

**NATIONAL CONSULTATION ON
INNOVATIONS IN DIGITAL HEALTH
ECOSYSTEM AND INTEROPERABILITY**

Theme: Digital Healthcare

Saturday, 1st October 2016 : 2.30 pm to 6.30 pm
Swami Vivekanand Hall, MIT Campus, Kothrud, Pune

Agenda

- Introduction
- Key growth drivers for healthcare in India
- Reality Checks
- Indian Healthcare
- Potential for Future Endeavors
- Digital Health Ecosystem
- Advancements in technology
- Increased mobile connectivity
- Healthcare trends

Source : CII-PWC Report on “The Healthcare Agenda”

Introduction- Healthy Leap

- The private sector in the country's healthcare landscape is now assuming the centre stage. Private health spending is significantly higher than the government allocation on healthcare.
- The need of the hour is to identify and strengthen the support pillars of healthcare delivery systems. These may include production of quality manpower, technology-enabled solutions like mobile health and adoption of low-cost drugs and vaccines.

Key Growth Drivers for healthcare in India

- Favorable Demographics
- Increasing incidences of lifestyle diseases
- Emerging middle class and rising healthcare consumption
- Growing Healthcare penetration
- Medical value travel advantage
- Diversifying delivery models

Reality Checks

0.9 hospital beds per 1,000 population

66% reduction in MMR between 1990-2015

77% reduction in proportion of population with no access to drinking water between 1990-2012

22% reduction in proportion of population with no access to improved sanitation

Life expectancy at birth is 65 years for males and 68 for females

Mortality rates for communicable diseases is 253 and for non-communicable diseases is 682 per 1,00,000 population

7 physicians, 17.1 nurses and midwifery personnel, 5 pharmaceutical personnel per 10,000 population

Government spends only 4.3% of its total expenditure on health which is 3.8% of GDP

private sector contributes 69.5% and government contributes 30.5% to expenditure on health.

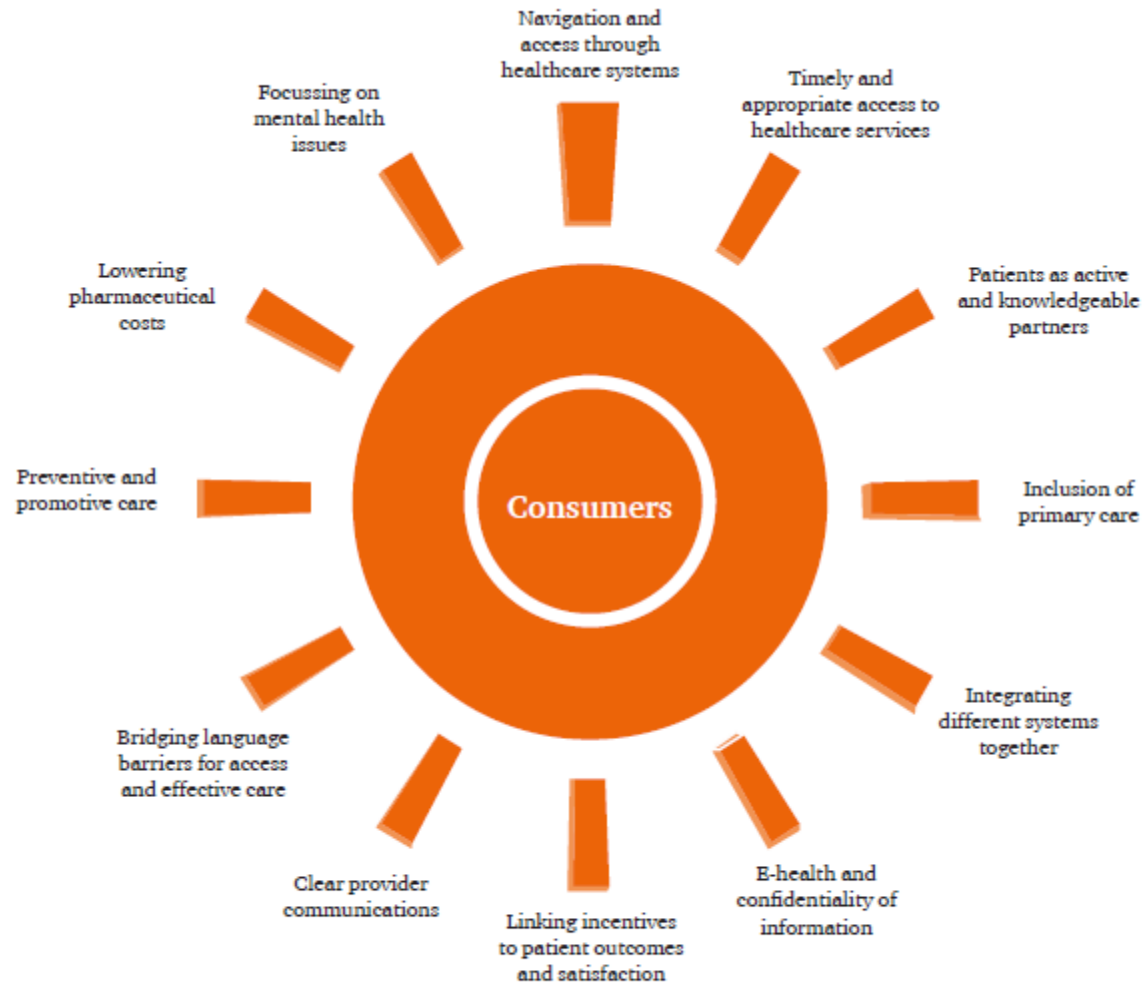
Out of the 69.5%, 87.2% is OoPE; and out of the 30.5%, 6.5% is on social security

Indian Healthcare

1. 30% Indians do not have access to primary healthcare facilities
2. 39 million Indians fall below the poverty line each year because of healthcare expenses
3. 70% of India's healthcare infrastructure is limited to the top 20% cities
4. 30% people in rural India do not visit hospitals fearing the expenses
5. India accounts for 21% of the global disease burden

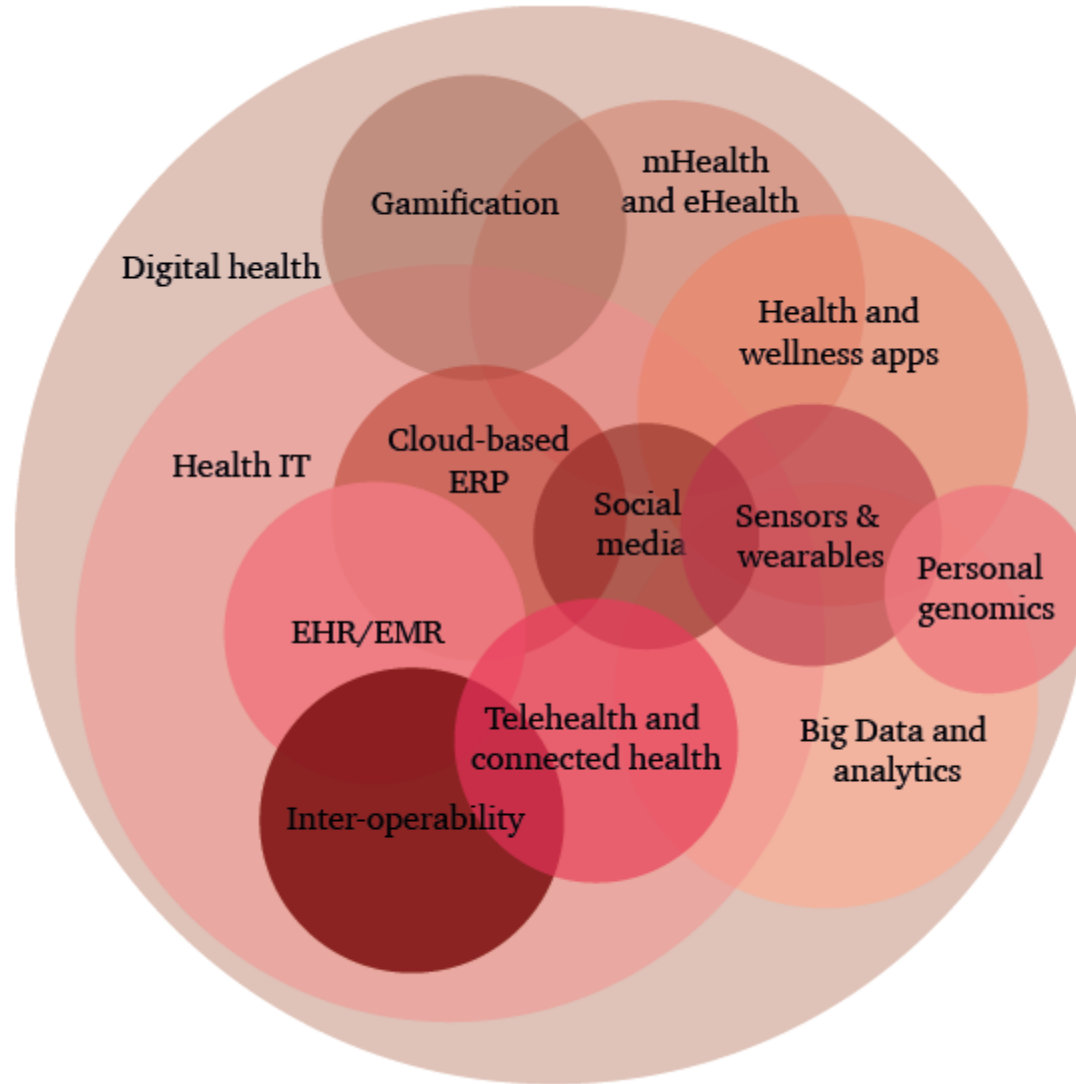
5. India needs to add at least 6,50,000 beds by 2017, requiring a capital investment of 1,62,500 crore INR by 2017
6. Medicines constitute the highest share in consumer expenditure – 64% in public and 34% in private.
7. Rural India accounts for 70% communicable diseases and over 50% non-communicable diseases
8. Healthcare needs of 47% of rural India and 31% urban India are financed by loans or sale of assets

Potential for Future Endeavours



Source: PwC's Report on Citizens' Reference Panel in Ontario (2011)

Digital Health Ecosystem



What does it mean for healthcare:

- Improve Access
- Quality care
- Better Information
- Better Patient Outcome
- Increase Patient Engagement
- Enhance Information Flow

Advancement in Technology

1. Integrated
2. Interoperability
3. Intelligent
4. Socialized
5. Outcome Oriented
6. Engaging

Cloud=unlimited processing power delivered to everyone on any device

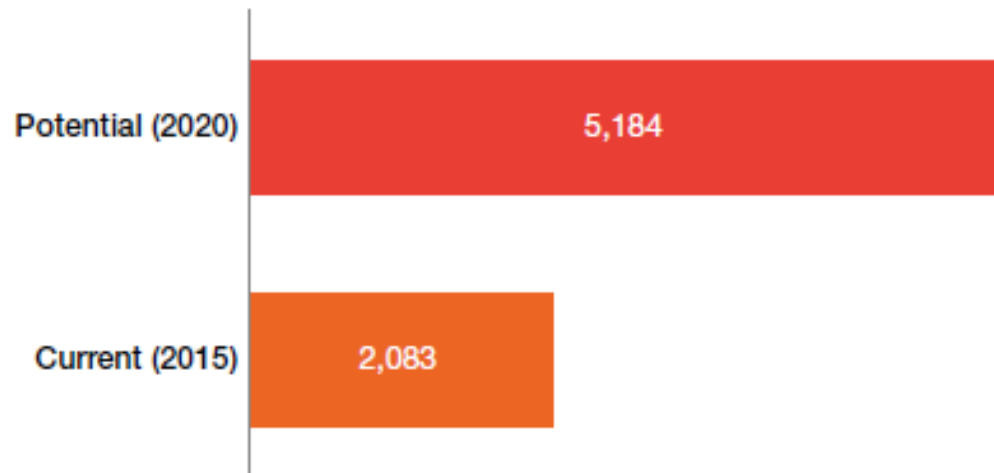
Analytics and consumption data can fuel new customer experiences

Ubiquitous and 'always-on' social media are changing the customer's behaviours

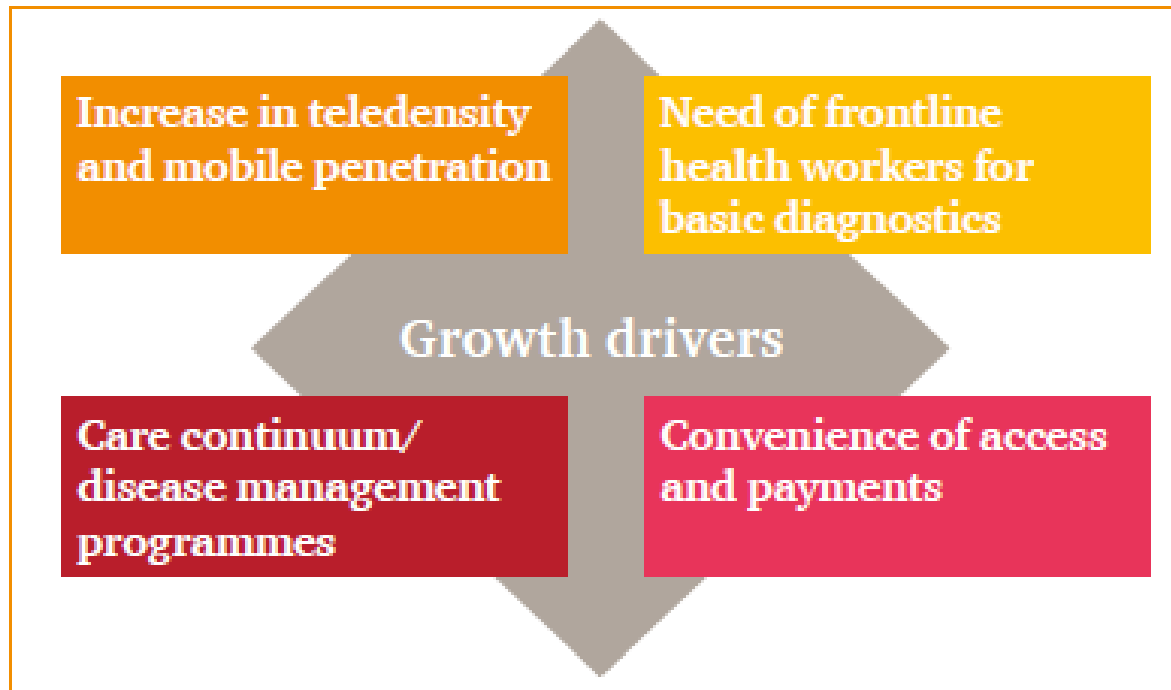
Smart phones bring Internet and appson-the-go to the mass marke

Increased Mobile Connectivity

Mobile health addressable market (crore INR)

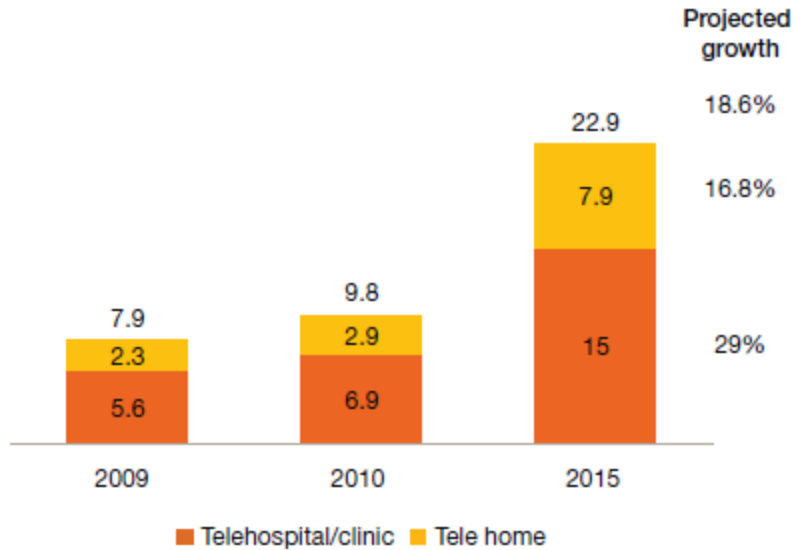


Growth Drivers

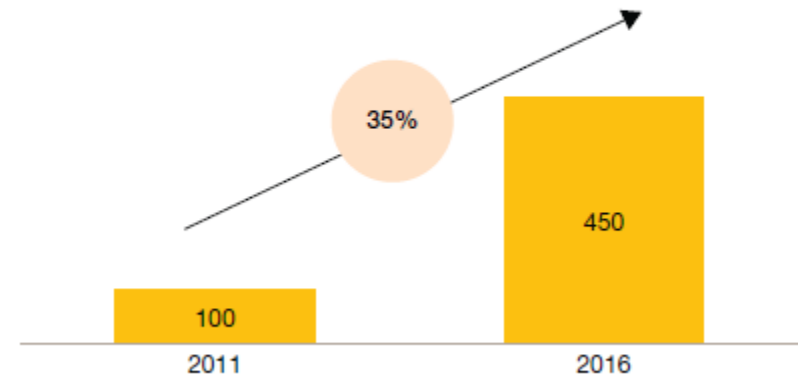


Telemedicine, a Big Opportunity

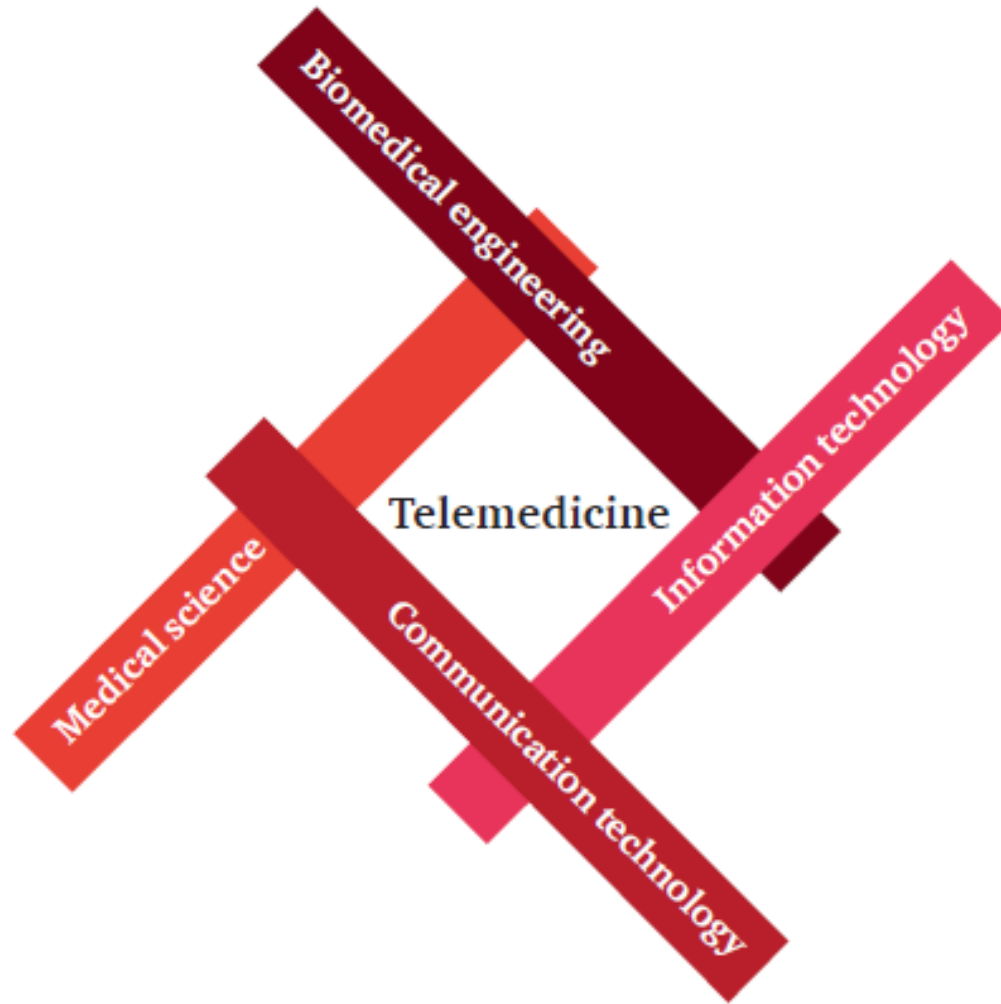
Global telemedicine market (billion USD)



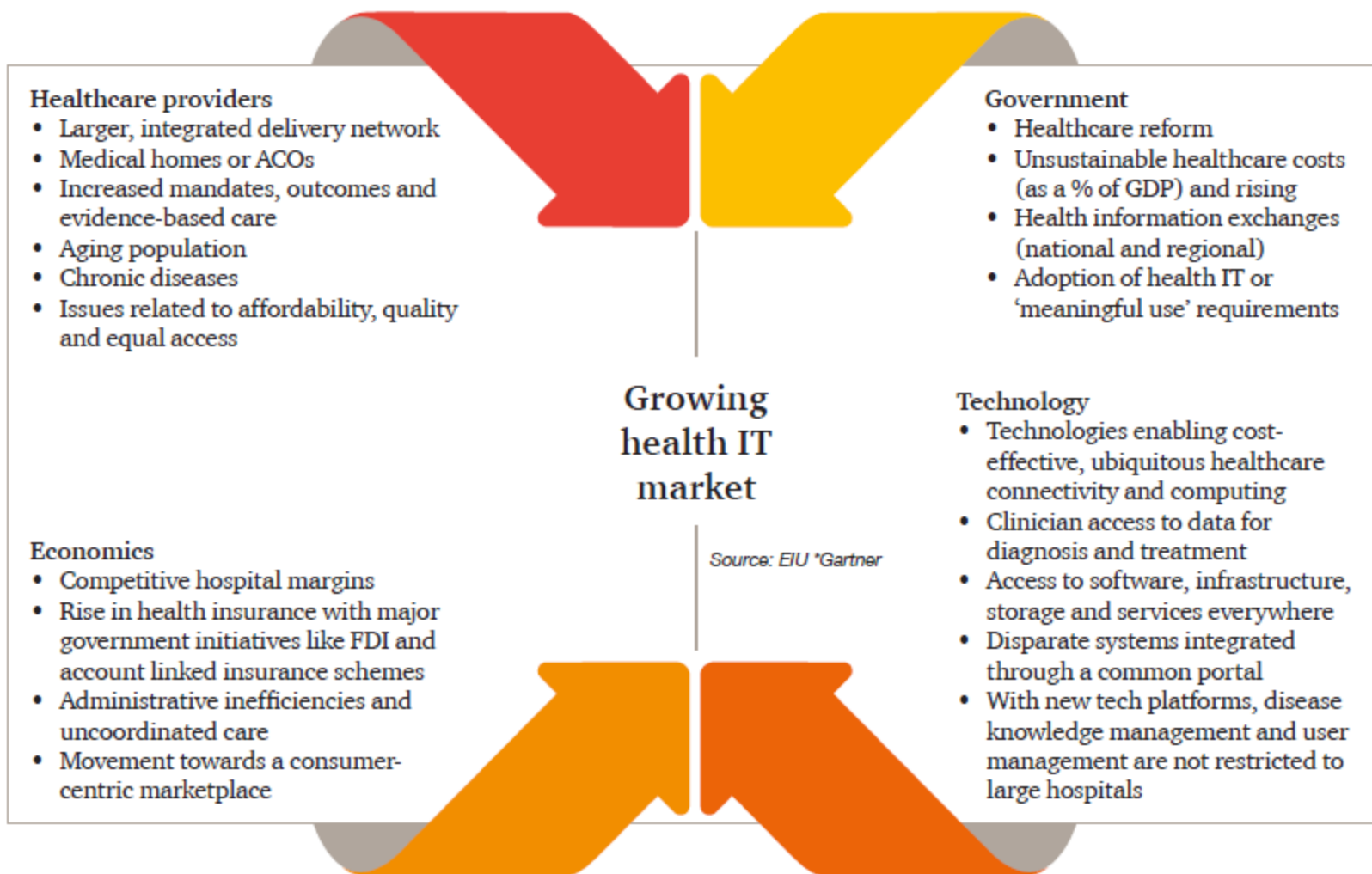
India telemedicine market (million USD)



Pillars of telemedicine



Health IT ties healthcare trends



Smart Healthcare Solutions



Online portal, e-health cards and records

Digitalising healthcare means easy access of patient information across all platforms possible



Analytics

Will include digital and diagnostic analytics



Medical simulation

Will include training of healthcare individuals using advanced technology



Telemedicine

Will result in easy access and services at the doorstep of the individual



GIS-enabled services

Will integrate, store, edit, analyse, share and display information within a geographical context



Business process automation

Convene all processes together and build a robust working system

*NASSCOM, 2015

The Future of India

1. Digitalizing healthcare means easy access to patient information across all platforms possible
2. Winning leaps in 10 key sectors
3. Corporate sector capabilities for winning leap
4. Entrepreneurship innovation and ease of doing business
5. Key features of 10trillion USD economy

Stakeholder roles



Government

- Ease of doing business
- Provide tax incentives
- Simplifying regulations

- Physical
- Digital
- Provide access to quality utilities—water, electricity



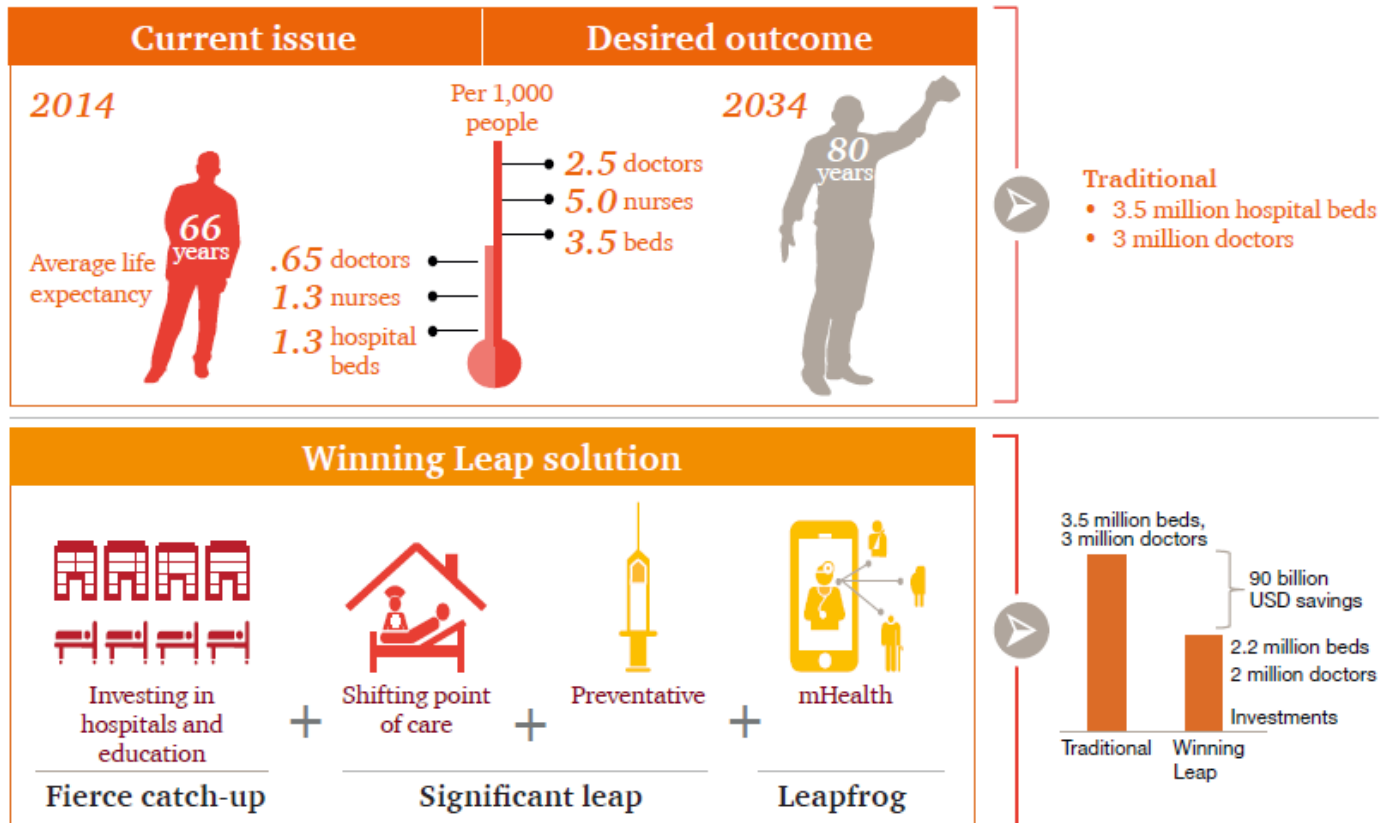
Private sector

- Mentoring
- Incubating
- Building entrepreneurial networks
- Access to markets

- Access to capital
- VC/PE
- Angel investors
- Debt funding
- Providing relevant training



Desired outcomes in healthcare



Thank You