The scheduling module is an optional feature in longitudinal projects. This powerful tool greatly enhances the project calendar. The module is particularly useful when doing patient research. Scheduling and opening events on the calendar is much easier than scrolling through a large Dashboard.

The longitudinal module enables data collection instruments to be completed multiple times for each record. The module is based on a defined series of events, called the event grid. The scheduling module uses the grid to populate the calendar with record-specific events.

The longitudinal event grid should be defined and tested while in development mode. Event changes are possible in production mode, but not recommended.

The Days Offset column defines the intervals from a start date to each event. REDCap uses these intervals later, to create a schedule for each record. The Offset Range column builds a range of dates around your target. This creates flexibility later.

If needed, multiple event grids can be created. Arms are groups or categories of records. Each arm has its own series of events and intervals. Using multiple arms allows you to schedule records differently, linking records to different series of defined events. Separate videos further explore creating the event grid and using multiple arms. In this example, only one event grid will be used. All patients will follow the same series of events.

Using these defined events, the scheduling module creates schedules for the calendar. Schedules can be generated for a new study ID, meaning that records can be created through the scheduling module. Records can
also be created through the traditional methods. Any existing records will appear in a dropdown box, allowing you to generate their schedules.

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The Start Date is the beginning of the schedule. Based on the start date, REDCap schedules the remaining events according to the days offset in the selected arm.

Once these fields are complete, a projected schedule is created.

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Each event and tentative date is displayed. Dates scheduled on the weekend are shown in red. You can change the scheduled date and enter an optional time for any event before scheduling it.

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Some events might have a gray range of dates. This offset range was defined in the longitudinal event grid.

If a date is modified such that it falls outside the range, a warning will appear. But REDCap will save the new date. The range changes from gray to red, reminding you that this date is now outside the expected range.

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Remember that this schedule is still tentative. When a date changes, subsequent dates are not automatically shifted by the same interval. Carefully review each schedule before creating it.

Once ready, the schedule is added to the project calendar. If this schedule was generated for a new record, the record is also added to the project.

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Open the calendar tool to view the schedule. All events for this record now appear. Each scheduled calendar event includes a status field. This is particularly useful for tracking patient schedules. Notice how the icons and color coding enhance the calendar view.

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Also notice that the date of a scheduled event cannot be changed through the calendar. The entire schedule for any record can be viewed and modified within the scheduling module.
On this page, event dates can be modified just as before. However, REDCap can additionally shift subsequent dates any time you make a change. This updates the calendar events for the record.

As always, stand-alone or ad hoc events can be added at any time. These events are generally unexpected and may not apply to all records. Ad hoc events can be added from within any record’s schedule or added directly on the calendar. Remember that any time a schedule changes, ad hoc events are excluded from date shifting. If you change an event date prior to your ad hoc event, only the events originally defined in this arm are shifted; the ad hoc event date is unchanged.

It is possible to use REDCap solely to manage schedules and not enter actual data about each record. In such projects, no data collection instruments are linked to record-specific events because no data collection is needed.

However, if you will be collecting data, a second step is required to complete the longitudinal event grid. After events are defined, instruments are designated for each event. More information about designating instruments can be found in a separate video.

The project structure has just changed significantly. The project changed from purely scheduling to scheduling plus longitudinal data collection. Still, the scheduling module works just as before.

But now, because we are collecting data, the record-specific events are linked to data collection instruments. Each event clearly displays which instruments should be completed. This is based on the event grid that was modified earlier.

Even existing schedules are now linked to instruments. Colored buttons are used to open any record for a given instrument and event.