Move to Production Checklist

This is a checklist designed to help researchers plan and test a REDCap project prior to requesting it be moved to production.

Please note that the IHSI REDCap team will do some administrative checks prior to moving a project to production. Additional recommendations or requirements may be suggested prior to moving a project to production. The IHSI REDCap team will also email the research team to verify or collect the following information:

- PI’s name and contact information;
- Copies of agreements from organizations providing secondary data (if applicable); and
- Documentation from compliance units.

Project Design
- Confirm all forms are present and appear in the intended order.
- Assess the logical order/flow of fields within forms and forms across the project.
- Ensure questions that are required fields are clearly marked as required.
- Ensure Field Type (i.e., question format) and answer choices are appropriate for the data needed; for example:
  - Continuous variables are collected through text boxes asking for integers or numbers and categorical variables are collected through multiple choice questions with discrete options.
  - Numeric coding schemes are consistent throughout the project.
    - If you have a variable with the same labels, such as yes/no, ensure the same numeric codes are applied to these labels (e.g. “Yes” always = 1 and “No” always = 0) throughout the project.
    - If you are using a validated measure (e.g., PROMIS, IDS-SR, PHQ9) with published scoring methods and defined levels, ensure numeric coding is consistent with the validated scoring methods. Do not modify the numeric coding for the questions.
  - Review all “text” field types and ensure that validation rules are applied where possible.
    - It is recommended that the numeric fields contain a validation for “integer” or “number” and minimum/maximum validation values.
      - The “integer” validation only allows whole numbers. The “number” validation allows numbers with decimals.
  - Check that all date/time formats are consistent (e.g. “MM/DD/YYYY”) throughout the project.
- For longitudinal studies:
  - Verify that language in instructions, questions, and multiple-choice options are applicable across all study time points and treatment arms.
  - Ensure events are properly defined and forms correctly correspond to the appropriate events.
  - Check that any branching logic or piping is accurate across events.
    - For security reasons, no identifiers should be piped across events.
Thoroughly test data entry:
   □ Verify all branching logic works and is present in all the necessary places. Select varying choices in multiple-choice and checkbox-style question.
   □ Enter test data in all calculated fields, and verify all equations yield the intended results in the appropriate format (e.g., check age calculations for accuracy and rounding).
   □ Try entering various “types” of responses. For example, try entering words where someone should only enter numbers (e.g., heart rate: enter “90 bpm” or “not done”). Doing so may point to fields that need validation.
   □ Test randomization procedures.
   □ Send surveys to yourself and put yourself in the shoes of the participant as you take it. Things to consider are:
      □ Are instructions clear?
      □ How will the questionnaire look to a participant?
      □ How long does it take to complete?
      □ Does auto-continue and/or a survey queue work correctly?
   □ Export test data entered to ensure the results export as intended.
   □ Delete all test data prior to moving the project to production. If test data has not been deleted when the move to production request is received by the REDCap administration team, they will delete test data prior to approving the request.
      □ If you need to keep the test data you entered after the project is moved to production, let the IHSI REDCap team know you would like to keep the test data when moving the project to production.
      □ As a reminder, no real data should be collected while in the development phase, as it is easy to delete or corrupt your data with little to no warning?

Privacy
□ Ensure that all fields containing PHI or other identifiers are marked as identifiers.
□ Check that user rights are appropriately assigned to those on the research team according to minimum necessary standards.
 □ Export of identifiable data is discouraged whenever possible. If it is necessary, ensure data export rights to export identifiable data are limited to the PI and/or project administrators.
Consult with your unit’s IT professionals about safe export and data storage of identifiable data.
□ Ensure that non-Illinois collaborators do not have data exporting rights.
□ Check that access to forms and surveys containing high risk data, including identity key(s), is restricted according to minimum necessary standards.

Survey Settings
□ If the project will be a survey, check that it is enabled as a survey.
   □ Check that all instruments that will be used as surveys are enabled as surveys.
□ If the project is longitudinal, check that is enabled as a longitudinal study.
□ Check that participants are not allowed to “Save and Return Later” unless the survey is a one-time survey that will be live for ≤ 1 month.
□ Check that respondents will never be allowed to return without needing a return code.
Other Recommendations

- Verify all text is spelled correctly and free of typos.
- Ensure units are consistent throughout (e.g., temperature [C vs. F], length measurements [in vs. cm], weight measurements [lbs vs. grams], etc.).
- Utilize field notes to ensure data entry methods are consistent and clear.
- While coding multiple choice responses, ensure absent responses are consistently coded (e.g. “Don’t know” coded to “998” and “No answer” coded to “999”).
- Confirm that multiple choices questions have options that are exhaustive and mutually exclusive.
- Consider matrix questions when three or more fields are used that contain the same options.
- Assign variable names that are simple and intuitive.
- Download copies or take snapshots of every iteration of your Data Dictionary in case you need to revert to an older version of your study.

This checklist was adapted from the following:
