



ImageMap – REDCap User Guide

Note: there is a **\$100** one-time fee to activate this module in each REDCap project. User support is \$100/hour.

Introduction:

This REDCap module replaces a text, radio, or checkbox field with an image that users can interact with to select one or more options. Specific applications include a body map (the over 70 body regions), a smile scale from 1-7 with facial expressions, and 3 representations of teeth and teeth surfaces. Future versions will allow admins and users to add additional maps via the module configuration.

Features

This module defines a new action tag: @IMAGEMAP.

Usage

To display one of the images above in a survey or data entry form, add a new field of type **Text Box** and include one of the following options in the **Action Tags / Field Annotation (optional)** field:

```
@IMAGEMAP=PAINMAP_MALE  
@IMAGEMAP=PAINMAP_FEMALE  
@IMAGEMAP=SMILE_SCALE  
@IMAGEMAP=SINGLE_TOOTH  
@IMAGEMAP=TEETH_SURFACE  
@IMAGEMAP=TEETH  
@IMAGEMAP=PIRADS  
@IMAGEMAP=BEES
```

Each region of an image is associated with a key, for example the "Ankle (front-left)" of the female body diagram is linked to the key "f34". To find a particular key for a body part, please refer to the html files (map files) located in the folder maps. After selecting multiple body parts, the field containing the action tag @IMAGEMAP will have as value a string of comma-separated keys, e.g. "f36,f17,f18,f21". Similarly, if using the faces diagram, the field containing the action tag (i.e. @IMAGEMAP=SMILE_SCALE) will have the value corresponding to the face clicked, which ranges from 1 to 7.

What field types are supported?

If the imagemap uses '**Single-Select**' this means that only one region can be selected at a time. For this type of map you should use a text or radio field. The benefit of using a radio field is that you could add custom labels to the selected value that would appear with piping or in exports with labels. You **MUST** make sure the enumerated values for your question match the options defined by the imagemap.



If, on the other hand, your map supports '**Multi-Select**', then you can choose either a text or checkbox question type. Text is simpler and multiple regions will be comma-separated in the input value. A checkbox allows you to do individual branching based upon selected regions. For example, you could have specific questions that apply if someone checks any head or neck region on the pain map.

Setup Image Map Field

Once the **REDCap** Image Map module is activated, the module can replace a text, radio, or checkbox field with an interactive image.

Simple implementation of image maps:

- Add a text box with the Action tag @IMAGEMAP:"Name of image map".
- This method is great if you just want to capture the selections for analysis later.
- It will store your data as: "J23, K4, B2" in a single variable.

Advanced implementation of image maps:

- Add a checkbox with the action tag @IMAGEMAP:"Name of image map".
- Add correct coding for each option in the desired image map.
- Use this method if you plan on basing branching logic of your selections in this image map.
- It will store your data as a set of unique checkbox options that are either checked or unchecked. (This option can yield a large number of sub-variables for the larger image maps).

Text Field – Simple Implementation

1. Click on .

Add New Field ✕

You may add a new project field to this data collection instrument by completing the fields below and clicking the Save button at the bottom. When you add a new field, it will be added to the form on this page. For an overview of the different field types available, you may view the [Field Types video \(4 min\)](#).

Field Type:

Field Label

Variable Name (utilized in logic, calcs, and exports) Enable auto naming of variable based upon its Field Label?
ONLY letters, numbers, and underscores

How to use [Smart Variables](#) [Piping](#)

Action Tags / Field Annotation (optional)

Learn about [@ Action Tags](#) or [using Field Annotation](#)

Validation? (optional)
- OR -

Required?* No Yes
* Prompt if field is blank

- Click on the **Add** to add the “ImageMap” Action Tag. Click on **Full Documentation** to see all Image Maps, field specifications and Enums (enumerated choice values) for each image map.

Add **@IMAGEMAP** Converts a radio, checkbox, or text field into a clickable image. For example, to display a male body with clickable body parts, you may use @IMAGEMAP=PAINMAP_MALE. For a full list of available image maps and details about options, please reference the: **Full Documentation**

After clicking on “Full Documentation” there is an option to download a Data Dictionary with all of the Image Map specifications by clicking on the “Download Example Instrument” button.

Can you help me get started?

The following instrument.zip file contains a number of example ImageMap options. Simply download it and add it to your project from the online designer. You can remove the instrument at any time when you're done.

Download Example Instrument

- Add =ImageMapName after the ImageMap Action Tag.

Field Type: Text Box (Short Text, Number, Date/Time, ...) ▾

Field Label

Variable Name (utilized in logic, calcs, and exports)

Enable auto naming of variable based upon its Field Label?

ONLY letters, numbers, and underscores

How to use [\[+\] Smart Variables](#) [Piping](#)

Validation? (optional) ----- None ----- ▾

- OR -

-- select ontology service -- ▾

Action Tags / Field Annotation (optional)

@IMAGEMAP Just add =ImageMap name

Learn about [@ Action Tags](#) or [using Field Annotation](#)

Action Tags / Field Annotation (optional)

@IMAGEMAP=PAINMAP_MALE

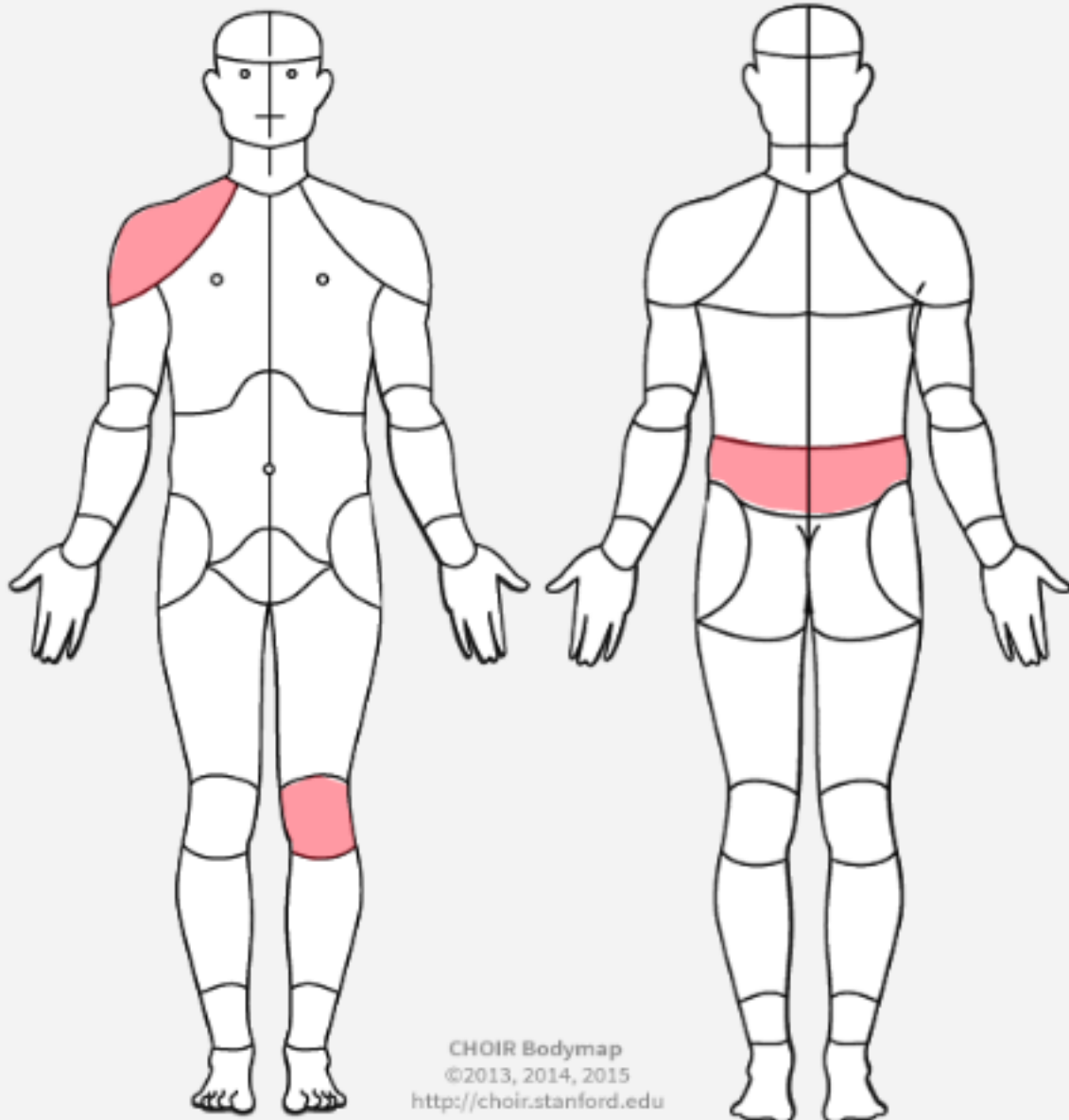
Learn about [@ Action Tags](#) or [using Field Annotation](#)

Variable: imagemap_male_text


Click on the areas where you currently have pain

Here is what image map looks like in a survey with 4 body regions selected by respondent.

9) Click on the body areas where you currently have pain:



Checkbox Field – Advanced Implementation

1. Click on . Add the name of the image to the ImageMap Action Tag.

Field Type: Checkboxes (Multiple Answers)

Field Label
Click on the body areas where you currently have pain:

Choices (one choice per line) [Copy existing choices](#)

Add "Enums" here

[How do I manually code the choices?](#)

Action Tags / Field Annotation (optional)
@IMAGEMAP=PAINMAP_MALE

Learn about [@ Action Tags](#) or [using Field Annotation](#)

Variable Name (utilized in logic, calcs, and exports)
imagemap_male Enable auto naming of variable based upon its Field Label?
ONLY letters, numbers, and underscores

How to use [Smart Variables](#) [Piping](#)


Required?* No Yes
* Prompt if field is blank

Identifier? No Yes
Does the field contain identifying information (e.g., name, SSN, address)?

Custom Alignment Left / Vertical (LV)
Align the position of the field on the page

Field Note (optional)
Small reminder text displayed underneath field

- Add the enumerated values, one on each line, for the body area choices to the "Choices" box. Quickly find Enums here:

[Add](#) [@IMAGEMAP](#)  [Full Documentation](#)

Converts a radio, checkbox, a male body with clickable b...
For a full list of available im...

Copy the Enums and paste them into the "Choices" box.

Name:	PAINMAP_MALE
Desc:	The Stanford Choir Pain Map for Males
Keys:	f01,f02,f03,f04,f05,f06,f07,f08,f09,f10,f11,f12,f13,f14,f15,f16,f17,f18,f19,f20,f21,f22,f23,f24,f25,f26,f27,f28,f29,f30,f31,f32,f33,f34,f35,f36,b01,b02,b03,b04,b05,b06,b07,b08,b09,b10,b11,b12,b13,b14,b15,b16,b17,b18,b19,b20,b21,b22,b23,b24,b25,b26,b27,b28,b29,b30,b31,b32,b33,b34,b35,b36,b37,b38
Enums:	b37, Foot (bottom-left) b38, Foot (bottom-right) Copy Enums

Field Type: Checkboxes (Multiple Answers)

Field Label
Click on the body areas where you currently have pain:

Choices (one choice per line) [Copy existing choices](#)

f01, Cranium (front-right)
f02, Cranium (front-left)
f03, Face (front-right)
f04, Face (front-left)
Paste Enums here

[How do I manually code the choices?](#)

Action Tags / Field Annotation (optional)
@IMAGEMAP=PAINMAP_MALE

Learn about [@ Action Tags](#) or [using Field Annotation](#)

Variable Name (utilized in logic, calcs, and exports)
imagemap_male Enable auto naming of variable based upon its Field Label?
ONLY letters, numbers, and underscores

How to use [Smart Variables](#) [Piping](#)

Required?* No Yes
* Prompt if field is blank

Identifier? No Yes
Does the field contain identifying information (e.g., name, SSN, address)?

Custom Alignment Left / Vertical (LV)

Align the position of the field on the page

Field Note (optional)
Small reminder text displayed underneath field

Variable: imagemap_male

Click on the body areas where you currently have pain:

Cranium (front-right)
 Cranium (front-left)
 Face (front-right)
 Face (front-left)

Now, if needed, you can add a field with branching logic to have specific questions that apply if someone checks any shoulder or back region on the pain map.

Variable: rshoulder_pain

You selected right shoulder. Please rate your current shoulder pain

No Pain Moderate Pain Worst Pain

Change the slider above to set a response

reset

Drag-N-Drop Logic Builder

Displaying field choices for the following data collection instrument:
 Prescreening Survey

Field choices from other fields
 (drag a choice below to box on right)

- imagemap_male = Cranium (front-left) (f02)
- imagemap_male = Face (front-right) (f03)
- imagemap_male = Face (front-left) (f04)
- imagemap_male = Neck (front-right) (f05)
- imagemap_male = Neck (front-left) (f06)
- imagemap_male = Shoulder (front-right) (f07)
- imagemap_male = Chest (front-right) (f08)
- imagemap_male = Chest (front-left) (f09)

Show the field ONLY if...

- ALL below are true
- ANY below are true

imagemap_male = Shoulder (front-right) (f07)

[Clear logic](#)

Click on the body areas where you currently have pain:

CHOIR Bodymap
 ©2013, 2014, 2015
<http://choir.stanford.edu>

You selected right front shoulder. Please rate your current shoulder pain

No Pain Moderate Pain Worst Pain

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[reset](#)

You selected left lower back. Please rate your current shoulder pain

No Pain Moderate Pain Worst Pain

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Data Export

Text Box Field – Single Select

Export Data in REDCap project.

Participant ID participant_id	Shoulder (front-right) imagemap_male_f07	Chest (front-right) imagemap_male_f08	Chest (front-left) imagemap_male_f09
<u>1</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>1</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>2</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Exported data into csv file

S
imagemap_male_f07
1
1
1
0
0
0
0
0
1
1

Checkbox Field– Multi-Select

Participant ID participant_id	Click on the areas where you currently have pain imagemap_male_text
<u>1</u>	<input type="checkbox"/> b18,f07
<u>1</u>	<input type="checkbox"/> b18,b19,f07,f10,f29,f30
<u>2</u>	<input type="checkbox"/> b05,b06,b12,b13,b18,b19,f01,f10,f29,f30

CK
imagemap_male_text
b18,f07
b18,b19,f07,f10,f29,f30
b05,b06,b12,b13,b18,b19,f01,f10,f29,f30
b18,f07