REDCap @Yale

Frequently Asked Question (FAQ) Library

How do I perform a calculation on text fields?

The @CALCTEXT action tag evaluates specified logic for text fields and outputs the result as text. It is usually used with an if (x,y,z) function, where if x is true, then y, else z.

Example #1: Conditional piping – used to customize lookback timeframes.

In the following example, we want to customize the timeframe for lookbacks at each event (visit). For the baseline questionnaire, we will ask about medications prescribed <u>in the past year</u>. For the follow-up questionnaire, we will ask about medications prescribed <u>in the past month</u>.

To perform a calculation on text fields with conditional piping, we will add a hidden field and use the @CALCTEXT action tag to 'calculate' the text that will be used for piping based on the event.

a. Within the '**Designer**' in the left navigation menu, add a text box field for the calculation.

b. In the action tag box, add the @HIDDEN and @CALCTEXT action tags. The @HIDDEN action tag will hide the field on the form.

   For the @CALCTEXT tag, add the following syntax:
   @CALCTEXT(if([event-name]='baseline_arm_1', 'in the last year', 'in the last month'))

If the event is baseline, the calculated value will = in the last year	For all other events, the calculated value will = in the last month

The action tag box should look like this:

Action Tags / Field Annotation (optional)

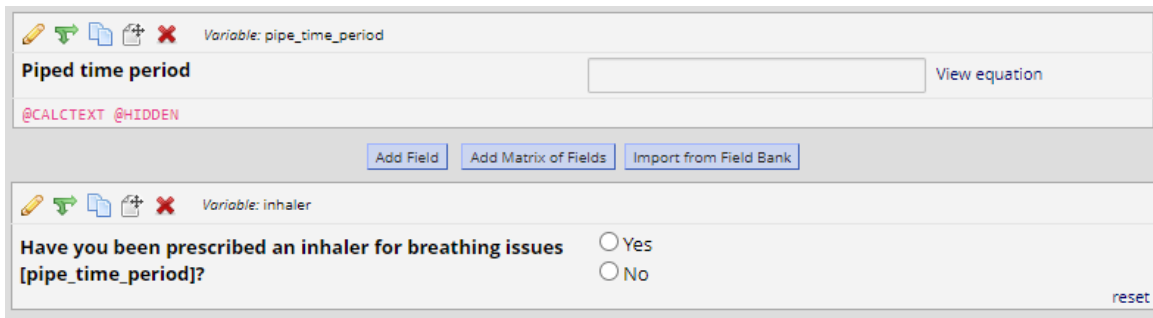@HIDDEN @CALCTEXT(if([event-name]='baseline_arm_1','in the last year','in the last month'))

Notes:

   i. *You must use text box field type for @CALCTEXT calculations. Do not use calculated field type.*

   ii. *In this example, a smart variable, [event-name], is used; however, project-specific variables can also be used. In instances where the evaluated field is multiple choice, use the numeric code for the choice you want to reference.*

   iii. *When referencing the value of a text field, it must be contained within quotes or apostrophes.*

   iv. *@CALCTEXT action tag can also be used without conditional logic. For example, it can be used with other text functions to concatenate text or extract text from other text field.*

c. When the @CALCTEXT is created, you will pipe the calculated field into the survey question.
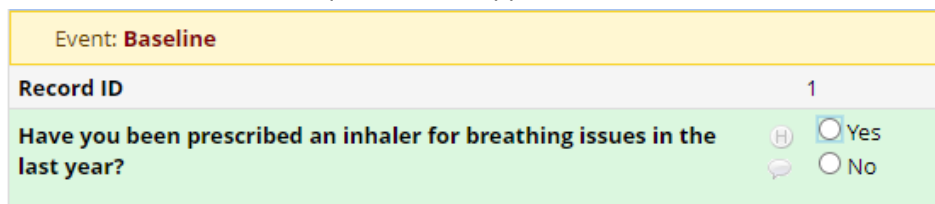
   To learn more about piping, refer to **FAQ: PIPING**.
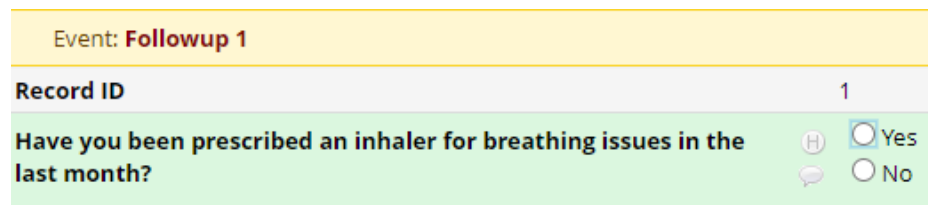
d. <u>Once these steps are completed:</u>

   a. In the **baseline event**, this question will appear:

   b. In the **follow-up event** (non-baseline), this question will appear:

Pro Tip: If after a data import, your calculated fields do not appear to update, run the Data Quality rule H. This will evaluate all calculated fields for accuracy. Select *View* to see the results of the data quality test and then select *Fix Calcs Now.* REDCap will correct all incorrect calculations.
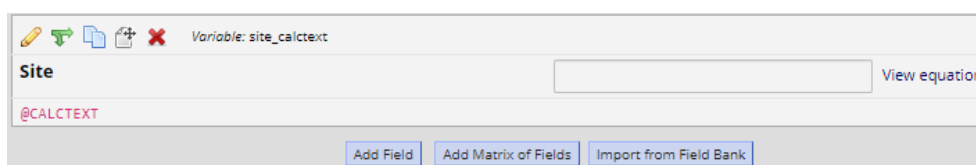

FAQ: Calculate Text Field (v1,0, 07/21/23)	
Page 2 of 3	*Tags: Features Basic, Action Tags*

Frequently Asked Question (FAQ) Library

Example #2: Populate a site name field based on the Data Access Group (DAG)

To learn more about Data Access Groups, refer to **FAQ: DAGs.**

In the following example, we will identify the recruitment 'site', based on the data access group (DAG) assigned to that the record. To reference a DAG, use the Smart Variable [record-dag-name]. The DAG name of each data access group can be found on the DAG page under the column 'Unique group name'.

1. Within the '**Designer**', create a text field for the 'Site'. Use @CALCTEXT action tag with [record-dag-name] to calculate the site, if any.
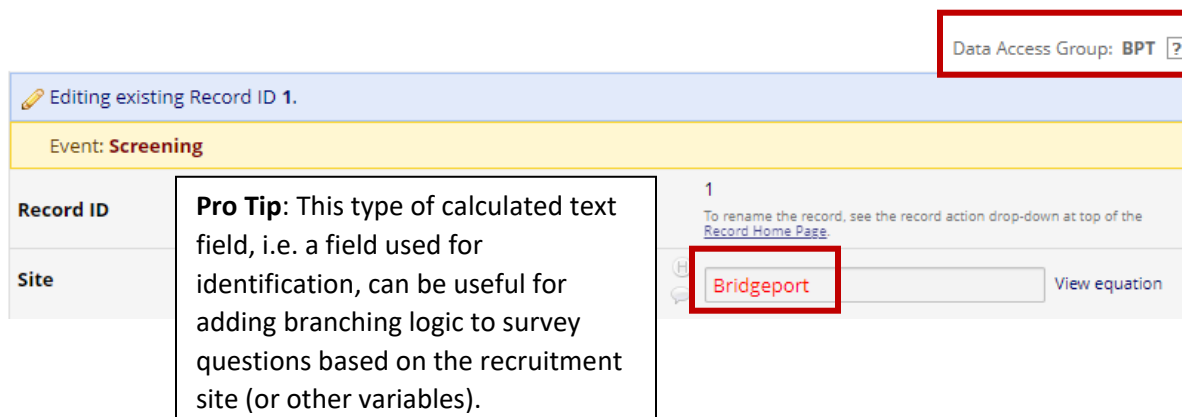


```
@CALCTEXT(if([record-dag-name]='nhv','New Haven',
if([record-dag-name]='hfd','Hartford',
if([record-dag-name]='bpt','Bridgeport','none'))))
```

2. This CALCTEXT statement will result in the following value being displayed for the 'BPT' DAG:

Pro Tip: This type of calculated text field, i.e. a field used for identification, can be useful for adding branching logic to survey questions based on the recruitment site (or other variables).