



European
Commission

JRC SCIENTIFIC AND POLICY REPORTS

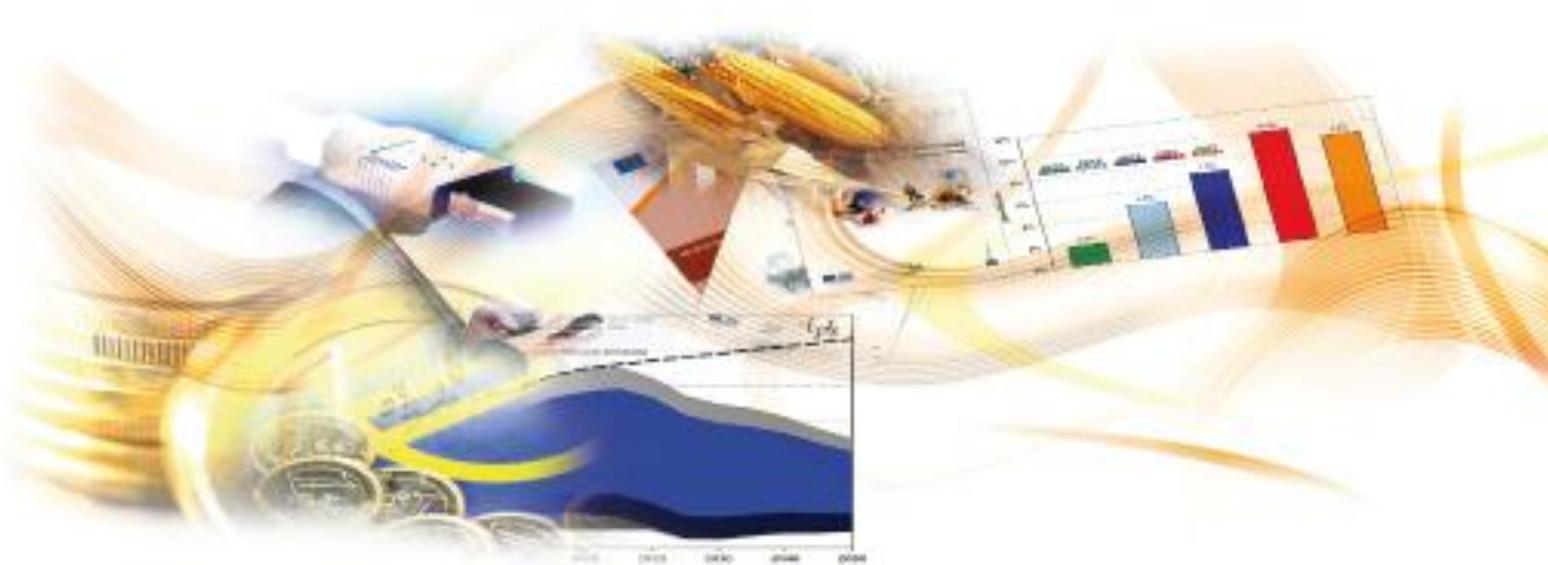
Strategic Intelligence Monitor on Personal Health Systems,
Phase 2:

Market Developments – Remote Patient Monitoring and Treatment, Telecare, Fitness/Wellness and mHealth

Authors: Peter Baum, Fabienne Abadie

Editors: Fabienne Abadie, Maria Lluch,
Francisco Villanueva Lupiañez, Ioannis Maghiros,
Elena Villalba Mora, Maria Bernarda Zamora Talaya

2013



Report EUR 25426 EN

European Commission
Joint Research Centre
Institute for Prospective Technological Studies

Contact information

Address: Edificio Expo. c/ Inca Garcilaso, 3. E-41092 Seville (Spain)
E-mail: jrc-ipts-secretariat@ec.europa.eu
Tel.: +34 954488318
Fax: +34 954488300

<http://ipts.jrc.ec.europa.eu>
<http://www.jrc.ec.europa.eu>

This publication is a Scientific and Policy Report by the Joint Research Centre of the European Commission.

Legal Notice

Neither the European Commission nor any person acting on behalf of the Commission is responsible for the use which might be made of this publication.

Europe Direct is a service to help you find answers to your questions about the European Union
Freephone number (*): 00 800 6 7 8 9 10 11

(*): Certain mobile telephone operators do not allow access to 00 800 numbers or these calls may be billed.

A great deal of additional information on the European Union is available on the Internet.
It can be accessed through the Europa server <http://europa.eu/>.

JRC71141

EUR 25426 EN

ISBN 978-92-79-25708-7 (pdf)

ISSN 1831-9424 (online)

doi:10.2791/83417

Luxembourg: Publications Office of the European Union, 2013

© European Union, 2013

Reproduction is authorised provided the source is acknowledged.

Table of Contents

1	Introduction	7
1.1	Background	7
1.2	Objectives and approach	7
1.3	IPHS market segmentation	8
1.4	Players active on the IPHS market	9
1.5	Definitions	11
1.6	Sources	13
1.7	Structure and content	14
2	The RMT market	15
2.1	Market size and potential for growth	15
2.2	Market players on the RMT segment	19
2.3	Has anything changed?	19
2.3.1	Market analysts' expectations	19
2.3.2	Scarcity of market data	20
2.3.3	Barriers and drivers	21
2.3.4	Geographical focus	21
2.3.5	Type of applications	21
3	The Telecare market	23
3.1	Background	23
3.2	Different generations of Telecare products	23
3.3	Telecare market data	25
3.4	Market dynamics: recent trends	29
3.5	Barriers and drivers	30
3.6	Geographical considerations	31
4	Wellness/fitness and prevention	33
4.1	Wellness/fitness in the IPHS context	33
4.2	Market data	34
4.3	Market dynamics	35
4.3.1	The professional market as a hotbed	35
4.3.2	Sport enthusiasts as a driver of growth	36
4.3.3	Corporate fitness: a new niche	37
5	mHealth	39
5.1	What is mHealth?	39
5.2	Overall market developments	39
5.3	Types of services offered	40
5.4	Smart phone applications as a dynamic emerging field	41
5.4.1	Market trends	41
5.4.2	Type of applications offered	42
5.4.3	Market statistics on the emerging apps economy	44
5.5	Market size for mHealth in general	47
5.6	Actors on the mHealth market	50
6	Ecosystem and value chains	53
6.1	Ecosystem perspective: value chains and business models	53
6.2	The role of acquisitions, alliances and industry groups	57
6.3	Threats for companies active in the IPHS field	58

7	IPHS market: companies review	59
7.1	Geographical spread.....	59
7.1.1	Companies characteristics.....	60
7.2	Product and service characteristics.....	62
7.2.1	Medical focus.....	62
7.2.2	Non-medical focus.....	63
7.2.3	Type of products and services offered.....	64
7.3	IPHS market positioning.....	66
8	Concluding remarks	69
9	References	71
	Annex 1: Overview of market reports	74
	Annex 2: Telecare cost data, Spain (2008)	77
	Annex 3: Companies on the IPHS market	78
	3G DOCTORS.....	78
	A&D Company, Limited.....	78
	Abbott.....	78
	Adidas/Reebok.....	79
	Aerotel Medical Systems.....	79
	Aipermon.....	80
	Alive Technologies.....	80
	Bayer.....	80
	B. Braun.....	81
	BD (Becton Dickinson and Company).....	81
	Beurer.....	81
	BiancaMed.....	82
	Biotel Inc. /Cardionet.....	82
	Biotronik.....	83
	Bodymedia Inc.....	83
	BodyTel.....	83
	British Telecom (BT).....	84
	Cambridge Silicon Radio (CSR).....	84
	Cambridge Consultants.....	85
	Card Guard Group.....	85
	Cardiac Science Corporation.....	85
	Cardiocom.....	85
	CAS Medical Systems.....	86
	CardioMEMS Inc.....	86
	Cardioscan GmbH / Energy Lab Technologies GmbH.....	86
	CareTech.....	87
	Cirrus Communication Systems.....	87
	Cisco.....	87
	Corscience GmbH.....	88
	Custo Med GmbH.....	88
	Danmeter A/S.....	89
	Deutsche Telekom.....	89
	Docobo.....	89
	Dossia.....	90
	Dräger Medical AG & Co.....	90

Dr. Gerhard Schmidt GmbH	90
Epocrates	90
ERGO-FIT	90
Fairbanks Scales.....	91
Fitbit.....	91
Fold.....	91
Fukuda Denshi	91
Garmin and Dynastream Innovations.....	91
Google Health.....	92
HeartMath LLC.....	92
High Five Health Promotion.....	92
Honeywell Hommed.....	93
Inotive Solutions B.V.....	93
Intel.....	93
LifeWatch.....	94
Life Record.....	94
Lifescan	94
Linde Respiratory Homecare section.....	94
Medtronic.....	95
Medic4All/Telcomed.....	95
Meigaoy	96
Microlife.....	96
Microsoft.....	96
Nihon Kohden.....	97
Nike	97
Nintendo.....	97
Nonin	97
Nordic Semiconductor ASA.....	97
Orange.....	98
Omron Healthcare.....	99
Qualcomm.....	99
OBS Medical	99
OTE.....	99
Portugal Telecom	99
POLAR Electro.....	100
POWERbreathe.....	100
Philips Healthcare/ PHILIPS DIRECT LIFE.....	100
Preventice.....	101
Research in Motion's (RIM).....	101
Robert Bosch Healthcare.....	102
Roche.....	102
Rossmax.....	103
RS TechMedic Ltd. (MHealth CVD)	103
Sanvartis GmbH	103
Schiller.....	103
Scottcare	103
SHIMMER.....	104
SenseCore.....	104
Senslab.....	104
SHL Telemedicine.....	105
Smiths Medical PM Inc	105
ST-Ericsson	105
St. Jude Medical.....	106

Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.