

Healthcare without Bounds: Trends in RFID

TITLE:	Healthcare without Bounds: Trends in RFID
AUTHOR:	Spyglass Consulting Group Gregg Malkary, Managing Director gmalkary@spyglass-consulting.com www.spyglass-consulting.com 
LENGTH:	60 Pages 30 Figures
TYPE:	Study - Customer Needs and Strategies
PUBLISHED:	August 2005
PRICE	\$1,995.00 (US) <i>Enterprise pricing available upon request</i>
INTRODUCTION	<p>Trends in RFID presents the findings of an end-user market study focused on the current state of Radio Frequency Identification (RFID) adoption by healthcare organizations across the United States. The report uncovers strong opinions regarding the market opportunities and challenges for deploying RFID solutions for positive patient identification, accurate mobile asset and patient tracking and supply chain inventory management to help increase operational efficiency and improve the quality of care.</p> <p>The content for Trends in RFID was derived from over 100 in-depth interviews with healthcare organization professionals working in a variety of functional areas including pharmacy, clinical engineering, materials management and medical/nursing informatics. These professionals were representative of a broad range of organization types and sizes.</p> <p>The telephone interviews were conducted over a 3-month period starting in April 2005. The purpose of the interviews was to identify the needs and requirements for RFID through discussions about existing workflow inefficiencies, usage of wireless and RFID-based solutions today, and the potential impact for deploying RFID in the future.</p> <p>Spyglass also evaluated key vendor product offerings and identified early adopter organizations that have successfully deployed RFID-based solutions.</p>
TARGET AUDIENCE	<ul style="list-style-type: none"> • Software & hardware vendors, systems integrators and management consultants who are selling mobile computing devices, applications and services into the healthcare industry • Hospital administrators and IT executives who are making strategic decisions to fund clinical information technology solutions • Clinicians who are involved in informatics and clinical system evaluation and selection • Investment banking and private equity investors

ABSTRACT:	<p>Radio Frequency Identification (RFID) is a disruptive technology that has broad applicability across the healthcare industry. With RFID, healthcare organizations (HCOs) can automate inefficient manual processes to help increase operational efficiency and improve the quality patient care delivery. RFID enables HCOs to positively identify patients, accurately track mobile assets and patients, and optimize supply chain inventory management and logistics.</p> <p>Over the past few years, excitement and hype for RFID have been driven by initiatives and mandates by Wal-Mart and the Department of Defense. Unfortunately, healthcare organizations are finding it difficult to leverage these experiences because the needs/requirements and market dynamics of the healthcare industry are significantly different than the retail and government sectors.</p> <p>HCOs are investing in RFID today. Healthcare organizations are investing in RFID solutions today to better understand the viability of the technology and to figure out how to leverage RFID to solve real problems within their organizations.</p> <p>Active solutions are propelling growth of RFID in healthcare. Healthcare organizations are primarily deploying active RFID solutions for tracking assets and patients. With RFID, HCOs are achieving a compelling ROI to help increase operational efficiency and improve the quality of patient care.</p> <p>Passive RFID solutions lack a compelling business case. Healthcare organizations are having difficulties identifying a compelling business case to justify an investment in passive RFID for patient safety and inventory/supply chain management solutions.</p> <p>RFID solutions are not ready for large-scale, enterprise-wide deployment due to healthcare organization concerns about network infrastructure, network scalability, application availability, and systems integration complexities.</p>
------------------	---

**ABOUT
SPYGLASS
CONSULTING
GROUP**

The **Spyglass Consulting Group** is a market intelligence firm and consultancy focused on the current and future potential of mobile computing and wireless technologies within the healthcare industry. Spyglass offers products and services in customer & market intelligence, strategic partnership development, product marketing and investment due diligence.

Spyglass customers include leading high technology vendors such as **Cisco, Microsoft, Intel, IBM, Hewlett Packard, McKesson, Cerner, Philips Medical, Cardinal Health, NEC, PalmOne, RIM, Sprint, Verizon Wireless, PriceWaterhouse**

Coopers and Cap Gemini.

Mr. Gregg Malkary is the **founder** and **Managing Director** of the **Spyglass Consulting Group**. He has over 20 years experience in the high technology industry working with Fortune 2000 companies to help them use information technology for competitive advantage. Mr. Malkary has domain expertise in mobile computing, wireless and broadband technologies with direct experience in the healthcare, hospitality, manufacturing, communications and entertainment markets.

Prior to founding **Spyglass Consulting Group** in August 2002, Mr. Malkary was an Associate Partner at **Outlook Ventures**, a venture capital firm, where he was responsible for making investments in early stage enterprise software and communications companies. Previously, Mr. Malkary was the Director of Strategic Planning for **Exodus Communications** where he was responsible for identifying, evaluating and executing growth initiatives in the managed web-hosting marketplace. Mr. Malkary has also held consulting and senior management roles in business development, strategic planning and product marketing for public and private technology companies including **IBM, Hewlett Packard, Accenture, Silicon Graphics, SkyTel Communications** and **Liberate Technologies**.

Mr. Malkary is a frequent speaker at regional and national conferences focused on mobile computing, wireless technologies and healthcare related issues. He has been written about and quoted in numerous industry publications such as CIO Insight, Network World, eWeek, Wireless Week, MIT Technology Review, Health Data Management, Modern Physician, Health Management Technology, and ADVANCE for Health Information Executives.

Mr. Malkary is an honors graduate of **Brown University** having earned a MS and BA in Computer Science. He was awarded the prestigious North American Philips Corporation Fellowship for his graduate research work in graphical simulation environments.

For additional information about this study, please contact Gregg Malkary at gmalkary@spyglass-consulting.com.

<p>Customer Testimonials</p>	<p><i>Mobile Computing for Physicians and Mobile Computing in Nursing</i> have become essential reference tools for the palmOne healthcare team as we develop our product and partner strategy for handhelds and smartphones. Because of the depth and breadth of the research, we are able to find answers to questions about a broad range of topics – from current and future usage patterns and preferences to workplace realities inhibiting adoption. What is particularly refreshing is the frank discussion of the gap between the panacea of e-health initiatives and the challenging environment in which our healthcare professionals must function today. I highly recommend their research for those seeking a comprehensive environmental scan of mobile technology usage among clinicians.</p> <p>Gail Moody-Byrd Director, Business And Healthcare Marketing palmOne</p> <p><i>Trends in Mobile Computing</i> is an excellent review. People of your caliber should be recognized at national meetings for your valuable contribution of legitimate end-user based research, so we can all better understand the market realities of mobile technology in healthcare. Your findings are both encouraging to those trying to advance the usage of mobile technologies, and words of caution to those who extrapolate or make assumptions solely based on anecdotal success stories.</p> <p>Andrew Barbash, MD Bethesda, MD Director of Mobile Health Program Medical Records Institute (Boston, MA)</p> <p><i>Mobile Computing for Physicians</i> provided the Microsoft TabletPC Group with unique insights and perspectives to better understand how physicians are using mobile computing solutions at the point of care within wide variety healthcare settings. As a result of this report, we were able to better fine tune our value proposition and messaging toward different constituencies within the healthcare community.</p> <p>Chris Barry, Group Product Manager Windows Client PMG, Tablet PC Division Microsoft</p> <p><i>Trends in Mobile Computing</i> is engaging, comprehensive and thorough. It provided us with valuable insights and perspectives on we can effectively use mobile computing today to automate clinician workflow and processes at the point of care. I recommend this report to healthcare organizations who are looking to make new investments in clinical IT to improve the quality and safety of patient care.</p> <p>Richard G. Ellenbogen, MD, FACS Chairman, Department of Neurological Surgery University of Washington School of Medicine Theodore S. Roberts Endowed Chair in Pediatric Neurological Surgery The Children's Hospital and Regional Medical Center Seattle, WA</p> <p>The <i>Spyglass</i> reports offer one of the best overviews of the promises and pitfalls of mobile computing solutions for the healthcare community. It is useful for both vendors and providers; helping us plan together to make the best of a promising technology. It is well researched and thoughtful.</p> <p>Kevin Whelan Director of Product Marketing, Mobile Solutions McKesson Corp</p>
-------------------------------------	--

Trends in RFID August 2005

Spyglass Consulting Group
Gregg Malkary, Managing Director
Menlo Park, CA

IN THIS STUDY4

METHODOLOGY 4

TARGET AUDIENCE 4

DEMOGRAPHIC SEGMENTATION..... 5

EXECUTIVE SUMMARY 7

MARKET SURVEY RESULTS 13

ARE HCOS INVESTING IN RFID SOLUTIONS? 13

WHICH RFID SOLUTIONS ARE HCOS DEPLOYING?..... 14

Mobile Asset Tracking 17

Patient Tracking..... 22

Patient Identification 30

Staff Tracking 37

Materials Management..... 39

Medication Tracking and Dispensing 44

Computer Proximity Login 49

IS RFID READY FOR ENTERPRISE-WIDE DEPLOYMENTS? 51

Network Infrastructure 51

HCO Funding..... 52

RFID Solution Costs..... 52

Workflow Integration..... 52

Lack of Standards..... 53

WHAT IS REQUIRED FOR WIDESPREAD RFID ADOPTION IN HEALTHCARE? 55

ABOUT SPYGLASS CONSULTING GROUP 56

GLOSSARY 57

LIST OF FIGURES 58

ENDNOTES 60

