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Tablets Set to Change Medical Practice

By Mary Modahl, Chief Marketing Officer, QuantiaMD
Executive Summary

A new generation of physicians is embracing mobile technology, not only with smartphones, but rapidly with tablet computers as well. A significant group of “Super Mobile” doctors now use both devices, and they are far more likely to use mobile technology in clinical settings to access decision tools, learn about new treatments, look up reference material, and handle patient information. Among the top take-aways from our study:

• Physicians are adopting mobile technology at a very high rate; this transcends practice settings and years of practice.
• Physicians’ strong interest in tablet devices indicates this technology will soon command the physician market; there is also strong interest in tablets from health care institutions.
• “Super Mobile” physicians who own both smartphones and tablets are accessing online resources at significantly higher rates across a broad range of core professional activities.
• Health care institutions are beginning to adopt mobile technology for their physicians and show strong interest in moving forward.
• Access to EMR data tops the physician wish-list for how they want to use mobile technology.
• Physicians are concerned about how they can be reimbursed for patient care and professional consulting activities when using mobile technology.

Our study included 3,798 physicians and was conducted May 5-12, 2011 on QuantiaMD. QuantiaMD is the leading mobile and online community serving over 125,000 physicians with opportunities to learn from, and exchange insights with, their peers and experts in their fields. www.quantiamd.com.
Physicians’ High Use of Mobile Technology Will Continue to Grow

More than 80% of physicians responding to our survey say they own a mobile device capable of downloading applications—an adoption rate for smartphones and tablets that is significantly higher than that for the U.S. population, which is estimated at about 50% for smartphones and 5% for tablet devices¹ (Figure 1). This high level of mobile device usage by physicians is reported by other recent surveys as well.² Our study also found that 44% of physicians who do not yet have a mobile device intend to purchase one in 2011, indicating that physician use of mobile devices will continue to grow very rapidly this year (Figure 2).

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Tablets are on the Rise

Our survey finds that 30% of physicians use a tablet device, compared to just 5% of U.S. consumers\(^1\). Of these physicians who are tablet users, two-thirds, or 19% of all physicians, use their tablet in a clinical setting. Another 35% of physicians surveyed say they are extremely likely to use a tablet within the next few years to help their practice. This suggests that adoption of the tablet by physicians for use in professional settings may soon exceed 50% (Figure 3).

**Figure 3:** How likely is it that you will use a tablet device in a clinical setting in the next few years to help your practice?

Among physicians who say they are extremely likely to use a tablet in the years ahead, interest in this technology holds steady across years of practice, and is as high for physicians with 30 years or more of practice as it is for those with 10 years or less. The appeal of tablets is also steady across practice settings, with particular interest coming from hospitals and other health care institutions (Figure 4).

**Figure 4:** Practice setting vs. How likely you will use a tablet device in your practice

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\(^1\) The Nielsen Company, Q1 2011 Mobile Connected Device Report.
“Super Mobile” Physicians are Changing Clinical Practices

Twenty-five percent of physicians in our survey report using both smartphones and tablet devices for their work. These “Super Mobile” physicians are using online resources at significantly higher rates than physicians who use either a smartphone or a tablet alone. Among the top professional activities for these very mobile physicians are searches for drug and treatment reference materials, learning about new treatments and research, and diagnosing and choosing treatment for patients. While these activities are similar to those pursued by other physicians who are online, “Super Mobile” physician are using online resources much more frequently across a broad range of core professional activities, pushing physician online usage upward.

One notable impact of tablets is that physicians are much more interested in accessing patient data and records via a mobile device with a tablet than with their smartphone (Figure 5).

**Figure 5:** Which of the following professional activities do you **currently** use your mobile device for?

<table>
<thead>
<tr>
<th>Activity</th>
<th>Both smartphone &amp; tablet</th>
<th>Smartphone</th>
<th>Tablet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Looking up drug &amp; treatment reference material</td>
<td>73%</td>
<td>67%</td>
<td>66%</td>
</tr>
<tr>
<td>Learning about new treatments &amp; clinical research</td>
<td>50%</td>
<td>39%</td>
<td>44%</td>
</tr>
<tr>
<td>Helping me diagnose patients</td>
<td>44%</td>
<td>39%</td>
<td>44%</td>
</tr>
<tr>
<td>Helping me choose treatment paths for patients</td>
<td>43%</td>
<td>39%</td>
<td>39%</td>
</tr>
<tr>
<td>Helping me educate patients</td>
<td>33%</td>
<td>25%</td>
<td>26%</td>
</tr>
<tr>
<td>Accessing patient information &amp; records</td>
<td>31%</td>
<td>15%</td>
<td>24%</td>
</tr>
<tr>
<td>Making decisions about ordering labs or imaging tests</td>
<td>28%</td>
<td>21%</td>
<td>26%</td>
</tr>
</tbody>
</table>

N = 2985

www.quantiamd.com
Hospitals are Getting into the Game

Most physicians purchase their mobile device personally or for their private practice. However, about 18% receive their devices from the institutions they work for, showing that hospitals and other health care institutions are beginning to provide mobile technologies to their physicians (Figure 6). In our study, institutions that currently provide their physicians with mobile devices tend to provide smartphones and Blackberry devices (65%), but physicians say that 16% of the devices provided are tablets, indicating strong initial interest in tablets on the part of hospitals and institutions.

Figure 6: How did you acquire this device?

82% I bought it personally or for my private practice
10% I have two or more devices – personal & institution-provided
8% My institution supplied it as part of my work

N = 3153

Years of Practice Not a Barrier to Mobile Adoption

Adoption of mobile technology is clearly related to years in practice, with younger physicians not surprisingly having higher adoption rates than older ones. Usage declines as years of practice increase, showing an adoption rate that is 27 percentage points lower for those in practice for 30 years or more compared with the newest doctors. Nevertheless, current use of mobile devices by those physicians longest in practice is above 60%.

Current use of tablets, and a strong interest in using them in the future, holds steady across all years of practice. Among physicians with 30 years or more of practice, almost 20% already use a tablet device for work, and another 25% say they are extremely likely to do so. Physicians in their second decade of practice use tablets most frequently, even when compared to the newest physicians. This may be related to physician income, which rises with years of practice (Figure 7).

Figure 7: Years of practice vs. How likely you will use a tablet device in your practice
Apple Platform Dominates

Apple products are the clear preference of physicians, with more than 60% of smartphone users saying they have iPhones; Android and BlackBerry smartphones are also represented. For tablet users, the iPad is virtually alone; only a fraction of physicians report they use Android tablets. For physicians who do not yet own mobile devices, our survey shows that 66% are likely to select Apple products. When institutions supply mobile devices to physicians, Apple products account for a majority of the smartphones and virtually all of the tablets; Blackberries account for one-quarter of smartphones from institutions; Androids account for 12% (Figure 8).

Figure 8: How did you acquire your device vs. What type do you have?

N = 3136, multiple responses allowed

<table>
<thead>
<tr>
<th>I bought it personally or for my private practice</th>
<th>I have two or more devices – personal &amp; institution-provided</th>
</tr>
</thead>
<tbody>
<tr>
<td>iPhone</td>
<td>28%</td>
</tr>
<tr>
<td>iPad</td>
<td>61%</td>
</tr>
<tr>
<td>Android smartphone</td>
<td>11%</td>
</tr>
<tr>
<td>Android tablet</td>
<td>3%</td>
</tr>
<tr>
<td>Blackberry</td>
<td>1%</td>
</tr>
</tbody>
</table>

Percent of respondents
Mobile Devices Support Core Physician Activities

In professional settings, physicians most often use their mobile devices to access drug and treatment reference information. Also high on the list is obtaining new information about treatments and research, and making decisions about patient treatment and diagnosis. Emerging areas of use include medical testing decisions, patient education materials, and accessing patient records and information (Figure 9).

Figure 9: Which of the following professional activities do you currently use your mobile device for?

- Looking up drug & treatment reference material
- Learning about new treatments & clinical research
- Helping me choose treatment paths for patients
- Helping me diagnose patients
- Helping me educate patients
- Making decisions about ordering labs or imaging tests
- Accessing patient information & records
- None of these
- Other

When asked how they would prefer to use their mobile devices for peer-to-peer activities, physicians’ top interest is access to EMR data. They also prioritize receiving treatment protocols alerts, and sharing and discussing cases with other physicians. For physician-to-patient activities, physicians value “e-prescribing,” sharing patient education materials, getting paid for time devoted to email and chats with patients, and receiving alerts when patients need follow-up treatment.
Among barriers that may impede use of mobile devices, physicians are most concerned about patient privacy and physician liability, and lack of financial reimbursement for physician time and investment in using this technology. Physicians also cite limited institutional support for peer-to-peer engagement using mobile technology. Concerns about patient privacy and liability also feature as physician-patient barriers. Interestingly, though, just 37% of physicians cite lack of technology among patients as a barrier. This would have been much higher just a year ago. (Figures 10-11).

**Figure 10:** Top factors or concerns that might hold physicians back from pursuing **physician-to-physician activities** with a mobile device

- Concerns about patient privacy
- Concerns about liability
- No way to pay other physicians’ consults or get paid for mine
- Lack of institutional support
- Lack of time or interest
- The technology is new to me
- I don’t have, and probably will not get, a smartphone or tablet
- Other

N = 3788

**Figure 11:** Top factors or concerns that might hold physicians back from pursuing **patient activities** with a mobile device

- Concerns about patient privacy
- Concerns about liability
- Patients do not have the technology
- There is no way to get paid for these activities
- Lack of institutional support
- Lack of time or interest
- The technology is new to me
- I don’t have, and probably will not get, a smartphone or tablet
- Other

N = 3784
Survey Demographics

Figure 12: How long have you been practicing medicine?

Figure 13: What is your practice setting?

Methodology

Study results are based on responses to an online survey of 3,798 physicians conducted on QuantiaMD between May 5-12, 2011. QuantiaMD is the leading mobile and online community serving over 125,000 physicians with opportunities to learn from, and exchange insights with, their peers and experts in their fields. www.quantiamd.com. Physicians in our study represent all practice settings, with the largest group (33%) coming from group practices, followed closely by private practice (24%) and inpatient settings (22%). A smaller representation of physicians came from outpatient, hospital-based settings (15%). Just under half the physicians in our study had less than 10 years in clinical practice, but all ages of physicians were well represented because of the large sample size. Whenever significant differences in response have appeared based on years of clinical experience, we have called this out in the text.

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