Screen to Script
The Doctor’s Digital Path to Treatment

Google/Manhattan Research
U.S.
June 2012
The best of times, the worst of times

Several forces have given rise to rapid digital adoption

- reimbursements, admin burden
- more patients, less time
- care coordination, consolidation
- more treatment options, great expectations
The best of times, the worst of times

Several forces have given rise to rapid digital adoption

A few key outcomes

- Shift to e-resources and information on demand
- Mass adoption of EMR, e-prescribing
- Streamlined practice, patient collaboration
Background and methodology

**What were the study objectives?**
The overarching study objective was to reassess physicians’ digital adoption across devices and media channels, and to ascertain their use and resulting impact.

**How many respondents were surveyed?**
The survey included a total of 506 U.S. practicing physicians.

**How was the survey conducted?**
The survey was conducted online, with supplemental qualitative interviews.

**When was the survey fielded?**
The survey was fielded in February and March 2012.

**How do survey participants compare to the overall physician population?**
The final data set is compared to the known national universe of practicing U.S. physicians by age, gender, region, practice setting, and specialty. Manhattan Research can state with confidence that the sample is reflective of the overall population of U.S. practicing physicians today.
What did we find?

**The Internet** is integral to clinical practice

**Search** is the doctor’s digital stethoscope

**Medicine is mobile**

**Online video** is an educational tool
What did we find?

The Internet is integral to clinical practice
Medicine is multiscreen

Percent that use device in their practice

- 99% desktop or laptop
- 84% smartphone
- 54% own a tablet

87% use a smartphone or a tablet

*Includes smartphone, PDA, or send email from mobile device
Source: Manhattan Research – Google Physician Channel Adoption Study
Physicians prefer online resources

When making clinical decisions, physicians spend twice as much time using online resources compared to print.

Note: Online resources include professional websites, drug references, mobile apps, email newsletters, etc. Print resources include journals and reference materials.

Source: Manhattan Research – Google Physician Channel Adoption Study
Online sources outweigh the print, it’s so much easier. You don’t need to have books and journals in front of you, you can find information on your iPhone or laptop or wherever you are. I can be in with a patient and I can easily give the patient information or be able to explain things a little more easily.

OB/GYN
Search and digital adoption spans all ages

**Physicians under age 45**
- 90% own smartphone
- 15 hrs per week spent online for professional purposes
- 82% use search engines daily
- 77% of time spent using online resources for clinical decisions

**Physicians ages 55+**
- 80% own smartphone
- 9 hrs per week spent online for professional purposes
- 84% use search engines daily
- 64% of time spent using online resources for clinical decisions

Source: Manhattan Research – Google Physician Channel Adoption Study
What did we find?

**Search** is the doctor’s digital stethoscope.
For physicians’ clinical and treatment decisions...

Search is indispensable

• across all devices
• at all times
• on many topics
• and drives action

*on respective device
Source: Manhattan Research – Google Physician Channel Adoption Study
Physicians search on all devices

Use of search engines to find clinical and treatment information

98% of desktop/laptop owners search on this device

56% of smartphone owners search on this device

63% of tablet owners search on this device

… and more doctors start with a search engine than any other online resource or website

Among those using search engines to find clinical and treatment information, n=484 for desktop/laptop owners, n=421 for smartphone owners, n=254 for tablet owners

Source: Manhattan Research – Google Physician Channel Adoption Study
Search is a daily activity

Source: Manhattan Research – Google Physician Channel Adoption Study

Percent using professional online resources daily

- Search engines: 84%
- Portal websites intended for physicians: 39%
- Pharmaceutical/biotech product websites: 7%
- Pharmaceutical/biotech corporate websites: 7%

94% turn to Google

Average of 6 professional searches/day
Physicians search on many occasions

When search engines used to find clinical and treatment information

56% on lunch breaks

70% after work or on weekends

77% between patient consults

41% during patient consults

Among those who use general search engines, n=490
Source: Manhattan Research – Google Physician Channel Adoption Study
Physicians search for many reasons

Situations that prompted use of a search engine

<table>
<thead>
<tr>
<th>Situation</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>When patient requested more info during consult</td>
<td>68%</td>
</tr>
<tr>
<td>After patient requested specific drug</td>
<td>62%</td>
</tr>
<tr>
<td>After patient reported drug side effect</td>
<td>61%</td>
</tr>
<tr>
<td>After reading journal article</td>
<td>59%</td>
</tr>
<tr>
<td>After attending medical conference</td>
<td>52%</td>
</tr>
<tr>
<td>When new drug becomes approved</td>
<td>51%</td>
</tr>
<tr>
<td>After drug did not show expected effects with patient</td>
<td>33%</td>
</tr>
<tr>
<td>After talking to pharmaceutical sales rep</td>
<td>34%</td>
</tr>
<tr>
<td>After seeing prescription drug ad in print</td>
<td>32%</td>
</tr>
<tr>
<td>After seeing pharmaceutical online promotion</td>
<td>28%</td>
</tr>
<tr>
<td>After seeing prescription drug ad on TV</td>
<td>26%</td>
</tr>
</tbody>
</table>

Source: Manhattan Research – Google Physician Channel Adoption Study
Google for doctor, Google for patient

- **Breadth of information**
- **New products and clinical developments**
- **Patient testimonials and clinical studies**
- **Patient education, admin, copay support**
- **Dosing info, side effects, or research on conditions**
- **Conditions/symptoms with which I’m less familiar**
- **To find a specific product or medication**

Source: Manhattan Research – Google Physician Channel Adoption Study
Google helps doctors be better doctors

"Google is an amazing resource for medicine. It’s a great resource that gives me great information. If I can show the patient a picture or pull up a study or factual information, it increases my credibility [as a physician] and patients really appreciate the collaboration.

PCP"
Not surprisingly, search terms are varied

Keywords used when looking for clinical information

<table>
<thead>
<tr>
<th></th>
<th>Physicians</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Condition</strong></td>
<td>84%</td>
</tr>
<tr>
<td>Generic prescription drug name</td>
<td>56%</td>
</tr>
<tr>
<td><strong>Branded prescription drug name</strong></td>
<td>50%</td>
</tr>
<tr>
<td>Symptoms</td>
<td>46%</td>
</tr>
<tr>
<td>Generic medical device name</td>
<td>32%</td>
</tr>
<tr>
<td><strong>Branded medical device name</strong></td>
<td>28%</td>
</tr>
<tr>
<td>Name of clinical trial or study</td>
<td>26%</td>
</tr>
<tr>
<td><strong>Pharmaceutical manufacturer</strong></td>
<td>17%</td>
</tr>
<tr>
<td>Name of a medical professional or expert</td>
<td>16%</td>
</tr>
</tbody>
</table>

= Branded
Any branded keywords: 59%

Among those who use general search engines for clinical and treatment information, n=490
Source: Manhattan Research – Google Physician Channel Adoption Study
1 in 3 clicks first on sponsored listings

Areas clicked first when looking for clinical/treatment information

Among those use general search engines for clinical and treatment information, n=490
Source: Manhattan Research – Google Physician Channel Adoption Study

Sponsored listings: 33%

useful
relevant
efficient
trusted
Search influences clinical decisions

Actions taken as a result of using search engines for clinical and treatment information

93% take action as a result of search (any of the below)

- I searched for more information online: 68%
- I shared information with a patient: 67%
- I changed or made a decision about treatment for a patient: 55%
- I shared information with a colleague: 38%
- I went to a website from a pharmaceutical or medical device company: 30%
- I requested a product sample: 25%
- I took another clinical-related action: 3%

Among those who use general search engines for clinical and treatment information, n=490
Source: Manhattan Research – Google Physician Channel Adoption Study
What did we find?

Medicine is **mobile**
How is your smartphone most valuable to you in your practice?

- As a drug reference database and for dosing info.
- As a search engine and to check email.
- I Google diseases and check meds on Epocrates.
- Immediate access to prof. sites for quick clinical answers.
- I am able to check UpToDate, and search the web for any patient related information.

*Asked among physicians who own a smartphone*

Source: Manhattan Research – Google Physician Channel Adoption Study
Physicians favor mobile search over apps

Percentage of time physicians use the following methods to find clinical information on a smartphone:

- **Search engine**: 48%
- **Mobile professional app**: 34%
- **Type website into browser, or use bookmark**: 18%

Source: Manhattan Research – Google Physician Channel Adoption Study
Mobile search is a daily activity

smartphone searchers
49% search at least daily

tablet searchers
39% search at least daily

*Smartphone search engine users, n=360, **Tablet search engine users, n=226
Source: Manhattan Research – Google Physician Channel Adoption Study
I still haven’t found what I’m looking for…

69% agree they rely on search engines to navigate the Internet on smartphone.

51% agree they generally find the health or treatment information they are looking for on a smartphone.

74% agree they rely on search engines to navigate the Internet on a tablet.

69% agree they generally find the health or treatment information they are looking for on a tablet.

Among those using mobile search on their smartphone, n=360
Among those using mobile search on their tablet, n=226

Source: Manhattan Research – Google Physician Channel Adoption Study
Optimizing sites for mobile devices is critical

62% of physicians are likely to abandon the mobile website if it’s not optimized for a smartphone

41% report that they are led to mobile-optimized sites only occasionally

Among those looking for clinical and treatment information from their smartphone, n=475

Source: Manhattan Research – Google Physician Channel Adoption Study
Mobile search is action-oriented

Actions taken as a result of clinical and treatment information accessed on smartphone or tablet in the past twelve months

<table>
<thead>
<tr>
<th>Action</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>I searched for more information online</td>
<td>59%</td>
</tr>
<tr>
<td>I shared information with a patient</td>
<td>50%</td>
</tr>
<tr>
<td>I changed or made a decision about treatment for a patient</td>
<td>46%</td>
</tr>
<tr>
<td>I shared information with a colleague</td>
<td>36%</td>
</tr>
<tr>
<td>I went to a website from a pharmaceutical or medical device company</td>
<td>23%</td>
</tr>
<tr>
<td>I requested a product sample</td>
<td>19%</td>
</tr>
<tr>
<td>I took another clinical-related action</td>
<td>1%</td>
</tr>
</tbody>
</table>

Among those using mobile search, n=387
Source: Manhattan Research – Google Physician Channel Adoption Study
What did we find?

Online video is an educational tool
Physicians spend considerable time watching online video

- **6** hours per week watching video online on average (half for professional purposes)
- **8** hours per week watching television on average

Source: Manhattan Research – Google Physician Channel Adoption Study
Physicians watch video on all devices

Among those watching online video, percentage of time viewing by device...

- **67%** watch on a desktop/laptop*
- **13%** watch on a smartphone*
- **29%** watch on a tablet*

Among those watching online video, n=412, *Among those who own the device

Source: Manhattan Research – Google Physician Channel Adoption Study
Physicians watch a wide array of professional online video

Types of medical videos watched online in the past 12 months

<table>
<thead>
<tr>
<th>Types of Videos</th>
<th>Physicians</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuing medical education</td>
<td>55%</td>
</tr>
<tr>
<td>Lectures</td>
<td>48%</td>
</tr>
<tr>
<td>Disease and condition information</td>
<td>43%</td>
</tr>
<tr>
<td>Demonstrations of medical procedures</td>
<td>40%</td>
</tr>
<tr>
<td>Health news</td>
<td>37%</td>
</tr>
<tr>
<td>Presentations from key opinion leaders (KOLs)</td>
<td>37%</td>
</tr>
<tr>
<td><strong>Information about a specific drug or treatment</strong></td>
<td><strong>36%</strong></td>
</tr>
<tr>
<td>Medical device information</td>
<td>23%</td>
</tr>
<tr>
<td><strong>Video clips to show patients</strong></td>
<td><strong>13%</strong></td>
</tr>
<tr>
<td>Conversations between a physician and a patient</td>
<td>10%</td>
</tr>
<tr>
<td>Patients discussing their condition or treatment</td>
<td>9%</td>
</tr>
</tbody>
</table>

Source: Manhattan Research – Google Physician Channel Adoption Study
YouTube is viewed for work and play

Watch videos for **personal** purposes on...

- **87%** YouTube
- **24%** Facebook
- **20%** Hulu

Among those watching video online for personal purposes, n=372

Watch videos for **professional** purposes on...

- **67%** Medscape
- **44%** YouTube
- **28%** Pharma company website

Among those watching professional video online, n=285

Source: Manhattan Research – Google Physician Channel Adoption Study
YouTube: Easy, searchable, lots of variety

Physicians who prefer YouTube say:

Always find something I am looking for

Easy access, broad options

Easy interface, easy search, comfortable using site

Good quality video, good search capability

Large selection, easy to search

Vast choice, easy to use, and versatile on all different devices

Source: Manhattan Research – Google Physician Channel Adoption Study
YouTube: Easy, searchable, lots of variety

"The iPad has revolutionized YouTube. You can get surgical procedures, mechanisms of actions to find out the pharmacological ways in which the drugs work, pharmacodynamics, pharmacokinetics, animations, and video streaming."

Chicago Cardiologist
Online video drives clinical action

Actions taken as a result of watching online professional video in the past twelve months

85% of those watching professional video online have taken action

<table>
<thead>
<tr>
<th>Action</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>I searched for more information online</td>
<td>49%</td>
</tr>
<tr>
<td>I shared information with a colleague</td>
<td>40%</td>
</tr>
<tr>
<td>I shared information with a patient</td>
<td>38%</td>
</tr>
<tr>
<td>I changed or made a decision about treatment for a patient</td>
<td>34%</td>
</tr>
<tr>
<td>I went to a website from a pharmaceutical or medical device company</td>
<td>22%</td>
</tr>
<tr>
<td>I requested a product sample</td>
<td>20%</td>
</tr>
<tr>
<td>I took another clinical-related action</td>
<td>1%</td>
</tr>
</tbody>
</table>

Among those watching professional video online, n=285
Source: Manhattan Research – Google Physician Channel Adoption Study
The Internet is integral to clinical practice

Search is the doctor’s digital stethoscope

Medicine is mobile

Online video is an educational tool
What this all means for you...

Be there when they’re looking for you

Leverage the power of sight, sound and motion

Reach them on the go

Source: Manhattan Research – Google Physician Channel Adoption Study
The future is now

"I think the internet is going to be the sole source of information in the future. Everything will be consolidated digitally, and we’ll see a merge with the electronic medical record. You’ll be able to search for different topics, be able to print things out for patients or direct them to certain websites while you’re in the room with them."

PCP
Screen to Script
The Doctor’s Digital Path to Treatment

June 2012