New Features in REDCap
Version 12

Sui Tsang
REDCap@Yale Team
9/30/2022
New Features - REDCap I and II

Fields:
1. Dynamic Min/Max Range Limits for Fields
3. New Action Tags:
   - @IF
   - @FORCE-MINMAX
4. New Smart Variable: [event-number]

Forms:
1. Form Display Logic
New Features - REDCap I and II

Surveys:
1. Survey Start Time and Related Smart Variables
2. Conditional logic for Survey Auto-Continue

Data Exports:
1. Instrument-Level Data Export Rights
2. New Data Export Option
   - Export blank values for gray instrument status
New Features - REDCap I and II

Emails:
1. Protected Email Mode
2. Email Logging Page

Applications:
1. Multi-Language Management
2. Calendar Sync
Fields
Dynamic min/max range limits for fields

- **today** and **now** can now be used as the min or max values for validation so that the current date or time is always used for validation. These can be used to prevent a date/time field from having a value in the past or in the future.
- Additionally, you can now pipe a value from another field into the field's min or max range setting - e.g., [visit_date] or [event_1_arm_1][age].

Example:

```
Validation? (optional) Date (M-D-Y)
Minimum: [scrn_date]
Maximum: today
```

Tip for min/max limits: You may use the word **today** or **now** (not wrapped in quotes) for date/time fields to set dynamic range limits. Also, you may pipe a value from another field - e.g., [visit_date] or [event_1_arm_1][age].
New Field Validation: "Time (HH:MM:SS)"

Variable Name (utilized in logic, calcs, and exports)
actig_sleep_onset1

Enable auto naming of variable based upon its Field Label?

How to use

Smart Variables
Piping
Field Embedding

Validation? (optional)
Time (HH:MM:SS)

Minimum:
Maximum:

Tip for min/max limits: You may use the word today or now (not wrapped in

Actigraphy Sleep Onset 1
* must provide value

14:19:50
Now
New Action Tag: @IF

- Allows action tags to be set based on conditional logic provided inside an @IF() function.

- Syntax:

```
@if(CONDITION, ACTION TAGS if condition is TRUE, ACTION TAGS if condition is FALSE)
```

Example: `@IF([yes_no] = '1', @HIDDEN, @HIDECHOICE='3' @READ-ONLY)`

- If you wish not to output action tags for a certain condition, set it with a pair of apostrophes/quotes as a placeholder

Example: `@IF([my_radio]='1', @READONLY, '')`

Note: The conditional logic is evaluated only when the survey page or data entry form initially loads; thus, action tag will not be evaluated in real-time as data is entered.
New action tag: @FORCE-MINMAX

- For Textbox fields with a min or max validation range, users/participants will not be able to enter a value unless it is within the field's specified validation range. This is different from the default behavior in which out-of-range values are permissible. Note: @FORCE-MINMAX is also enforced for data imports to ensure the value is always within the specified range.
### New Smart Variable: [event-number]

<table>
<thead>
<tr>
<th>Event # [event-number]</th>
<th>Days Offset</th>
<th>Offset Range Min / Max</th>
<th>Event Label [event-label]</th>
<th>Custom Event Label (optional)</th>
<th>Unique event name (auto-generated) [event-name]</th>
<th>Event ID (auto-generated, unchangeable) [event-id]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>-7</td>
<td>-0/+0</td>
<td>V0</td>
<td>pre</td>
<td>v0_arm_1</td>
<td>16432</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>-0/+0</td>
<td>V1</td>
<td>pre</td>
<td>v1_arm_1</td>
<td>16433</td>
</tr>
<tr>
<td>3</td>
<td>7</td>
<td>-1/+1</td>
<td>V2a</td>
<td>1 week fu</td>
<td>v2a_arm_1</td>
<td>24534</td>
</tr>
<tr>
<td>4</td>
<td>30</td>
<td>-7/+7</td>
<td>V2</td>
<td>1 mo [v1_arm_1] [anticipated_fu_1m]</td>
<td>v2_arm_1</td>
<td>16434</td>
</tr>
<tr>
<td>5</td>
<td>90</td>
<td>-7/+7</td>
<td>V3</td>
<td>3 mo [v1_arm_1] [anticipated_fu_3m]</td>
<td>v3_arm_1</td>
<td>16435</td>
</tr>
<tr>
<td>6</td>
<td>180</td>
<td>-7/+7</td>
<td>V4</td>
<td>6 mo [v1_arm_1] [anticipated_fu_6m]</td>
<td>v4_arm_1</td>
<td>16436</td>
</tr>
<tr>
<td>7</td>
<td>365</td>
<td>-7/+7</td>
<td>V5</td>
<td>12 mo [v1_arm_1] [anticipated_fu_12m]</td>
<td>v5_arm_1</td>
<td>16437</td>
</tr>
</tbody>
</table>
Forms
Form Display Logic

- Provides a way to use conditional logic to disable specific data entry forms that are displayed on the Record Status Dashboard, Record Home Page, or the form list on the left-hand menu.

Example:
Form Display Logic

- Forms are hidden when the form display logic is not matched.

<table>
<thead>
<tr>
<th>Data Collection Instrument</th>
<th>V0 pre</th>
<th>V1 pre</th>
<th>V2a 1 week fu</th>
<th>V2 1 mo</th>
<th>V3 3 mo</th>
<th>V4 6 mo</th>
<th>V5 12 mo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screener and Eligibility</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opt-in Form</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initially eligible</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consent Offered</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consent Obtained</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Final Eligibility Checklist</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eligible (Final)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enrollment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

These forms are hidden on the event grid as the condition specified in the form display logic is not true.
Surveys
## Survey Start Time and Related Smart Variables

<table>
<thead>
<tr>
<th>Smart Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>[survey-time-started:instrument]</td>
<td>Survey start date time</td>
</tr>
<tr>
<td>[survey-date-started:instrument]</td>
<td>Survey start date</td>
</tr>
<tr>
<td>[survey-time-started:instrument:value]</td>
<td>Survey start date time raw value, more appropriate for conditional logic or calculated fields</td>
</tr>
<tr>
<td>[survey-date-started:instrument:value]</td>
<td>Survey start date raw value, more appropriate for conditional logic or calculated fields</td>
</tr>
<tr>
<td>[survey-duration:instrument:units]</td>
<td>Time elapsed since survey started. For completed survey, this value will be the same as [survey-duration-completed:instrument:units].</td>
</tr>
<tr>
<td>[survey-duration-completed:instrument:units]</td>
<td>Total time it took to complete the survey</td>
</tr>
</tbody>
</table>
Survey start time, completion time and duration display on top of the data entry form:

Response was completed on 09/20/2022 1:57pm. Response was initially started on 09/20/2022 1:55pm. The total completion time of the response is 2 minutes, 8 seconds. You have permission to edit this survey response from its original values. In order to begin editing the response, you must click the Edit Response button above. View all contributors to this response.

Designer - Survey start time, completion time and duration are piped to another form using smart variables:

<table>
<thead>
<tr>
<th>Variable: survey_time</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Survey start date time:</td>
<td>[survey-time-started:enrollment]</td>
</tr>
<tr>
<td>Survey start date time raw value:</td>
<td>[survey-time-started:enrollment:value]</td>
</tr>
<tr>
<td>Survey start date:</td>
<td>[survey-date-started:enrollment]</td>
</tr>
<tr>
<td>Survey start date raw value:</td>
<td>[survey-date-started:enrollment:value]</td>
</tr>
<tr>
<td>Survey completed date time:</td>
<td>[survey-time-completed:enrollment]</td>
</tr>
<tr>
<td>Survey completed date time raw value:</td>
<td>[survey-time-completed:enrollment:value]</td>
</tr>
<tr>
<td>Time elapsed since the survey was started (minutes)</td>
<td>[survey-duration:enrollment:m]</td>
</tr>
<tr>
<td>Total time it took to complete the survey (minutes)</td>
<td>[survey-duration-completed:enrollment:m]</td>
</tr>
</tbody>
</table>
Survey Start Time and related Smart Variables Examples

Data Entry Form – Piped survey start time, completion time and duration shown on the data entry form:

<table>
<thead>
<tr>
<th>Survey start date time:</th>
<th>09/20/2022 1:55pm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Survey start date time raw value:</td>
<td>2022-09-20 13:55:13</td>
</tr>
<tr>
<td>Survey start date:</td>
<td>09/20/2022</td>
</tr>
<tr>
<td>Survey start date raw value:</td>
<td>2022-09-20</td>
</tr>
<tr>
<td>Survey completed date time:</td>
<td>09/20/2022 1:57pm</td>
</tr>
<tr>
<td>Survey completed date time raw value:</td>
<td>2022-09-20 13:57:21</td>
</tr>
<tr>
<td>Time elapsed since the survey was started (minutes)</td>
<td>2.13333333333333</td>
</tr>
<tr>
<td>Total time it took to complete the survey (minutes)</td>
<td>2.13333333333333</td>
</tr>
</tbody>
</table>
Conditional Logic for Survey Auto-Continue

- When enabling auto-continue option in survey setting, conditional logic can be specified to determine whether the auto-continue should be applied.
- REDCap will auto-continue to the next survey only if the conditional logic is TRUE or if the logic textbox has been left blank.
- A simpler alternative to the Survey Queue.

Survey Termination Options:

- Auto-continue to the next survey? Automatically start the next survey instrument after finishing this survey.

(Optional) Conditional logic for Survey Auto-Continue:
Auto-continue to the next survey ONLY if the conditional logic below is TRUE or if the textbox has been left blank.

[sex]=2

e.g., [age] > 30 and [sex] = "1" How to use this
Data Exports
A user may be given "No Access", "De-Identified", "Remove All Identifier Fields", or "Full Data Set" data export rights for **EACH** data collection instrument.

**Pro’s**
- Easier to match a user's Data Exports Rights with their Data Viewing Rights.
- Give you more granular control for allowing users to export data from your project.
Instrument-level Data Viewing and Export Rights

Development Project:
- When adding a new form to a development project -> all users automatically receive "Full Data Set" data export rights for the new instrument.

Production Project:
- When adding a new form to a production project -> all users will automatically receive "No Access" to data viewing and data export rights for the new instrument.

Remember to give your users view/edit/export rights to the new instrument after the production changes have been approved.
New Data Export Option –
Export Blank Values for Gray Instrument Status

Select your export settings, which includes the export format (Excel/CSV, SAS, SPSS, R, Stata) and if you wish to perform de-identification on the data set.

Choose export format
- CSV / Microsoft Excel (raw data)
- CSV / Microsoft Excel (labels)
- SPSS Statistical Software
- SAS Statistical Software
- R Statistical Software
- Stata Statistical Software
- CDISC ODM (XML)

De-identification options (optional)
The options below allow you to limit the amount of sensitive information that you are exporting out of the project. Check all that apply.

Known Identifiers:
- Remove All Identifier Fields (tagged in Data Dictionary)
- Hash the Record ID field (converts record name to an unrecognizable value)

Free-form text:
- Remove unvalidated Text fields (i.e. Text fields other than dates, numbers, etc.)
- Remove Notes/Essay box fields

Date and datetime fields:
- Remove all date and datetime fields
  - OR —
  - Shift all dates by value between 0 and 364 days (shifted amount determined by algorithm for each record)

Des-select all options

Additional export options
- Export survey identifier field and survey timestamp field(s)?

Advanced data formatting options

Export blank values for gray Form Status?
All Form Status fields with a gray status icon can be exported either as a blank value or as "0" (Incomplete). Hint: Blank values are recommended if the data will be imported back into REDCap, in which case this preserves the gray status icons for all the imported records.

- Export gray Form Status fields with value of "0"
- Export gray Form Status fields with value of "0"
- Export gray Form Status fields with blank value

Data file (only valid for CSV Raw Data and CSV Labels export formats):

Force all numbers into a specified decimal format?
You may choose to force all data values containing a decimal to have a specified decimal character (comma or period/full stop). This will be applied to all calculations and number-validated text values in the export file.

- Use fields' native decimal format (default)

NOTE: Your data formatting selections above will be remembered in the future and will be pre-selected upon your next export.
Emails
Protected Email Mode

- Prevents identifying data from being sent in outgoing emails
- To enable, go to Project SetUp -> Enable optional modules and customizations -> Additional Customizations

Protected Email Mode

This setting prevents identifying data (PHI/PII) from being sent in outgoing emails for alerts, survey invitations, and survey confirmation emails. If enabled, either A) all alerts, survey invitations, and survey confirmation emails or B) those whose email body is attempting to pipe data from Identifier fields will be affected, in which it will not send the full email text to the recipient but will instead send a surrogate email containing a link that leads them to a secure REDCap page to view their original email. If they are accessing an email in the Protected Email Mode for the first time (or in more than a month), it will send a security code to their inbox that will allow the recipient to view any protected emails for up to 30 days on that same device. Note that the Protected Email Mode will not apply to alerts that utilize sendgrid template emails because these emails cannot be fully rendered in the REDCap web application.

1) Should the Protected Email Mode operate on all alerts, survey invitations, and survey confirmation emails, or only on those whose email body is piping data from Identifier fields?

2) Optional custom text to display in the email header and page header seen by the recipient. Default text: REDCap Secure Messaging.

3) Optional custom logo to display in the email header and page header seen by the recipient. (Will be displayed above the custom text.)
Protected Email Mode

Secure email message sent by REDCap

Security code required for verification
Email Logging Page

• Search and view all outgoing emails related to your project
• Only users with User Rights privileges can access the email logging page.
• Can view and resend emails
• For projects with data access groups (DAGs), user will be able to view emails related to all DAGs
Email Logging Page

Search all outgoing emails for this project

Search for: keywords
in Subject, body, sender, and recipient

Type: -- all types --

Pertaining to a specific record: All Records

Search within a window of time from
09/01/2022 15:59 to 09/20/2022 15:59

Search emails

4 matching results

<table>
<thead>
<tr>
<th>View</th>
<th>Time sent</th>
<th>Record</th>
<th>Summary email content and attributes</th>
</tr>
</thead>
</table>
| ![icon] 09/14/2022 11:13am | 31 | From: REDCap@yale.edu, To: sui.tsang@yale.edu
Subject: [REDCap] Survey completed: "Demo eConsent (Scanned Image)"
This message was automatically generated by REDCap. A respondent completed your survey titled "Demo eConsent (Scanned Image)"

| ![icon] 09/12/2022 8:44pm | 30 | From: REDCap@yale.edu, To: sui.tsang@yale.edu
Subject: [REDCap] Survey completed: "Demo eConsent (Scanned Image)"
This message was automatically generated by REDCap. A respondent completed your survey titled "Demo eConsent (Scanned Image)"

| ![icon] 09/12/2022 5:12pm | 29 | From: REDCap@yale.edu, To: sui.tsang@yale.edu
Subject: [REDCap] Survey completed: "Demo eConsent (Scanned Image)"
This message was automatically generated by REDCap. A respondent completed your survey titled "Demo eConsent (Scanned Image)"

| ![icon] 09/12/2022 5:09pm | 28 | From: REDCap@yale.edu, To: sui.tsang@yale.edu
Subject: [REDCap] Survey completed: "Demo eConsent (Scanned Image)"
This message was automatically generated by REDCap. A respondent completed your survey titled "Demo eConsent (Scanned Image)"

Click the envelope icon to view or resend email
Applications
Multi-Langauge Management (MLM)

- Multi-language support in REDCap works by providing translations for each display item, i.e. field labels, choice labels, and user interface elements, but also for items such as email subjects and body texts of alerts and automated survey invitations.
There Are Three Primary Translation Components (For Each Language)

- **User Interface** – ~500 REDCap messages and prompts encountered when entering data (*common to ALL REDCap projects*)
- **Instruments** – Project-specific data collection instruments (*and other project-specific miscellaneous items*)
- **Survey Framework** – Content specific to instruments in “Survey Mode” (*Survey Title, Instructions, Completion Text*)
1. Add languages to your project

2. Add default language - English
2. Add the second language

* The ‘Import from file or system’ option lets you import languages for the user interface. Available languages include Chinese, French, German and Spanish.
3. Set English as the default language

Make sure to click “Save Changes” after making any changes
How to Set Up MLM

4. Click each tab (*Form/Surveys, Alerts, Misc, etc.*) and select the language to add translation.

![Translation Settings](image)
5. Add translated text to each field

<table>
<thead>
<tr>
<th></th>
<th>Field label translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td><strong>phq9_1</strong> - (phq)</td>
</tr>
<tr>
<td></td>
<td><strong>Field label translation:</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Default text:</strong> 1. Little interest or pleasure in doing things</td>
</tr>
<tr>
<td></td>
<td>1. Poco interés o placer en hacer cosas</td>
</tr>
<tr>
<td>4</td>
<td><strong>phq9_2</strong> - (phq)</td>
</tr>
<tr>
<td></td>
<td><strong>Field label translation:</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Default text:</strong> 2. Feeling down, depressed, or hopeless</td>
</tr>
<tr>
<td></td>
<td>2. Se ha sentido decaído(a), deprimido(a) o sin esperanzas</td>
</tr>
<tr>
<td>5</td>
<td><strong>phq9_3</strong> - (phq)</td>
</tr>
<tr>
<td></td>
<td><strong>Field label translation:</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Default text:</strong> 3. Trouble falling or staying asleep, or sleeping too much</td>
</tr>
<tr>
<td></td>
<td>3. Ha tenido dificultad para quedarse o permanecer dormido(a), o ha dormido demasiado</td>
</tr>
</tbody>
</table>
6. If you use the import from system option [STEP 2], most of the translated text will already be available for the user interface.

---

**Click a button below to select a language to translate:**

- English
- Spanish

You may translate any of the REDCap's stock user interface elements seen on forms/surveys, such as field validation error messages, survey submit buttons, and other things that typically cannot be defined in a project. Please keep in mind that you probably do not need to translate all user interface items since it is likely that many of them might not be used on your forms/surveys. Tip: Use the ‘highlight’ feature on the Settings tab above to highlight all untranslated text on the page as a quick way of determining which specific elements need to be translated.

Filter items on this page: [Search for anything...] [Hide translated items]

---

**Controls & Display Elements**

- **The ‘Click to decrease font size’ tooltip text:**
  
  **Default text:** Click to decrease font size
  
  [Dé clic para reducir el tamaño de fuente]

- **The ‘Click to increase font size’ tooltip text:**
  
  **Default text:** Click to increase font size
  
  [Dé clic para aumentar el tamaño de fuente]
Study Form:

### English

<table>
<thead>
<tr>
<th>PHQ-9</th>
<th>Not at all</th>
<th>Several days</th>
<th>More than half the days</th>
<th>Nearly every day</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Little interest or pleasure in doing things</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(must provide value)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Feeling down, depressed, or hopeless</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(must provide value)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Spanish

<table>
<thead>
<tr>
<th>PHQ-9</th>
<th>Ningún día</th>
<th>Varios días</th>
<th>Más de la mitad de los días</th>
<th>Casi todos los días</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Poco interés o placer en hacer cosas</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Campo requerido)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Se ha sentido decaído(a), deprimido(a) o sin esperanzas</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Campo requerido)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### PHQ-9

<table>
<thead>
<tr>
<th></th>
<th>Ningún día</th>
<th>Varios días</th>
<th>Más de la mitad de los días</th>
<th>Casi todos los días</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) 1. Poco interés o placer en hacer cosas</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td></td>
<td>* Campo requerido</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2) 2. Se ha sentido decaído(a), desanimado(a) o sin esperanza</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

Restablecer el valor
# New MLM Action Tags

<table>
<thead>
<tr>
<th>Tag</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>@LANGUAGE-CURRENT-FORM</td>
<td>Allows you to capture the currently used language in projects where multilingual data is enabled on data entry forms. The @LANGUAGE-CURRENT-FORM action tag can be used on fields of type 'Text Box' (no validation), and 'Drop-down List', or 'Radio Buttons' (these need to have choices whose codes correspond to the IDs of the defined languages - e.g., 'en'). This action tag is only active on data entry forms and will always, when possible, set the field's value to the currently active language.</td>
</tr>
<tr>
<td>@LANGUAGE-CURRENT-SURVEY</td>
<td>Same as @LANGUAGE-CURRENT-FORM, but works only on survey pages. For multi-page surveys, @LANGUAGE-CURRENT-SURVEY needs to be used on a field of each page where capture of the language is relevant (e.g. for performing branching).</td>
</tr>
<tr>
<td>@LANGUAGE-FORCE</td>
<td>When used on a field, the data entry form or survey on which the field is located will be rendered in the specified language (which must have been set up using the Multi-Language Management feature). The format must follow the pattern @LANGUAGE-FORCE=&quot;???&quot;, in which the ID of the desired language should be inside single or double quotes - e.g., @LANGUAGE-FORCE=&quot;de&quot;. Piping is supported - e.g., @LANGUAGE-FORCE=&quot;[field_name]&quot;. When the language is forced successfully (i.e., it exists and is active), the language selector is hidden. Using this together with @LANGUAGE-CURRENT-FORM/SURVEY on the source field for @LANGUAGE-FORCE may be used to 'lock in' a user to their selected language.</td>
</tr>
<tr>
<td>@LANGUAGE-FORCE-FORM</td>
<td>Same as @LANGUAGE-FORCE, but the effect is limited to data entry forms (i.e. this does not affect surveys).</td>
</tr>
<tr>
<td>@LANGUAGE-FORCE-SURVEY</td>
<td>Same as @LANGUAGE-FORCE, but the effect is limited to surveys (i.e. this does not affect data entry forms).</td>
</tr>
<tr>
<td>@LANGUAGE-SET</td>
<td>When used on a Drop-down or Radio Button field only, this action tag will allow the field's value to control the currently shown language (in the same way as switching the language via the buttons at the top of the page). Tip: When used in a survey, this field could be prepopulated (and thus auto-selected) by embedding a participant's language ID in the survey URL itself (for details, see the FAQ's &quot;How to pre-fill survey questions&quot; section).</td>
</tr>
</tbody>
</table>
If your project uses scheduling, you can use the new Calendar Sync feature to sync your REDCap project calendar to an external calendar application.

The Calendar application can be used as a project calendar within this project to help organize your schedule and keep track of any upcoming events. It will allow you to add or modify calendar events and then view them either in a daily, weekly, or monthly format below. To add a new note or calendar event to any day, click +New at the top of that day's box to begin entering the information. Since you have already defined multiple events for this project, you may additionally generate a schedule using your pre-defined Events, which will then be added to the calendar.

[Calendar sync button]

[Print Calendar button]

[Video link: How to use the calendar (7 min)]
Add Calendar from URL/Internet

Sync Calendar to External Application

You may sync your REDCap calendar or perform a one-time import of your calendar events to external calendar applications such as Google Calendar, Outlook, Office 365, Zoho, Apple Calendar, or any application that supports iCal or ICS files. Choose one of the two options below to sync or import your project calendar events to an external calendar application.

Live calendar feed: Add calendar from URL/Internet

The web address below represents a real-time live feed of your REDCap project calendar. **Copy the URL to paste it as the calendar URL in your calendar application** using the option "Add calendar from URL/Internet". This will subscribe your external application to the REDCap project calendar. Notice: Different calendar applications have different refresh rates. So if new events are added to the calendar in REDCap, they may not immediately appear in the external application but will appear after the next refresh interval, which might be some time later that day or the next day (depending on the calendar application). Additionally, this calendar feed represents a **one-way feed**. This means that while changes made to the calendar in REDCap will automatically show up in the external calendar application, you will not be able to modify them in the external calendar application because they will be read-only.

Copy URL to clipboard

— OR —

One-time import: Download ICS file

Download and open the calendar ICS file below to import your REDCap calendar events manually into your calendar application on your computer, or upload the file to a web-based calendar service. Notice: This is not a live feed but a **one-time import**. Thus, any new events added to your REDCap calendar in the future will not be automatically added to your external calendar application. Additionally, please note that if you download and import the ICS file more than one time, it may create duplicate events in your calendar application.

Download ICS file
Add Calendar URL to Outlook

New Internet Calendar Subscription

Enter the location of the internet calendar you want to add to Outlook:
https://poa-redcap.med.yale.edu/surveys/index.php?_calendar=
Example: webcal://www.example.com/calendars/Calendar.ics

OK    Cancel
Project Calendar Added to Outlook
QUESTIONS?
REDCap@Yale Team

Top Row
Denise Acampora
Katy Araujo
Peter Charpentier
Kraig Eisenman
Brian Funaro
Mary Geda

Bottom Row
Tyler Hamilton
Dana Limone
Janet Miceli
Jesse Reynolds
Sui Tsang
Maxwell Wibert

redcap@yale.edu
Thank You!

Further Questions: Contact us at REDCap@yale.edu