Physician-Patient E-Mail: The United States Perspective

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Of the 15,499 Physician/Patient Emails

- 59.3% interpretation of test results
- 21.7% response to patients (either initiated by patients through the practices interactive Web site or as part of email dialogue with patients)
- 9.3% administrative problems
- 5% acute problems
- 2.8% proactive outreach to patients
- 1.9% discussions with consultants
“The new media and technologies by which we amplify and extend ourselves constitute huge collective surgery carried out on the social body with complete disregard for antiseptics. If the operations are needed, the inevitability of infecting the whole system during the operation has to be considered. For in operating on society with a new technology, it is not the incised area that is most affected. The area of impact and incision is numb. It is the entire system that is changed” (p.4).
Today’s Medical Environment

Email, MySpace, Face Book, Twitters, Web Pages, Patient Portals, EHRs

• These are all forms of electronic messaging.
• How are they currently being used in medicine?
• Why is studying their use so important to the field of medicine?
Patients Are Now...

• **PRODUCERS** of their own Medical Charts
• **PARTICIPANTS** in medical decision making
• **RESEARCHERS** of medical information

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The U.S. Impetus for *Change* was the *American Recovery & Reinvestment Act*

- **“Stimulus Bill”** *(February 17, 2009)*
- **$787 Billion Total Stimulus Package**
- **$19.2 Billion HITECH Act (Health Information Technology for Economic and Clinical Health Act)**
  - Key purpose was to stimulate use of Electronic Medical Records *(EMRs)* by physicians and hospitals
  - 2014 Deadline for EMR implementation
  - Projected $12 Billion over next 10 years Savings of Healthcare Spending.
Electronic Messaging within the EMRs has become a *Social Instrument of Change* in the Physician-Patient Relationship

- Emails exchanged through secured portals
- Emails allowing/encouraging patient input
- Emails becoming a part of the patient medical record.

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Electronic Messaging: A “Socio-Informatics” Perspective

A hybrid of letter writing and the spoken word

• Maintains the spontaneity of oral expression
  • Done at anytime of day, interruption-free
  • Can capture the emotion while it is happening
  • Free-flowing ideas and thoughts representing mental state
  • Nonverbal response absent from communication

• Provides the permanence of written word
  • Once the “send button” is pushed, you cannot take it back
  • No email is really ever “deleted”

• Transcends time and space
  • Message sent despite physical disability, location, or age

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The AMIA (1998 White Paper) has defined patient-provider electronic mail as...

“computer-based communication between clinicians and patients within a **contractual relationship** in which the health care provider has taken on an explicit measure of responsibility for the client’s care.”

This includes medical advice, treatment, and information exchanged professionally between physicians and their patients through electronic interactions.
• Patients should receive care whenever they need it and in many forms, not just face-to-face visits.

• Health care systems must be responsive at all times and access to care should be provided over the Internet, by telephone, and by other means in addition to in-person visits.

• The key to a trusting, effective relationship involves multiple levels of communication, including but not limited to email.
Rationale Exists for Emailing

Are Patients Desiring this Change?

Center for Studying Health System Changes “Tracking Report”
August 2008 (Tu & Cohen, 2008)

- Over 122 million people in US in 2007 reported seeking information about their personal health concerns.
- Of this group 16% in 2001 and 32% in 2007 sought medical information on the Internet (a doubling of online usage by adults).
- Possible reasons for this increase:
  - An exponential increase in high-speech Internet residential assess (Horrigan and Smith, 2007)
  - An increase in Web-based health sites for consumers (Noonan, 2007).
HEALTHCARE TREND REPORT FROM THOMSON REUTERS

PHYSICIAN CONSULTATIONS AND THE TWITTER GENERATION: PATIENTS START COMMUNICATING WITH THEIR DOCTORS ONLINE

August 2009
http://thomsonreuters.com/content/healthcare/pdf/394449/healthcare_trend_report

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<table>
<thead>
<tr>
<th>TABLE 1: Do you personally have access to the Internet?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOTAL</strong></td>
</tr>
<tr>
<td><strong>BY AGE</strong></td>
</tr>
<tr>
<td>Under Age 35</td>
</tr>
<tr>
<td>35-64</td>
</tr>
<tr>
<td>65 and over</td>
</tr>
<tr>
<td><strong>BY INCOME</strong></td>
</tr>
<tr>
<td>&lt; $15k</td>
</tr>
<tr>
<td>$15k - $24.9k</td>
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<tr>
<td>$25k - $34.9k</td>
</tr>
<tr>
<td>$35k - $49.9k</td>
</tr>
<tr>
<td>$50k - $74.9k</td>
</tr>
<tr>
<td>$75k - $99.9k</td>
</tr>
<tr>
<td>$100k - 149.9k</td>
</tr>
<tr>
<td>$150k+</td>
</tr>
<tr>
<td>TABLE 2: Have you used the Internet to communicate with your physician?</td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
</tr>
<tr>
<td><strong>BY AGE</strong></td>
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<tr>
<td>$35k - $49.9k</td>
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<tr>
<td>$50k - $74.9k</td>
</tr>
<tr>
<td>$75k - $99.9k</td>
</tr>
<tr>
<td>$100k - 149.9k</td>
</tr>
<tr>
<td>$150k+</td>
</tr>
</tbody>
</table>
Adoption Levels

Summer 2009

Patients, doctors connecting online
Although online communications are increasing between patients and doctors, less than a third of physicians use it.

Physicians communicating with patients online 2007*
No 69%  Yes 31%

*Based on a survey of 1,353 practicing physicians in 1Q 2007

Patients communicating with physicians online
10 20 30 million
00 01 02 03 04 05 06 07
4 29

Spring 2010

2009 39%
2007 31%
2006 25%

Manhattan Research

So what might this actually look like in a multi-member practice?

What’s Keeping Us So Busy in Primary Care?

A Snapshot from One Practice

Richard J. Baron, M.D.

1632 n engl j med 362;17 nejm.org april 29, 2010
Volume and Types of Services for an Active Caseload of 8440 Patients at Greenhouse Internists in 2008.*

<table>
<thead>
<tr>
<th>Type of Service</th>
<th>Total No.</th>
<th>No. Per Visit</th>
<th>No./Dr./Day†</th>
<th>No./Pt./Yr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visit</td>
<td>16,640</td>
<td>N/A</td>
<td>18.1</td>
<td>2.0</td>
</tr>
<tr>
<td>Telephone Call</td>
<td>21,796</td>
<td>1.31</td>
<td>23.7</td>
<td>2.6</td>
</tr>
<tr>
<td>Prescription Refill</td>
<td>11,145</td>
<td>0.67</td>
<td>12.1</td>
<td>1.31</td>
</tr>
<tr>
<td>E-Mail Message</td>
<td>15,499</td>
<td>0.93</td>
<td>16.8</td>
<td>1.8</td>
</tr>
<tr>
<td>Laboratory Report</td>
<td>17,974</td>
<td>1.08</td>
<td>19.5</td>
<td>2.1</td>
</tr>
<tr>
<td>Imaging Report</td>
<td>10,229</td>
<td>0.61</td>
<td>11.1</td>
<td>1.2</td>
</tr>
<tr>
<td>Consultation Report</td>
<td>12,822</td>
<td>0.77</td>
<td>13.9</td>
<td>1.5</td>
</tr>
</tbody>
</table>

* Patients were included in the active caseload if they had any interaction with the practice in the listed categories of activities during calendar year 2008. NA denotes not applicable.
† The values are based on the work of four full-time-equivalent physicians who each worked 50 to 60 hours per week for 230 workdays per year.
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Guidelines for the Clinical Use of Electronic Mail with Patients

The American Medical Informatics Association (AMIA) responded to patient need and physician concern with their own guidelines:

– (1) effective interaction between the physician and patient
– (2) the need for medico-legal prudence
AMA Basic Guidelines for Physician-Patient E-Mail

- All emails must be encrypted
- Emails are not to be used to establish a patient-physician relationship
- They should only supplement other, more personal encounters such as the office visit.
- AMA recommends that emails be
  - restricted to professional interactions
  - placed in the patient’s EMR/Chart

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AMIA Communication Guidelines on the Physician-Patient Relationship and Emails

• Must only be used when improving not complicating the relationship

• Must rely upon a negotiation between the patient and provider with emphasis on
  – turnaround time,
  – privacy
  – permissible transaction and content
  – discreet and categorical subject headers

• Must be formally and carefully delivered, received, and recorded. (Patients might be spontaneous but physicians must treat it like a legal document.)
**AMIA *Specific* Guidelines on the Physician-Patient Relationship and Emails**

- **Use Automatic Replies** to incoming messages must be sent indicating who has received the message and when it will be responded to.
- **Place Email on Patient Chart.** Email transactions must be archived in full and placed on the patient chart or EMR.
- **Have Patients Acknowledge They Received the Message.** Acknowledgment of messages from the physician office should be requested from the patients to assure whether or not and at what point they received the information.
- **Use a Footer to Direct Emergencies.** This is necessary to help direct patients to escalate communication if an emergency arises.
- **Use Blind Copies for Group Mailings.** The address book and group mailings (generally with educational information) should be recorded with care and sent using a blind copy to insure privacy.
- **Avoid Emotional Content** to avoid misinterpretation. Omit Emoticons!

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# AMIA on Medico-Legal Prudence

**Treat Emails and Telephones Differently**

<table>
<thead>
<tr>
<th>PHONE</th>
<th>EMAIL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urgent Messages</td>
<td>Less Urgent Messages</td>
</tr>
<tr>
<td>“Phone Tag”</td>
<td>Direct Message to Receiver</td>
</tr>
<tr>
<td>Synchronous</td>
<td>Asynchronous</td>
</tr>
<tr>
<td>Not Automatically Recorded</td>
<td>Always Recorded</td>
</tr>
<tr>
<td>Nonpermanent “proof”</td>
<td>Permanent “Proof”</td>
</tr>
<tr>
<td>Constant Office Interruptions</td>
<td>End-of-Day Answers</td>
</tr>
<tr>
<td>More Time Consuming</td>
<td>Less Time Consuming</td>
</tr>
<tr>
<td>Answering Machine Uncertainty</td>
<td>Relayed Only to Consumer</td>
</tr>
</tbody>
</table>

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American Climate: “OpenNotes” Project
June 9, 2010

- **Online Medical Record Access for Patients**
- **Robert Wood Foundation Pilot study**
  - $1.4 Million grant for a 12-month project
  - Assessing impact of sharing physician notes with patients through the EMR portals
  - Subjects: 100 primary care physicians, 25,000 patients at Beth Israel Deaconess Medical Center in Massachusetts, Geisinger Health System in PA and Harbor New Medical Center in Washington State.
- Surveys comparing physician and patient experiences of those enrolled and not enrolled in this pilot study.
The European Climate:

Government Health IT  Brian Robinson  Thursday, May 27, 2010


• Neelie Kroes, the European Commissioner for the digital agenda, in a May 25 speech to the World Congress on Information Technology in Amsterdam. "Without proper use of ICTs over the next decade, Europe will become a broken economy."

• European Commission (EC) addressing aging population and limiting healthcare costs through a ten-year action plan

• Desired Outcomes:
  – Secure, online access to medical health data by 2015 and telemedicine services by 2020.
  – A clearly defined, common set of patient data that will allow patient records to be accessed or exchanged electronically across all of the EU's 27 member states by 2012.

• Barriers: 30% of Europeans have never used the Internet and overall Europe has only a 1% penetration of high-speed networks, only 40% of that in the US.

• Strategy: creating a single digital market for the whole of the EU, Improving interoperability, boosting the trust and security of the Internet, and guaranteeing the provision of much faster Internet access to its citizens
“Once a new technology comes into a social milieu it cannot cease to permeate that milieu until every institution is saturated.”

(McLuhan, 1964)
EXTRA SLIDES NOT INCLUDED IN THE PROGRAM FOLLOW AS ADDITIONAL INFORMATION FOR YOUR FURTHER PERUSAL.

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Partial List of References
(Not including intext citations)

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