

## Outcome Codes in ER Web

### Setting up the coding tool

Setting up coding tools, as you are probably already aware, is a matter of creating a code set and then structuring it as you choose with child codes.

The same tool is used for quantitative / statistical data, but the types of codes involved are slightly different.

Usually, when you are setting up codes for data extraction, you use the top two options in the dropdown list – depending on whether you want a code to be selectable (i.e. appear with a checkbox next to it) or not.

Codes for outcomes are set up in the same way, though additional options are available -: outcome, intervention, comparison, and 'outcome classification code'.

It is not necessary to use intervention, comparison or classification codes, though you do need to set up at least one outcome code for the 'outcomes' button to appear on the coding screen.

The screenshot displays the 'Edit Coding Tools' interface. At the top left is the 'ePPI REVIEWER Beta' logo. The title 'Edit Coding Tools' is centered at the top. On the top right, there are links for 'Feedback', 'Help', the user name 'Zak Ghouze', and a 'Logout' button. Below the title bar, there are four buttons: 'Import Coding Tool(s)', 'Add Coding Tool', 'Edit Code', and 'Add Child'. The main form area has a label 'Current code (or set) Name: Outcome example'. It contains three input fields: 'Code Type\*' with a dropdown menu showing 'Outcome', 'Code Name\*' with a text box containing 'Outcome example', and 'Description (optional)' with a larger text area. At the bottom of the form are four buttons: 'Update' (green), 'Move...' (blue), 'Delete Code...' (red), and 'Cancel' (grey). On the right side, there is a 'Coding Tool(s) in Review' section with a 'Close/back' button. This section contains a list of coding tools, each with a person icon and a dropdown arrow: 'Title/Abstract Screen', 'Full Text Screen', 'Risk of Bias', 'Data Extraction', 'Retrieval Status', 'Reviewer Assignment', 'ER Support TEMP', 'Outcome example' (highlighted in blue), 'Intervention example', and 'Outcome classification code'.

## Summary of EPPI-Reviewer code types

### Study codes

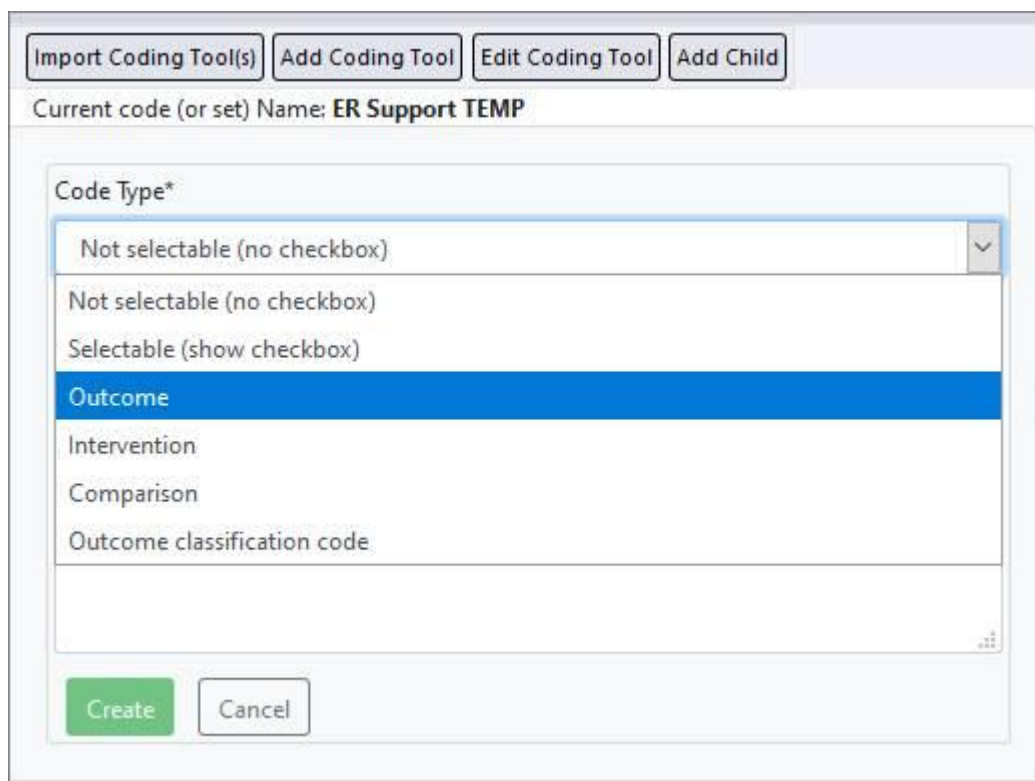
These are normal 'answer' codes in a code set. They describe a given study characteristic, for example, an aspect of the population, or particular intervention component. These characteristics are constant for all outcomes – they only vary across studies, not across outcomes in the same study. The ways of creating these codes are documented above.

### Intervention / Outcome / Comparison codes

These are specific categories which are useful for classifying outcome characteristics. Importantly, they can differ *between outcomes in the same study*, so are applied to individual outcomes, rather than whole studies. These are special code types that are selected when you create a new code.

### Outcome classification codes

Like intervention / outcome / comparison codes, outcome classification codes are codes which apply to individual outcomes, rather than the whole study. For example, you might want to have classification codes which allow you to identify the follow-up period for intervention measurement, as you might have several of these per study. Classifying study outcomes in this way allows you to quickly to identify specific sub-sets for meta-analysis.



Import Coding Tool(s) Add Coding Tool Edit Coding Tool Add Child

Current code (or set) Name: ER Support TEMP

Code Type\*

Not selectable (no checkbox)

Not selectable (no checkbox)

Selectable (show checkbox)

Outcome

Intervention

Comparison

Outcome classification code

Create Cancel

You can see the Outcome, Intervention, Comparison and Outcome Classification code types in the drop-down list of options.

## Outcome, intervention and comparison codes

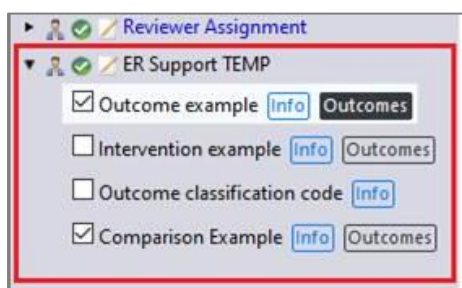
Codes which allow you to classify the outcome, intervention and comparison are each individually selectable. While you may need to compile a list of, for example, all the outcomes a study evaluates (and so select from a list when doing a data extraction of a study), you also need to be able to distinguish which outcome from the list each outcome refers to. The same principle applies to interventions and comparisons. If you specify that a given code is one of these types, it is still selectable in the standard coding screen, but it also then appears in the screen where statistical outcome data are entered.

## Outcome classification codes

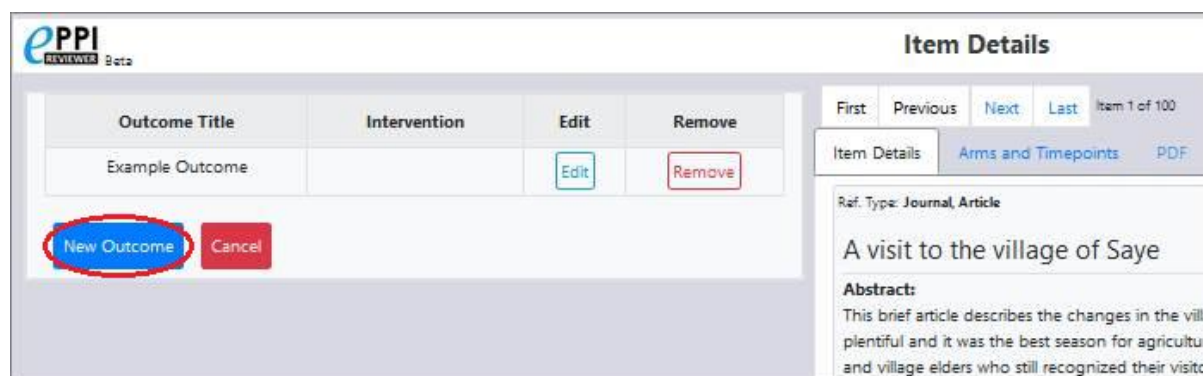
As well as being able to specify the set categories of outcome, intervention and comparison, it is also possible to set up as many additional categorisations as needed. These are useful in situations in which you have multiple outcomes with the same outcome, intervention and comparison definitions. An example of their use might be subgroup analyses in which results are presented separately for males and females, or to be able to distinguish different types of measurement tool for assessing the same outcome. Outcome classification codes appear as a list of selectable checkboxes where statistical data are entered.

Once you have set up at least one code as an outcome, the 'outcomes' button will appear on the coding screen.

Selecting an **Outcome code** when coding an item (e.g. *Outcome example* in the screenshot below) will allow you to click on the [now active] **Outcomes** button.



This will allow you to associate an outcome with the reference in its coding. You can use an existing Outcome from the list or create a New Outcome. (You can also remove redundant outcomes here.)



Once you have created an outcome, it is then possible to enter numerical data for your references and their associated outcomes.

The codes set up previously all appear in the appropriate places on this screen: outcomes, interventions and comparisons are available to select on the left-hand side. Any classification codes you have created can be associated with the reference.

(There are currently eight types of outcome available.)

You should name the outcome, enter your outcome data based on the outcome type selected and then click Save outcome. Once you have outcomes entered, you can view them from the '**Coding Record**' tab by clicking **View**.

Your outcomes will then appear in a table as shown below (image is for demonstration purposes only).

Baimukhamedov C, Makhmudov S and Botabekova A.; 2021. "Seropositive rheumatoid arthritis after vaccination against SARS-CoV-2 infection.". *International journal of rheumatic diseases* :  
**Your ID:** 34565843

Reviewer: Zak Ghouze

**Treatments**

- Prescription 1
  - Outcome 1
    - Male
    - C1

**Outcomes**

Title	Description	Timepoint	Outcome	Intervention	Control	Arms	Type	SMD	SE	r	SE	Odds ratio	SE	Risk ratio	SE	Risk difference	SE	Mean difference	SE	Outcome Classifications	
Example Outcome 1	First session		Outcome 1	1	C1		Manual entry	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Outcome 1 Male

You can also use then report on any numerical data you have entered during coding via an outcome report.

Item Id	Imported Id	Title	Outcome 1	Prescription 1	Outcome description	Timepoint	Outcome type	Outcome	Intervention	Comparison	Arm 1	Arm 2	Data 1	Data 2	Data 3	ES	SE	Male	Outcome 1
63158357	34565843	Baimukhamedov (2021)	1		Example Outcome 1		Continuous	Outcome 1	1	C1			0	0	0	0	0	1	1

NOTE: There are also facilities to create Arms and Time Points for a study / reference, so you can enter data appropriately.

**ePPI REVIEWER Beta** Feedback Help Zak Ghouze Logout

First Previous Next Last Item 1 of 9 Show terms? Auto Advance? Close/back

▶ Treatments Item Details Links Arms Timepoints PDF Coding Record

**Linked Items** Add new Link Collapse

**Arms** Collapse

Create new study arm:

Add New Study Arm Cancel

**Time Points** Collapse

Enter Time Point value:

Time Unit: Choose time point metric

Add Time Point Cancel