Building Apps for Person Care

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Why beeing mobile…

Gadgets changed the world:

! Third world

- Health
- Sport
- Distance learning

…

from CAMAI 2014 presentation

Building Apps for Person Care

- The place and the role of mobile devices in person care
- Situations, domains
- Characteristhics of the apps
- Who build and who can build them

Mobile Health Regulations, **Mobile Health Applications**

Mobile devices and apps. Motivation for mHealth

- increasing use of the mobile devices and mHealth by the population in their daily life

- [8] (in 2013) by 2017:
  - 3.4 billion people will own a smartphone and
  - half of them will be using mHealth apps

- easy to use
  - by everyone, or adapted to each particular situation
  - by simple gesture

- cut healthcare costs

- access to primary case

Apps, users, developers

- [7] App developers: 30% individuals; 34.3% small companies (2-9 empl.)
- [8] (2013) 97,000 mHealth apps – Android, iOS, Windows Mobile
  - ❑ 70% consumer wellness and fitness segments, [9] (2012)
  - ❑ 30% health professionals, easing access to patient data, patient consultation and monitoring, diagnostic imaging, pharmaceuticals information [9] (2012)
- HPC [1, June 2012]
  - 87% smartphone or tablet device in their workplace

    80% iPhone, 20% Android

    66% of m. doctors own a tablet computer,

    of which 54% use in their practice
  - 99% computer

mHealth solutions – a supportive tool for the management and provision of healthcare

- Mobile devices - mobile phones, patient monitoring devices, personal digital assistants (PDAs), and other wireless devices
- Mobile health (**mHealth**) **(EU)** [6] (2014)
  - medical and public health practice supported by mobile devices
  - lifestyle and wellbeing apps that may connect to medical devices or sensors (e.g. bracelets or watches)
  - personal guidance systems, health information, medication reminders

    provided by sms and wireless telemedicine
- FDA **(US)** intends to apply its regulatory oversight only to those mobile apps that are medical devices and whose functionality pose a risk to a patient's safety [10] (2015)

mHealth solutions and technologies involved

following [6] (2014)

- measure vital signs (heart rate, blood pressure, body temperature, brain activities) – sensors – eg. emergency, daily use
- communication, information and motivation tools (medication reminders, fitness and dietry recommendations) – texting (sms), viewer (pdf), audio/viedo player – eg. keep-in-touch with family doctor, personal assistant, or adviser
- healthcare services for safety and autonomy – 3G, 4G networks, GPS – eg. disaster / contagious zones, disabilities persons
- collection of considerable medical, physiological, lifestyle, daily activity and environmental data – research (big data, data mining, cloud computing) - patient access to their health information anywhere, anytime; more accurate diagnosis and treatment; living more independent lives in his/her own home

Type of ressources for health care professionals following [11] (2014)

- Communication capabilities—voice calling, video conferencing, text, and e-mail

- Hospital information systems —electronic health records, electronic medical records, clinical decision support systems, picture archiving and communication systems, and laboratory information systems

- Informational resources—textbooks, guidelines, medical literature, drug references

- Clinical software applications—disease diagnosis aids, medical calculators

Romania

- project for funding mHealth apps - mobile technology for increasing quality of life (eg. Mobile for Good 2012, Vodafone Romania: diabet I and II, elder persons home medical care, intelectual disability youngs, telemedicine for newborns, pediatric call center, SMURD help)
- apps for hospital, medical labs – scheduling, information, laboratory results, etc. (medicover, sanador, medlife)
- companies (elcor consultant)
- individuals

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Thank you!