



**MOBILE
WORLD CAPITAL™
BARCELONA**

mHealth
COMPETENCE CENTRE

Transforming Healthcare with mHealth Solutions.





“That’s all Folks!”

l s b e r g[®]





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

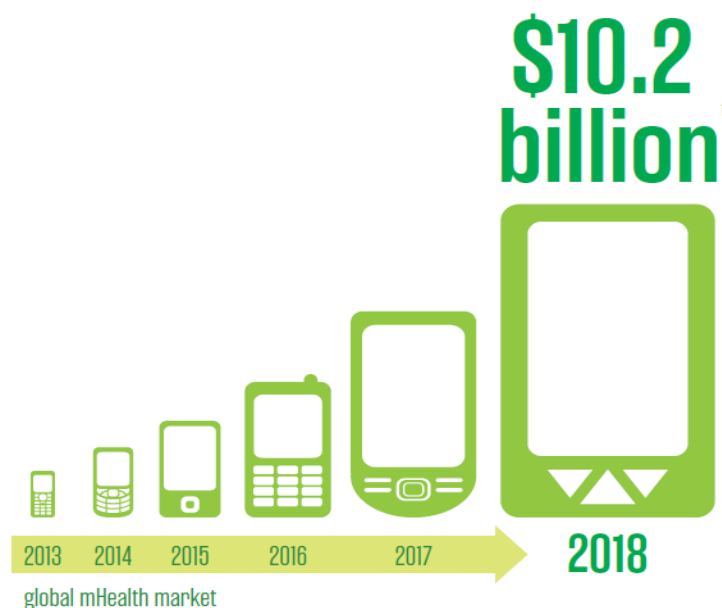
By 2017, **3.4 billion people** worldwide will own a smartphone

1/2 will use **health apps**



Global Mobile Health Market

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?



June 2013

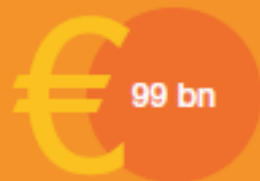
Executive summary [Pg 3](#) | Socio-economic impact of mHealth [Pg 6](#)
Overcoming barriers to adoption [Pg 20](#) | Appendices [Pg 25](#)

Socio-economic impact of mHealth

An assessment report for
the European Union



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



Private
savings
(23%)



Public
savings
(77%)

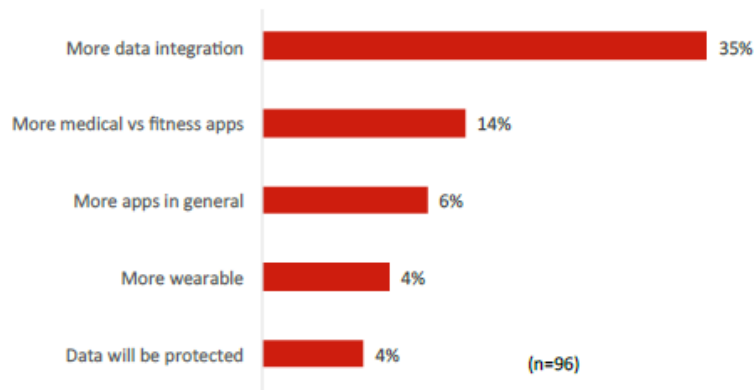


Total GDP addition
in 2017

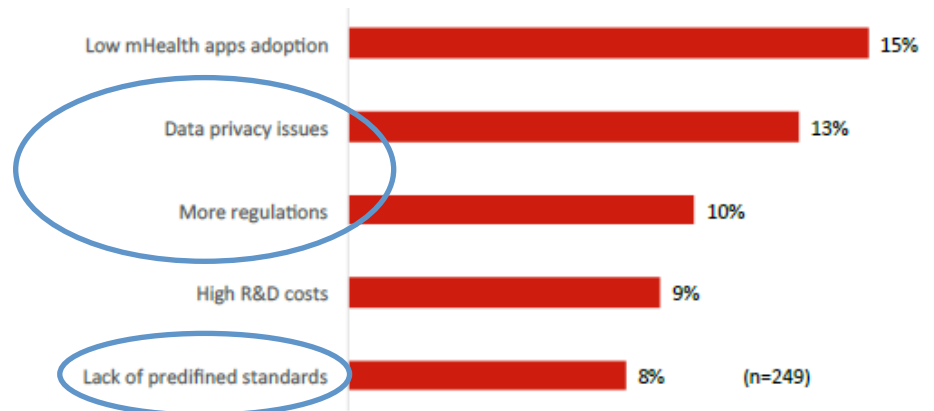
Source: PwC analysis

Global Mobile Health Market

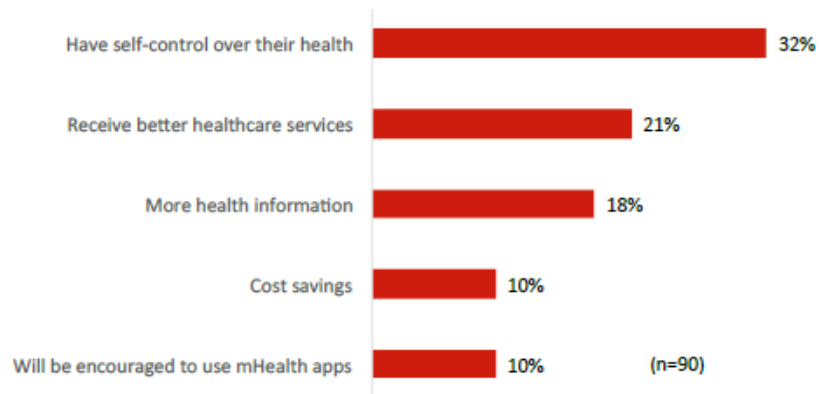
Top 5 mHealth changes towards 2020



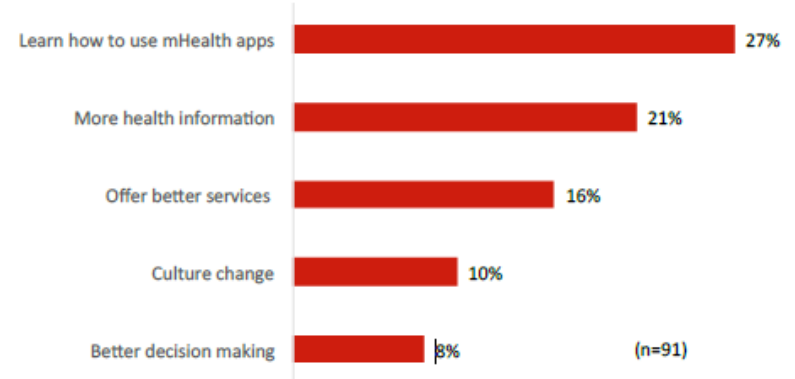
Biggest barriers for mHealth development



Changes for patients



Changes for doctors and nurses



Regulatory, economic, structural and technological adoption barriers are limiting the adoption of mHealth

| Flow of information | Regulatory | Economic | Structural | Technological |
|-------------------------|--|--|---|--|
| Healthcare provider | <p>Lack of clarity on mHealth certification</p> <p>Lack of interoperability standards</p> <p>Lack of compensation mechanisms</p> | <ul style="list-style-type: none"> • Need for further evidence • Conflicting incentives • Change management | <ul style="list-style-type: none"> • Low cohesion across levels and regions • Low competition | <ul style="list-style-type: none"> • Late involvement of doctors in solution design |
| Solution vendor | | <ul style="list-style-type: none"> • Inadequate funding • Scalability issues | <ul style="list-style-type: none"> • Hindrances to scalability | <ul style="list-style-type: none"> • Interoperability |
| Mobile service provider | | <ul style="list-style-type: none"> • Lack of reimbursement mechanisms | | <ul style="list-style-type: none"> • Standardisation • Interoperability |
| Medical device vendor | | | | <ul style="list-style-type: none"> • Standardisation • Interoperability |
| Doctors / Patients | | <ul style="list-style-type: none"> • Lack of awareness of mHealth benefits | | <ul style="list-style-type: none"> • Significant training needs |

| Barrier | Mitigation measure | Key Actor |
|------------|---|--|
| Regulatory | Integration of mobile health into healthcare strategy | <ul style="list-style-type: none"> • 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

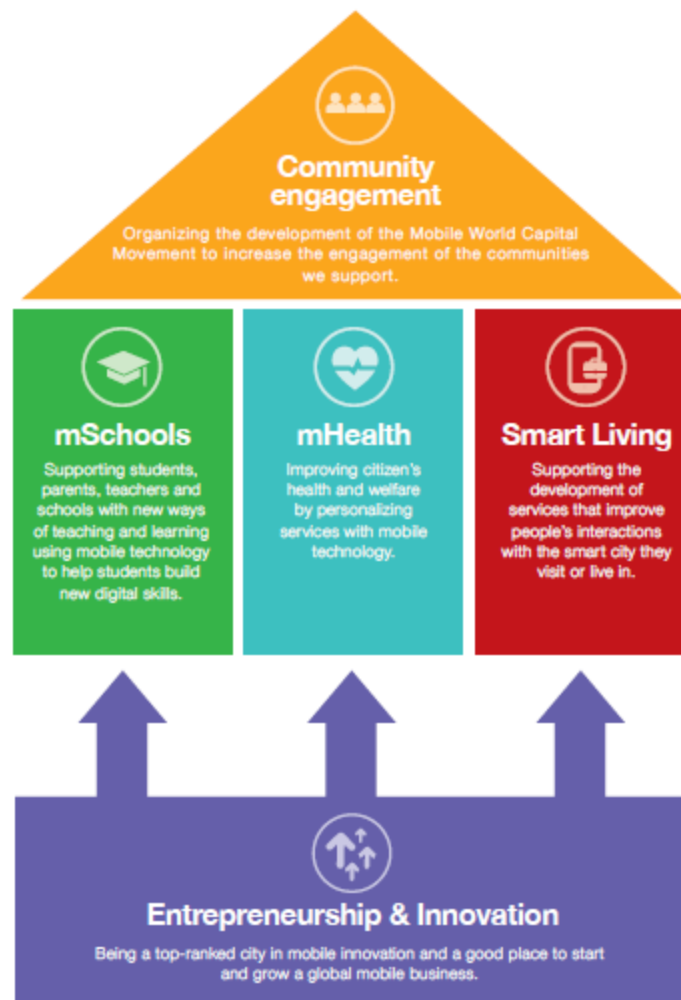
- 7,000 companies working in innovation related fields.
- 30 ideas and business incubators.
- Barcelona nominated iCapital by the European Commission.
- Barcelona ranked 4th most creative city in the world.
- Barcelona is the 4th Smart city in Europe and the 10th worldwide.



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



Changing Healthcare

mHealth

A photograph of several children climbing a tall, conical rope ladder structure. The ladder is made of red ropes and is set against a background of a city skyline with tall buildings under a clear sky. The children are at various heights on the ladder, some near the top and others lower down. The image is partially covered by a teal diagonal overlay on the left and a teal banner at the bottom right.

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 mHealth!
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.*

Digital Single Market





European Connected Health Alliance

We bring people, organisations, needs and solutions together

Brian O'Connor

Chair

brian@echalliance.com



www.echalliance.com / info@echalliance.com

The ECHAlliance

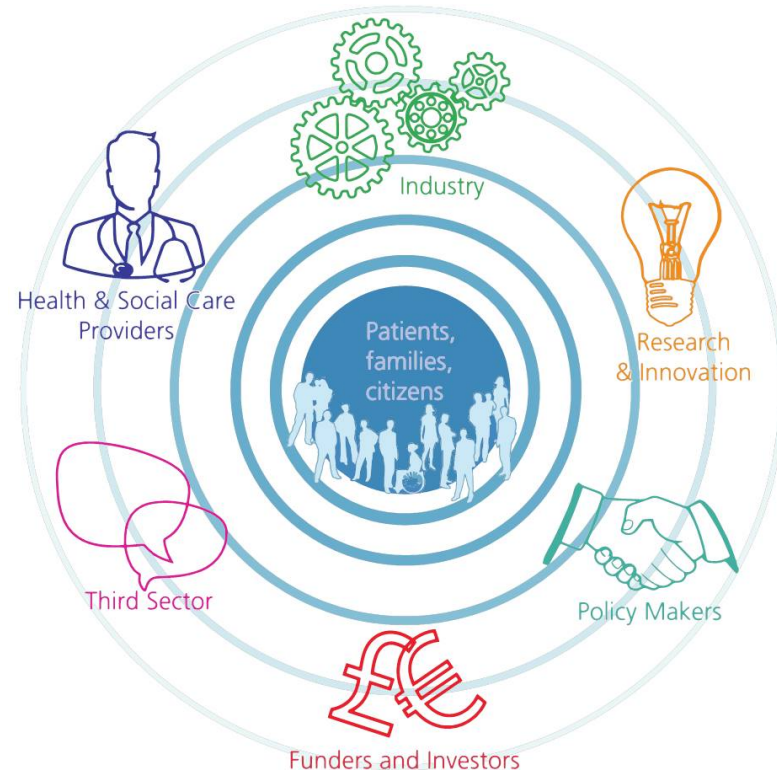


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An informal and open community of stakeholders interested in developing a joint eHealth agenda

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 countries 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.

[MORE NEWS](#)

INTERVIEW WITH JOHN MACK



“

Many US marketers desperately want to use social media to promote products directly to consumers”

[MORE INTERVIEWS](#)

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

[MORE EVENTS](#)

CATALOGUE

Explore apps, projects and other
mHealth Solutions



THANK YOU !

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Join us at:

<http://www.mobilehealthglobal.com>