PARTNERS HEALTHCARE

FOUNDED BY BRIGHAM AND WOMEN'S HOSPITAL
AND MASSACHUSETTS GENERAL HOSPITAL

PROMs in Primary Care Collaborative

United Hospital Fund Quality Institute

November 16th, 2016

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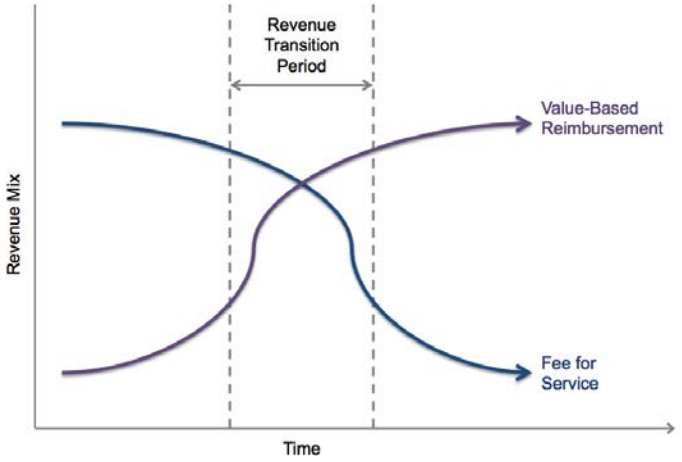
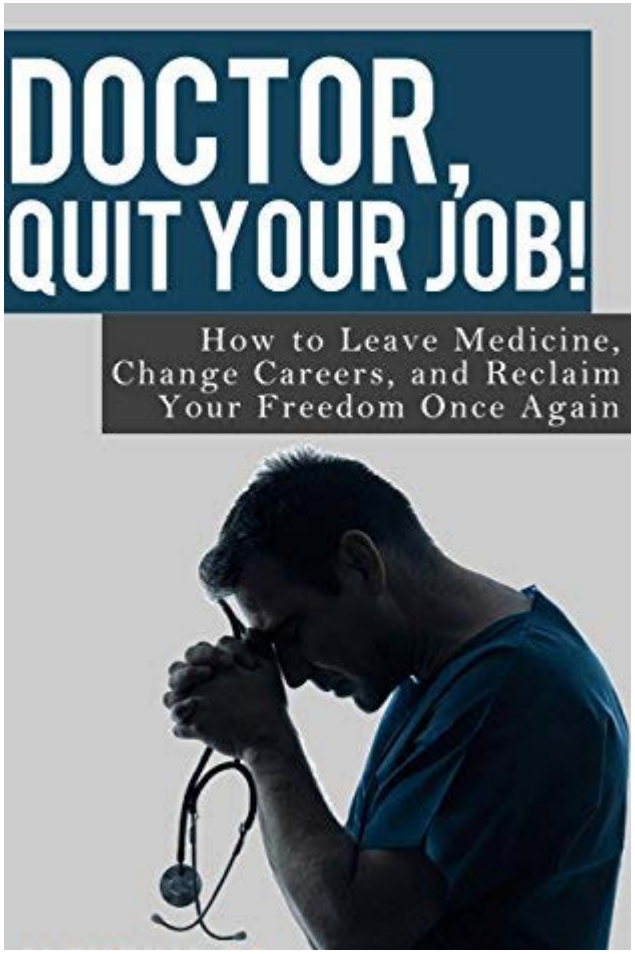
Center for Population Management | Quality, Safety, and Value



"Do you solemely swear to have no involvement in your own care?"



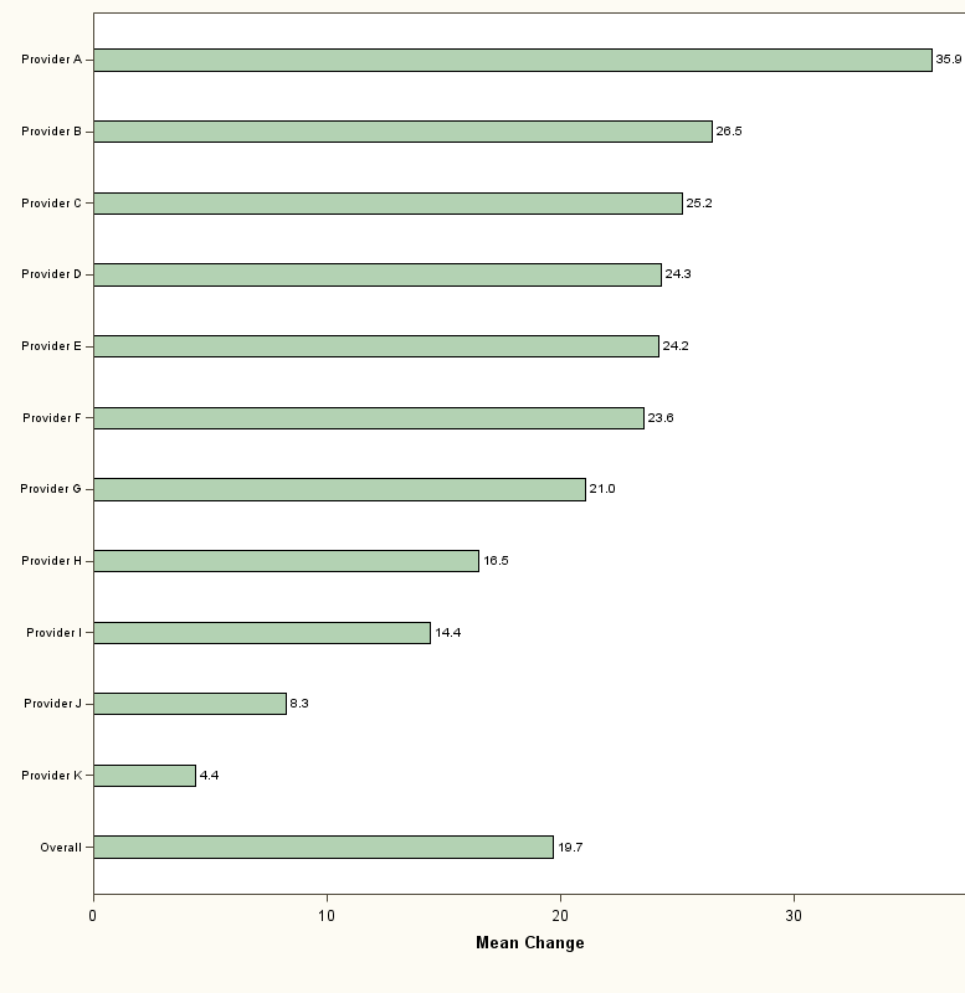
Today's Agenda

- 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

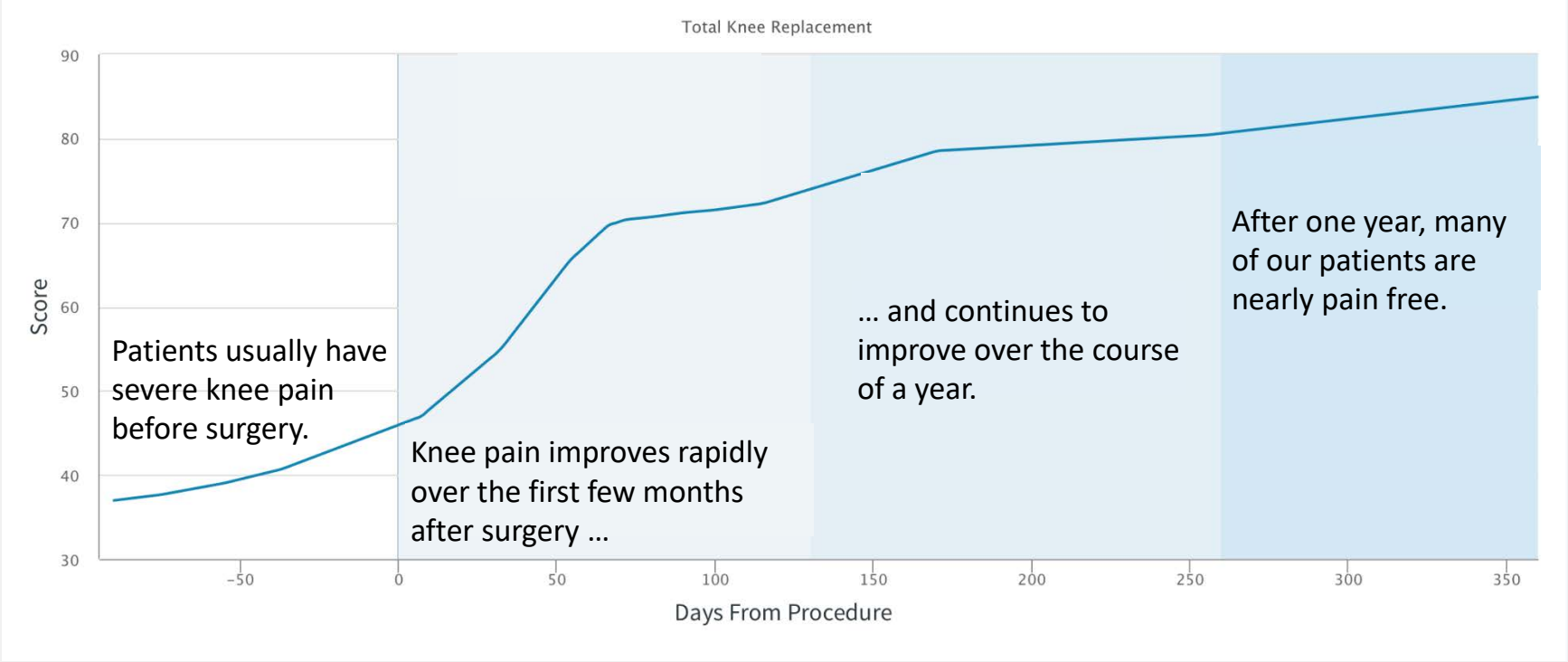
Measuring Quality in Surgery

Improvement in Pain and Function after Total Knee Replacement



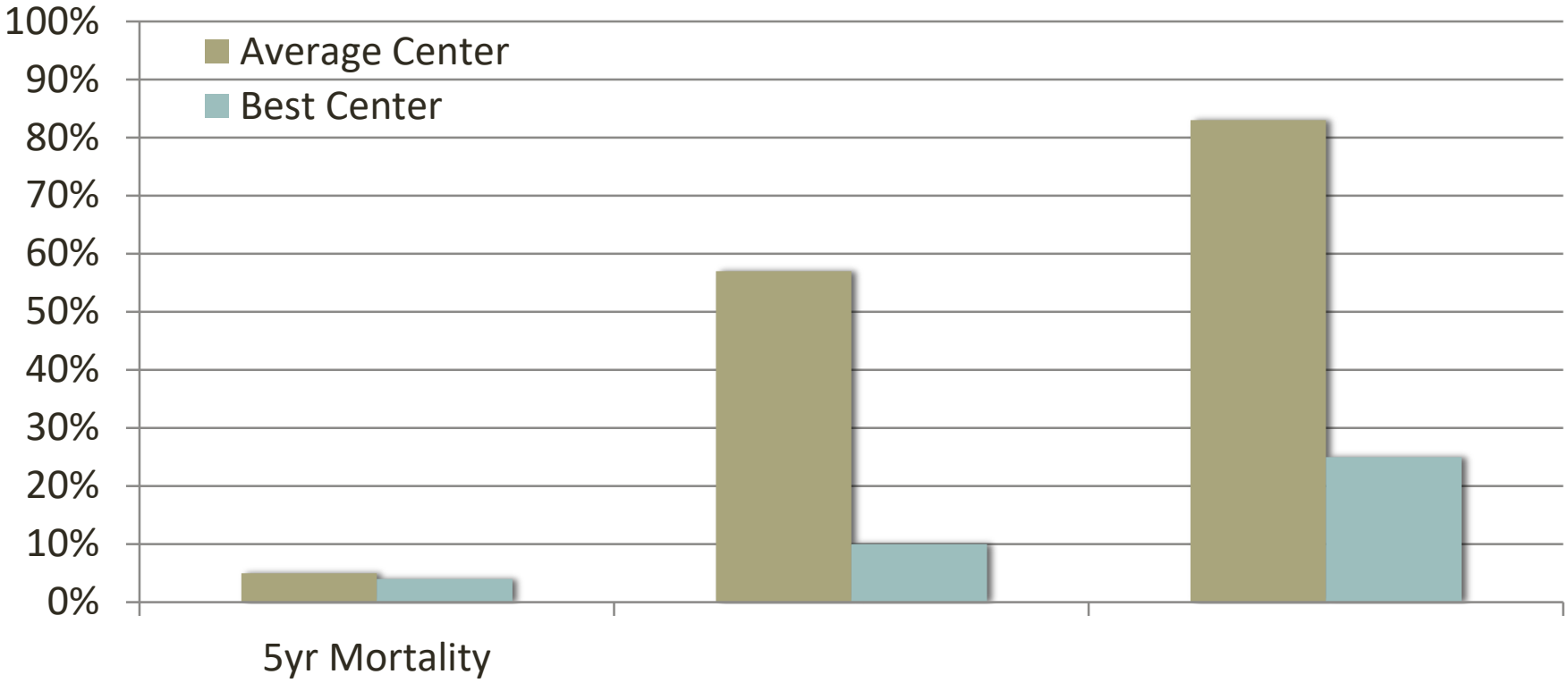
Total Knee Replacement: Relief from Knee Pain

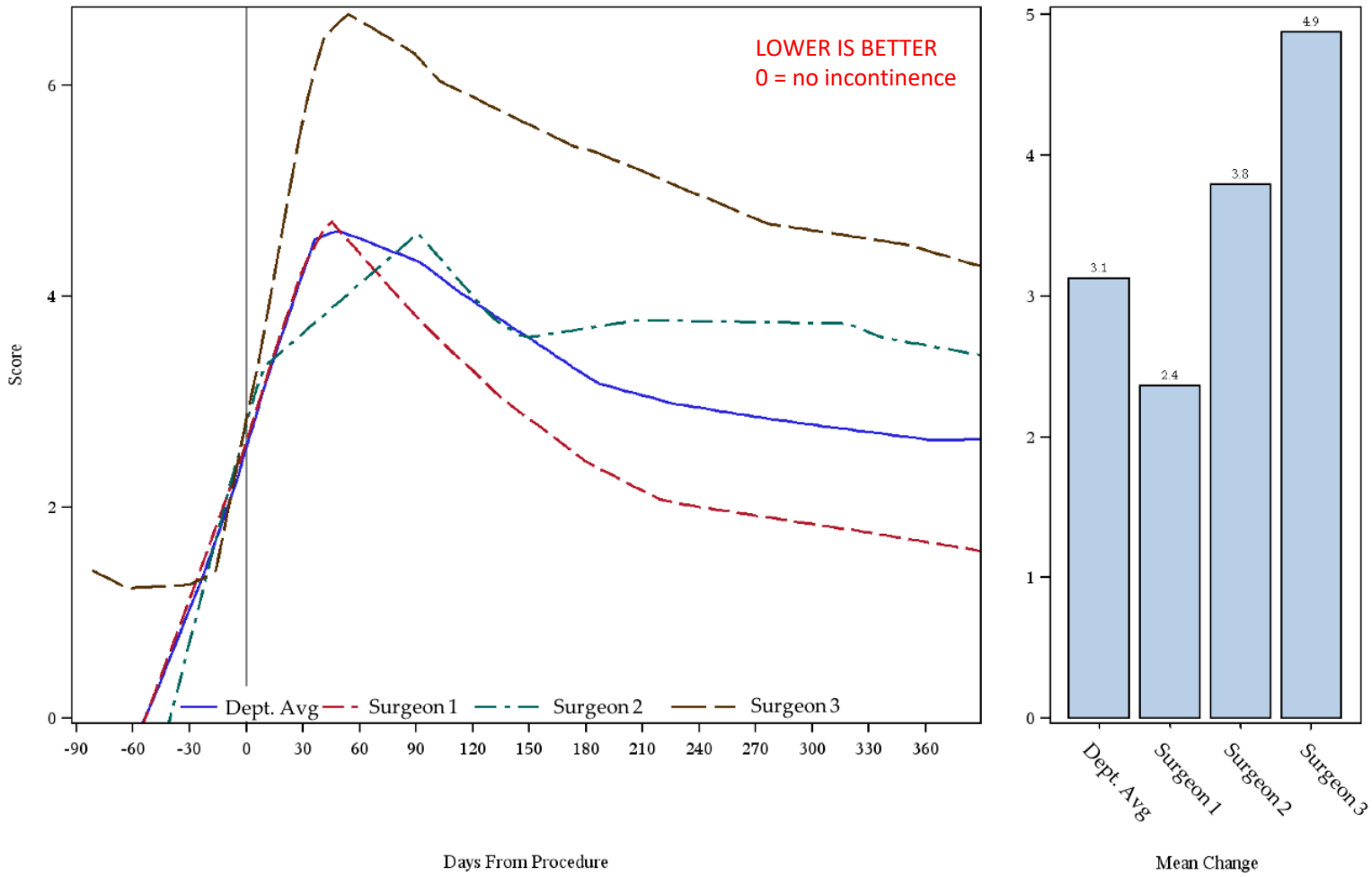
Our patients report, on average, little to no knee pain one year a knee replacement.



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




LOWER IS BETTER
0 = no incontinence
Score
Days From Procedure
Dept. Avg
Surgeon 1
Surgeon 2
Surgeon 3
-90
-60
-30
0
30
60
90
120
150
180
210
240
270
300
330
360
0
2
4
6
Mean Change
3.1
2.4
3.8
4.9
0
1
2
3
4
5
Dept. Avg
Surgeon 1
Surgeon 2
Surgeon 3

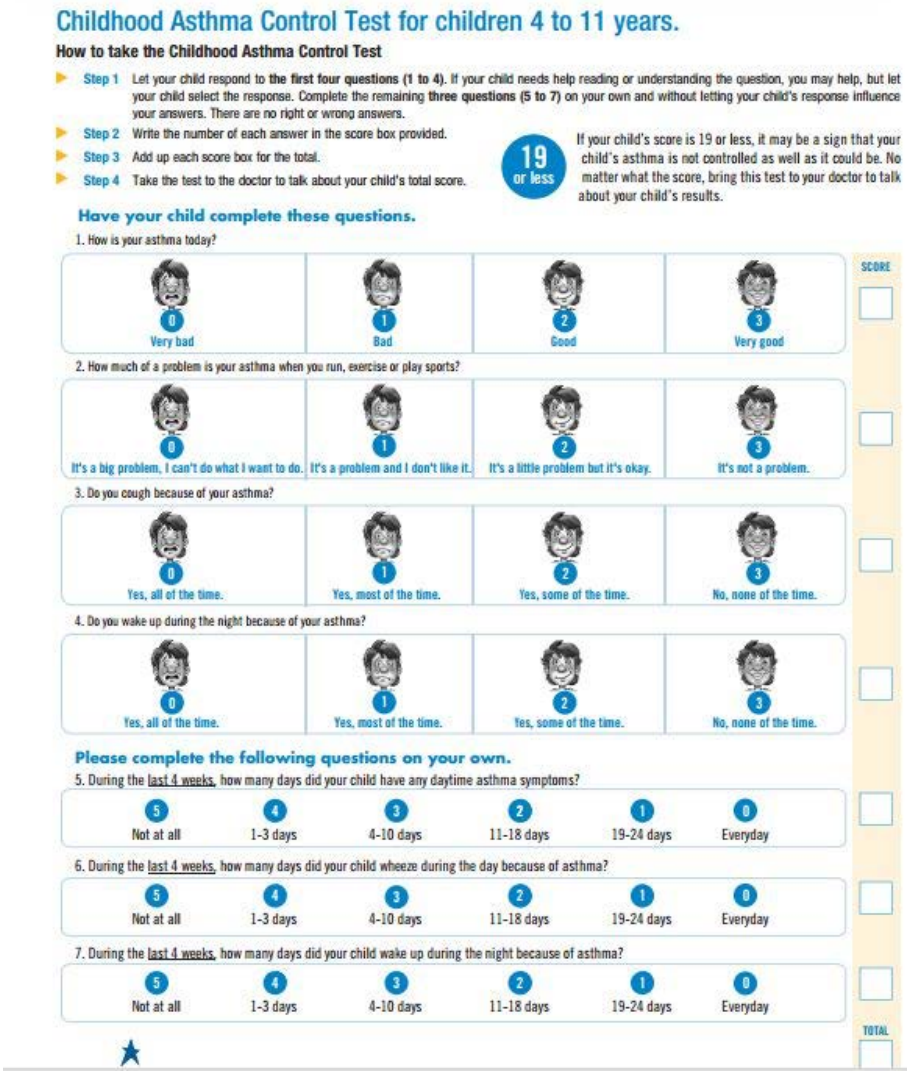
Asthma Control Measure

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



Childhood Asthma Control Test for children 4 to 11 years.

How to take the Childhood Asthma Control Test

- **Step 1** Let your child respond to **the first four questions (1 to 4).** If your child needs help reading or understanding the question, you may help, but let your child select the response. Complete the remaining **three questions (5 to 7)** on your own and without letting your child's response influence your answers. There are no right or wrong answers.
- **Step 2** Write the number of each answer in the score box provided.
- **Step 3** Add up each score box for the total.
- **Step 4** Take the test to the doctor to talk about your child's total score.

19 or less If your child's score is 19 or less, it may be a sign that your child's asthma is not controlled as well as it could be. No matter what the score, bring this test to your doctor to talk about your child's results.

Have your child complete these questions.

1. How is your asthma today?

0	1	2	3	SCORE
Very bad	Bad	Good	Very good	

2. How much of a problem is your asthma when you run, exercise or play sports?

0	1	2	3	
It's a big problem, I can't do what I want to do.	It's a problem and I don't like it.	It's a little problem but it's okay.	It's not a problem.	

3. Do you cough because of your asthma?

0	1	2	3	
Yes, all of the time.	Yes, most of the time.	Yes, some of the time.	No, none of the time.	

4. Do you wake up during the night because of your asthma?

0	1	2	3	
Yes, all of the time.	Yes, most of the time.	Yes, some of the time.	No, none of the time.	

Please complete the following questions on your own.

5. During the last 4 weeks, how many days did your child have any daytime asthma symptoms?

5	4	3	2	1	0	
Not at all	1-3 days	4-10 days	11-18 days	19-24 days	Everyday	

6. During the last 4 weeks, how many days did your child wheeze during the day because of asthma?

5	4	3	2	1	0	
Not at all	1-3 days	4-10 days	11-18 days	19-24 days	Everyday	

7. During the last 4 weeks, how many days did your child wake up during the night because of asthma?

5	4	3	2	1	0	
Not at all	1-3 days	4-10 days	11-18 days	19-24 days	Everyday	

TOTAL

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")

Proposed: Module Assignment

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:

Appointment Type	Med Hx Surg Hx FHx SHx	Primary Care Annual Visit Qnr	Smoking History Qnr	Primary Care Review of Systems	Depression Screening	Pain Assessment
New	Yes	Yes	Yes	(included in Annual)	(included in annual)	(included in Annual)
Annual (or DOT, etc.)		Yes	Yes	(included in Annual)	(included in annual)	(included in Annual)
AWV		Yes	Yes	(included in Annual)	(included in annual)	(included in Annual)
Return/Follow-up/Established			(current smokers)	Yes	Yes	Yes
Urgent/Walk-in			(current smokers)	Yes	Yes	Yes
Pre-op			(current smokers)	Yes	Yes	Yes

See previous slide for what's included in the Primary Care Annual Visit Questionnaire

How would patients complete these questionnaires?

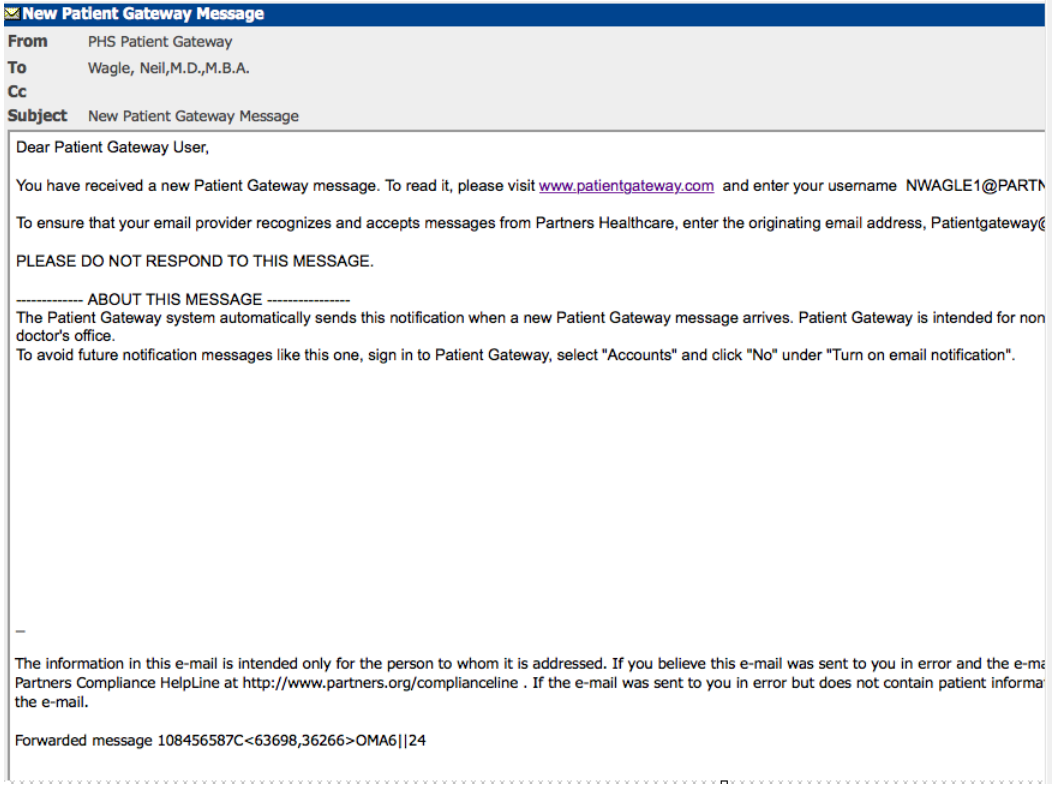
1. **At Home - Partners Patient Gateway**: 7 days before the visit, any patient who is enrolled in Gateway would receive an email notification (tickler) to log-in to Gateway to complete this as part of their pre-visit tasks (other tasks include med rec, allergy confirmation, etc.)
2. **In Clinic Waiting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

Patient



New Patient Gateway Message

From PHS Patient Gateway
To Wagle, Neil,M.D.,M.B.A.
Cc
Subject New Patient Gateway Message

Dear Patient Gateway User,

You have received a new Patient Gateway message. To read it, please visit 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".

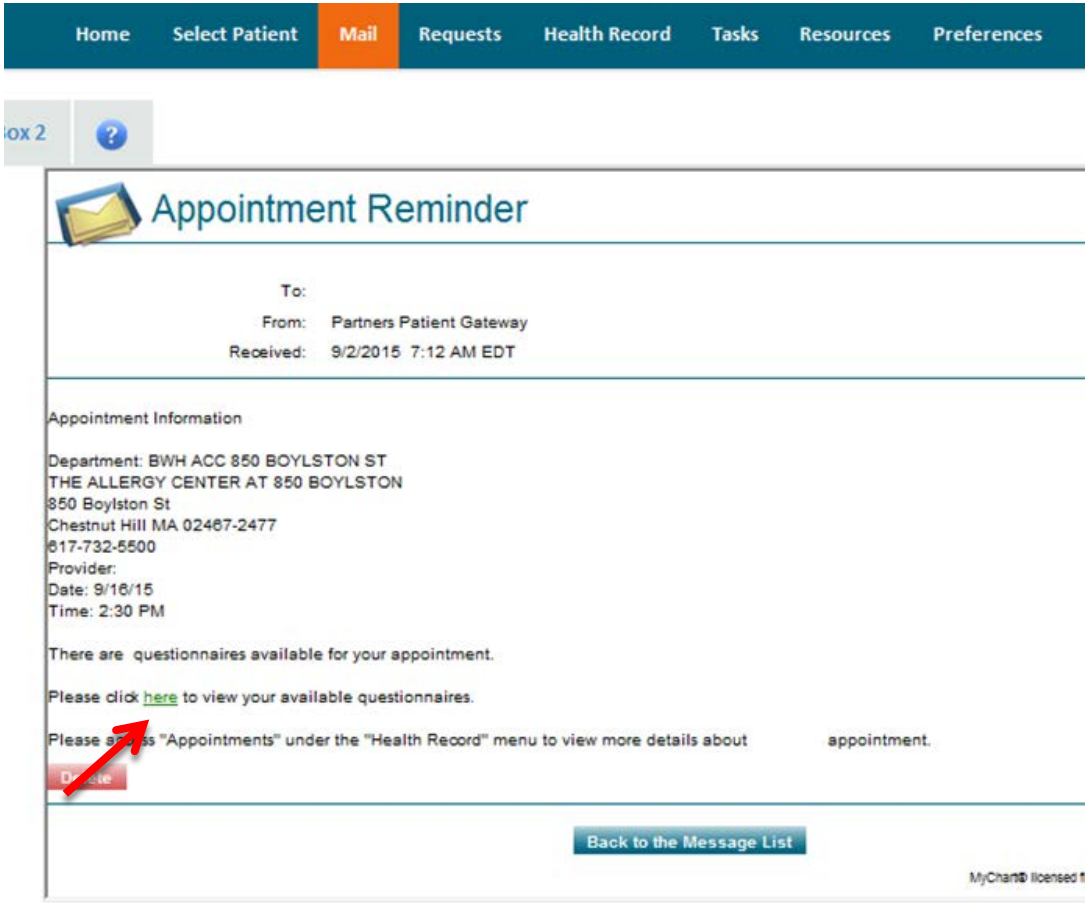
–

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-ma
Partners Compliance HelpLine at http://www.partners.org/complianceline . If the e-mail was sent to you in error but does not contain patient informa
the e-mail.

Forwarded message 108456587C<63698,36266>OMA6||24

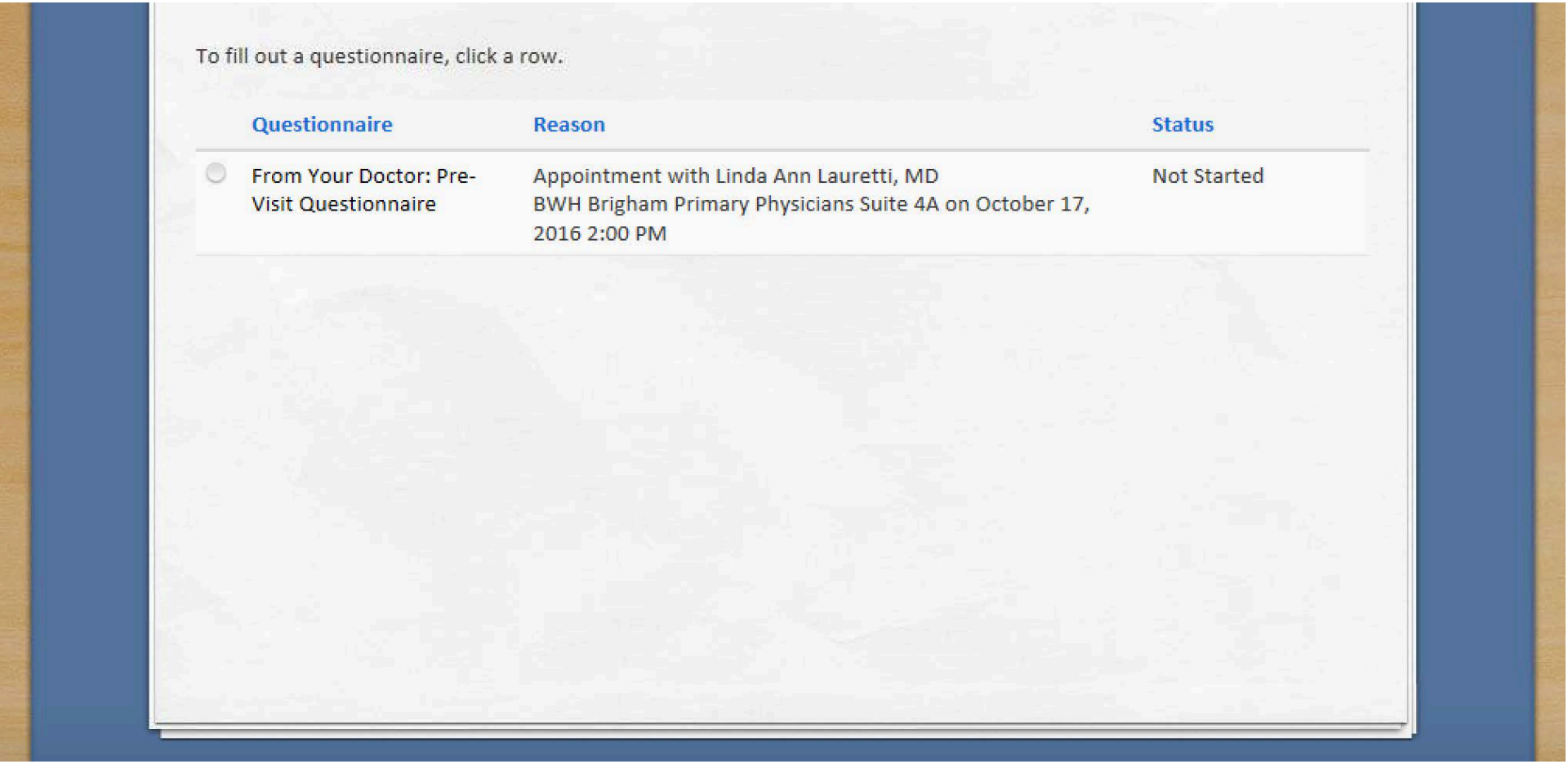
PROMs Integrated with Appointment Reminder

Patient

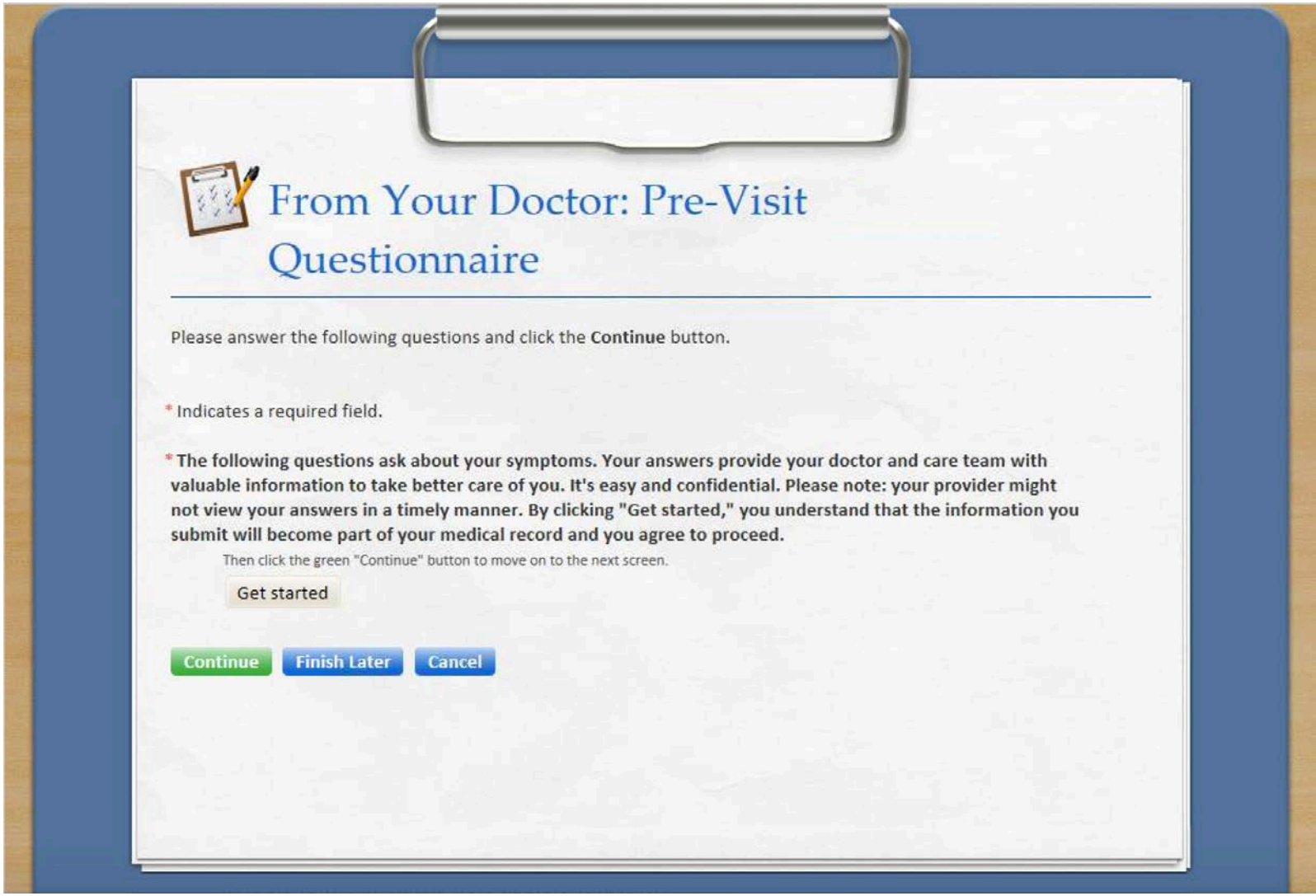


- Once logged into gateway, patients can access questionnaires from their appointment reminder in "Mail" or from "Tasks"
- Questionnaires are available up to 7 days before prior to appointment
- At home completion eliminates in-clinic administration

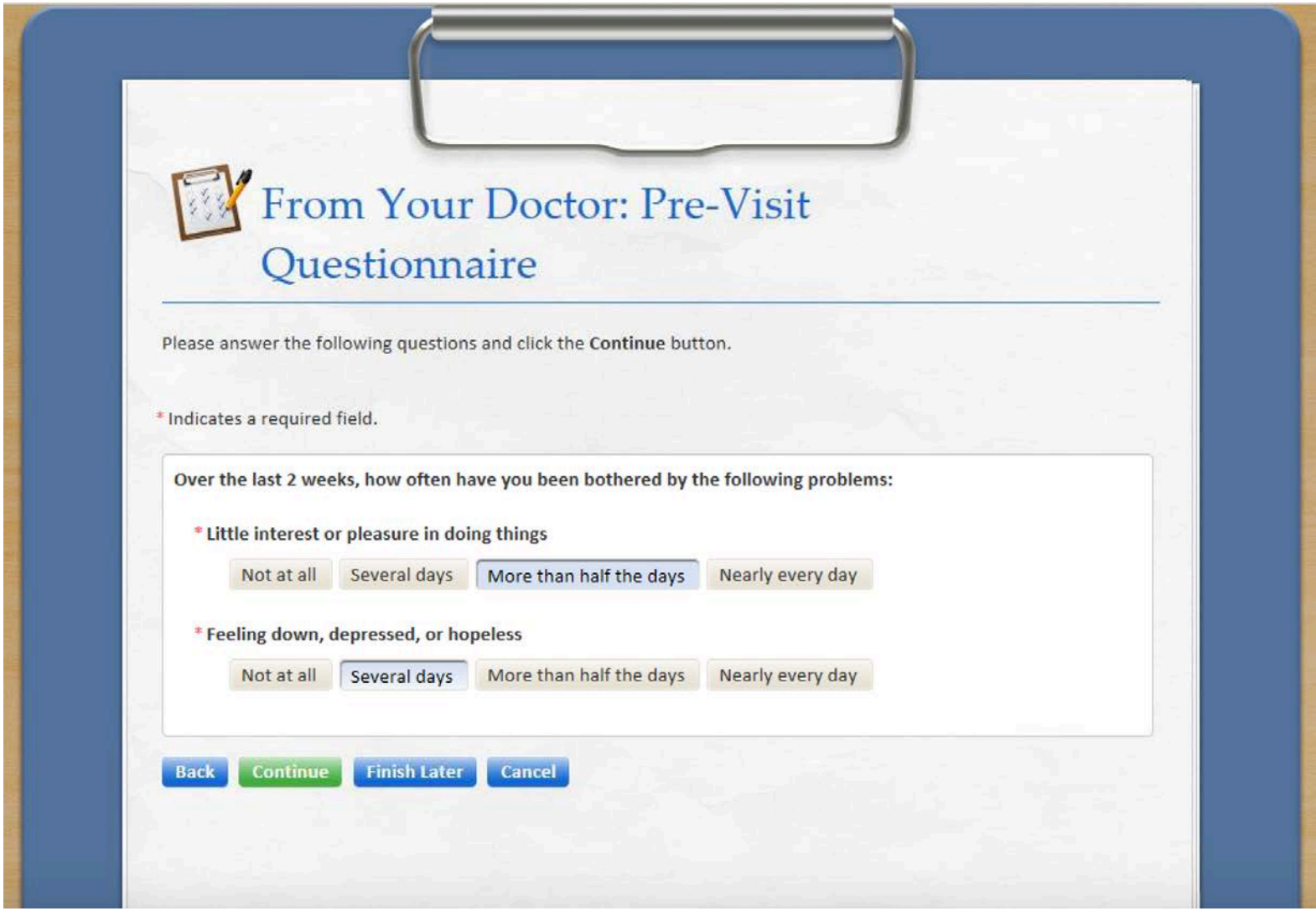
Choose the questionnaire to answer



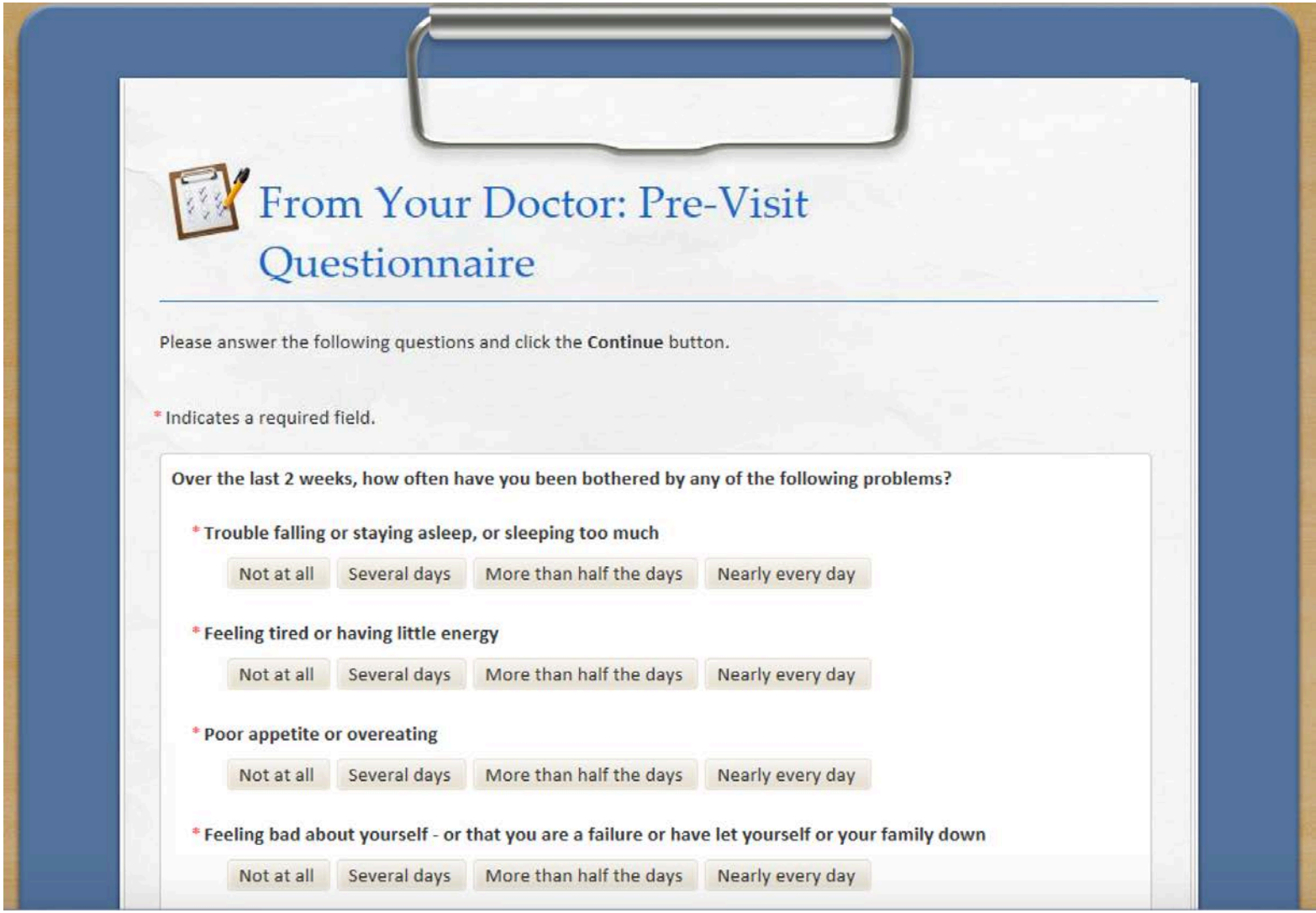
Opening Screen



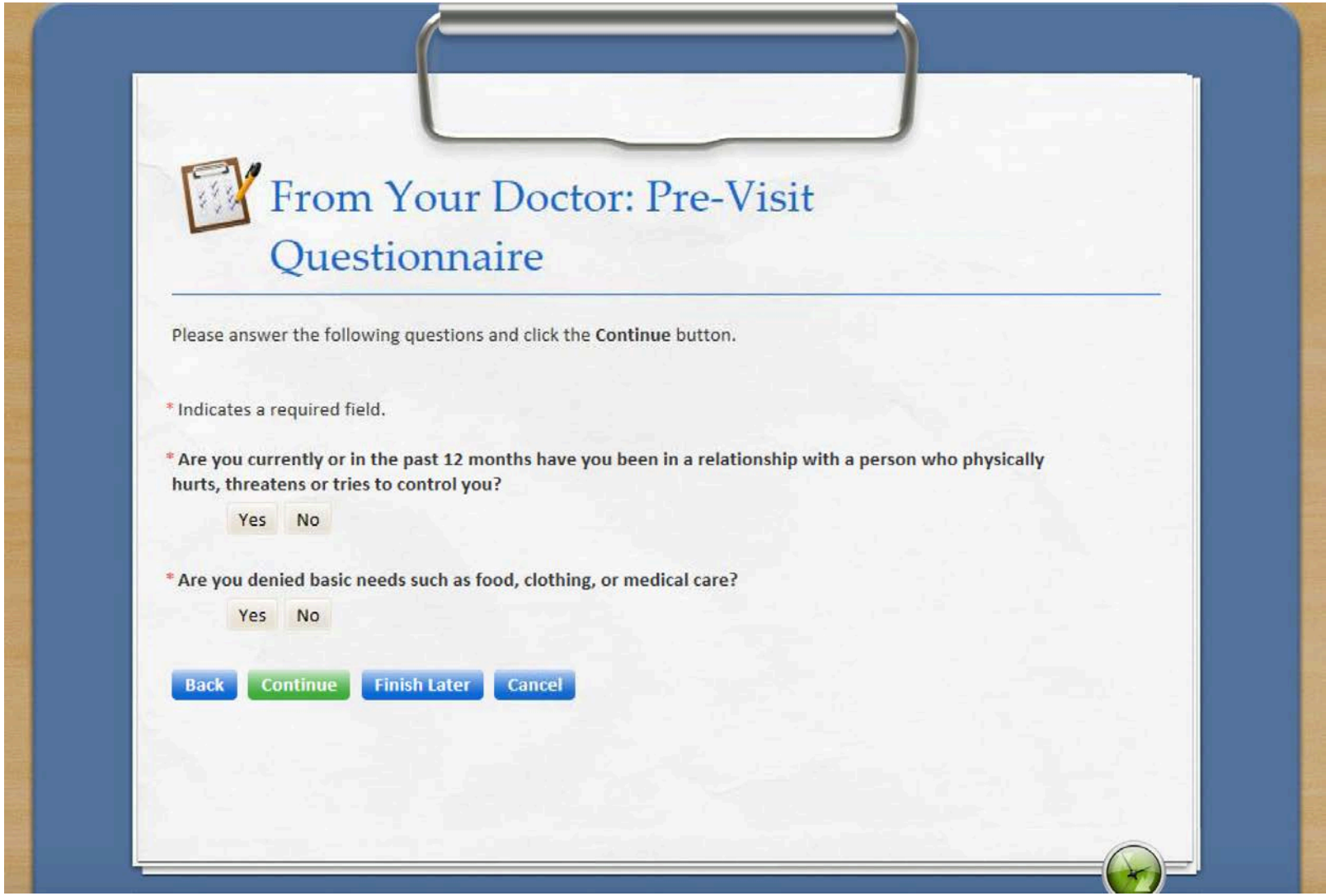
Depression Screen PHQ2



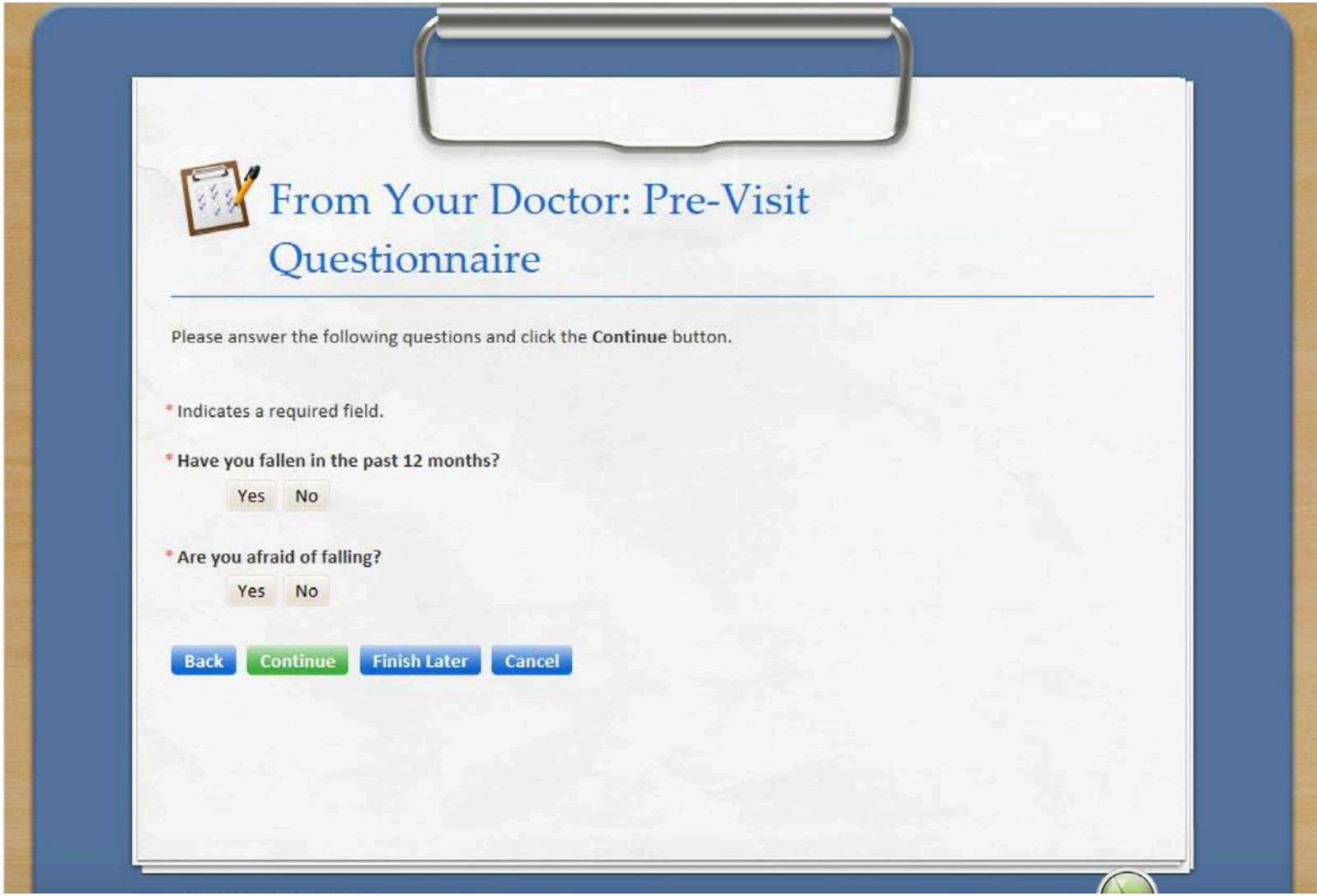
Depression Screen
PHQ9



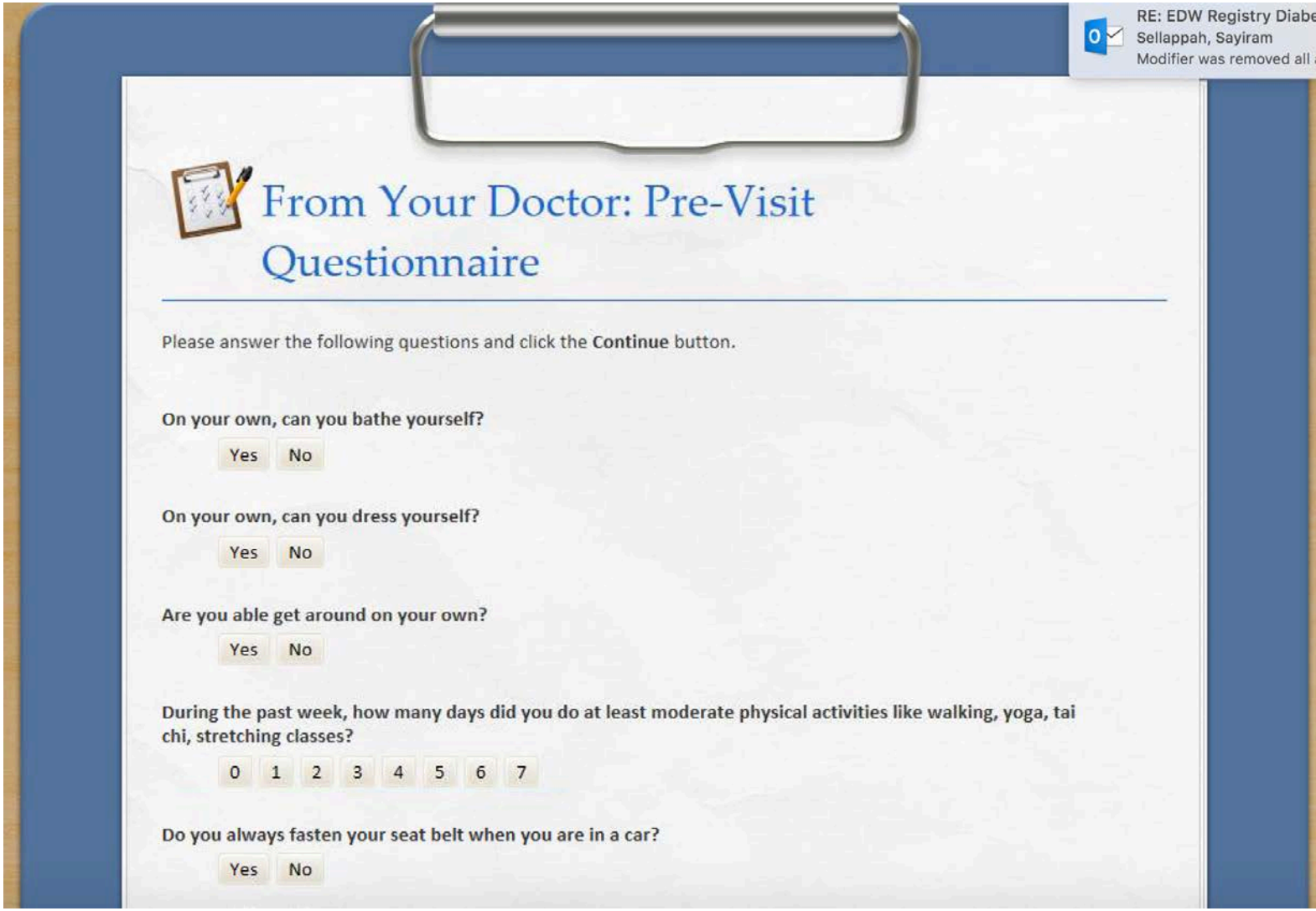
Domestic violence Screening



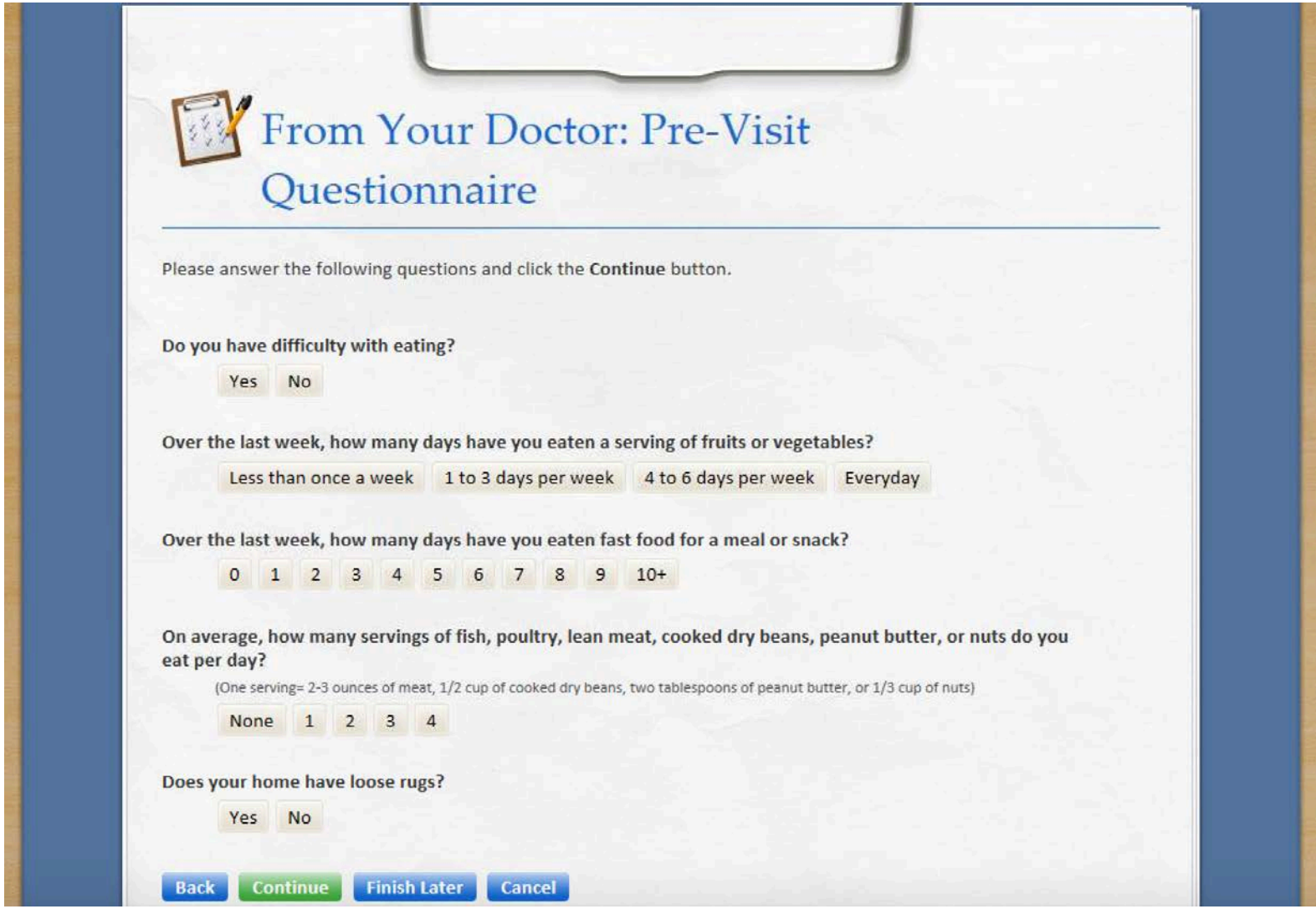
Fall Screening



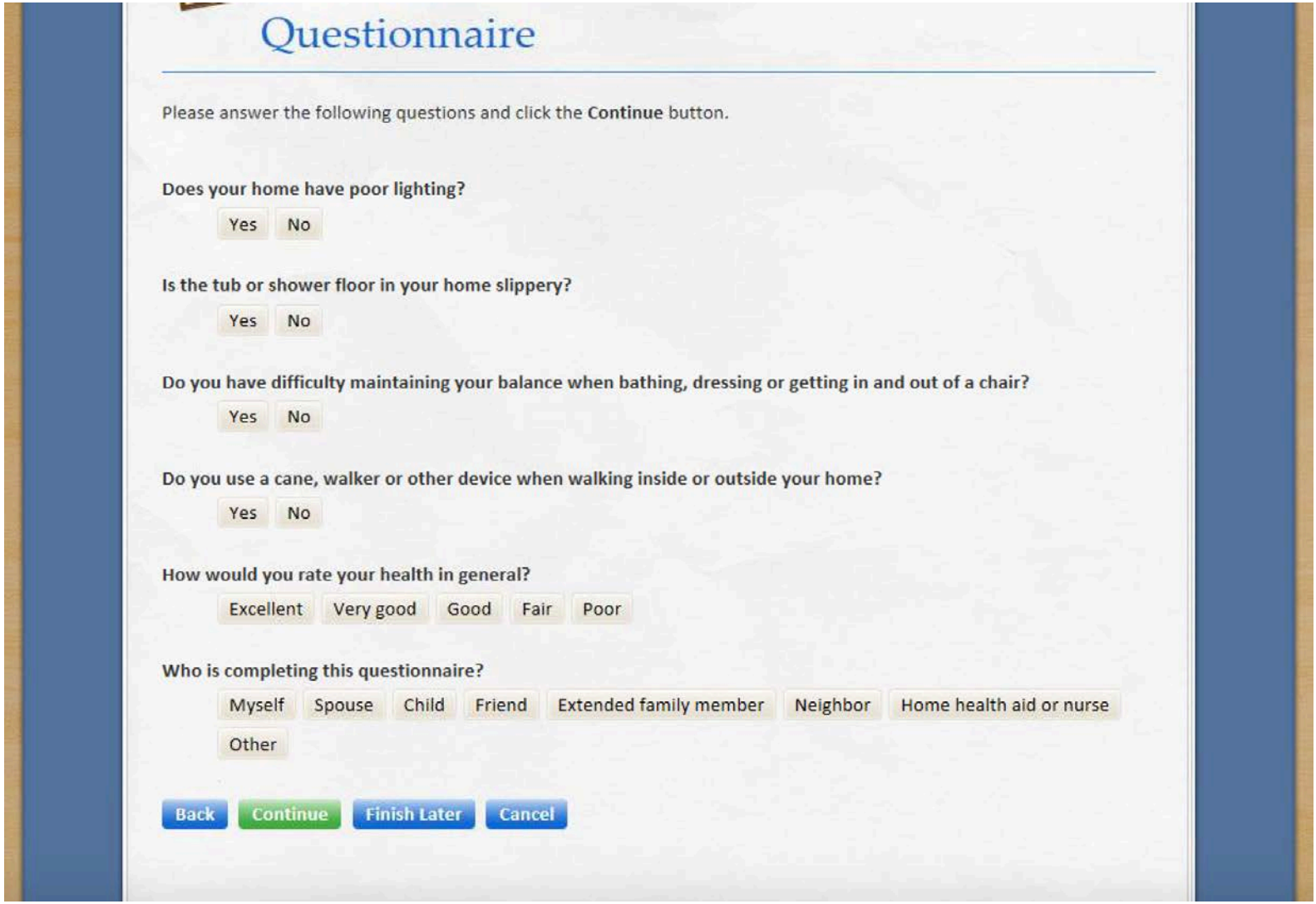
HRA – Page 1


RE: EDW Registry Diabe
Sellappah, Sayiram
Modifier was removed all
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

HRA – Page 2


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?
0
1
2
3
4
5
6
7
8
9
10+
On average, 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
Back
Continue
Finish Later
Cancel

HRA – Page 3

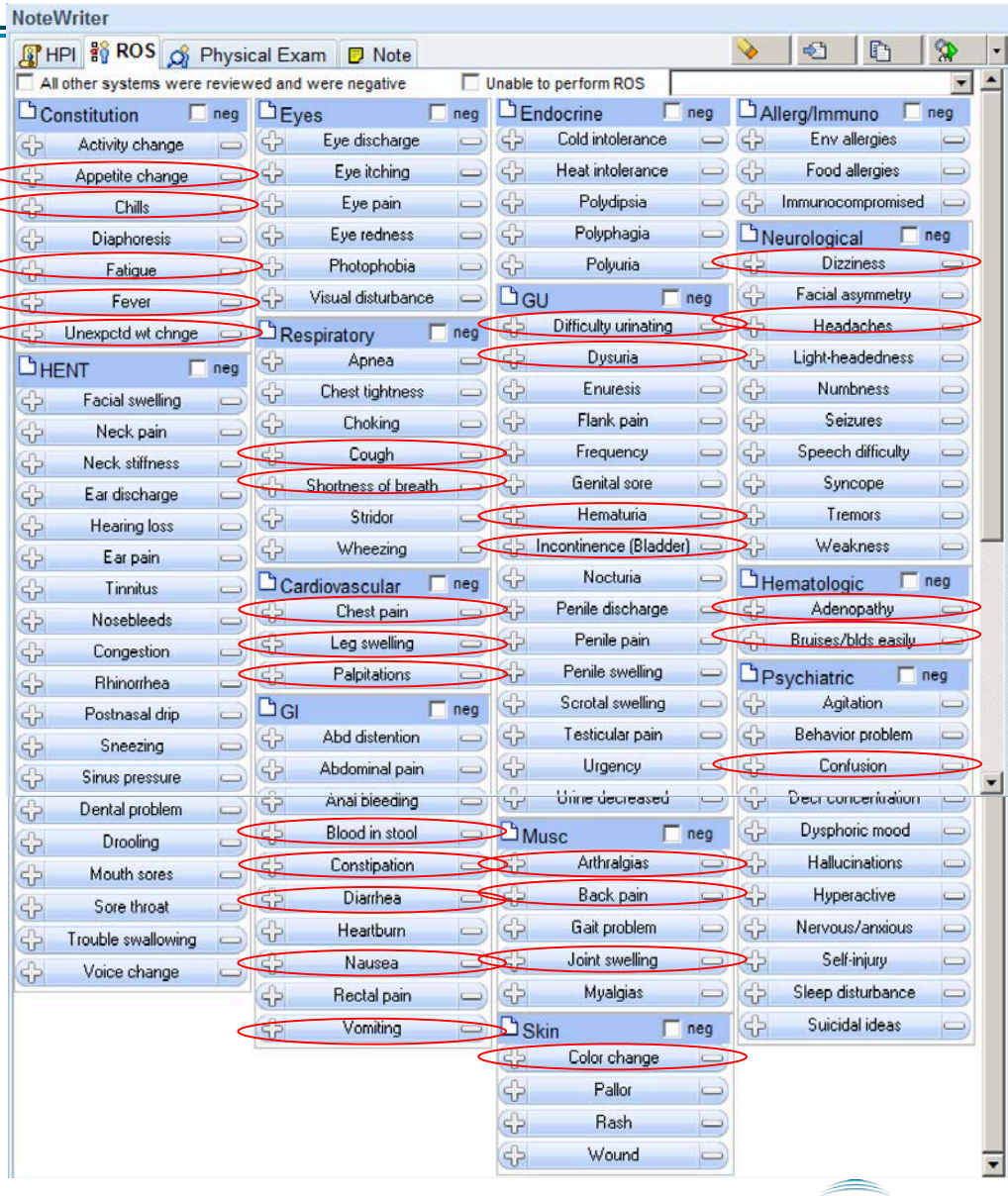

Questionnaire
Please answer the following questions and click the Continue button.
Does your home have poor lighting?
Yes
No
Is the tub or shower floor in your home slippery?
Yes
No
Do you have difficulty maintaining your balance when bathing, dressing or getting in and out of a chair?
Yes
No
Do you 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

ROS – Page 1

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
Continue
Finish Later
Cancel

Review of Systems

Things circled in red are asked in ROS questionnaires and populated by the answers.



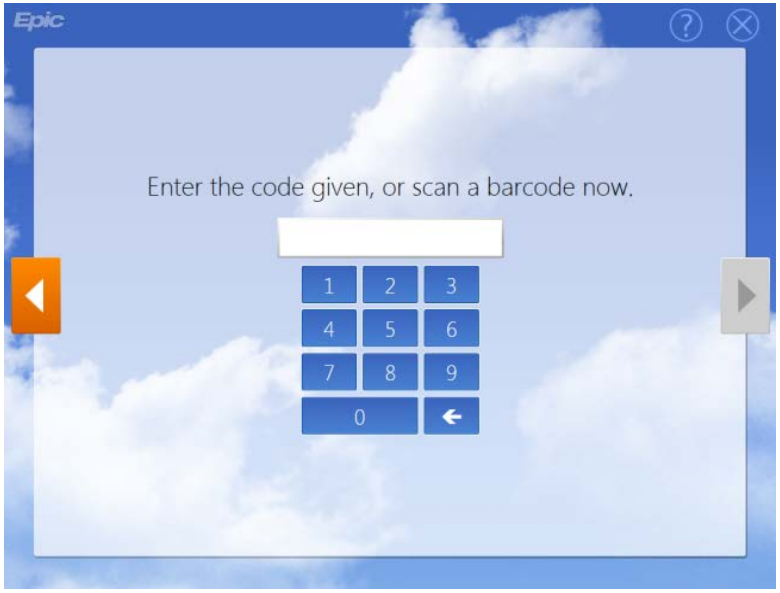
Only for Clinics using iPads: Front-Desk View

Staff

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

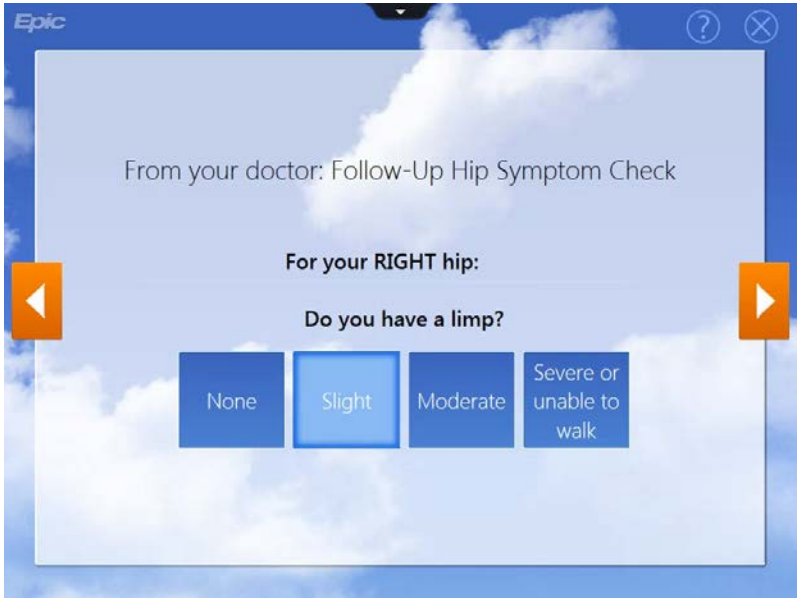
Clinic staff use the added Kiosk fields to identify patients who need to complete PROMS in the clinic and enter the associated Barcode in the Welcome app.

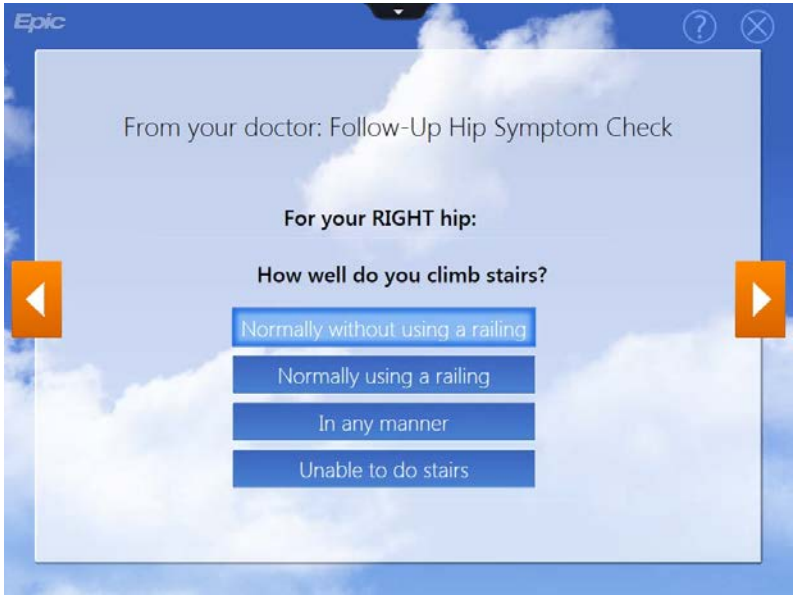
Barcode #	Kiosk Pt ?
3075965125	
3075966894	?
3078581150	?



Patient

Patient View: Questionnaire on iPads Running "Welcome"

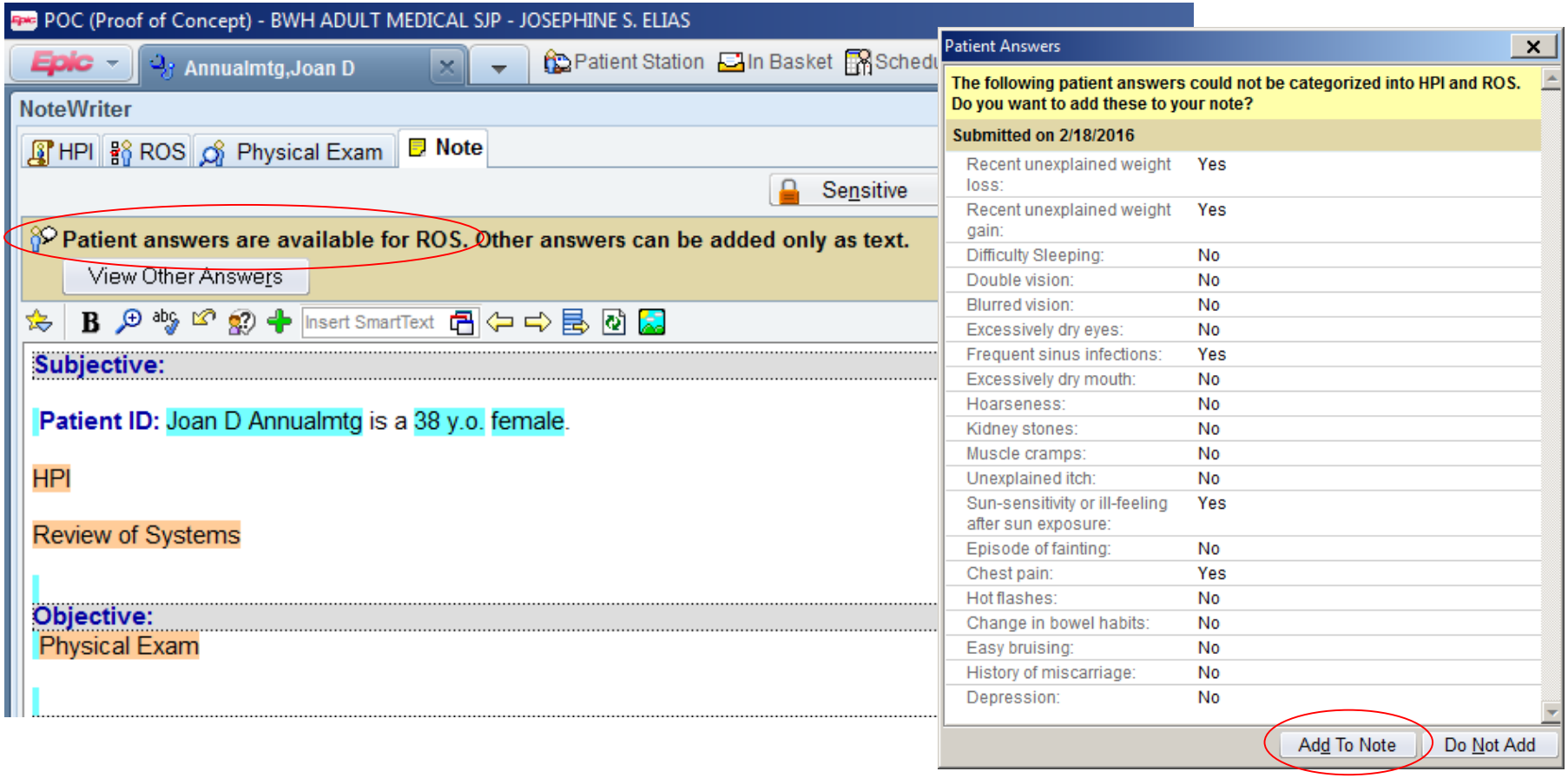




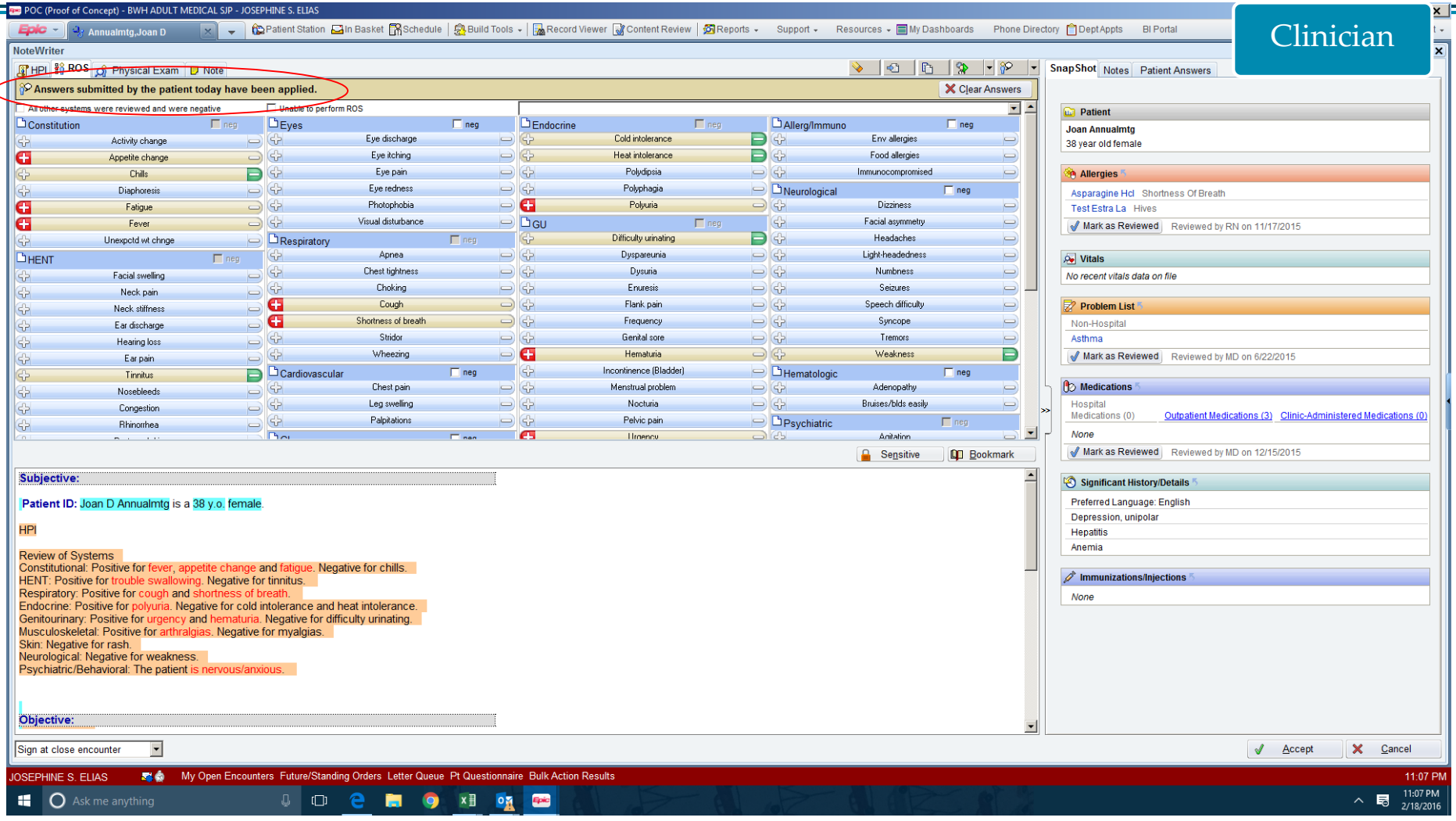
Note: these are not the screenings referred to in this deck, but the view would be similar

Patient-Entered Review of Systems *FLOWING* to Note

Clinician



Review of Systems Screenshots



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

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

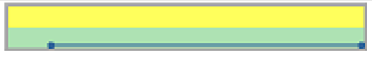
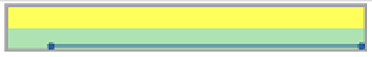
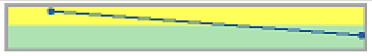
Show All Answers

Patient Responses

Proms Bwh Cardiac Root

Question	9/29/2016 8:49 PM
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.	Get started
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.	
Walking indoors on level ground	Moderately limited
Gardening, vacuuming, or carrying groceries	Quite a bit limited
Lifting or moving heavy objects (e.g. furniture, children)	Extremely limited
Over the past 4 weeks, on average:	
How many times have you had chest pain, chest tightness or angina? I have had chest pain, chest tightness, or angina...	3 or more times per week, but not every day
How many times have you had to take nitroglycerin (tablets or spray) for your chest pain, chest tightness or angina? I have taken nitroglycerin...	None over the past 4 weeks
Over the past 4 weeks, how much has your chest pain, chest tightness or angina limited your enjoyment of life?	It has moderately limited my enjoyment of life
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?	Mostly dissatisfied
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"

	Range	Last 2 scores Previous	Latest	7/13/2016-9/14/2016	
PROMs PROMIS Pain Intensity Short Form 3a Score	30-72	**67.4**	57.5		Normal < 60
PROMs PROMIS Physical Function SF10a	0-62	**32.7**	55.3		Normal > 40
PROMs Anxiety Score (PROMIS Short Form 4a)	40-82	40.3	40.3		Normal < 61
PROMs Depression Score (PROMIS Short Form 4a)	41-80	41	41		Normal < 61
PROMs Pain Interference Score (PROMIS Short Form 4a Score)	41-76	**75.6**	52		Normal < 61
PROMs PROMIS Global Health Short Form Score (Physical)	16-68	**26.7**	57.7		Normal > 40
PROMs PROMIS Global Health Short Form Score (Mental)	21-68	43.5	67.6		Normal > 41

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)

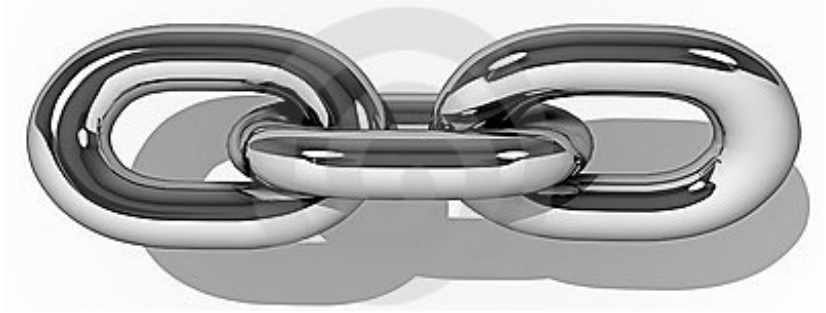
2. **Efficiency**: doctors and staff spend less time asking primary data questions and entering the data.

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 processin



Patients

- 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

Front-Line Staff

- Improve or minimally impact workflow
- Administrative champion is key
- Clinical providers must communicate the imperative

Clinical Providers

- 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

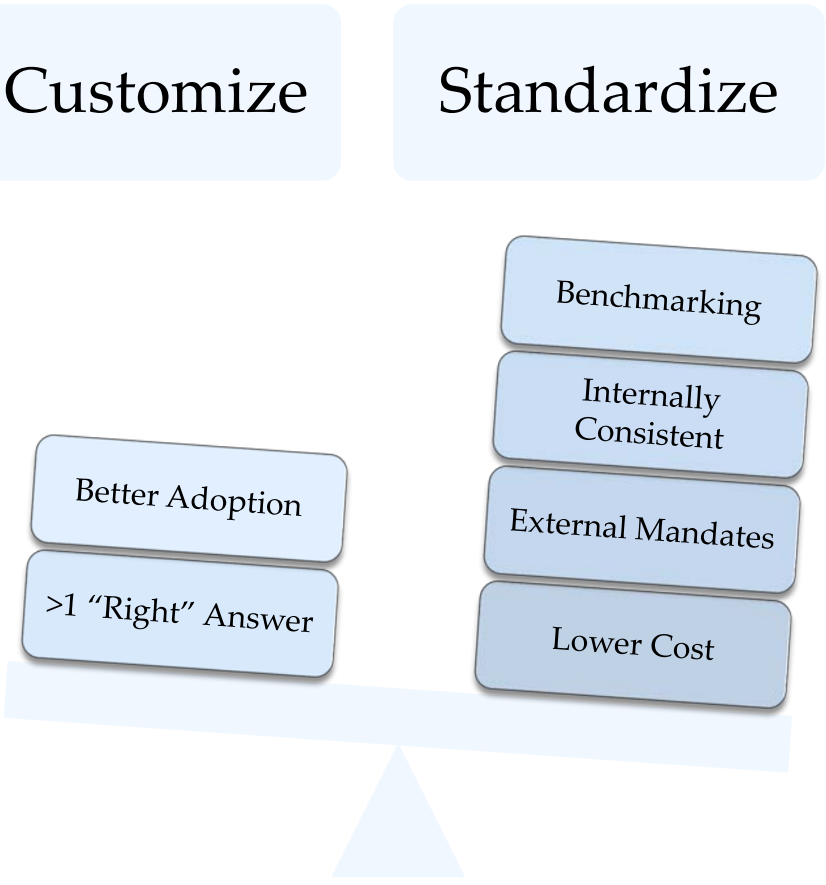
Agree on which PROM to measure

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

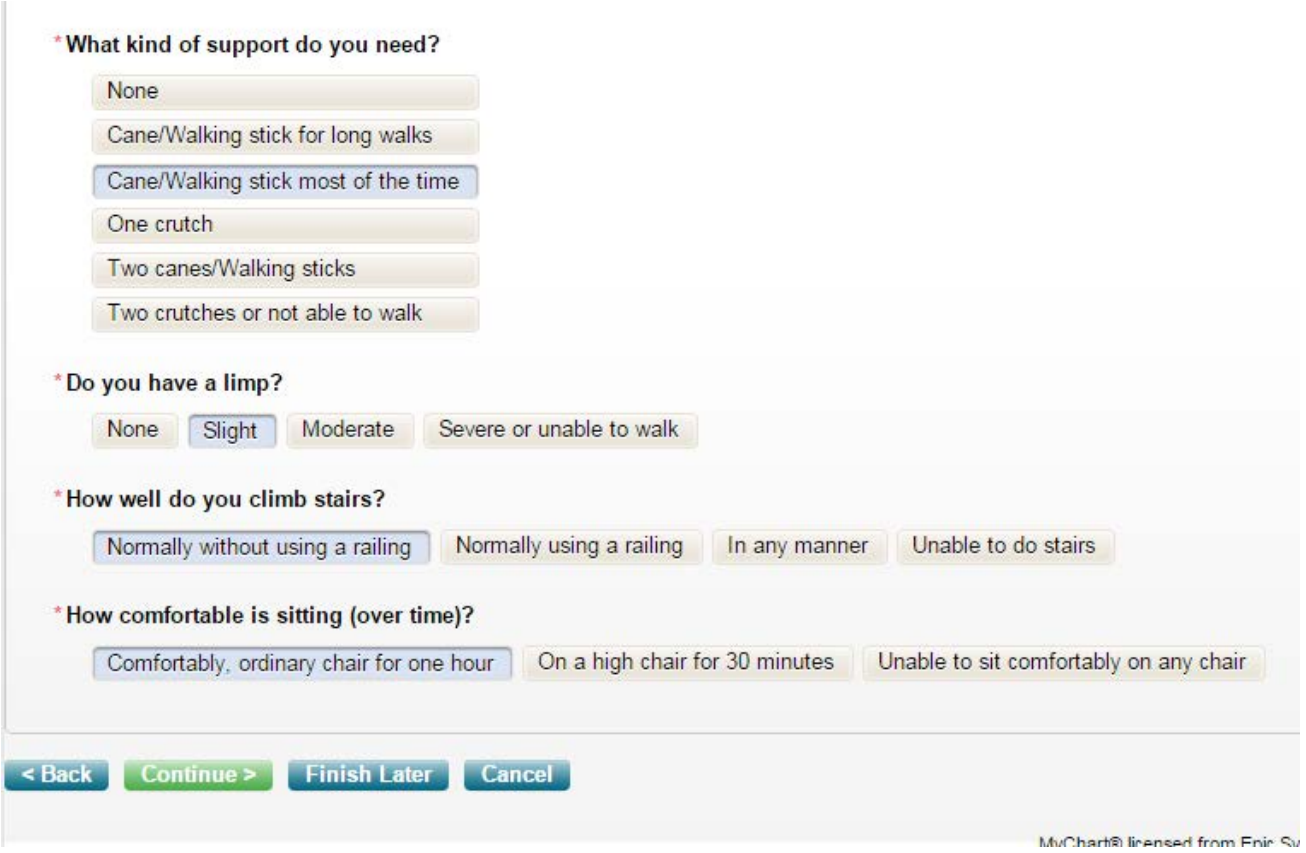
PROM Selection: Customize vs. Standardize



Engage the patient – multimodal collection is a must

Collecting: MyChart

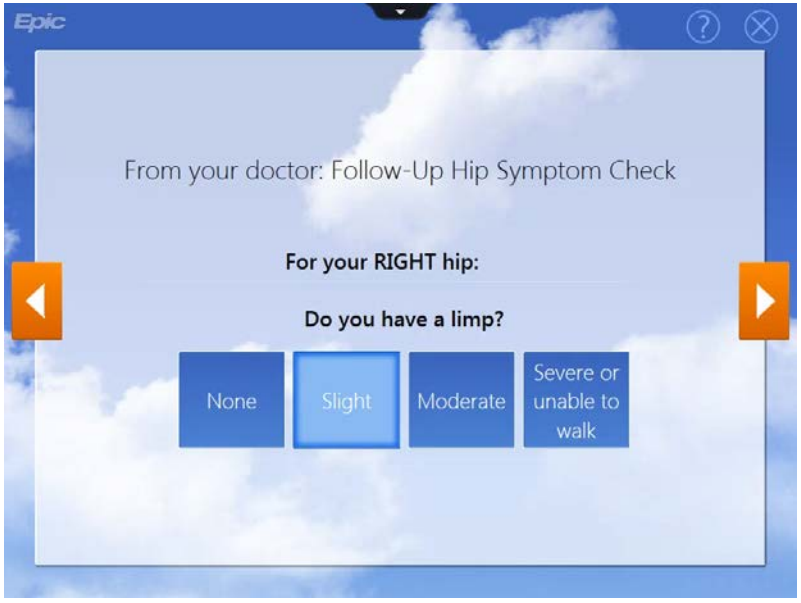
- Sample questionnaire page

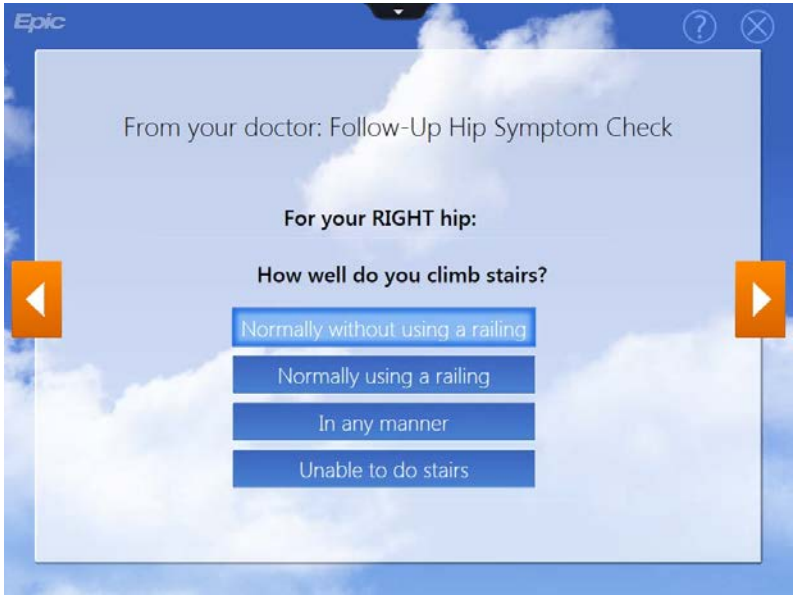


Engage the patient – multimodal collection is a must

Collecting: Welcome – On Tablets (iPads)

- Patient answers questions!

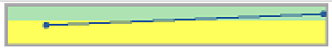
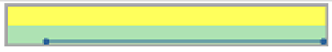
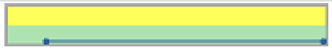
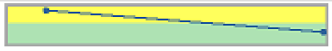




Engage the clinicians – ensure "usefulness"

Goals:

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

	Range	Last 2 scores Previous	Latest	7/13/2016-9/14/2016	
PROMs PROMIS Pain Intensity Short Form 3a Score	30-72	**67.4**	57.5		Normal < 60
PROMs PROMIS Physical Function SF10a	0-62	**32.7**	55.3		Normal > 40
PROMs Anxiety Score (PROMIS Short Form 4a)	40-82	40.3	40.3		Normal < 61
PROMs Depression Score (PROMIS Short Form 4a)	41-80	41	41		Normal < 61
PROMs Pain Interference Score (PROMIS Short Form 4a Score)	41-76	**75.6**	52		Normal < 61
PROMs PROMIS Global Health Short Form Score (Physical)	16-68	**26.7**	57.7		Normal > 40
PROMs PROMIS Global Health Short Form Score (Mental)	21-68	43.5	67.6		Normal > 41

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)