


## Healthcare Without Bounds: Trends in Mobile Communications

<b>TITLE:</b>	Healthcare Without Bounds: Trends in Mobile Communications
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<b>LENGTH:</b>	87 Pages 40 Figures
<b>TYPE:</b>	Study - Customer Needs and Strategies
<b>PUBLISHED:</b>	November 2006
<b>PRICE</b>	\$2,295.00 (US) <i>Enterprise pricing available upon request</i>
<b>INTRODUCTION</b>	<p><b>Healthcare Without Bounds: Trends in Mobile Communications</b> presents the findings of an end-user market study focused on the current state of mobile communications adoption by <b>physicians and nurses</b> across the United States. The report uncovers strong opinions regarding the market opportunities and challenges for adopting mobile solutions to improve clinician mobility and responsiveness, enhance patient safety and reduce communications costs.</p> <p>The content for <b>Trends in Mobile Communications</b> was derived from more than 100 in-depth interviews with physicians and nurses working in inpatient and outpatient environments nationwide. Clinicians interviewed were technically competent and representative of a broad range of medical specialties and institution sizes.</p> <p>Spyglass conducted the telephone interviews over a four-month period beginning July 2006. The purpose of the interviews was to identify the needs and requirements for mobile communications solutions through discussions about:</p> <ul style="list-style-type: none"> <li>• existing workflow inefficiencies in communicating with colleagues and patients,</li> <li>• current usage models for mobile communications devices and solutions, and</li> <li>• barriers for widespread mobile communications adoption.</li> </ul> <p>Spyglass also evaluated key vendor product offerings and identified early adopter organizations that have successfully deployed mobile communications solutions.</p>
<b>TARGET AUDIENCE</b>	<ul style="list-style-type: none"> <li>• <b>Software and hardware vendors, systems integrators and management consulting groups</b> who are selling hardware, applications and services into the healthcare industry</li> <li>• <b>Healthcare administrators and IT executives</b> who are making strategic decisions to fund clinical information technology solutions</li> <li>• <b>Clinicians</b> who are involved in informatics and clinical system evaluation and selection</li> <li>• <b>Investment banking and private equity investors</b></li> </ul>

## ABSTRACT:



Mobile communications solutions enable clinicians to communicate and collaborate with colleagues, medical staff and patients anytime, anywhere.

Clinicians are mobile warriors who are constantly on-the-go as they travel between their offices, exam rooms and the corridors of affiliated hospitals. They work in high-stress, data-intensive environments that are dominated by inefficient paper-based processes. As clinicians are taking care of more patients with higher acuity levels, it is becoming increasingly difficult to communicate with them in a timely manner.

**Ideal mobile communications device does not exist.** Clinicians interviewed do not believe there is an ideal mobile communications device. They are experimenting with a wide variety of devices including pagers, cell phones, smartphones and VoIP phones to improve their mobility and responsiveness and enhance patient safety. Each device has its own set of strengths and weaknesses that depend upon work environment, job responsibilities and personal preferences.

**Clinicians carry multiple communications devices.** Clinicians interviewed were carrying multiple communications devices. Multiple devices enable clinicians to manage communications with different groups of people or to address the needs of specific job functions. Clinicians need the equivalent of a utility belt to carry and keep track of these devices.

**Clinicians lack tools to filter, manage and prioritize communications.** Clinicians interviewed lack tools to filter, manage and prioritize communications to/from colleagues and patients. Clinicians create artificial barriers to prevent unnecessary interruptions and tend to prioritize communications based on whom they know.

**Clinicians lack standardized processes to collaborate with colleagues.** Clinicians interviewed are having difficulties communicating with colleagues due to a dependency on paper-based workflows and a lack of standardized tools and processes to collaborate with colleagues across the continuum of care.

**Clinicians have limited time to spend with patients.** Clinicians interviewed are having difficulties communicating with patients because clinicians are overworked and have limited to time to spend with their patients.

**ABOUT  
SPYGLASS  
CONSULTING  
GROUP**

**Spyglass Consulting Group** is a market intelligence firm and consultancy focused on the nexus of information technology and healthcare. Spyglass offers products and services in customer and market intelligence, strategic partnership development, product marketing and investment due diligence. Spyglass' current research is entitled **Healthcare without Bounds** that focuses on the current and future potential of mobile computing and wireless technologies within the healthcare industry.

Spyglass customers include more than 100 leading high technology vendors, management consulting organizations and healthcare providers

including **Cisco, IBM, Microsoft, Intel, Hewlett Packard, Oracle, Johnson & Johnson, Pfizer, Siemens, GE Healthcare, Philips Medical, Sprint, and Kaiser Permanente.**

**Gregg Malkary** is the **founder** and **Managing Director** of **Spyglass Consulting Group**. He has more than 20 years experience in the high technology industry working with Fortune 2000 companies to help them use information technology for competitive advantage. 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, Malkary was an Associate Partner at **Outlook Ventures**, a venture capital firm focused on early stage investments in enterprise software and communications companies. Previously, Malkary was the Director of Strategic Planning for **Exodus Communications** where he was responsible for identifying, evaluating and executing growth initiatives for Exodus in the managed web-hosting marketplace. 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** and **Skytel Communications**.

Malkary is a frequent speaker at regional and national conferences focused on mobile computing, wireless technologies and healthcare related issues. Numerous industry publications have written about and quoted Malkary including the **Wall Street Journal, CIO, Business 2.0, MIT Technology Review, Network World** and **eWeek**.

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](mailto:gmalkary@spyglass-consulting.com).

<p><b>Customer Testimonials</b></p>	<p><b>Spyglass Consulting Group</b> has provided the Cisco Healthcare Team with excellent, in-depth market research and analysis that clearly maps key healthcare related issues/trends to available mobile technologies and solutions. Spyglass has also been a key resource for Cisco's healthcare channel partners with educational sessions providing partners with detailed and meaningful insights about healthcare customer requirements. Spyglass engagements with Cisco and Cisco partners have been extremely professional and have provided excellent value-add. I strongly believe Spyglass' research could be useful for both healthcare provider organizations and solutions vendors targeting the healthcare industry.</p> <p><b>Kacey Carpenter</b>  <b>Healthcare Solutions Marketing</b>  <b>Cisco Systems</b></p> <p><b>Trends in RFID</b> is an impressive and useful analysis of the current state of RFID technologies and solutions in healthcare. Its value to me and other hospital and health systems CIOs comes from the survey of operating managers and its analysis of opportunities for specific departments. Given our construction project and network infrastructure upgrades, the timing of the report's publication could not be better. Creative CIOs of leading organizations will gain many useful insights from the report as they consider investments in RFID solutions targeted to patient safety and operational quality improvements.</p> <p><b>Walter Fahey, VP and CIO</b>  <b>Maimonides Medical Center</b>  <b>Brooklyn, NY</b></p> <p><b>Mobile Computing for Physicians</b> and <b>Mobile Computing in Nursing</b> 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><b>Gail Moody-Byrd</b>  <b>Director, Business And Healthcare Marketing</b>  <b>palmOne</b></p> <p><b>Trends in Mobile Computing</b> 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><b>Andrew Barbash, MD</b>  <b>Bethesda, MD</b>  <b>Director of Mobile Health Program</b>  <b>Medical Records Institute (Boston, MA)</b></p> <p><b>Mobile Computing for Physicians</b> provided the Microsoft TabletPC Group with unique insights and perspectives to had 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><b>Chris Barry, Group Product Manager</b>  <b>Windows Client PMG, Tablet PC Division</b>  <b>Microsoft</b></p>
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# Trends in Mobile Communications

## November 2006

**Spyglass Consulting Group**  
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**Menlo Park, CA**

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