PROMs in Primary Care Collaborative

*United Hospital Fund Quality Institute*

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Partners HealthCare
Center for Population Management | Quality, Safety, and Value
“Do you solemnly swear to have no involvement in your own care?”
Today’s Agenda

• A brief look at why PROMs are useful in general (5)

• PROMs and Patient-Entered Data in Primary Care (15)

• Keys to Implementation (10)

• Questions and Discussion (15)
FINDING DR. RIGHT
Measuring Quality in Surgery

Improvement in Pain and Function after Total Knee Replacement
Total Knee Replacement: Relief from Knee Pain

Our patients report, on average, little to no knee pain one year after a knee replacement.

This graph measures the severity of your knee pain before a total knee replacement and after a total knee replacement. A higher score means you feel better and have less pain. Most patients see a dramatic increase in their scores from less than 40 out of 100 before surgery up to almost 90 out of 100 one year after surgery, representing very little pain. The vertical line represents the time of surgery.
Outcomes in Prostate Cancer

5yr Mortality

- Average Center
- Best Center
LOWER IS BETTER
0 = no incontinence
Asthma Control Measure

Asthma well-controlled as defined by most recent Asthma Control Test (ACT)

- Scores of 20 or greater → well-controlled
- (Use C-ACT for ages <12)

AND

Patients not at elevated risk of exacerbation as defined by less than two patient-reported ED visits or hospitalizations in the last year
PROMs and Patient-Entered Data in Primary Care
Two Paths for Primary Care

1. Primary Care centered questions
   • Screening
   • Health Risk Assessments
   • Social determinants of health
   • General tools? (PROMIS-10)

2. Use of specialty instruments in primary care
   • BPH/Prostate: IPSS
   • Knee Pain/Orthopedic Issues: KOOS-Jr, PROMIS Physical Function
Primary Care Annual Visit Questionnaire “Bundle”

Primary Care Annual Visit Questionnaire (~20 questions minimum)
- Depression Screening (PHQ2/9)
- Fall Screening (3 questions)
- AWV: Health Risk Assessment (RULE: Payer = Medicare)
- Domestic Violence Screening (2 questions)
- Pain Assessment (1 question 0-10 pain)
- Anxiety Screening (GAD2/7)
- Alcohol Misuse Screening (Audit 1/C)
- Brief ROS (~1 question per system)

(Smoking: History Questionnaire … must be separate because it’s a “History Qnr”)

Each primary care clinic can choose the modules assigned to each visit type. Rules (based on age or payer) can select certain patient types within particular visit types. Here’s one way to assign modules to visit types:

<table>
<thead>
<tr>
<th>Appointment Type</th>
<th>Med Hx</th>
<th>Surg Hx</th>
<th>FHx</th>
<th>SHx</th>
<th>Primary Care Annual Visit Qnr</th>
<th>Smoking History Qnr</th>
<th>Primary Care Review of Systems</th>
<th>Depression Screening</th>
<th>Pain Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>New</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>(included in Annual)</td>
<td>(included in annual)</td>
<td>(included in Annual)</td>
</tr>
<tr>
<td>Annual (or DOT, etc.)</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>(included in Annual)</td>
<td>(included in annual)</td>
<td>(included in Annual)</td>
</tr>
<tr>
<td>AWV</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td>See previous slide for what’s included in the Primary Care Annual Visit Questionnaire</td>
<td>Yes</td>
<td>(included in Annual)</td>
<td>(included in annual)</td>
<td>(included in Annual)</td>
</tr>
<tr>
<td>Return/Follow-up Established</td>
<td>(current smokers)</td>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Urgent/Walk-in</td>
<td>(current smokers)</td>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Pre-op</td>
<td>(current smokers)</td>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>
How would patients complete these questionnaires?

1. **At Home - Partners Patient Gateway**: 7 days before the visit, any patient who is enrolled in Gateway would receive an email notification (tickler) to log-in to Gateway to complete this as part of their pre-visit tasks (other tasks include med rec, allergy confirmation, etc.)

2. **In Clinic Waiting Room – iPads running “Welcome”**: for clinics who have iPads or can otherwise run “Welcome”, an icon will show up on the DAR, informing the staff that the patient has a questionnaire to complete.

3. **In Exam Rooms – desktop using “Hyperspace”**: a clinician can click “Complete incomplete questionnaires” in Rooming. This launches an interface that a patient can use to complete questionnaires with the rest of Hyperspace locked.

These are the ways for patients to enter these data themselves. Providers can also enter the data (current workflow)

- **Provider-Entered**: providers can still ask the patient verbally and enter these data directly into the appropriate “documentation flowsheet”.


Email Notification to Patient

Dear Patient Gateway User,

You have received a new Patient Gateway message. To read it, please visit [www.patientgateway.com](http://www.patientgateway.com) and enter your username NWAGLE1@PARTN.

To ensure that your email provider recognizes and accepts messages from Partners Healthcare, enter the originating email address, Patientgateway@.

PLEASE DO NOT RESPOND TO THIS MESSAGE.

------------- ABOUT THIS MESSAGE ---------------

The Patient Gateway system automatically sends this notification when a new Patient Gateway message arrives. Patient Gateway is intended for non-doctor's office.

To avoid future notification messages like this one, sign in to Patient Gateway, select "Accounts" and click "No" under "Turn on email notification".

---

The information in this e-mail is intended only for the person to whom it is addressed. If you believe this e-mail was sent to you in error and the e-mail pertains to Patient Compliance Help Line at [http://www.partners.org/complianceline](http://www.partners.org/complianceline). If the e-mail was sent to you in error but does not contain patient information, please disregard the e-mail.

Forwarded message 108458587C<63698,36266>OMA61]24
PROMs Integrated with Appointment Reminder

- Once logged into gateway, patients can access questionnaires from their appointment reminder in “Mail” or from “Tasks”
- Questionnaires are available up to 7 days before prior to appointment
- At home completion eliminates in-clinic administration
Choose the questionnaire to answer

<table>
<thead>
<tr>
<th>Questionnaire</th>
<th>Reason</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>From Your Doctor: Pre-Visit Questionnaire</td>
<td>Appointment with Linda Ann Lauretti, MD BWH Brigham Primary Physicians Suite 4A on October 17, 2016 2:00 PM</td>
<td>Not Started</td>
</tr>
</tbody>
</table>
From Your Doctor: Pre-Visit Questionnaire

Please answer the following questions and click the Continue button.

* Indicates a required field.

* The following questions ask about your symptoms. Your answers provide your doctor and care team with valuable information to take better care of you. It’s easy and confidential. Please note: your provider might not view your answers in a timely manner. By clicking "Get started," you understand that the information you submit will become part of your medical record and you agree to proceed.

Then click the green "Continue" button to move on to the next screen.

Get started

Continue  Finish Later  Cancel
Depression Screen
PHQ2

From Your Doctor: Pre-Visit Questionnaire

Please answer the following questions and click the Continue button.

* Indicates a required field.

Over the last 2 weeks, how often have you been bothered by the following problems:

* Little interest or pleasure in doing things
  - Not at all
  - Several days
  - More than half the days
  - Nearly every day

* Feeling down, depressed, or hopeless
  - Not at all
  - Several days
  - More than half the days
  - Nearly every day
From Your Doctor: Pre-Visit Questionnaire

Please answer the following questions and click the Continue button.

* Indicates a required field.

Over the last 2 weeks, how often have you been bothered by any of the following problems?

* Trouble falling or staying asleep, or sleeping too much
  - Not at all
  - Several days
  - More than half the days
  - Nearly every day

* Feeling tired or having little energy
  - Not at all
  - Several days
  - More than half the days
  - Nearly every day

* Poor appetite or overeating
  - Not at all
  - Several days
  - More than half the days
  - Nearly every day

* Feeling bad about yourself - or that you are a failure or have let yourself or your family down
  - Not at all
  - Several days
  - More than half the days
  - Nearly every day
Domestic violence Screening

From Your Doctor: Pre-Visit Questionnaire

Please answer the following questions and click the Continue button.

* Indicates a required field.

* Are you currently or in the past 12 months have you been in a relationship with a person who physically hurts, threatens or tries to control you?
  
  Yes  No

* Are you denied basic needs such as food, clothing, or medical care?
  
  Yes  No

Back  Continue  Finish Later  Cancel
Fall Screening

From Your Doctor: Pre-Visit Questionnaire

Please answer the following questions and click the Continue button.

* Indicates a required field.

* Have you fallen in the past 12 months?
  - Yes
  - No

* Are you afraid of falling?
  - Yes
  - No

[Buttons: Back, Continue, Finish Later, Cancel]
From Your Doctor: Pre-Visit Questionnaire

Please answer the following questions and click the Continue button.

On your own, can you bathe yourself?
- Yes
- No

On your own, can you dress yourself?
- Yes
- No

Are you able get around on your own?
- Yes
- No

During the past week, how many days did you do at least moderate physical activities like walking, yoga, tai chi, stretching classes?
- 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7

Do you always fasten your seat belt when you are in a car?
- Yes
- No
From Your Doctor: Pre-Visit Questionnaire

Please answer the following questions and click the Continue button.

Do you have difficulty with eating?
Yes  No

Over the last week, how many days have you eaten a serving of fruits or vegetables?
Less than once a week  1 to 3 days per week  4 to 6 days per week  Everyday

Over the last week, how many days have you eaten fast food for a meal or snack?

Over the last week, how many servings of fish, poultry, lean meat, cooked dry beans, peanut butter, or nuts do you eat per day?
(One serving= 2-3 ounces of meat, 1/2 cup of cooked dry beans, two tablespoons of peanut butter, or 1/3 cup of nuts)
None  1  2  3  4

Does your home have loose rugs?
Yes  No
Please answer the following questions and click the Continue button.

Does your home have poor lighting?
   Yes  No

Is the tub or shower floor in your home slippery?
   Yes  No

Do you have difficulty maintaining your balance when bathing, dressing or getting in and out of a chair?
   Yes  No

Do you use a cane, walker or other device when walking inside or outside your home?
   Yes  No

How would you rate your health in general?
   Excellent  Very good  Good  Fair  Poor

Who is completing this questionnaire?
   Myself  Spouse  Child  Friend  Extended family member  Neighbor  Home health aid or nurse  Other

Back  Continue  Finish Later  Cancel
Review of Systems Questionnaire

Have you experienced any of the following regularly during the past month?

Cardiac:
- Chest pain
  - Yes
  - No
- Leg swelling
  - Yes
  - No
- Palpitation
  - Yes
  - No
Review of Systems

Things circled in red are asked in ROS questionnaires and populated by the answers.
Only for Clinics using iPads: Front-Desk View

PROMS uses native EPIC functionality for Welcome designed for kiosk check-in. We modified the kiosk to display on iPads using a Citrix virtual machine.

Clinic staff use the added Kiosk fields to identify patients who need to complete PROMS in the clinic and enter the associated Barcode in the Welcome app.
Patient View: Questionnaire on iPads Running “Welcome”

Note: these are not the screenings referred to in this deck, but the view would be similar
Patient-Entered Review of Systems *FLOWING* to Note

**Subjective:**

*Patient ID: Joan D Annualmtg is a 38 y.o. female.*

**HPI**

Review of Systems

**Objective:**

*Physical Exam*
Review of Systems Screenshots

Clinician
## Viewing Results in eCare: Detailed Answers and Scores in "Rooming"

**Current View:** Showing only relevant answers  
**Legend:** Scores, Non-relevant Questions

### Patient Responses

**Proms Bwh Cardiac Root**

<table>
<thead>
<tr>
<th>Question</th>
<th>9/29/2016 8:49 PM</th>
<th>Get started</th>
</tr>
</thead>
<tbody>
<tr>
<td>The following questions ask about your symptoms. Your answers provide your doctor and care team with valuable information to take better care of you. It's easy and confidential. Please note: your provider might not view your answers in a timely manner. By clicking &quot;Get started,&quot; you understand that the information you submit will become part of your medical record and you agree to proceed. Please go over the activities listed below and indicate how much limitation you have had due to chest pain, chest tightness or angina over the past 4 weeks.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walking indoors on level ground</td>
<td>Moderately limited</td>
<td></td>
</tr>
<tr>
<td>Gardening, vacuuming, or carrying groceries</td>
<td>Quite a bit limited</td>
<td></td>
</tr>
<tr>
<td>Lifting or moving heavy objects (e.g. furniture, children)</td>
<td>Extremely limited</td>
<td></td>
</tr>
<tr>
<td>Over the past 4 weeks, on average:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How many times have you had chest pain, chest tightness or angina? I have had chest pain, chest tightness, or angina...</td>
<td>3 or more times per week, but not every day</td>
<td></td>
</tr>
<tr>
<td>How many times have you had to take nitroglycerin (tablets or spray) for your chest pain, chest tightness or angina? I have taken nitroglycerin...</td>
<td>None over the past 4 weeks</td>
<td></td>
</tr>
<tr>
<td>Over the past 4 weeks, how much has your chest pain, chest tightness or angina limited your enjoyment of life?</td>
<td>It has moderately limited my enjoyment of life</td>
<td></td>
</tr>
<tr>
<td>If you had to spend the rest of your life with your chest pain, chest tightness or angina the way it is right now, how would you feel about this?</td>
<td>Mostly dissatisfied</td>
<td></td>
</tr>
</tbody>
</table>

**PROMs Seattle Angina Questionnaire Summary Score (SAQ-7) (range: 0 - 100)**  
44.16 (Fair)

**PROMs Seattle Angina Questionnaire Angina Frequency Score (SAQ-7) (range: 0 - 100)**  
70 (Monthly Angina)

**PROMs Seattle Angina Questionnaire Physical Limitation Score (SAQ-7) (range: 0 - 100)**  
25 (Moderate)

**PROMs Seattle Angina Questionnaire Quality of Life Score (SAQ-7) (range: 0 - 100)**  
37.5 (Fair)
### Viewing Results in eCare: Scores and Sparklines in “Rooming”

<table>
<thead>
<tr>
<th>PROMs PROMIS Pain Intensity Short Form 3a Score</th>
<th>Range</th>
<th>Previous</th>
<th>Latest</th>
<th>7/13/2016-9/14/2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROMs PROMIS Physical Function SF10a</td>
<td>0-62</td>
<td>32.7</td>
<td>55.3</td>
<td>Normal &gt; 40</td>
</tr>
<tr>
<td>PROMs Anxiety Score (PROMIS Short Form 4a)</td>
<td>40-82</td>
<td>40.3</td>
<td>40.3</td>
<td>Normal &lt; 61</td>
</tr>
<tr>
<td>PROMs Depression Score (PROMIS Short Form 4a)</td>
<td>41-80</td>
<td>41</td>
<td>41</td>
<td>Normal &lt; 61</td>
</tr>
<tr>
<td>PROMs Pain Interference Score (PROMIS Short Form 4a)</td>
<td>41-76</td>
<td>75.6</td>
<td>52</td>
<td>Normal &lt; 61</td>
</tr>
<tr>
<td>PROMs PROMIS Global Health Short Form Score (Physical)</td>
<td>16-68</td>
<td>26.7</td>
<td>57.7</td>
<td>Normal &gt; 40</td>
</tr>
<tr>
<td>PROMs PROMIS Global Health Short Form Score (Mental)</td>
<td>21-68</td>
<td>43.5</td>
<td>67.6</td>
<td>Normal &gt; 41</td>
</tr>
</tbody>
</table>

Viewing options: Table/Sparklines in Rooming/Encounter, Synopsis, Smart Data Elements or Phrases in Notes
How does this help?

1. **Systematic completion of regulatory requirements**: depression, falls, HRA. (Meaningful Use/MIPS: two-way electronic communication)

2. **Efficiency**: doctors and staff spend less time asking primary data questions and entering the data.

3. **Deeper conversations, more personalized care**: with primary data out of the way, the system highlights those areas that need attention, and you can start your conversation further along.
Keys to Implementation
Robust Collection Requires Engaging 3 Parties + Functioning Platform

For All, technology platform must *work seamlessly*: WiFi, tablets, security, integration into EHR, real-time processing.

<table>
<thead>
<tr>
<th>Patients</th>
<th>Front-Line Staff</th>
<th>Clinical Providers</th>
</tr>
</thead>
</table>
| • Must reach them in ways that are convenient for them  
• Most important determinant: did provider use the results  
• User-interface must be intuitive  
• Must avoid survey fatigue | • Improve or minimally impact workflow  
• Administrative champion is key  
• Clinical providers must communicate the imperative | • Don’t interfere with workflow  
• PROMs must improve *individual* patient care  
• AND provide some other benefit  
• Removing other administrative burden is a bonus  
• Scores must be actionable |
Agree on which PROM to measure

*consensus is hard, but not as hard as you might think.*

**Criteria**

1. Short
2. Relevant to clinical care
3. Validated
4. Industry-standard (ICHOM, national registries)
5. Covered by a PROMIS domain? (Patient-Reported Outcomes Measurement Information System)
   - Emerging consensus to use PROMIS
   - Free/NIH sponsored
   - In Epic Foundations
   - Computer Adaptive Testing
PROM Selection: Customize vs. Standardize

**Customize**
- Better Adoption
- >1 “Right” Answer

**Standardize**
- Benchmarking
- Internally Consistent
- External Mandates
- Lower Cost
Engage the patient – multimodal collection is a must

Collecting: MyChart

- Sample questionnaire page
Engage the patient – multimodal collection is a must

Collecting: Welcome – On Tablets (iPads)
• Patient answers questions!

From your doctor: Follow-Up Hip Symptom Check

For your RIGHT hip:
Do you have a limp?
- None
- Slight
- Moderate
- Severe or unable to walk

From your doctor: Follow-Up Hip Symptom Check

For your RIGHT hip:
How well do you climb stairs?
- Normally without using a railing
- Normally using a railing
- In any manner
- Unable to do stairs
Engage the clinicians – ensure “usefulness”

Goals:
1. Don’t interfere with workflow, improve it if possible
2. Benefit patient care (real-time in EHR, notifications)

Viewing options: Table/Sparklines in Rooming/Encounter, Synopsis, and Smart Data Elements /Phrases in Notes
Build the right team, have the right resources

- Clinical Leadership
- Technical Resources
- Implementation / Training Resources
- (Analytics resources)