



**Deloitte.**

2015 Global life sciences  
sector outlook

Adapting to an era of  
transformation

April 2015

# Sector overview



## Market size

**Biotech**  
\$289 billion



**Pharma**  
\$1.23 trillion



**Med tech**  
\$364 billion

## Drivers

Aging population

Lengthening life expectancy

Increase in chronic diseases

Population growth

Rising wealth

# Sector overview

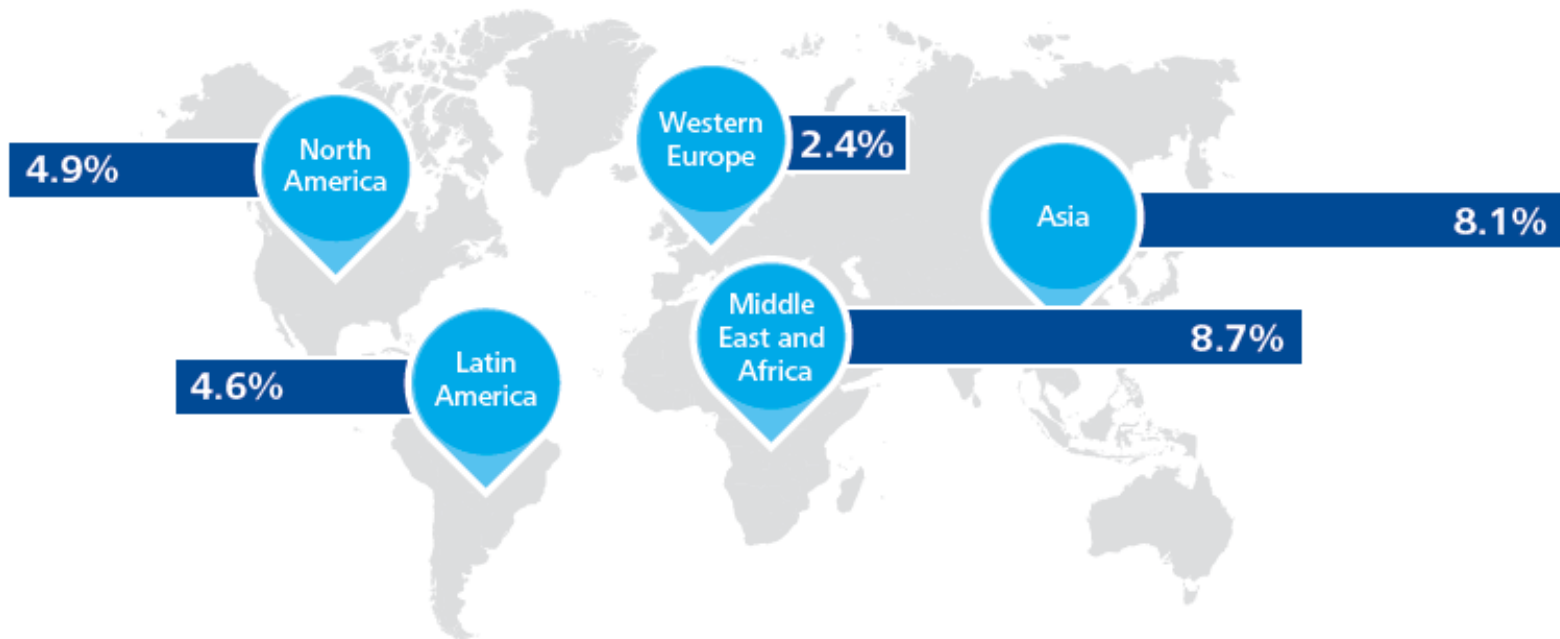


Global health care spend to grow at **5.2%** annually to 2018



% of GDP spent on health care globally is expected to decrease from 10.6% today to **10.3%** by 2018

## Where's the growth expected?



# Global Life Sciences and Health Care trends

# Global megatrends

- *Innovation and demand soars in emerging economies*
- *Personalized medicine drives technological innovation*
- *Aging populations overwhelm systems*
- *Spiraling costs*
- *Global pandemics*
- *Evidence-based medicine*
- *Health care professional shortage*
- *Payer influence over treatment decisions*
- *Growing role and influence of philanthropy*
- *Prevention versus curative*
- *Medical tourism*

Source: Harvard Business Review, April 5, 2010 blog article

# Top issues



# Top issues



## Cost increase factors



Higher premiums,  
OPP



Affordable Care Act



Overuse of services



Coverage expansion



Austerity measures

## Pressure to contain costs and demonstrate value is coming from all sides



Governments



Providers



Health plans



Life sciences  
companies



Consumers



Political uncertainty, persistent economic stress, and austerity measures in numerous countries are calling into question the sustainability of public health care funding

Continual cost increases and margin erosion are impacting all stakeholders



New value-based-care models focus on maximizing value (lower cost and higher quality) are being increasingly looked at as a solution

# Top issues



## Searching for innovation and growth

Companies continue to look for opportunities to replenish pipelines, foster innovation, and collaboration across the health care value chain, and seek revenue growth.



Use of  
generics



Loss of revenue  
from patent expiry



**\$700 billion**

M&A transactions in first half of 2014, surpassing entirety of 2013 and nearing totals of mega-merger years 2008 and 2010.



**R&D productivity** has been in decline, but recent trends indicate a turnaround may be under way:

- » NPV of sector's R&D pipeline surging
- » NME approvals rising
- » Phase III approvals increasing (only bringing the most promising drugs to this stage)
- » Restructuring R&D to focus on most promising areas
- » Government investment from many countries in sector R&D efforts
- » Specialty pharma could see growth surge



# Top issues



## Acclimating to a changing regulatory and risk environment

Life sciences sector has a robust, complex and evolving regulatory landscape, driven by patient health, safety, and protection at its core, but is also adapting to different requirements and mandates throughout the world.



**Transparency** in product commercialization, executive pay, financial information accuracy, manufacturing processes, and clinical trial quality.



## Security and privacy

Health care's digitization and the proliferation of EMRs, networked medical devices, mHealth, cloud and data sharing among industry stakeholders increases complexity. Frequency and pace of cyber-attacks are increasing.



**Drug and device safety** — product safety standards are tightening set against a backdrop of heightened regulatory scrutiny and patient advocacy in areas such as social media and affiliate marketing programs.



## Intellectual property protection

Continue to struggle to globally enforce intellectual property (IP) rights, particularly in some emerging markets.

# Top issues



## Adoption of new digital HIT advances is transforming the way stakeholders interact



### Technology

mHealth, telemedicine, AM, AI, diagnostics, wearables, big data, and analytics are seen as a potential way to improve the care process



### Challenges

Challenges exist in widespread adoption due to patient engagement, security, and privacy



# Top issues



**Preserving and building shareholder value** in an era of pricing pressures, generics competition, margin erosion, supply chain issues, and regulatory constraints, all of which can limit life sciences companies' ability to grow revenues. On the cost side, rising R&D expenses, marketing and sales outlays, and general operating cost increases can exert pressure on gross margins.



Governments in both developed and emerging markets are minimizing pharmaceutical spending growth by enacting **pricing** and **reimbursement** legislation.



Generic drugs account for around **70%** of the U.S. drug market by volume, but generics are feeling the pressure:



» Tighter price controls and other sales constraints are impacting



» Downstream effects of slowing patent expiries



» Increased global competition



**Supply chain** — Learning how to understand and control supply chain operations at “arm’s length” is an inherent challenge for life sciences companies doing business in the global marketplace.

Counterfeit drugs are a **\$35-\$40** billion-a-year global business.



# Top issues



## Increasing role of government

Governments introducing broad reforms to cut cost and improve quality



## Scale to prosper

Vertical and horizontal integration, cross-industry M&A



## Competition for talent

Number of doctors to remain flat, uneven distribution of caregivers, opportunities outside of home markets



## Improving access to care

Emerging market expansion, innovative solutions outside of traditional models

Adapting to market forces



## Consumerism

Patients engagement increasing due to rising out-of-pocket costs, more choice, better access to information and shift to patient-driven health care models



**Globally, the number of doctors per 1,000 population is expected to remain virtually the same between 2012 and 2015**

# Top issues



## Environment is complex and evolving



Much focus on drug and patient safety



Protected health information impacted by security breaches and cyber attacks



Push for payment transparency continues to take center stage



## Health care security and privacy challenges

Safeguarding security and privacy likely to become more challenging with the evolving health care landscape

New technologies



EHR/ePHI



Risk data flow  
and number of players



Health care stakeholders

Escalated risk



Population health/  
new care models



Growing consumerism



PHR

Increased regulatory scrutiny



# Top issues



**Preparing for the 'next wave'** — Life sciences companies will need to develop capabilities to provide real-world evidence of positive patient outcomes, potential products, manufacturing capabilities, value-based pricing and contracting, reimbursement, market access, and marketing.

## New stakeholders, new conversations

The changing roles and influence of stakeholders along the care continuum call for a more cross-functional, collaborative customer model that effectively targets all critical decision-makers.



### Personalized medicine

The alignment of science, education, research, informatics, and training is enabling a more personalized approach to life sciences product development and, in the process, transforming the future of health care decision-making and delivery.



### Technology-enabled health care

Technology innovation to health care delivery (wearables, sensors, digital medicine, and novel drug delivery systems) can help to drive down costs and improve treatment regimens.



### The 'next' emerging markets

As growth in developed markets slows, life sciences companies are expected to continue expanding their presence in emerging markets through acquisitions and joint ventures.



### Talent

Life sciences companies are competing globally for increasingly scarce technical and professional skills. A recent survey showed that **75 percent** of respondents rated workforce capability as "urgent" or "important"; however, only **15 percent** believe they are ready to address it.



# Regional Life Sciences and Health Care trends



# Regional Life Sciences and Health Care trends

## EMEA

### The life sciences and health care industry in EMEA include:

- Demand drivers in developed and transitional economies, including an increase in medical tourism and growing obesity and chronic age-related diseases.
- Western Europe is seeing austerity measures such as growth slowing in health care spending despite changing demographics, and more stable markets (UK, France, and Germany) using the Euro crisis to push broader health care reforms. Also, cost-cutting measures include targeting pharmaceutical sales such as reduced market access and higher pharmaceutical sales tax, and demanding that products demonstrate superior patient benefits before granting reimbursement and marketing approvals.
- Central and Eastern European transitional economies are struggling to fund health care, with funding for novel drugs particularly challenging.
- Increasing pressure on regulatory and compliance (e.g., HCP transparency).
- While Africa still represents a very high prevalence of infectious diseases, including HIV/AIDS, there is strong growth forecasted for larger African economies, with an increasing life expectancy leading to a shift in the disease burden to non-communicable diseases.

### Representative thought leadership

#### Sustainable Public Pharmaceutical Expenditures Financing Model - Roadmap and Process Management

- This report reviews important areas of reform for maintaining sustainability in the pharmaceutical sector and developing a roadmap for the public financing model of pharmaceutical products.

#### Measuring the Return from Pharmaceutical Innovation 2014

- This fourth annual series explores the pharmaceutical industry's performance in generating a return from its investment in new product innovation

### Regional industry centers

- UK Centre for Health Solutions
- Deloitte Belgium's Health Economics Services





# Regional Life Sciences and Health Care trends

## North America

### The life sciences and health care industry in North America is seeing:

- Demand and growth drivers in spending around such factors as aging populations, growth in obesity, and the conversion of terminal disease into chronic illness.
- Health care reform provisions, including increases in government funding and broader insurance coverage, provisions which may pressure life science industry margins and growth of branded drugs.
- Market forces like bundled payments and accountable care organizations (ACOs) that are driving transformative innovation and shared clinical/financial responsibility.
- Changing reimbursement models in the U.S. that are increasingly more focused on comparative effectiveness with an emphasis on big data.
- Canadian price controls that could challenge drug makers' revenues and weak patent protection, including the U.S. placing Canada on its "Priority Watch List" for patent protection.

### Representative thought leadership and market presence

#### Affordable Care Act Timeline

- This ACA timeline highlights key health reform provisions taking effect from 2010-2018, including the establishment of key programs and new agencies, new requirements for industry, and changes to Medicare and Medicaid.

#### Health Care Current

- The Health Care Current includes weekly information about such topics as legislation and industry news.

#### 2012 Survey of U.S. Health Care Consumers

- This Issue Brief highlights data-driven insights on consumers' perceptions of the health care system and their thoughts on health care reform.

### Regional industry centers

- Center for Health Solutions
- Center for Innovation
- Center for Corporate Governance
- Center for Cyber Innovation
- Center for Financial Solutions
- Center for Regulatory Strategies
- Center for Security & Privacy Solutions
- Center for the Edge
- Forensics Center
- DC Innovation



# Regional Life Sciences and Health Care trends

## Asia-Pacific

### The life sciences and health care industry in Asia-Pacific include:

- An aging population – for example, in Japan, a quarter of the population is now age 65 or over.
- Increases in personal income.
- Investments in government health care in China and increased private domestic investment.
- Governments addressing high costs of healthcare, for example through price controls and generic drugs.
- Increased government spending to enhance health care infrastructure, particularly in Southeast Asia.
- Health care reform programs in Australia, China, and India to improve health care access.
- Medical tourism hubs in Singapore, Malaysia, and Thailand.
- Multinational investment in Southeast Asia for low-cost clinical trials and R&D.

### Representative thought leadership

#### **Fortune Favors the Bold: Unlocking the future of China's Pharmaceutical market**

- This report explores the key events of the past 24 months in the China health care market and explores four key themes pharma companies should consider as they think about their future in China

#### **Justified optimism? Gauging corporate sentiment in Asia**

- How worried are companies in the Asia-Pacific region about the potential impact of a crisis in the Eurozone and a global recession?



# Regional Life Sciences and Health Care trends

## Latin America

### The life sciences and health care industry in Latin America include:

- An expanding middle class, particularly in Brazil and Mexico.
  - The rise of the aging population and increased prevalence of chronic disease and obesity.
  - Population increases and economic growth.
  - New dimensions around market access, including changing government dynamics (registration, etc.).
  - In Brazil, a health care reform program (extending total healthcare coverage, quality, and access), a strong local generics industry (the largest in Latin America) encouraged by government policies, a tighter pricing and reimbursement environment, and increased use of pharmaceutical data to determine reimbursement in public/private sectors.
  - Favorable regulations and a growing health care market that is attracting foreign entrants in various health care sectors in the region.
  - In Mexico, a health care system that consists of a large, under-resourced and over-used public sector, and a much smaller, well-funded, and well-equipped private sector that caters to a small, wealthy population.
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### Representative thought leadership

#### Health Care Reform and Life Sciences: Threat, Opportunity or Both?

- This Economist Intelligence Unit study, developed in collaboration with Deloitte, examines the common elements of the recent wave of global reform, national differences through three case studies, and how life sciences companies are reacting.
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