone removal). Second, hospitals will transition from focusing on topline alone to worrying about profitability. Third, corporate hospitals in particular, will drive the adoption of treatment protocols for critical and life-saving procedures and treatments. Fourth, hospitals will increasingly be instrumental in building pharmaceutical product brands. A material proportion of prescriptions for chronic ailments is being generated in a hospital setting. Finally, and most importantly,

<sup>7</sup> Tier-II markets provide critical support to accessing rural markets by being the sales headquarters, supply chain stocking points, and centres for primary and secondary care.

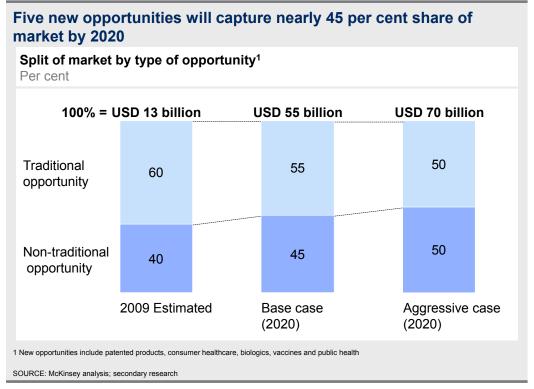


hospitals will increasingly become the first point of care across segments, especially within the metro and Tier-I markets.

The fast-growing and evolving hospital opportunity has several implications for players. First, players need to significantly step up the size of sales forces and the nature of their activities. Second, the model of engagement with hospitals needs to change. Pharmaceutical players need to go beyond contracting and negotiating, to supporting hospitals in shaping treatment protocols. Third, companies need to expand their hospital product portfolio, beyond critical care products and thrombolytics. Relatively newer molecules in cardiovascular, for post-procedure care, are cases in point.

### NON-TRADITIONAL EMERGING OPPORTUNITIES WILL SCALE-UP

As the Indian pharmaceuticals market grows in size and diversity, there are several opportunities that will scale up to their full potential. Five opportunities – patented products, consumer healthcare, biologics, vaccines and public health – appear to be emerging, and offer significant potential going forward. Considered together, these opportunities account for a combined size of USD 5 billion. In the base case, we expect these to grow to a USD 25 billion market (Exhibit 11). The more remarkable impact of these five opportunities is their ability to spur the aggressive



growth scenario. More than 50 per cent of the difference between the aggressive growth case (i.e., USD 70 billion market in 2020) and the base case (i.e., USD 55 billion market in 2020) is predicated on these segments growing at rates much higher than expected.

**Patented products will be a viable way to build scale in specific therapies** An assessment of the global pipeline indicated that patented products will be launched primarily in four therapies – metabolics, neuropsychiatry, oncology and anti-infectives. Rising affordability will be the primary driver for the patented product segment. Estimates of the patented products segment are fraught with doubts, given the uncertainty around the likely number of launches in India. Notwithstanding, we believe that this segment can reach USD 1.7 billion by 2020, provided a healthy pace of launches is maintained (i.e., 25 per cent of all global launches), with an outer limit of USD 3.2 billion in an aggressive growth scenario. While the overall segment will comprise less then 5 per cent of the market, revenues will be concentrated on a fewer number of brands, and hence be attractive for players who launch and succeed.

To capture the full potential, players need to excel on four key success factors. First, players will do well to localise pricing and find an optimal sweet spot. Baraclude was launched in China at around 15 to 20 per cent of the price levels in developed markets. Free supplies of Iressa were offered in China after 6 months of consistent usage, provided patients achieved a certain level of compliance. Second, a robust doctor engagement model would be required. Another example from the China market illustrates this point - a multinational pharmaceutical player carried out an extensive profiling exercise to identify 20 national level and 30 regional level key opinion leaders 4 years prior to launch, and involved them extensively in local trials. Third, players will need to engage and partner with payors, potentially highlighting the favourable impact on health economics. Finally, direct patient engagement would be critical for expanding the patient pool, to ensure higher retention and compliance.

#### Consumer healthcare market is ripe for growth

The consumer healthcare segment in pharmaceuticals is currently estimated at above USD 3 billion. It comprises of two segments. The first is the Rx-to-OTC segment, comprising brands that have been built through the prescription route but over time, move on to being self-medicated. Crocin and Volini are two suitable examples. Pure-play OTC includes non-Rx brands that have been built through direct-to-consumer marketing, such as the Eno or Pudin Hara brands. This segment includes the nascent category of condition-specific nutrition products such as Glucerna or Slim-Fast. We expect the consumer healthcare segment to grow at 14 to 16 per cent to become a USD 14 to 18 billion market by 2020.

As pharmaceutical companies aspire for leadership in this market they face three implications. First, companies need to constantly innovate on the back of consumer insights. Players will need to depend more on research to understand and formulate products accordingly, instead of indiscriminately launching 'me too' products and extensions. Second, pharmaceuticals players in particular will need to enhance their channel management and merchandising capabilities. Finally, companies will need to consciously accept lower margins in a bid to dramatically scale up their brands.

#### Biologics offers opportunities for explosive growth

We estimate the biologics market at above USD 300 million and its growth at over 30 per cent. The market currently is dominated by simple biologics such as insulin and EPO, enjoying over 80 to 85 per cent share. Therapies for the treatment of diabetes (insulin), oncology (EPO and mabs), autoimmune diseases and cardiovascular dominate the segment currently. Driven by constraints of affordability and access, the market is limited to metro and Tier-I geographies. The biologics market has the potential to grow to USD 3 billion by 2020 and can become much larger if industry can take bold measures related to physician education and confidence. We expect complex biologics such as mabs to account for up to 40 per cent of the market by 2020 in the base case. Affordability rise, as in most cases, will drive growth. Pricing decisions will be critical, and if optimised well, can lead to a manifold increase in market size. Moreover, aspiring players will need to enhance physician confidence in biologics. For instance, examples from other emerging markets have shown that a transparent pricing system that benchmarks local prices against reference markets such as the US and the EU can drive physician comfort. Finally, players will do well to work with physicians in local trials to establish efficacy in the local population.

#### Vaccines market will penetrate further to achieve its fair share

At 2 per cent penetration, the vaccines market is significantly under-penetrated, despite suffering from a high burden of deaths by vaccine preventable diseases. The market is estimated currently at USD 250 million, with the private segment accounting for two-thirds share. We expect the vaccines market to grow to USD 1.7 billion by 2020. However, the upside in an aggressive growth scenario is significant. Active shaping by players could lead to higher than expected growth in both private and public segments, and help achieve a USD 3.5 billion size by 2020.

Player actions in four areas will drive growth. First, companies need to produce locally or leverage supply partnerships. GlaxoSmithKline's local partnership for the HiB vaccine with Bio-manguinhos in Brazil is a case in point. Second, players will need to conduct studies on the economic impact of vaccination and establish vaccine safety and performance standards. Third, there is a need to extend coverage beyond paediatricians and include general practitioners, consulting physicians and gynaecologists. Finally, players need to enhance supply chain reliability and reduce costs.

#### Public health will offer meaningful opportunities

We define the public health segment in pharmaceuticals as direct government purchases from pharmaceutical companies. This market is currently estimated at nearly USD 1 billion but has the potential to grow to USD 4.5 billion by 2020, and to USD 6 billion in an aggressive growth scenario.

The public health market is made up of different segments, with some that are more attractive and strategic. The largest segment, state hospitals, account for around 45 per cent of government purchases. However, this segment is relatively inaccessible for established players due to low price levels and the fragmented nature of procurement. At the other extreme, central government hospitals that account for around USD 30 million spend, are concentrated, accessible and more strategic in nature. Standards of care are high, comparable to those in the largest corporate hospitals. This segment's importance lies not in its size, but in its ability to provide access to key opinion leaders (KOLs) through sponsored research and efforts at designing treatment protocols.

Players aspiring to win in this market need to choose segments to play in. Focusing on states with more centralised buying can help. Enterprise selling capabilities will play an important role, particularly for government institutions. Finally, for high value specialty and super specialty products, health economics studies will help engage the institutional segment.

### IMPLICATIONS FOR INDUSTRY

Over the next decade, the market will proliferate, presenting a variety of opportunities. To lead, players must not only participate across multiple opportunity areas, but also significantly modify their business models to enable a profitable scaling up.

Pharmaceutical companies have taken note of new opportunities and begun to make meaningful investments in these areas. On balance, multinational companies have probably covered more ground. Most leading multinational companies have set bold aspirations for their India businesses, adopted a localised model including dramatic sales force ramp-ups and branded generics launches, and made major investments in their local organisations. Leading local players have made investments in market creation, developed differentiated business models and maintained the momentum of new product launches.

While these are all steps in the right direction, a lot more needs to be done to fully capture the potential of the market. The requirements for leadership have gone up manifold. Enhanced competitive intensity and a rapidly evolving market have left limited room for complacency. For instance, a few years ago, market creation entailed expanding therapies to new doctor segments and geographies, identifying opportunities in underpenetrated therapies, and deepening penetration in established markets. These levers remain important, but are not sufficient anymore. Market creation during the next decade will involve collaborating with a broader set of partners to enhance diagnosis rates and compliance, thereby changing the very nature of the patient funnel.

Another suitable example is the rising importance of large brands, particularly in the context of dwindling generics launch opportunities. Not only can the large brands make up for the gap created in the topline, they can also bolster profitability. Unfortunately, over the last few years, large brands have not kept pace with the market and lost share. This is a cause for concern.

While winning in the Indian market will require cross-functional focus, the capabilities that require the most substantial improvements are related to the commercial model. We believe that three commercial capabilities will be critical. These capabilities will need to be supported by a strong organisation and collaborative partnerships with stakeholders within and outside the industry.

Players will rediscover the essence of marketing

Existing marketing capabilities will not suffice. While launch marketing and brand planning, based on prescriber shifts and competitor strategies, will remain important, three more crucial aspects will need attention.

First, building big brands will assume much greater importance. As new launch possibilities dwindle, brand building will be necessary to grow profitably (Exhibit 12). Interestingly, as much as 50 per cent of late-launch successes<sup>8</sup> have been launched as brand extensions. To instil a culture and mindset of building large brands, pharmaceutical players will need to pro-actively manage the brand portfolio, aspire high for large brands and build competitive differentiation.

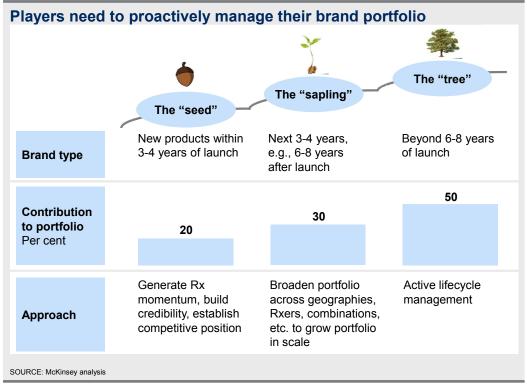


Exhibit 12

Second, disease management and market creation capabilities will be crucial. Players will need to work with doctors to shape therapy. Direct-to-consumer activation needs to be undertaken in a manner such that it complements the doctors' efforts. The efforts of orthopaedic implant companies is a case in point. These players are collaborating with KOLs and other physicians to increase the awareness of joint replacements and reduce the fear of surgery.

<sup>8</sup> We define late launches as brand launches that are not amongst the first 5 launches in a molecule or molecule combination.

Third, improving customer focus will enable higher growth. The industry needs to move away from its 'one size fits all' approach to providing more customised messages. Marketing teams will need to play a big role in understanding the different segments of physicians, chemists and patients.

None of these marketing initiatives are alien to the industry. When the scale of the market was smaller, senior management's attention and judgment was sufficient for decision making. However, with heightened scale and complexity, leaders will now need to institutionalise these marketing capabilities within their organisations.

**New models of sales force coverage and excellence will emerge** Two sales force capabilities will need to collaborate to enable and sustain high growth.

First, adopting innovative and differentiated coverage models will become essential. Our research indicated that sales representatives are getting crowded out of the doctors' chambers, especially in the metro and Tier-I cities (Exhibit 13). Other influencers such as hospital purchasing committees, payors, and chemists are all playing an increasingly important role in driving therapy and brand choice. Consequently, selling efforts will need to change to reflect the new industry dynamics.

Year	Number of doctors		Estimated number of representatives		Ratio of representa- tives/doctor
2005		670,000		000 — 000	~0.10
2009		760,000		000 – 0,000	~0.13
2020		940,000		300,000 - 350,000	0.31-0.37
OURCE: Medical	Council of India; McKinsey ana	Ilysis			

#### Exhibit 13

#### Ratio of sales representatives to physicians to go up dramatically

Second, sales force excellence will differentiate the winners. Traditional sales force management approaches have lost their edge. These are not suited to the current context as they are designed to capture incremental share rather than drive aggressive market growth. For instance, territory allocation and deployment based on market potential data, and doctor segmentation and targeting based on Rx patterns, have become 'tickets to play'. Players will now need to shift focus to three differentiators that will help achieve sales force excellence. The first differentiator is enhanced quality of performance management and dialogue. For instance, instead of just focusing on performance in the previous month and quarter, the top team will need to develop a forward-looking view of performance, and accordingly drive interventions. The second differentiator is the added focus on people. National or regional sales heads need to identify levels at which talent can make the biggest difference in performance. In our experience, the Indian market suffers from a paucity of good quality talent at the area sales manager level. The third differentiator is the mindset to challenge long standing myths, such as the view that newly deployed sales representatives can be fully productive only over a 2 to 3 year timeframe (Exhibit 14).

#### Exhibit 14

## Players will need to challenge myths and well entrenched views to drive excellence

From myth	To reality	
90% of sales happen during the last 3 days of the month	Performance transparency and problem solving can enable up to 60% of sales i first 3 weeks	
Late launches can generate only so much in the face of entrenched competition	Thoughtful planning and passionate execution can lead to a substantive late launch success	
New sales representatives will be fully productive in only 2-3 years time	New sales representatives can ramp up in 12-18 months with right expectations and right inputs	
95% achievement implies an OK performer in the field	105% achievement can become a habit for the organisation 100% a marker for average (and expected) performance	

SOURCE: McKinsey analysis

Top teams will need to change the nature of their engagement with the sales force. They will need to involve themselves more, go beyond data and templates, and focus on the softer aspects. In doing so, they will be able to transform the sales organisation's mindsets, habits and culture. Commercial operations will be a source of differentiation

Profitability will remain a major focus area for leading players. Business building investments in non-traditional opportunities, coupled with heightened competition and a rising cost of talent, will result in margin pressures. In order to safeguard profitability, and consequently encourage market investments, players will need to seek productivity enhancements in marketing and sales operations.

Sales force costs, promotional expenditure, and supply chain are three potential areas that offer opportunities for enhancing productivity. Greater sales force productivity will be a function of differentiated sales force models, heightened performance management, and capability building. In the area of promotional spending, clear linkages are often missing between brand strategies, their likely sources of business, differentiation and messaging, and the consequent spend allocation plan. Further, players will have the opportunity to create an efficient supply chain, and enhance the viability of accessing hitherto difficult-to-reach markets. Even partial improvements in processes can increase margins by a percentage point, without accounting for any decline in lost sales. Aspirants for market leadership will do well to master these three capabilities.

Organisation needs to adapt to proliferation of opportunities

Players will need to strengthen their organisation by focusing on three priorities. First, they would need to import talent and skills from outside the industry. Traditionally, the industry has focused on developing talent from within. However, not only will the demand for talent multiply manifold in terms of sheer numbers, new skills and non-traditional thinking would be needed as well (Exhibit 15). For instance, brand managers in FMCG companies are experienced in building big brands and managing these in high growth environments. Brand managers with such FMCG experience will no doubt have greater comfort in environments that demand greater than 20 per cent growth.

Second, players need to encourage risk taking. Aspiring market leaders will do well to place multiple bets and create a portfolio of opportunities. Players will need to go beyond the review of near-term financial metrics, and place equal emphasis on input measures and non financial outcomes. Over the past five years, several established players have lost ground due to their constrained and risk-free approach. For instance, some early entrants in segments such as hospitals have not invested in product portfolio and differentiated commercial capabilities, and simply ceded the initiative and first-mover advantage. Yet others have delayed the Rx-to-OTC switch for large brands and, in the process, seen competing brands surge ahead.

Third, the top team's attention should be focused on longer term business health. While performance cells will deliver short-term performance, the top team needs

# Beyond numbers, new skill requirements will also increase the attractiveness of talent from non-pharma backgrounds

New marketing areas	New skills required	Sectors which can contribute talent				
Consumer healthcare	<ul> <li>Direct to patient promotion (e.g., TV/print media ads)</li> <li>Tapping non-pharmacy channels (e.g., retail)</li> </ul>	• FMCG				
Market shaping/ awareness	<ul><li>Running programs/campaigns at scale</li><li>Organising camps, events, etc.</li></ul>	<ul> <li>Event management firms</li> </ul>				
Rural and tier-II markets	<ul> <li>Ability to cultivate untapped markets</li> <li>Sell large volumes at low cost</li> <li>Manage supply chain in difficult to access region</li> </ul>	<ul> <li>FMCGs, Mobile Telephone</li> </ul>				
Rural health awareness	<ul><li>Communicate and build knowledge in relatively under-educated regions</li><li>Build trust</li></ul>	<ul> <li>NGOs, teachers</li> </ul>				
Hospitals and insurers	<ul><li>Making bulk sales</li><li>Cultivating relationships with key people</li></ul>	<ul> <li>Bank/insurance sales, BPO employee</li> </ul>				
SOURCE: McKinsey analysis						

to divert attention to business health. What are the major trends that need to be leveraged? Is the company taking adequate bets in the most opportune areas? What are possible risks? Is the organisation building the right set of capabilities? These are a few aspects that leadership teams will need to engage on and monitor.

## Collaboration with other pharmaceuticals players and outside the industry is key

Given the substantive nature of investments required to enhance access and shape markets, partnerships could help spread risks and achieve rapid scale up. We envisage three types of partnership possibilities going forward.

First, pharmaceuticals players will partner with each other to shape the market. For example, multiple players could co-invest in launching a rural play with a focus on enhancing access. Such a business could run as an independent joint venture entity. While commercial examples of this nature are practically non-existent in India, we see the early signs of engagement and discussions on several such possibilities.

Second, players will partner with other stakeholders in healthcare to enhance access. These could include partnering with payors to provide coverage for high cost life saving therapies; with device companies to expand into Tier-II markets

while leveraging common supply chain infrastructure and information; with hospital chains to establish treatment protocols and drive local clinical trials; and with diagnosis players to enhance disease awareness and diagnosis rates.

Third, players will increasingly enter public-private partnerships (PPPs). The government is increasingly open to partnering with the private sector to determine health outcomes. Potential areas for partnerships could include launching telemedicine programmes such as the HMRI programme, executing insurance schemes such as the Aarogyasri programme in Andhra Pradesh, and establishing treatment protocols in the tertiary and quaternary government hospitals.

### THE GOVERNMENT NEEDS TO PLAY A CRUCIAL ROLE

The government needs to play a direct role in driving access to healthcare through long range initiatives. Moreover, it needs to ensure that the industry maintains its confidence and is not affected by extraneous shocks. In particular, we believe that the government needs to fulfil five roles:

- Raise healthcare spending to stated 3 per cent of GDP: The government has announced plans to increase its spending in healthcare to 3 per cent of GDP. The current growth trajectory, in which this spending is increasing at 18 per cent annually, will take the government's healthcare spending up to 1.6 per cent of GDP by 2020. The gap between this achievement and the stated aspiration will have a material impact on the trajectory of the healthcare sector in general, and the pharmaceuticals sector in particular.
- Invest in healthcare infrastructure, particularly in Tier-II and rural markets: The government plans heavy investments in medical infrastructure during the next decade. A majority of this spending will go towards upgrading infrastructure in primary and secondary care centres, i.e., district hospitals, PHCs and CHCs. Executed well, these investments will create real options for the poorer underserved segments to access quality healthcare.
- Adopt a broader set of measures to contain healthcare costs: Drug prices in India are among the lowest in the world driven by intense generics competition. Any further controls on pricing will impair the viability of the industry, reduce investments and wipe out USD 20 billion market opportunity by 2020. Hence, policy makers should consider measures beyond price control (e.g., wider health coverage, reimbursement control) to control overall healthcare costs.
- Reduce the shortage of physicians: Allowing for private investments in medical education was a major step in this direction. Beyond setting up new medical education centres, the government needs to encourage innovative ways to

address the talent deficit. The Bachelor of Rural Medicine and Surgery (BRMS) programme, launched in Tamil Nadu, is a case in point.

Execute RSBY according to plan: The government has announced plans to cover approximately 400 million people through RSBY; 19 million families have already been covered and implementation seems to be on track. However, specific attention needs to be given to two areas. First, while RSBY is creating affordability, more doctors and hospitals need to be empanelled such that access does not become a bottleneck. Second, the private insurance players involved in RSBY need to remain viable and committed to the long-term success and scaling up of the initiative.

The government's actions are foundational and will play a central role in determining the pace and quality of market growth.

India's pharmaceuticals market has grown in confidence and firmly moved on to an accelerated growth path. The central question now rests around the true nature and the full extent of this market's potential. Backed by solid fundamentals, the market is giving rise to a variety of business opportunities. We feel confident that strong player intent, investments and actions will underpin future growth and enable the Indian pharmaceuticals market to break into the global top tier.