

# Questionnaire

# Brief Motivation

# What is Patient Reported Outcome (PRO)?

“A PRO is directly reported by the patient without interpretation of the patient’s response by a clinician or anyone else and pertains to the patient’s health, quality of life, or functional status associated with health care or treatment.”

- Weldring, T., & Smith, S. M. S. (2013). Patient-Reported Outcomes (PROs) and Patient-Reported Outcome Measures (PROMs). *Health Services Insights*, 6, 61–68. <http://doi.org/10.4137/HSI.S11093>

# Why are PROs important?

For physicians and researchers:

“For example, a new drug may demonstrate good clinical outcomes in terms of improving the length of survival for a particular patient group, while PROs may identify that patients are non-compliant with the drug regime due to reported adverse or side effects, complexity of the drug regime, and or a poor quality of life.”

# Why are PROs important?

For patients:

“In 2016, Basch et al. showed numerous clinical benefits associated with the use of PROs in cancer care, including improved health-related quality of life and a decrease in the frequency of hospitalizations.”

# Question Types

# Rating Scale & Slider Questions

	Not at All	A Little	Quite a Bit	Very Much
1. Do you have any trouble doing strenuous activities, like carrying a heavy shopping bag or a suitcase?	1	2	3	4
2. Do you have any trouble taking a <u>long</u> walk?	1	2	3	4
3. Do you have any trouble taking a <u>short</u> walk outside of the house?	1	2	3	4

► EORTC QLQ-C30: Core quality of life questionnaire



**Edmonton Symptom Assessment System:**  
**Numerical Scale**  
 Regional Palliative Care Program

**Please circle the number that best describes:**

No pain      0    1    2    3    4    5    6    7    8    9    10    Worst possible pain

Not tired      0    1    2    3    4    5    6    7    8    9    10    Worst possible tiredness

► ESAS Questionnaire

# Multiple Choice and Checkbox Questions

Under each heading, please tick the ONE box that best describes your health TODAY.

► Health Questionnaire

## **MOBILITY**

- I have no problems in walking about ☐
- I have slight problems in walking about ☐
- I have moderate problems in walking about ☐
- I have severe problems in walking about ☐
- I am unable to walk about ☐

On which side was your breast operation?

Left      Right      (please circle one)

Movement of my arm on this side is painful.....

► FACT-B



**During the past week:**

	No	Yes
61. Have you used pain-killers?	1	2
62. Have you taken any nutritional supplements (excluding vitamins)?	1	2
63. Have you used a feeding tube?	1	2

► EORTC QLQ - H&N35

# Text Box

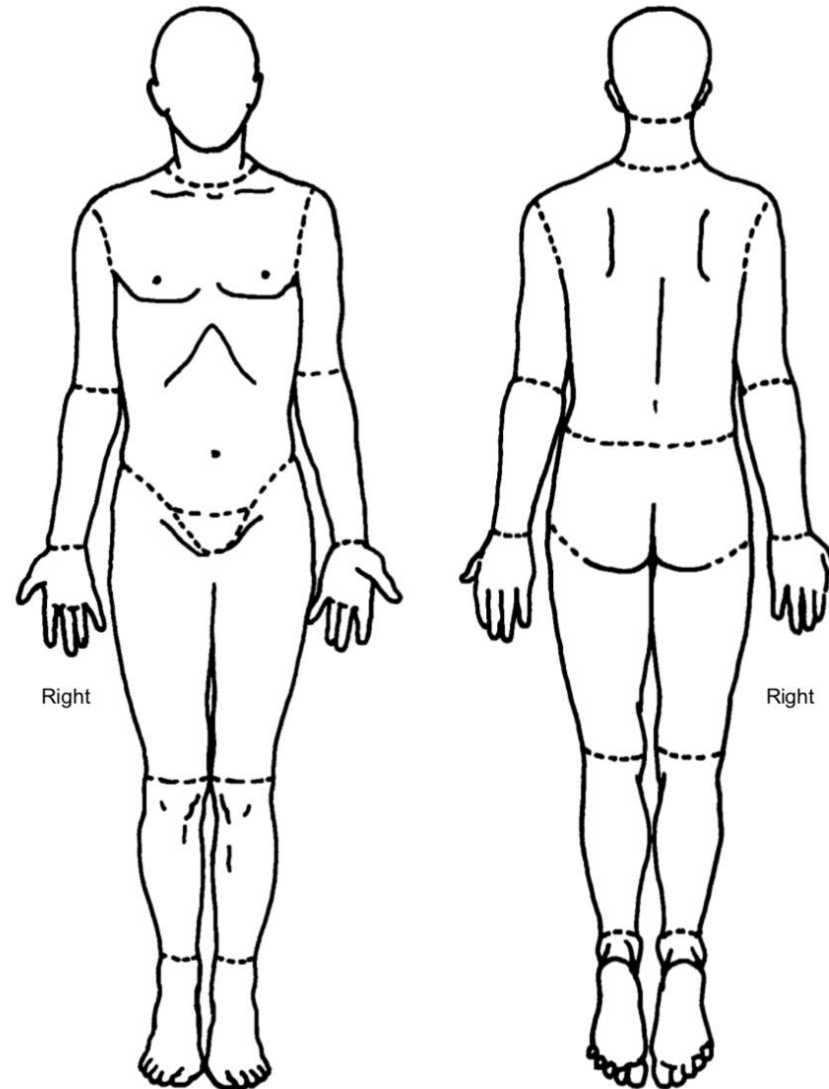
53.	a)	Do you wish to receive <u>more</u> information?	Yes	No
	b)	If yes, please specify on which topics?		
<hr/>				
54.	a)	Do you wish that you had received <u>less</u> information?	Yes	No
	b)	If yes, please specify on which topics?		
<hr/>				

- EORTC QLQ-INFO25: Educational Material

# Labelling Question

► ESAS questionnaire

Please mark on these pictures where it is you hurt.



# Question Types in Opal

# Questionnaire Database

# Clinical Tools

Opal IGNORER SVP, JOHN (99999996)

Age:45 Sex:F

Search for Questionnaire:

## Questionnaire List

Breast Radiotherapy Symptom Questionnaire

Edmonton Symptom Assessment System

Information about diagnosis and prognosis of cancer disease

Opal Feedback Questionnaire

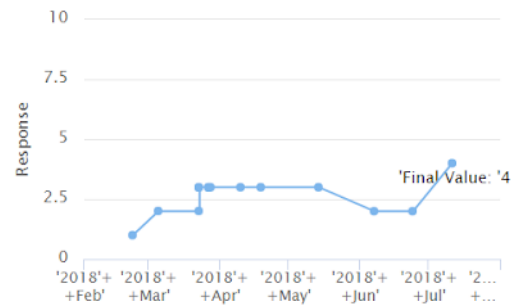
Patient Acceptability

Patient Satisfaction Questionnaire

## Breast Radiotherapy Symptom Questionnaire

Last Answered On: 2018-07-11

During the past week: Did you have any pain in your arm or shoulder?



During the past week: Did you have any pain in your arm or should...

Highcharts.com

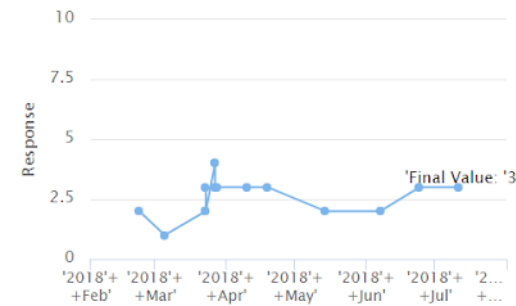
During the past week: Did you have a swollen arm or hand?



During the past week: Did you have a swollen arm or hand?

Highcharts.com

During the past week: Was it difficult to raise your arm or to move it sideways?



During the past week: Was it difficult to raise your arm or to move i...

Highcharts.com

During the past week: Have you had any pain in your radiated area?

During the past week: Have you had any swelling in your radiated area?

During the past week: Has your radiated area been oversensitive?

Current Time: 2018-07-

Call Location: Specify at call-

EN 1:01 PM

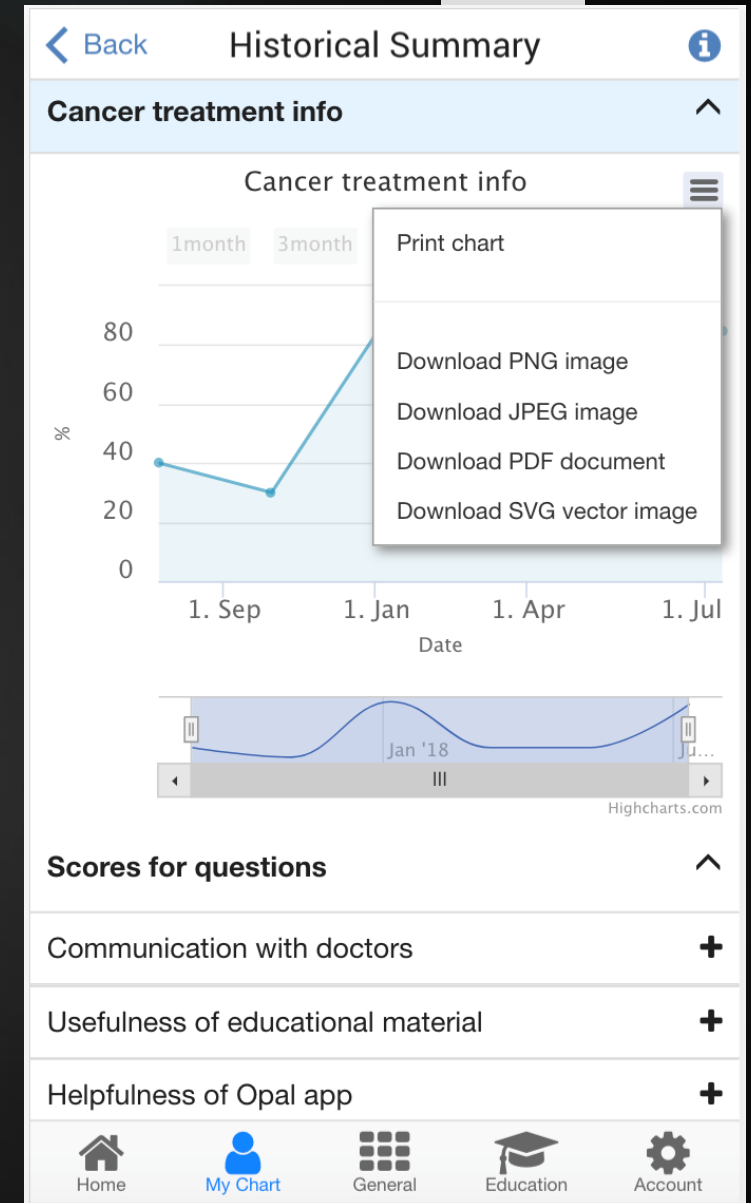
# Publishing a Questionnaire



# Sub-Projects

# Historical Visualizations

► [https://github.com/Sable/hig/tree/master/QVIS\\_W2018](https://github.com/Sable/hig/tree/master/QVIS_W2018) Zhengbo Wang



# Labelling Question

Sketch 9:41 AM 100%

< Back Quality of Life Skip

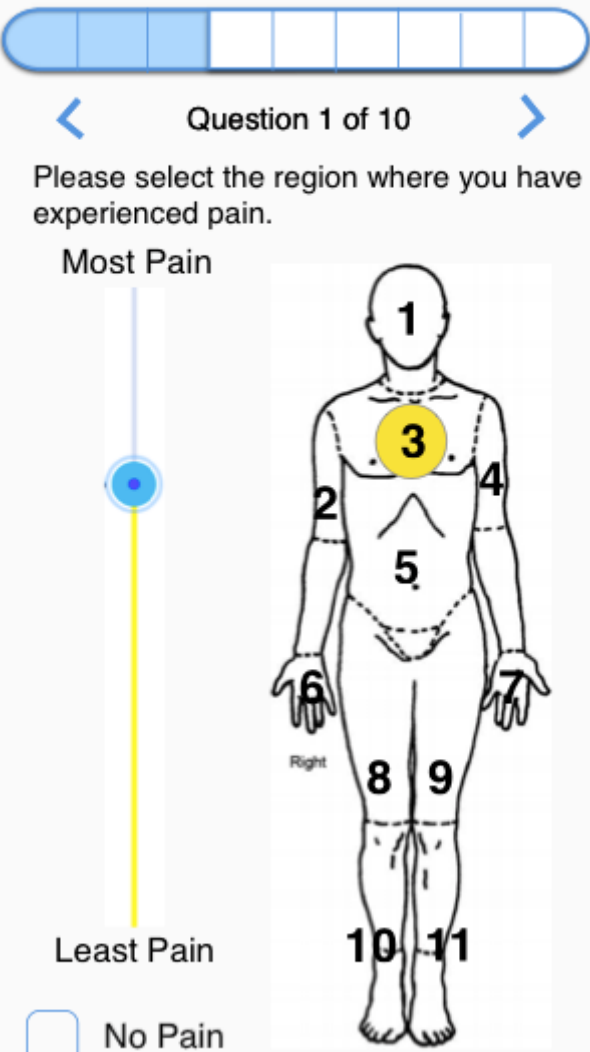
Question 1 of 10

Please select the region where you have experienced pain.

Most Pain

Least Pain

☐ No Pain



The diagram shows a human figure with 11 numbered regions: 1 (head), 2 (left arm), 3 (chest, highlighted), 4 (right arm), 5 (abdomen), 6 (left hand), 7 (right hand), 8 (right leg), 9 (left leg), 10 (left foot), and 11 (right foot). A vertical slider on the left is labeled 'Most Pain' at the top and 'Least Pain' at the bottom. A blue dot is positioned near the top of the slider. Below the slider is a checkbox labeled 'No Pain'.

# Date and Time

Sketch 9:41 AM 100%

< Back Quality of Life

< Question 1 of 10 >

Please select the date of your last appointment.

< June 2018 >

Sun	Mon	Tue	Wed	Thu	Fri	Sat
27	28	29	30	31	01	02
03	04	05	06	07	08	09
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
01	02	03	04	05	06	07

Sketch 9:41 AM 100%

< Back Quality of Life

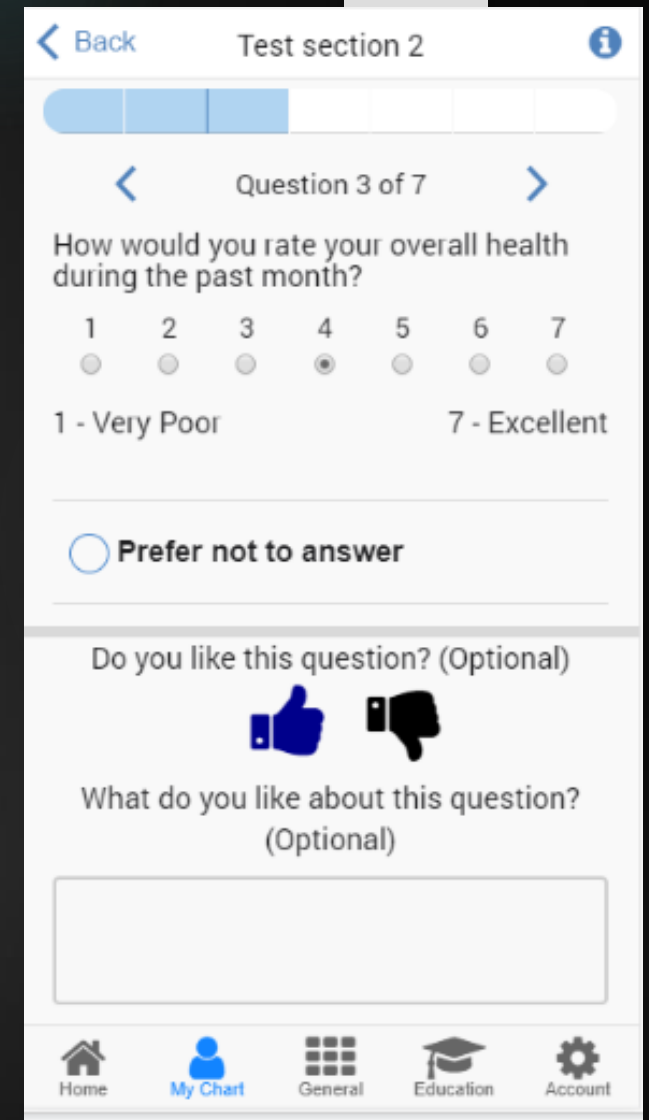
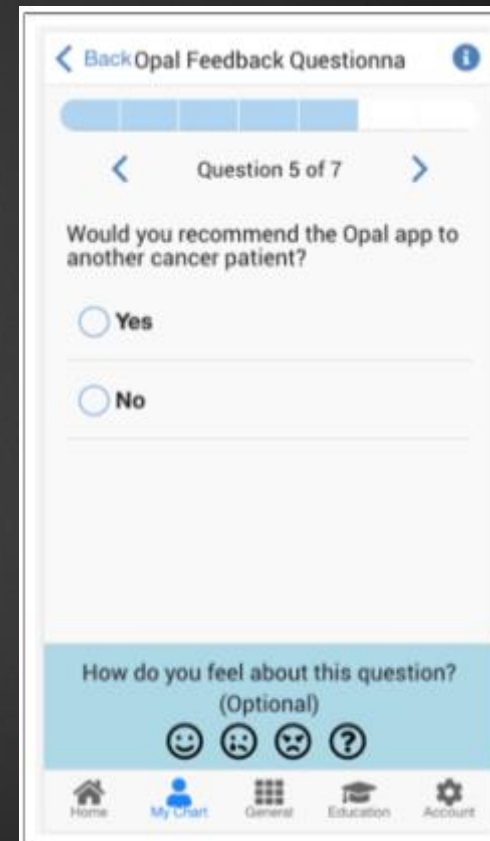
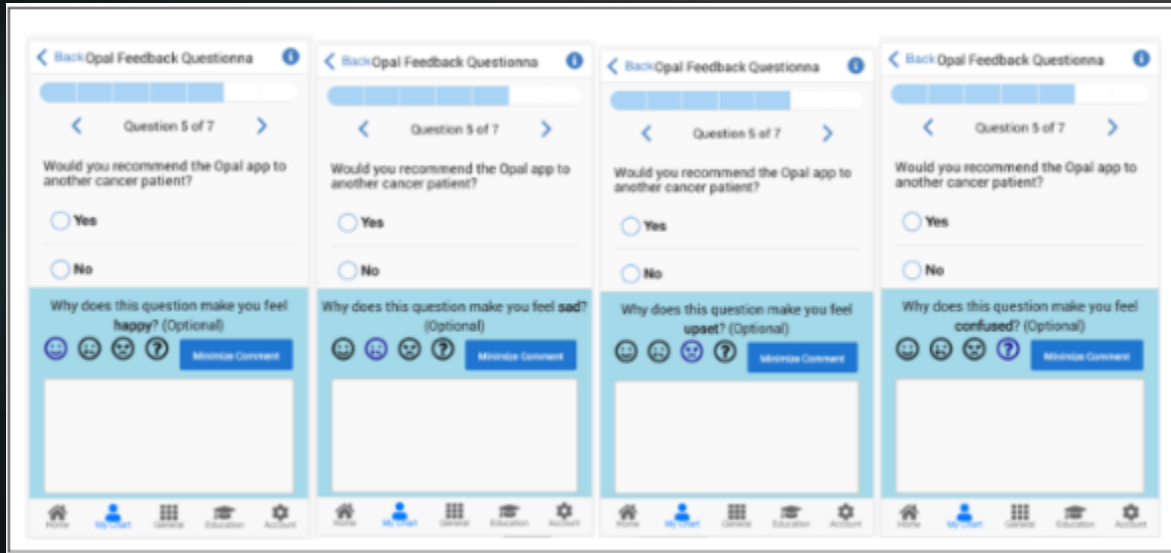
< Question 1 of 10 >

What time is it please?

15:57

23 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22

# Feedbacks



► <https://github.com/Sable/hig/tree/master/Noah%20and%20Jordan>

# Conditional Questionnaires

- ▶ <https://github.com/Sable/hig/tree/master/ariane>
- ▶ <https://github.com/Sable/hig/tree/master/vince>

<a href="#">Back</a>	Summary Page	<a href="#">Submit</a>
Physical Well-Being		
1. I have a lack of energy		<a href="#">Not at all</a>
2. I have nausea		<a href="#">Not at all</a>
3. Because of my physical condition, I have trouble meeting the needs of my family		<a href="#">Very much</a>
4. I have pain		<a href="#">Not at all</a>
Social/Family Well-Being		
1. I feel close to my friends		<a href="#">A little bit</a>
2. I get emotional support from my family		<a href="#">Not at all</a>
3. I get support from my friends		<a href="#">A little bit</a>
4. My family has accepted my illness		<a href="#">Not at all</a>
5. I feel close to my partner (or the person who is my main support)		<a href="#">Not at all</a>
6. I am satisfied with my sex life		<a href="#">Not at all</a>
Emotional Well-Being		
1. I feel sad		<a href="#">Not at all</a>
2. I am satisfied with how I am coping with my illness		<a href="#">Not at all</a>

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 My Chart
 General
 Education
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(a) Question 3 triggered one additional question

<a href="#">Back</a>	Summary Page	<a href="#">Submit</a>
Physical Well-Being		
1. I have a lack of energy		<a href="#">Not at all</a>
2. I have nausea		<a href="#">Not at all</a>
3. Because of my physical condition, I have trouble meeting the needs of my family		<a href="#">Not at all</a>
4. I am bothered by side effects of treatment		<a href="#">Quite a bit</a>
5. I feel ill		<a href="#">Not at all</a>
6. I am forced to spend time in bed		<a href="#">Very much</a>
Social/Family Well-Being		
1. I feel close to my friends		<a href="#">Not at all</a>
2. I get emotional support from my family		<a href="#">Somewhat</a>
3. I get support from my friends		<a href="#">A little bit</a>
4. My family has accepted my illness		<a href="#">Somewhat</a>
5. I am satisfied with family communication about my illness		
6. I feel close to my partner (or the person who is my main support)		<a href="#">Somewhat</a>

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(b) Question 3 triggered three additional questions

# Questionnaire Algorithms

**FACT-B**  
Algorithm name: default

Section 1: Physical Well-Being 7

Question 1: I have a lack of energy 1

Not at all	<span>5</span>
A little bit	<span>4</span>
Somewhat	<span>3</span>
Quite a bit	<span>2</span>
Very much	<span>1</span>

Question 2: I have nausea 1

Question 3: Because of my physical condition, I have trouble meeting the needs of my family 1

Question 4: I have pain 1

Question 5: I am bothered by side effects of treatment 1

Figure 8. Detail of default algorithm for FACT-B [5]