

# **MOBILE HEALTHCARE**

## The End Markets

AUGUST 2013

STUDY NUMBER:  
MP102-1-13

© Copyright Semico Research, 2013. All rights reserved.

Reproduction in whole or part is prohibited without the express written permission of Semico.

The contents of this report represent the interpretation and analysis of statistics and information that is generally available to the public or released by responsible agencies or individuals, but is not guaranteed as to its accuracy or completeness. The reader acknowledges that they use this information at their own risk.

# Table of Contents

---

<b>TABLE OF CONTENTS</b> .....	<b>I</b>
<b>LIST OF FIGURES &amp; TABLES</b> .....	<b>III</b>
<b>EXECUTIVE OVERVIEW</b> .....	<b>6</b>
<b>METHODOLOGY</b> .....	<b>7</b>
<b>OVERVIEW</b> .....	<b>8</b>
<b>Accessory vs. Stand Alone</b> .....	<b>8</b>
<b>Wellness vs. Fitness</b> .....	<b>9</b>
<b>MARKETS</b> .....	<b>10</b>
<b>Wearable electronics</b> .....	<b>10</b>
Apple .....	10
<b>Mental Health</b> .....	<b>13</b>
Neurowear .....	14
Imec .....	14
<b>Clothing</b> .....	<b>14</b>
AiQ Smart Clothing .....	15
Textronics .....	15
Heapsylon .....	17
Electric Foxy .....	17
Moticon .....	19
Nuubo .....	19
<b>Fertility</b> .....	<b>19</b>
Cambridge Temperature Concepts .....	19
<b>Fitness / Activity Tracker</b> .....	<b>20</b>
Misfit Shine .....	21
Amiigo .....	22
Basis .....	23
Finis .....	23
Fitbit .....	23
Jawbone .....	23
Google .....	24
ValenCell .....	24
Withings .....	25

Polar .....	25
BodyMedia .....	26
<b>Sports.....</b>	<b>29</b>
O-Synce .....	31
adidas .....	31
Nike .....	31
Under Armour .....	31
4iiii Innovations Inc.....	32
Impire .....	32
Omegawave .....	33
<b>Chronic Care Management .....</b>	<b>34</b>
Diabetes .....	35
Cellnovo .....	36
Dexcom .....	37
iBGStar .....	38
<b>Remote Health Monitoring.....</b>	<b>38</b>
AliveCor .....	39
iRhythm.....	39
Wahoo Fitness .....	39
Mio Alpha.....	40
<b>Helmets.....</b>	<b>40</b>
ICEdot .....	40
<b>Safety Alert / Medical Bracelets .....</b>	<b>40</b>
ICEdot .....	40
 <b>STANDARDS AND ALLIANCES .....</b>	 <b>42</b>
AdvaMed .....	42
ZigBee Alliance .....	43
Continua Health Alliance.....	43
ANT+ Alliance .....	44
 <b>TOTAL MARKET.....</b>	 <b>45</b>

## List of Figures & Tables

---

Figure 1: Worldwide Portable Healthcare Revenues and Units .....	6
Figure 2: Semico Forecasting Methodology .....	7
Figure 4: Personal Items Network Patent from Apple (Sports Example).....	11
Figure 5: Personal Items Network Patent from Apple (Fitness Example) .....	12
Figure 6: Brain Pacemaker Electrical Stimulation .....	13
Figure 7: Brain Disco .....	14
Figure 8: Smart Footwear with Fabric Sensors .....	15
Figure 9: Textronics Textile with Integrated Electronics.....	16
Figure 10: Numetrex Training Shirt with Heart Rate Sensing Technology.....	16
Figure 11: Concept App for Move Garment .....	17
Figure 12: Concept Heart Rate Ring and App .....	18
Figure 13: Heart Rate Ring Prototype .....	18
Figure 14: Nuubo nECG Textile and nECG Minder Devices .....	19
Figure 15: DuoFertility Monitoring Service .....	20
Figure 17: Misfit Shine.....	21
Figure 18: Wireless Social Networking, Gamification, and Competition .....	22
Figure 19: Amiigo.....	22
Figure 20: Inside the Fitbit .....	23

Figure 21: PerformTek Sensor Technology.....	24
Figure 22: Withings Activity Monitor .....	25
Figure 23: Polar RC3 GPS Sports Watch .....	25
Figure 24: Polar FT7 Heart Rate Monitor.....	25
Figure 25: Clinical Results of Armband Program .....	26
Figure 26: Bodymedia App Interface.....	27
Figure 27: Bodymedia Core 2 Armband.....	28
Figure 28: Bodymedia Technology .....	28
Figure 29: Babolat Racquet .....	29
Figure 30: Basketball with Sensors and Wireless Charging.....	29
Figure 31: Smart Helmet Technology.....	30
Figure 32: O-Synce Heads-Up Display.....	31
Figure 33: micoach Product Line .....	31
Figure 34: Sportiiiis .....	32
Figure 35: Bemeister Complete Tracking System.....	33
Figure 36: Omegawave Pro Mobile Platform.....	33
Figure 37: Obesity in United States by State .....	35
Figure 38: Top 10 Countries with Diabetes 2011 - 2030.....	36
Figure 39: Cellnovo System.....	36
Figure 40: Dexcom G4 PLATINUM .....	37

Figure 41: Dexcom Accuracy Comparison .....	37
Figure 42: iBGStar Glucose Meter Comparison .....	38
Figure 43: Heart Rate Monitor Patch .....	39
Figure 44: Wahoo Blue HR Heart Rate Strap .....	39
Figure 45: ICEdot Crash Sensor .....	40
Figure 46: ICEdot Band .....	41
Figure 49: ZigBee Alliance Interoperability .....	43
Figure 50: Integrated Approach of Interoperable Device by ST .....	44
Figure 51: Total Market Breakout by Segment .....	45
Figure 52: Fitness and Wellness Unit Forecast.....	46
Figure 53: Fitness and Wellness Total Revenue and Percent Change .....	47
Table 1: Total Fitness and Mobile Wellness Forecast .....	45
Table 2: Revenues by Market Segment .....	47