



Connected Living



Connected Living Latin America Summit

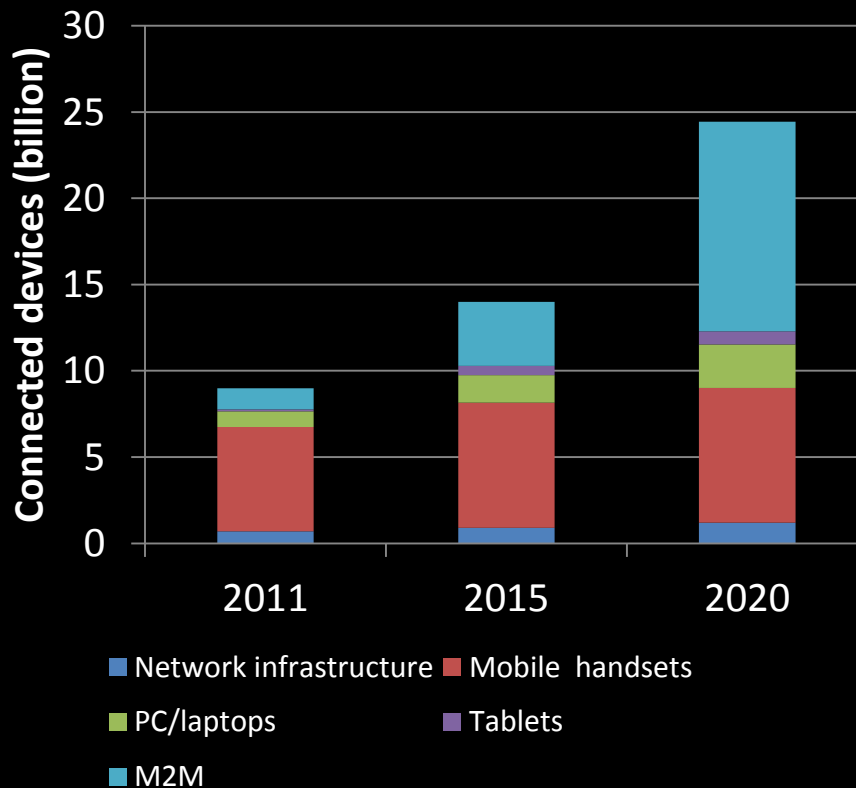
Ana Tavares Lattibeaudiere, Head of Connected Living

12 billion mobile connections by 2020



Connected cellular devices by technology 2011-2020

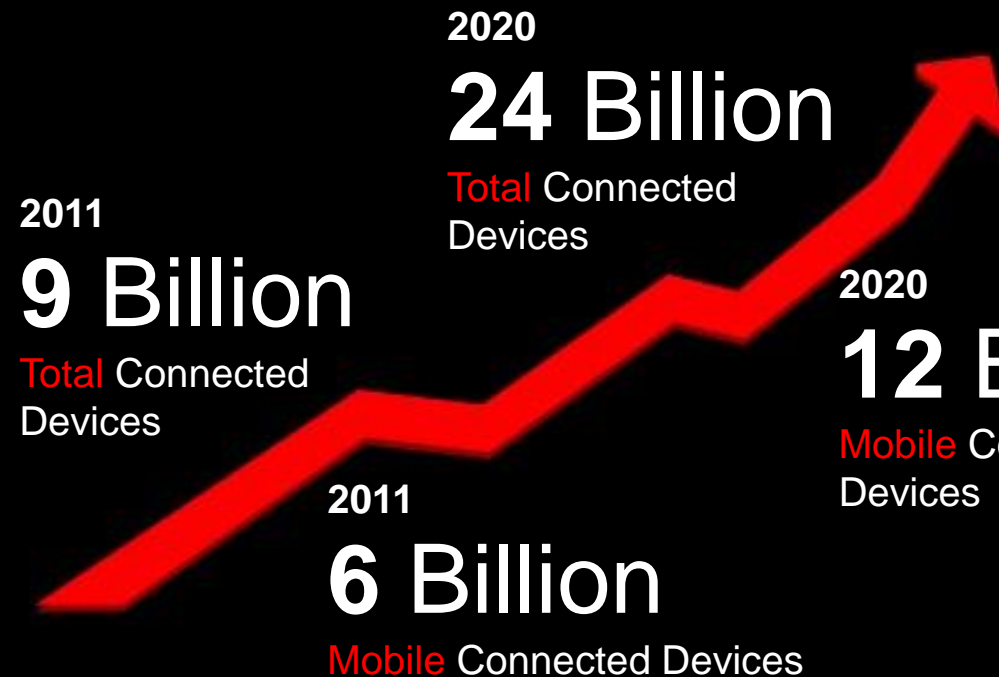
Source: Machina Research, 2011



- Global connected devices will increase from 9 billion in 2011 to 24 billion in 2020 across all technologies; 50% will be mobile
- Growth will be dominated by M2M, which will account for half of all devices in 2020, up from 14% in 2011
- 2.3 billion cellular M2M devices in 2020

TOTAL OPPORTUNITY FOR MOBILE OPERATORS = 1.2 TRILLION USD

Connected Life by 2020

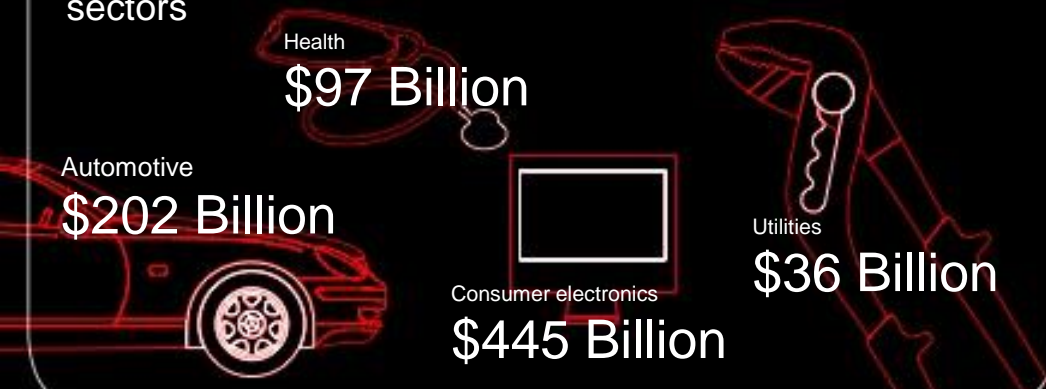


Revenue Opportunity For Mobile Network Operators in 2020

\$1.2 Trillion

7x increase on 2011 expected revenues

Revenue opportunity for connected devices in vertical sectors

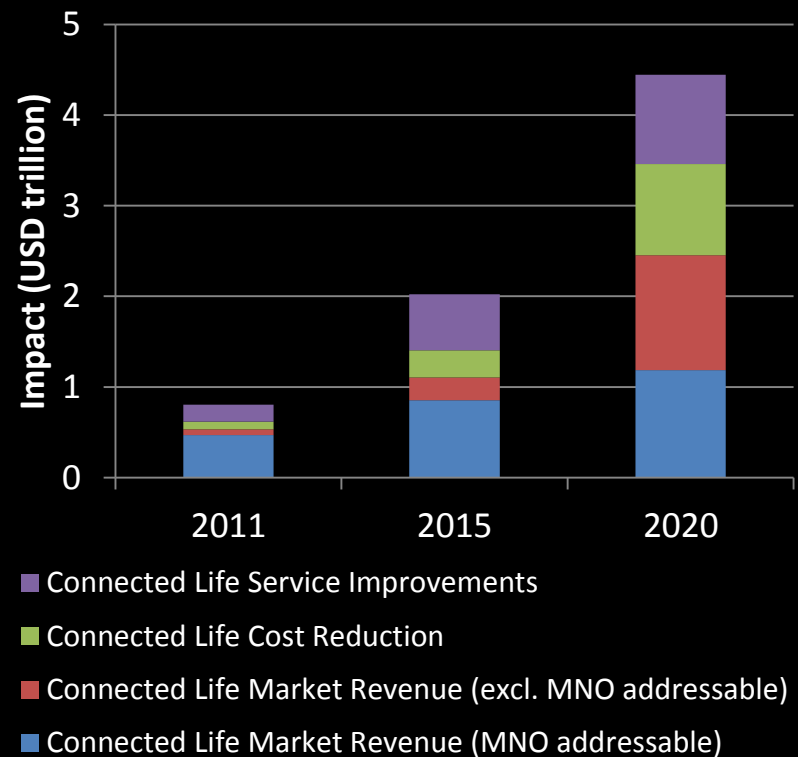


A USD 4.5 trillion global impact

- **Connected Life Market Revenue will be USD2.5 trillion in 2020**
 - Revenue from sale of connected devices and services, as well as related services that are provided over those devices
 - USD1.2 trillion addressable by MNOs
- **Connected Life Cost Reduction & Service Improvements is calculated at USD2 trillion**
 - Less direct, but nevertheless tangible, benefits to businesses, organisations and consumers stemming from the evolution of the Connected Life.
 - USD1 trillion from cost reductions
 - USD1 trillion from service improvements directly associated with Connected Life products and services.

Global impact of the Connected Life 2011-2020

Source: Machina Research, 2011



COLLABORATION WILL BE KEY TO DELIVER ON THIS OPPORTUNITY



Vision 2020

To create a world where everything intelligently connects via mobile networks, delivering rich services to businesses and consumers in every aspect of their lives

Mission

To accelerate the development and adoption of operator led scalable and interoperable mobile solutions in Healthcare, Automotive, Education, Utilities and Cities

mAutomotive – Telematics and Infotainment



Telematics

The number of telematics mandates by governments is growing e.g. eCall or Stolen Vehicle Tracking.

Total opportunity by 2020 is US\$20 billion



Infotainment

Infotainment services are forecast at 80% of all automotive traffic by 2025.

Today, only 28% of automakers offer connected infotainment services.

Value Added Services examples:

- Network security and user authentication
- Charging & Billing
- Customer relationship management
- Device management
- Application store support

Source: SBD

Smart Cities – Mobile World Capital

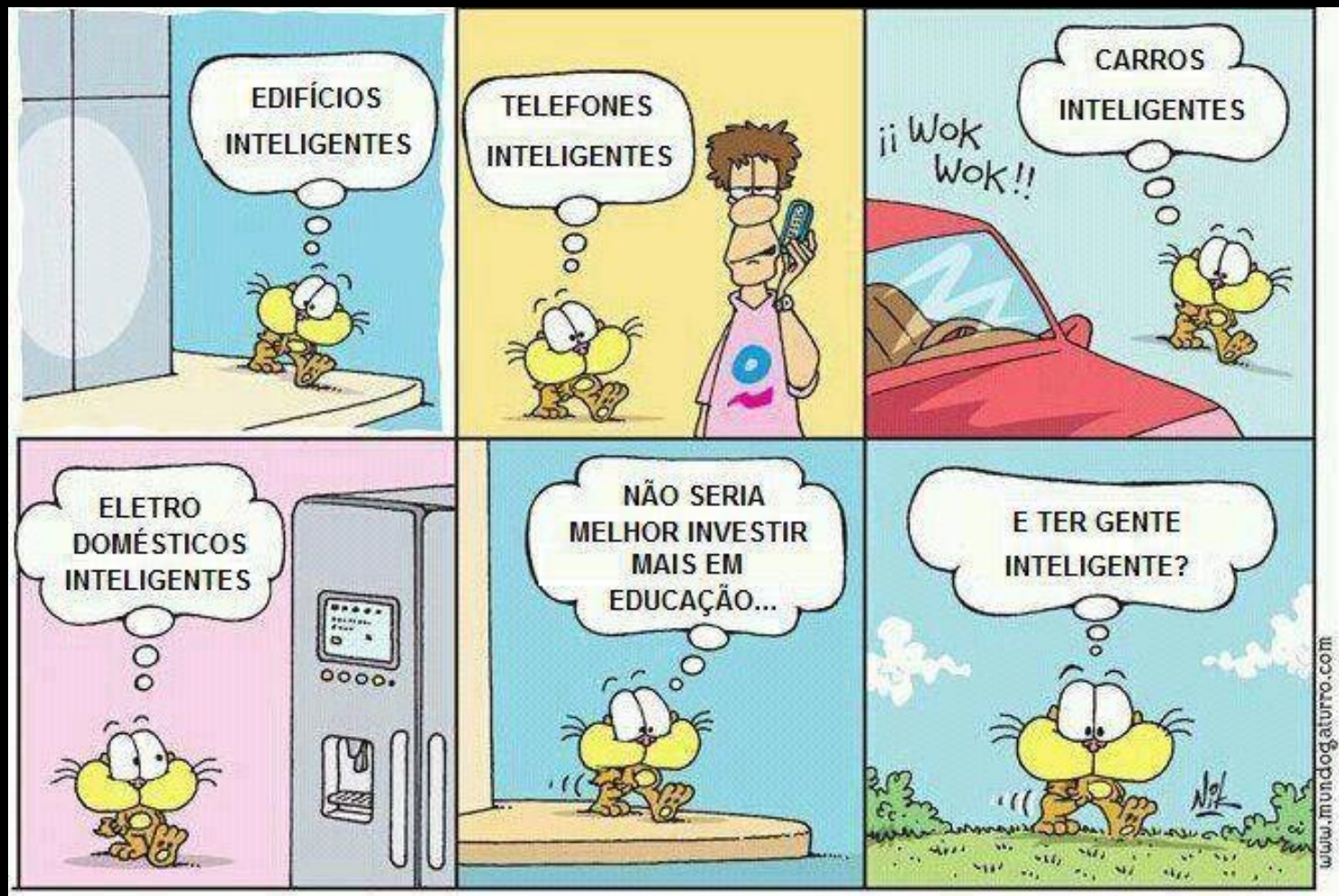
114 Smart Cities in the world today



Demonstrating practical implementation examples of Smart Cities, with great focus on Mobile World Capital

BARCELONA WORKING TOWARDS BECOMING THE MOBILE WORLD CAPITAL

mEducation – using innovation for Education



mEducation – Key education scenarios



Vocational education and training



Consistent connectivity for children



Out of classroom education and collaboration



Professional learning and development



Literacy skills



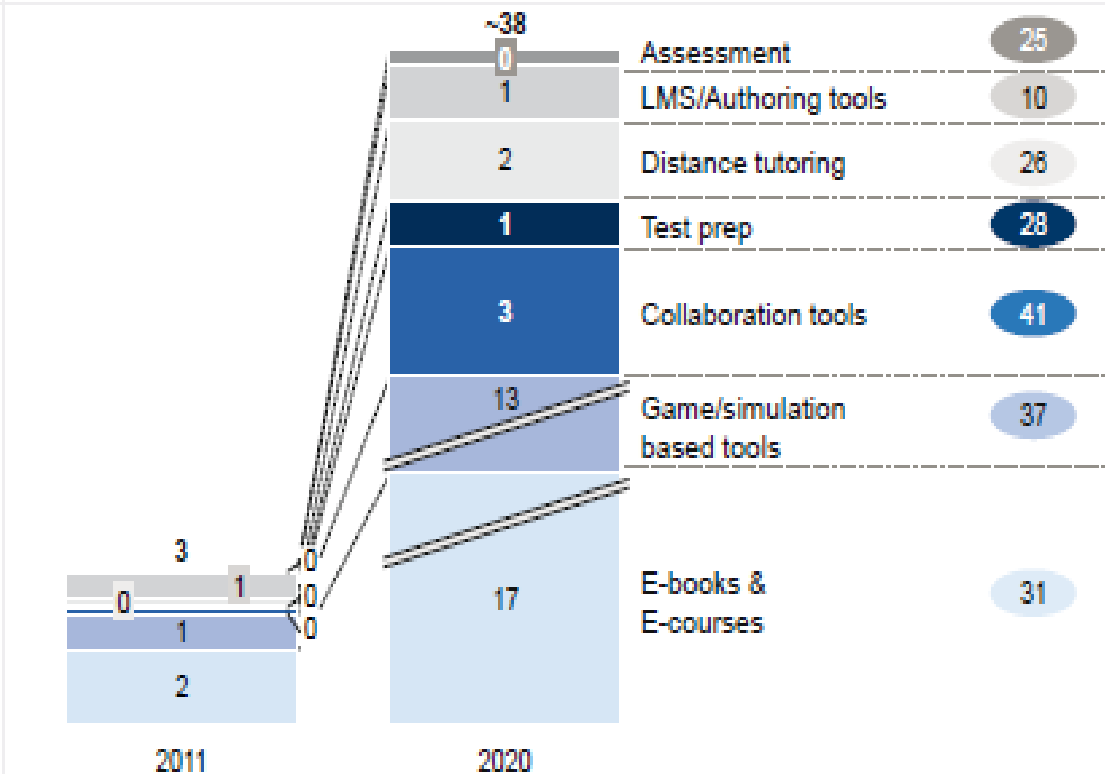
Supporting students with learning difficulties and disabilities

TABLETS FOR SCHOOL CHILDREN AND LEARNING FOREIGN LANGUAGES

Revenue opportunity = USD \$70 billion by 2020

2020 Market by products (excluding device sales)

USD billion



- **\$38 billion** in mEducation products and services
- **\$32 billion** in mEducation-specific devices
 - \$30 billion B2B
 - \$2 billion B2C

SOURCE: Press search; expert interviews; team analysis

Source: Transforming learning through mEducation (GSMA, McKinsey & Co, 2012)



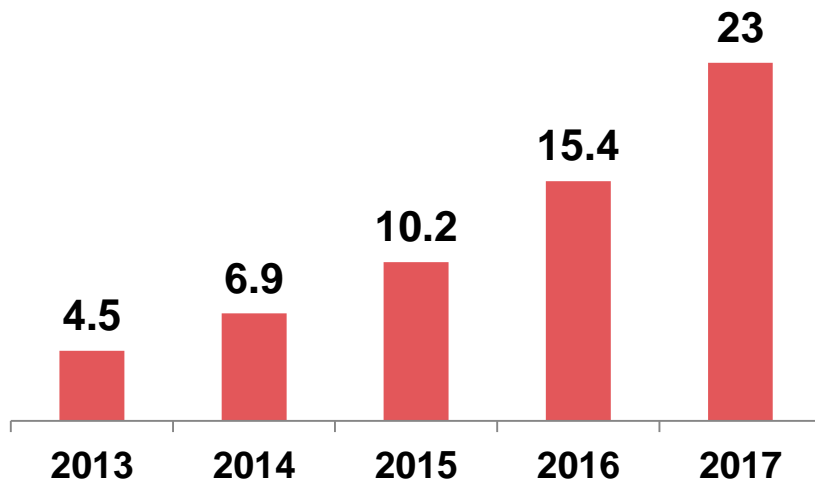
mHealth - costs, quality of care and behaviours



Remote Monitoring Chronic Disease Focus



Forecast global mHealth revenues 2013-2017
(US\$ Billion)



Diabetes Care Programme

- Over 350 million people worldwide have diabetes
- Forecast to double over next 20 yrs
- In some regions already affecting 20 – 25% of the population

Regional Campaigns

- Health economic evidence for payors
- Impacts and benefits to governments
- Appropriate principles for regulators
- Interoperability and common standards for industry

65% of revenues will be for remote monitoring

ANNOUNCING RESULTS OF GSMA'S MHEALTH END USER RESEARCH IN BRAZIL

Behaviours are key in managing chronic conditions



Challenges with managing chronic health conditions

The top 3 challenges for HCPs all relate to patient behaviours

Three-quarters of HCPs believe patients fail to follow diet/lifestyle changes

- Over 40% of HCPs also believe patients are non-compliant to medications and consultations
- Therefore there is a large opportunity for solutions that can drive behavioural change

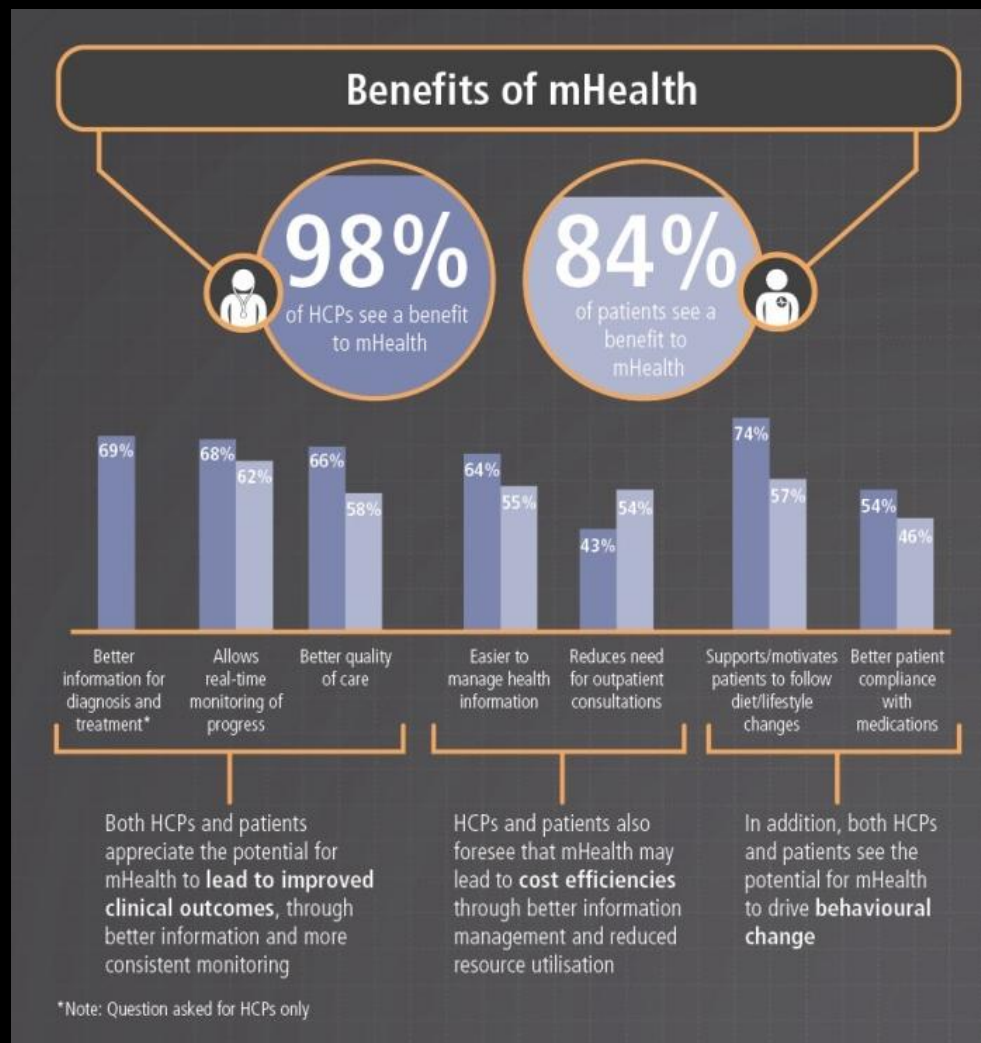
Patients face two main challenges when managing their condition

- Over 50% have difficulties following diet/lifestyle changes
- Half of patients have difficulties in achieving disease goals

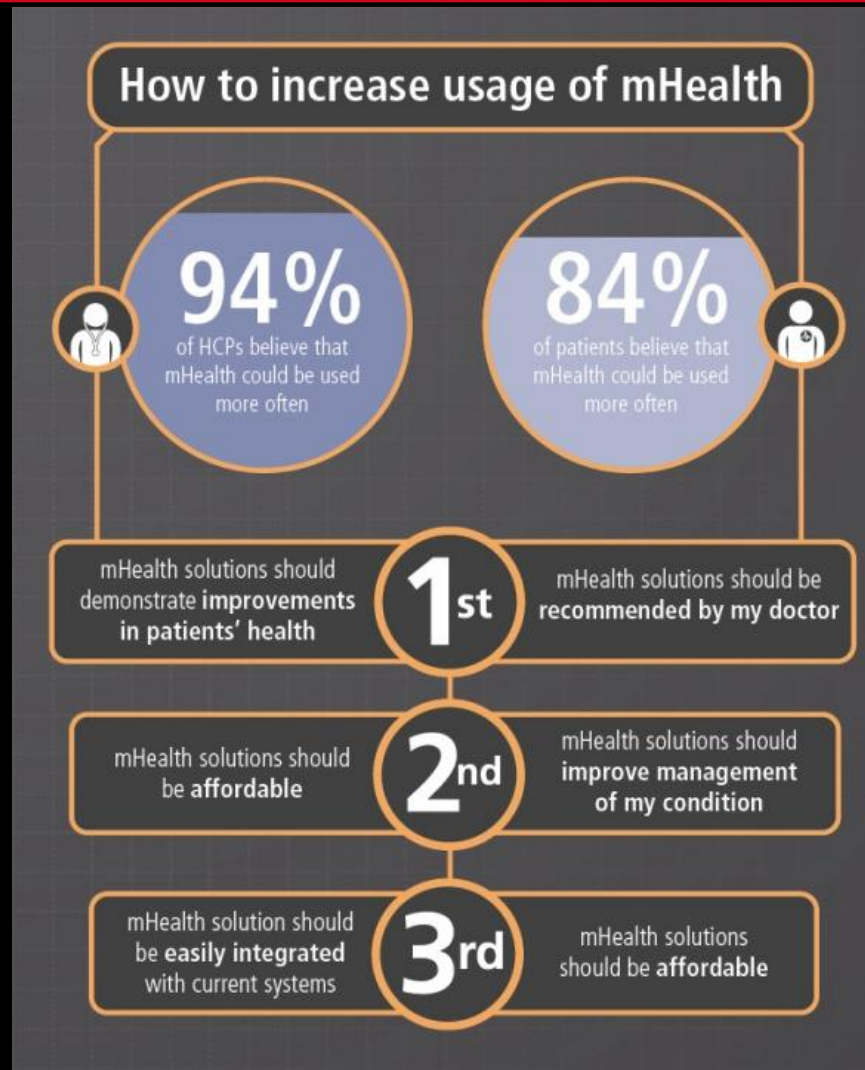
Affordability of care is also a common problem

- 1 in 3 patients and 27% of HCPs see cost of care as a challenge in managing patients' chronic conditions

Great recognition of potential mHealth benefits



Factors leading to increase in usage of mHealth



DOCTORS WILL DETERMINE THE SUCCESS OF mHEALTH

Vision: Connected Living

mEducation



mAutomotive



mHealth



Smart Cities



How do we deliver on this opportunity?

- We need to unite the **entire ecosystem** behind a consistent approach that utilises internationally accepted mobile industry standards
- **Mobile operators** are uniquely placed to work in partnership with other industries to enable this opportunity because:
 - They provide the ubiquitous network connectivity and have strong credentials in roaming and interoperability
 - They deliver proven customer care, billing and distribution capabilities
 - They represent a trusted brand for consumers and businesses
- We are calling on all participants in this new expanded ecosystem to join with the mobile industry to realise this vision



Thank you!

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