

“Forum of innovation of the health sector as an incentive to productivity”

“Virtual Democratization of care”

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Woodrow Wilson
International
Center
for Scholars



What is a new entrant?

A disruptive, recent arrival to a market or industry. These may include companies whose core businesses reside entirely outside of the new industry, or businesses expanding into new roles.

- ***New entrants are poised to disrupt the world's healthcare market***, which is estimated to be around ***US\$9.59 trillion***

The world faces many healthcare challenges

In the emerging markets, lack of healthcare access continues to be a challenge.

Challenges in developing markets



Lack of healthcare access



Increasing incidence of chronic diseases



Lack of infrastructure

In the developed world, rising healthcare costs are an ongoing problem.

Challenges in developed markets



Rising healthcare costs



Ageing populations



Increasing incidence of chronic diseases

In 2012 Mexico spent 6.2% of GDP or approximately \$73 billion on healthcare and is projected to continue increasing



Mexico ranks 14th in the global economy, 16th in exports, and 11th in the world market of health products



Pharmaceutical & medical device industry is projected to grow from \$17.6 billion in 2013 to \$27.9 billion in 2020



Key drivers of growth include a growing and aging population, an increasing incidence of chronic and life-styled related diseases, accelerated urbanisation and increased access



Mexico's public expenditure on healthcare increased significantly due to health care reform and in 2012 represented 52% of healthcare spend.

Population growth and chronic diseases will continue to place strain on Mexico's health systems

Current State

Insufficient workforce

Physicians per 1,000 population



Mexico

2.1 physicians



US

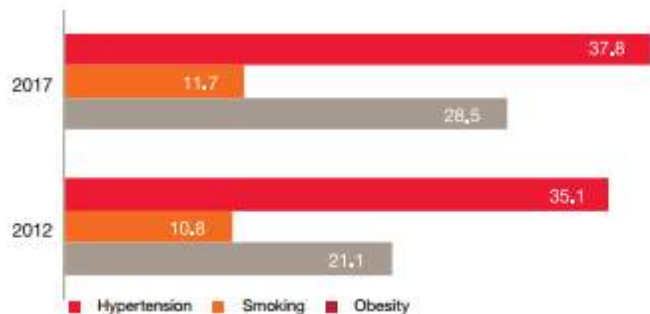
2.6 physicians



Canada

2.5 physicians

Prevalence of Lifestyle disorders (mm)



Highly Urbanised Population

In 2010 the urban population was estimated at 86% which represents a 17% rise from just 5 years prior.

Future State

Mexico's 15-64 Year Old Population

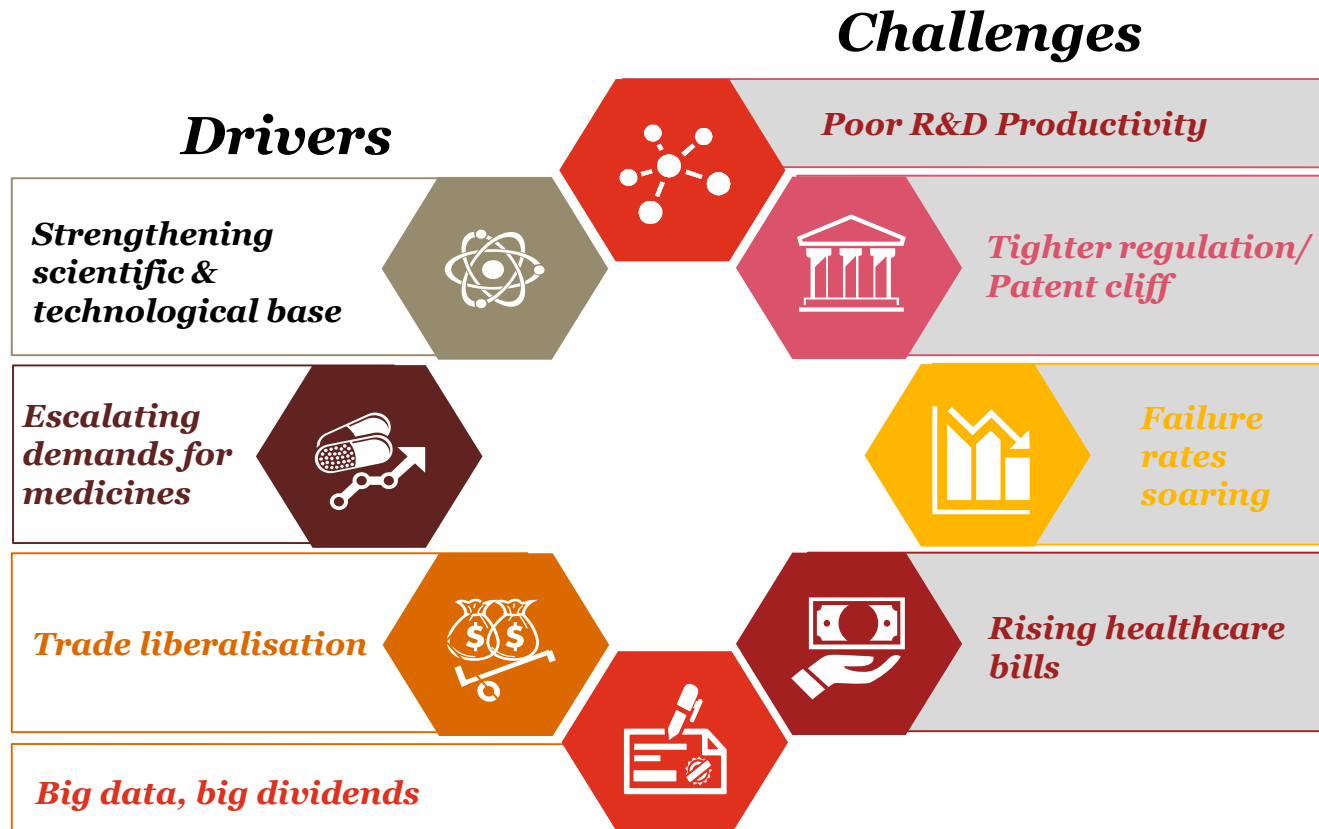


As the Mexico's population continues to grow, the demand for healthcare workers and health facilities will continue to increase, as will the number of people diagnosed with chronic diseases

The confluence of these factors will place an incredible burden on Mexico's healthcare systems which will be unsustainable in the mid- to long-term

Therefore, Mexico will need to leverage new and novel approaches to ensure that people have adequate access to quality care

Pharma industry : The best of times, the worst of times...



In Mexico, changing regulations, distribution and patient empowerment present opportunities

Opportunities

Changing regulations to encourage new players

Shift toward towards consumers and patients

Opportunities for contract manufacturing



Challenges



Changing distribution channels

Delays in regulatory approval of new medicines

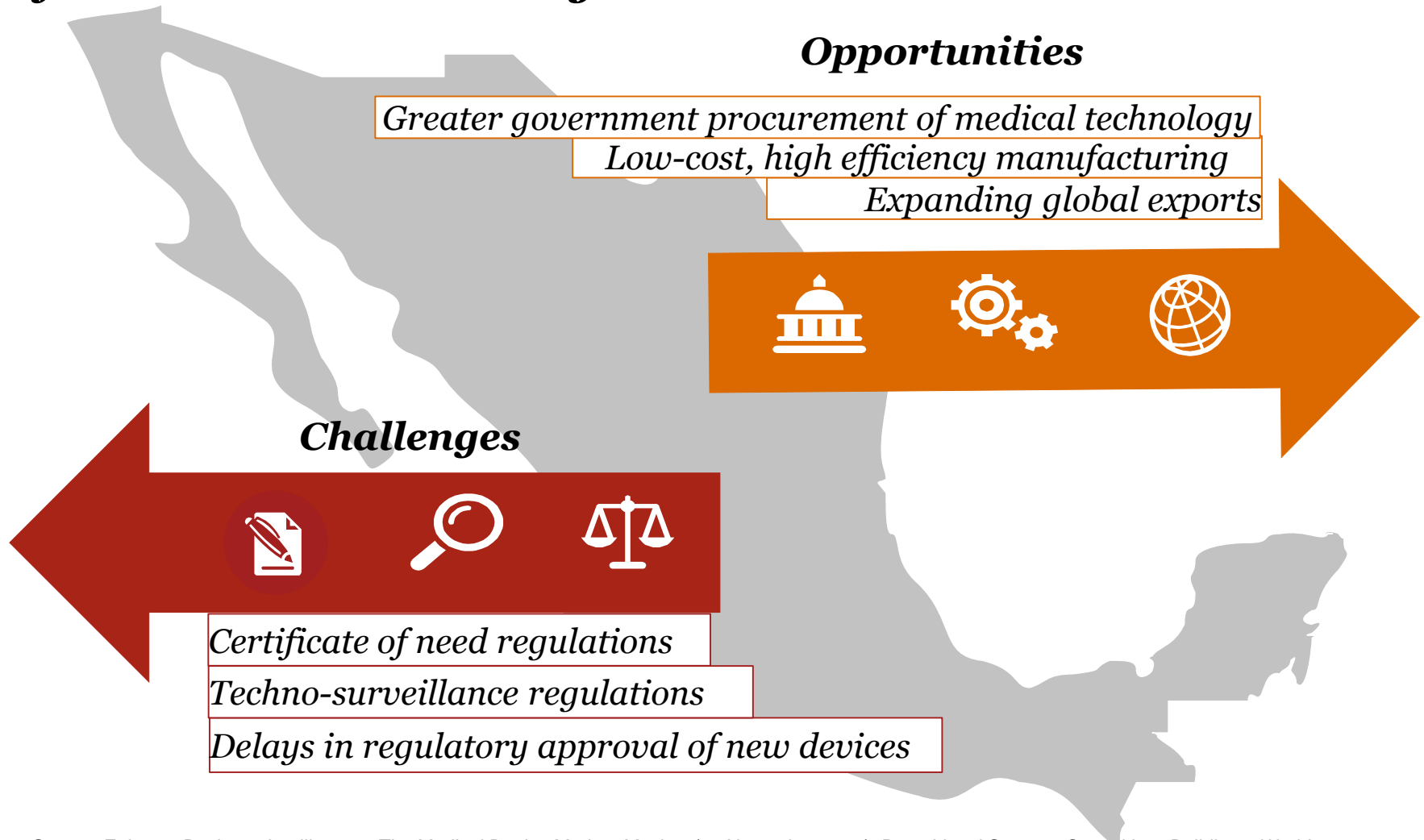
Increasing price pressure & outcomes based reimbursement

Medical technology: once the poster-child of the healthcare is in trouble



Source: Strategy&

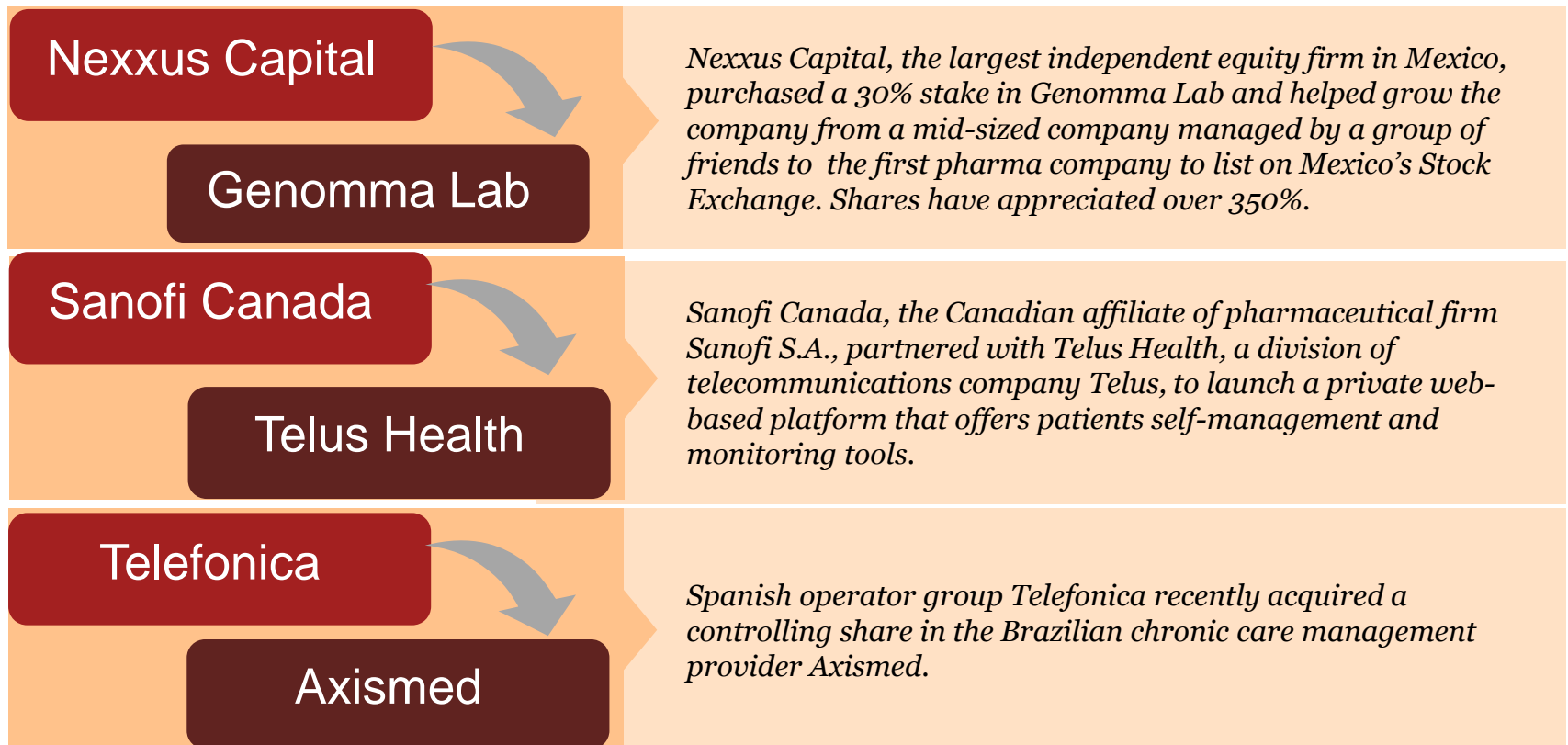
Manufacturing and exporting products present possibilities for the medtech industry in Mexico



Source: Episcom Business Intelligence, *The Medical Device Market: Mexico*, (18 November 2014); Peter Vogel Strategy Consulting, *Building a World Leading Medical Devices Ecosystem in Monterrey, Mexico* (2013)

The vast global arena is ripe for collaborations between incumbents and new entrants

With consumers now at the centre of healthcare, new business models that depend on collaboration are required. No single organisation has the requisite competencies needed to support the continuum of care.



Source: EMPEA (11 June 2012); "Telus Health partners with Sanofi Canada to launch Starsystem platform" news release, (28 May 2012); "SK Telecom Enters into the Chinese Healthcare Market" news release, (04 July 2014); Dawinderpal Sahota, "Telefonica eyes e-health opportunity with Brazilian acquisition", *telecoms.com*, (4 February 2013)

The leapfrog effect: developing countries can innovate faster

Innovations can spring more rapidly from emerging economies than from developed countries, where healthcare systems are more entrenched and regulated.

- **Where urgent needs prevail** in a less regulated environment, **health solutions** offered by new disruptive forces can **root more quickly**.
- **Technology is becoming less of a barrier**.
- **New entrants can test their products** and services in more receptive markets **before launching** proven business ventures **in more regulated nations**.

Telehealth and telemonitoring programs have been widely piloted in Latin America to provide increase healthcare access with documented success. Countries like the US are now starting to pilot similar programs to address access issues in rural America.

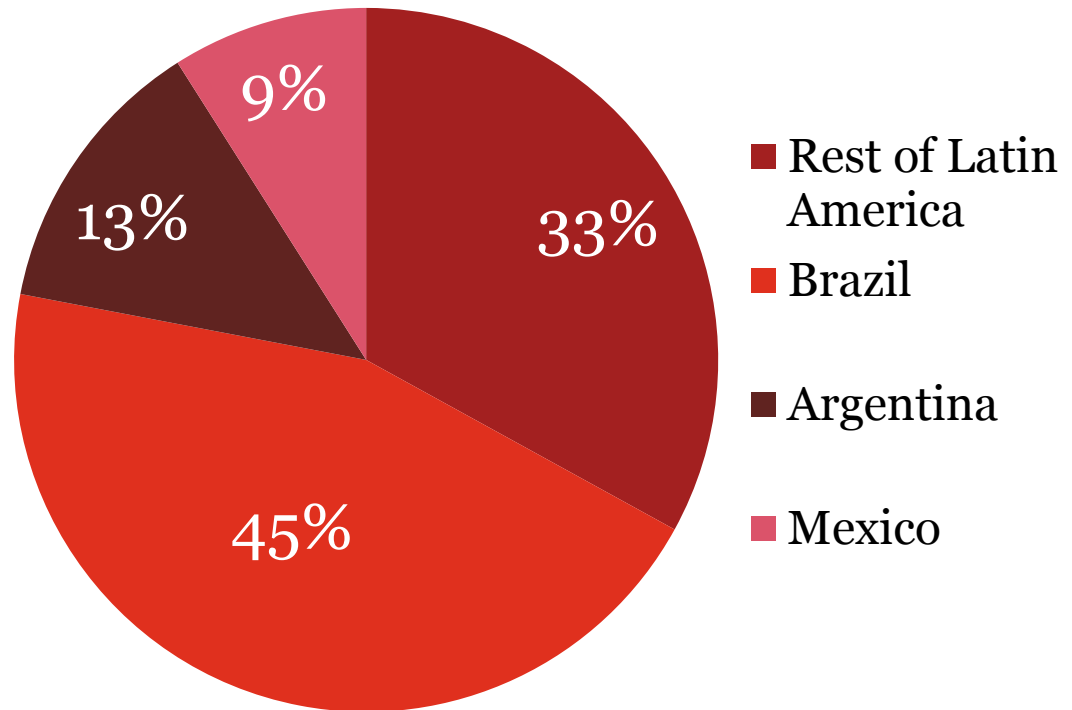


Source: Claire Read "Looking to Mexico for medical hotline innovation", HSJ, (8 April 2013)

Mobile health opportunity in Latin America is expected to be US\$1.6 billion in 2017

mHealth opportunity, 2017

- **Mexico, Brazil and Argentina** are expected to be the 3 largest mHealth markets
- **Mobile operators** are expected to lead the market with a bulk of their revenues coming from monitoring and treatment, followed by **device vendors** and **wellness applications**



Source: PwC, *Touching lives through mobile health: Assessment of the global market opportunity*, (February 2012)

As the world pivots towards the “virtualisation of care”, amazing breakthroughs can occur that erases boundaries



Global focus on driving wellness and preventive care as compared to episodic care



New business models in resource-poor settings



Integration of medical technology



Increased telecom penetration



Greater mobility in terms of health access



Increased patient and physician acceptance

Virtualisation of care: Mexico & US case studies

Medicall Home *Mexico*

Telehealth subscription service

- Partnership with TelMex, a leading Mexican telemedicine provider to provide telehealth services employing Cleveland Clinic define protocols
- Provides affordable and convenient access to primary care to over 5 million patients for as low as \$5 USD per month.
- Approximately two thirds of patients resolve their issues over the phone reducing the number of primary care visits.

AliveCor *US & India*

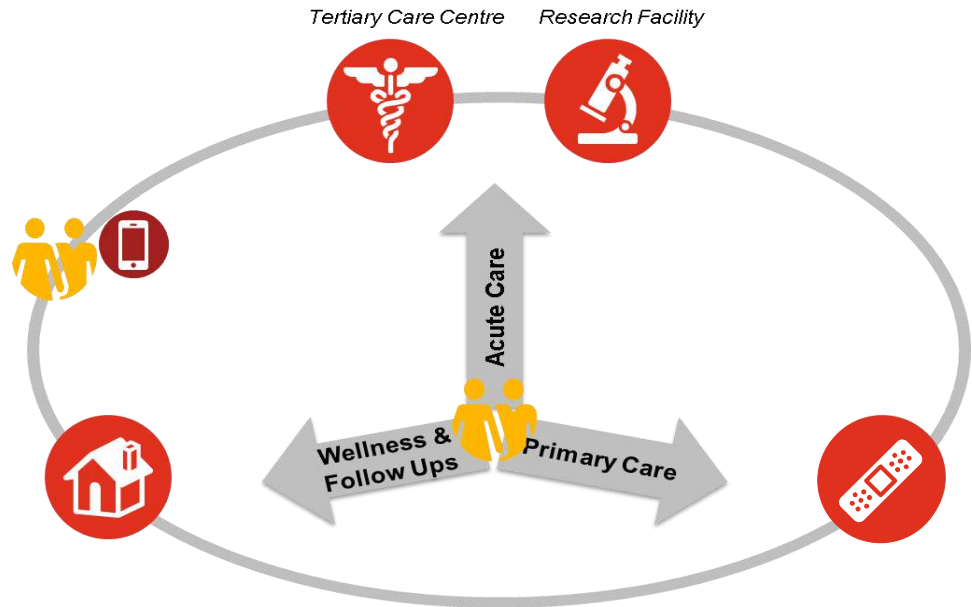
mHealth platform for cardiac patients

- To improve access of care, AliveCor, Inc., US maker of FDA-approved smartphone device to detect atrial fibrillation, partnered with Apollo Hospitals to provide smartphone-enabled devices to patients throughout India
- The devices will wirelessly record, display, store and transfer the heart rate and single-channel ECG to help prevent heart arrhythmia and strokes

Source: Claire Read "Looking to Mexico for medical hotline innovation", HSJ, (8 April 2013); "Apollo Hospitals and AliveCor Announce Exclusive Collaboration" news release, (9 September 2014)

The trend toward lower cost care settings is consistent in developed and emerging markets

- **Building much needed health infrastructure is a major challenge in many rapidly growing nations**, Mexico was the first country in Latin America to pilot healthcare PPPs to address its infrastructure challenges.
- **Fewer opportunities to build health facilities exist in developed markets** where governments and private providers are closing hospitals or converting them to chronic care facilities
- The trend over the past 15 years has been to move services out of the hospital to outpatient care; **now, the shift of services is to wherever the patient is**. In Mexico, there is a greater focus on early detection and wellness, exploring varying distribution channels to extend reach.



This trend is consistent around the world, reflecting the need for new entrants that can connect hardware, software, networks, diagnostics and biopharmaceuticals into integrated care solutions

Case study: Carlos Slim is partnering with telco to monitor high-risk pregnancies

“The current maternal mortality rate demands **innovative models of care** that use a systematic approach”

Roberto Tapia-Conyer
President
Carlos Slim Health Institute

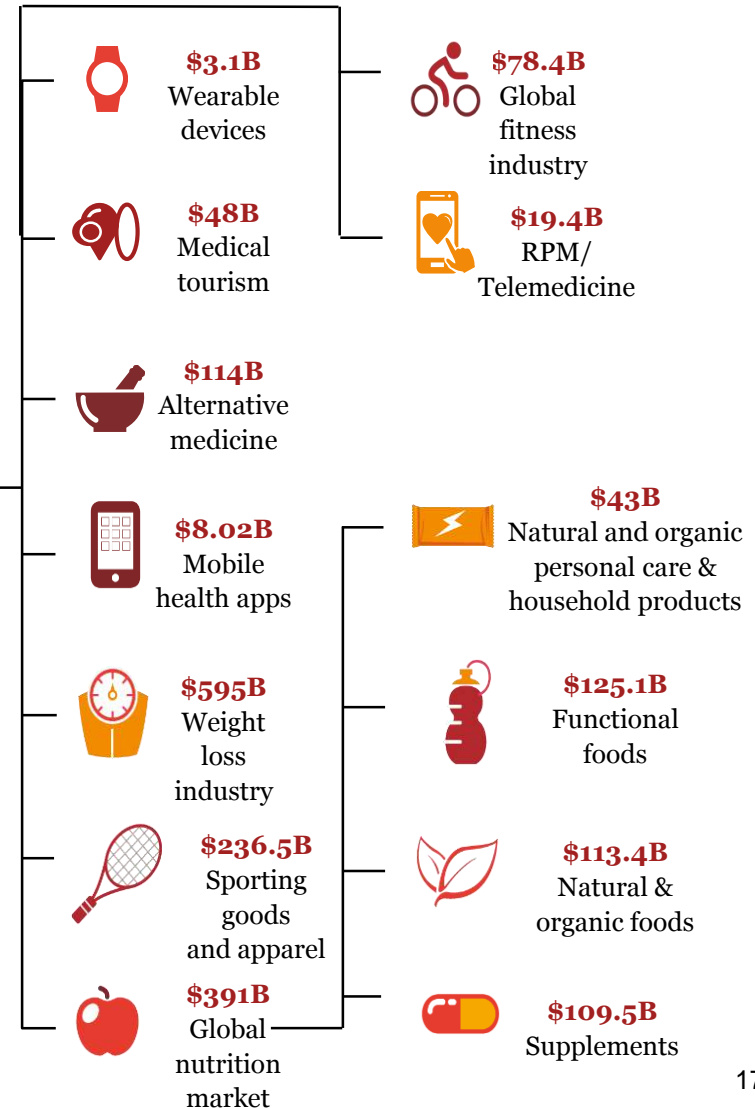
- The ***Carlos Slim Health Institute, created in 2007***, has collaborated with ***Qualcomm Inc.***, to ***develop a kit*** used by health professionals and community healthcare workers to ***monitor high-risk pregnancies***.
- The initiative was established in an effort to meet the ***UN Development Millennium Goals***.
- Innovations may find more fertile ground in ***developing countries***, such as Mexico, where ***access and quality of care is a prevalent concern***.

Source: “Carlos Slim Health Institute, West Wireless Health Institute and Qualcomm collaborate on maternal health kit”, news release (8 November, 2010).

The growing global wellness and fitness market offers a path of least resistance

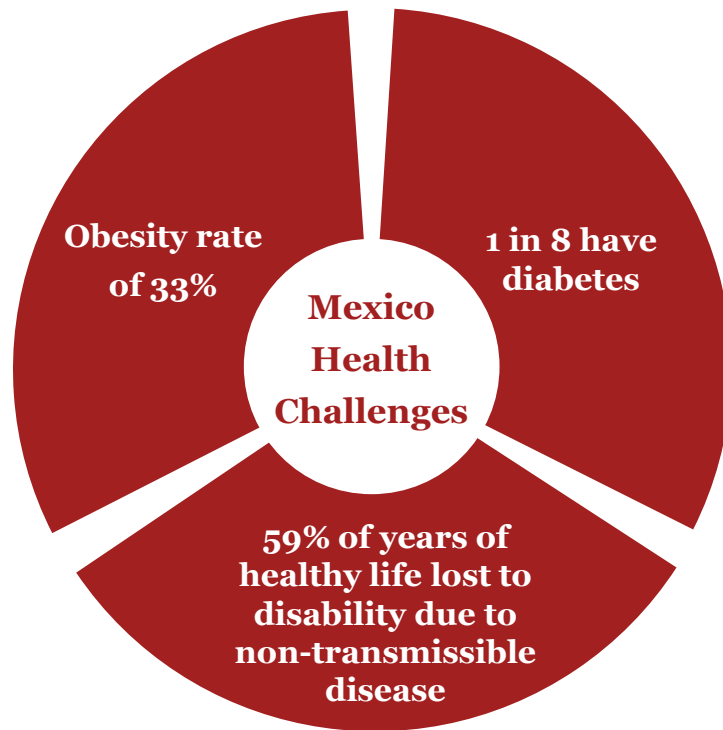
- **New entrants are already successfully offering services and products** such as fitness, reducing weight, etc.
- Growth in chronic diseases as nations become more affluent is **compelling governments to invest in preventative medicine**
- The **growing awareness of healthy workers as a corporate responsibility** is a strong trend in the developed world
- **Successful entrants are diversifying** into different products to improve profit margins

US\$1.49T
total global
ancillary/
wellness
market



Source: PwC analysis

Given the pervasiveness of non-communicable diseases in Mexico, the market is ripe for new entrants in the health and wellness space



Given the **steady rise of internet use in Mexico**, eHealth and mHealth are seen as promising mediums for **addressing obesity and poor lifestyle issues** in Mexico.



Qualcomm Wireless Reach piloted the Dulce Wireless Tijuana program, which employed **3G mobile technology to facilitate diabetes management** for a marginalised population in Tijuana, Mexico.



A recent study estimates that **32% of mobile and tablet users in Mexico use mobile apps** to access health and wellness information.

What this means for your business: Traditional and government providers

Choose partners wisely. Doing business with reputable new entrants provides an opportunity to build sustainable solutions that meet policy and business goals.

Be open to innovation. New entrants can challenge the status quo and may run counter to long-time practices. Examine their business plans and make sound decisions based on evidence rather than fear of breaking with tradition.

Develop consumer analytics. Closely track work with new entrants to gauge consumer response. Bringing in a new player or product should be considered the start of a process that can be fine-tuned, discontinued or renewed.

What this means for your business: Life sciences/biopharma and medtech industry

Move beyond the treatment. In most markets, payers are migrating to outcomes-based reimbursement models, which will force biopharma and medtech players to move beyond the episode of care and understand where and how they play in the continuum of care.

Develop partnerships. Biopharma and medtech will need to partner with new entrants to create new business models that support care anywhere.

Understand the value of data. Consumers expect solutions that integrate with their preferred mobile devices, apps, peripherals and wearables. Solutions and data should ensure that all parties are apportioned economic value relative to their contribution to the consumer's health.

Thank you

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