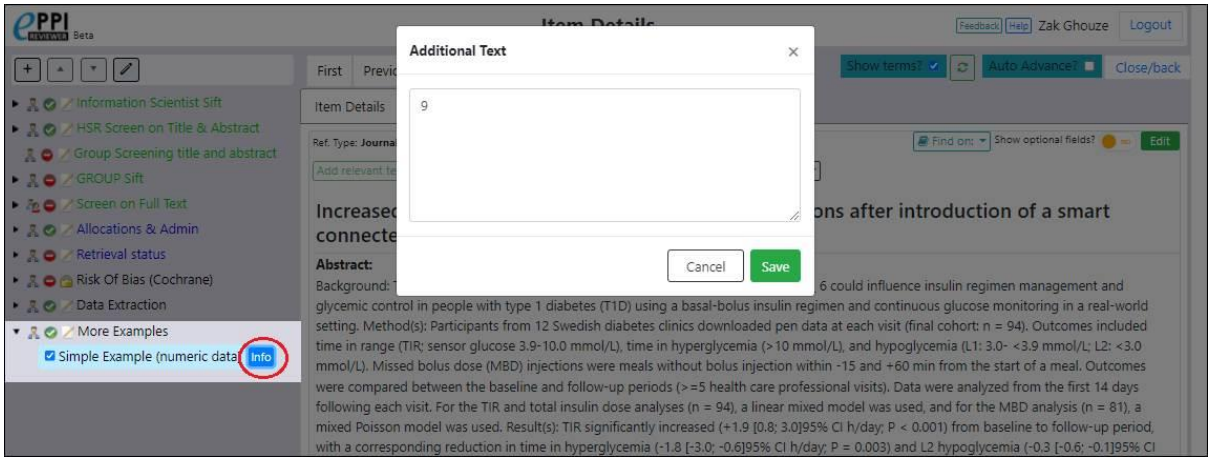
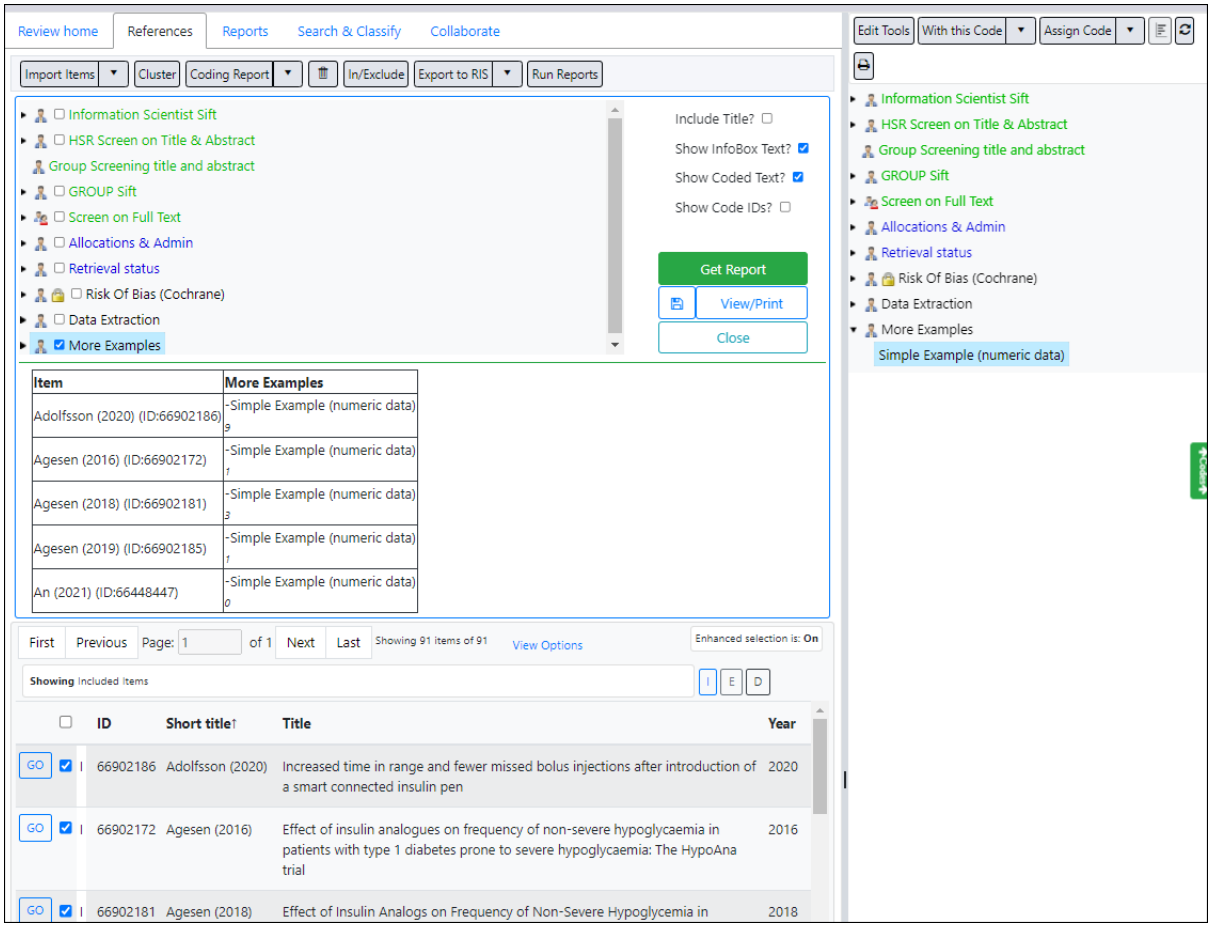
Entering Outcome Measures or Numerical Data

The easiest option is simply to set up selectable codes and then use the resultant ***Info*** box (also known as ***Additional Text***) to record the specific numeric or text data.

So, you could just have one code e.g. *Sample Size* and then enter a number in the ***Info Box***… This would come out in any report / Excel export when you reported on that particular code… However, you couldn't "operate" on those values – sort them in numeric order, for example.



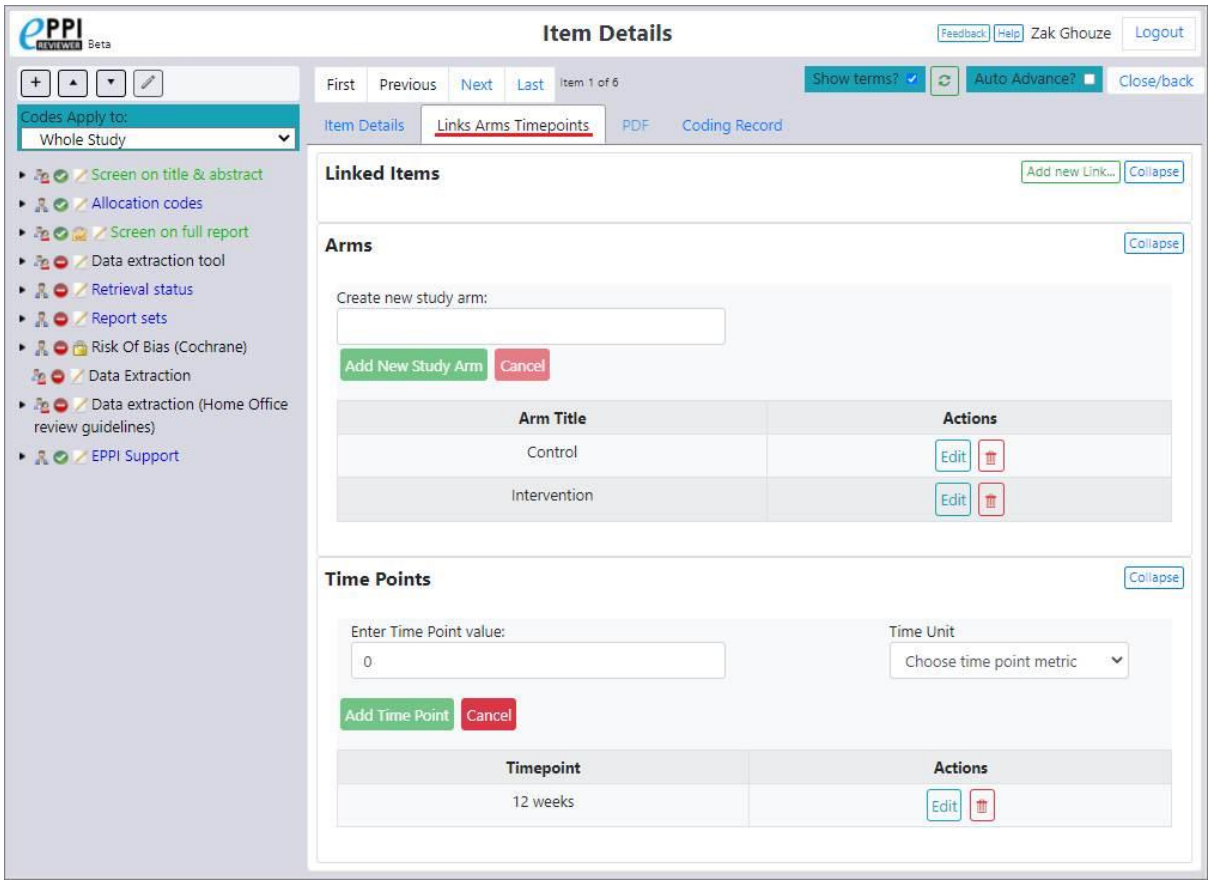


Simple Numeric Data

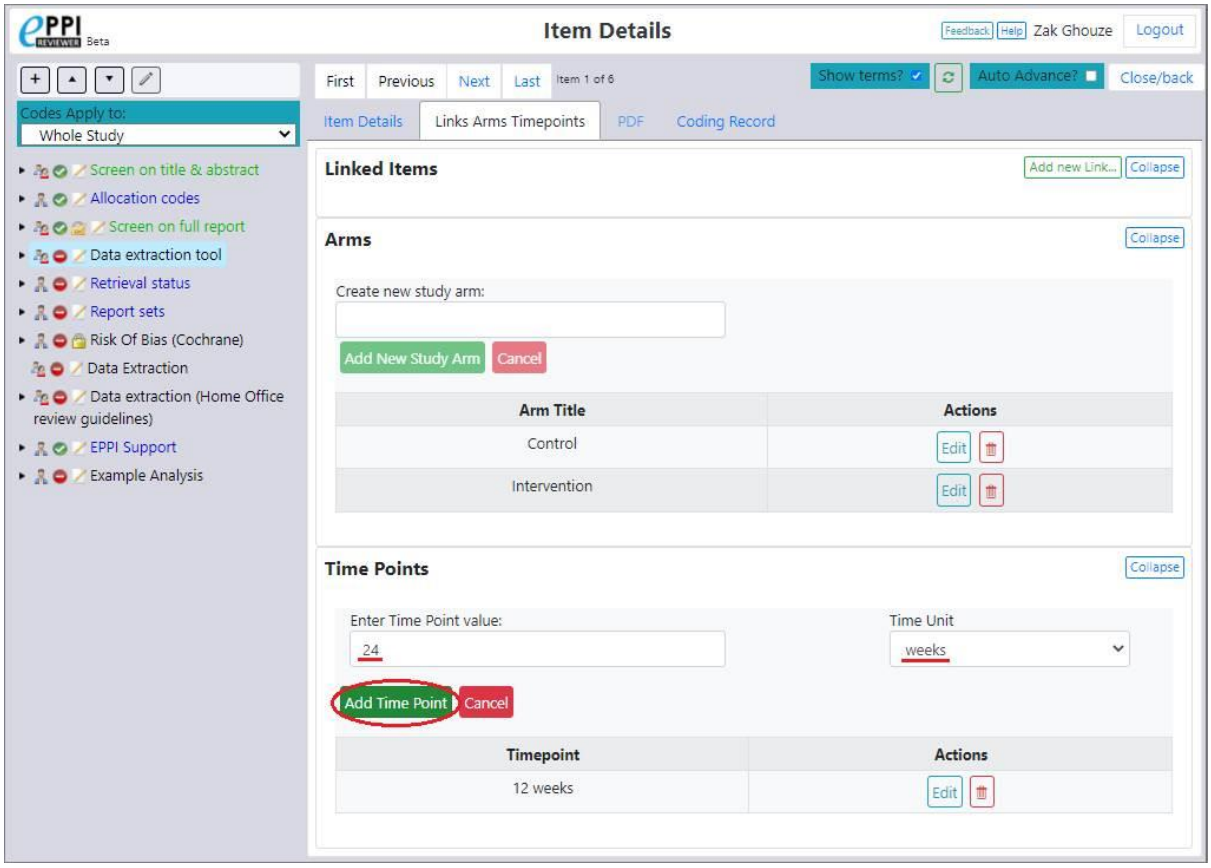
Short Title	Simple Example (numeric data)
Adolfsson (2020)	*9*
Agesen (2016)	*1*
Agesen (2018)	*3*
Agesen (2019)	*1*
An (2021)	*0*

(Just as an aside - equally any text you highlight in a full-text PDF can be associated with a code and automatically appear in your reports, if you select the option to show highlighted text. The PDF highlights are also very good for carrying out inductive coding, where themes and codes become apparent as you work through full-text papers.)

Alternatively, you go further and enter ***Outcome Measures***. You can then run Outcome reports showing the numerical values for various arms or time points in a paper…

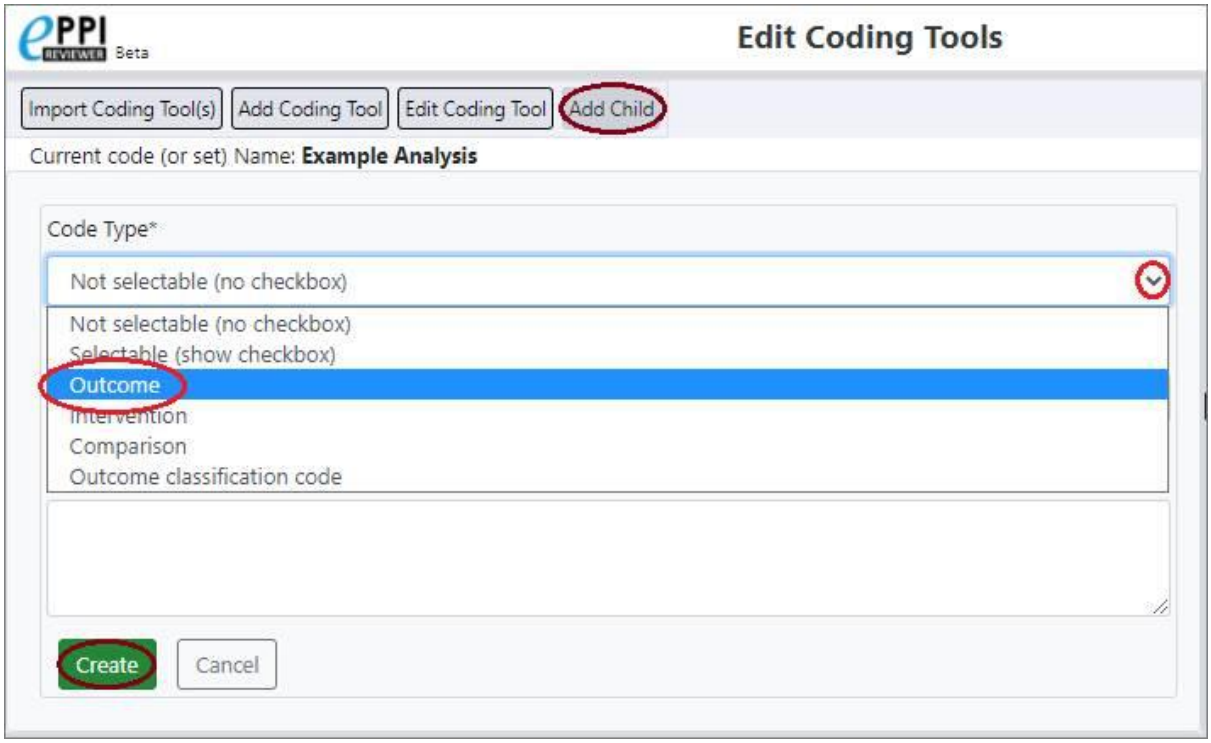


Enter the new time point values (***value*** and ***unit***), then press the ***Add Time Point*** button.

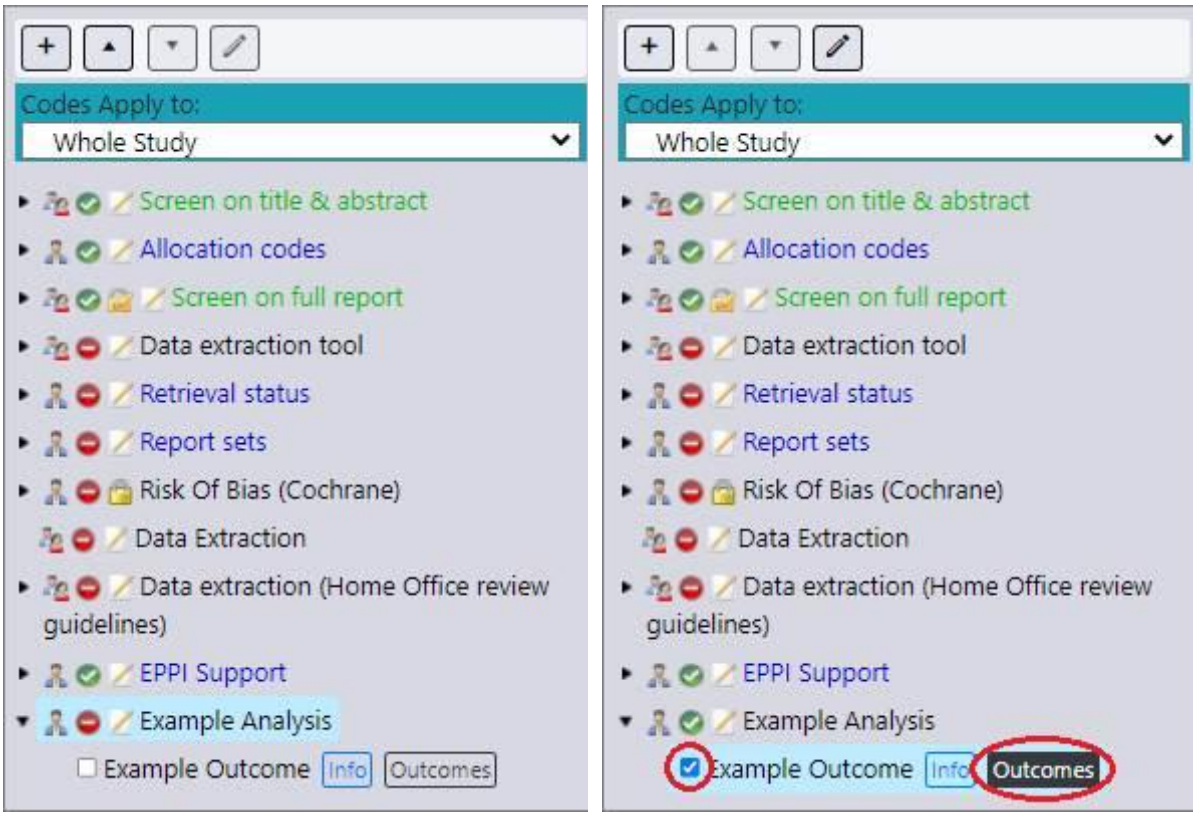


I created a new coding tool called *Example Analysis* to demonstrate the next part of entering different outcomes and associating them with different time points.

I added a child code to this codeset, with a ***Code Type*** of ***Outcome***.



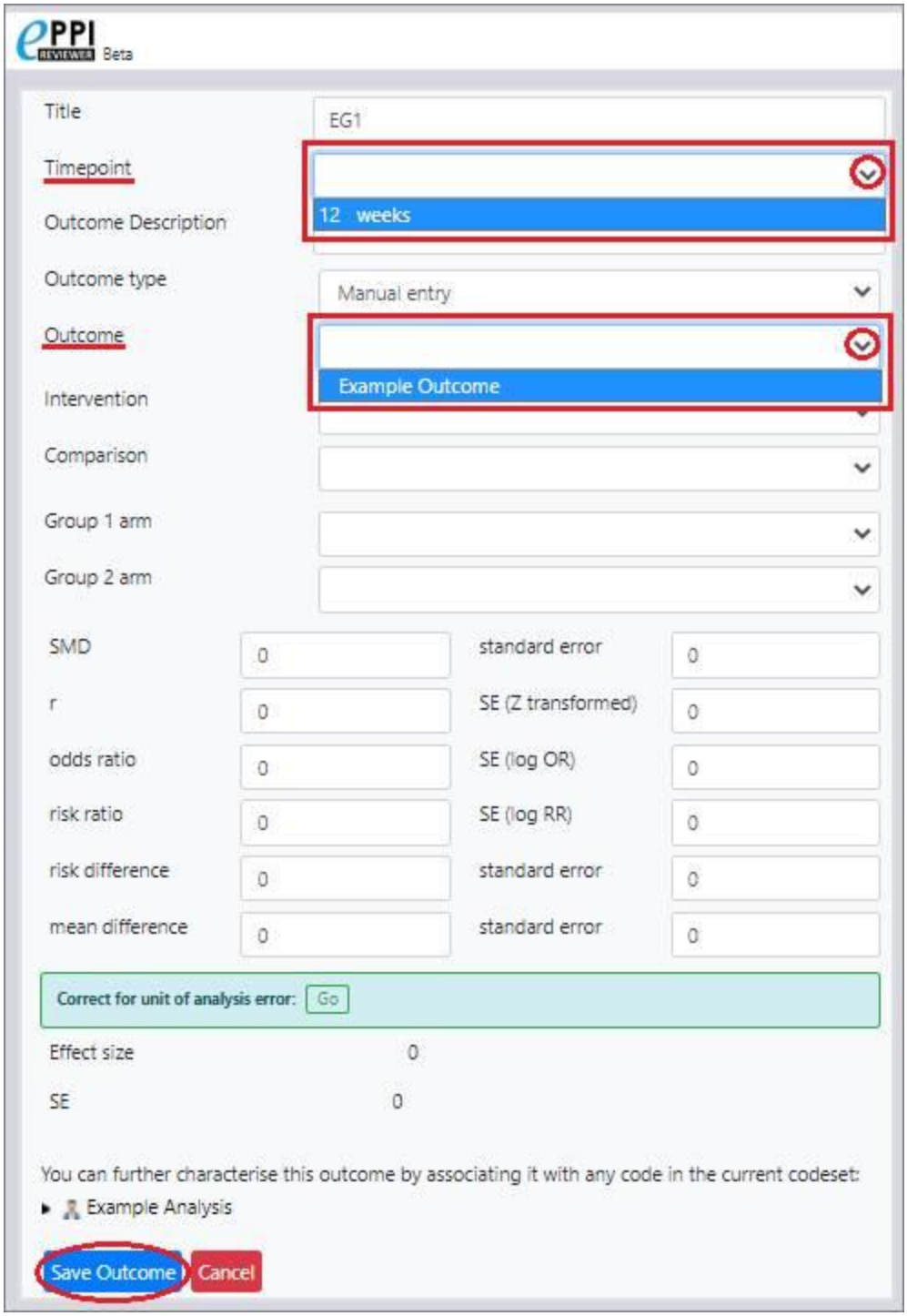
When coding a reference, select this code and you can then click the associated ***Outcomes*** button.



You can then select an existing outcome or create a new one.

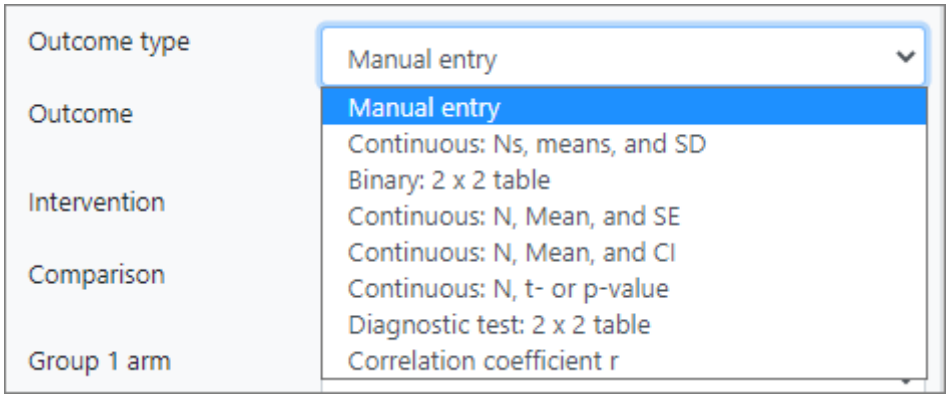
You can then select the relevant time point and associate your outcome with it. As you create new timepoints you can associate one of your Outcomes with each time point.

(Equally, you can also associate your Outcomes with a particular arm, intervention or comparison.)

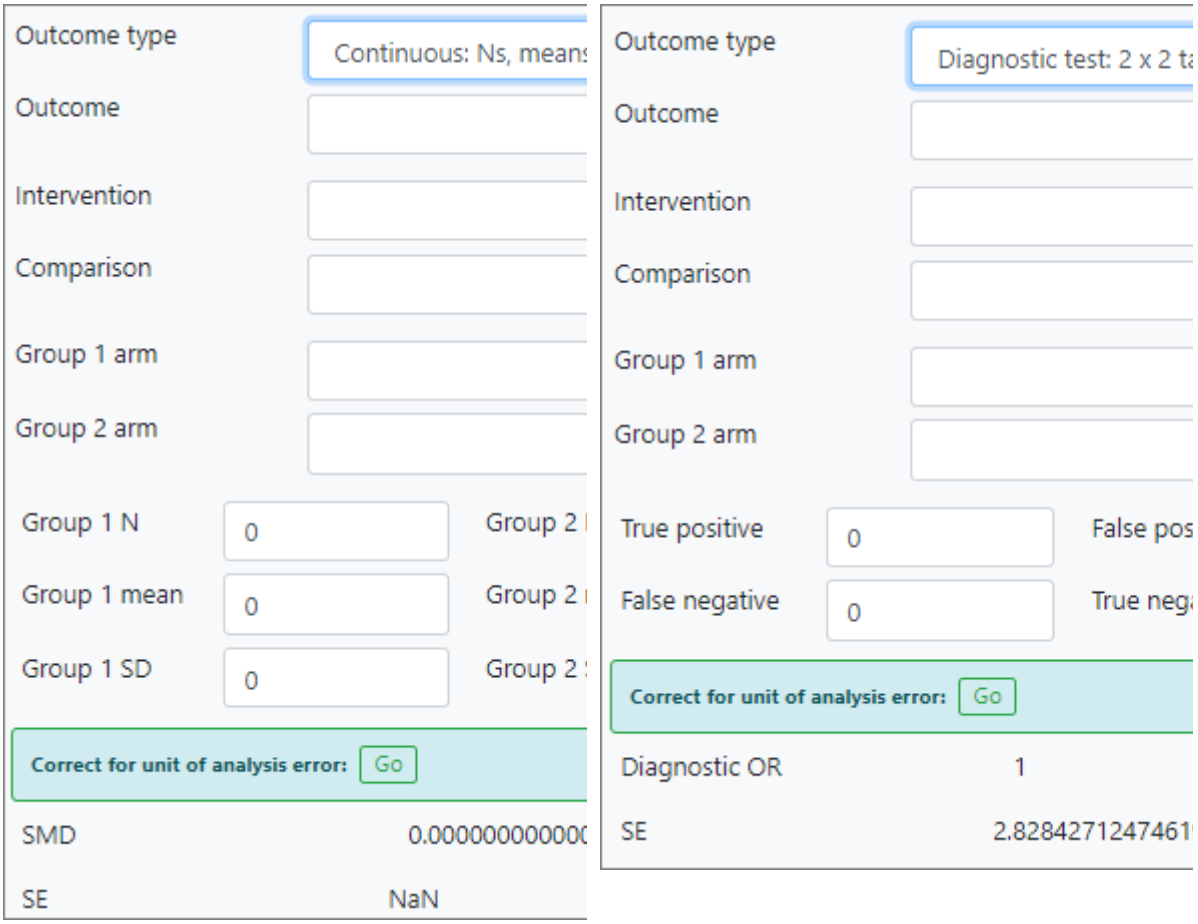


(You can also associate the outcome with any other code in the [*Example Analysis*] codeset.)

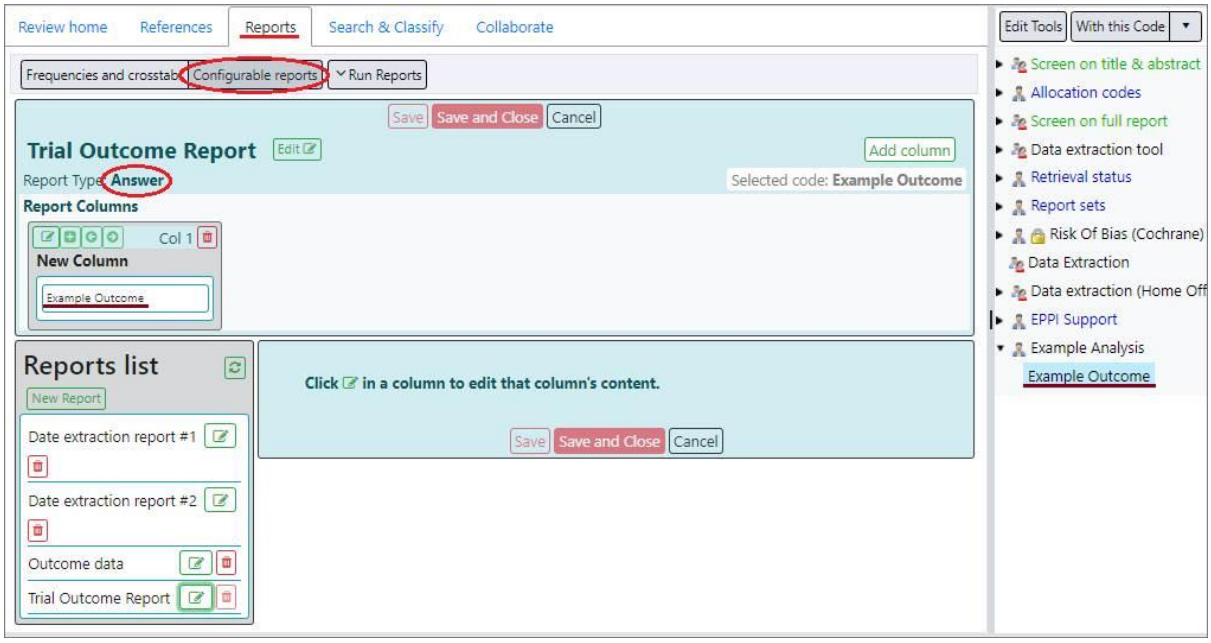
Note that you can select from a variety of Outcome types when entering an Outcome's details / values.



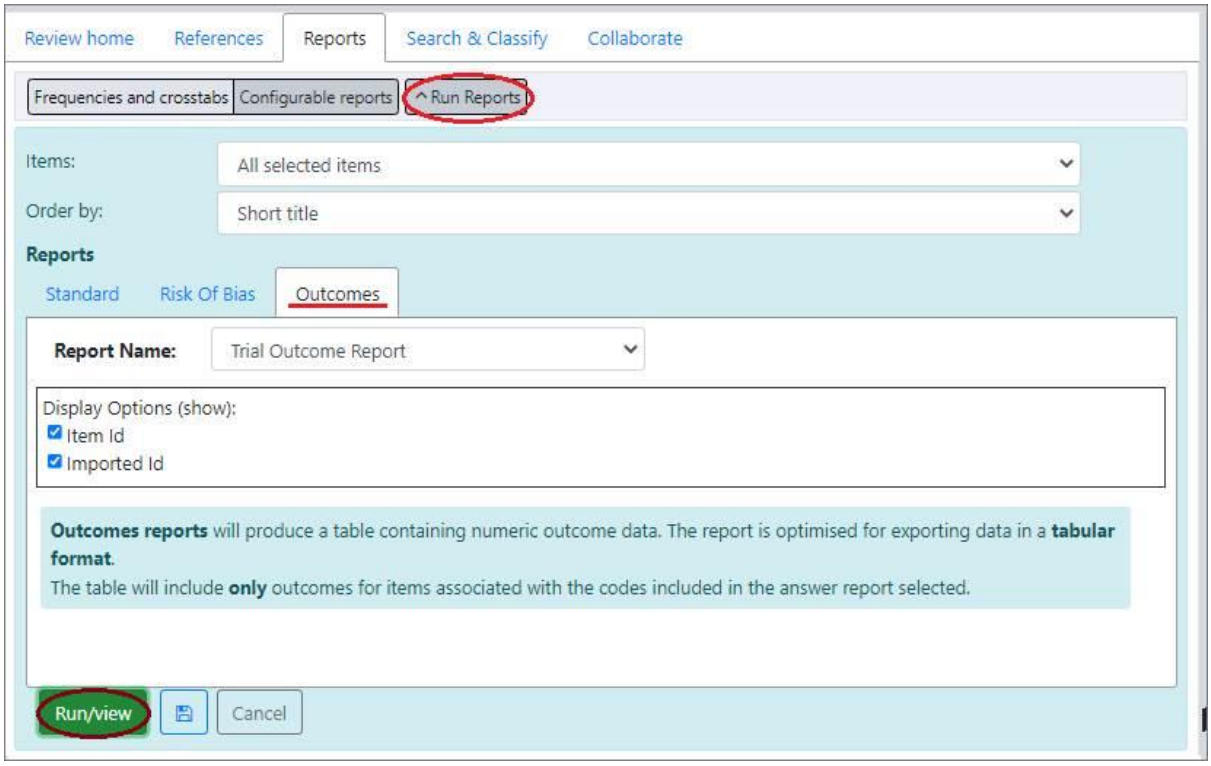
e.g.



You can report on outcomes via a ***Configurable Report***, Any outcome data will be shown in this report. (The report should be an ***Answer*** report.)



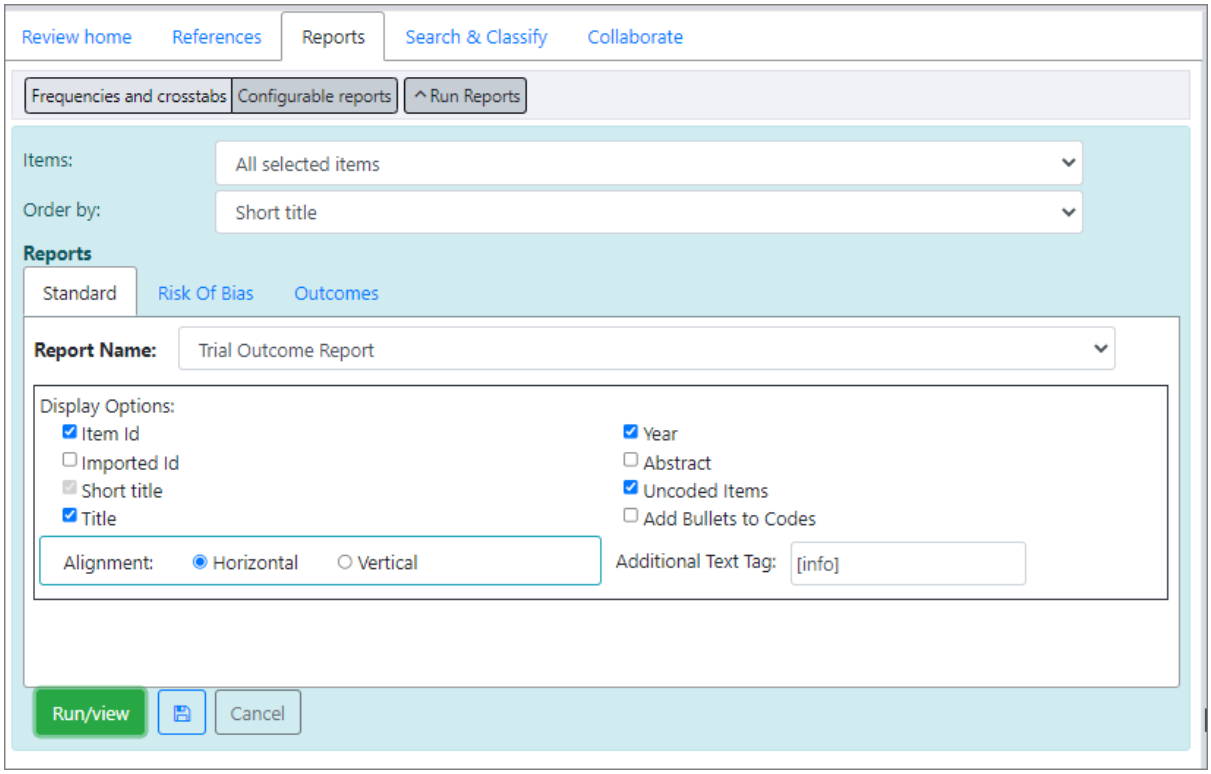
Then just ***Run*** the report and select the ***Outcomes*** tab.



You will see the values entered for the selected items. (I entered some nonsense values for an item – Arora (2017) – using my *Example Analysis* codeset and *Example Outcome* code.)

Item Id	Imported Id	Title	Example Outcome	Outcome description	Timepoint	Outcome type	Outcome	Intervention	Comparison	Arm 1	Arm 2	Data 1	Data 2	Data 3	Data 4	Data 5	Data 6	Data 7	Data 8	Data 9	Data 10	Data 11	Data 12	Data 13	Data 14	ES	SE
57997699	130973263	Arora (2017)	1	OC1		Manual entry	Example Outcome					1	2	3	4	2	2	0	0	0	0	0	0	0	0	0	0

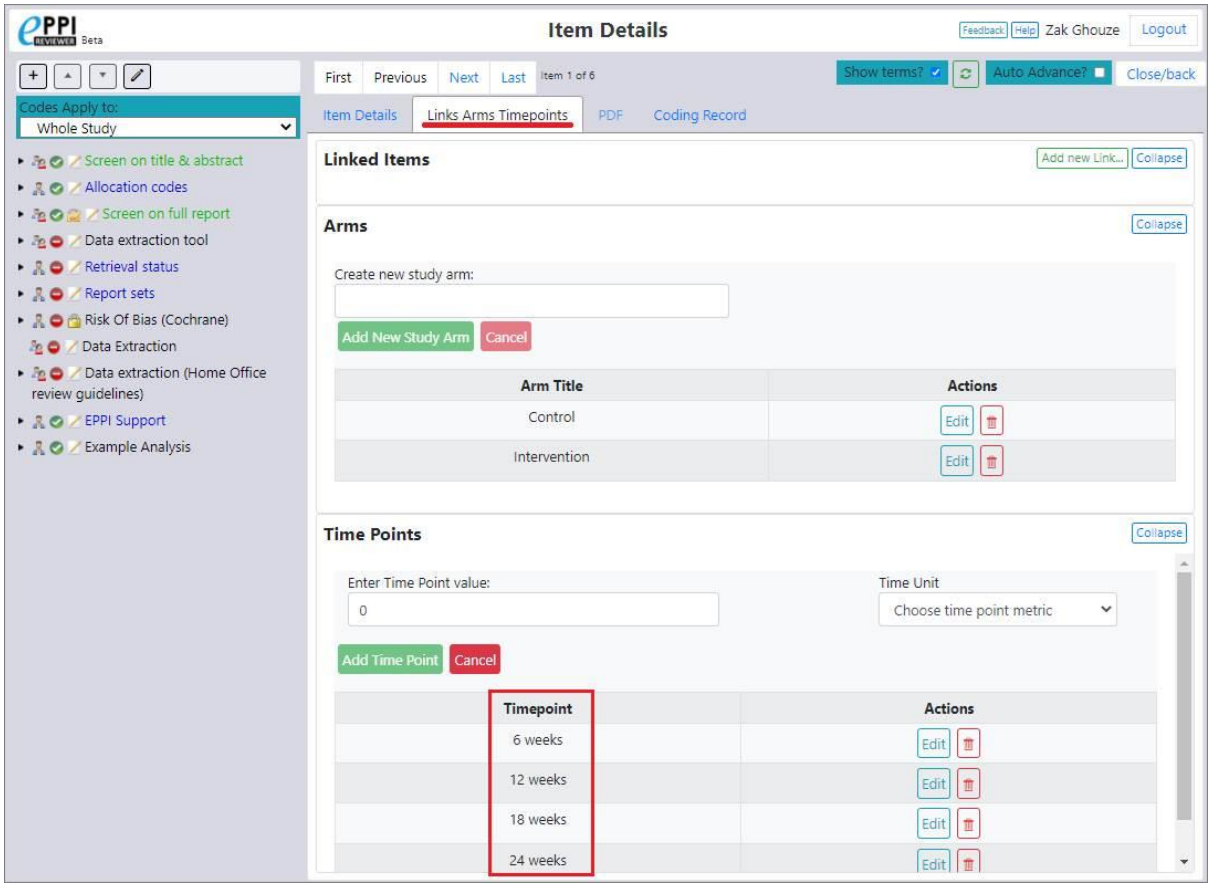
(Running the same report in the standard fashion gives you the usual reference and coding details.)



Trial Outcome Report

Item ID	Short Title	Title	Year	New Column
57997699	Arora (2017)	Cost-effectiveness analysis of telephone-based support for the management of pressure ulcers in people with spinal cord injury in India and Bangladesh,/td>	2017	**Example Outcome** Example Outcome

For this example paper, I've gone on to enter several time points (via the ***Links / Arms / Timepoints*** tab of the ***Item Details*** view.)

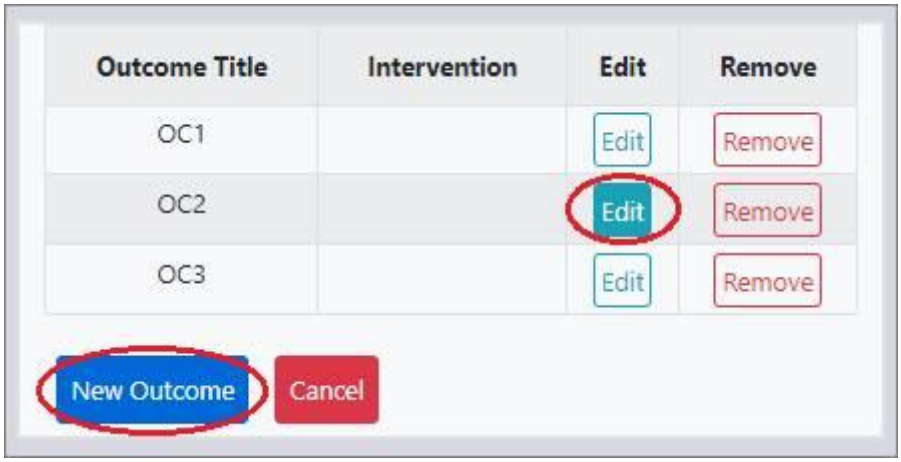


Selecting the *Example Analysis* codeset and the child code *Example Outcome*, you can then click the associated ***Outcomes*** button (present when a code is of type ***Outcome***).

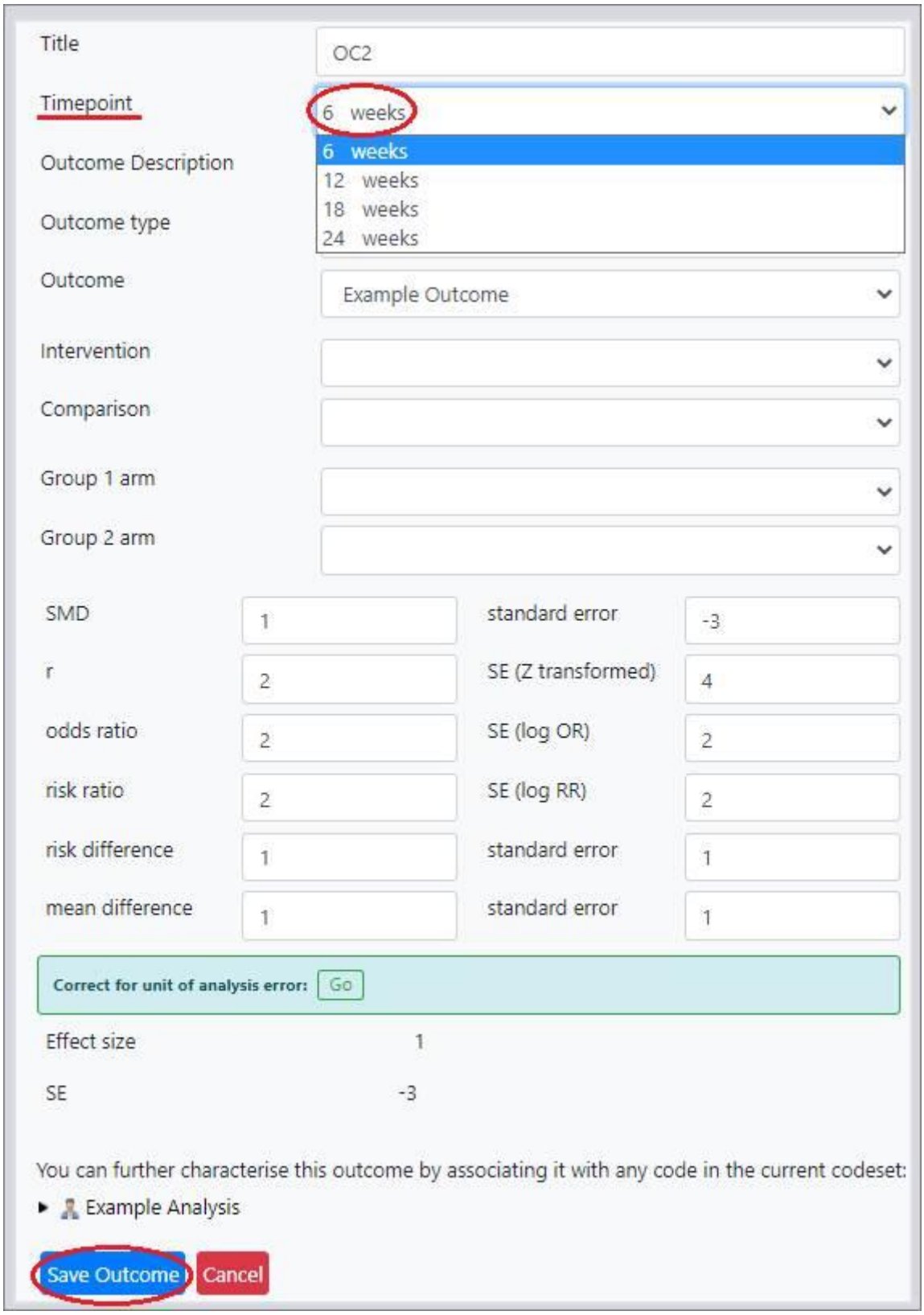
You will see the ***Outcomes*** panel.

You can add ***New Outcomes*** here.

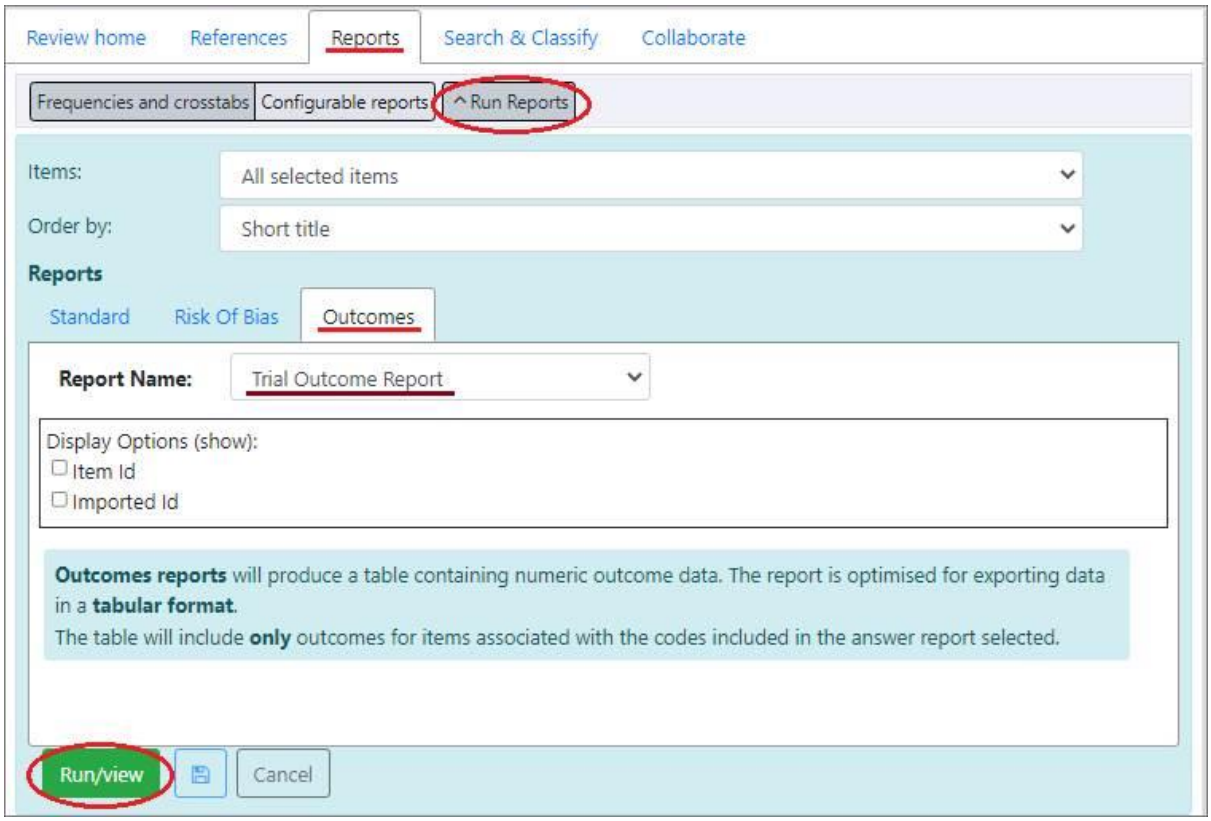
(Or if any are already present, you can use them or edit them.)



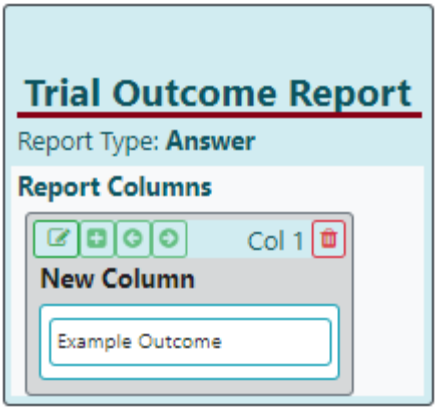
You can add data here for each outcome and associate the outcome with a particular [existing] time point.



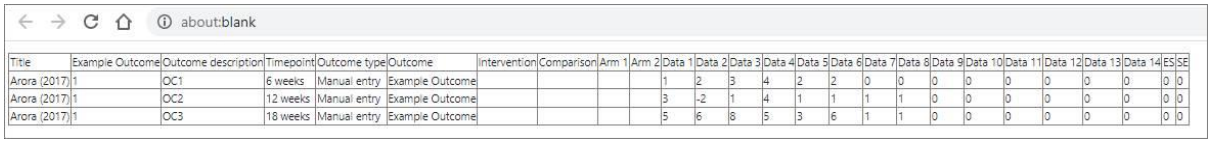
You can then report on the paper's various results at particular time points.



(I'm using an ***Answer*** report, consisting of just one column containing the *Example Outcome* code.)



So here we have the three values entered at the 3 timepoints described in our paper (or at least the 3 fictitious timepoints we have made up and associated with our paper).


about:blank

Title	Example Outcome	Outcome description	Timepoint	Outcome type	Outcome	Intervention	Comparison	Arm 1	Arm 2	Data 1	Data 2	Data 3	Data 4	Data 5	Data 6	Data 7	Data 8	Data 9	Data 10	Data 11	Data 12	Data 13	Data 14	ES	SE
Arora (2017)	1	OC1	6 weeks	Manual entry	Example Outcome					1	2	3	4	2	2	0	0	0	0	0	0	0	0	0	0
Arora (2017)	1	OC2	12 weeks	Manual entry	Example Outcome					3	-2	1	4	1	1	1	1	0	0	0	0	0	0	0	0
Arora (2017)	1	OC3	18 weeks	Manual entry	Example Outcome					5	6	8	5	3	6	1	1	0	0	0	0	0	0	0	0

We can opt to include IDs etc.

Item Id	Imported Id	Title	Example Outcome	Outcome description	Timepoint	Outcome type	Outcome	Intervention	Comparison	Arm 1	Arm 2	Data 1	Data 2	Data 3	Data 4	Data 5	Data 6	Data 7	Data 8	Data 9	Data 10	Data 11	Data 12	Data 13	Data 14	ES	SE
57997699	130973263	Arora (2017)	1	OC1	6 weeks	Manual entry	Example Outcome					1	2	3	4	2	2	0	0	0	0	0	0	0	0	0	0
57997699	130973263	Arora (2017)	1	OC2	12 weeks	Manual entry	Example Outcome					3	-2	1	4	1	1	1	1	0	0	0	0	0	0	0	0
57997699	130973263	Arora (2017)	1	OC3	18 weeks	Manual entry	Example Outcome					5	6	8	5	3	6	1	1	0	0	0	0	0	0	0	0

How you enter your numbers would depend on how much further meta-analysis are you intending to do.

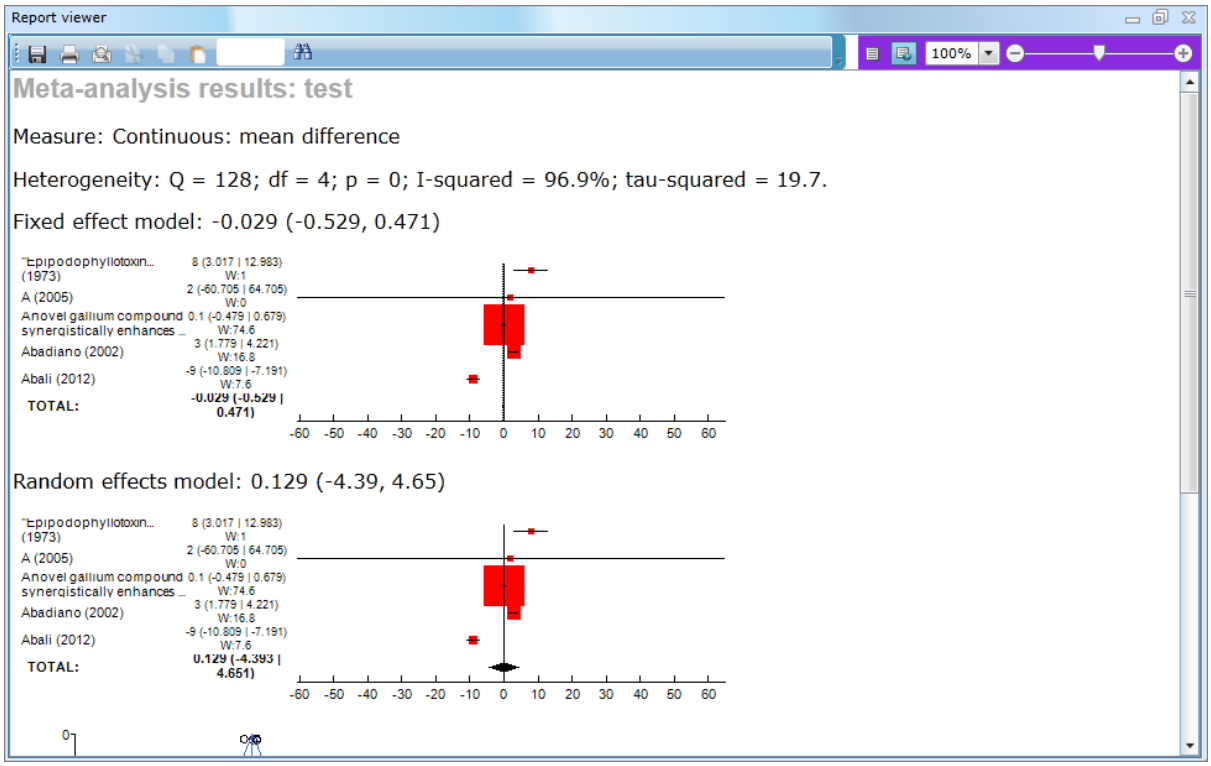
Note that statistical data can be entered into ER Web, and Outcome reports can be produced, but for full meta-analysis you would need to use the earlier version of EPPI Reviewer - ER 4. (We have yet to complete the coding for meta-analysis in ER Web.)

You can still open the same reviews in either version, so could use ER 4 for your meta-analysis and ER Web for everything else.

The only drawback of ER 4 is that was developed using slightly older web technology (Microsoft's Silverlight). This no longer runs on some newer Apple Mac operating systems and many newer browsers.

If you are using a PC, it is quite easy to add the Chrome extension IE Tab and access ER 4 using that. Alternatively, you can use IE Mode in Microsoft's Edge browser. (You may still have Internet Explorer on your PC, in which case you can install Microsoft's browser extension Silverlight and then run ER 4. The final possibility is to use a legacy browser like Waterfox Classic or Firefox ESR v52.9.0. See https://eppi.ioe.ac.uk/cms/Default.aspx?tabid=3848#ER4SetUp for further details. We have a brief document on running ER 4 available here.

ER 4 will give you access to a lot more statistical functions and analysis e.g.



You can find further information on meta-analysis within ER 4 in the manual at https://eppi.ioe.ac.uk/cms/Portals/35/ER4_8_0%20user%20manual.pdf#page=97. It may be worth looking at this anyway, as it will give you further information on the basics of entering Outcome data in ER Web too. (Though the user interface has changed somewhat, the underlying principles remain the same.)

The main consideration at the moment is to consider how you want to report on your review (whether you want to include the outcome measures) and whether you want to do further meta-analysis. (Do your papers give comparable numbers that you can use together or analyse together. If they are all measuring different things and unrelated in the way the studies were carried out, you may not be able to carry out meta-analysis.)

We generally suggest creating a trial codeset structure, entering details from one or two studies, then seeing if reporting on this provides what you want.