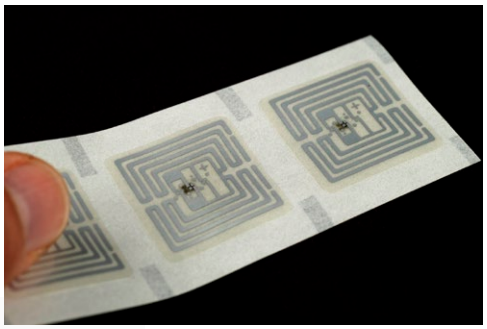
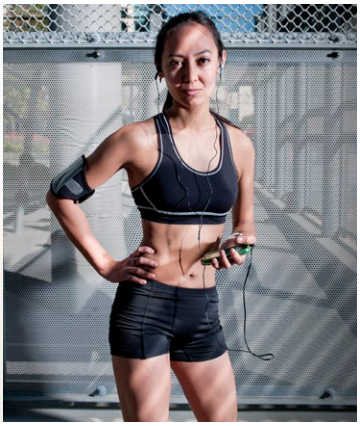
A Thintri
MARKET STUDY 2014

BiowireleSS:

Market Opportunities in Wireless Healthcare





Thintri Inc. announces the release of **BiowireleSS: Market Opportunities in Wireless Healthcare, 2014**, a new market study covering opportunities emerging in the use of wireless technologies in healthcare delivery. This comprehensive examination of the subject discusses the various technologies and their impact on the healthcare landscape, with market forecasts to 2020.

Thintri Inc.

Thintri Inc. provides business and market intelligence for a wide range of technologies through custom consulting, technology assessments, and published market studies.

- Materials
- Manufacturing
- Electronics
- Semiconductors
- Telecommunications
- Aerospace
- Logistics
- Imaging
- Photonics
- Security
- And many others

Contact:
J. Scott Moore, Ph.D.
President
Thintri, Inc.
914/242-4615
smoore@thintri.com

Thintri Inc
Business Intelligence • Technology Assessment

Contents

Wireless Medical Applications

- Chronic disease management
- Post-surgical recovery
- Vital sign monitoring
- Pro-active monitoring
- Eldercare
- Remote diagnosis
- Emergency communications
- Wellness and Fitness
- Telemedicine
- Facilities monitoring
- Asset and staff locating
- Positioning
- Asset management
- Tracking pharmaceuticals
- Tracking meds compliance
- Imaging and Video
- Research and clinical trials
- In-home assistance

Wireless Technologies

- WPANs/WBANs/MBANs
- WLANs, Wi-Fi
- WiMAX
- ZigBee
- Bluetooth
- ANT
- Ultra-wideband (UWB)
- E-textiles
- Radar
- Web conferencing
- Capsule endoscopy
- Implantable and ingestible sensors
- Epidermal electronics
- Smart bandages
- Smartphone apps
- RFID, RTLS, IPS

Market Demand

2013–2020 forecasts

- E-Textiles and Wearable Sensors
- Wireless Imaging and Video
- Smart pills & capsule endoscopes
- mHealth and remote monitoring
- Smartphone apps
- RFID
- RTLS
- Market volumes and unit sales
- Application segments
- Regional markets

Background on BiowireleSS

Biomedical Wireless Technology, Networks and Sensing Systems, or BiowireleSS, is rapidly becoming an integral component of healthcare delivery. A wide range of wireless technologies is being brought to bear on a long list of healthcare and pharmaceutical applications with the promise of utterly transforming healthcare as we know it today.

BiowireleSS will bring unprecedented efficiencies and productivity to healthcare delivery while lowering costs and improving patient outcomes. More importantly, many patients and their healthcare providers will experience far more freedom and flexibility. Where once a patient would have been confined to a hospital bed for extensive tests, or to be monitored post-surgery or for chronic conditions, in many cases patients will soon be monitored at home, free to go about their normal activities, while a wireless device will transmit data to healthcare providers, who will be alerted if vital signs vary from normal ranges. Hospitals will use wireless technology to instantly track equipment and staff, and automate facilities management tasks such as keeping medication at the proper temperature and storing records in the cloud, with far greater efficiency and reliability than was previously possible.

Wireless technologies applicable to healthcare will include smart garments and e-textiles; wearable sensors that can be worn on the wrist, in armbands, etc.; other sensors that are attached directly to the skin, and even epidermal electronics, small, temporary tattoo-like patches that will contain both sensors that can monitor body functions as well as wireless transmission capability and power generation/harvesting. RFID/RTLS systems will allow tracking of both hospital staff and equipment for instant locating, as well as tracking of pharmaceuticals to prevent counterfeiting. Wireless imaging and video will facilitate remote diagnosis for those lacking access to specialists. Smartphone apps will bring healthcare information directly to consumers. Many other scenarios are emerging as well.

The development of these wireless technologies, many now near market entry or already commercialized, comes as a "perfect storm" takes place, largely due to recent Federal legislation that can only be implemented in any practical sense by use of such technologies. The Patient Protection and Affordable Care Act, also known as the ACA or "Obamacare," will implement extraordinary measures to increase the efficiency and reliability of the US healthcare system. For example, Meaningful Use will mandate the complete move to electronic record-keeping and fundamentally changing the way physicians interact with patients and clearing the way for remote monitoring of patients.

Other ACA provisions, while not explicitly concerned with technology, will force healthcare providers to find new ways to increase efficiency and effectiveness, and thus maximize health and wellness, as part of a broad move from fee-for-service to fee-for-outcome. Hospitals, for example, will pay a penalty if a patient is readmitted within a certain period of time after discharge for the same condition. Hospitals will see full beds as expenses, rather than sources of profit. Many of the requirements of the ACA are in line with the capabilities of emerging wireless technologies and will be fundamental to their realization.

However, the road to implementation of BiowireleSS will not be smooth. Many technologies that could open up new wireless healthcare markets are still too costly. Customer education remains a significant obstacle as well.

Understand the Markets

Realizing the wide-ranging market potential in wireless healthcare delivery will depend on the development of appropriate business models, some of which are already deployed or in development. Those that are successful, and the industry consolidation that will invariably follow, will define the wireless healthcare landscape for the next couple of decades.

The 15% of the US population that is considered fragile or episodic and which forms a large portion of healthcare demand, as well as many suffering from temporary conditions, will have to be monitored closely in order to avoid hospital stays. The best way to address the needs of these populations will be the widespread use of new wireless technologies. At the same time, demand will also come from the wellness and fitness segments, which will find a bewildering array of technological options available to monitor personal training and wellness regimes. This complex mix of technologies, legislation, markets and shifting demand will present healthcare providers and wireless technology developers with extraordinary opportunities as well as threats in an uncertain, rapidly developing environment.

Thintri's market study, **BiowireleSS: Opportunities in Wireless Healthcare**, will examine the leading emerging wireless healthcare-related technologies, their capabilities and limitations, along with their most promising applications and markets.

Order your copy today: *$4200*

914/242-4615
smoore@thintri.com
www.thintri.com

Report Contents

See Tables and Figures next page

Tables and Figures