







# Instructions/fields for completing a Real World Evidence Registry entry Version 1.2 (10.25.2021)

#### Initial screen

STEP 1 – Do you have content for registration in an existing OSF project?

The Open Science Forum has another database for projects, separate from this registry. While you can import project information from that database for this registration, it is not required or, at this point, common. Most users will only be entering their protocol information into this Real World Evidence Registry and will start by clicking NO here.

STEP 2 - Which type of registration would you like to create?

At present the only registry option here is the Real World Evidence Recommended Minimum Registration Template.

# General points about these instructions

As you create a draft, information added will be auto-saved periodically or when you change screens – see the note on the right-hand side of the screen. However, no registration will be submitted until you click on "REGISTER" at the end. Until you have submitted it, you can retrieve and edit your draft by clicking on a link that all contributors will receive by email. It is important that you save/bookmark this link.

Most elements are required (unless marked "optional") for the protocol to be posted; however, while drafting it, you can move from screen to screen without completing all elements.

Information/directions for each entry screen, generally already present or accessible on the entry screen, are provided below.

More information about what happens after you complete the data entry screens and click on REGISTER can be found at the end of this document.

Much more information about the registration process can be found by clicking on the HELP tab at the top of the screen.

# **Entry Screens**

# Registration Metadata

#### 1. Title

- 1.1. Provide the working title of your study. It may be the same title that you submit for publication of your final manuscript, but it is not a requirement.
- 1.2. **Example**: Effect of sugar on brownie tastiness.
- 1.3. **More info**: The title should be a specific and informative description of a project. Vague titles such as 'Fruit fly preregistration plan' are not appropriate.

### 2. Description

- 2.1. Please give a brief description of your study, including some background, the purpose of the of the study, or broad research questions.
- 2.2. **Example**: Though there is strong evidence to suggest that sugar affects taste preferences, the effect has never been demonstrated in brownies. Therefore, we will measure taste preference for four different levels of sugar concentration in a standard brownie recipe to determine if the effect exists in this pastry.
- 2.3. **More info**: The description should be no longer than the length of an abstract. It can give some context for the proposed study, but great detail is not needed here for your preregistration.

# 3. Contributors

- 3.1 You can add contributors by clicking on the "+" button.
- 3.2 You can edit contributor information by clicking on the contributor name.
- 3.3 Administrators have the same functions as Read and Read+Write as well as the added functions listed below:
  - create view-only links for the project or registration
  - o make a project private or public
  - o delete the project
  - create a preprint from the project
  - register the project
  - view and edit draft registrations
  - o end a registration's embargo
  - o add and remove institutional affiliations to the project or registration

# 4. Category

4.1 Choose from the dropdown list. It is expected that "Analysis" will be most often chosen for this registry, but other choices are possible.

#### 5. Affiliation

5.1. This can be added by editing your profile on OSF.

#### 6. License

6.1 The two Content license types available for this registry are CC0 1.0 Universal and CC-By Attribution 4.0 International. These licenses apply to the information you enter in this registry. For more information about these licenses please click on "License FAQ", "article on licenses" or go to <a href="https://creativecommons.org/licenses/">https://creativecommons.org/licenses/</a>, or <a href="https://en.wikipedia.org/wiki/Creative">https://en.wikipedia.org/wiki/Creative Commons license</a> for information specific to these two Creative Commons (CC) licenses.

## 7. Subjects

7.1 Please check the boxes for appropriate subjects

## 8. Tags (optional)

- 8.1 Please type in appropriate tags.
- 8.2 Examples: (to be added)

Click on NEXT when you have finished this Registration Metadata screen

## <u>Administrative Information</u>

Directions and examples for each item are shown on the page and reproduced below.

#### 9. Research Question

- 9.1. Description: The research question is essential to guide the research project and should pinpoint exactly what you are attempting to evaluate. For hypothesis evaluating treatment effect or comparative effectiveness research the question should include the population of interest, exposure, comparator and outcome(s) to be evaluated.
- 9.2. Examples: Does in-hospital zxxxxxnib improve pulmonary function compared to yxxxxxnib in patients treated with high-dose corticosteroids for moderate to severe SARS-CoV-2 pneumonia? What are the comparative risks for stroke or major bleeding in patients with non-valvular atrial fibrillation who initiate anticoagulant X versus anticoagulant Y?

#### 10. Funding Source

- 10.1. Description: Please include grant numbers and funding source, or company name
- 10.2. Examples: Grant number: XYZ9999 source: PCORI, OR company: AbbPfir BioPharmaceutical

### 11. Data Source(s)

- 11.1. Description: Please list the databases or other source of data for this secondary data use study
- 11.2. Examples: IBM Marketscan Claims and Encounters Database; Clinical Practice Research Datalink (CPRD)
- 12. Study period

- 12.1. Description: The calendar time boundaries for data used to create the analyzed study data set, including exposures, inclusion and exclusion criteria, covariates, outcome, and follow-up. This is the full window of data observation from the date of the earliest data point to the date of the last data point, across all subjects.
- 12.2. Example: 01/15/2010 to 09/22/2019 (can include a future date as well)

Click on NEXT when you have finished this Administrative Information screen

# Summary Design and Summary Specifications

# 13. Study Design

- 13.1. Description: Options are cohort, case-control, self-controlled (eg, pre-post), cross-sectional, quasi-experimental, other (with explanation)
- 13.2. Example: Cohort designs - A study design in which groups defined by a characteristic, risk factor or exposure are identified and followed for a defined period of time with subsequent evaluations of the outcome(s) of interest. Cohort studies are conducted to determine the magnitude of treatment associations with the outcome. Within cohorts, one can apply sampling designs that oversample patient according to certain study parameters to increase study efficiency: casecontrol sampling identifies patients according to their outcome status; casecohort sampling identifies patients according to exposure status and preexposure patient characteristics; and two-stage sampling which does both. The efficiency gain with cohort sampling approaches is most relevant if some information critical to the study is difficult or costly to acquire. The family of selfcontrolled designs use an individual's experience at different times as their own control. We differentiate self-controlled designs by how patients are selected into the study, or the indexing event. The case-crossover design is indexed by the study outcome, while the self-controlled case series is typically exposureindexed. Quasi-experimental: research that resembles experimental research but is not true experimental research. Often but not always a cohort design, it also involves a condition or analytical technique that proxies randomization of treatment assignment to some degree but is not true randomization.

### 14. Study Population

- 14.1. Description: The population under evaluation in the study
- 14.2. Example: Adults with sleep disordered breathing
- 15. Cohort Entry (index) date
  - 15.1. Description: The cohort entry date could also be referred to as the 'index' date. This is the date from which the cohorts will be followed forward in time in the data set. This could be the first date of drug initiation or first prescription fill date, or the date of diagnosis of the disease of interest or perhaps the date of disease progression.
  - 15.2. Example: The cohort entry date was defined by new initiation of SLEEPINATOR XR (intervention) or melatonin (comparator).
- 16. Specific Inclusion Criteria

- 16.1. Description: A description of how exactly patients enter the study
- 16.2. Example: A prior diagnosis of condition X
- 17. Specific Exclusion Criteria
  - 17.1. Description: The population that you want to leave OUT of the study
  - 17.2. Example: Adults with previous sleep disordered breathing-related surgery; Patients under 18 years of age
- 18. Intervention
  - 18.1. Description: The intervention or approach you are evaluating
  - 18.2. Example: SLEEPINATOR XR (oral formulation)
- 19. Comparator
  - 19.1. Description: The approach you're comparing the intervention to. The comparator could be a placebo or a control group, but often it is a different type of medical treatment or the usual form of care
  - 19.2. Example: Melatonin
- 20. Outcomes
  - 20.1. Description: Variables that are monitored during a study to document the impact that a given intervention has on the health of a given population.
  - 20.2. Example: Hospitalization for injury based on a fall, acceptance of CPAP treatment, adherence to CPAP treatment, change in functional status or quality of life. Adverse effects or complications related to the use of SLEEPINATOR XR and Melatonin.
- 21. Patient Characteristics to be used in the analysis
  - 21.1. Description: To improve explanatory power, one may want to model preexposure patient characteristics that are risk factors for the study outcome. To reduce confounding in the absence of baseline randomization one may want to adjust for patient characteristics that are also associated exposure.
  - 21.2. Example: Age, sex, pre-existing dementia, BMI, Hb A1c measurement, .....
- 22. Patient Subgroups
  - 22.1. Description: A subset of subjects from the overall study population defined by a variable (age or a certain co-morbidity) based on a reasonable supposition that one group or another might have a different response or outcome.
  - 22.2. Example: Age >65; patients with low density lipoproteins (LDL) > 200 mg/dl

Click on NEXT when you have finished this Summary Design and Specifications screen

# Key Elements of Evaluation Period

- 23. Follow-up Definition
  - 23.1. Description: The text definition of the full follow-up window inclusive of treatment for both intervention and comparator.
  - 23.2. Example: Day 1 (fill date) through 100 days, the last day of the study period, death, or disenrollment.

Click on NEXT when you have finished this Key Elements of Evaluation Period screen

# <u>Data Handling Attestation at Time of Registration</u>

- 24. Data handling attestation at time of registration
  - 24.1. Please choose the one best short description that best reflects the amount of data handling that you have had up until the date of registration for this study. Options are:
    - No data handling at this point
    - Acquired access to the source data
    - Conducted feasibility counts
    - Created an analytic dataset for the study population of interest
    - Conducted preliminary analyses, including descriptive statistics and observation of data distributions – but no analyses of association between treatment and outcome
    - Study analysis is progress
    - Statistical comparisons completed
  - 24.2. Example: If you have looked at the data to determine whether there are enough adults with sleep disordered breathing to at least satisfy requirements for your sample size, you should choose option 3 –conducted feasibility counts.
- 25. Data handling
  - 25.1. (Optional) Clarify the description chosen for data handling.

Click on NEXT when you have finished this Data Handling Attestation screen

### Protocol Document

- 26. Upload protocol document
  - 26.1. You may attach up to 5 file(s) to this question. You may attach files that you already have in OSF Storage in this project or upload (drag and drop) a new file from your computer. Uploaded files will automatically be added to this project so that they can be registered. To attach files from other components or an add-on, first add them to this project.

Files cannot total over 5GB in size.

Uploaded files will automatically be archived in this registration. They will also be added to a related project that will be created for this registration.

Click on REVIEW when you have finished this Data Handling Attestation screen

Click on REGISTER when you have completed all required fields and are ready for this protocol to be reviewed for posting.

**Once you have clicked REGISTER**, you will be given the option to embargo the protocol – ie, not make it publicly available – for a period of time. You will see the following message:

- Registrations cannot be modified or deleted once submitted.
- Changes to any files uploaded or selected as prompt responses will result in archiving failure and loss of your registration timestamp. If this registration has been archiving for more than 72 hours, email support@osf.io for assistance.
- A moderator must review and approve your registration before it will be made public or embargoed.

And will be given the following choice (as well as to cancel submission at this point):

- Make registration public immediately
- Enter registration into embargo

If you choose "Enter registration into embargo" you will be asked to choose an end date.

Once you have specified either immediate or embargoed availability, the protocol will sent for review by an ISPOR-based moderator for completeness or other concerns. This review will take place within 3 business days. If no concerns are found it will be posted on this registry. If the moderator has any concerns you will be contacted at the email address supplied.

Instructions for editing, withdrawing or other user actions for protocols under review or already posted can be found by clicking on the HELP tab on the top menu.