# Global mHealth Developer Survey





Whitepaper: Summary of Survey Results

December, 2010

# This document is a summary of the results of the global developer interview survey

### Market background

The advent of the "app economy" created a brand new interactive way to communicate with the market. This "Smartphone Applications Market Phenomena" has already impacted heavily on many industries, and that impact will only increase as smartphone penetration grows. Healthcare is one of these industries, and the opportunities for improving both healthcare delivery and the dissemination of medical information are yet to be fully understood.

Attracted by the overall market hype around smartphone applications, independent application developers and to a lesser extent traditional healthcare industry players have started to develop and market mHealth applications on the smartphone application stores.

The global mHealth market survey conducted in summer 2010 examines the opinions about key market trends of both start-up companies and mHealth and traditional healthcare market players that have had experience publishing applications for a smartphone platform.

#### Survey details

### **Objectives:**

 Obtain developers' perception of mHealth status, drivers and barriers

#### Time:

The survey was conducted in Summer 2010

#### Method:

Online questionnaire

### **Participants:**

231 companies involved in mobile health market

#### Reach:

Global

**Note:** This document summarizes the information gathered during the survey. It does not draw any conclusions or provide recommendations. For further insights, analysis and recommendations please see The Global mHealth Market Report 2010-2015.

### **Survey participants include (total 231 respondents)**

3C Strategy Limited Able Eve Device Co., Ltd

Abt Associates Active Medicine ACUMED

**AEON Connected Health** 

Allina

Altys Technology

Anexim Sales Consulting Pvt. Ltd. ANT Wireless div of Dynastream

Innovations Inc. antwerpes ag Apollo Health Street Apollo Life APS Healthcare, Inc. Arcimboldo Astellas Pharma Canada

AT&T Axicare Bainton

Bayer Healthcare Diabetes Care

Bayer Schering Pharma

Barco

Beijing KellyMed Co.,Ltd. Benchmark Softec (P) Ltd binaryHealthCare

BlinkMD VoiceSystems

Boehringer Ingelheim Bosch Healthcare Cancer Care Ontario

Card Guard

Blue Latitude

CareSpeak Communications Catholic Healthcare West CellTrak Tecnologies Inc. Cidway Security SA

CMC

Cognizant Technology Solutions Colleen Shannon Medical Writing

com2health CoMetrica

Clinovations, Inc.

Complete Digital

CONSORTIUM SANTE FRANCE

Consulting Darwin HC IMS Health

DD Studio Deepak Foundation

Federal Department of Health (Australia)

Derdack

CSC

Desert Oasis HealthCare

Detecon

Diacoustic Medical Devices

DocInfoTech Docobo Ltd

DreamWeavers InfoCom Pvt. Ltd.

DRUGWRITE, LLC DunayNET

Engage EPG Health Media

Ericsson Fabulous PR

FC Busienss Intelligence felix burda stiftung Fishawack Fitness Fulfillment

**FORTH Institute of Computer Science** 

Futurehealth GDT: Group, LLC

GeoMed/FireKite Globalpark AG GlaxoSmithKline

**GSMA** 

H3 System, Co., Ltd.

Health Innovation Partners LLC Health Interactions

Health IQ Healthagen, LLC

Hiliary Critchley Consulting, LLC

HomeCare HomeBase Huawei

Humana Hungarian Telekom IBM icom group

**IKERLAN** iLabs Medical

Independent Management Consultant

Infisys Inc. **INFORSON** Innovacom Instera

Intelecare, Inc. iPLATO Healthcare

iSensa ispace

> Johns Hopkins Public Health Kaweah Delta District Health Care

KM Group KV IT consulting

Leap of Faith Technologies, Inc

LifeWIRE Corp

Logistics for Global Good

Magothy Group Makina Corpus mBricks AS

McCann Healthcare **MDeSolutions** 

MEDgle

Medical Connectivity Consulting

MedicApp Corp Ltd MediLogos MediMedia USA MedTech Media MedWriter Limited

Medical Surveillance

MHComm

mHealth-Mobile Solutions

Microx Solutions Mobien Technologies Pvt. Ltd.

Mobile Flow mobile zeitgeist MobileWellbeing Inc. Mobisante

National Institutes of Health National Lab for Drug Control

NGN NHS Nokia Novo Nordisk NowPos M Solutions

Nurture Connect, Inc.

Omnicom Onlife Health, Inc.

Open Standard Solutions / medRF Papageorge General Hospital

PatientenWielch GmbH PatientKeeper, Inc. Peak Biomedical Ltd

Persistent Systems PharmiWeb Solutions Photon infotech

PMDEXP, Inc.

Powerwave Technologies Inc. Praetorian Services PLC Inc.

Psion Teklogix Inc PSL Group

Razoron Health Innovations RegPoint Ltd RememberItNow!

Rinfgroup

Roche (Diagnostics Division) **RSi Communications** Say Communications saludnova Salveo

SapientNitro SB Communications Group

Scoop Technologies Scottish Healthcare

ScriptPad

SegurCaixa Adeslas SENGEX, LLC Serviceplan VITAL Shivya Cosmoplast

Sicap AG Siemens AG

Silverlink Communications

SingTel

SM2 Surveillance Médicale

SMi Group

SML Associates Ltd

Sofomo Embedded Solutions Pvt Ltd

Solaris Health Sorin Group Sotera Wireless

Sudler & Hennessey GmbH

Suffolk University

Sureban

Tactio Software Tata Teleservices Ltd Telefónica I+D

TeleThrive **TELUS** Text to Change

Triple Play Consulting

TroyTyla Turkcell

UnitedHealth Group University of Bayreuth Urgent Care America Verizon Wireless Vestreviken Viable Synergy VitalmHealth Voxiva VU

WebDispatch.com

WellDoc

Walker

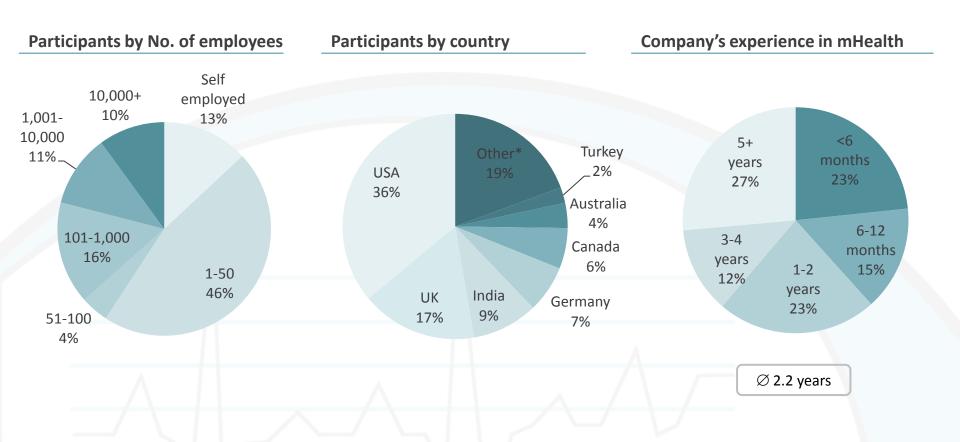
Wellness & Health Innovation

What If Zorgbeheer And single experts

### Summary

- The majority of participants forecast mHealth to break through in the next five years.
- Nearly 80% of respondents see diabetes as the therapeutic area with highest business potential.
- Today healthcare interested people and clinical doctors are the main target groups for mHealth solutions, as perceived by 61% and 58% of respondents, respectively.
- Mobile health solutions for patients and professionals differ a lot in their business potential: survey
  participants concentrate most on medication compliance and health tracking tools for patients, and
  on remote monitoring and continuing medical education solutions for professionals.
- Almost 70% of survey participants agree that app developers and agencies will be the main players in the market.
- Smartphone penetration is seen as the main driver for mHealth by 63% of respondents.
- Lack of standardization (50%), regulation (49%) and market transparency (49%) are the main barriers facing mHealth.
- Smartphones will offer the highest business potential for mHealth compared to other handheld devices.
- App stores will lose their role as main distribution channels for mHealth solutions.
- Android and iOS will be preferred mobile platforms for mHealth solutions.
- mHealth apps are seen as tools to improve communication between patients and healthcare professionals and amongst healthcare professionals.

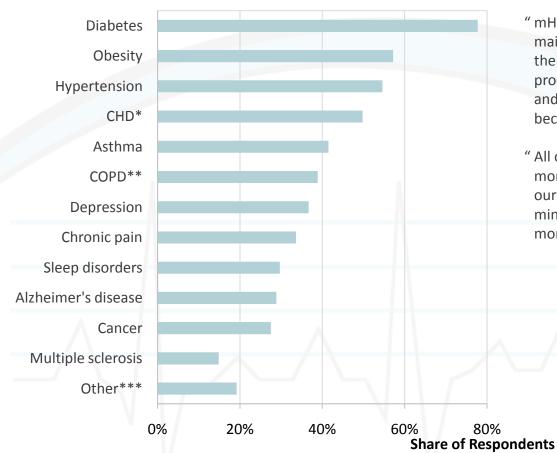
# The global survey involved small start-ups as well as large corporates, with an average of 27 months business experience in mHealth



<sup>\*</sup> Other countries include: Spain, Switzerland, South Africa, China, US, Greece, Belgium, Israel, Finland, Singapore, Norway, New Zealand, Tunisia, Sweden, Poland, UAE, Rwanda, Peru, Serbia, Japan, Croatia, Slovenia, Netherlands, Ireland, Hungary, South Korea

# Diabetes is seen as the therapeutic area with highest business potential

### Which therapeutic areas offer the best market potential for mHealth solutions?



- "mHealth will enable us to learn about and maintain our health, helping the clinicians to know their patients better by enabling an interactive process based on actual, daily recorded metrics, and allow for treatment before the disease becomes chronic."
- "All of these [applications] will enable us to be more health conscious and active, more aware of our own health and chronic conditions, helping minimize the acute episodes in our life, enabling a more healthy lifestyle."

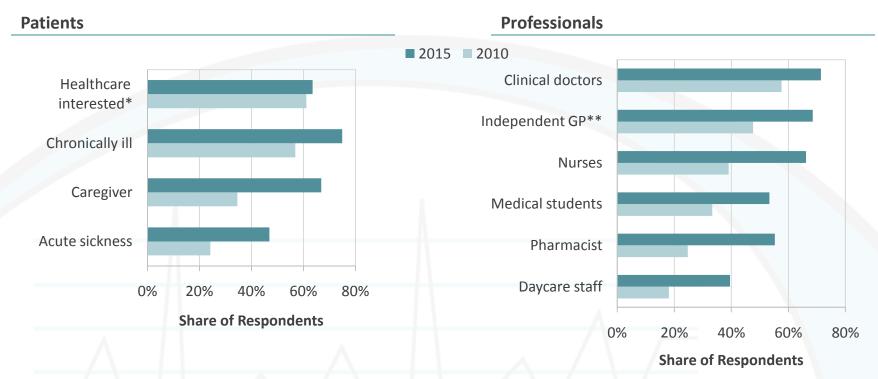
<sup>\*</sup> CHD refers to coronary heart disease

<sup>\*\*</sup> COPD refers to chronic obstructive pulmonary disease.

<sup>\*\*\*</sup> Other chronic diseases such as HIV, Aids, epilepsy, infectious diseases, other less serious illnesses.

# Today healthcare interested people and clinical doctors are the main target groups for mHealth solutions

### What are and will be the main target groups for mHealth solutions?



<sup>&</sup>quot;A major target group, the elderly, will have issues with technology adoption, but will benefit most from mHealth applications."

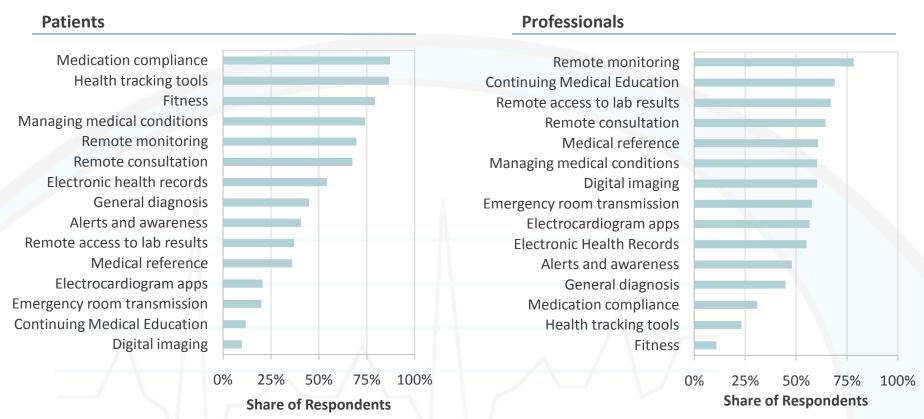
<sup>&</sup>quot;Clinicians are slow adapters when it comes to using IT. They are quite conservative about the source of info - research shows they are most likely to ask colleagues, check their own personal libraries, and search online for info, in that order of preference."

<sup>\*</sup> Individuals that are highly interested in fitness, nutrition, and other health related issues.

<sup>\*\*</sup> Independent general practitioner refers to doctors working outside of a hospital.

# Mobile health solutions for patients and professionals differ a lot in their business potential

### What mHealth solutions offer the biggest market potential for medical professionals and patients?

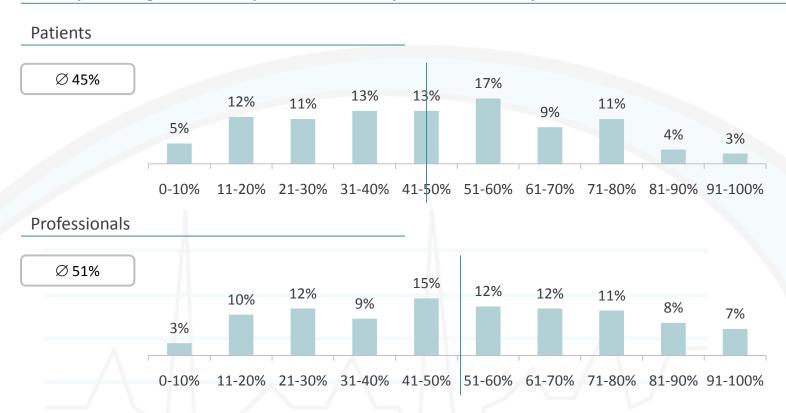


<sup>&</sup>quot;mHealth has the potential to prevent patients from being lost in the system after leaving the doctor's rooms. Consumers will be able to improve wellness in their daily lives, as with mHealth solutions they will remain "always connected" to their healthcare providers."

<sup>&</sup>quot;A digital dialogue, centered around an individual patient and his 3D anatomical display, will be the future of virtual medical solutions."

### Participants envision significant acceptance of mHealth solutions in 2015

### What percentage of medical professionals and patients in developed countries\* will use mHealth in 2015?



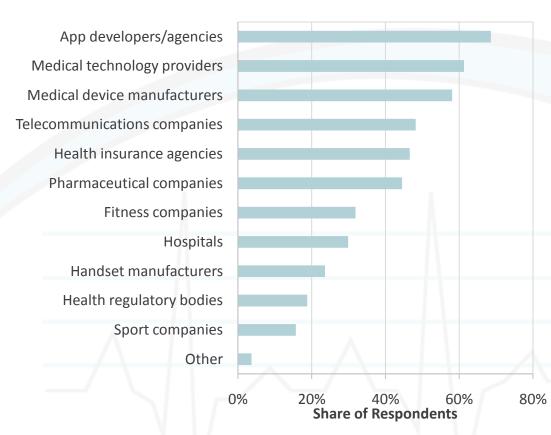
<sup>&</sup>quot;It is well documented that the adoption of new clinical practices and technologies takes longer than 5 years. However, because healthcare is one of the global economy's largest industries even a 10% adoption/change would be very meaningful."

<sup>&</sup>quot;It is likely that there will be a shortlist of mHealth solutions that achieve significant market penetration by 2015. These solutions will probably be clinically validated and reimbursed – as most healthcare products are."

<sup>\*</sup> North America, Europe, Australia, Japan, South Korea, New Zealand (IMF definition).

### App developers and agencies are seen as main players in the market

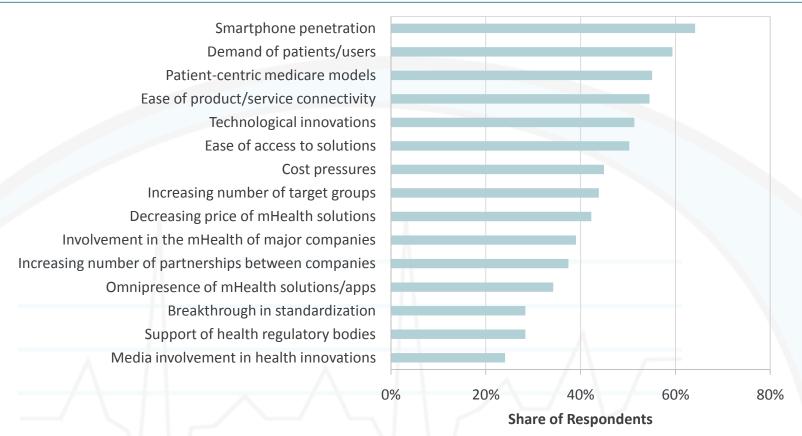
### Which are the main players that will develop the mHealth market in the next 5 years?



- "Doctors and medical practitioners are not leading the mHealth drive."
- "For some of the advances to materialize, medical personnel conservatism needs to reduce whilst patients are educated. This is the role of the rest of the ecosystem, i.e. us 3<sup>rd</sup> party providers and the media."
- "The medical industry needs to work closely with the telecom industry, in order for mHealth applications to become a success."
- "Health insurance agencies might work in developed but probably not in developing country health financing."
- "Government and the health industry are the two most important factors and motivators to establish the mHealth platform for growth and to benefit end users."

### Smartphone penetration is seen as the main driver for mHealth

### What are the main driving forces for the growth of mHealth in upcoming years?



<sup>&</sup>quot;At this phase clients (patients) will drive the demand with the help of innovators that will create more applications and will link them with providers. Health insurance companies and governments will understand the cost effectiveness of this and will promote its development."

<sup>&</sup>quot;Continuous innovation challenges will drive the market as clients will demand more personalized and sophisticated apps."

<sup>&</sup>quot;Lowering clinician resistance to anything that will put control in patients' hands will be critical to success."

# Lack of standardization, regulation and market transparency are the main barriers facing mHealth

### What are the biggest barriers of mHealth in the upcoming years?

Barrier	Ranking (Share of Respondents)	Explanation
Lack of Standardization	50%	→ The lack of having standards on hardware and software will slow down market dynamic
Regulation	49%	→ Regulation will slow down innovation and development of mHealth solutions
Unaware of solutions	49%	→ People are not aware of mHealth solutions or find it hard to access them
Security	47%	→ Patients want to keep health information secure, strong encryption and authentication needed
Cost of solution	38%	→ Patients are not willing to pay for the solution. Costly development process
Readiness of patients	33%	→ People aren't ready for a change in their routine healthcare treatment
Target group mismatch	31%	→ There is a small percentage of the target group (e.g. elderly/chronic disease) that owns a smartphone
Unknown legitimacy	21%	→ Users will be reluctant to use apps since they can be developed by anyone
Technology readiness	19%	→ The technology isn't practical and affordable for a large enough market yet

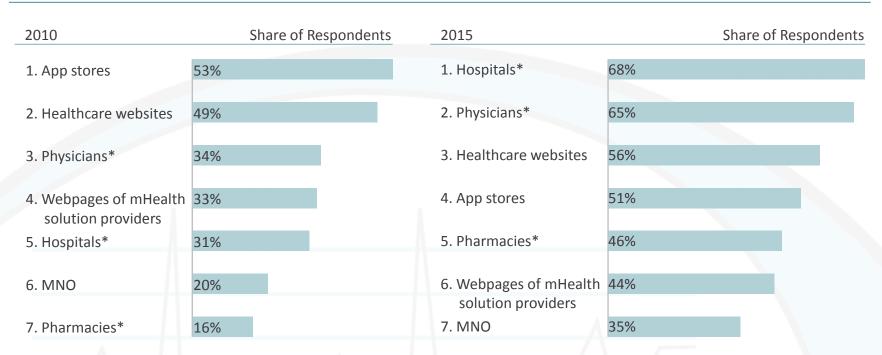
<sup>&</sup>quot;One big problem is funding for innovative companies in the mHealth space. Everyone knows how huge this can be, but many VC firms and investment companies are scared to death of healthcare. They don't understand it and don't see the business model in supplying something that non-patients use (i.e. something only 50,000 physicians might buy)."

<sup>&</sup>quot;mHealth solutions need a lot of safety, security, medical knowledge, etc., which is not readily available today in the market."

<sup>&</sup>quot;Industry (or regulators) has to build common frameworks and platforms to suit interoperability of multiple bodies and devices."

### App stores will lose their role as main distribution channels for mHealth solutions

### What are the best distribution channels for mHealth solutions as of today and in 5 years time?



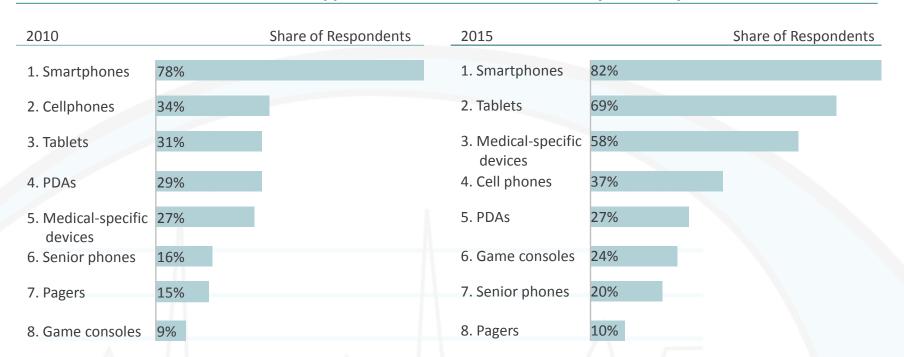
<sup>&</sup>quot;In the future, even five years from now, we will have special different systems for distribution and acceptance of mHealth solutions."

<sup>&</sup>quot;I see doctors including apps into their therapies to improve health outcomes but also to differentiate."

<sup>\*</sup> Hospitals, pharmacies, and physicians would recommend or provide mHealth solutions when patients come in for treatment.

### Smartphones will offer the highest business potential for mHealth

### What devices offer the best business opportunities for mHealth as of today and in 5 years time?



<sup>&</sup>quot;There will be a very large migration "to the middle" between smartphones and tablets. The lines will be blurred and there will be the "real" device that people use for healthcare: a small tablet; bigger than today's smartphones, smaller than mainstream tablets like the iPad."

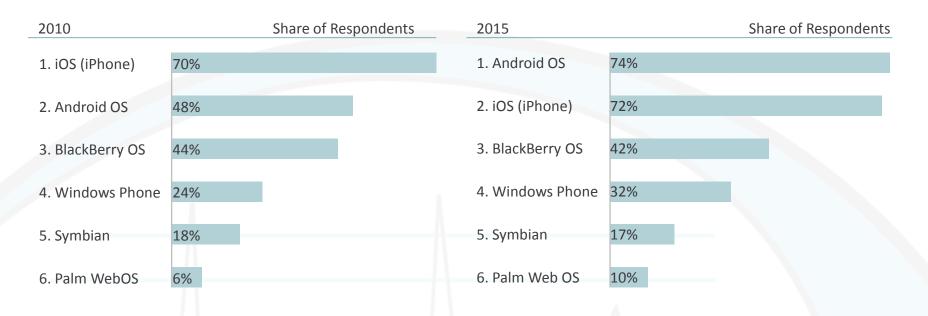
<sup>&</sup>quot;We will be able to unify our communications across multi modalities - web, mobile, other media - a single device will have the ability to have multiple personas."

<sup>&</sup>quot;Not sure smartphones will really pick up since they are too complicated to use for the target population. Specific easy to use, non-intrusive devices will win in my opinion."

<sup>&</sup>quot;mHealth is just another mode - it could be a better mode, but the true solution needs to use all types of communications from face to face to virtual healthcare delivery via a smart phone."

### Android and iOS will be the preferred mobile platforms for mHealth solutions

### What smartphone platforms offer the best business opportunities for mHealth as of today and in 5 years time?



<sup>&</sup>quot;Apps have a place, but it mainly as a portal to cloud solutions, the real players in this space will be cloud service companies."

<sup>&</sup>quot;Apps will live in the cloud - we will carry dumb bricks that we load with smart applications - OS for phone/or mobile device (pad, tablet some new thing we have not seen yet) should be standardized at some point."

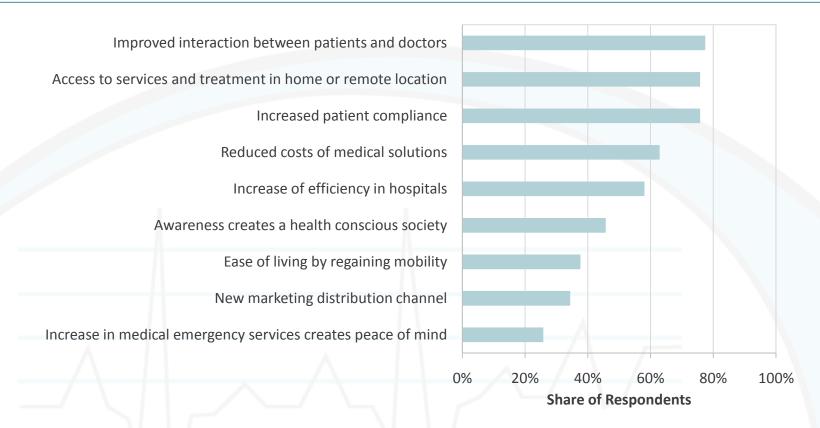
<sup>&</sup>quot;There is too much focus on Smartphone Apps and not Web Apps. Web Apps will be the future!"

<sup>&</sup>quot;No good platforms as of now. They all have serious limits related to connectivity to external data collection devices."

<sup>&</sup>quot;A more comprehensive approach will be necessary to assure sustainability of mHealth applications. Even though individual apps can be very fancy and useful they do not solve problems in the long term. In the long run they will have to be part of more integrated systems."

# mHealth apps are seen as tools to improve communication between patients and HCPs\* and amongst HCPs

### How can the industry benefit from mHealth solutions?



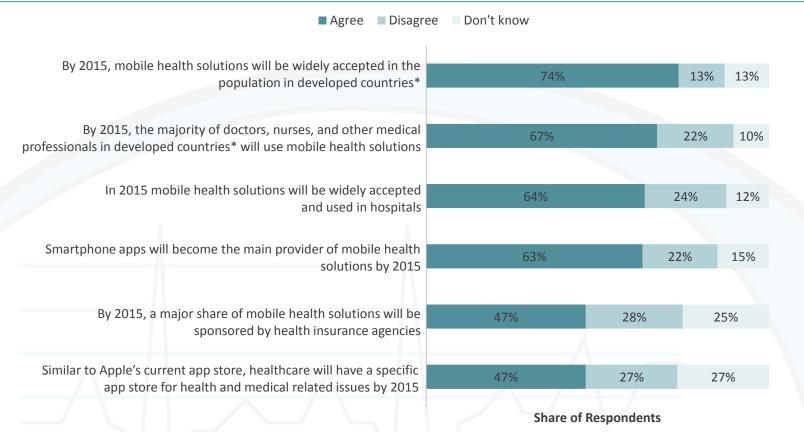
<sup>&</sup>quot;mHealth will assist in building healthier communications between patients and providers."

<sup>&</sup>quot;It [mHealth] helps providers to improve their service delivery, resulting in better health and greater satisfaction in their patients. The end result will be reduced healthcare costs, increased productivity and overall happiness in human lives."

<sup>\*</sup> HCPs: Healthcare professionals

# The majority of participants forecast a break through of mHealth in the next five years

### Please tell us your opinion about the following hypotheses:



<sup>&</sup>quot;An emerging market for mHealth could be India. Even though it is still a developing economy, it is a country where acceptance of technology is very high due to a large population in the age group 20 to 40 years."

<sup>&</sup>quot;Healthcare is 15 years behind most other industries - we use robots to perform sophisticated tasks and then we write about the results on paper!"

<sup>\*</sup> North America, Europe, Australia, Japan, South Korea, New Zealand (IMF definition).

### research2guidance: get in contact

### **Our Service Offerings**

### **Reports and PowerPoint slide-sets**

market insights on selected topics

### Bespoke research

custom-made research for your individual needs

### **Knowledge center**

a subscription to a wealth of data, analysis, profiles, and daily news and opinion

### **Consulting services**

projects tailored to assist you in developing your mobile strategy

#### **Contact us for**



### A one-on-one expert call with a research analyst for

- A personal 15-30 min. consultation
- Questions and answers about our research
- Matching your needs with our research services
   Write an email to expert@research2guidance.com



### Direct web-shop access to our reports and PPTs

- Browse our research products
- Download immediately
- Easy payment (VISA; Master Card; PayPal)
   Visit www.research2guidance.com/shop



#### Additional information on

- Pricing
- Report Packages
- Custom made services and bespoke projects
   Call Robert Kuersten (+49 30 609893366)

### Some of Our Reports: select the information you need



#### Mobile Health Market Report 2010 - 2015

A comprehensive business guide to the new mHealth market. How can traditional healthcare companies successfully engage in and profit from this new channel to their patients and customers?

2010-11-12 | 91 pages PDF

€ 1,890.00



### mHealth App Market Trends and Figures 2010-2015

This report is a consolidation of the most important trends and figures in the mHealth smartphone application market.

2010-11-12 | 28 pages PDF

€ 950.00



#### Global mHealth Developer Survey

Benefit from the first-hand insights of 235 mHealth app developer worldwide. Get their views on which areas offer the highest business potentials for mHealth, the best mobile mHealth platforms, barriers and trends and much more.

2010-11-12 | 17 pages PDF

€ 390.00

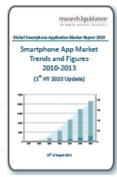


#### mHealth Application Best-Practice Landscapes

This report shows current status of 17,000 mHealth applications and gives state-of-the-art 21 best-practice examples of general healthcare & fitness, medical information, remote monitoring and healthcare management applications.

2010-11-12 | 37 pages PDF

€ 490.00



### Smartphone App Market Trends and Figures 2010-2013

This report is a consolidation of the most important trends and figures in the smartphone application market.

2010-08-20 | 31 pages PDF

€ 950.00



#### Application Store Comparison

This report describes and compares today's main 36 smartphone application stores in detail using quantitative and qualitative metrics. It highlights the differences between app stores operated by OEM, OS, MNO and independent companies.

2010-08-20 | 26 pages PDF

€ 490.00

Find more on www.research2guidance.com/shop

# Our Ready-to-use PowerPoint slides: drag and drop them into your presentation.

### PPT Package for "Mobile Health Market Report 2010-2015"



2010-11-12 | 41 page PPT € 690.00

### Number of Paid & Free mHealth Apps per App Store



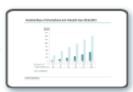
2010-11-12 | 1 page PPT € 19.00

### mHealth App Market Drivers 2010 -2015



2010-11-12 | 1 page PPT € 9.00

### Price Comparison mHealth vs. Total App



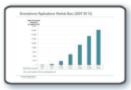
2010-11-12 | 1 page PPT € 29.00

#### App Store Race (2000-2010)



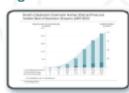
2010-08-12 | 1 page PPT € 29.00

### Smartphone App Market Size (2007-2013)



2010-08-20 | 1 page PPT € 29.00

### PPT Package for "Smartphone App Market Trends and Figures 2010-2013" Report



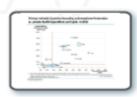
2010-08-20 | 13 pages PPT € 290.00

### App Store Comparison Tables (8 Slides)



2010-08-20 | 8 pages PPT € 49.00

### mHealth Market Potential per Country 2015



2010-11-12 | 1 page PPT € **29.00** 

Find more on www.research2guidance.com/shop