



PRISMA Flow Diagram

How to use it for
literature reviews



What this session will cover

What is the PRISMA Flow Diagram?

Where can it be accessed from?

Who can use it?

How can it be used?





What is PRISMA?

- Preferred **R**eporting **I**tems for **S**ystematic **R**eviews and **M**eta-**A**nalyses
- Evidence-based minimum set of items for reporting systematic reviews
- PRISMA has a range of parts of which the flow diagram is only one
 - PRISMA 2020 Checklist
 - PRISMA 2020 flow diagram
 - PRISMA 2020 Statement
 - PRISMA 2020 Explanation and Elaboration



Where can it be accessed from?

The PRISMA website has a downloadable version of the flow diagram

If you are doing a full systematic review you can access the other documents there

PRISMA home page: <https://prisma-statement.org/>

PRISMA Statement home page (for the flow diagram):

<https://prisma-statement.org/PRISMAStatement/>



Welcome to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) website!

PRISMA is an evidence-based minimum set of items for reporting in systematic reviews and meta-analyses. PRISMA primarily focuses on the reporting of reviews evaluating the effects of interventions, but can also be used as a basis for reporting systematic reviews with objectives other than evaluating interventions (e.g. evaluating aetiology, prevalence, diagnosis or prognosis).

Who should use PRISMA?

- Authors: PRISMA aims to help authors improve the reporting of systematic reviews and meta-analyses.
- Journal Peer reviewers and editors: PRISMA may also be useful for critical appraisal of published systematic reviews, although it is not a quality assessment instrument to gauge the quality of a systematic review.

News Feed

PRISMA Website re-design

The PRISMA website underwent a much-needed update in October 2015 to update the content of the website. We have updated the look of the site and added the PRISMA extensions, translations, and information about review protocols.

PRISMA Extensions!

Several [PRISMA extensions](#) have been published in 2015 so far.

- [PRISMA-P](#) for developing review protocols was published in January 2015 in *Systematic Reviews* and the *BMJ*.
- [PRISMA-IPD](#) (individual patient data) was published in *JAMA* in April
- [PRISMA-NMA](#) (Network Meta-Analyses) was published in *Annals of Internal Medicine* in June

These are in addition to the PRISMA Abstract and Equity extensions, all found on the PRISMA website, [here](#).

[Read more...](#)

Key Documents

- [PRISMA 2020 Checklist](#)
- [PRISMA 2020 flow diagram](#)
- [PRISMA 2020 Statement](#)
- [PRISMA 2020 Explanation and Elaboration](#)



PROSPERO

International prospective register of systematic reviews



equator
network

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Chris Pritchard @chriscritchard · Jul 3



If you want to check out the newest features, head on over to: estech.shinyapps.io/PRISMA_flowdia..., we now support reporting of individual databases and registers, meaning you



Who can use it?

- Anyone searching for research papers in a systematic fashion can use the diagram
- If it's a full, 12-18 month systematic review you would generally use all / multiple parts i.e., the diagram, the checklist, the extensions
- For an undergraduate or postgraduate systematised literature review the flow diagram is enough to record your process – anything else would overcomplicate things



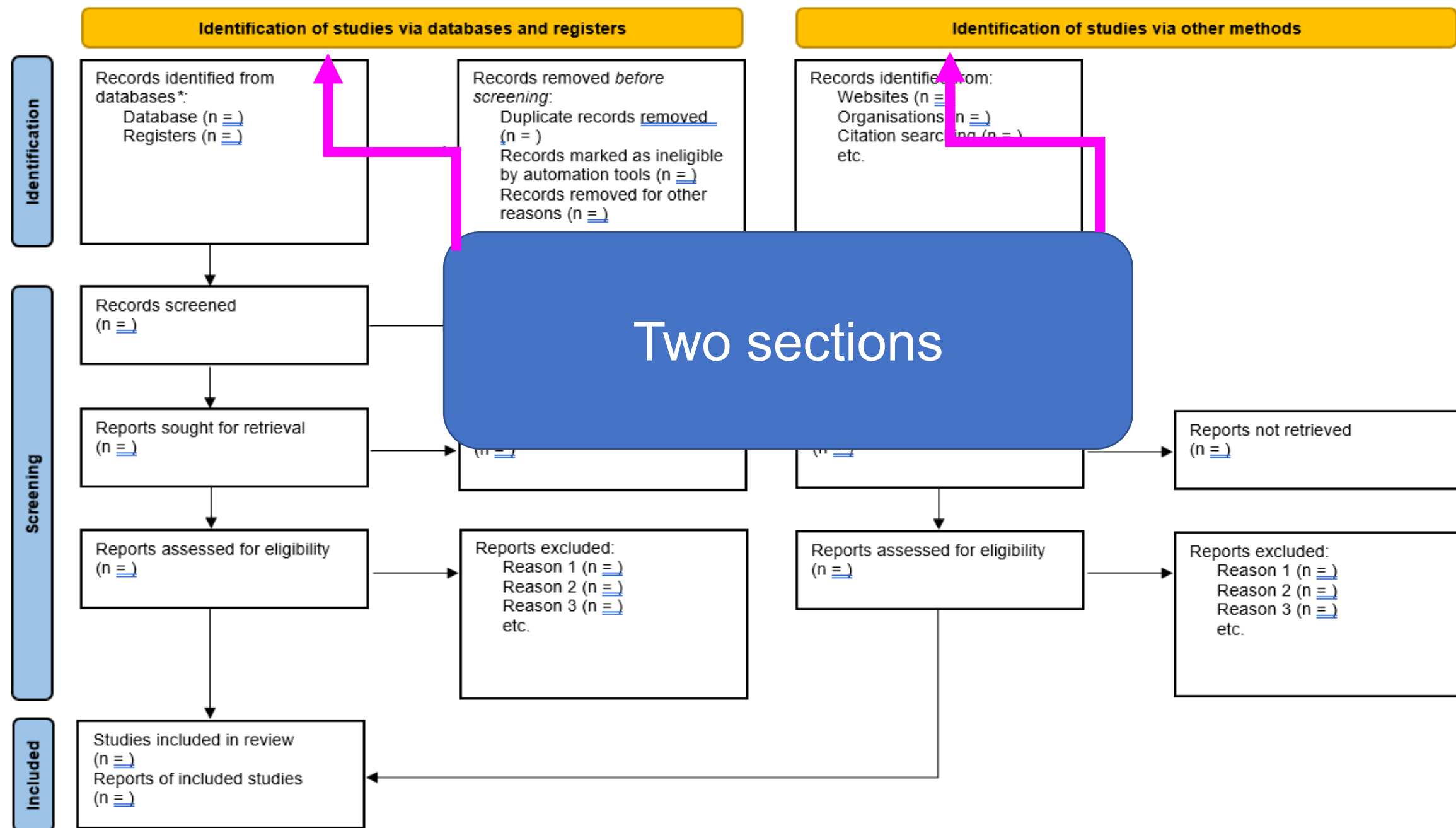
How can it be used?

- Has different sections and boxes
- Some can be modified
- Some must be left as they are
- An image search for PRISMA flow diagram will give you examples of how it's been / can be used

Structure of the diagram



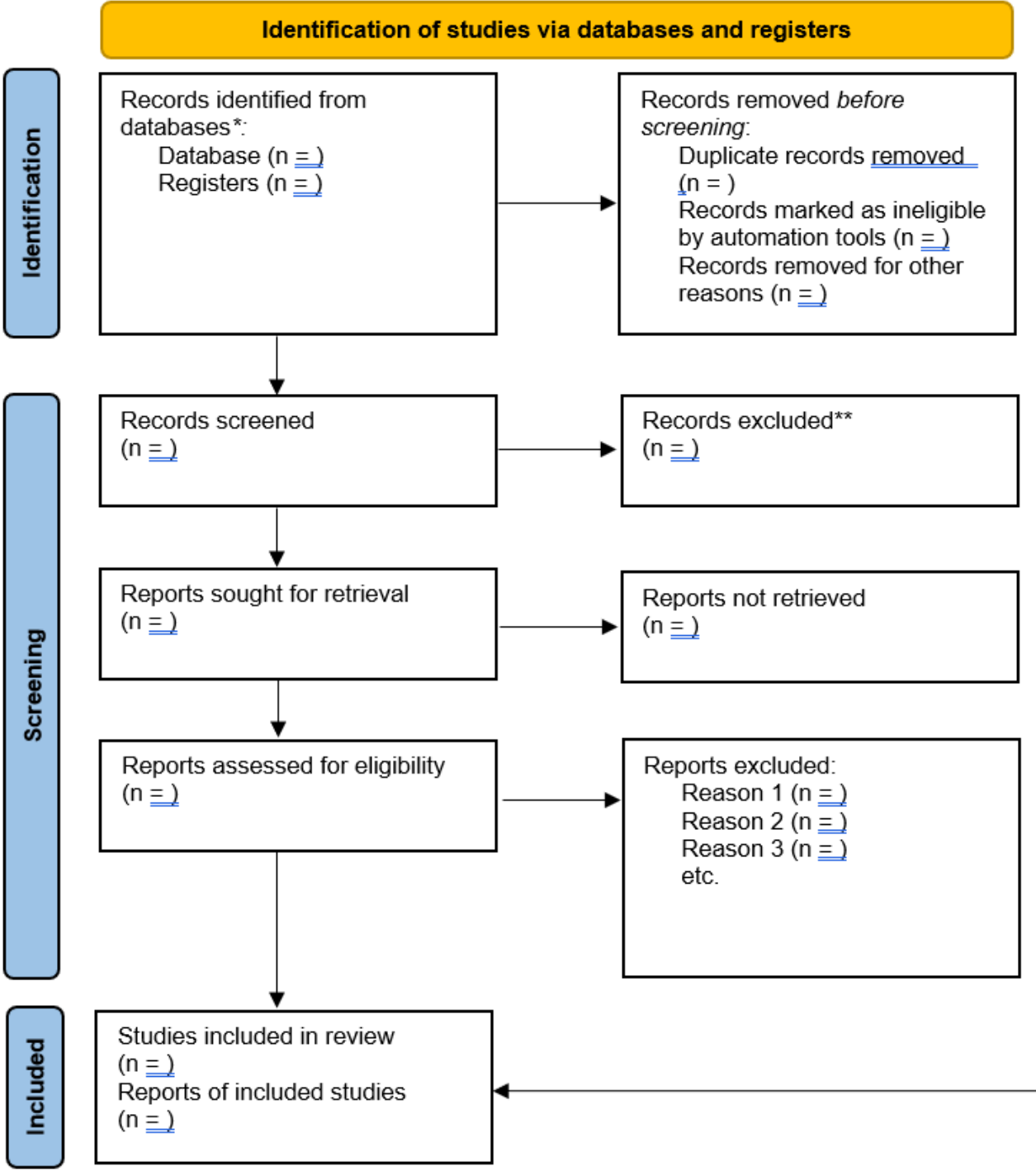
PRISMA 2020 flow diagram for new systematic reviews which included searches of databases, registers and other sources





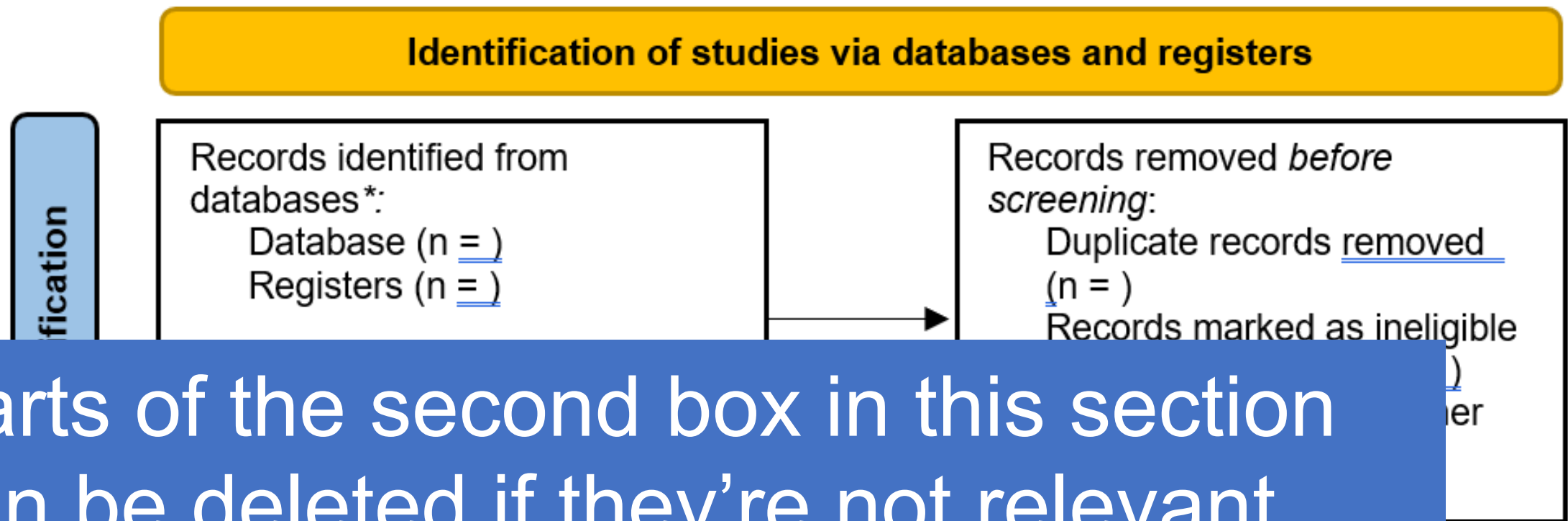
Section one has three parts

Identification
Screening
Included





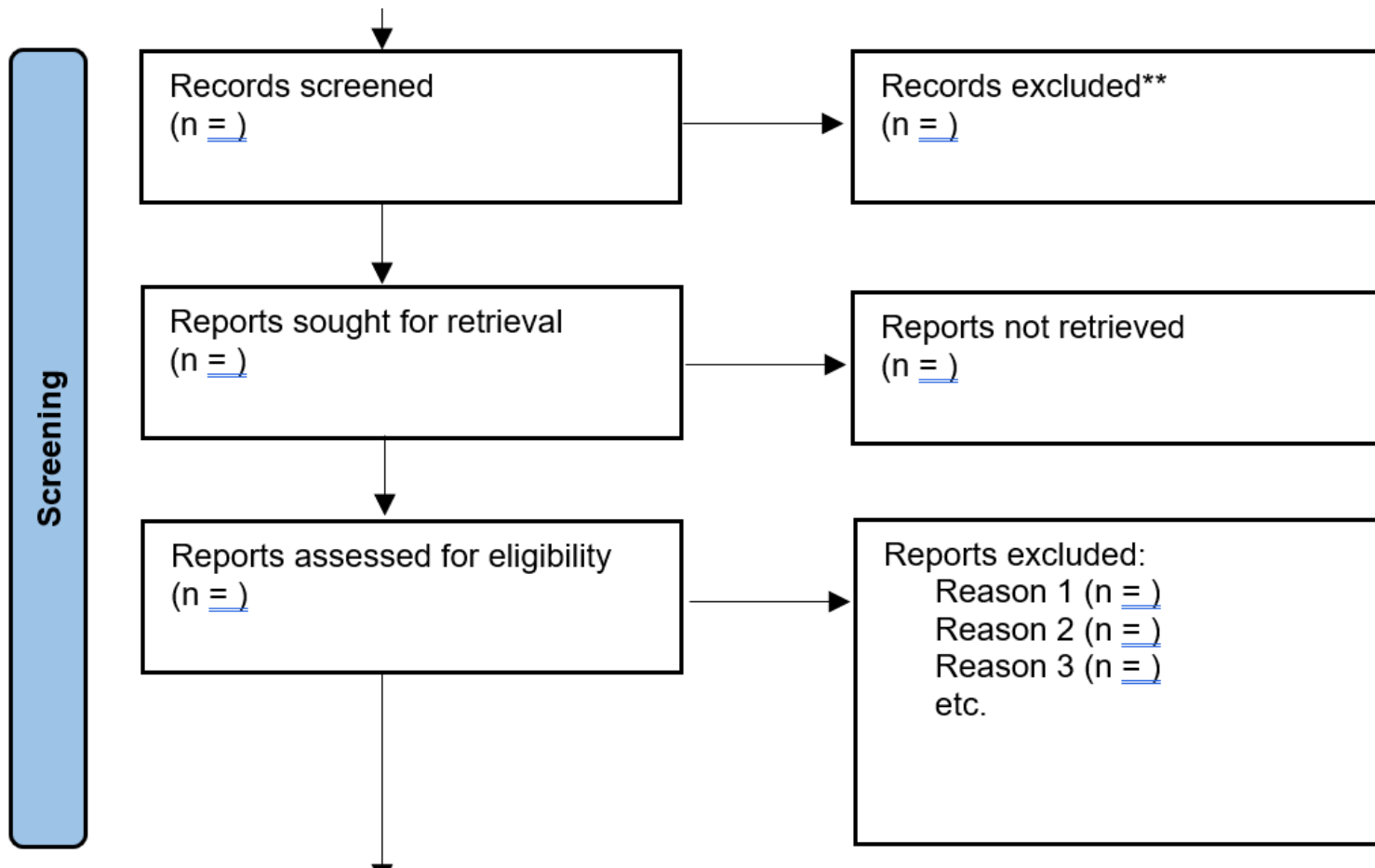
Identification (left-side of diagram)



Parts of the second box in this section can be deleted if they're not relevant



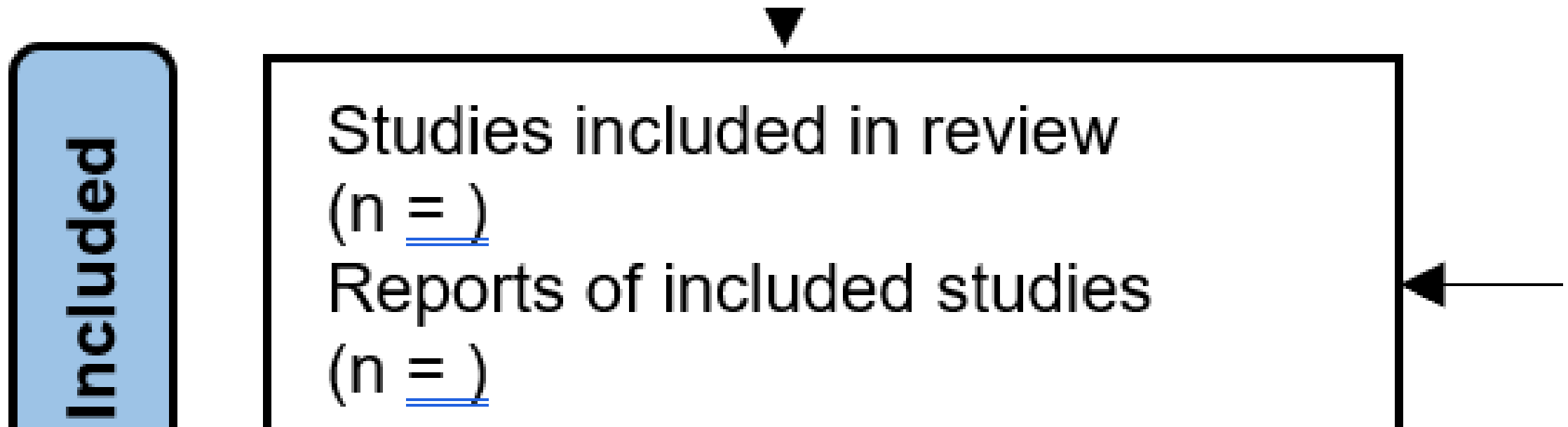
Screening (left-side of diagram)



The screening section is important as this is where the bulk of your results will be excluded and also where you'll give some justification as to **why** you've chosen to remove articles



Included (left and right-side of diagram uses this)



For most people, this section will refer to articles, rather than studies and this is because most people won't be doing full, long-term systematic reviews.



Identification (right-side of diagram)

Identification of studies

Records identified from:

Websites (n =)

Organisations (n =)

Citation searching (n =)

etc.

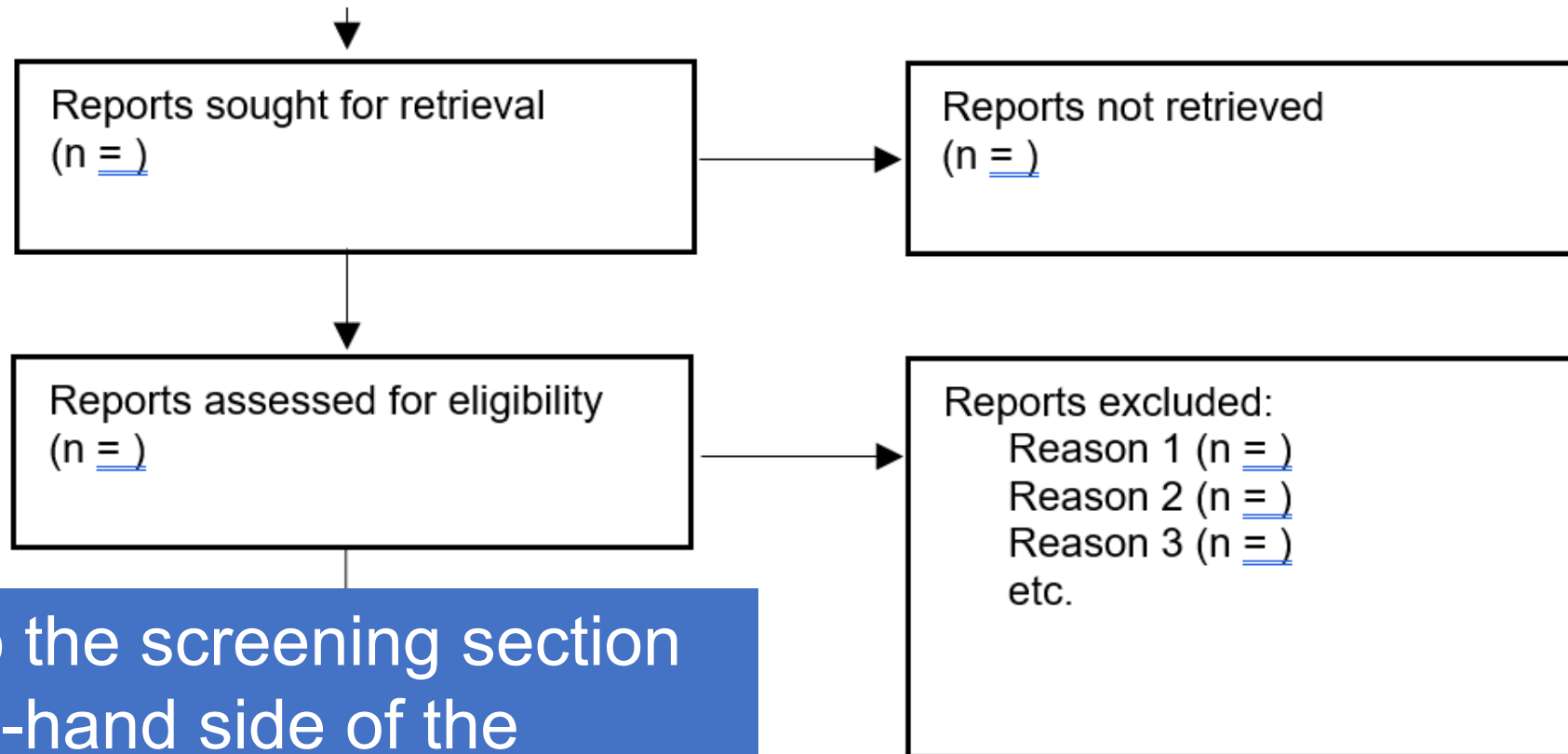
Citation searching = how many other papers have cited an article of interest

Many databases will tell you this information

You can use Google Scholar for a broader view of citations



Screening (right-side of diagram)



Similar to the screening section
of the left-hand side of the
diagram



How it can look 1

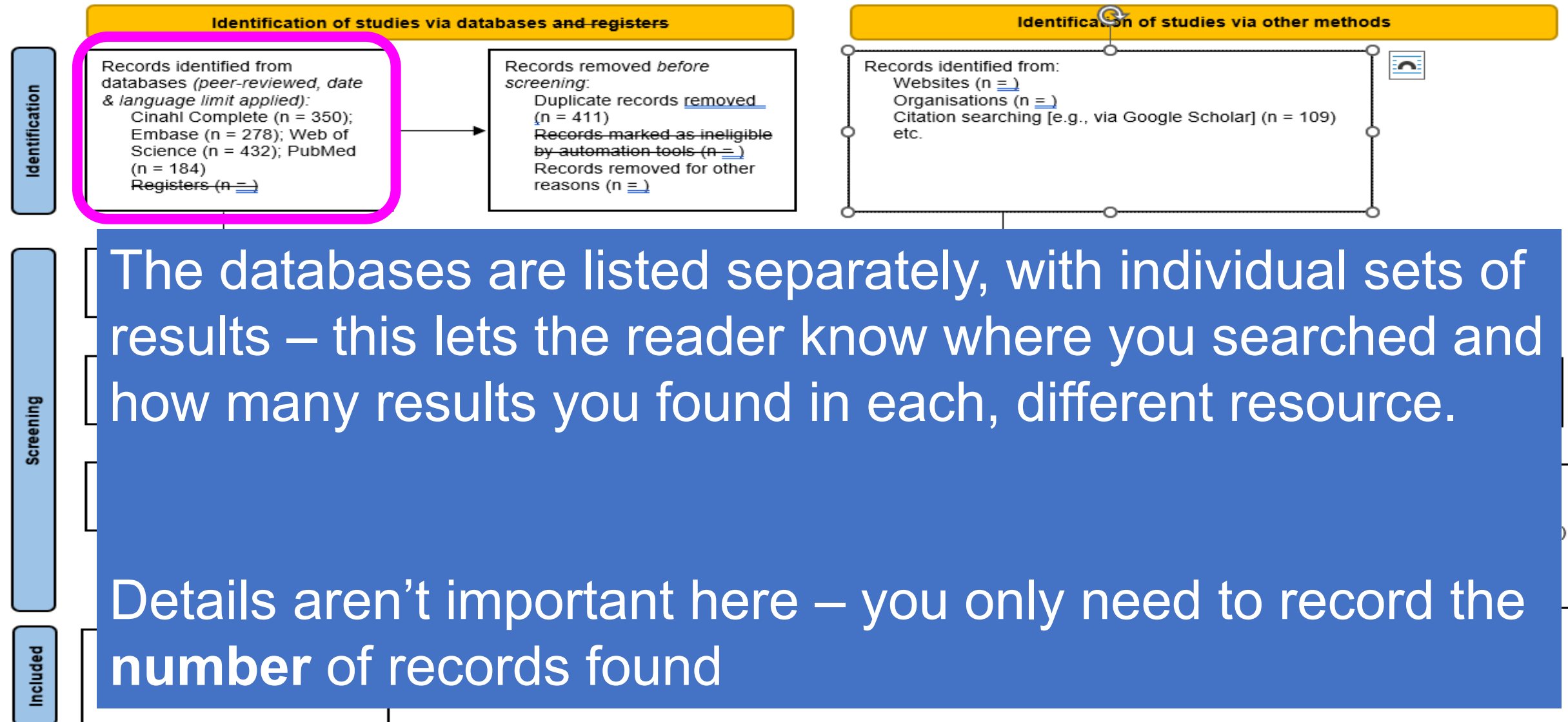
Identification



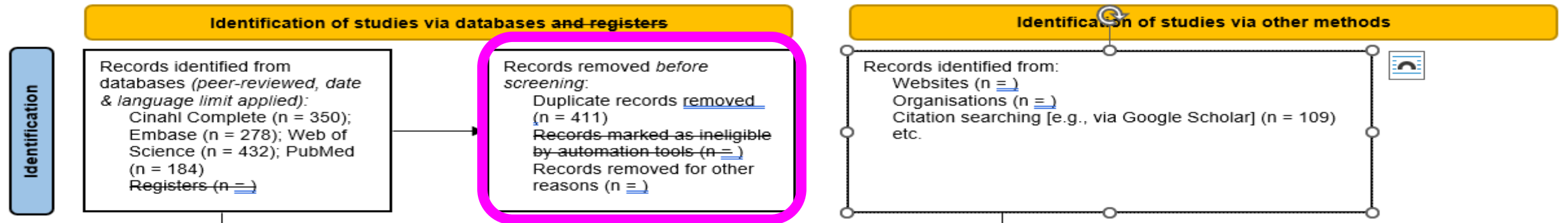
In the 'How it can look' sections...

- An example of how it *can* look
- Not definitive – huge number of ways the diagram can be used
- Search online for images of the PRISMA flow diagram (focusing on the new version) to see how people have used it / the variety of ways it can be used

Identification box 1 – databases searched



Identification box 2 – duplicates



If you don't need one of the options – you can delete it

Where I've used a strikethrough in the box, I would delete this part from my final PRISMA

How it can look 2

Screening





Screening section

Identification of studies via databases and registers

Records identified from databases (*peer-reviewed, date & language limit applied*):
Cinahl Complete (n = 350);
Embase (n = 278); Web of Science (n = 432); PubMed (n = 184)
Registers (n =)

Records removed *before screening*:
Duplicate records removed (n = 411)
Records marked as ineligible by automation tools (n =)
Records removed for other reasons (n =)

Identification of studies via other methods

Records identified from:
Websites (n =)
Organisations (n =)
Citation searching [e.g., via Google Scholar] (n = 109)
etc.

Identification

Screening

Included

Records screened (n = 833)

Records excluded** (n = 601)

Reports **Articles** sought for retrieval (n = 232)

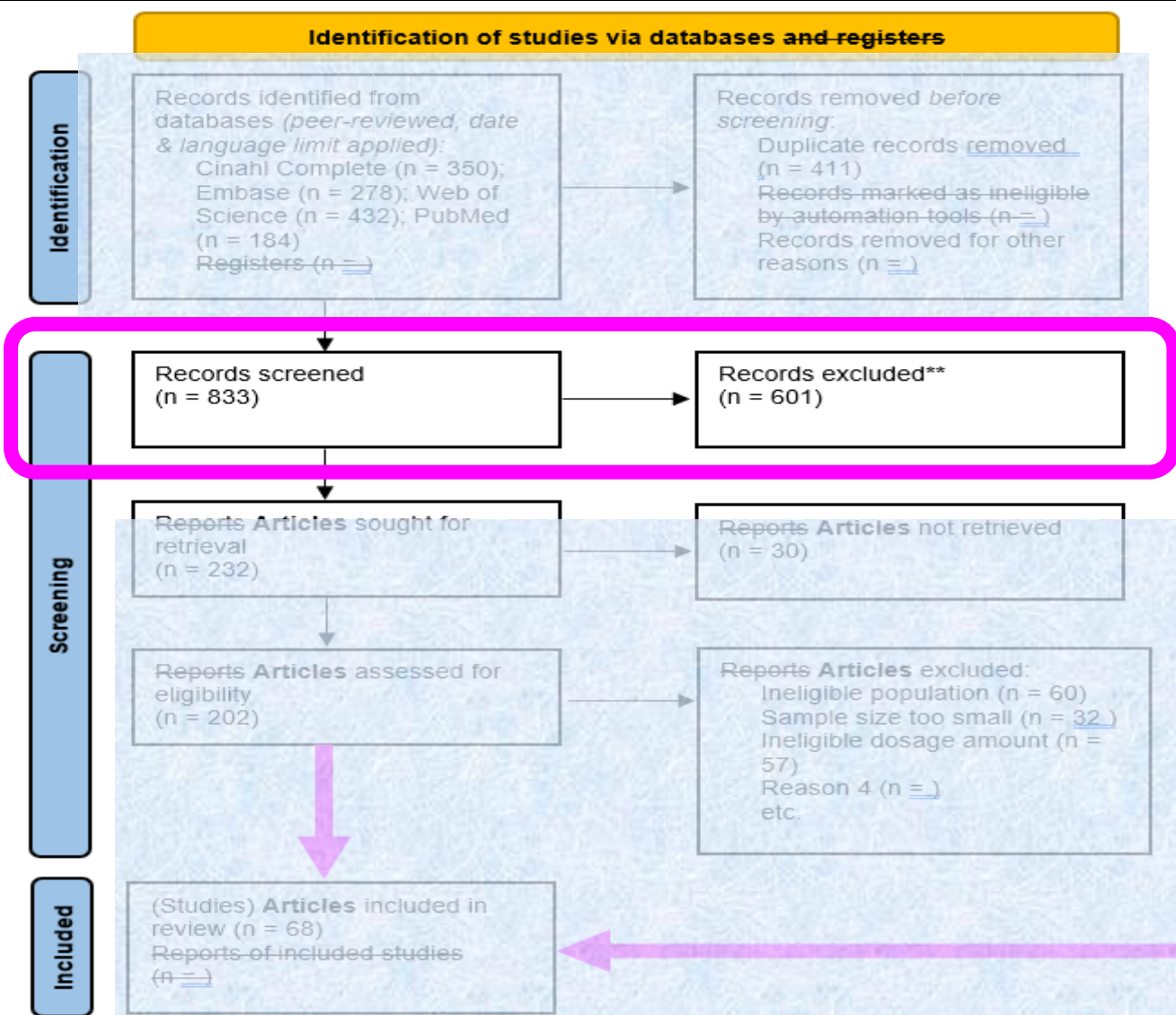
Reports **Articles** not retrieved (n = 30)

Reports **Articles** assessed for eligibility (n = 202)

Reports **Articles** excluded:
Ineligible population (n = 60)
Sample size too small (n = 32)
Ineligible dosage amount (n = 57)
Reason 4 (n =)
etc.

The second section is where you record the numbers associated with screening your results

Screening section – row 1

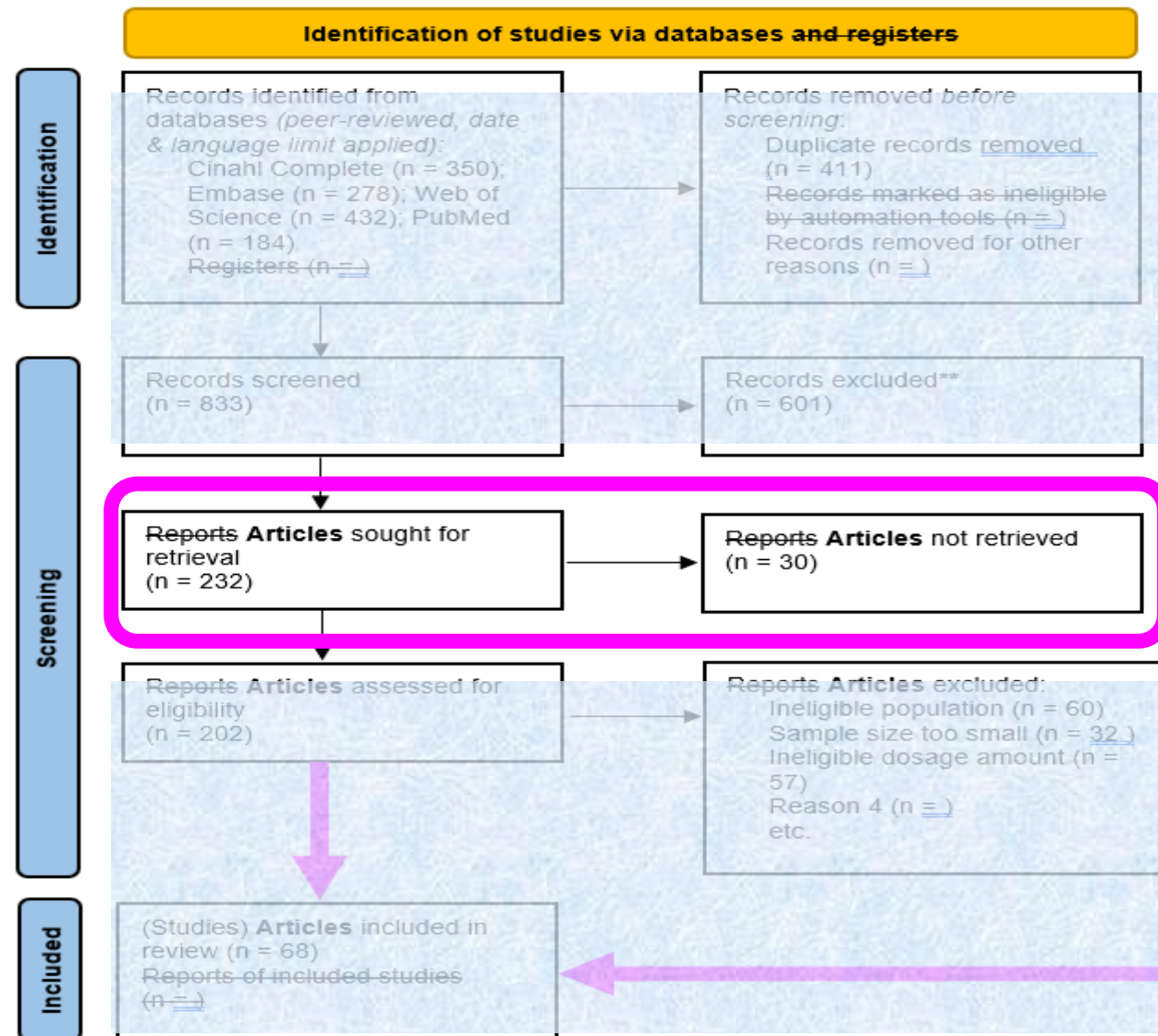


At this point, you don't need to read the articles in full – just the description of the content

Most articles can be excluded at this point / in this way

etc.

Screening Section - row 2

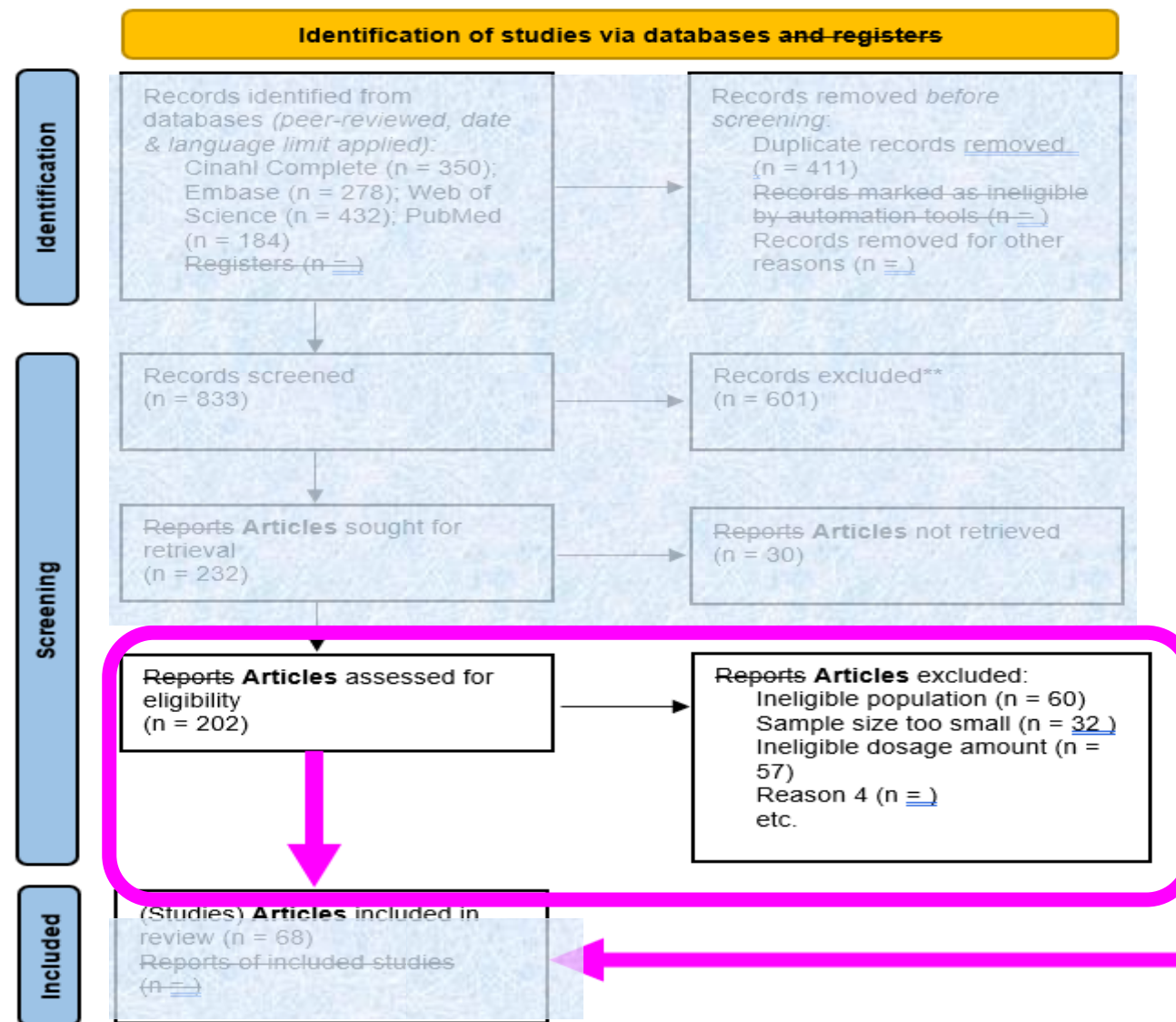


The second row refers to the number of articles you're aiming to get hold of as full-text resources

Here, I've crossed out 'Reports' and replaced it with 'Articles'



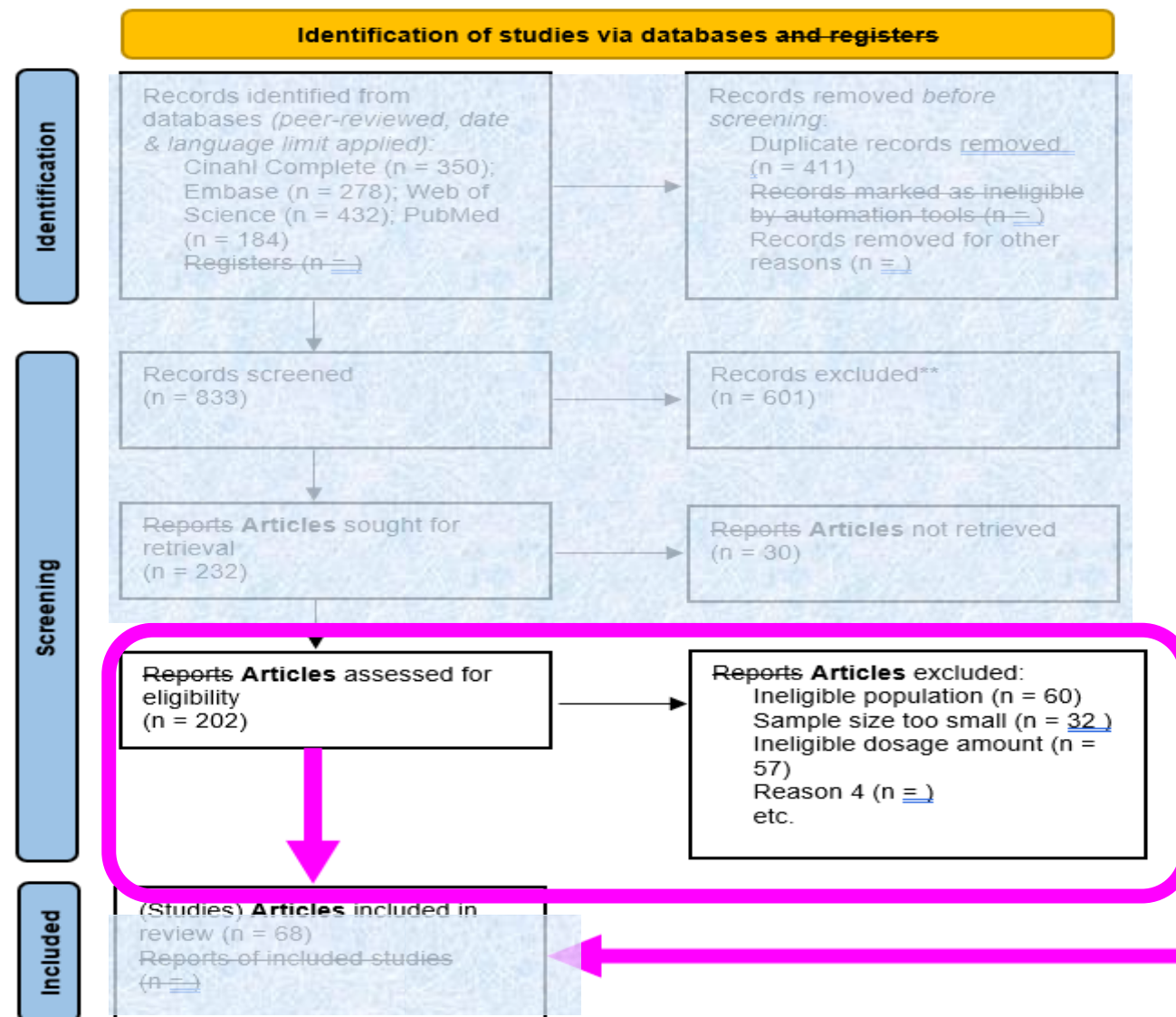
Screening Section row 3



The final row in section two is where you record the number of articles that you have read in full

If you reject any articles at this point, you will need to give a reason, not just record the number

Screening Section – row 3.2



Because you have spent valuable time reading an article that you initially thought was useful, you need to give a **brief** justification for why you've decided, after all of that effort, to exclude that paper

A few words are all you need – not an essay

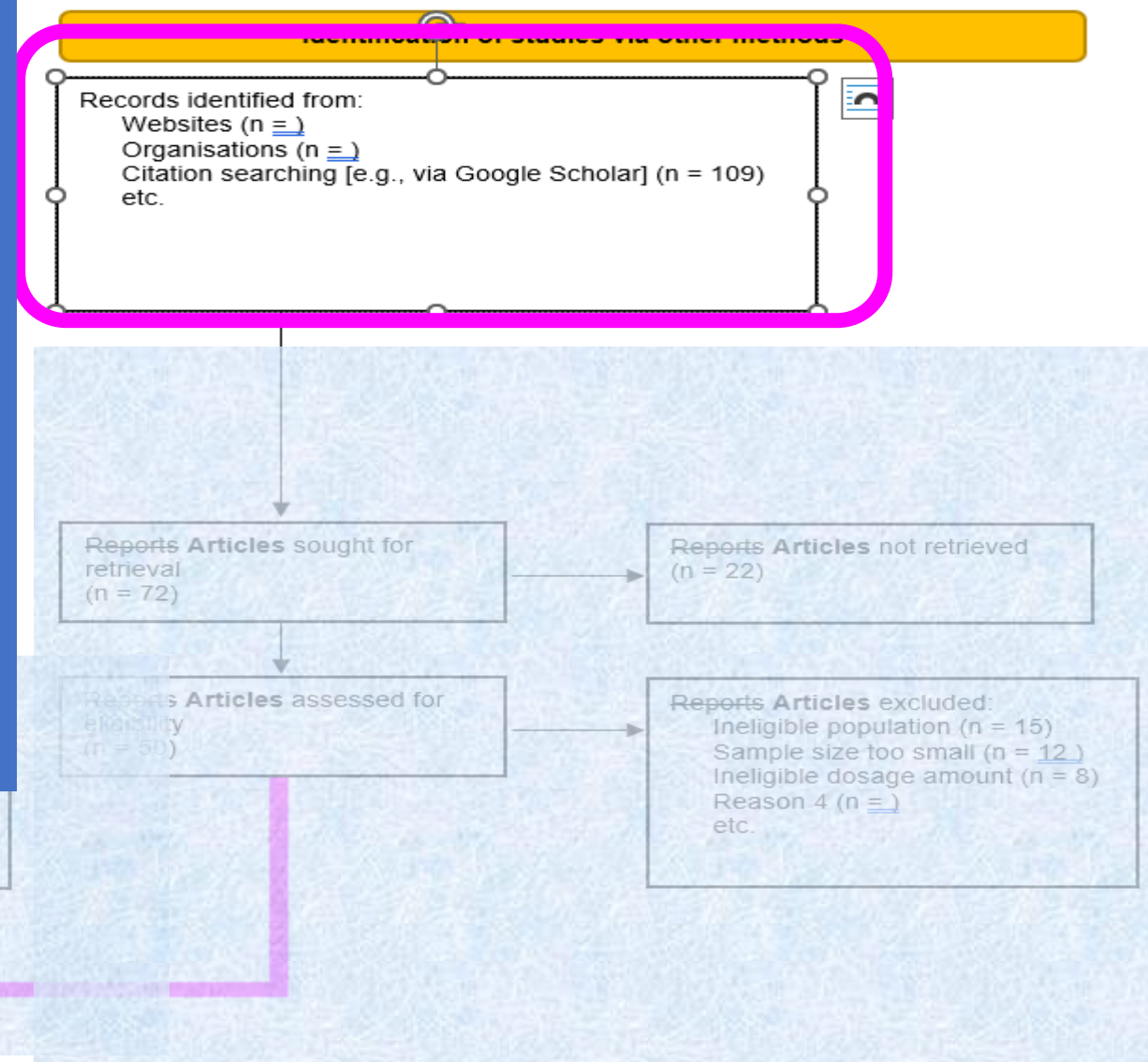


Left-hand side, Identification Section

Items you've found on websites
i.e., professional body sites

Material (print or online) from
organizations e.g., WHO

Citation searching – Google
Scholar is good for this

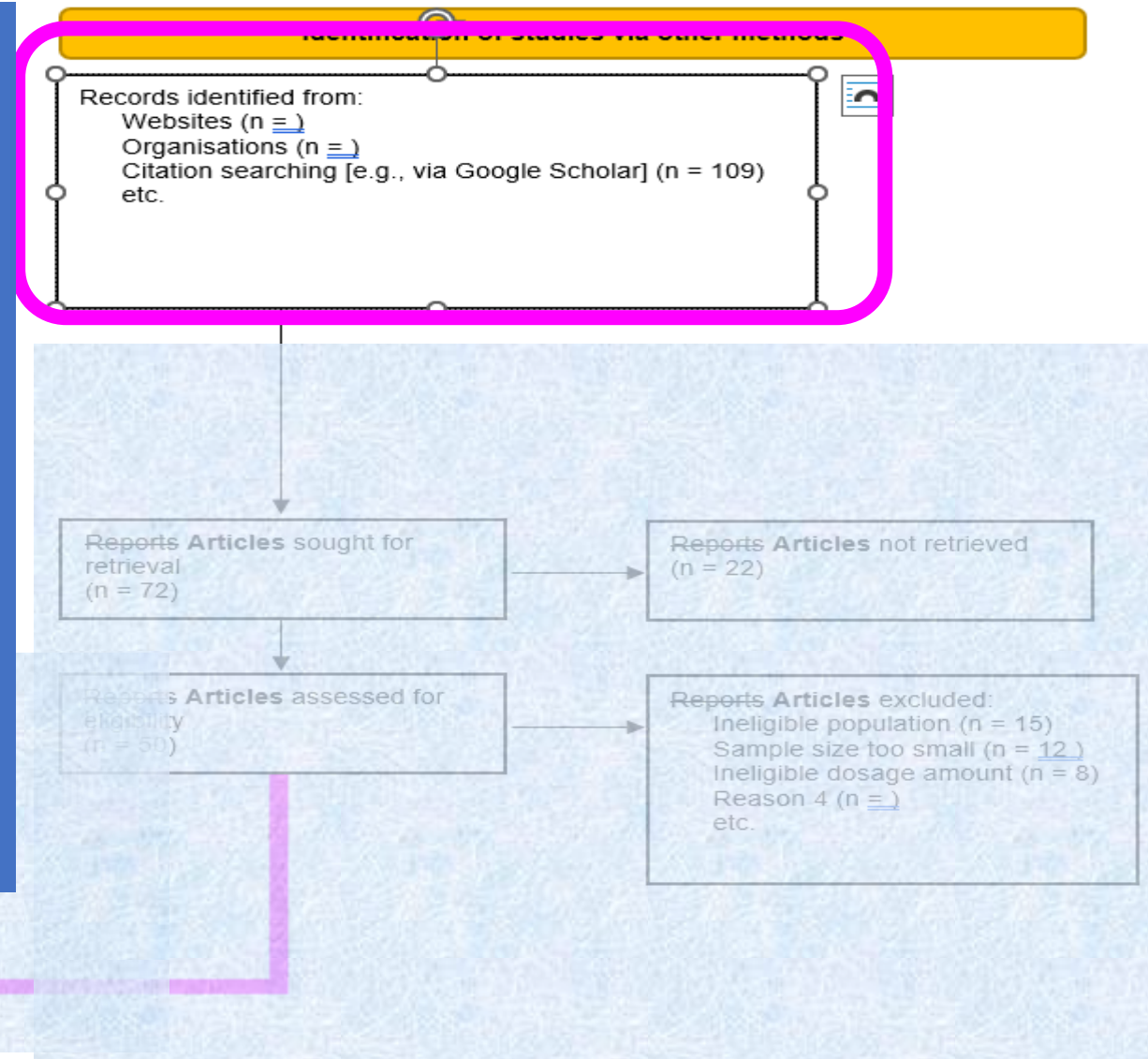




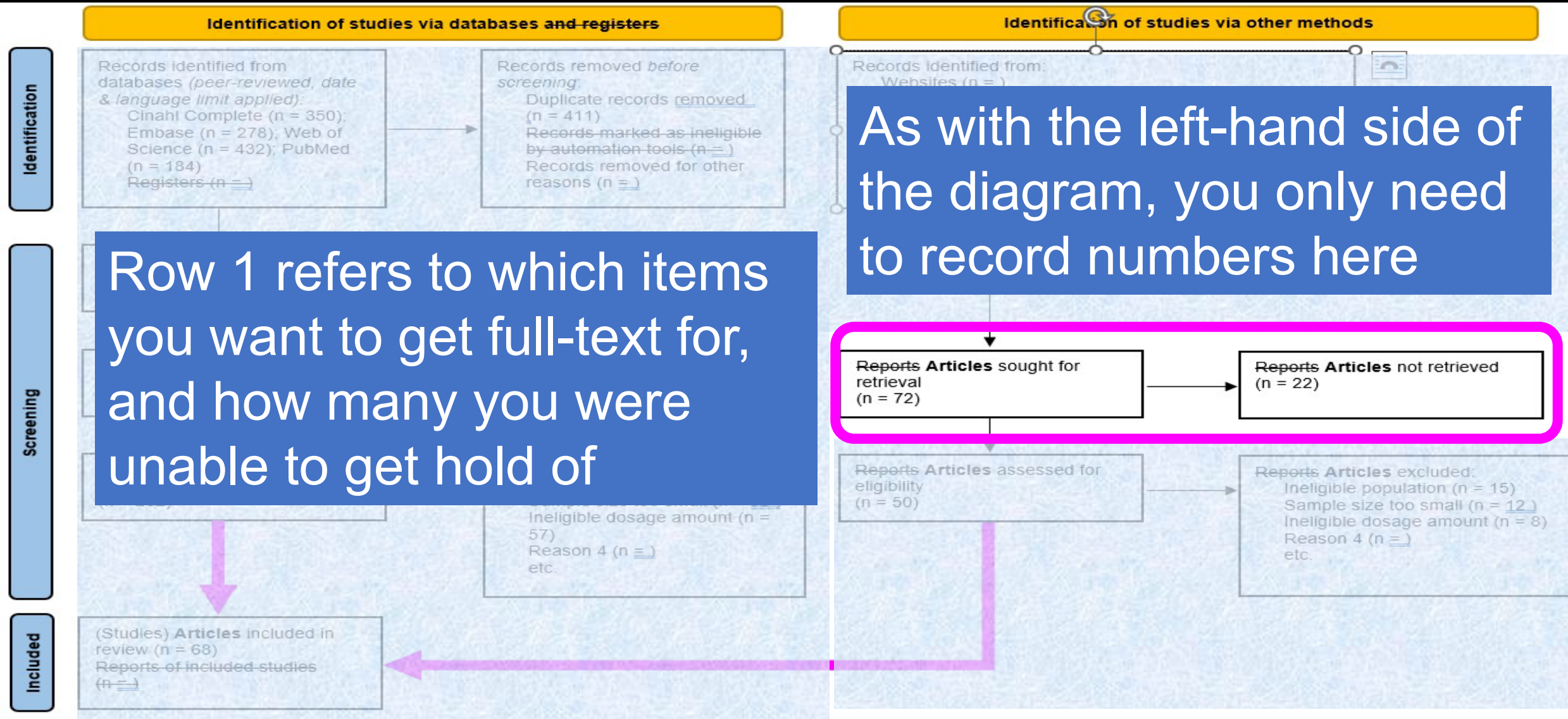
Left-hand side, Identification Section 2

As with the left-hand section, you need to record the number of items you found through each method

You can delete any methods you didn't use, and you can add methods that you did use e.g., 'hand searching' journals



Right-hand side of diagram - Screening



Right-hand side of diagram – Screening 2

Identification of studies via databases and registers

Identification of studies via other methods

Row 2 on the right-hand side refers to the items (most likely articles) that you have read in full

Again, you only need a few words / a short phrase here – don't write an essay

In the second box, you have to give your reasons for rejecting those papers as you spent your time to read them

Reports Articles sought for retrieval (n = 72)

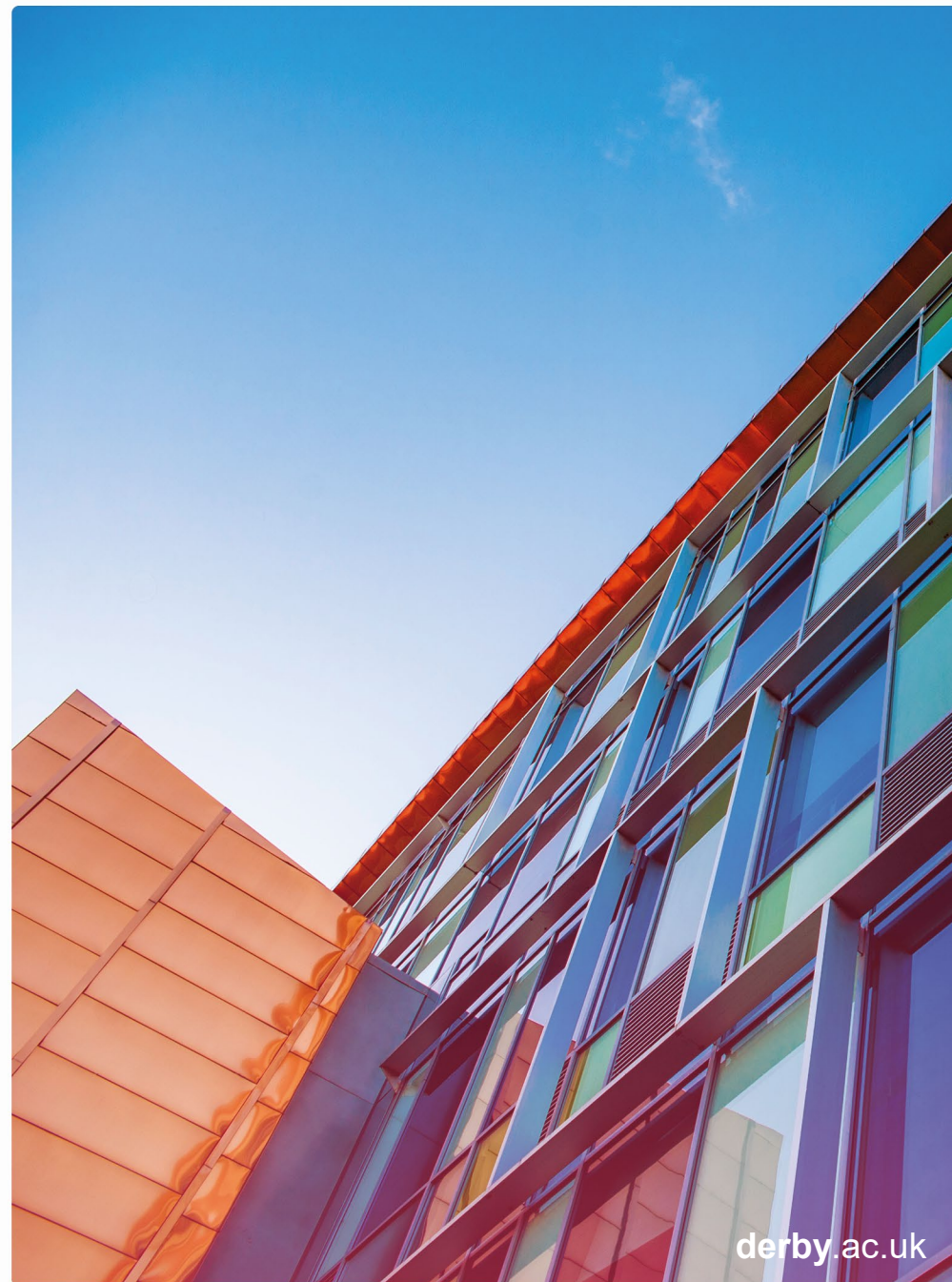
Reports Articles not retrieved (n = 22)

Reports Articles assessed for eligibility (n = 50)

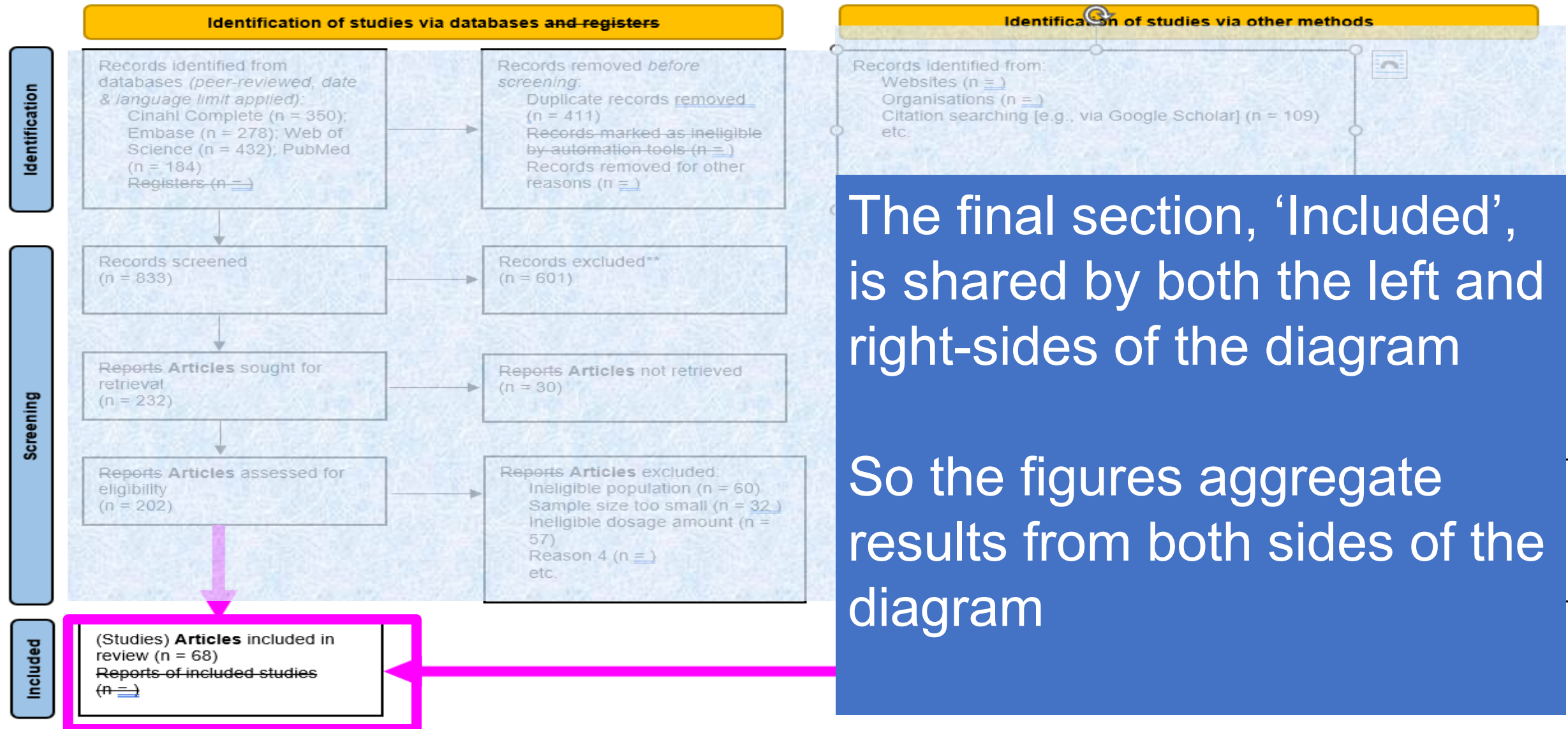
Reports Articles excluded:
Ineligible population (n = 15)
Sample size too small (n = 12)
Ineligible dosage amount (n = 8)
Reason 4 (n =)
etc.

How it can look 3

Included



PRISMA diagram – filled in





So what's the point?

- Helps keep you organised
- Documents part of your process
- Allows others to duplicate your process to a certain degree
- Shows whether you have worked in a systematic (organised) way [or not]



Questions?

- **Library Enquiries**
 - library@derby.ac.uk / (01332) 59 1215
- **Academic Librarians**
 - librarians@derby.ac.uk
- **Library Workshops**
 - <https://libcal.derby.ac.uk/>
- **Research skills help**
 - <https://libguides.derby.ac.uk/researchguides>





Useful Library Links

- Literature Reviews Library Guide - <https://libguides.derby.ac.uk/literature-reviews> has a PDF on citation searching in Google Scholar
- Skills Guides - <https://libguides.derby.ac.uk/skillsguides> contain help resources for a range of academic skills
- [Workshops](#) – we provide regular workshops on a variety of topics that you can sign up for. Have a look under the link



Useful PRISMA Links

- PRISMA home page: <https://prisma-statement.org/>
- [Link to the PRISMA diagram used in this guide](#) – this will download the Word document onto your device
- You can see the list of different PRISMA diagrams on the Flow Diagram page - <https://prisma-statement.org/PRISMAStatement/FlowDiagram>



UNIVERSITY OF
DERBY

University of Derby, Kedleston Road, Derby, DE22 1GB

T +44 (0)1332 591044 E opendays@derby.ac.uk



THANK YOU

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