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## 2014 Global health care outlook Shared challenges, shared opportunities



### Contents

Overview and outlook	1
Global health care sector top issues in 2014	3
Aging population and chronic diseases	
Cost and quality	
Access to care	
Technology	
Stakeholder considerations	8
Market updates	10
Americas	10
Europe, Middle East, Africa (EMEA)	13
Asia	18
Contacts	24

### Overview and outlook

The global health care industry is going through a period of "glocalization," a term that combines the words "globalization" and "localization" to describe the adaptation of global products or services to accommodate the needs of people in a specific locale. Typically associated with efforts by large consumer companies to boost sales by tailoring their products and menus to appeal to local tastes, glocalization also applies to health care: Industry issues are global, even if care is usually delivered locally. And while the effects of these issues are influenced by local factors, many challenges are shared around the world to varying degrees, as are the opportunities to innovate to solve them.

Total global health spending was expected to rise by 2.6 percent in 2013 before accelerating to an average of 5.3 percent a year over the next four years (2014-2017).<sup>1</sup> This growth will place enormous pressure on governments, health care delivery systems, insurers, and consumers in both developed and emerging markets to deal with issues such as an aging population, the rising prevalence of numerous chronic diseases, soaring costs, uneven quality, imbalanced access to care due to workforce shortages, infrastructure limitations and patient locations, and disruptive technologies.

Across the globe there have never been more health care challenges than there are today. However, these challenges can push stakeholders to innovate in new and exciting ways and to generate scientific, medical, and care delivery breakthroughs that can improve the health of people worldwide. This 2014 global health care outlook examines the current state of the sector, describes the top issues facing stakeholders, provides a snapshot of activity in a number of geographic markets, and suggests considerations for 2014 and beyond.

#### Sector overview

Health care, among both providers and payers in public and private settings, is a very costly industry sector. The Economist Intelligence Unit (EIU) estimates that global health care spending as a percentage of Gross Domestic Product (GDP) will average 10.5 percent in 2014 (unchanged from 2013), with regional percentages of 17.4 percent in North America, 10.7 percent in Western Europe, 8.0 percent in Latin America, 6.6 percent in Asia/ Australasia, and 6.4 percent in the Middle East/Africa.<sup>2</sup> Among developed nations, health is the second-largest category of government spending, after social protection (social assistance, health/unemployment insurance).<sup>3</sup>

Most of the countries across the globe are facing a formidable challenge to manage the rapidly increasing cost of health care. Although spending rose by just an estimated 1.9 percent in 2012, it is expected to pick up again, with total spending rising by 2.6 percent in nominal terms in 2013 and by an annual average of 5.3 percent until 2017.<sup>4</sup> Given population growth, this means that spending per head is anticipated to rise by an average of 4.4 percent a year from 2014-2017.

Life expectancy is projected to increase from an estimated 72.6 years in 2012 to 73.7 years by 2017, bringing the number of people over age 65 to around 560 million worldwide, or more than 10 percent of the total global population. In Western Europe the proportion will hit 20 percent; in Japan, 27 percent. The aging population will create additional demand for health care services in 2014 and beyond.<sup>5</sup> Concurrently, the number of high-income households (those earning over \$25,000 a year) is expected to increase by about 10 percent, to over 500 million, with over one-half of that growth coming from Asia.<sup>6</sup> Governments in many emerging markets are taking note of this economic growth and planning to roll out public health care services to meet consumers' rising expectations.

With aging populations, an increase in those inflicted with chronic ailments that require more health care spending, government initiatives to increase the access to care in both industrialized and emerging markets, and treatment advancements expected to drive sector expansion, pressure to reduce health care costs remains and is escalating. Heavy government debts and constraints on tax revenue, combined with the pressures of aging populations, are forcing health payers to make difficult decisions on benefit levels. Europe remains under particular pressure, and not just in those countries most impacted by the regional economic crisis. After forcing through painful cuts to drug prices, wages and staffing levels, some governments are now using the crisis as a chance to push through broader reforms to health care funding or provision. The hope is that these reforms may make health care systems more sustainable in the future.

<sup>2</sup> World Healthcare Outlook, Economist Intelligence Unit, August 14, 2013

5 Ibid 6 Ibid

<sup>&</sup>lt;sup>1</sup> World Healthcare Outlook, Economist Intelligence Unit, August 14, 2013. Total spending is for the 60 markets that EIU covers.

<sup>&</sup>lt;sup>3</sup> Health expenditure, total (% of GDP) data, World Bank

<sup>&</sup>lt;sup>4</sup> World Healthcare Outlook, Economist Intelligence Unit, August 14, 2013

#### Outlook

2014 looks to be a positive but challenging year for the global health care sector; one in which many historic business models and operating processes will no longer suffice amid rising demand, continued cost pressures, lack of or inadequate care facilities, and rapidly evolving market conditions. The United States likely will be dominated by the Affordable Care Act (ACA) implementation and consolidation; many European health systems are expected to be hampered by monetary/recession issues; and workforce shortages and access issues remain problematic around the globe. Changing governments could influence health care in both positive and negative ways; emerging market growth is likely to offset slower growth in North America and Western Europe; numerous digital and ehealth/data initiatives are gaining critical mass; and many developed countries are encouraging best-practice models, improved productivity and efficiencies, as well as skilled labor-minimizing strategies.

The outlook for global health care sector growth over the next few years is generally positive. Emerging markets including China, India, Indonesia, Russia, and Mexico are expected to see spending increase quickly over the next five years, due to population growth, increasing consumer wealth, and government programs to expand access to health care.<sup>7</sup>

From a regional perspective, health care spending in North America is set to rise by an annual average of 4.4 percent from 2013-2017. Growth will be driven partly by the expanded access to health insurance coverage in the U.S. through the ACA and Medicaid. However, there continue to be stumbling blocks with ACA implementation, including the troubled rollout of the federally operated health insurance exchange. Latin American health care spending is expected to rise by an annual average of 6.8 percent from 2013-2017. The fastest spending growth will be in Mexico, at more than 10 percent a year, with Brazil at 6.8 percent.<sup>8</sup>

The specter of further economic woes and subsequent costcutting measures in Western Europe is expected to slow annual average growth in health care spending to just two percent from 2013-2017, despite the pressures of aging populations and chronic diseases. Although economic conditions within the European Union (EU) appear to be stabilizing, the pressing need for continuing debt reduction in some southern European nations may lead to further reductions in public spending in some of these markets. Most affected may be Portugal, where health spending is unlikely to start recovering until 2017, but Greece and Spain may also have to wait until at least 2016. All three countries have seen public protests over the effects of government cuts.<sup>9</sup>

The Asia-Pacific region's health care spending is expected to grow at a rate of 7.1 percent from 2013-2017,<sup>10</sup> as the rollout of public health care systems, growing consumer wealth, and lifestyle changes continue to boost demand. India has expanded its primary care policy priority and is expected to increase spending at an average rate of 17 percent a year, followed by China at over 14 percent a year. Indonesia, Thailand, the Philippines, and Malaysia are also likely to see double-digit annual growth as they expand their health insurance systems. In Japan, health care spending is expected to further increase due to its rapidly aging society.

The fastest-growing region in the coming years could be the Middle East and Africa, where spending is expected to rise by an average of 10 percent annually.<sup>11</sup> A key driver may be population growth, which will combine with government efforts to expand access to care. South Africa's spending growth is expected to be slower, at 5.6 percent, even in light of the government's efforts to introduce universal health care.

The concept of glocalization — thinking globally but acting locally — will move to the forefront in 2014 and beyond. In the face of change and innovation, the ability to reach into global jurisdictions to learn and mitigate the risk of local change will be invaluable. Conversely, trying to apply global solutions to local markets without factoring in local dynamics could be disastrous.

The health care sector's growth prospects are being shaped by a number of glocalized marketplace and enterprise issues that present both challenges and opportunities. Read on to learn more about these issues, suggested considerations for stakeholders, and activity in specific geographic markets.

<sup>7</sup> Ibid

<sup>&</sup>lt;sup>8</sup> Ibid

<sup>9</sup> Ibid

<sup>10</sup> Ibid

<sup>&</sup>lt;sup>11</sup> World Healthcare Outlook, Economist Intelligence Unit, August 14, 2013

## Global health care sector top issues in 2014

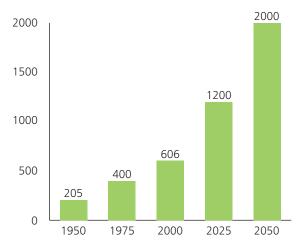
There are four major issues that governments, health care providers, payers, and consumers face in 2014: aging population and chronic diseases; cost and quality; access to care; and technology. As evidence of the trend towards glocalization, many of the challenges and opportunities emanating from each of these issues can be both global and market-specific.

#### 1. Aging population and chronic diseases

The shared, long-term trends of an aging population and an increase in people inflicted with chronic diseases are expected to drive demand for health care services in both developed and emerging economies in 2014 and beyond.

Aging populations and increasing life expectancies are anticipated to place a huge burden on the health care system in markets such as Western Europe, Japan, and — surprisingly — China, where it is expected to combine with a sharp decline in the number of young people. (China's decline may be related to the impact of family size policies.)<sup>12</sup> The global population age 60 or above has tripled over the last 50 years and is expected to more than triple again over the next half-century, to reach nearly two billion in 2050 (Figure 1).<sup>13</sup>

#### Figure 1: World population over 60 (in millions)<sup>14</sup>



Source: DTTL Global Life Sciences and Health Care Industry Group analysis of United Nations data statistics

Europe currently has the world's highest proportion of older individuals and is projected to retain that distinction for at least the next 50 years: About 37 percent of the European population is projected to be 60 or over in 2050. In contrast, only 10 percent of Africa's population is projected to be over 60 in 2050. The current growth rate of the older population, at 1.9 percent, is significantly higher than that of the total population at 1.2 percent, and the spread between the two rates is expected to become even larger as the baby-boom generation starts reaching older ages in several parts of the world.<sup>15</sup> Mexico has a young population — nearly 30 percent were 14 years old or younger in 2011; however, by 2017 about 7.5 percent will be 65 or older, placing a greater strain on public health care services and boosting spending on chronic, age-related diseases.<sup>16</sup>

Another shared demographic trend creating increased health care demand is the spread of chronic diseases heart disease, stroke, cancer, chronic respiratory diseases, diabetes, and mental illness, among others — which is attributable to the aging population, more sedentary lifestyles, diet changes, and rising obesity levels, as well as improved diagnostics.

Chronic diseases are, by far, the leading cause of mortality in the world, representing 63 percent of all deaths.<sup>17</sup> Cancer and heart disease are becoming major killers, even in emerging markets. Africa, the Middle East, Asia, and Latin America are experiencing epidemics in diabetes and cardiovascular illnesses. China, with 92 million diabetics, has overtaken India (80 million) as the world leader in diabetes cases, according to International Diabetes Federation.<sup>18</sup> The cost of treatment for diabetes and other chronic diseases — which may be out of reach for many consumers, especially in emerging markets — is expected to compel a more intense focus on disease education and prevention by governments and health care practitioners while life sciences companies continue to develop innovative new medicines to address many of these diseases.<sup>19</sup>

- <sup>14</sup> UN Data Statistics: http://data.un.org/Data.aspx?d=PopDiv&f=variableID%3a22
- <sup>15</sup> UN Publications: http://www.un.org/esa/population/publications/worldageing19502050/pdf/80chapterii.pdf
- <sup>16</sup> Healthcare Briefings & Forecast: Mexico: Healthcare Report, Economist Intelligence Unit, July 17, 2013
- <sup>17</sup> WHO Database: http://www.who.int/topics/chronic\_diseases/en/
- <sup>18</sup> http://www.idf.org/press-releases/idf-press-statement-china-study
- <sup>19</sup> Global Life Sciences Outlook: Resilience and reinvention in a changing marketplace, 2013, Deloitte Touche Tohmatsu Limited

<sup>&</sup>lt;sup>12</sup> Global life sciences outlook: Resilience and reinvention in a changing marketplace, Deloitte Touche Tohmatsu Limited, 2013

<sup>&</sup>lt;sup>13</sup> UN Data Statistics: http://data.un.org/Data.aspx?d=PopDiv&f=variableID%3a22

#### 2. Cost and quality

A 2013 survey conducted in 11 countries by The Commonwealth Fund found that the United States spends \$8,508 per person on health care, nearly \$3,000 more per person than Norway, the second-highest spender.<sup>20</sup> Health care costs in the U.S. are expected to rise an average of 4.4 percent a year in 2013-2017.<sup>21</sup>

The U.S. may be an outlier in terms of health care cost and affordability, but whether that country is spending nearly 18 percent GDP on health care or recession-riddled Europe is spending 10 percent, public and private funding systems are economically stressed — across the globe rising costs are unaffordable and unsustainable. Health care cost increases can be attributed to numerous factors, such as:

- Health care industry consolidation, particularly in the U.S., has increased more than 50 percent since 2009—activity that is expected to continue through 2014. According to a recent report, hospital mergers can lead to price increases of up to 20.3 percent. These price increases are especially acute in markets with one dominant health care system.<sup>22</sup>
- Prolonged hospital stays are a driver of higher health care expenditures in developed countries.
- Until recently, widespread adoption and use of generic medicines helped dampen overall medical inflation, but the rise of expensive complex biologics will nudge spending trends upward. Approvals of new biologics now outpace traditional therapies, and that pattern is expected to continue in 2014 as research efforts target complex cases such as cancer.
- Overuse of medical services can contribute to wasteful spending, with some estimates attributing as much as 30 percent of U.S. health care spending to overuse.<sup>23</sup>

High health care costs are adversely impacting patients as well as providers and insurers. The Commonwealth Fund survey revealed that 23 percent of U.S. adults, 13 percent of adults in France, and lower percentages in other countries either had serious problems paying medical bills or were unable to pay them. Roughly 40 percent of both insured and uninsured U.S. survey respondents spent \$1,000 or more on medical out-of-pocket costs during the previous year, not counting insurance premiums.<sup>24</sup>

Unfortunately, higher costs do not necessarily correlate to better results or higher-quality care, even in developed countries. Sometimes, a bigger danger to patients is not their disease but the hospitals that treat them. Every year in the United States, for example, 1.7 million patients develop infections while in the hospital, and 99,000 die as a result. These hospital-acquired infections add \$30 billion to the nation's annual health-care bill — and many are preventable.<sup>25</sup> In addition, over-prescribing of drugs is resulting in increased side effects for over-dosage of medicines — the U.S. Centers for Disease Control & Prevention reported in 2004 that 14 million patients misused their medications and more than 20,000 cases a year result in an unintentional death.<sup>26</sup>

#### 3. Access to care

Improving health care access is a major goal of governments around the world, and a centerpiece of many reform efforts. In the United States, for example, the Congressional Budget Office (CBO) has estimated that, by 2020, approximately 24 million people will purchase coverage through the new federal and state health insurance exchanges<sup>27</sup> established by the ACA — a substantial addition to the market. To expand citizens' access to medicine in India, the government in 2012 allocated \$5.4 billion under a policy to provide free generic drugs/products for patients in government hospitals and rural clinics.<sup>28</sup>

<sup>&</sup>lt;sup>20</sup> "Access, Affordability, and Insurance complexity Are Often Worse in the United States Compared to 10 Other Countries," The Commonwealth Fund, November 13, 2013, http://www.commonwealthfund.org/Publications/In-the-Literature/2013/Nov/Access-Affordability-and-Insurance.aspx

<sup>&</sup>lt;sup>21</sup> Healthcare Briefing & Forecasts: United States of America: Healthcare and Pharmaceuticals Report, Economist Intelligence Unit, June 21, 2013

http://www.bizjournals.com/triad/news/2013/06/18/health-care-cost-increases-expected-to.html
Science Daily: http://www.sciencedaily.com/releases/2012/01/120123163354.htm, Urban, Worst pills, nhmrc

<sup>&</sup>lt;sup>24</sup> Ibid

<sup>&</sup>lt;sup>25</sup> "10 Ways to Cut Health-Care Costs Right Now," Bloomberg Business Week, November 2009

<sup>&</sup>lt;sup>26</sup> Science Daily, Urban, Worst pills, nhmrc, Businessweek: http://www.businessweek.com/debateroom/archives/2008/06/prescription\_drug\_abuse\_ blame\_doctors.html

<sup>&</sup>lt;sup>27</sup> Congressional Budget Office Projections. Health Insurance Exchanges: CBO's May 2013 Baseline. http://www.cbo.gov/sites/default/files/cbofiles/ attachments/44190\_EffectsAffordableCareActHealthInsuranceCoverage\_2.pdf. As cited in Will they come? Consumers and health insurance exchanges: Awareness, preferences, and concerns, Deloitte Center for Health Solutions, 2013.

<sup>&</sup>lt;sup>28</sup> Reuters. http://www.reuters.com/article/2012/07/04/us-india-drugs-idUSBRE8630PW20120704

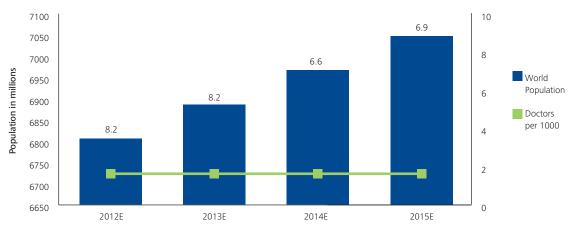


Figure 2: Doctors per 1,000 population vs. world population

Source: DTTL Global Life Sciences and Health Care Industry Group analysis of Economist Intelligence Unit database

While facilitating increased health care access is an important and worthy endeavor, more people in the system means more demand for services that numerous health care systems are unable to accommodate due to workforce shortages, patient locations, and infrastructure limitations, in addition to the cost issues identified earlier.

Many countries across the globe are facing a challenge to meet their required number of health care workers, a shortage that directly affects the quality of care. Globally, the number of doctors per 1,000 population is expected to remain virtually the same between 2012 and 2015 (Figure 2).<sup>29</sup>

More than one billion people worldwide lack access to a health care system, <sup>30</sup> both for caregivers and facilities. The United Kingdom, for example, had an estimated shortage of 40,000 nurses in 2012, and has a shortage of other health care professionals, including general practitioners (GPs). According to a European commission, there will be a shortage of 230,000 physicians across the continent in the near future.<sup>31</sup> The number of caregivers in 36 countries in Africa is inadequate to deliver even the most basic immunization and maternal health services. Rapid economic development across Asia has led to hugely increased access to health care, yet coverage across the region remains uneven. Developed Asian countries such as Singapore,

South Korea, Japan, and Taiwan offer world-class health systems while poorer neighbors such as Indonesia, Vietnam, and India struggle to provide even the most basic coverage. And, like many countries, China is lacking millions of nursing home employees to care for its growing elderly population.<sup>32</sup>

Uneven distribution of caregivers is also a problem. The physician and mid-level caregiver supply is increasing significantly in the U.S., due to increased enrollment in existing medical schools and the opening of about a dozen new medical schools. From 1970 to 2010 the U.S. physician-to-population ratio increased by 98 percent (from 161 per 100,000 to 319 per 100,000).33 At the same time, India, Nigeria, and Pakistan have critical health workforce shortages but also are in the top 25 countries for the number of their doctors and nurses that are migrating to other countries. More than 50 percent of foreign-born doctors and 40 percent of foreign-born nurses in the U.S. are from Asia.<sup>34</sup> Numerous countries in the Middle East have a significant shortage of local talent; numbers indicate dominance of the expat communities in both the nursing and physician functions. South Africa's caregiver shortage is so acute that the government has been pursuing bilateral and multilateral agreements aimed at discouraging destination countries from "poaching" key health care workers.35

- <sup>31</sup> China Daily: http://usa.chinadaily.com.cn/china/2012-10/23/content\_15837603.htm, WHO, CNBC
- 32 Ibid

<sup>35</sup> South Africa: Healthcare and Pharmaceuticals Report, Economist Intelligence Unit, March 25, 2013

<sup>&</sup>lt;sup>29</sup> Economic Intelligence Unit Database, Losing Ground: Physician Income, CNN Health, World Bank

<sup>&</sup>lt;sup>30</sup> Global Issues: http://www.globalissues.org/issue/587/health-issues, Losing Ground: Physician Income, CNN Health, World Bank

<sup>&</sup>lt;sup>33</sup> Derek R. Smart, *Physician Characteristics and Distribution in the US*, 2012 Edition (American Medical Association, 2012), as cited in "Physician Supply and the Affordable Care Act," Congressional Research Service, January 15, 2013. http://op.bna.com/hl.nsf/id/myon-93zpre/\$File/crsdoctor.pdf. Accessed January 6, 2014

<sup>&</sup>lt;sup>34</sup> China Daily, Africa portal, Migration Information: http://www.migrationinformation.org/usfocus/display.cfm?ID=

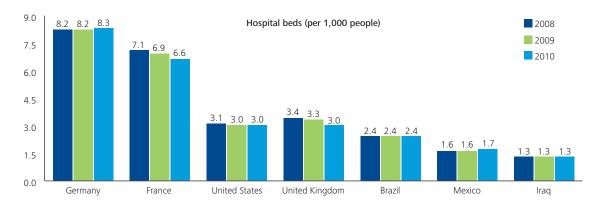
Bolstering the number of professional medical, nursing, and other health care professionals is not the only staffing challenge facing hospitals and health systems in 2014 and beyond: Organizations will need to source, recruit, and retain staff, such as advanced nurse practitioners and telemedicine technicians, who are trained to meet the needs of new 21st-century health care models.

Workforce shortages are a major contributor to health care access problems around the world; patient location can be another deterrent to care. In India, for example, about 80 percent of the population lives in rural areas. Many of these rural areas lack good hospitals when compared to urban parts of India; some rural areas even lack a dispensary.<sup>36</sup> Finding innovative solutions to provide health care outside of the traditional hospital setting is going to be critical for industry stakeholders.

A third constraint on patient access is lack of health care infrastructure in certain countries and outdated facilities in both developed and emerging markets. For example, the number of hospital beds per 1,000 population varies from country to country — ranging between 0.3 per 1,000 in Guinea to 11.1 in Belarus (2011)<sup>37</sup> — clearly indicating the difference in access to health care around the globe (Figure 3). Due to the lack of a primary care infrastructure in Brazil, patients go directly to hospitals, raising both costs and hospitalizations rates.

One of the major problems in Mexico's health care system is the lack of resources allocated for the country's health infrastructure. According to the Organisation for Economic Co-operation and Development (OECD), Mexico spends 6.2 percent of GDP on health care, more than three percentage points lower than the average of 9.5 percent in OECD countries and the second-lowest share among OECD countries, after Turkey.<sup>38</sup> There are also limited public-private partnerships to fund infrastructure projects. This underfunding results in a lack of material resources for constructing and equipping medical care units; e.g., insufficient beds, operating rooms, and specialized equipment.

India's primary health care infrastructure and physician base remain inadequate despite the Ministry of Health and Family Welfare (MoHFW) expanding access to care into tier 1 and 2 cities through the National Rural Health Mission (NHRM). Also, a high patient out-of-pocket-expenditure (>70 percent of total health care costs) implies that many of those living in underinvested areas (i.e., smaller towns and rural areas) either do not have access to health care or have to pay significantly more for treatment because they travel to larger cities and often get treated at an advanced stage of the disease.



#### Figure 3: Access to care: Hospital beds

Source: DTTL Global Life Sciences and Health Care Industry Group analysis of World Bank database

<sup>&</sup>lt;sup>36</sup> Difference between Urban and Rural India, http://www.differencebetween.net/miscellaneous/difference-between-urban-and-rural-india. Accessed December 12, 2013

<sup>&</sup>lt;sup>37</sup> World Bank Database

<sup>&</sup>lt;sup>38</sup> OECD Better life index. "Mexico. How is life?" available at http://www.oecdbetterlifeindex.org/countries/mexico/

#### 4. Technology

Across the world, health care systems are recognizing the need for innovation; advances in health technologies and data management can help facilitate new diagnostic and treatment options; however, these same advances are likely to increase overall costs, prompting widespread efforts by public and private health care providers and insurers to contain expenditure by restructuring care delivery models and promoting more efficient use of resources.

Health care technology changes will be rapid and, in some parts of the world, disruptive to established health care models. Some exciting advancements are taking place at the intersection of information technology and medical technology, such as using 3D printing to help in preparing tissues for transplants. In addition, the use of big data and analytics to gain insights is an active industry trend. Providers can leverage vast amounts of patient data gathered from a variety of sources to determine the clinical value of specific treatments and how to make them better.<sup>39</sup> Technology advancements are also connecting developed and emerging markets — and participants along the health care value chain. Adoption of new digital health information technologies (HIT) such as electronic medical records (EMRs), telemedicine, mobile health (mHealth) applications, and electronic medical prescriptions is driving change in the way physicians, payers, patients and other sector stakeholders interact.

Yet, acquiring and leveraging technology innovations require financial investments that many health care providers — even in developed economies — may struggle to afford in an era of cost-cutting and reform. In addition, the increasing use of mergers and acquisitions (M&A), joint ventures (JVs) and other collaborative business models means that companies with disparate systems will need to synergize their local operations with global requirements; this can be a challenge because emerging markets often lack a reliable technology infrastructure. These and other technology-based changes are shifting the power balance within the health care system and driving different dialogues along the value chain.<sup>40</sup> Finally, the technology-enabled, transforming health care system is producing an immense volume of information and, more specifically, how to interpret and use that data will be important. Much rides upon its availability, integrity, and confidentiality. However, new care and insurance models, electronic information transmission, and permeable boundaries among industry participants increase the complexity of managing protected health information (PHI) and compound an already challenging issue.<sup>41</sup> In addition, networked medical devices and other mHealth technologies may be a vehicle that exposes patients and health care provider organizations to safety and security risks. Among the unintended consequences of health care's digitization and increased networked connectivity are the risks of data breaches, malware infections, and vulnerability to unauthorized access.42

Increased government focus on PHI security and privacy is most evident in the United States, where the Department of Health and Human Services (HHS) has taken a series of steps to strengthen patient privacy protections and to monitor and enforce these protections. The Health Insurance Portability and Accountability Act (HIPAA) Omnibus Final Rule, with a compliance date of September 23, 2013, strengthens regulatory protections for patient information, increases penalties for breaches, and emphasizes agreements with business associates.<sup>43</sup>

Potential patient safety, economic, and reputational damage may arise if organizations lack appropriate security and privacy controls. Health care industry stakeholders should consider whether they have a need to promptly assess potential capability gaps, define their security and privacy vision and needs, and develop appropriate remediation programs.<sup>44</sup>

40 Ibid

- <sup>41</sup> Issue Brief: Update: Privacy and security of protected health information: Omnibus Final Rule and stakeholder considerations, Deloitte Center for Health Solutions, Deloitte Development LLC, 2013
- <sup>42</sup> Issue Brief: Networked medical device security and patient safety: Perspectives of health care information security executives, Deloitte Center for Health Solutions, Deloitte Development LLC, 2013

<sup>&</sup>lt;sup>39</sup> Global Life Sciences Outlook: Resilience and reinvention in a changing marketplace, 2013, Deloitte Touche Tohmatsu Limited

<sup>&</sup>lt;sup>43</sup> "What HHS/OCR will look for in HIPAA compliance audits," Health Data Management, Mar 21 2013, via Factiva

<sup>&</sup>lt;sup>44</sup> Issue Brief: Update: Privacy and security of protected health information: Omnibus Final Rule and stakeholder considerations, Deloitte Center for Health Solutions, Deloitte Development LLC, 2013

### Stakeholder considerations

The transformational changes taking place in the global health care sector can be disconcerting and challenging, but they can also push participants to innovate in new and exciting ways. Additionally, shared health care challenges may lead to shared solutions if individual countries endeavor to learn from other nations' successful practices and adapt them to local needs. The following are among important considerations for health care stakeholders as they look to address marketplace and organizational issues in 2014 and beyond:

Aging population and chronic diseases: Many of the world's countries are working individually and collaboratively to address age-related care and cost challenges, and to control and prevent chronic diseases. The World Health Organization (WHO) is endeavoring to create global awareness about chronic diseases and intervene against them; the organization has set a goal of achieving an additional annual reduction of two percent in the global mortality rate from chronic diseases in the next 10 years, which is projected to prevent 36 million premature deaths by 2015.45 Additionally, health plans, and providers in the U.S. and other nations are collaborating to innovate in approaches to wellness and prevention. Lifestyle-related habits and chronic diseases contribute to 75 percent of health costs<sup>46</sup> and patients often get off track in their treatment regimen. If governments, health plans and providers can develop robust programs and incentives to keep patients on track, it could make a potentially huge difference.

**Cost and quality:** In the global struggle to manage the cost of health care, payers, providers, and policymakers are transitioning from a focus on volume to a focus on value — improving outcomes while also maintaining or lowering costs. Concurrently, numerous countries are instituting cost-containment measures, such as new physician incentive models, prescription drug price cuts and controls, comparative effectiveness, and evidence-based medicine. Care continues to move outside costly settings such as hospitals to more affordable retail clinics and mHealth applications. Consumers value the convenience, and costs can be as little as one-third of a traditional health care site.

Most national health care systems have been encouraging greater use of generic drugs; in the U.S., for example, the proportion of prescriptions filled by generics has risen from around half to 80 percent over the last decade.<sup>47</sup> Brazil is making branded generics and proprietary drugs of greater interest to pharmaceutical companies, and in China, recent reforms have put intense pressure on the prices of all drugs, including generic and over-the-counter (OTC) medicines. In another cost-containment approach, Germany and several other countries have turned to value-based pricing for new drugs, which allows a price differential from existing offerings — including generics — based on a new product's demonstrated superiority. Finally, some countries are increasingly mandating prices: India, Brazil and China, for example, have national lists of essential drugs with set prices.

Access to care: Nations around the globe are taking steps to address patient access issues by helping to ease the health care workforce shortage. In the United States, for example, health care industry employment rose from 8.7 percent of the total U.S. civilian workforce in 1998 to 10.5 percent in 2008, and is projected to increase to 11.9 percent (19.8 million) by 2018.48 Several U.S. initiatives are planned at the federal level to address workforcerelated issues: The National Health Care Workforce Commission, a 15-member committee appointed by the General Accountability Office (GAO), is required to review health care workforce supply and demand and make recommendations regarding national priorities and policy. The National Center for Health Workforce Analysis is developing guidelines for a uniform minimum health data set across health professionals in order to improve data collection and comparisons over time. Also, competitive grants are provided to enable state partnerships to conduct comprehensive planning and carry out health care workforce development strategies at state and local levels.

- 47 Ibid
- <sup>48</sup> Deloitte LLP: Healthcare Reform (Center Stage 2012)

<sup>&</sup>lt;sup>45</sup> WHO (2013). Enfermedades crónicas y promoción de la salud [online], available in: http://www.bidi.uam.mx/index.php?option=com\_ content&view=article&id=62:citar-recursos-electronicos-normas-apa&catid=38:como-citar-recursos&Itemid=65#2

<sup>&</sup>lt;sup>46</sup> Center for Disease Control and Prevention, "Chronic Diseases: The Power to Prevent, The Call to Control—At A Glance 2009," December 2009

In Australia, the government has launched the Australian General Practice Training program to increase the number of trainee general practitioners. In 2011 the country's health minister reported the administration was halfway to achieving its goal of adding another 600 to the program by 2014.<sup>49</sup> China's Ministry of Civil Affairs has set an ambitious target to train six million caregivers by the end of 2020. The South African National Department of Health's 2012/13-2016/17 strategic plan includes programs around equitable staffing, health workforce development, recruitment and retention. Other tactics used by various countries' health systems include recruiting quality nurses from low-income and middle-income countries to meet staffing needs, and identifying incentives to attract new providers to a specific hospital or to join the profession.

From an infrastructure perspective, hospitals in India are expected to add over 1.8 million beds to achieve a target of two beds per 1000 people by 2025.<sup>50</sup> The Saudi Arabian government has identified investment in health care infrastructure as a priority; the 2013 budget includes funding for 19 new hospitals, on top of the 102 currently under construction.<sup>51</sup> The Chinese government has consistently increased its health care expenditure budget to expand its primary care infrastructure and insurance reimbursement coverage.

Technology: Health information technology (HIT) and innovation are becoming important contributors to improve the quality of care, reduce the cost of care, and most importantly, improve patient outcomes. Advancements such as electronic health records, mHealth applications, e-prescribing, and predictive analytics are being used to better understand diseases and potential treatments and to identify similarities across patients to improve the quality of care. Industry leaders are applying advanced analytics to improve disease management; to drive more focused sales and marketing efforts; and to build new analytics platforms that combine internal and external data to create new business models for coordinating care across the health care ecosystem. Looking a few years out, the power of technology could enable countries to experiment with virtual health care delivery systems.

Adoption of new technologies is driving change in the way physicians, patients, and other stakeholders interact. For example, mobile technology and devices are bringing care to many rural parts of the world, specifically in China and Africa. The number of mobile phone owners in China reached an estimated 1.22 billion (equal to the total population of India) at the close of October 2013, a growth of 10 million within a span of 10 months.<sup>52</sup> In addition, Cisco predicts 850 million mobile phone users in Africa by 2017.<sup>53</sup>

Mexico is implementing electronic health records (EHRs) in public and private institutions but sees cooperation with the United States and other countries as essential to integrate various technologies into its hospitals and health centers. China is rapidly piloting and exploring HIT to help the government realize its ambitious agenda for health care system reform. These technologies offer challenges and opportunities to the business models that have traditionally been successful in China. Organizations should think about how to effectively leverage digital technologies and to improve their engagement with customers as informational needs shift to continue propelling growth. In addition, organizations should remain alert to potential patient safety, economic, and reputational damage that may arise from a lack of appropriate security and privacy controls. Industry stakeholders should consider whether they have a need to promptly assess potential capability gaps, define their security and privacy vision and needs, and develop appropriate remediation programs.54

<sup>&</sup>lt;sup>49</sup> Australia Healthcare Report, Economist Intelligence Unit, August 8, 2013

<sup>&</sup>lt;sup>50</sup> IBEF, Healthcare Industry, March 2013

<sup>51</sup> Ibid

<sup>&</sup>lt;sup>52</sup> "China's mobile phone users number as high as population of India at 1.22 billion," mobiltor.com, November 21, 2013. http://www.mobiletor. com/2013/11/21/chinas-mobile-phones-users-number-high-population-india-1-22-billion/

<sup>&</sup>lt;sup>53</sup> "Cisco Predicts 850 Million Mobile Phone Users in Africa by 2017," *This Day Live*, February 21, 2013. http://www.thisdaylive.com/articles/cisco-predicts-850m-mobile-phone-users-in-africa-by-2017/140154/

<sup>&</sup>lt;sup>54</sup> Issue Brief: Update: Privacy and security of protected health information: Omnibus Final Rule and stakeholder considerations, Deloitte Center for Health Solutions, Deloitte Development LLC, 2013

### Market updates

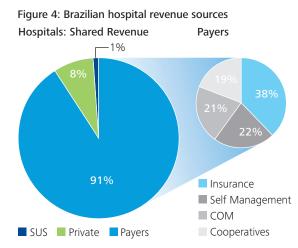
#### Americas

#### Brazil

Market Fact: Brazil has a strong local generics industry (the largest in Latin America), which is supported by government policies aimed at extending the availability of medicines to lowincome consumers.<sup>55</sup>

The outlook for Brazil's health care sector in 2014 is promising. Spending has increased in recent years — to 8.9 percent of GDP in 2011. This rate is expected to rise slightly, to 9.1 percent of GDP, by 2017.<sup>56</sup> Total spending on health care is projected to rise to \$255.5 billion by 2017.<sup>57</sup> However, as evidenced by huge protests in June 2013, the government is being pressured to increase spending for the public health system even more to address the needs of its lower-income citizens. (Middle-income earners are expected to increasingly turn to private health care, due to the public system's deficiencies.) In response to the protests, the government announced plans to increase the number of doctors by hiring foreign staff and by requiring medical students to work for two years, rather than one, in the public health care system before graduating.<sup>58</sup>

Outpatient care is the largest provider sector segment, accounting for 30.9 percent of total value.<sup>59</sup> Ninety percent of hospitals' revenue comes from payers (Figure 4). The public health care system, the Sistema Único da Saúde (SUS), is funded through federal and local taxes and employer and employee contributions. Brazil also has a robust private health-insurance sector. The public system is financially stressed: around 75 percent of the population depends on it, but only 47 percent of all health care spending comes from public funding.<sup>60</sup>



Source: CNES, 2011. Observatório ANAHP, 2013

One of the issues generating considerable discussion among Brazilian hospital executives is defining best practices for the physician payment model. For instance, the new "Procedimento Gerenciado" model aims to expedite and streamline the collection and payment process by using an average price for services based on grounded protocols, clinical guidelines, and expert consensus from clinical and business staffs.

Some hospitals in Brazil are hampered by a lack of standardized processes as well as executives with underdeveloped management skills, which can negatively impact corporate strategic planning, governance, and operations. For example, only a few of Brazil's hospitals follow diagnostic protocols or drug guidelines. Also, many decisions appear to be based on intuition, not data, as management reports and key indicators generally are not used to measure hospital performance. In addition, financial gaps exist due to lack of information such as fixed-cost evaluations. To improve care delivery and financial performance, hospitals should invest in IT systems and tools to help them monitor, control, and report key performance indicators. Moreover, they should hire or develop executives with the necessary skill sets to lead in the near-and longterm, seek appropriate industry accreditations, and follow established guidelines to help build standardized processes.

<sup>56</sup> World Health Organization (WHO), as cited in Healthcare Briefing & Forecasts: Brazil Healthcare Report, Economist Intelligence Unit, July 17, 2013

- 58 Ibid
- <sup>9</sup> Health care Providers in Brazil: Executive Summary
- <sup>60</sup> Healthcare Briefing & Forecasts: Brazil Healthcare Report, Economist Intelligence Unit, July 17, 2013

<sup>&</sup>lt;sup>55</sup> Healthcare Briefing & Forecasts: Brazil Healthcare Report, Economist Intelligence Unit, July 17, 2013

<sup>&</sup>lt;sup>57</sup> Healthcare Briefing & Forecasts: Brazil Healthcare Report, Economist Intelligence Unit, July 17, 2013

#### Canada

Market Fact: Cost management and alternative revenue creation are the top issues facing Canada's health care industry.

Canada's total health care expenditure in 2013 is estimated to be 11.4 percent of GDP — up from 8.8 percent in 2000 — and the projected trend is also slightly upwards, at 11.6 percent by 2017,<sup>61</sup> driven in part by the advance of chronic diseases and an aging population. Although much lower than in the U.S. (by far the highest in the world), Canada's health care spending is high as a percentage of GDP by Organization for Economic Co-operation (OECD) standards.<sup>62</sup>

Hospitals represent the largest share of the nation's health care spend, at 32.5 percent in 2010. Ambulatory care accounts for 27.4 percent of total spending, while retail sales of medicines and other medical goods is almost 20 percent and nursing and residential facilities 10.8 percent.<sup>63</sup>

Canada's health care system, Medicare, is primarily publicly funded and delivered. (The public sector is forecast to be responsible for 70.1 percent of Canadian health expenditures in 2013.<sup>64</sup>) The system is administered by the provinces and territories. The Canada Health Act requires every province to cover a minimum set of treatments under the Medicare system, including all medically necessary care provided in hospitals and by physicians. The sale of private insurance coverage for basic insured services is prohibited, as Medicare has a monopoly.<sup>65</sup> Private health insurance may be used to pay for auxiliary items such as semi-private rooms, dental care, dental care, vision care, etc. Medication coverage is provided in hospitals, but is privately paid in the community.

Public spending has risen uncomfortably over the past decade but the system is still viable — each province is working to transform care delivery and funding models to better balance demand with available resources. Understandably, cost management and alternative revenue creation are the top issues facing industry stakeholders. In response, the public health system and providers are coming together to drive innovation and productivity, and to identify new business models and funding solutions that focus on outcomes and value rather than volume.

#### Mexico

Market Fact: Mexico occupies the last place of OECD countries having the least number of hospital beds per person.

Mexico's health care spending has grown steadily over the past several years and is expected to increase by an annual average rate of 10.2 percent between 2013 and 2017. Total health care expenditure was 6.7 percent of GDP in 2012; that rate is expected to rise gradually to seven percent of GDP in 2017. A fiscal reform bill that Mexico's congress passed November 1, 2013, and which is set to take effect in 2014,<sup>66</sup> could further increase the rate.

Public health care is provided primarily by the Instituto Mexicano del Seguro Social (IMSS), for formally employed private-sector workers, and the Instituto de Seguridad y Servicios Sociales de los Trabajadores del Estado (ISSSTE), for public-sector workers. The two are funded by employer and employee contributions, investment returns and, in the case of the ISSSTE, increasing transfers from the federal government to avoid insolvency.<sup>67</sup>

Mexico's government is advocating system improvements to "generate predictability for the market [...] and to have a better set of alternatives for consumers, hence protecting public health care."<sup>68</sup> As part of this initiative, the government is defining an effective structure for universal health care coverage, while also striving to improve service quality and reduce system costs. In addition, the Mexican Health Ministry has launched a national strategy to prevent diabetes and obesity, highlighting the importance of investing in preventive health care because the costs of these chronic illnesses are extremely high.<sup>69</sup>

<sup>&</sup>lt;sup>61</sup> Canada: Healthcare and Pharmaceuticals Report, Economist Intelligence Unit, March 26, 2013

<sup>62</sup> Ibid

<sup>&</sup>lt;sup>63</sup> OECD data, as cited in Canada: Healthcare and Pharmaceuticals Report, Economist Intelligence Unit, March 26, 2013

<sup>&</sup>lt;sup>64</sup> National Health Expenditure Trends, 1975 to 2013, Canadian Institute for Health Information, https://secure.cihi.ca/free\_products/4.0\_TotalHeal-

thExpenditureProvTerrEN.pdf

<sup>&</sup>lt;sup>65</sup> Canada: Healthcare and Pharmaceuticals Report, Economist Intelligence Unit, March 26, 2013

<sup>&</sup>lt;sup>66</sup> "MetLife sees Mexico's fiscal reform impacting 2014 operating earnings," *BN Americas*, November 4, 2013, http://www.bnamericas.com/news/ insurance/metlife-sees-mexicos-fiscal-reform-impacting-2014-operating-earnings. Accessed January 15, 2014

<sup>67</sup> Ibid

<sup>&</sup>lt;sup>68</sup> ARRIOLA, Mikel, Interview with COFEPRIS: Mikel Arriola, Health Care & Life Sciences Review, 18-19, México, 2013

<sup>&</sup>lt;sup>69</sup> Global life sciences outlook: Resilience and reinvention in a changing marketplace, Deloitte Touche Tohmatsu Limited, 2013

Despite these strides, Mexico's public health care system faces considerable challenges. Among these are an insufficient health infrastructure, which includes a lack of resources for constructing medical units and acquiring equipment; poor distribution of resources among federal entities; and limited public-private partnerships for infrastructure development. Another challenge is the overall low quality of Mexico's health services, which is evidenced by outdated, low-tech equipment, long waiting times, unavailability of medications, limited access to services, and little focus on wellness and prevention. In fact, only 0.6 percent of the disbursements budget assigned for the health sector is used in the promotion of health, prevention and control of communicable and degenerative diseases, and injury.<sup>70</sup> The private health system has challenges as well, including a deficit of nurses since wages and benefits are lower than those offered by the public sector.

Achieving Joint Commission International (JCI) certification and complying with industry best practices could dramatically improve the quality of care provided by Mexico's health institutions and give them a competitive advantage both globally (i.e., for medical tourism purposes) and in their local market. The Mexican Council of General Health (CSG) has established certain standards to oversee, among other things, the rights of patients and their families; proper evaluation, education, and care of patients; anesthesia and surgical care; the management and use of drugs; the prevention and control of infections; the qualifications and education of hospital staff; and the management of communication and information.

#### **United States**

Market Fact: ACA implementation will present challenges for U.S. health care providers and health plans, with a greater division between successful companies which are able to innovate and transform and laggards which will suffer growing financial losses.

The United States spends more on health care than any other country in the world, totaling an estimated 17.2 percent of GDP in 2012.<sup>71</sup> Yet, U.S. health care spending may be slowing; it grew 3.7 percent in 2012 (0.4 percentage points higher than in 2011), to \$2.8 trillion, the

lowest rate since 1960. 2012's increase is similar to annual growth rates since 2009, which have ranged from 3.6 percent to 3.8 percent.<sup>72</sup> Private spending is about half of the U.S. total, a high rate by international standards. Recent OECD data shows that private health insurance paid for 33.4 percent of health spending in 2010, while consumers' out-of-pocket spending totaled 11.8 percent.<sup>73</sup>

The most pressing issue for U.S. health care providers and health plans is implementation of the Affordable Care Act (ACA or Obamacare), the most significant restructuring of the country's health care funding in decades. The ACA uses a combination of an expanded federal-state health care program, Medicaid, and an individual health insurance mandate to extend coverage to around 30 million previously uninsured Americans. The goal is to increase coverage from approximately 85 percent of the population to around 95 percent by 2019, as well as slow the rise in health care costs.<sup>74</sup>

ACA implementation is causing rapid change in the U.S. health care market, both directly from the legislation and through market-based changes. Providers and health plans will need to comply with the rules emanating from the ACA and use them to their advantage if they want to prosper in a transformed marketplace. To date, most organizations have taken their existing business models and tweaked them for this new world. As reality sets in, some may need to come to grips with the fact that their existing approaches will not work and they will need to replace them with something better designed for a post-reform market. Employers, meanwhile, are also evaluating their employeesponsored health care coverage in light of the ACA and exploring different options and models.

Among the challenges emanating from U.S. health care reform are:

 Margin preservation — With the implementation of health insurance exchanges (HIX) and the addition of millions of uninsured Americans to the Medicaid rolls, most providers expect reimbursements to decline. In order to at least break even, most will have to cut costs from 20-30 percent. Health plans will face new competitive challenges and the ACA places limits on what they can spend (earn) on things other than direct member benefit.

<sup>&</sup>lt;sup>70</sup> CEFP de la Cámara de Diputados (2013). Presupuesto de Egresos de la Federación 2013: Recursos asignados al Ramo 12 de Salud [online], pp. 12, available in: http://www.cefp.gob.mx/publicaciones/nota/2013/marzo/notacefp0102013.pdf

<sup>&</sup>lt;sup>71</sup> "U.S. healthcare rate of growth at 53-year low," UPI, January 7, 2014. http://www.upi.com/Health\_News/2014/01/07/US-healthcare-rate-ofgrowth-at-53-year-low/UPI-44241389073908/

<sup>72</sup> Ibid

<sup>73</sup> Ibid

- Consolidation Health providers and plans continue to consolidate. On the provider side, many believe that competing in the new environment will require minimum system revenue of \$4-10 billion. Physicians are rapidly moving from private practice to an employed model and are being acquired by health systems and plans. Organizations are engaging in horizontal integration (hospital-hospital acquisitions) and forming much larger entities to better collaborate, prioritize programs, increase purchasing power, consolidate services, and cut costs. More vertical integration is happening, as well. Hospitals are becoming true health systems; they are buying physician practices, ambulatory centers, diagnostic centers, home care services, and durable medical equipment and wellness companies. In addition, cross-sector convergence is expected to increase: It will become more common for a health plan to offer clinical services — both professional and technical — and for health care providers to offer health care financing products. The lines are blurring, generating both opportunities and threats. These growth and competitive positioning strategies will continue to fuel the already hot market for mergers, acquisitions and affiliations.
- Moving from volume- to value-based care As reimbursement models change to rewarding providers for good outcomes in their populations, both providers and health plans are figuring out how to manage risk. In addition to consolidation, one approach is revenue diversification. For example, most health systems want more than half of their revenue to come from non-acute care sources; they are buying medical practices, office care settings, labs, diagnostic imaging centers, post-acute care centers, and home care companies. Health plans are buying medical practices and entering the accountable care arena. The goal is to manage risk, lower costs of care, and beat the competition.
- Technology-driven transformation There are two main threads of technology-driven transformation. Work flow tools such as EHRs, portals, mHealth systems, and home and remote monitoring are rapidly transforming and enabling care. The other thread is harnessing big data through analytics and predictive modeling to manage risk, better understand costs, and determine clinical effectiveness. The next two to three years will see rapid advancements of information technology driving change. Medical technology will continue to rapidly advance, particularly with the unraveling of the human genome and the achievement of benefits

around personalized medicine. While clinically beneficial, these trends can also drive up costs as more lifesaving technologies come on line and impact national economies as life spans are extended.

- Growing consumer power Consumers using their increased purchasing power and access to information to drive health care decisions could be a major disruptive trend in 2014. After several years of shifting responsibility for co-pays, premiums and deductibles, it is no longer just the employer paying for coverage — it is the consumer's money, and they want a say in deciding where and how to spend it, and what courses of treatment to follow. Innovation will come from providers and health plans satisfying the unmet needs of these consumers, who want transparency, value, and convenience.
- Managing expectations As the framework for HIX solidifies, managing provider, employer, and consumer expectations is a considerable challenge. In particular, health plans will be having many conversations with employers particularly with mid-market and small companies about the new exchange environment and its resulting implications. Health plans also have an opportunity to work with employers on strategies to manage the increasing cost of care, specifically in areas such as product design, wellness program implementation and innovative care delivery models. There will be conversations with individual consumers, as well, helping consumers to understand the value of the product they are buying and how to use it effectively.

#### Europe/Middle East/Africa

#### Germany

Market Fact: Germany's population aged 65 or older is likely to exceed one in five by 2017, increasing demand for elder care and treatment of age-related conditions, and heightening concerns about the public health care system's sustainability.<sup>75</sup>

Germany's total health care spending is expected to rise by an average of 2.8 percent a year from 2013-2017, to \$461 billion, and from 11.7 percent of GDP in 2009 to 11.9 percent in 2017.<sup>76</sup>

<sup>&</sup>lt;sup>75</sup> Healthcare Briefing & Forecasts: Germany: Healthcare Report, Economist Intelligence Unit, September 4, 2013

<sup>&</sup>lt;sup>76</sup> Healthcare Briefing & Forecasts: Germany: Healthcare Report, Economist Intelligence Unit, September 4, 2013. Health expenditure accounts,

Federal Statistical Office - Total expenditures in 2011 EUR210bn across all financing agents.

The German health care system is funded by public sector expenditures (about 75 percent of total spending) and private contributions (over half of which is out-of-pocket expenses).<sup>77</sup> The public system is largely financed by contributions deducted from wages, with the remainder from government subsidies. Public ("social") health insurance (SHI) has been mandatory since 2007. Opting out of the SHI in favor of a private health insurance provider is possible if an individual's income is above an annually adjusted level. These individuals may remain in SHI on a voluntary basis (and the majority does), they can purchase private health insurance, or they can theoretically be uninsured. SHI covers about 88 percent of the population,<sup>78</sup> about 12 percent has private health insurance,<sup>79</sup> and less than one percent has no coverage.<sup>80</sup>

From an infrastructure perspective, Germany has fared better than some other countries: The number of doctors per 1,000 people is forecast to remain stable, at 3.8,<sup>81</sup> which is higher than the OECD average. Germany also has one of the highest ratios of nurses to population in the OECD. However, the number of health care graduates has fallen over the past decade, resulting in recruitment concerns. In response, the country has employed a significant number of physicians (~33,000) from other countries, with an increase of 15 percent from 2011 to 2012. However, language barriers and accreditation hurdles still exist.<sup>82</sup>

Among the issues facing Germany's health care sector in 2014 are a continued need for cost containment and process optimization; and demands for increased transparency around clinical quality and patient outcomes. These challenges could drive increased market consolidation, strategic partnerships, and privatization as providers strive for scale and cost efficiencies. In addition, health care providers are likely to develop value- and quality-based pricing models, institute pay-for-performance mechanisms, bolster real-world evidence and accountability capabilities, and implement process optimization programs. The federal and regional governments are expected to continue attempting to hold down health care spending growth but cost controls involve politically difficult decisions, making them hard to implement.<sup>83</sup> The September 2013 re-election of Chancellor Angela Merkel and her conservative bloc may lead to new health system reform in 2014. What form this may take, and what regulatory constraints, price pressures, and business model impacts it may have on the health care sector, are as yet unclear but are worth watching.<sup>84</sup>

#### Middle East

Market Fact: Oil-rich countries, notably the UAE and Saudi Arabia, see better health care provision (including medical tourism) as a way to ease political dissent and also diversify their economies.

In the Gulf Cooperation Council (GCC) — member states include Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates (UAE) — where the most significant economic activity takes place among countries in the Middle East, a growing and aging population and increasing total health care expenditures per capita are supporting health care industry growth. The GCC's population is expected to increase by five percent YoY, driven mainly by the influx of expatriates. While the dominant age group is estimated to be 30-44 year olds, the 45-65 and 65+ age groups are expected to grow cumulatively by an average of four to five percent between 2011 and 2020.85 Among other favorable trends are continually improving health care standards; governments' increasing investments in technological advancements and health awareness; the growth of smaller health care clinics and ambulatory centers; and a strong medical tourism industry.86

<sup>&</sup>lt;sup>77</sup> Validated for 2011 with data from Health expenditure accounts, Federal Statistical Office

<sup>&</sup>lt;sup>78</sup> Busse, R., M.D. M.P. H. The German Health Care System, http://www.commonwealthfund.org/~/media/Files/Resources/2008/Health%20Care%20 System%20Profiles/Germany\_Country\_Profile\_2008\_2%20pdf.pdf. Accessed December 29, 2013

<sup>&</sup>lt;sup>79</sup> Healthcare Briefing & Forecasts: Germany: Healthcare Report, Economist Intelligence Unit, September 4, 2013

<sup>&</sup>lt;sup>80</sup> Busse, R., M.D. M.P. H. The German Health Care System, http://www.commonwealthfund.org/~/media/Files/Resources/2008/Health%20Care%20 System%20Profiles/Germany\_Country\_Profile\_2008\_2%20pdf.pdf. Accessed December 29, 2013

<sup>&</sup>lt;sup>81</sup> Espicom; The Economist Intelligence Unit

<sup>&</sup>lt;sup>82</sup> German Medical Association (Bundesärztekammer)

<sup>&</sup>lt;sup>83</sup> Ibid

<sup>&</sup>lt;sup>84</sup> Global life sciences outlook: Resilience and reinvention in a changing marketplace, Deloitte Touche Tohmatsu Limited, 2013

<sup>&</sup>lt;sup>85</sup> Unites States Census Bureau, 2009; Deloitte Development LLC research and analysis, Nov 2009

<sup>&</sup>lt;sup>86</sup> Global life sciences outlook: Resilience and reinvention in a changing marketplace, Deloitte Touche Tohmatsu Limited, 2013

Saudi Arabia provides a snapshot of GCC health care challenges and opportunities. Its spending of 4.3 percent of GDP is less than half of the OECD average. However, the country's oil wealth means that a 4.3 percentage translates into an estimated \$1,115 per person in 2012, on par with the global average of \$1,113.<sup>87</sup> However, health care provision in Saudi Arabia is uneven. It is concentrated in urban centers and some desert communities do not have regular and reliable access to good-quality health care. The government is trying to address this imbalance and has identified investment in health care infrastructure as a priority. The 2013 budget allocated \$23.1 billion to health and social welfare, a 16 percent increase over 2012.<sup>88</sup>

Health care delivery in the Middle East is dominated by the public sector. A key challenge facing the region's governments is to provide a framework that enables the private sector to participate more fully in the health care system and supplement state systems that are heavily dependent on fluctuating oil revenues. Increased private sector participation should help the region achieve its overall goal to improve access and quality; however, creating such a framework is likely to require policy changes, industry restructuring, and new incentives. Adding complexity, the Middle East has a significant shortage of local health care talent, as numbers indicate the dominance of expat communities in both the nursing and physician professions.

GCC countries also are trying to improve health care provision at home to discourage the tradition of publicly funded treatment abroad for patients needing specialist care and complicated surgery. The health ministry in Saudi Arabia, for example, is building five "medical cities" which will focus on specialist treatments, complicated surgeries, and treatment of rare diseases.<sup>89</sup>

#### South Africa

Market Fact: South Africa has the largest health care market in Africa, estimated to be worth approximately \$31.5 billion at the end of 2013; pharmaceuticals make up approximately \$3.7 billion of this figure.<sup>90</sup>

Health care spending in South Africa is expected to rise by an annual average of 8.8 percent in local currency terms between 2013 and 2017, with spending as a proportion of GDP remaining stable during the period, at 8.5 percent.<sup>91</sup> Expenditure between the private and public sectors in South Africa is at a near 50/50 parity,<sup>92</sup> with the latest full-year figures from WHO showing government expenditures on health as 48 percent of total expenditures and the private sector figure at 52 percent.<sup>93</sup> Despite the private sector being the slightly larger half in spending terms, only 17 percent of the population benefits from access to private health care via medical schemes (which are often considered too expensive for the majority of the population).<sup>94</sup> However, when out-of-pocket expenditures are also taken into account (mainly from practitioner access such as GPs and dentists) the estimated figure increases to 28-38 percent of the population making use of private services. The national treasury estimates that \$1.7 billion was spent on out-of-pocket expenditures in 2011/2012;95 this suggests there is demand for private health care outside traditional medical schemes and that opportunities for new business may exist in this space.

As is increasingly the case in many developing countries, South Africa is considered to suffer from a double burden of disease, with communicable disease putting strain on the health care system alongside growing instances of non-communicable disease.<sup>96</sup> HIV/AIDS in particular is a key area of focus within communicable disease, with 5.26 million, or 9.9 percent, of South Africa's approximately 53 million residents estimated to be living with it.<sup>97</sup> Further, 17.9 percent of individuals aged 15-49 are estimated to be

<sup>87</sup> Healthcare Briefing & Forecasts: Middle East/Africa Healthcare Outlook, Economist Intelligence Unit, July 24, 2013

- <sup>90</sup> Business Monitor International, "South Africa Pharmaceuticals and Healthcare Report Q1 2014," 2014
- <sup>91</sup> Economist Intelligence Unit, "South Africa: Healthcare and Pharmaceuticals Report," March 25, 2013
- <sup>92</sup> 'Econex, "The South African Private Healthcare Sector: Role and Contribution to the Economy," Research Note 32, pp. 1-10, December 2013
- <sup>93</sup> World Health Organization, "Global Health Expenditure Database," January 12, 2014, http://apps.who.int/nha/database/DataExplorerRegime.aspx. Accessed 12 January 2014
- <sup>94</sup> Econex, "The South African Private Healthcare Sector: Role and Contribution to the Economy (Full Report)," Econex, 2013.
- 95 Ibid

<sup>&</sup>lt;sup>88</sup> Ibid <sup>89</sup> Ibid

<sup>&</sup>lt;sup>96</sup> Business Monitor International, "South Africa Pharmaceuticals and Healthcare Report Q1 2014," 2014. World Health Organization, "South Africa Health Profile," WHO, 2013. World Health Organization, "South Africa: Country Cooperation Strategy 2013-2014," WHO, 2013

<sup>&</sup>lt;sup>97</sup> Statistics South Africa, "Mid Year Population estimates 2013," May 2013, http://www.statssa.gov.za/publications/P0302/P03022013.pdf. Accessed January 10, 2014

infected.<sup>98</sup> Individuals aged 15-49 are considered to be in the most socioeconomically productive phase of their lives and, as a result, the government has increased spending and embarked on the world's largest anti-retroviral access campaign as a means to alleviate the socioeconomic effects of this reality.<sup>99</sup> The drive to increase spending in this regard presents significant opportunities for public-private engagement on how to improve access to medicines, make them more affordable in the long run, and make delivery of health care more efficient. From a non-communicable disease perspective, growth drivers include an aging population and rising incidence of chronic diseases: more than half the population is overweight and faces related medical conditions. In addition, the country faces a projected 17 percent growth rate in newly detected cancer cases from 2009 to 2020.100

Despite the number of physicians increasing from 0.70 per 1,000 of the population in 2008 to 0.80 per 1,000 of the population in 2012,<sup>101</sup> the South African health care sector, particularly the public sector, is considered to be overburdened. The aforementioned physician per 1,000 of the population figures are still well below the OECD average of 3.1 percent; and it is estimated that 37 percent of GPs and 59 percent of specialists were actually operating in the private sector, further highlighting the capacity constraints in the public sector.<sup>102</sup>

To address the disparity between the public and private sectors, the government has proposed creating a National Health Insurance (NHI) system to ensure that all citizens have access to essential health care. Early projections suggest that the system, which is to be funded by personal taxes and mandatory employer contributions, will cost around \$16.4 billion to implement over nine years. Phase one launched in April 2012 as a pilot program in 11 (out of 52) districts (focusing on primary public health service delivery) but funding for the pilot areas is small — just \$1.2 million per district — and the government said that it is expecting legal challenges from some private health care providers.<sup>103</sup> Private health plans would remain intact as part of the NHI initiative; in fact, the government would contract with the private sector for some health care services. However, under NHI, private plans would lose their preferential tax treatment and the timelines as to when successive phases of the system will begin are not clear.

Health care infrastructure is a topic of growing importance in South Africa. Private sector-derived data indicates that in 2013 there were 314 day clinics and private hospitals in South Africa, allowing for a total of 34,572 private beds within the three largest South African-based hospital groups making up 70 percent of the market.<sup>104</sup> Public sector statistics from the National Healthcare Facilities Baseline Audit (2012) show that the National Department of Health estimates that the country had a total of 3,800 public health facilities and a total of 48,809 beds available across the board at the time of the audit.<sup>105</sup> These figures indicate that South Africa has a good baseline capacity to build on, in both the private and public sectors, should the appropriate growth and investment strategies be put into place. In addition, private hospital groups have offered to provide support to the public sector in areas such as training, patient administration, and pharmacy management. The government is also eager to promote public-private partnerships (PPPs).<sup>106</sup>

<sup>98</sup> World Bank, "World Bank Databank," 2014, http://data.worldbank.org/topic/health. Accessed January 12, 2014

<sup>&</sup>lt;sup>99</sup> Business Monitor International, "South Africa Pharmaceuticals and Healthcare Report Q1 2014," 2014

<sup>&</sup>lt;sup>100</sup> Economist Intelligence Unit, "IMS TPM Audit, Deloitte South Africa Analysis," 2012. Business Monitor International, "South Africa Pharmaceuticals and Healthcare Report Q1 2014," 2014

<sup>&</sup>lt;sup>101</sup> World Bank, "World Bank Databank," 2014, http://data.worldbank.org/topic/health. Accessed January 12, 2014

<sup>&</sup>lt;sup>102</sup> Economist Intelligence Unit, "South Africa: Healthcare and Pharmaceuticals Report," March 25, 2013. Econex, "The South African Private Healthcare Sector: Role and Contribution to the Economy," *Research Note 32*, pp. 1-10, December 2013. Econex, "The South African Private Healthcare Sector: Role and Contribution to the Economy (Full Report)," Econex, 2013

<sup>&</sup>lt;sup>103</sup> Economist Intelligence Unit, "South Africa: Healthcare and Pharmaceuticals Report," March 25, 2013. World Health Organization, "South Africa: Country Cooperation Strategy 2013-2014," WHO, 2013. Business Monitor International, "South Africa Pharmaceuticals and Healthcare Report Q1 2014," 2014

<sup>&</sup>lt;sup>104</sup> Econex, "The South African Private Healthcare Sector: Role and Contribution to the Economy," *Research Note 32*, pp. 1-10, December 2013. Econex, "The South African Private Healthcare Sector: Role and Contribution to the Economy (Full Report)," Econex, 2013

<sup>&</sup>lt;sup>105</sup> National Department of Health, "The National Healthcare Facilities Baseline Audit," 2012

<sup>&</sup>lt;sup>106</sup> Economist Intelligence Unit, "South Africa: Healthcare and Pharmaceuticals Report," March 25, 2013

#### United Kingdom

Market Fact: Over the last three years, the U.K. government has increased health care funding by only 0.1 per cent in the face of increasing demand of around four per cent per year. This has resulted in stringent austerity measures being applied, including staff pay freezes, pressure on pharmaceutical and medical technology spending, and rationing of some services. The current requirement to achieve around four percent annually in productivity and efficiency savings by 2014-2015 is likely to continue to 2020-2021; in the absence of changes to the delivery model, the funding gap is likely to increase to \$47 billion.<sup>107</sup>

Total health care spending in the United Kingdom (U.K.) was an estimated \$235 billion in 2012 and is expected to rise to \$292 billion by 2017, with the ratio of spending to GDP increasing to 10.3 percent.<sup>108</sup> Unfortunately, constraints on government spending mean that the National Health Service (NHS) may be facing its tightest budgetary squeeze since the 1950s, with expectations that spending will be constrained at least for the next couple of years.<sup>109</sup> Insufficient funding to meet rising demand may lead to tighter reimbursement policies, as well as rising patient out-of-pocket costs.<sup>110</sup>

Since 1948, the U.K. has had a tax-funded health care model, with universal coverage free at the point of need. The government sets a limit on how much it is prepared to pay for health and commissioners receive a proportion of this budget calculated on the basis of a formula which assesses needs in accordance with levels of deprivation and other demographics. Commissioners then use this funding to order hospital, primary care, mental health, and other health care services and are performance managed to remain within budget. The U.K. has a small, private health care market, which is dominated by the long-term care sector, followed by acute care, psychiatric care, private medical insurance, and primary care sector. A recent decline in private expenditures on health care has been partially offset by an increase in self-pay spending, and real growth in NHS purchasing from the private sector, in the past three years. Recent reforms have resulted in longer waiting times in NHS hospitals and restrictions in availability of certain treatments and procedures, which has led to the growing interest in selfpay health care. The outlook of the private health care market over the next five years is expected to be positive, with an average annual growth rate of five percent. The long-term care market is expected to remain the largest private health care sector.

The top issue facing the NHS and public health care sector in 2014 is the growing demand for services driven by the U.K.'s aging population and the increasing burden of chronic and lifestyle-related diseases, such as cancer, coronary heart disease, diabetes, dementia, and obesity. There has also recently been an increase in the number of births, which is putting increasing pressures on obstetrics, gynecology, and maternity services. Other high-profile issues include a focus on quality of care following several damning reports on mortality and poor hospital care which, in turn, is leading to increased regulation and provider rating systems. The Care Quality Commission (CQC), the regulator of health and adult social care in England, aims to ensure that hospitals, care homes, dental and GP surgeries, domiciliary and all other care services provide people with "safe, effective, compassionate and high-guality care, and encourages them to make improvements."111 Different legislation and inspection regimes apply to health and social care providers in Scotland, Wales, and Northern Ireland. The private health care sector faces many of the same regulatory issues as the NHS, since in order to deliver NHSfunded services, providers also need to be registered with and inspected by the CQC.

 <sup>&</sup>lt;sup>107</sup> NHS and social care funding outlook to 20221-22, Research report commissioned from the Institute of Fiscal Studies by the Nuffield Trust. Published July 2012, http://www.nuffieldtrust.org.uk/sites/files/nuffield/publication/120704\_nhs-social-care-funding-outlook-2021-22-update2.pdf
<sup>108</sup> Healthcare Briefing and Forecasts: United Kingdom: Healthcare Report, Economist Intelligence Unit, August 1, 2013

<sup>&</sup>lt;sup>109</sup> NHS and social care funding outlook to 20221-22, Research report commissioned from the Institute of Fiscal Studies by the Nuffield Trust. Published July 2012. http://www.nuffieldtrust.org.uk/sites/files/nuffield/publication/120704\_nhs-social-care-funding-outlook-2021-22-update2.pdf

<sup>&</sup>lt;sup>111</sup> Care Quality Commission Strategy 2013 to 2016 http://www.cqc.org.uk/sites/default/files/media/documents/20130503\_cqc\_strategy\_2013\_final\_cm\_tagged.pdf

To control costs and improve quality, U.K. health care providers are looking to implement delivery models that are more efficient and cost-effective than hospital care, such as home- or community-centered care. Stakeholders concur that there is need for an integrated health and social care system, including integrated budgets. In addition, given reductions in the numbers of suitably qualified staff across all care settings, clinicians are developing shared electronic health records and adopting assistive technologies to work more efficiently with patients and reduce demand for labor-intensive, face-to-face care.<sup>112</sup>

In light of a growing level of financial deficits, commissioners are striving to adopt more outcomesbased commissioning. Many are working with provider organizations to introduce complex and politically sensitive service reconfigurations across their health economies. Among key levers are moving from volumeto value-based payment models; population health care management schemes; and supported self-management/ patient engagement models. All of these levers depend on developing a robust technology infrastructure to create the information and workflow tools that will enable this transformation.

Finally, good quality primary care remains an essential feature of the U.K. system. However, primary care is increasingly challenged by tightening budgets, an aging workforce, and growing demand from an aging population. This has led to rising demand for GP appointments; calls for GPs to resume responsibility for out-of-hours care; difficulties recruiting and retaining sufficient medical and nursing staff; and reduced funding for primary care as a proportion of the total funding for the NHS. These challenges are variable in nature but may be overcome by both short-term actions — the newly released GP contract is one example — and by longer-term actions, such as reconfiguration and structural changes.

#### Asia/Pacific

#### Australia

Market Fact: In August 2012, the government announced that it would spend around \$4.1 billion over six years to provide free dental care for children and those on low incomes.<sup>113</sup>

Australians generally enjoy good health outcomes, with average life expectancy being one of the highest in the world. The country's health care expenditure continues to grow, spurred by the country's aging population, treatment and technology advances, and consumers' increasing awareness of health-related issues. Health care spending in 2012 was an estimated 11.3 percent of GDP, with two-thirds of the total from public sources.<sup>114</sup> Annual per-head spending in 2012 was an estimated \$7,602 and is projected to rise nominally to \$7,634 – or average annual growth on a per-head basis of 0.1 percent – by 2017.<sup>115</sup>

The majority of Australia's health care funding is provided by the state through a long-standing system known as Medicare. Contributions are made through taxes and a levy based on taxable income. Medicare provides free hospital care and subsidizes spending on non-hospital care, such as doctors' consultation fees. Medicare pays for medicines provided in public hospitals and a Pharmaceutical Benefits Scheme (PBS) subsidizes the cost of drugs prescribed elsewhere. Doctors' fees for private-hospital patients are partly paid by Medicare, but all other charges must be paid by the patients themselves or by their private insurers.<sup>116</sup>

Over the past decade the Australian government has encouraged consumers to buy private health insurance to help reduce Medicare costs; however, the proportion of Australians covered by private health care has grown only slightly since. Currently, the country has 36 private health care funds; the largest is Medibank Private, which accounts for about one-third of the market. Medibank is a for-profit company that is currently owned by the federal government.

<sup>&</sup>lt;sup>112</sup> Deloitte LLP Centre for Health Solutions. Primary care Working differently http://www.deloitte.com/assets/Dcom-UnitedKingdom/Local%20Assets/ Documents/Industries/Life%20Sciences/uk-ls-telehealth-telecare.pdf

<sup>&</sup>lt;sup>113</sup> Australia: Healthcare Report, Economist Intelligence Unit, August 8, 2013

<sup>&</sup>lt;sup>114</sup> Episcom estimates, as cited in Australia: Healthcare Report, Economist Intelligence Unit, August 8, 2013

<sup>&</sup>lt;sup>115</sup> Australia: Healthcare Report, Economist Intelligence Unit, August 8, 2013 <sup>116</sup> Ibid

Like many health care systems around the world, funding, provider reimbursement, regulatory uncertainty, and rapid technological change are among the issues facing Australia in 2014. The country also is challenged by workforce shortages; the ratio of doctors to patients was an estimated 2.8 per 1,000 in 2012, fairly low for an industrialized nation.<sup>117</sup>

To address these challenges, health care providers and payers in Australia should consider changing their care and business models to focus on innovation, efficiency, and safety; regulatory compliance and strategic risk management; personnel recruitment, retention, and development; and technology investments.

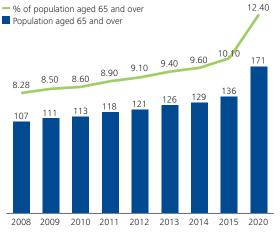
#### China

Market Fact: China's rapidly rising income level and dramatic increase in Internet and mobile phone usage are increasing patients' ability to pay for treatment and driving new expectations for quality of care.

Health care spending in China is expected to near \$890 billion a year by 2017, growing by an average rate of 13.8

#### Figure 5: China's aging population vs. global comparison group

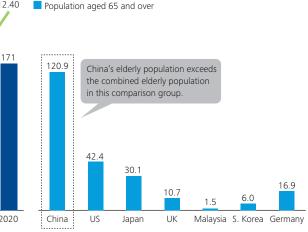
### Aging population in China (2008–2020F)



percent annually in local currency terms from 2013-2017. Total spending is forecast to reach the equivalent of 5.9 percent of GDP by 2017, up from an estimated 5.3 percent in 2012.<sup>118</sup> The central government spent an additional \$125 billion in health care expenses above and beyond its planned expenditures over the past three years.<sup>119</sup> To address the huge divides in the quality of health care provision, the percentage of spending in rural areas (e.g., clinics, insurance, equipment and drugs) will rise faster than that in urban areas. However, total urban health care spending will remain far higher than rural expenditure in 2013-2017.<sup>120</sup>

Looking at demographic trends, China's population is aging (Figure 5), bringing attendant health conditions and creating demand for health care services and life sciences products. In addition, China is becoming increasingly urbanized — the proportion of urban population has grown from 36 percent in 2010 to 52.6 percent in 2012.<sup>121</sup> Urbanization and continued westernization of the population have driven lifestyle changes centered on an increasingly western diet, high prevalence of smoking, and increased pollution, which have materially changed the profile of disease in China.

#### Comparison of population 65+ Number in Million (2012)



Source: Economist Intelligence Unit Monitor Deloitte Analysis

<sup>117</sup> Ibid

<sup>&</sup>lt;sup>118</sup> Healthcare Briefing and Forecasts: China: Healthcare and Pharmaceuticals Report, Economist Intelligence Unit, June 7, 2013

<sup>&</sup>lt;sup>119</sup> Global life sciences outlook: Resilience and reinvention in a changing marketplace, Deloitte Touche Tohmatsu Limited, 2013

<sup>&</sup>lt;sup>120</sup> Healthcare Briefing and Forecasts: China: Healthcare and Pharmaceuticals Report, Economist Intelligence Unit, June 7, 2013

<sup>&</sup>lt;sup>121</sup> Global life sciences outlook: Resilience and reinvention in a changing marketplace, Deloitte Touche Tohmatsu Limited, 2013

2014 is expected to be an overall positive year for the health care sector in China but it will not be without its challenges. While the Chinese government has increased spending to expand the health care infrastructure and improve public insurance coverage as part of its reform objectives, health care spending correlates closely to China's overall GDP growth. The uncertainties surrounding China's recent economic results will likely impact the continued growth of China's overall health care environment and its stakeholders, particularly in the public sector. There have been encouraging signs that the country's private health care market and infrastructure are developing at a fast pace to meet the growing demand for high-guality health care. This expansion is expected to offer wideranging opportunities for providers, pavers, manufacturers, and investors; however, capitalizing on them will require innovation, collaboration and exploration to realize the financial returns companies are hoping for.

A key challenge for both the public and private sectors is the need to reduce prices while improving quality. The government will need to continue altering investments and policies to meet the country's growing demand for access and quality of care. Private payers will need to build networks and develop products specific to the country's consumer demographics and needs. Life sciences companies will need to develop innovative products to balance affordability and treatment applicability. Fortunately, China is seeing an era of partnerships across the public and private sectors: Local governments are cooperating with private insurance providers to manage public insurance funds. Life sciences companies are co-developing products and other core competencies and joining forces with distributors. More creative and borderless cooperation may surface in the near future.

China likely will adopt a tiered approach to meet the diverse health care demands of different regions and economic levels. For top-tier cities, the government is anticipated to allow health care offerings to improve to reduce the gap with more developed countries. Simultaneously, the government is developing a basic care environment for lower-tier markets. A wide range of pilot programs have already began to take place in various regions and localities; some may be adopted nationally while others remain regional due to political, economic, and demographic differences.

#### India

Market Fact: India's health care industry (which includes hospitals, medical infrastructure, medical devices, clinical trials, outsourcing, telemedicine, health insurance and medical equipment) is developing at a great pace and is expected to reach \$160 billion by 2017, according to Frost & Sullivan.<sup>122</sup>

Spending on health care in India is estimated to be five percent of GDP in 2013. Total annual health care spending is expected to more than double from 2012-2017, to \$201.4 billion, an average annual growth rate of 15.8 percent.<sup>123</sup>

The double-digit growth registered by India's health care industry can be attributed to several socio-economic factors, including increasing sales of generic medicines (under its \$5.4 billion policy to provide free generic medicines to the Indian people),<sup>124</sup> continued growth in chronic therapies, and a greater penetration in rural markets. Other growth drivers are heightened health awareness, increasing affluence, changing lifestyles resulting in higher incidence of related diseases, and increasing government expenditure on health care.<sup>125</sup> Greater penetration of health insurance has also aided the growth in health care spending. The Indian government plans to cover health insurance for 80 percent of the population by 2020 under its Health Insurance Vision 2020 (released in December 2013).<sup>126</sup>

<sup>122</sup> IBEF, December 2013 http://www.ibef.org/industry/healthcare-india.aspx

<sup>&</sup>lt;sup>123</sup> Healthcare Briefing and Forecasts: India: Healthcare Report, Economist Intelligence Unit, August 1, 2013

<sup>&</sup>lt;sup>124</sup> Reuters, July 2012. http://www.reuters.com/article/2012/07/04/us-india-drugs-idUSBRE8630PW20120704

<sup>&</sup>lt;sup>125</sup> Global life sciences outlook: Resilience and reinvention in a changing marketplace, Deloitte Touche Tohmatsu Limited, 2013

<sup>&</sup>lt;sup>126</sup> Hindu Business Line, December 2013. http://www.thehindubusinessline.com/industry-and-economy/banking/health-insurance-must-cover-at-least-80-of-indians-ficci/article5455224.ece

India's primary health care infrastructure and physician base remain inadequate despite the Ministry of Health and Family Welfare (MoHFW) expanding access into tier 1 and 2 cities through the National Rural Health Mission (NHRM). Also, a high out-of-pocket-expenditure by patients (>70 percent of total health care costs)<sup>127</sup> implies that many of them living in underinvested areas and either do not have access to health care or have to pay significantly more for treatment because they travel to larger cities and often get treated at a later stage of the disease. To address some of the nation's ongoing infrastructure deficiencies, the Ministry of Health & Family Welfare has allocated \$5.87 billion for near-term development.<sup>128</sup>

India's health care technology infrastructure is gradually improving and the industry is transitioning from paper files to electronic mediums. The country's Health Information Technology (HIT) market is expected to grow at a CAGR of around 22.7 percent from 2013-2015.<sup>129</sup> Indian health care providers plan to spend \$916.40 million on IT products and services in 2013, a seven percent increase over 2012.<sup>130</sup>

The global demand for low-cost, sophisticated medical treatments is expected to drive opportunities in the Indian medical tourism market. India has been experiencing an influx of patients from Africa. Commonwealth of Independent States (CIS) countries, the Middle East, Pakistan, Bangladesh, and Myanmar for organ transplants and orthopedic, cardiac, and oncology problems. The medical tourism market is expected to expand at a CAGR of 27 percent to reach \$3.9 billion in 2014 from \$1.9 billion in 2011.<sup>131</sup> Further, factors such as health care companies entering into management contracts to provide additional revenue streams to hospitals, the re-emergence of traditional (ayurvedic) medical care, and increasing establishment of R&D facilities by global life sciences companies will drive opportunities for health care industry growth in the coming years. Some of the select opportunities will be in diagnostic and pathology services, clinical trials, health insurance, and telemedicine.

#### Japan

Market Fact: People aged 65 and older make up one fourth of Japan's total population and the number of elderly is expected to reach about 35 million by 2025.<sup>132</sup>

Japan spent an estimated \$384 billion on health care in 2012 (about 8.15 percent of GDP), making it the thirdlargest health care spender in the world after the U.S. and China.<sup>133</sup> Because of the weak state of Japan's economy, total spending on health care is expected to rise only by an average of 2.7 percent a year in local-currency terms, reaching 9.7 percent of GDP by 2017.<sup>134</sup> Social-security funds are the main source of public expenditure on health, contributing 69.8 percent of total health care spending in 2011.<sup>135</sup>

In Japan, every citizen, including the unemployed, can enroll in the National Healthcare Insurance (NHI) system. A rapid increase in health care expenditures due to Japan's aging society and the growing prevalence of chronic diseases has prompted the government to launch a number of initiatives to control spending, such as encouraging the use of cheaper generic drugs and increasing preventive care and self-management of chronic diseases. However, reforms to date have fallen short of the overhaul needed to safeguard the health care system's long-term viability. Further changes are planned, including unifying and restructuring the different types of health insurance, changing the feepayment system, and establishing a new health care system for the elderly.<sup>136</sup> As well, the government is reforming the social security system to create a "21st century-type social security scheme," which aims to prioritize and streamline the provision of social security by 2025. An important element of the initiative is a shift from a "hospitalcontained" care-delivery and patient-support model to a "community-contained" model.

<sup>&</sup>lt;sup>127</sup> IBEF Pharmaceuticals Industry March 2013, (http://www.ibef.org/industry/pharmaceutical-india.aspx), (http://www.ibef.org/download/Pharmaceuticals-March-220313.pdf)

<sup>&</sup>lt;sup>128</sup> Global life sciences outlook: Resilience and reinvention in a changing marketplace, Deloitte Touche Tohmatsu Limited, 2013

<sup>&</sup>lt;sup>129</sup> IBEF Healthcare Industry, September 2013, http://www.ibef.org/industry/healthcare-india.aspx

<sup>&</sup>lt;sup>130</sup> *IBEF, Healthcare Industry in India,* December 2013

<sup>&</sup>lt;sup>131</sup> BEF, Healthcare Industry in India, March 2013

<sup>132</sup> National Institute of Population and Social Security Research. http://www.ipss.go.jp/index-e.asp

<sup>&</sup>lt;sup>133</sup> Healthcare Briefing and Forecasts: Japan: Healthcare Report, Economist Intelligence Unit, August 18, 2013

<sup>134</sup> Ibid

<sup>135</sup> Ibid

Most clinics and hospitals in Japan are privately owned and paid on a fee-for-service basis by insurers;<sup>137</sup> these fees are revised by the government every two years. In the 2014 revision, the cost control policy is expected to be tightened, including an increase in the cost borne by people aged 70 to 74. This action could reduce the number of patients that visit medical facilities, resulting in a revenue decline. Moreover, a rise in the consumption tax rate from five percent to eight percent in 2014 will reduce profitability unless medical fees are reasonably increased in accordance with the tax hike. Unfortunately, there are limited countermeasures that individual medical facilities can take to ease the impact; government relief measures likely will be needed.

In Japan, physicians often operate medical facilities through medical corporations, which usually consist of small-sized facilities that are capable of providing treatment for a range of acute and chronic diseases. Currently, these corporations are faced with selecting treatment functions that comply with the government's new social security scheme, or they risk profitability declines with each revision of medical fees. Organizations may need to reconsider their current business model and expand offerings to include, for example, nursing services that bridge care from medical facilities to community and home care.

#### Southeast Asia

Market Fact: Southeast Asia is, potentially, at the beginning of a health care tipping point, although this change will not happen overnight.

The outlook for Southeast Asia's health care sector continues to be positive, with relative growth for established players as they continue to dominate and enjoy a steady revenue stream that allows them to look into non-traditional, innovative health care business models, services, and geographic expansion.

In Singapore, for example, direct government spending on health care has risen from \$3.3 billion (8.5 percent of the government's budget) in fiscal year 2010-2011 (April-March) to \$5.7 billion in FY 2013-2014. The city state's total health care spending is expected to rise by an average of 7.9 percent annually (in U.S. dollar terms) until 2017.<sup>138</sup> Building on the world-class reputation of Singapore's health care services, the government is promoting the local industry as a regional center of excellence for general surgery and medicine, as well as specialist services including cardiology, oncology, and organ transplants.<sup>139</sup>

Most of Southeast Asia's spending on health care comes from the public sector, state-run insurance funds, and personal individual savings. Top issues for the public sector in 2014 include the need to control runaway health care costs and to meet citizens' demands for fair and equitable access to universal care/coverage. Because overall national health care expenditures as a percentage of GDP are projected to rise, governments are expected to begin employing sophisticated methods of cost containment such as risksharing agreements, cost-effectiveness assessments, generic drug promotion, and international price referencing versus previous blunt methods such as spending caps, allocating patient contributions, prescription controls, and mandatory price controls.

<sup>137</sup> Ibid

<sup>&</sup>lt;sup>138</sup> EIU Healthcare Briefings & Forecast: Singapore Healthcare and Pharmaceuticals Report, March 1, 2013

The private sector is seeking improved revenue growth and profitability. Profit margins for traditional health care services (e.g., general practice medicine, undifferentiated acute hospital care) are shrinking due to commoditization caused by the entry of patient aggregators/managed care organizations playing the role of middle man between the patient/payer and the provider, together with the entry of non-traditional players into the health care market. One reaction of private sector stakeholders is to grow into new, untapped markets. Standing in the way of direct organic geographical expansion, however, are regulatory hurdles and the protectionist stance of target countries' local governments and medical communities. An alternative strategy is inorganic growth through acquisitions or JVs, but these ventures are not without inherent risk, as even seasoned industry players have made missteps. Other growth strategies include expanding the medical tourism industry and exploring upstream and downstream areas of health care such as wellness and aged-care services.

Most governments are prepared to increase their spending allocation on health care in order to meet demand and this should have a positive impact on both the public and private health care sectors. Providers should consider offering a mix of generic services/treatments and bespoke niche services tiered to different market segments/geographies. In addition, organizations will need the ability to scale operations up or down depending on market demand and patient/consumer behavior. Smaller businesses might be squeezed on margins as certain segments of the value chain become commoditized or disrupted by bigger competitors or new industry entrants.

Expect to see the introduction of new payer models and business models based on health outcomes and value as governments begin to ease subsidy levels while trying to balance cost-control measures with the increasing demands for care, especially due to changing disease patterns (acute to chronic conditions) and the aging population. Adopting and leveraging disruptive and smart technologies, combined with innovative delivery models such as cross-sector/ geographic collaborations, may help bring forth practical and sustainable solutions for the region.

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