Transforming Healthcare with mHealth Solutions.
“That’s all Folks!”
45% of mHealth APPs users are worried by data privacy and usage of their data.

By 2017 ...
3.4 billion people will have smartphones
50% with mHealth APPs
According to a new market report published by Transparency Market Research "mHealth Market- Global Industry Analysis, Market Size, Share, Growth, Trends and Forecast, 2012 - 2018," the global mHealth market is expected to reach USD 10.2 billion by 2018 from USD 1.3 billion in 2012 at a CAGR of 41.5% from 2012 to 2018.

Missing regulations is seen as one of the major barriers for the mHealth market to enter the next market phase: the integrated phase. In this phase, mHealth applications will become an integrated part of doctors’ treatment plans. [http://www.researchandmarkets.com/reports/2603873/mobile_health_trends_and_figures_20132017]
Can we really prove that mHealth helps sustainability of the healthcare system?
- Saving time to professionals
- Reducing costs
- Empowering the patient
- Increasing efficiency, Access to information, ...
- ......

Good market figures are being foreseen in this segment.
Would these figures incentivate industry?
Would the public admin be willing to play their role?
mHealth could save 99 billion EUR in healthcare costs in the European Union (EU) and add 93 billion EUR to the EU GDP in 2017 if its adoption is encouraged.

- Total healthcare cost savings in 2017
  - 99 bn
  - 23 bn Private savings (23%)
  - 76 bn Public savings (77%)

Total GDP addition in 2017
- 93 bn

Source: PwC analysis

Source: Socio economic impact of mHealth • PWC
Global Mobile Health Market

Top 5 mHealth changes towards 2020

- More data integration: 35%
- More medical vs fitness apps: 14%
- More apps in general: 6%
- More wearable: 4%
- Data will be protected: 4% (n=96)

Changes for patients

- Have self-control over their health: 32%
- Receive better healthcare services: 21%
- More health information: 18%
- Cost savings: 10%
- Will be encouraged to use mHealth apps: 10% (n=90)

Changes for doctors and nurses

- Learn how to use mHealth apps: 27%
- More health information: 21%
- Offer better services: 16%
- Culture change: 10%
- Better decision making: 8% (n=91)

Biggest barriers for mHealth development

- Low mHealth apps adoption: 15%
- Data privacy issues: 13%
- More regulations: 10%
- High R&D costs: 9%
- Lack of predefined standards: 8% (n=249)

Source: own study, conducted in Aug – Sep 2014, total simple size =157, completed responses =99
Regulatory, economic, structural and technological adoption barriers are limiting the adoption of mHealth

<table>
<thead>
<tr>
<th>Flow of information</th>
<th>Regulatory</th>
<th>Economic</th>
<th>Structural</th>
<th>Technological</th>
</tr>
</thead>
</table>
| Healthcare provider | Lack of clarity on mHealth certification | • Need for further evidence  
• Conflicting incentives  
• Change management | • Low cohesion across levels and regions  
• Low competition | • Late involvement of doctors in solution design |
| Solution vendor     | Lack of interoperability standards | • Inadequate funding  
• Scalability issues | • Hindrances to scalability | • Interoperability |
| Mobile service provider | Lack of compensation mechanisms | • Lack of reimbursement mechanisms | • Standardisation  
• Interoperability | • Standardisation  
• Interoperability |
| Medical device vendor | | | | |
| Doctors / Patients  | | | | |

<table>
<thead>
<tr>
<th>Barrier</th>
<th>Mitigation measure</th>
<th>Key Actor</th>
</tr>
</thead>
</table>
| Regulatory | Integration of mobile health into healthcare strategy | • Regulator  
• Government  
• Ministry of Health |
| | Stakeholder accountability framework | |
| | Clarity on regulations for medical devices | |
BARCELONA, INSPIRING ENTREPRENEURSHIP & INNOVATION

TALENT & KNOWLEDGE
- 20% of Spain’s ICT sector, with 110,000 ICT professionals.
- 12 public/private universities & 5 top business schools.
- 8 internationally recognized scientific facilities.
- Over 47,000 employees dedicated to research and development.
- 4 ICT research centres.

INNOVATION & CREATIVITY
- 7,000 companies working in innovation related fields.
- 30 ideas and business incubators.
- Barcelona nominated iCapital by the European Commission.
- Barcelona ranked 4th most creative city in the world.
- Barcelona is the 4th Smart city in Europe and the 10th worldwide.

QUALITY OF LIFE & CONNECTING PLATFORMS
- #1 European city in quality of life for employees.
- 311 sunny days per year.
- #10 tourist destination in the world, #4 in Europe.
- #1 ranked city for people attending congresses.
A HUB FOR MOBILE AND DIGITAL BUSINESS FOCUSED ON PRIORITIES FOR PEOPLE

**Community Engagement**
Organizing the development of the Mobile World Capital Movement to increase the engagement of the communities we support.

**mSchools**
Supporting students, parents, teachers and schools with new ways of teaching and learning using mobile technology to help students build new digital skills.

**mHealth**
Improving citizen’s health and welfare by personalizing services with mobile technology.

**Smart Living**
Supporting the development of services that improve people’s interactions with the smart city they visit or live in.

**Entrepreneurship & Innovation**
Being a top-ranked city in mobile innovation and a good place to start and grow a global mobile business.

**Changing Communities**

**Changing Education**

**Changing Healthcare**

**Changing Lifestyles**

**Changing the Economy**
Changing Healthcare

mHealth

We are witnessing a huge change in the health sector with mHealth solutions boosting the efficiency and effectiveness of the healthcare system. Citizens and patients are improving their quality of life with remote monitoring systems and engaging in self-care.

Improving citizen's health and welfare by personalizing services with mobile technology.

mHealth enablers
- Boosting the adoption of solutions and best practices.

Get mHealthy!
- Deploying solutions and initiatives for citizens.

Raising awareness
- Building an mHealth ecosystem.
To promote improvements in citizen’s health and welfare by personalizing services based on mobile technology

**Enablers**

To accelerate the adoption of solutions and best practices through standards definition and proven methodologies.

**INITIATIVES**

- Standards & Interoperability
- PHR mIdentification
- Clinical benchmark
- Social and economic impact analysis

**Get mHealthy**

To engage citizens in using mHealth and generate public demand for mHealth solutions.

**INITIATIVES**

- mHealth CAT Plan
- Vaccine App
- mHealth Mental Health Plan
- BCN mHealthy City

**Raising awareness**

To disseminate mHealth information and foster the community.

**INITIATIVES**

- mobilehealthglobal.com
- Workshops
- mHealth Observatory
Mobilise Europe for mHealth
A call for action to enable mHealth adoption

March 2015

The mHealth Task Force, an initiative of Mobile World Capital Barcelona that convenes technology and healthcare, calls on all stakeholders to advance mHealth adoption through three actions:

- Change the conversation from risks and dangers to potentials and opportunities
- Work out mHealth’s overall value proposition rather than chasing medical evidence
- Support an enabling environment for innovation
**Regulatory Support**

**Risks:**
- Regulations can inhibit the growth of mHealth.
- Some countries seem to be following a ‘one-size-fits-all’ approach (rigorous standards also applied to non-intrusive, noncritical solutions) → negative impact to the growth of mobile health.

**Actions needed:**
- Regulations should effectively address issues as certification, standardization and interoperability to help increase the confidence and trust of both physicians and patients.
- Concrete roadmap and timeline on when relevant policies and regulations may be introduced and what might be addressed by such measures.
- Regulations should be pro-innovation and aimed at introducing measures that enable affordable and ubiquitous healthcare.

---

**Standardization and Interoperability**

**Actions needed:**
- Regulators have to work together to ensure interoperability and standardisation guidelines for various mobile health ecosystem participants (device vendors, content creators and healthcare providers).
- Ensuring standardisation and interoperability among solutions will help
  - plug-and-play solutions development
  - easy adoption for end-users
  - facilitate scaling
Certification of Devices and Applications

Actions needed:
• Regulators should facilitate **speedy approvals** for vendors and software developers.
• The intent of governments and regulators should be to enable the **rapid creation of a healthy mobile health ecosystem** that benefits both patients and market players.
• It is important for regulators to follow a **harmonised approach** to ensure greater applicability of certified devices and applications **across regions** to encourage greater participation of device vendors and solution developers.

**In summary**…

• **Confusion amongst consumers regarding the most appropriate app to meet their needs.**
• **Professionals face the same challenge when recommending apps to a patient.**
• **A concerted effort among stakeholders (payers, providers, developers, …) is needed → evaluation and integration in the system.**
• **Need for evidence generation to demonstrate improvements in the outcomes.**

*Source: PwC analysis*
Global Mobile Health Market

Digital Single Market

Creating a #DigitalSingleMarket
European Connected Health Alliance

*We bring people, organisations, needs and solutions together*

Brian O’Connor
Chair
brian@echalliance.com
The ECHAlliance

We were founded to facilitate multi-stakeholder connections, to create and strengthen partnerships committed to driving sustainable change in the delivery of health and social care.

The trusted connector

Unrivalled Knowledge, Reach and Expertise

Collaborative partnerships

Speeding up progress
Ecosystems are:

- Multi-stakeholder communities within a country or region who build projects and implement innovative solutions
- They are permanent
- Regular (4 meetings per year)
- Part of an international network - sharing and learning with other Ecosystems

"eHealth Ecosystems could be the answer to the strain our social security systems are undergoing. If we work together and use the enormous potential technology has to offer us, we can ensure top healthcare for all in Europe" Neelie KROES, Former Vice President of the European Commission
mHealth Competence Center: Ready, Steady, GO!

Joan Cornet
Director, mHealth Competence Center, MWC

May 15, 2014
EXPANDING BOUNDARIES, THE E-PRESCRIPTION CHALLENGE

Falling ill abroad won’t be a problem in the future because drugs that patients take in their own country will be available in all Europe with a prescription. This is a milestone that EPSOS project wants to achieve by expanding boundaries of e-Prescription, a system that some European countries have already implemented.

INTERVIEW WITH JOHN MACK

18/05
AMERICAN TELEMEDICINE ASSOCIATION 2014 ANNUAL MEETING

One of the most prestigious forums for healthcare professionals and entrepreneurs in the telemedicine, telehealth and mHealth space. It is an opportunity to meet with leaders in the field and learn about telemedicine best practices and emerging...

Baltimore, USA

CATALOGUE

Explore apps, projects and other mHealth Solutions
THANK YOU!

**mHealth Competence Center – MWC**

*Director: Joan Cornet, jcornet@mobileworldcapital.com*

*Manager: Bárbara Vallespín, bvallespin@mobileworldcapital.com*

*Technical coordinator: Patricia Díaz, pdiaz@mobileworldcapital.com*

Join us at:  
[http://www.mobilehealthglobal.com](http://www.mobilehealthglobal.com)