

# REDCap Training 201

REDCap Special Features and Customization

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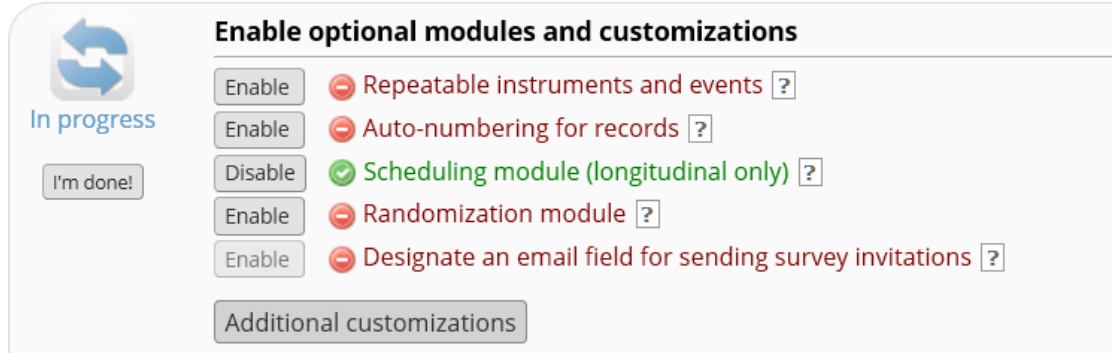


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# Introduction and Learning Objective

- Recognize the optional modules available in REDCap
- Understand alerts and notifications
- Learn how to set up custom dashboard
- Learn how to use data quality module
- Demonstrate special functions for calculation and branching logics
- Understand what external modules are

# REDCap Optional Modules and Customizations



**Enable optional modules and customizations**

In progress

I'm done!

Enable	Repeatable instruments and events ?
Enable	Auto-numbering for records ?
Disable	✓ Scheduling module (longitudinal only) ?
Enable	Randomization module ?
Enable	Designate an email field for sending survey invitations ?

Additional customizations

## Other additional customizations:

1. Set a custom record label
2. Define a secondary unique field
3. Order the records by another field
4. Enable the Field Comment Log or Data Resolution Workflow (Data Queries)
5. PDF Customization
6. Set up Missing Data Codes
7. Enable the Data History widget for all data collection instruments
8. Enable the File Version History for 'File Upload' fields
9. Display the Today/Now button for all date and time fields on forms/surveys
10. Prevent branching logic from hiding fields that have values
11. Require a 'reason' when making changes to existing records
12. Protected Email Mode

# Optional Modules: Custom Record Label, Secondary Unique Field & Custom Record Order

## **Set a Custom Record Label**

You may append other data and/or static text to any record name (e.g., Study ID) as the record is displayed on your data collection instruments, such as inside the drop-down lists when choosing a record and at the top of the page after being selected. Simply provide the text you wish to display below, and place any variable names inside square brackets [ ], after which the data collected for those variables for that record will replace the variable in the text.

Custom Record Label:

Example: if ([last\_name], [first\_name]) where entered, then for record '102' it would display '102 (Doe, Jon)'.

## **Designate a Secondary Unique Field**

You may designate a text field to serve as a unique constraint whose value cannot be duplicated or shared by any other record in the project. When a value is entered or imported for the secondary unique field, it will be checked in real time to ensure it is not shared by another record, and if so, it will ask the user to enter another value. Additional options exist below that dictate if and how the secondary unique field will be displayed in conjunction to a record name on various pages in the project.

Display the value of the Secondary Unique Field next to each record name displayed?

Display the field label of the Secondary Unique Field when displaying the value?

## **Order the records by another field**

The default setup is that all records are ordered by their record name (e.g., Study ID) when displayed in the drop-down lists on your data collection instruments, but you may alternatively order the drop-down lists by the values of another field in the project (e.g., last name), if desired. If you wish to order the records by another field, select the field below.

# Optional Modules: Custom Record Label, Secondary Unique Field & Custom Record Order

Total records: 439

Choose an existing Screen ID

-- select record --

97 (U19 ID 110431) source id:2002-006

75 (U19 ID 110432) source id:2002-030

98 (U19 ID 110433) source id:2002-047

99 (U19 ID 110434) source id:2002-048

100 (U19 ID 110435) source id:2002-092

101 (U19 ID 110436) source id:2003-008

76 (U19 ID 110437) source id:2003-011

102 (U19 ID 110438) source id:2003-030

103 (U19 ID 110439) source id:2003-131

77 (U19 ID 110440) source id:2003-133

104 (U19 ID 110441) source id:2003-139

78 (U19 ID 110442) source id:2003-141

105 (U19 ID 110443) source id:2004-009

79 (U19 ID 110444) source id:2005-003

106 (U19 ID 110445) source id:2005-018

80 (U19 ID 110446) source id:2006-008

81 (U19 ID 110447) source id:2006-014

82 (U19 ID 110448) source id:2006-028

107 (U19 ID 110449) source id:2006-032

Data Search

Choose a field to search  
(excludes multiple choice fields)

Search query  
Begin typing to search the project data, then click an item in the list to navigate to that record.



QUESTIONS?

# Optional Modules: PDF Customization

## PDF Customizations

Downloadable PDFs of data entry forms and surveys can be customized using the options below. Note: The options will be applied to ALL instruments in the project.

- 1) Set custom header text to appear at top left of every PDF page (it may be left blank, if desired). Note: Only static text can be entered; thus piping cannot be utilized here.

Default text: *Confidential*

- 2) Display or hide the REDCap logo and website URL at the bottom right of every PDF page?

Display REDCap logo and website URL (default)

Hide REDCap logo/URL and instead display the following text: *Powered by REDCap*

- 3) Display or hide the Secondary Unique Field value at the top right corner of the PDF? (This option is only applicable if the Secondary Unique Field is enabled above and is set to be displayed.)



- 4) Hide Record ID from PDF header? (This will remove the record ID from the header of every PDF page.)



QUESTIONS?



# Optional Modules: Missing Data Code

## **M** Missing Data Codes: Set up your missing data codes for this project

Fields that have a blank/missing value may be marked with a custom 'Missing Data Code' to note why the value is blank. These missing codes may be used to aid in data analysis by specifying why a field lacks a value. To enable this feature below, enter both the codes AND their labels for all the categories of missing data that you wish to use in this project. The missing codes should be coded just like the choices of a multiple choice field with *code + comma + label*, in which the codes can only have letters, numbers, dots, dashes, and underscores (e.g., '-999, Not asked' or 'UNK, Unknown'). If no codes are entered, this feature will remain disabled.

[Read more detailed instructions.](#)

### Missing Data Codes

 Modify missing data codes

9999, N/A

Add code from standardized list of missing data codes (optional suggestions):		
<input type="button" value="Add"/>	<b>NI</b>	No information
<input type="button" value="Add"/>	<b>INV</b>	Invalid
<input type="button" value="Add"/>	<b>UNK</b>	Unknown
<input type="button" value="Add"/>	<b>NASK</b>	Not asked
<input type="button" value="Add"/>	<b>ASKU</b>	Asked but unknown
<input type="button" value="Add"/>	<b>NAV</b>	Temporarily unavailable

# Optional Modules: Missing Data Code

## Examples:

**6. Initial Neck measurement (cm)**  
\* must provide value

9999

N/A (9999)

**Date of screening**  
\* must provide value

9999 M-D-Y

N/A (9999)

**In New Haven area next 6 weeks**  
\* must provide value

Yes  
 No

N/A (9999)

**Had fever past 2 weeks**  
\* must provide value

**Any chance pregnant**  
\* must provide value

**History of cancer, not skin, non-metastatic prostate**  
\* must provide value

**Treatment for cancer past 3 months**  
\* must provide value

Yes  
No  
Missing Data Codes:  
N/A (9999)

QUESTIONS?

# Alerts and Notifications

- Construct alerts and send customized notifications
- Can be sent to project users or recipients who are not REDCap users
- Can use conditional logic to trigger notifications

## Example – REDCap 201 Training confirmation email:

### 👉 STEP 1: Triggering the Alert

- A) How will this alert be triggered?
- When a record is saved on a specific form/survey\*
  - If conditional logic is *TRUE* when a record is saved on a specific form/survey\*
  - When conditional logic is *TRUE* during a data import, data entry, or as the result of time-based logic ⓘ

B) Trigger the alert...

when "Redcap Training Sign Up Form" is saved with Complete status only (excludes data imports)

while the following logic is true:

[training(3)]= "1"

(e.g., [age] > 30 and [sex] = "1")

[How to use 'stop logic' to disable a scheduled alert](#)

Ensure logic is still true before sending notification? ⓘ

# Alerts and Notifications

## 🕒 STEP 2: Set the Alert Schedule

When to send the alert?

- Send immediately
- Send on next  at time  H:M
- Send the alert after time lapse of  days  hours  minutes
- Send at exact date/time:

Send it how many times?

- Just once
- Every time the form/survey in Step 1B is    
(excludes data imports)
- Multiple times on a recurring basis:
  - Send every   after initially being sent.
  - Send up to  times total (including the first time sent). *Leave blank to continue sending forever.*

Alert expiration:

(optional)

This alert will be auto-deactivated at the specified date/time above. Note: This will cause any already-scheduled notifications not to be sent after the expiration time.

# Alerts and Notifications

## STEP 3: Message Settings

Alert Type:

Email  SMS Text Message  Voice Call

NOTE: If you wish to send alerts as SMS Messages or Voice Calls, read about enabling the Twilio Telephony Services on the Project Setup page or ask an administrator.

Email From:

\* must provide value

REDCap@Yale

redcap@yale.edu

Email To:

\* must provide value

× [email] "Email"

+ [Show more options](#)

Or manually enter emails:

Subject:

\* must provide value

Yale REDCap 201 Training 2/22/2022

Message:

\* must provide value

Paragraph   **B** *I* U

Prevent piping of data for Identifier fields

Hello,

Thank you for registering for REDCap training!

You are confirmed for the following session:

**REDCap 201 Training on 2/22/2022 at 2:00 - 3:00 PM EST.**

Here is the Zoom link for the training:

In the subject or message, you may use Piping and Smart Variables

Example: Hi [first\_name]! Please complete this survey: [survey-link:followup\_survey]

Message Attachments (Max file size: 10MB)

Attachment #1:

REDCap 201.ics Delete File

# Alerts and Notifications

Other examples of alerts and notifications:

- Enrollment notification
- Randomization notification
- Adverse Event notification
- Send survey queue link to study participants

To learn more, refer to the FAQ on our website:



QUESTIONS?












# Custom Record Dashboard



## Record Status Dashboard (all records)

Displayed below is a table listing all existing records/responses and their status for every data collection instrument (and if longitudinal, for every event). You may click any of the colored buttons in the table to open a new tab/window in your browser to view that record on that particular data collection instrument. Please note that if your form-level user privileges are restricted for certain data collection instruments, you will only be able to view those instruments, and if you belong to a Data Access Group, you will only be able to view records that belong to your group.

### Legend for status icons:

-  Incomplete
-  Incomplete (no data saved) [?](#)
-  Unverified
-    Many statuses (all same)
-  Complete
-  Many statuses (mixed)

Dashboard displayed: [Default dashboard]  [Create custom dashboard](#)

Displaying record Page [Default dashboard]  of 500 records 100  records per page

[Enrolled Participants](#)

[Follow Up](#)

[+ Add new record](#)

[Table not displaying](#)



[REDCap FAQ](#)  
Custom Record  
Dashboard

# Custom Record Dashboard

## ✎ Custom Record Dashboard

You may create your own custom version of the Record Status Dashboard by setting up the configuration options below. Only users with Project Setup/Design privileges will be able to create custom dashboards. Once a custom dashboard has been created, it will be viewable to all users in the project.

**Dashboard title:**

**Description / instructions:**

(Optional) Displayed near top of page

**Header orientation:**

Use 'Vertical' to transpose headers for a more compact display.

**Group columns by instrument or event:**

Grouping by Event will display event name at top spanning over its instruments, whereas grouping by Instrument will do vice versa.

**Select instruments/events:**

(Optional) Include/exclude specific instruments (to display less columns)

**Filter logic:**

(Optional) Filter the records displayed based on conditional logic

(e.g., [enrollment\_arm\_1][age] > 30 and [enrollment\_arm\_1][sex] = "1")

**Sort by:**

Sort the records by the value of a specific event's field in either ascending or descending order

Save dashboard

[Cancel](#)

Delete dashboard


Group columns by instrument or events

Select forms to display on the dashboard

Add record filter logic

QUESTIONS?

# Data Quality Module

 Upload or download Data Quality Rules ▾

**Data Quality Rules**
Execute rules: All All except A&B Clear
Apply to: -- All records -- ▾

	Rule #	Rule Name	Rule Logic (Show discrepancy only if...)	Real-time execution <input type="checkbox"/>	Total Discrepancies	Delete rule?
	A	Blank values*	-		<input type="button" value="Execute"/>	
	B	Blank values* (required fields only)	-		<input type="button" value="Execute"/>	
	C	Field validation errors (incorrect data type)	-		<input type="button" value="Execute"/>	
	D	Field validation errors (out of range)	-		<input type="button" value="Execute"/>	
	E	Outliers for numerical fields (numbers, integers, sliders, calc fields)**	-		<input type="button" value="Execute"/>	
	F	Hidden fields that contain values***	-		<input type="button" value="Execute"/>	
	G	Multiple choice fields with invalid values	-		<input type="button" value="Execute"/>	
	H	Incorrect values for calculated fields	-		<input type="button" value="Execute"/>	
	I	Fields containing "missing data codes"	-		<input type="button" value="Execute"/>	
	<input type="button" value="Add"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>		

# Data Quality Module – Rule H Example

Rule: **Incorrect values for calculated fields**  
Discrepancies found: **40** [Export results \(CSV\)](#)

**Fix ALL incorrect calculated values?** [Fix calcs now](#)

Record	Discrepant fields with their values	Status	Exclude
4 Randomization	"Total Score (PHQ8)" phq8_score = [no data] (Calculated value should be "0")	Incorrect value	<a href="#">exclude</a>
5 Randomization	"Total Score (PHQ8)" phq8_score = [no data] (Calculated value should be "4")	Incorrect value	<a href="#">exclude</a>
6 Randomization	"Total Score (PHQ8)" phq8_score = [no data] (Calculated value should be "3")	Incorrect value	<a href="#">exclude</a>
9 Randomization	"Total Score (PHQ8)" phq8_score = [no data] (Calculated value should be "8")	Incorrect value	<a href="#">exclude</a>
138 Randomization	"Total Score (PHQ8)" phq8_score = [no data] (Calculated value should be "13")	Incorrect value	<a href="#">exclude</a>
145 Randomization	"Total Score (PHQ8)" phq8_score = [no data] (Calculated value should be "0")	Incorrect value	<a href="#">exclude</a>
145 6 month	"Total Score (PHQ8)" phq8_score = [no data] (Calculated value should be "1")	Incorrect value	<a href="#">exclude</a>
221	"Total Score (PHQ8)" phq8_score = [no data]	Incorrect value	<a href="#">exclude</a>

Close



H	Incorrect values for calculated fields	-	0
---	--	---	---

# Data Quality Module – Custom Rule Example

Rule #	Rule Name	Rule Logic (Show discrepancy only if...)	Real-time execution <input type="checkbox"/>	Total Discrepancies
1	Grip Strength 1	[screening_arm_1][screening_sex]='2' and [baseline_arm_1][gripkg1]>29 and [baseline_arm_1][gripkg1]< 96 or [screening_arm_1][screening_sex]='1' and [baseline_arm_1][gripkg1]>61 and [baseline_arm_1][gripkg1]< 96	<input type="checkbox"/>	<b>22</b> <a href="#">export</a>   <a href="#">view</a>

## Rule #1: **Grip Strength 1**

Discrepancies found: **22**

 Export results (CSV)

Record (Sorted by DAG)	Discrepant fields with their values	Status	Exclude <input type="checkbox"/>
100-137 Baseline (SILVER 100)	"1st Grip Strength (kg)" gripkg1: <u>65</u> "3. Sex" screening_sex:	Issue exists	<a href="#">exclude</a>
100-137 Screening (SILVER 100)	"3. Sex" screening_sex: <u>1</u> "1st Grip Strength (kg)" gripkg1:	Issue exists	<a href="#">exclude</a>
180-136 Baseline (SILVER 180)	"1st Grip Strength (kg)" gripkg1: <u>30</u> "3. Sex"	Issue exists	<a href="#">exclude</a>

QUESTIONS?

# Logging

## Logging

Export (CSV): [All logging](#) [All pages using current filters](#) [Current page](#)

This module lists all changes made to this project, including data exports, data changes, and the creation or deletion of users.

Filter by event: All event types (excluding page views) ▾

Filter by user name: All users ▾

Filter by record: All records ▾

Filter by time range from  to  [Custom range](#) [Past Day](#) [Past Week](#) [Past Month](#) [Past Year](#) [No limit](#)

Displaying events (by most recent): 1 - 100 (Page 1 of 3) ▾

Time / Date	Username	Action	List of Data Changes OR Fields Exported
10/22/2021 2:52pm	[REDACTED]	Manage/Design	Copy project as PID=2139 ("Copy of eConsent Scanned Image Demo")
09/14/2021 12:54pm	[REDACTED]	Manage/Design	Download instrument ZIP file
09/09/2021 12:11pm	[REDACTED]	Manage/Design	Download instrument ZIP file
09/09/2021 11:47am	[REDACTED]	Manage/Design	Download instrument ZIP file
07/08/2021 2:53pm	[REDACTED]	Manage/Design	Edit project field
07/08/2021 2:52pm	[REDACTED]	Manage/Design	Reorder project fields
05/04/2021 9:08pm	[survey respondent]	Updated Response 224	date_signed = '2021-05-04', fname = 'aaa', lname = 'bbb', participant_sign = '156712', participant_consent_v2_complete = '0'
05/04/2021 8:42pm	[survey respondent]	Updated Response 225	participant_sign = '156705'
05/04/2021 8:42pm	[survey respondent]	Updated Response 225	date_signed = '2021-05-04', fname = 'test', lname = 'test',



QUESTIONS?

# Field Embedding

- Where to find help on Online Designer?

↓ Field Embedding

💡 How to embed a field elsewhere

Learn how to customize your instrument or survey by using [Field Embedding](#).

- What is field embedding?
  - Allow position of fields anywhere on the form
  - For example, place fields in a grid/table for a more compact user-friendly page



[REDCap FAQ](#)  
Field  
Embedding

# Field Embedding

Without field embedding:

Test Date 1	<input type="text"/> Today M-D-Y
Test Result 1A	<input type="text"/>
Test Result 1B	<input type="text"/>
Test Date 2	<input type="text"/> Today M-D-Y
Test Result 2A	<input type="text"/>
Test Result 2B	<input type="text"/>

With field embedding:

Date	Test Result A	Test Result B
<input type="text"/> Today M-D-Y	<input type="text"/>	<input type="text"/>
<input type="text"/> Today M-D-Y	<input type="text"/>	<input type="text"/>

# Field Embedding

1. Create the field(s) that will be embedded
2. Create a descriptive text field
3. Use rich text editor to add table to the descriptive field
4. Add embedded fields to the table, enclose each field with curly bracket

Pro tip: If you have branching logics set up for your tables and/or fields, position your table before the embedded fields.

The screenshot displays the REDCap interface for embedding fields. At the top, a table is defined with the variable `result_table`. The table has three columns: **Date**, **Test Result A**, and **Test Result B**. The rows contain the following content:

Date	Test Result A	Test Result B
{date1}	{result1a}	{result1b}
{date2}	{result2a}	{result2b}
{test_stem}	{test_checkbox}	

Below the table, the interface shows the configuration for each embedded field. Each field is represented by a row with a title, a variable name, and a text input field. A green status bar on the right of each row indicates "Field is embedded elsewhere on page".

- Test Date 1** (Variable: date1): Includes a date picker and a "Today" button. Format: M-D-Y.
- Test Result 1A** (Variable: result1a): A simple text input field.
- Test Result 1B** (Variable: result1b): A simple text input field.
- Test Date 2** (Variable: date2): Includes a date picker and a "Today" button. Format: M-D-Y.
- Test Result 2A** (Variable: result2a): A simple text input field.
- Test Result 2B** (Variable: result2b): A simple text input field.

Each field configuration row includes "Add Field" and "Add Matrix of Fields" buttons.

# Field Embedding

## Limitations & Requirements

- The record id field cannot be embedded.
- A field cannot be embedded in itself.
- All fields involved in field embedding have to be on the same instrument/form.
- A field cannot be embedded in another field that's been embedded.
- Embedding supports branching logic.
- Field embedding only relocates the field input. The field label is hidden.
- For embedded fields, the following icons are hidden by default: *Data History*, *Field Comments*, and (if enabled) *Missing Data Codes*.
  - Display the icons by appending ":icons" to the variable name inside the braces/curly brackets - e.g., {last\_name:icons}.
- For a multi-page survey, all fields in field embedding must be on the same page.

# Field Embedding

## Other examples:

### Result

\* must provide value

- Left voicemail
- Unable to leave voicemail
- Call back at a later time/date
- Baseline appointment scheduled
- Appointment Reminder
- Refused participation in the study
- Stop trying (3 attempts with no response)
- Other





### Choices (one choice per line)

[Copy existing choice](#)

- 2, Unable to leave voicemail
- 3, Call back at a later time/date
- 4, Baseline appointment scheduled
- 8, Appointment Reminder
- 5, Refused participation in the study
- 6, Stop trying (3 attempts with no response)
- 7, Other {call\_result\_other\_sp}

### My usual work schedule

... starts at \_\_\_\_\_ o'clock.   H:M or  No specific start time




    Variable: mctq\_banner Branching logic: [mctq\_reg\_schedule] <> '0'

### My usual work schedule

Add Field

Add Matrix of Fields

Import from Field Bank

    Variable: embed\_work\_start Branching logic: [mctq\_reg\_schedule] <> '0'

... starts at \_\_\_\_\_ o'clock. {mctq\_work\_start} or {mctq\_work\_start\_notsp}

QUESTIONS?

# Special Functions for Calculation, Branching Logic

## √\* Special Functions

## √\* Special Functions

[View text on separate page](#)

### List of functions that can be used in Branching Logic, Calculations, Report filtering, Data Quality Module, Automated Survey Invitations, etc.

REDCap logic can be used in a variety of places, such as Branching Logic, Calculations, Report filtering, Data Quality Module, Automated Survey Invitations, and more. Special functions can be used in the logic, if desired. A complete list of ALL available functions is listed below. Listed below are some examples of common use cases where these functions might be used.

**NOTICE:** Please be advised that it is not possible to pipe the choice label of a multiple choice field into any of the special functions listed below. In other words, you cannot use the ':label' option, such as [my\_field:label], to output the text label into a function. **The special functions only utilize the value of a field, never its label.**

### Practical examples for common use cases

1. Calculate the number of days separating today's date and a date/datetime field's value in the past or future.

```
datediff([date1], 'today', 'd')
```

2. Calculate a person's age based on date of birth.

```
rounddown(datediff([date_of_birth], 'today', 'y'))
```

3. Calculate a person's BMI (in metric units of 'cm' and 'kg') and rounding to the first decimal place.

```
round(([weight]*10000)/((([height])^(2))), 1)
```

4. Calculate a person's BMI (in English units of 'lb' and 'in') and rounding to the first decimal place.

```
round(([weight]/((([height])^(2))*703), 1)
```

5. Remove a prefix and dash from the beginning of a record name (e.g., convert '4890-2318' to '2318').

```
mid([record-name], find('-', [record-name])+1, length([record-name])-find('-', [record-name])+1)
```

6. Convert a person's first and last name into a username-looking format (e.g., convert 'John' and 'Doe' to 'john\_doe'). We may want to trim the values just in case there were spaces accidentally entered.

```
lower( concat( trim([first_name]), '_', trim([last_name]) ) )
```

7. Add leading zeros to an integer in which the number near the end of the equation represents the maximum length of the result after



[REDCap FAQ](#)  
Calculated Field



# Special Functions for Calculation, Branching Logic

## Most popular functions:

Function	Name/Type of Function	Notes / Examples
if (CONDITION, VALUE if condition is TRUE, VALUE if condition is FALSE)	<b>If/Then/Else conditional logic</b>	Return a value based upon a condition. If CONDITION evaluates as a true statement, then it returns the first VALUE, and if false, it returns the second VALUE. E.g. if([weight] > 100, 44, 11) will return 44 if "weight" is greater than 100, otherwise it will return 11.
datediff ([date1], [date2], "units", returnSignedValue)	<b>Datediff</b>	Calculate the difference between two dates or datetimes. Options for 'units': 'y' (years, 1 year = 365.2425 days), 'M' (months, 1 month = 30.44 days), 'd' (days), 'h' (hours), 'm' (minutes), 's' (seconds). The parameter 'returnSignedValue' must be either <i>true</i> or <i>false</i> and denotes whether you want the returned result to be either signed (have a minus in front if negative) or unsigned (absolute value), in which the default value is FALSE, which returns the absolute value of the difference. For example, if [date1] is larger than [date2], then the result will be negative if returnSignedValue is set to TRUE. If returnSignedValue is not set or is set to FALSE, then the result will ALWAYS be a positive number. If returnSignedValue is set to FALSE or not set, then the order of the dates in the equation does not matter because the resulting value will always be positive (although the + sign is not displayed but implied).

# If/Then/Else

## Syntax :

if (CONDITION, VALUE if condition is TRUE, VALUE if condition is FALSE)

## Example:


- Eligibility calculation

- Initial Eligibility (1=Eligible, 0=Ineligible)


```
if([inclu1]='1' and [inclu2]='1' and [inclu3]='1' and  
[inclu4]='1' and [exclu1]='0' and ([exclu2]='0' or  
[exclu2]='2') and [exclu3]='0' and [exclu4]='0' and  
[exclu5]='0' and [exclu6]='0' and [exclu7]='0', 1, 0)
```

# Examples – If/Then/Else

- Change text of field label based on event

 How many times in [pipe\_d19\_header] have you been treated for:

[Add Field](#) [Add Matrix of Fields](#) [Import from Field Bank](#)

 Variable: pipe\_d19\_header

**Pipe text for D19 header**  [View equation](#)

@CALCTEXT @HIDDEN

**Action Tags / Field Annotation** (optional)

```
@HIDDEN @CALCTEXT(if([event-name]='baseline_arm_1','your life','the last month'))
```

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

Baseline: **How many times in your life have you been treated for:**

Follow up: **How many times in the last month have you been treated for:**

# DateDiff

Syntax:

`datediff ([date1], [date2], "units", returnSignedValue)`

\*The parameter “returnSignedValue” is optional. The default value is false. If you do not include the returnSignedValue parameter, the datediff function will calculate the absolute difference between the two dates.

Example:

- Age at Enrollment
  - `rounddown((datediff([dob],[enroll_date], 'y'),0)`



# Examples – DateDiff

- Number of weeks from MAT start date
  - `round(((datediff([scrn_mat_start], [call_date], 'd'))/7),1)`
- Branching logic to show warning
  - `datediff([medical_abstractio_arm_1][hosp_discharge], [admitdate1], "d", true)<1` or  
`datediff([medical_abstractio_arm_1][hosp_discharge], [admitdate1], "d", true)>180`



Variable: warning\_admitdate1

Branching logic: `datediff([medical_abstractio_arm_1][hosp_discharge], [admitdate...`

**Warning: Admission date not within 180 days of discharge date.**

QUESTIONS?

# External Modules (EMs)

Individual packages of software that extend REDCap's functionality.

External Modules provide customizations and enhancements for REDCap's existing behavior and appearance at the system- or project- level.



## Repository of External Modules

The REDCap Repo is a centralized repository of curated External Modules that can be downloaded and installed in REDCap by a REDCap administrator. External Modules are add-on packages of software that can extend REDCap's current functionality, as well as provide customizations and enhancements for REDCap's existing behavior and appearance, either at the system level or project level. The modules provided here were created and submitted by software developers at various REDCap institutions around the world.

If you have created a module and wish to submit it to be listed in the REDCap Repo, please complete the [Module Submission Survey](#). Updated versions must also be submitted via the survey. To learn more about the REDCap Repo module review process, you may download the [Module Review Guidelines \(PDF\)](#).

You may search below for available modules. If you got to this site directly, you will be able to view information about each module, but you will not be able to download modules from this page unless you arrived here from the REDCap application and are a REDCap administrator. If you have questions or are experiencing issues, please email [redcap@vumc.org](mailto:redcap@vumc.org).

Disclaimer: The modules listed in the REDCap Repo have gone through a process of testing, validation, and curation by the Vanderbilt REDCap Team with help from trusted individuals in the REDCap Consortium. It should not be assumed that all modules are bug-free or perfect, so please be aware that the entire risk as to the quality and performance of the module as it is used in your REDCap instance is borne by the REDCap administrators who download and install the modules.

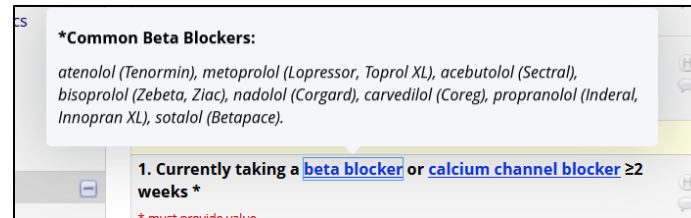
Show  entries

Search

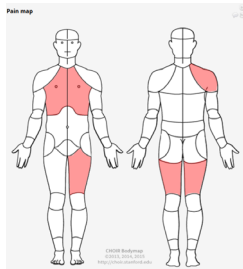
Module title and description	First Submitted	Most Recent Update	Downloads (Installs only - Excludes updates)
<b>Address Auto Complete</b> ( <i>address_auto_complete_v1.2.0</i> ) <a href="#">View on GitHub</a> <a href="#">View Stats</a> <i>Description:</i> Please note that currently supported countries are: Switzerland, United Kingdom. Easily create Auto-Complete Address fields that fetch results from APIs. Additionally, save geo data in custom variables and adjust the format of the address label. <i>Author:</i> <a href="#">Ekin Teremli</a> (Swiss Tropical and Public Health Institute (Swiss TPH))	2021-10-14	2022-01-07	11
<b>Admin Dashboard</b> ( <i>admin_dash_v4.0.5</i> ) <a href="#">View on GitHub</a> <a href="#">View Stats</a> <i>Description:</i> Provides a sortable table view of various reports on REDCap metadata (users, projects, etc). Includes a number of built-in reports as well as support for custom SQL queries. <i>Authors:</i> Ioe Sorina (University of Iowa), Heath Davis, Chris Ortman	2018-02-27	2021-10-29	1,308

# External Modules (EMs)

- Commonly used external modules
  - Instance Table
    - Embed a repeating form within a data entry form
  - Inline Descriptive Pop-ups
  - Cross-project piping
    - Pipe data from one project to another project



- Image Map



- Recalculate - Run recalculations for specific records, events, fields or any combination

***\*Contact REDCap@Yale for suitability of external modules for your project***



Thank You!

Further Questions: Contact us at  
[REDCap@yale.edu](mailto:REDCap@yale.edu)