Patient Gateway: Opening Communication between Providers and Patients Webinar

Presented by: Jonathan Wald, MD, Partners Healthcare

Hosted by: PCHI and the Stoeckle Center for Primary Care Innovation, Paula Ricci

December 2, 2009
Agenda

- **7:15 – 7:45 – Presentation** – Jonathan Wald, MD, MPH, FACMI, Associate Director of Clinical Informatics at Partners Healthcare

- **7:45-8:00 – Q&A** – Jonathan Wald and Lance Rachelefsky, Practice Manager, Brigham & Women’s Physicians Group.
Outline

- Introduction
- Patient demo
- Practice demo
- Adoption
- Conclusions
Introduction
A patient internet portal

1999

What would happen if patients could use the internet to connect with our providers and information systems?

John Glaser, PhD
VP and CIO, Partners HealthCare
Goals

Patients
- Information/tools
  - Access information to manage health concerns
- Convenience
  - Easily manage administrative steps (appt, Rx, referral, etc.)
- Communication
  - Connect with providers, online

Practice improvement
- Staff workflow
  - Time-efficient communication
- Physician workflow
  - No need to change usual workflow
  - More efficient
- Improvement projects
  - Quality & safety, cost savings, online services
Patient Demo
Patient features

- **Chart information**
  - Current: Meds, Allergies, Immunizations, 200+ Lab Results, Radiology Reports, etc.
  - Future and past appointments
    - Self-service appointment reminders
- **Online web-messaging**
  - Messages are triaged to a designated message handler
  - Notifications when a new message is received
  - All messages permanently saved
- **Reference information**
  - Healthwise®
  - Links to web resources (for medications, allergies, immunizations, lab results, etc.)
- **No charge to the patient for use of Patient Gateway**
Patient Gateway Web Site
www.patientgateway.org

Welcome to Patient Gateway, the secure electronic link between you and your doctor's office!

Patient Gateway offers a convenient way to:
- Request routine appointments, prescriptions, and referral authorizations
- Obtain quality health and disease information
- Find directions and other helpful practice information

Patient Gateway is ideal for routine communications and notifies your regular email account when a new message arrives. It is easy to use and designed to protect your privacy. To find out more, take a tour.

Privacy/Terms of Use
Note: Patient Gateway should not be used for emergencies. Patient Gateway is best viewed at 1024x768 screen resolution
Patient Gateway Web Site
www.patientgateway.org

Welcome to Patient Gateway, the secure electronic link between you and your doctor’s office!

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- Request routine appointments, prescriptions, and referral authorizations
- Obtain quality health and disease information
- Find directions and other helpful practice information

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PG Home

Alerts

1. A provider is inactive - please update provider information
2. Has 11 new messages
3. Has no future appointments

Proxy

Practice info

- Schneider, Louise Isabel, M.D.
- Brigham Primary Physicians
- 1153 Centre Street, Jamaica Plain, MA 617-983-7699
- The Brigham and Women's Hospital monthly Health-E-Newsletter contains valuable health information...
Requests menu
## Select prescription

### Important Information
An appointment with your provider within the last 12 months is generally required before a prescription renewal is written.

- **Prescription Renewals:** Check with your pharmacy for refills (shown on the label of your medication) before requesting a renewal from our office.
- **Process time:** Requests may take several business days to process.
- **Narcotics:** Please call the office after completing this form.
- **New requests only:** To contact us about an existing request, please send us a message instead of using this form.

### Medications

<table>
<thead>
<tr>
<th>Date</th>
<th>Medication</th>
<th>Details</th>
<th>Ordered by</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/01/2006</td>
<td>Benicar (OLMESARTAN) Renew</td>
<td>20 MG (20MG TABLET Take 1) By Mouth every day ; Dispensed: Tablet(s)</td>
<td>Conner, Bruce E.</td>
</tr>
<tr>
<td>07/09/2009</td>
<td>Prilosec OTC (OMEPIRAZOLE OTC) Renew</td>
<td>20 MG (20MG TABLET DR Take 1) By Mouth every day ; Dispensed: Tablet(s)</td>
<td>Brown, Mary Linda, M.D.,M.P.H.</td>
</tr>
<tr>
<td>06/06/2008</td>
<td>Tylenol (ACETAMINOPHEN) Renew</td>
<td>325 MG (650MG TABLET SA Take 0.5) By Mouth every 4 hours ; Dispensed: Tablet(s)</td>
<td>Conner, Bruce E.</td>
</tr>
<tr>
<td>12/01/2006</td>
<td>Zomig (ZOLMITRIPTAN) Renew</td>
<td>2.5 MG (2.5MG TABLET Take 1) By Mouth one time ; Refills: 3; Dispensed: 30 Tablet(s)</td>
<td>Conner, Bruce E.</td>
</tr>
</tbody>
</table>
Rx details

* You have asked to renew:

<table>
<thead>
<tr>
<th>Date</th>
<th>Medication</th>
<th>Details</th>
<th>Ordered by</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/01/2006</td>
<td>Benicar (OLMESARTAN)</td>
<td>20 MG (20MG TABLET Take 1) By Mouth every day ; Dispensed: Tablet(s)</td>
<td>Conner, Bruce E.</td>
</tr>
</tbody>
</table>

* Are you sure the details (refills, dispense, dose, etc.) are correct?
  - Yes - this is exactly what I need
  - No - I would like: [ ]
  Additional comments: [ ]

* Please select a provider from the list below:

<table>
<thead>
<tr>
<th>Name ▲</th>
<th>Role</th>
<th>Practice</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birdsey, Jo, MSN, N.P.</td>
<td>Nurse Practitioner</td>
<td>MGH Revere Health Center at Ocean Avenue</td>
<td>300 Ocean Ave, Revere, MA 02151</td>
</tr>
<tr>
<td>Israel, Elliot, M.D.</td>
<td>Physician</td>
<td>BWH Center for Chest Diseases</td>
<td>15 Francis Street, Boston, MA 02115</td>
</tr>
<tr>
<td>Schneider, Louise Isabel, M.D.</td>
<td>Physician</td>
<td>Brigham Primary Physicians</td>
<td>1153 Centre Street, Jamaica Plain, MA 02130</td>
</tr>
<tr>
<td>Schneider, Louise Isabel, M.D.</td>
<td>Physician</td>
<td>BWH Foxborough Primary Care</td>
<td>20 Patriot PI, Foxborough, MA 02035</td>
</tr>
</tbody>
</table>

* Please re-check that the information is complete and correct before continuing.

[Cancel] [Next]
Pharmacy

Where should the prescription go?
- Phone or fax into Pharmacy
- Mail it to Pharmacy

Select a pharmacy:
- From My Profile
- Rite Aid Pharmacy

Mail it to me
- Hold it for pick-up

Other Pharmacy
- Name:
- Address:
- City:
- State: AK
- Zip:
- Phone:
- Fax:

Cancel  Previous  Next
Contact Info

Number during the day to receive calls regarding this request.
Enter a daytime phone number, best time to call and other information in the fields below.
Select the checkbox if it is OK to leave a voicemail message.

- Phone: 781-766-3433
- Best time to call: after 6pm
- OK to speak with:
- OK to leave an answering machine message
- Update my preferences

[Buttons: Cancel, Previous, Next]
Review & submit

About the medication:
- You have asked Office of Elliot Israel, MD to prescribe
- Date: 12/01/2006
- Medication: Benicar (OLMESARTAN)
- Details: 20 MG (20MG TABLET)
- Ordered by: Conner, Bruce E.
You have indicated that the prescription information above is correct.
Additional Comments: None

Instructions to the practice
- Phone or fax into Pharmacy
- Rite Aid Pharmacy; 800 S Main St Sharon, MA 02067-2869; Ph:781-784-1235; Fax: 781-784-2698

CONTACT INFO
Phone number to reach you: 781-766-3433 (please leave a message)
Best time to call: after 6pm

[ buttons: Cancel, Edit, Submit ]
Automatic system reply

Communicates a service level to the patient
Write message (patient)

Select a provider
Health Record

Year Added
2002
2006
2008
2009

Year Added
2003
PG Results Summary

[Each Result has a release timeframe: *Immediate, 2 bus. day, 30 day, etc.*]
Info link for “Magnesium”

Magnesium

Also known as: Mg
Related tests: Calcium, Potassium, Phosphorus, Parathyroid hormone (PTH), Vitamin D

At A Glance

Why get tested?
To evaluate the level of magnesium in your blood and to help determine the cause of abnormal calcium and/or potassium levels

When to get tested?
If you have symptoms (such as weakness, irritability, cardiac arrhythmia, nausea, and/or diarrhea) that may be due to too much or too little magnesium or if you have abnormal calcium or potassium levels

Sample required?
A blood sample drawn from a vein in your arm
## Medications and Allergies

### Medications

<table>
<thead>
<tr>
<th>Date</th>
<th>Medication</th>
<th>Details</th>
<th>Ordered by</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/13/2006</td>
<td>Dernedol HCL (MEPERIDINE HCL)</td>
<td>50 MG (50MG TABLET take 1) by mouth every 4-6 hours x 10 days</td>
<td>Derby, Stephen W.</td>
</tr>
<tr>
<td>12/13/2006</td>
<td>Fosamprenavir</td>
<td>700 MG (700MG TABLET take 1) by mouth twice a day x 10 days</td>
<td>Derby, Stephen W.</td>
</tr>
<tr>
<td>12/27/2006</td>
<td>Insulin ASPART</td>
<td>4 UNITS subcutaneous before meals</td>
<td>Foley, Mary Beth</td>
</tr>
<tr>
<td>11/28/2006</td>
<td>Lipid FREE SKIN CLEANER</td>
<td>1 APPLICATION topical four times daily</td>
<td>McCarthy, John H.</td>
</tr>
<tr>
<td>12/31/1840</td>
<td>None</td>
<td></td>
<td>Sinsheimer, Judith A.</td>
</tr>
</tbody>
</table>

### Allergies

<table>
<thead>
<tr>
<th>Date</th>
<th>Allergen</th>
<th>Reaction</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>02/22/2007</td>
<td>Morphine</td>
<td>Hives</td>
<td></td>
</tr>
</tbody>
</table>
## Immunizations display

### Immunizations - Summary View

Your record of immunization dates is below. Click the “i” next to each immunization for related information. Click the “Detail view” button at bottom for complete documentation about your immunizations.

<table>
<thead>
<tr>
<th>Name</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hep A Vaccine</td>
<td>03/27/2006</td>
</tr>
<tr>
<td>HepB- 2 Dose regimen</td>
<td>03/30/2006</td>
</tr>
<tr>
<td>Influenza Vaccine</td>
<td>10/08/2006; 10/08/2006; 02/13/2007</td>
</tr>
<tr>
<td>PPD</td>
<td>08/16/2006; 08/16/2006; 08/16/2006; 08/16/2006</td>
</tr>
<tr>
<td>Pediarix (DTaP-HepB-IPV)</td>
<td>04/14/2006</td>
</tr>
<tr>
<td>Pneumovax</td>
<td>09/25/2006</td>
</tr>
<tr>
<td>Varicella</td>
<td>03/30/2006</td>
</tr>
</tbody>
</table>

[Each screen can be printed]
Immunizations – Reference links

Search Results for: Hep A Vaccine

Resources

- Combination vaccine for hepatitis A and B (Healthwise - Drugs)
- Hep A Vaccine (Centers for Disease Control)
- Hepatitis A (Healthwise - Illnesses and Conditions)
- Hepatitis A vaccine (Healthwise - Drugs)
- Immune globulin (IG) for hepatitis A (Healthwise - Drugs)
- Immunizations (Healthwise - Illnesses and Conditions)
- Vaccine Information (Healthwise - Illnesses and Conditions)

Link within PG

Link outside of PG
Radiology Report List

For more information about a report, please contact the Ordering Provider. [More]

Select a row to view a report.

<table>
<thead>
<tr>
<th>Date/Time</th>
<th>Type</th>
<th>Ordering Provider</th>
<th>Site</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>01/15/2009 23:55</td>
<td>Skull Film 1-3 Views</td>
<td>DANNENBAUM MD, MARK J</td>
<td>BWH</td>
<td>Final</td>
</tr>
<tr>
<td>01/08/2009 14:46</td>
<td>Skull Film 1-3 Views</td>
<td>DANNENBAUM MD, MARK J</td>
<td>BWH</td>
<td>Final</td>
</tr>
<tr>
<td>12/08/2008 14:46</td>
<td>FLUORO GUIDE FOR SPINE INJ</td>
<td>KHORASANI MD, RAIN</td>
<td>BWH</td>
<td>Final</td>
</tr>
<tr>
<td>12/08/2008 14:46</td>
<td>CT THYROID W/O CONTRAST</td>
<td>KHORASANI MD, RAIN</td>
<td>BWH</td>
<td>Final</td>
</tr>
<tr>
<td>12/08/2008 14:46</td>
<td>Sinus Complete Min 3 Views</td>
<td>KHORASANI MD, RAIN</td>
<td>BWH</td>
<td>Final</td>
</tr>
<tr>
<td>12/08/2008 14:46</td>
<td>Skull Film 1-3 Views</td>
<td>DANNENBAUM MD, MARK J</td>
<td>BWH</td>
<td>Final</td>
</tr>
<tr>
<td>12/08/2008 13:02</td>
<td>Skull Limited 1-3 Films</td>
<td>Pereira, Blanca</td>
<td>BWH</td>
<td>Final</td>
</tr>
<tr>
<td>08/02/2008 13:53</td>
<td>CT ABDOMEN W/O C</td>
<td>TEST, DOC (R)</td>
<td>BWH</td>
<td>Final</td>
</tr>
<tr>
<td>08/02/2008 13:53</td>
<td>CT PELVIS W/O C</td>
<td>TEST, DOC (R)</td>
<td>BWH</td>
<td>Final</td>
</tr>
<tr>
<td>08/02/2008 13:53</td>
<td>CT SHOULDER</td>
<td>TEST, DOC (R)</td>
<td>BWH</td>
<td>Final</td>
</tr>
<tr>
<td>08/02/2008 13:53</td>
<td>CT LMS EXT w/o C</td>
<td>TEST, DOC (R)</td>
<td>BWH</td>
<td>Final</td>
</tr>
</tbody>
</table>
Individual Radiology Report

Radiology Report - Site: BWH

Exam Number: P7943613
Type: CT SHOULDER
Date/Time: 08/02/2008 13:53
Exam Code: CT019EAM
Ordering Provider: TEST, DOC (R)

REPORT:

HISTORY:

Testing Disassociation and Post-Association

FINDINGS:

Will Disassociate an accession from an added report and post-associate it to this report once it is finalized

IMPRESSION:

Accessions 7943614 and 7943615 will be in the report originally.
Results Letter (from LMR)

Below are links to Results Letters from your medical record. Items appear in Bold if they were not opened. Click on a Date to open a letter. [More]

<table>
<thead>
<tr>
<th>Signed</th>
<th>Type</th>
<th>From</th>
<th>Visit</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/29/2009</td>
<td>Results Letter</td>
<td>Bruce E. Conner</td>
<td>06/29/2009</td>
</tr>
</tbody>
</table>
Practice Demo
Practice features

- Manage incoming requests
  - New message **Notification** (to one or multiple staff)
  - Triage to desired staff (usually not the physician)
  - Combine multiple patient Rx requests
  - Assign responsible staff
- LMR shortcuts
  - Open LMR chart (summary page)
  - Save as LMR Note
  - Write patient message
  - View patient activity
  - Automatic: Send Results Letter to PG; Send Visit Summary to PG

- Reports
  - Results Letters (when was it read online?)
  - Messages (Has it been read?)
- Broadcast messages
  - Ability to send a single message to all PG users
- Cost
  - Site license for use at BWH, MGH, DFCI – no individual charge to the practice
    - Available to LMR practices only
  - License fee at PCHI practices - $900/physician (and $450/NP) per year
    - Available to LMR practices only
Mail Message (practice)

Enhancing HealthWise search is a medium-to-large size project.

Hello,

Just forwarding along this patient’s feedback regarding the Health Library. Is there anything that we can do to change this or is it an enhancement request for the actual Health Wise product itself? If it falls on our end, I will gladly enter an enhancement request.

Thanks,
Rick

From: Rachelefsky, Lance  To: Cushing, Richard J.  Sent: 5/26/2009 01:50:57pm

Open LMR chart

Select Patient

Save as Note
Sign/Save message as LMR Note

My headaches have gotten a little better since we lowered the dose of my medication. I'll set up an appointment to see you in 3 months. Thanks very much for your help with this.

Sincerely,
Bridget
# Results Letter report

<table>
<thead>
<tr>
<th>Patient</th>
<th>Provider</th>
<th>Signed</th>
<th>Days</th>
<th>Printed</th>
<th>Read</th>
<th>Last Read</th>
<th>Print?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elms, Michele A., P.A.-C.</td>
<td>05/18/2009 10:07:35</td>
<td>43</td>
<td>Yes</td>
<td>Unread</td>
<td>Unread</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elms, Michele A., P.A.-C.</td>
<td>05/1/10:01:05</td>
<td>0</td>
<td>Yes</td>
<td>05/18/2009 10:05:04</td>
<td>05/18/2009 10:05:04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elms, Michele A., P.A.-C.</td>
<td>05/05/2009 13:59:14</td>
<td>0</td>
<td>Yes</td>
<td>05/05/2009 14:51:19</td>
<td>06/26/2009 17:03:02</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Patient PG activity**
- **Already printed?**
  - Yes
- **Select, to print**
Adopting Patient Gateway
Policies

- **Patient messages**
  - Considered part of the legal record
  - Not “private” from office staff (usually)
  - Time-urgent messages *strongly discouraged*

- **Embargo periods for Results**
  - Assigned to each result or report
    - E.g. 5 business days for radiology reports, except mammography (immediate sharing)
  - Some results are blocked – e.g. genetic tests, HIV diagnostic test
  - Recommended by the PG Expert Panel (a group of clinicians)
    - Embargo periods are “Partners-wide”
    - Approved by the CCC (Clinical Content Committee)
Policies

- **Portal access to Patient Gateway**
  - Currently: Patients must select a provider
    - Can add/change provider later
  - Patients can request a “proxy” user
  - Patients must be 18+ years, or 10-and-under (in pilot, 2009; rollout anticipated 2010)
    - Patients 13-17 years – not available (no date, yet)
  - Password letters are *mailed* to online enrollees
  - Electronic password distribution is anticipated in 2010
What’s it like to use PG?

- Staff like it – *a lot!*
  - Easier than phone messages
  - Satisfies their patients
  - Patient misuse is rare (if that occurs, staff reminders are effective)
- Physicians don’t have extra work
  - Majority of messages reach staff (not the physician)
  - Physician can contact patients directly – as much or as little as they like
- Myths* (common fears, but found *not* to be true…)
  - PG access leads to patient concerns/confusions
  - Flood of patient messages -
  - Staff or physician workload increases

*From experience with Partners practices & nation-wide*
What staff concerns are expressed?

**Want more** communication and information sharing
- They want to use PG to communicate with patients electronically (and avoid having to mail them)
- They want to share patient-education materials
- They want to send (and receive) attachments
- They want to receive patient-reported symptoms and patient-entered medication changes

Workflow and integration
- They **want tighter integration**, such as patient medication refill requests that auto-fill their prescription queue manager
About BPG

- Adult Primary Care practice at 850 Boylston Street
- 11 PCP’s, 3 Urgent Care Providers & 4 Residents
- LPN’s, Medical Assistants & Practice Secretaries
- ~ 13,000 patients
- ~ 28,000 visits/year

*Courtesy of Lance Rachelefsky, BPG practice manager, lrachelefsky@partners.org*
BPG Patient Gateway “Profile”

- 5,411 active patient accounts (40% of all patients)
  - Mean Age: 50 years old
  - 65% Female
- Activity
  - Go-Live in 2003
  - 2nd highest # of accounts and “activity” at Partners
  - FY08: ~ 20 new accounts/week
  - FY09: ~ 52 new accounts/week
  - 10,418 patient sessions in October ‘09

http://clinical.partners.org/scripts/phsweb.mwl?APP=PGdata&OPT=NEWME&TERM=LONG&PRACT=5&startYear=2002&INCL1=1&INCL2=1

*Courtesy of Lance Rachelefsky, BPG practice manager, lrachelefsky@partners.org*
BPG

- PG Enrollments each year (not cumulative)

- Activity by month (not cumulative)
### BPG Patient Gateway Requests (by desk)

<table>
<thead>
<tr>
<th>Desk</th>
<th>FY08</th>
<th>FY09</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Volume</td>
<td>% of Total</td>
</tr>
<tr>
<td>Medication</td>
<td>1,702</td>
<td>39%</td>
</tr>
<tr>
<td>Message</td>
<td>1,408</td>
<td>32%</td>
</tr>
<tr>
<td>Appointment</td>
<td>574</td>
<td>13%</td>
</tr>
<tr>
<td>Referral</td>
<td>431</td>
<td>10%</td>
</tr>
<tr>
<td>Registration</td>
<td>289</td>
<td>6%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4,404</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Avg/week</strong></td>
<td><strong>85</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Avg/day</strong></td>
<td><strong>17</strong></td>
<td></td>
</tr>
</tbody>
</table>

*Courtesy of Lance Rachelefsky, BPG practice manager, lrachelefsky@partners.org*
Getting Patient Buy-In

- The easy one!
- View your medical record
- “Email” your physician
- No need to ever deal with BPG phone system ever again
- Talk to your physician’s office at any time…24/7 access to BPG

*Courtesy of Lance Rachelefsky, BPG practice manager, lrachelefsky@partners.org
Getting Staff Buy-In

- Money talks (staff prize for marketing to patients)
- A different kind of “volume”
  - Instead of phone requests
  - No more phone-tag
  - Request is already “transcribed”
  - Many staff more comfortable on computer than phone
- Patients can answer their own questions
- Happy patients!

*Courtesy of Lance Rachelefsky, BPG practice manager, lrachelefsky@partners.org
Getting Physician Buy-In

- The tough one...fear of the “novel” and unnecessary contact
  - This did not materialize
- Patients can answer their own questions
- Patients become more involved in managing their own care
- “Blast” messages – ability to do ‘broadcasts’
- Happy Patients!

*Courtesy of Lance Rachelefsky, BPG practice manager, lrachelefsky@partners.org
Marketing Strategies – key!!

- Publicity: signs in exam rooms and at check-in/out, take-away cards, website and our phone menu
- Sales pitch from staff and invested physicians
- Staff are patients, too!
- “Do you know how long I’ve been waiting on hold?!”
- “I’m calling to see if my lab/test results are back”
- Full-service account registration and “tour”

*Courtesy of Lance Rachelefsky, BPG practice manager, lrachelefsky@partners.org*
Practice adoption*

*As of June 22, 2009

1248 Lic. Providers

949 MDs
Critical success factors

- Marketing to the patient
  - Communicate with patients, and encourage them to use it
- Physician enthusiasm “infects” staff and patients
- Engaging front-line staff and marketing at every opportunity
  - Staff leadership assures that messages will be handled
  - Like phone messages --- always received and returned (if needed)
- Provide excellent service!!
  - Patients who don’t receive a reply or don’t “trust” the system will abandon it, and will phone (extra work)
- Continue to innovate
  - Improve staff workflow & efficiency
  - Work to activate patients and make them partners in care
Questions?