

WEIDMANN, A. and TONNA, A. 2023. Understanding literature and AI: how to choose and conduct the right assessment for your research question. Presented as part of the 51st European Society of Clinical Pharmacy (ESCP) symposium on clinical pharmacy 2023 (ESCP 2023): innovations in clinical pharmacy practice, education and research, 30th October 2023, Aberdeen, UK.

# Understanding literature and AI: how to choose and conduct the right assessment for your research question.

WEIDMANN, A. and TONNA, A.

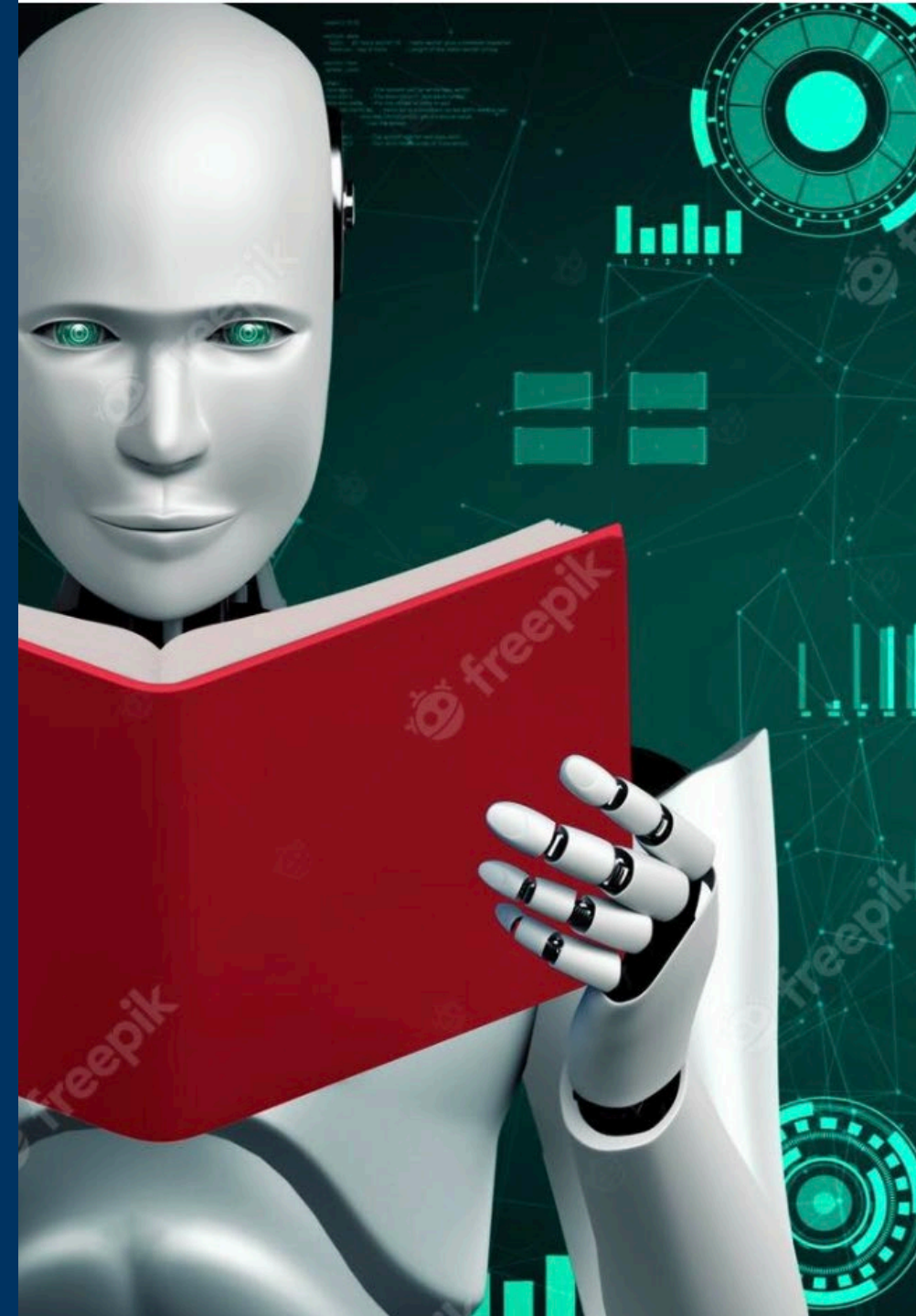
2023

# Making sense of Literature and AI

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*Dr. Antonella Tonna*





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Senior Lecturer (Clinical Pharmacy)

School of Pharmacy & Life Sciences

Robert Gordon University, UK

# Aim of the Masterclass

To take you through the stepwise approach of conducting a thorough literature review, enabling you to:

- decide on the **most appropriate type of literature review** for your own setting and research interest
- develop your **own review question** and protocol
- with and without the help of **AI**.

# Your expectations?



# Our expectations!

- Keep an open mind
- Don't be shy
- Keep asking "Why?"
- Be respectful towards each other
- Be creative and critical in your thoughts
- Reflect and dare to dream
- Talk **?Discuss** as much as possible
- Use your mobile phone



# Getting to know each other

If you could meet any living person for dinner, who would you pick and why?



## Task 1

# Your Experience

Briefly explain your experience with literature reviews and research topic of interest to each other.





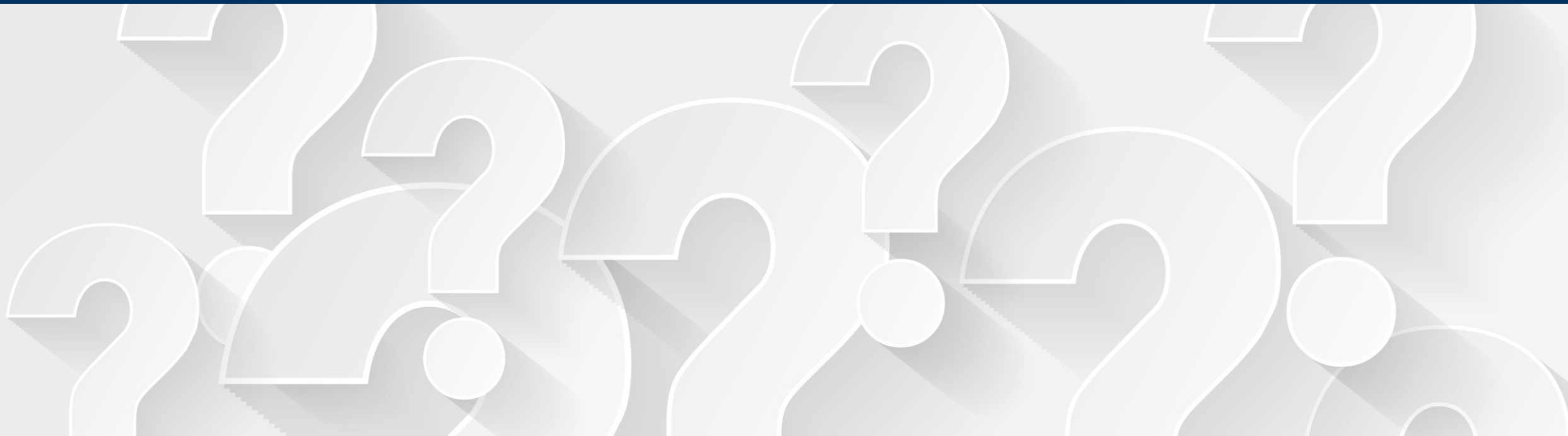
# Choosing an appropriate review methodology and writing a research question

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## Literature review development (Part 1)



**What's your  
research question?**



# How to write a research question



# How to write a research question

The aim of this systematic scoping review was to summarize the available evidence on frailty assessment during the COVID-19 pandemic, in an attempt to identify knowledge gaps to be bridged and possibly to draw future perspectives in this field.

[doi:10.3390/jcm9072106](https://doi.org/10.3390/jcm9072106)

The objective of this review was to identify and summarise the most recent research literature related to Post-stroke fatigue in order to update the evidence base.

<https://doi.org/10.12688/f1000research.22880.2>

The aim of this scoping review is to map the characteristics of medication use for older people in residential facilities in the last year of life. We aim to identify potential variables associated with these patterns of medication use, and how medication use changes as death approaches.

<https://doi.org/10.1177/0269216320911596>

# How to write a research question

**Question:** Which medications carry a risk of causing a delirium particularly in patients diagnosed with dementia?

**Aim:** To identify medications that have the risk of inducing delirium, particularly in patients diagnosed with dementia.

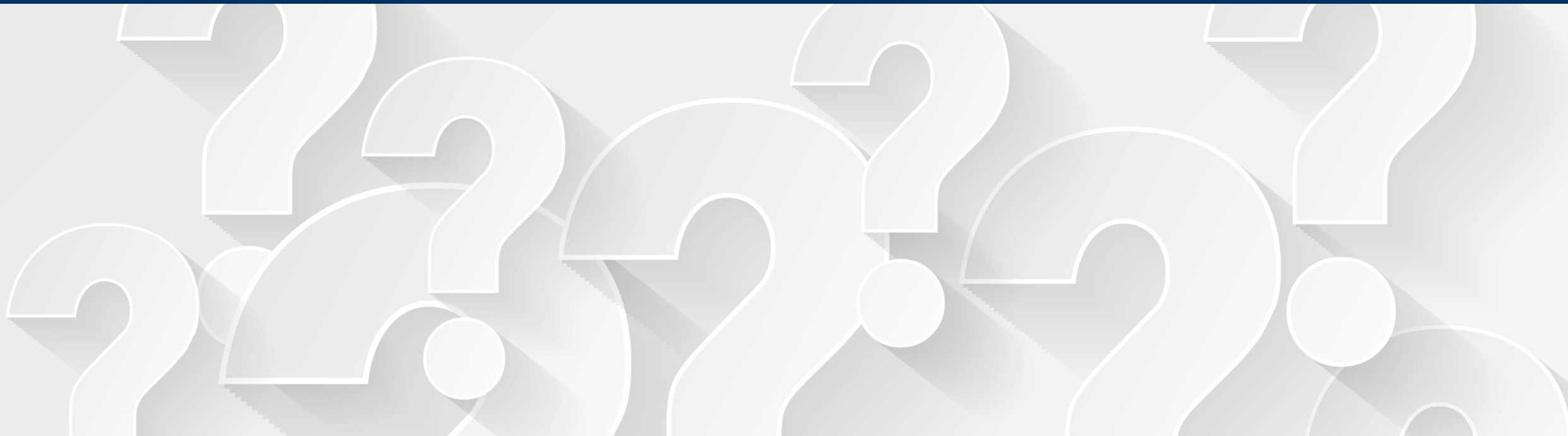
**Title:** ?**A review of** Medication-induced Delirium in dementia patients.



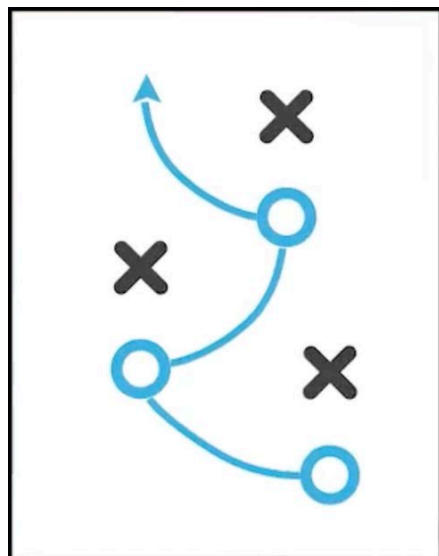
# Additional materials 1.0



# What types of Literature Review are there?



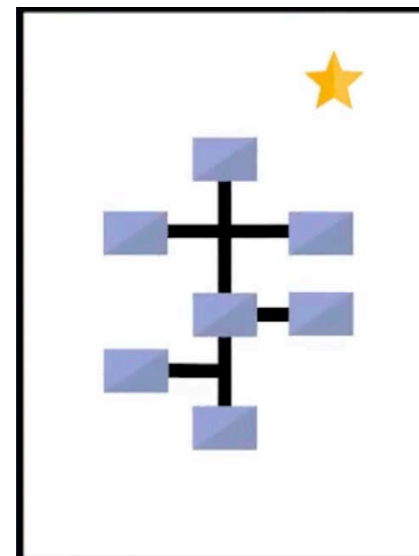
# Types of Literature Reviews



**Unstructured /  
Narrative Review**

## Unstructured = Narrative Review

- No set method
- Broad but not conclusive overview
- Depends on the researchers skills
- Subjective / Biased



**Structured /  
Systematic OR  
Scoping Review**

## Structured = Systematic OR Scoping Review

- Set method
- Specific overview of existing lit.
- Quality Assured process independent of the researchers' skills
- Objective
- Higher level of evidence / Meta-analysis



# What is the difference?

## Scoping Review

It has a clearly formulated question



It is a **structured** robust method



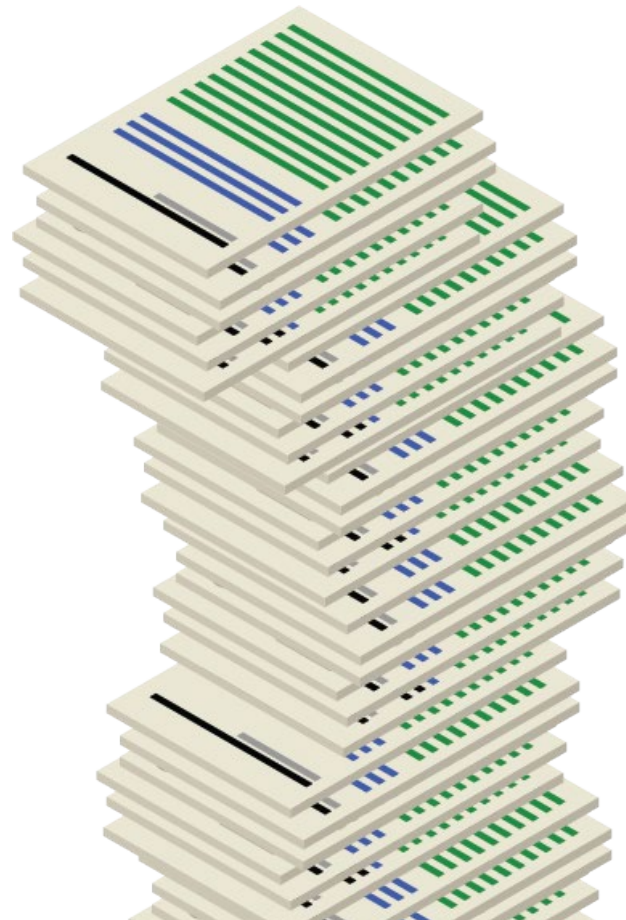
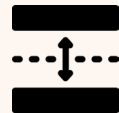
Not dependent on access to patient data



No **ethics** required



**Determines the gap in lit.** and whether a systematic review is needed



## Systematic Review



Carries the **highest level of evidence**



Protocol must be **registered officially**



**Quality assessment of papers**



**ALL** steps quality assured

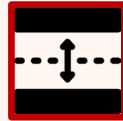


**Synthesizes** the evidence / Meta-analysis

# What is the difference?

## Scoping Review

**Determines the gap in lit.**  
and whether a systematic  
review is needed



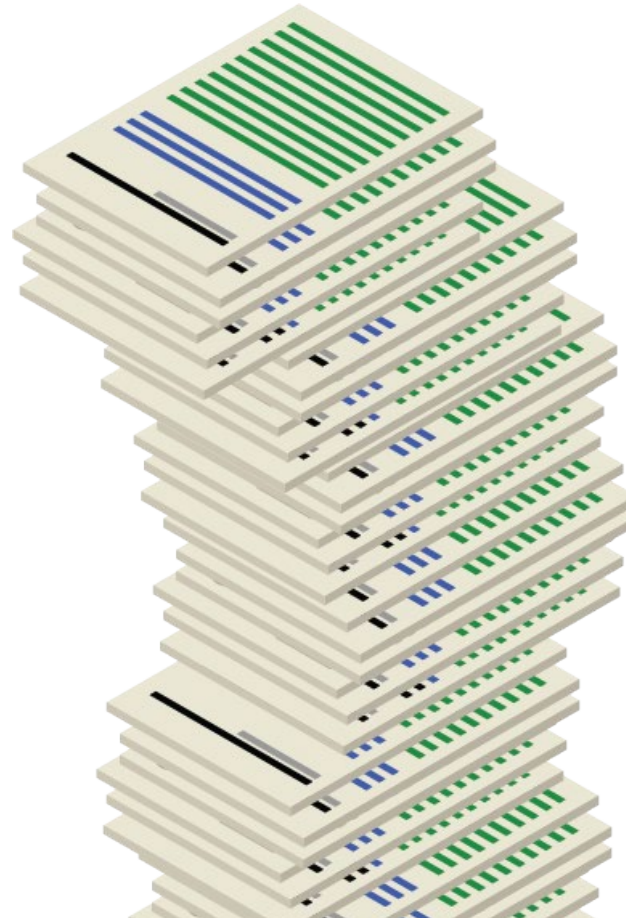
Identifies and maps full body of  
literature.

Identifies key characteristics or factors  
related to a concept.

Does not provide info on quality of  
papers or summary answer.

**Does not produce statements to  
guide decision-making.**

Precursor to Systemtic Review.



## Systematic Review



**Synthesises the  
evidence / Meta-analysis**

Provides highest level of summary  
evidence / analysis.

Assesses the quality of evidence and  
its level of bias.

**Produces statements that guide  
clinical decision making.**

# Advantages & Disadvantages of a scoping review

- Simple to follow scientific method
- It helps you to identify the gaps
- It is cheap to run
- It doesn't need complicated permissions
- It is still publishable



**BUT it is time consuming!!!**



# Steps of a ScR



## Scoping Review

9. PRESENT FINDINGS
8. FIND LITERATURE GAPS
7. EXTRACT
6. DEVELOP PRISMA CHART
5. SELECT PAPERS
4. PERFORM DB SEARCH
3. DEVELOP KEYWORD STRATEGY
2. DEVELOP PROTOCOL
1. WRITE RESEARCH QUESTION

## Systematic Review

- = **SUMMARIZE FINDINGS**
- < **QUALITY ASSESSMENT**
- < **REGISTER PROTOCOL**

# Additional materials 2.0



**Are there any Ai tools**  

---

**that can help?**



# ELICIT

Elicit

 FAQ

 Tasks

 Starred



**Ask a research question**

Elicit will find answers from 175 million papers



Or run Elicit over your own papers

 Upload PDFs

## Group exercise (45mins)

- Decide on a research topic in your group.
- Write a specific research question and have a go at the objectives.
- Decide which of the main literature research methods is the most appropriate to answer your research question and why.





# Coffee Break



# Writing a detailed literature review protocol

---

## Literature review development (Part 2)



# Developing a research protocol

- Inclusion and exclusion criteria  
[NB: Exclusion is not the opposite of inclusion]
- Primary and Secondary outcomes  
[planned and unplanned but predicted info]
- Bias
- Data analysis
- Which databases will you include
- Article filters
- Types of studies to include
- Search terms/ Keywords/ MESH terms
- How you will put them together to form a search string

SCOPING REVIEW PROTOCOL

Name (lead researcher):  
Lead researchers institution:

Title  
e.g. Mental health consequences of Three Mile Island, Chernobyl, and Fukushima nuclear power plant accidents: a scoping review

Research aim  
e.g. To clarify the mental health consequences of employees after three major nuclear power plant accidents (i.e., Three Mile Island, Chernobyl, and Fukushima) over the past 10 years

Literature search strategy

Databases  
e.g. We will search the following electronic bibliographic databases: PubMed, PsycINFO, ICUSHI, and The Cochrane Database. In addition, hand searches will be also conducted if the research team found references are appropriate through previously published books or previous reviews.

Filters  
e.g. Articles only in English language; Articles published since 2000; Only papers available in full text etc.

Key words / Search string  
e.g. ("Chernobyl"[Title/Abstract] OR "Chernobyl Nuclear Accident"[MeSH Terms]) OR ("Three Mile Island"[Title/Abstract] OR "Fukushima"[Title/Abstract] OR "Fukushima Nuclear Accident"[MeSH Terms]) AND (!!!!!("Mental Disorders"[MeSH Terms]))

Study types to be included  
e.g. Empirical studies; RCT; Number of participants >= 10;

Inclusion criteria  
• Untersuchte Bevölkerung z.B. Employees: 25  
• Intervention Survivors of the following three major nuclear power plant accidents: Three Mile Island, Chernobyl, Fukushima Daiichi

Exclusion criteria  
• Not meeting the inclusion criteria  
• Any criteria within the population under study that needs to be excluded (i.e. not the opposite of inclusion criteria)

factors which are the consequences of these three major accidents  
differences on the between three major ts

using ROBANS (Risk of Bias in Reporting of Systematic Reviews) (2013) randomized trials  
review authors of a third review

REGISTER

# Inclusion criteria

## WHO?

Patients with osteoarthritis of the knee.

## WHAT?

What specific diagnoses should your participants have?

## CONFOUNDERS?

Do your patients have any co-morbidities that can affect your results?

Any specific classes of medication you need to consider?

Any specific age groups?

## WHERE?

Where exactly are you recruiting your participants from?

## WHEN?

How long ago was this diagnosis made?

This allows you to generate a set of **specific** inclusion criteria

# Exclusion criteria



Exclusion criteria are **NOT** the opposite of inclusion criteria



Exclusion criteria capture any subjects/ papers that would normally fall within your inclusion criteria but are not eligible for inclusion because of certain confounding factors.

e.g. Patients > 18 years and over but unable to consent.

# Additional materials 3.0



# Search strategy



Consider all search terms before you start your research.

## Research Question or Aim:

To review published guidelines that allow the prevention and management of medication induced delirium in patients with dementia.

# Search strategy



- Consider your Key terms and synonyms
- Consider Medical Subject headings (MeSH)
- Consider truncations  
*(pharm = pharmacy, pharmacist, pharmaceuticals etc.)*
- Consider wildcards  
*(\* = multiple character searching; ? = single character searching)*



# Search strategy

Search Terms	Synonyms
<b>Medication induced</b>	Drug induced
<b>Medication</b>	Medication Therapy Management [MeSH]; Pharmaceutical Preparations [MeSH]; Drug-Related Side Effects and Adverse Reactions [MeSH]
<b>delirium</b>	altered mental status [AMS]; delirium [MeSH] [Deliri*]; DSM-5; encephalopathy (encephalopathy*); acute confusional state; acute brain dysfunction; brain disease [MeSH] acute brain failure, and altered mental status; lack uniform definitions; Hallucination (Hallucin*); Confusion (Confus*); Reorient* [disoriented]; uospatial ability
<b>dementia</b>	cognitive impairment, Alzheimer's disease [MeSH]; delirium superimposed on dementia
<b>prevention</b>	
<b>guidelines</b>	Pocket guide; Framework;

# Search strategy

Search Terms	Synonyms
Medication induced	Drug induced
Medication	Medication Therapy Management <b>[MeSH]</b> ; Pharmaceutical Preparations [MeSH]; Drug-Related Side Effects and Adverse Reactions <b>[MeSH]</b>
delirium	altered mental status [AMS]; delirium <b>[MeSH]</b> [Deliri*]; DSM-5; encephalopathy (encephalopathy*); acute confusional state; acute brain dysfunction; brain disease <b>[MeSH]</b> acute brain failure, and altered mental status; lack uniform definitions; Hallucination (Hallucin*); Confusion (Confus*); Reorient* [disoriented]; uospatial ability
dementia	cognitive impairment, Alzheimer's disease <b>[MeSH]</b> ; delirium superimposed on dementia
prevention	
guidelines	Pocket guide; Framework;

# Search strategy

Search Terms	Synonyms
Medication induced	Drug induced
Medication	Medication Therapy Management [MeSH]; Pharmaceutical Preparations [MeSH]; Drug-Related Side Effects and Adverse Reactions [MeSH]
delirium	altered mental status [AMS]; delirium [MeSH] <b>[Deliri*]</b> ; DSM-5; encephalopathy <b>(encephalopathy*)</b> ; acute confusional state; acute brain dysfunction; brain disease [MeSH] acute brain failure, and altered mental status; lack uniform definitions; Hallucination <b>(Hallucin*)</b> ; Confusion <b>(Confus*)</b> ; <b>Reorient*</b> [disoriented]; visuospatial ability
dementia	cognitive impairment, Alzheimer's disease [MeSH]; delirium superimposed on dementia
prevention	
guidelines	Pocket guide; Framework;

# Search string



Combine using **BOOLEAN LOGIC** - **AND / OR / NOT**

(((((Delirium) OR (Hallucin\*)) OR (altered mental status)) OR (Confusion)) OR (Encephalopathy\*)) OR (Cognitive\*)) AND (Drug induced) AND (Guideline)

Find that sweet spot of quantity & quality.

# Select database

Databases	Info Link
<p>Cochrane Library            Cochrane Central Registry of controlled Trials (CENTRAL)            CINAHL            ClinicalTrials.gov            International Pharmaceutical Abstracts (IPA)            Medline and Embase            PubPharm            PSychINFO            SAGE Education            Science Direct            Scopus            Springer Link            Web of Science (Core Collection)</p>	<p><a href="https://training.cochrane.org/handbook/current/chapter-04#section-4-3">https://training.cochrane.org/handbook/current/chapter-04#section-4-3</a></p>
<p>National Grey Literature Collection; Open Access thesis and Dissertations</p>	<p><a href="https://libguides.kcl.ac.uk/systematicreview/graylit">https://libguides.kcl.ac.uk/systematicreview/graylit</a></p>

# Additional materials 4.0



**Are there any Ai tools**  

---

**that can help?**



# CONSENSUS



**Ask a question, get conclusions from research papers**

Ask a research question



Try Searching:

does creatine help build muscle?

what are benefits of mindfulness?

do direct cash transfers reduce poverty?



# LITMAPS



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## Discover the world of Scientific Literature

# CONNECTED PAPERS

Explore academic papers  
in a visual graph

Search by keywords, paper title, DOI or another identifier

Build a graph



# SEARCH SMART

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Find!

SCHOLARLY RECORDS  
DATABASES

Tutorials

FAQ

News

## Search the best databases in academia.

There are dozens of academic databases, each offering unique coverages and features.  
To identify the ones most suitable for you, please select:

# RESEARCH Rabbit



[DONATE](#)

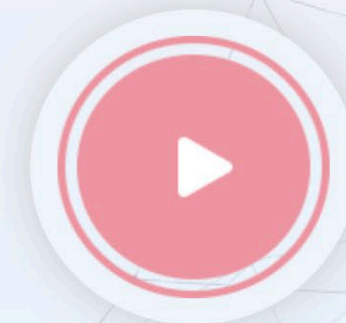
[REVIEWS](#)

[MISSION](#)



# Reimagine Research

We're rethinking everything:  
literature search, alerts, and more



# Iris.ai

## THE RESEARCHER WORKSPACE INCLUDES:



### Content based search

Bypass keywords and explore interdisciplinary with a content-based recommendation engine.



### Context filtering

Filter down a document set based on criteria you can explain in a sentence, but not put into one keyword.



### Data filtering

Filter based on information extracted from your documents like specific entities, data points or data ranges.



### Extracting and systematizing data

Automatically extract and systematize any key data points from text and tables into a table layout of your own design.



### Document set analysis

Analyze a large set of documents to form an overview



### Summarization

Ask the machine to summarize single or multiple documents to



### Monitoring and alerts

Set the system to rerun searches, filters and extractions



### New challenges?

Have a specific, scientific or medical text related problem

## THE RESEARCHER WORKSPACE INCLUDES:



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Set the system to rerun searches, filters and extractions



### New challenges?

Have a specific, scientific or medical text related problem

## Group exercise (60mins)

For your chosen group research topic:

- Set specific inclusion and exclusion criteria for your literature.
- Develop a specific search strategy (keywords, strings, databases).
- Search across three databases/ collate 15 suitable titles.
- Check if any of the free AI tools can add anything useful after your search is complete.



# Lunch Break



# Study selection, quality assessment and data extraction/ analysis

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## Literature review development (Part 3)

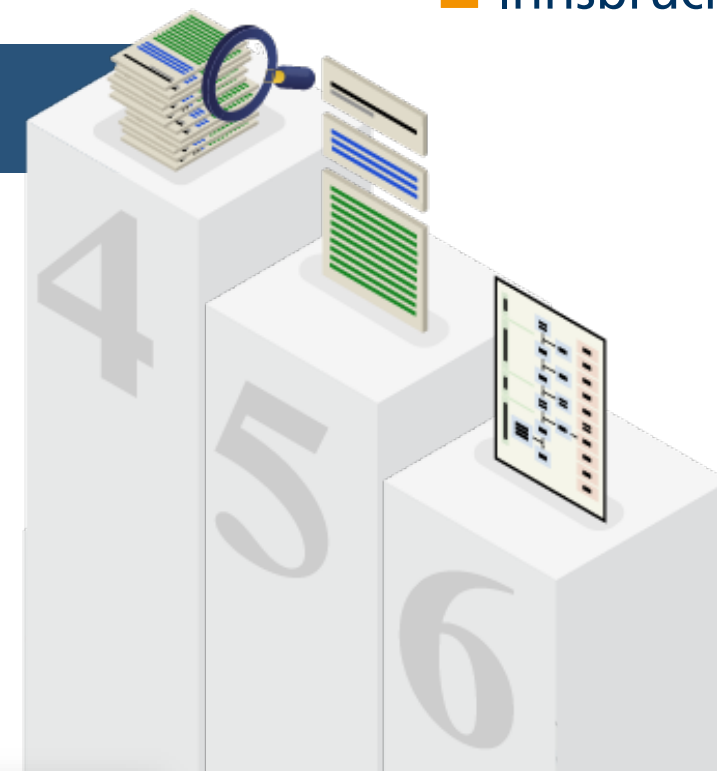
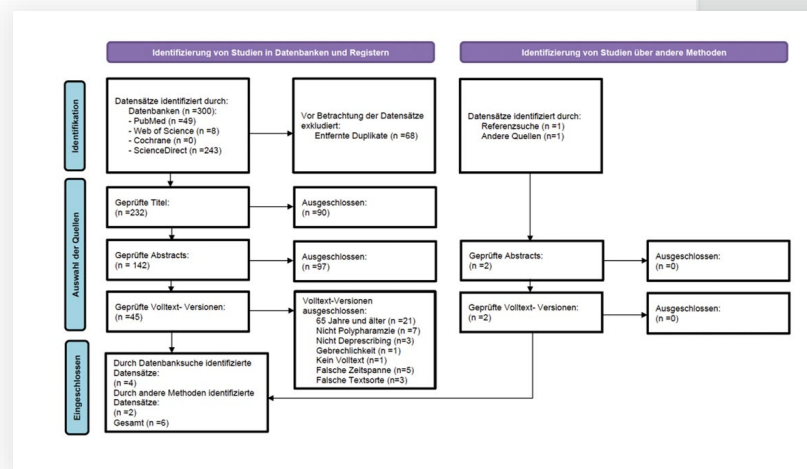




# Screening your papers

4. Database searches and identification of papers
5. Titles, Abstract and Full text consideration for inclusion (by two researchers)

## 6. PRISMA Flowchart



# Screening



Screening

Title only

Abstract only

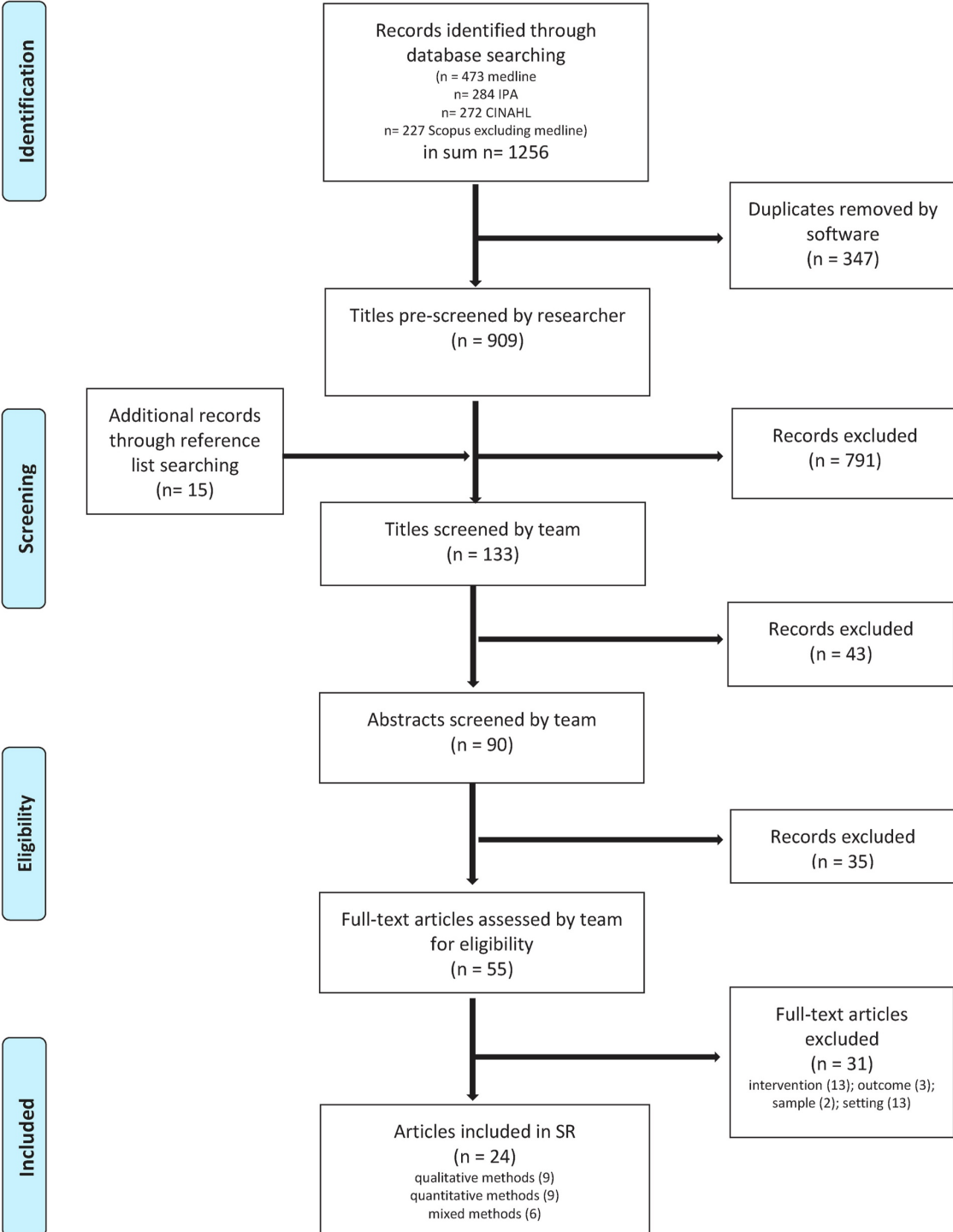
Full Text

Vs.

INCLUSION & EXCLUSION CRITERIA



Discrepancies



# PRISMA chart

Research in Social and Administrative Pharmacy 18 (2022) 2944–2961

Contents lists available at ScienceDirect

**Research in Social and Administrative Pharmacy**

journal homepage: [www.elsevier.com/locate/rsap](http://www.elsevier.com/locate/rsap)

ELSEVIER

RSAP

Check for updates

**Experiences of key stakeholders with the implementation of medication reviews in community pharmacies: A systematic review using the Consolidated Framework for Implementation Research (CFIR)**

Dorothee E. Michel<sup>a</sup>, Antonella P. Tonna<sup>a</sup>, Dorothee C. Dartsch<sup>b</sup>, Anita E. Weidmann<sup>a,\*</sup>

<sup>a</sup> School of Pharmacy and Life Sciences, Robert Gordon University, Garthdee Road, Aberdeen, AB10 7GJ, Scotland, UK  
<sup>b</sup> CaP Campus Pharmazie GmbH, Planckstraße 13, 22765, Hamburg, Germany

<http://www.prisma-statement.org/>

# Quality assessment

- Case Reports
- Case Series
- Cohort Studies
- Diagnostic Test Accuracy Studies
- Economic Evaluations
- Prevalence Studies
- Qualitative Research
- Quasi-Experimental Studies
- Randomized Controlled Trials
- Systematic Reviews
- Text and Opinion

### JBI CRITICAL APPRAISAL CHECKLIST FOR QUALITATIVE RESEARCH

Reviewer \_\_\_\_\_ Date \_\_\_\_\_

Author \_\_\_\_\_ Year \_\_\_\_\_ Record Number \_\_\_\_\_

	Yes	No	Unclear	Not applicable
1. Is there congruity between the stated philosophical perspective and the research methodology?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Is there congruity between the research methodology and the research question or objectives?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Is there congruity between the research methodology and the methods used to collect data?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Is there congruity between the research methodology and the representation and analysis of data?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Is there congruity between the research methodology and the interpretation of results?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Is there a statement locating the researcher culturally or theoretically?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Is the influence of the researcher on the research, and vice-versa, addressed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Are participants, and their voices, adequately represented?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Is the research ethical according to current criteria or, for recent studies, and is there evidence of ethical approval by an appropriate body?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Do the conclusions drawn in the research report flow from the analysis, or interpretation, of the data?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Overall appraisal: Include  Exclude  Seek further info

Comments (Including reason for exclusion)

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© JBI, 2020. All rights reserved. JBI grants use of these tools for research purposes only. All other enquiries should be sent to [jbisynthesis@adelaide.edu.au](mailto:jbisynthesis@adelaide.edu.au). Critical Appraisal Checklist for Qualitative Research - 3

# Critical Appraisal Toolkits

Source of Critical Appraisal Toolkits	Links
<b>Joanna Briggs Institute (JBI)</b>	<a href="https://jbi.global/critical-appraisal-tools">https://jbi.global/critical-appraisal-tools</a>
<b>Critical Skills programme (CASP)</b>	<a href="https://casp-uk.net/casp-tools-checklists/">https://casp-uk.net/casp-tools-checklists/</a>
<b>British Medical Journal (BMJ)</b>	<a href="https://bestpractice.bmj.com/info/toolkit/ebm-toolbox/critical-appraisal-checklists/">https://bestpractice.bmj.com/info/toolkit/ebm-toolbox/critical-appraisal-checklists/</a>
<b>Strengthening the reporting of observational studies in epidemiology (STROBE)</b>	<a href="https://www.strobe-statement.org/checklists/">https://www.strobe-statement.org/checklists/</a>
<b>Advancing the science of practice guidelines (AGREE)</b>	<a href="https://www.agreetrust.org/resource-centre/agree-ii/">https://www.agreetrust.org/resource-centre/agree-ii/</a>
<b>National Heart, Lung &amp; Blood institute (NIH)</b>	<a href="https://www.nhlbi.nih.gov/health-topics/study-quality-assessment-tools">https://www.nhlbi.nih.gov/health-topics/study-quality-assessment-tools</a>
<b>Cardiff University</b>	<a href="https://www.cardiff.ac.uk/specialist-unit-for-review-evidence/resources/critical-appraisal-checklists">https://www.cardiff.ac.uk/specialist-unit-for-review-evidence/resources/critical-appraisal-checklists</a>
<b>McGill Univeristy (MMAT)</b>	<a href="http://mixedmethodsappraisaltoolpublic.pbworks.com/w/file/fetch/127916259/MMAT_2018_criteria-manual_2018-08-01_ENG.pdf">http://mixedmethodsappraisaltoolpublic.pbworks.com/w/file/fetch/127916259/MMAT_2018_criteria-manual_2018-08-01_ENG.pdf</a>

# Quality assessment presentation

Table 5. Quality Assessment results as determined by the AGREE II tool.

GUIDELINE	*	±	⋮	Not assessable	Recommendation
Hartford HealthCare; (n.d.); USA				✓	
ADS; (n.d.); USA				✓	
RNAO; (2003); Canada			✓		Recommended
AHMAC; (2006) Australia			✓		Recommended
UKCPA; (2006); UK			✓		Recommended
CCSMH; (2006); Canada			✓		Recommended
BGS, RCP; (2006); UK			✓		Recommended
CCSMH; (2010); Canada			✓		Recommended
AHMAC; (2011); Australia			✓		Recommended
ANZSGM; (2012); Australia				✓	
Ministry of Health; (2013); New Zealand				✓	
NHS; (2013); UK		✓			Recommended
AAN; (2014); USA				✓	
AGS; (2014); USA			✓		Recommended
RCN; (2015); UK		✓			Recommended
ACI; (2015); Australia		✓			Recommended
APA; (2015); USA			✓		Recommended
AGS; (2015); USA				✓	
AGS, ACS; (2015); USA			✓		Recommended
ESAIC; (2017); Belgium			✓		Recommended
JSN; (2017); Japan			✓		Recommended
LSH; (2015); Iceland			✓		Recommended
RNAO; (2016); Canada			✓		Recommended
ESMO; (2018); Switzerland			✓		Recommended
SCCM; (2018); USA			✓		Recommended
IPS; (2018); India		✓			Recommended
IPS; (2018); India		✓			Recommended w. modifications
BAP, NAPICU; (2018); UK			✓		Recommended
NHS; (2019); UK	✓				Recommended w. modifications
FHA; (2019); Canada		✓			Recommended
BCCPA; (2019); Canada			✓		Recommended
SIGN; (2019); UK			✓		Recommended
NHS; (2020); UK			✓		Recommended
CSHP; (2020); Canada				✓	
Monash health; (2020); Australia			✓		Recommended
VUMC; (2021); USA	✓				Recommended w. modifications
DHA; (2021); Denmark			✓		Recommended
ADS; (2021); USA				✓	

High quality ≥70% \*\*\*, Moderate quality >40% and <70% \*\*, Low quality ≤40%\*.

## Quality assessment

Quality assessment was performed independently by two reviewers and any discrepancies were resolved by consultation with a third reviewer. An assessment tool of the National Institute of Health and Care Excellence (NICE)<sup>46</sup> was used for the assessment of qualitative methods, and the BMJ<sup>47</sup> assessment tool “Critical appraisal checklist for a questionnaire study” for quantitative surveys. It was decided not to exclude any eligible studies because of their quality, as the team deemed it important to incorporate the full range of implementation experiences following the suggestion of Dixon-Woods et al.<sup>48</sup>

Proppé G.B, Jónsdóttir F., Gunnarsson P.S., Weidmann AE. Medication-induced delirium in patients with and without dementia: A systemic review of international guidelines. Paper in preparation

Michel DE, Tonna AP, Dartsch DC, Weidmann AE. Experiences of key stakeholders with the implementation of medication reviews in community pharmacies: A systematic review using the Consolidated Framework for Implementation Research (CFIR). Res Social Adm Pharm. 2022 Jun;18(6):2944-2961. doi: 10.1016/j.sapharm.2021.07.017. Epub 2021 Jul 21. PMID: 34420864.

# Data Extraction

## SCOPING REVIEW – Data extraction

Author(en)		
Author		
Date of publication		
Title of paper and publication details		
Country of study origin		
Aim of the study		
Intervention		
Outcome measure(s): primary & secondary		
Population under study (if relevant) & sample size		
Method (study design): quantitative, qualitative & mixed methods studies		
Control group / randomization (if relevant)		
Duration of intervention		
Research framework/model/ theory used in design of study		
Theory origin: sociology, psychology, anthropology, pedagogy and health economics		
Research philosophy: positivism/postpositivism; constructivism; interpretivism & pragmatism		
Study type: Original studies, randomised controlled trials, cohort studies, case control studies, cross-sectional surveys, systematic reviews		
Research framework/model/ theory used in analysis of study		
Main findings		



### Publication details

*Where, When, Who etc.*



### Basic information

*population included; aim of study; methodology used etc.*

Should link directly to your **inclusion criteria**



### Essential information

*key results; conclusion; types of medication used etc.*

Should link directly to your **research question**

# Presentation of data

**Table 2.:** Summary of video education intervention characteristics

CHF = congestive heart failure; HF = heart failure; VE = Video education; mRS =modified Rankin Scale; PT = part-Time; INR = international normalised ratio

Study Author	Study Setting	Population under study	Sample size	Intervention	Summary of Key findings
Albert et al.;	Large, urban, 1000 + bed tertiary medical centre.	Acute decompensation of CHF. Men and women with an ejection fraction of 40% or less, aged 18–85 years	112 patients	<ul style="list-style-type: none"> <li>Newly diagnosed or new patients received a HF handbook, a 79 page 3-ring binder with a variety of HF information topics.</li> <li>Patients also received a discharge instruction sheet specifying medication, diet, exercise, and follow-up appointment recommendations.</li> <li>Milner-Fenwick, Inc. developed the Living with Heart Failure: A Home Video Guide to Self-Care video. This HF video focuses on self-care behaviours and self-management actions rather than providing only basic knowledge about CHF.</li> <li>It is 60 min long</li> </ul>	<ul style="list-style-type: none"> <li>At 90 days, VE does not improve health care consumption but does reduce the need for extra diuretic dosing and telephone advice and prompts a request for HF literature.</li> <li>Patients in the VE group do not have more office visits than SE patients, reflecting no difference in recognition of signs and symptoms requiring immediate attention.</li> <li>VE patients have less symptoms at follow-up, especially oedema and profound fatigue, and an increase in adherence to self-care.</li> </ul>
Kinnane et al.;	Peter MacCallum Cancer Centre, Victoria, Australia	Newly diagnosed with cancer, between 18 and 75 years of age, living in a community setting. Further, they had to	60 patients	<ul style="list-style-type: none"> <li>A 10min 30s video 'Staying Well During Chemotherapy'</li> </ul>	<ul style="list-style-type: none"> <li>The video group demonstrated trends towards higher recall in information concerning fever, mouth problems,</li> </ul>

**Table 3.:** Design features of patient education video interventions mapped against the intervention functions of the behaviour change wheel.

INTERVENTION FUNCTION	Albert et al.; (2007); USA	Kinnane et al.; (2008); AUS	Abed et al.; (2014); Global	Katz et al.; (2014); Canada	Correnti et al.; (2017); USA	Denny et al.; (2017); USA	Sinha et al.; (2019); USA	Davies et al.; (2019); USA	Heinrich et al.; (2019); USA	Reem et al.; (2020); Global	Munster et al.; (2020); NL	Eneanya et al.; (2020); USA
Education	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓
Persuasion	✓	✓				✓			✓			
Incentivisation								✓				
Coercion												
Training			✓	✓				✓	✓			
Enablement	✓					✓	✓	✓	✓			✓
Modelling	✓		✓									✓
Environmental restructuring												
Restrictions												

<https://www.equator-network.org/reporting-guidelines/>



# Additional materials 5.0



**Are there any Ai tools**  

---

**that can help?**



# RAYYAN

2023-05-03: Antibiotic longterm prescribing Blind OFF

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Date			Title	Authors
2018-01-01		Anita Anton	GUIDE TO INFECTION CONTROL IN THE HEALTHCARE SETTING, Tuberculosis	Allyn, P. R.
2021-01-01		Anita Anton	wrong study design GUIDE TO INFECTION CONTROL IN THE HEALTHCARE SETTI...	Amer, F.
		Anita Anton	The Core Elements of Antibiotic Stewardship for Nursing Homes APPENDIX A...	CDC
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2020-01-01		Anita Anton	Guidelines for the Treatment of Latent Tuberculosis Infection: Recommendat...	CDC
2018-01-01		Anita Anton	not long term use of AB Infection Control Guidelines on Nephrology Services in ...	Kong, Centre for Health Prot...
2020-01-01		Anita Anton	Treatment of Nontuberculous Mycobacterial Pulmonary Disease: An Official A...	Daley, C. L.
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2018-01-01	63%	Anita Anton	not long term use of AB GUIDE TO INFECTION CONTROL IN THE HEALTHCARE SE...	Ena, J.

**Possible Duplicates** -

- Unresolved 0
- Deleted 15
- Not duplicates 9
- Resolved 14

**Inclusion decisions** -

- Undecided 0
- Maybe 0
- Included 135
- Excluded 215
- Conflict 0

**Decision by** -

- Prof. Dr. Anita Weidmann
- BSc Anton Brunnschmid

**Minimum collaborator decisions** +

**Maximum collaborator decisions** -

- At most 0 0
- At most 1 0

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# Lateral



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## Group exercise (60mins)

- Complete a Title, Abstract & Full-text screening using the 15 titles.
- Identify and decide on the best critical appraisal tools to use.
- Develop a data extraction tool specific to the chosen research question.



# Coffee Break



# The use of AI as novel writing tool: opportunities and challenges

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Literature review development  
(Part 4)





## Group exercise (30mins)

- Use ChatGPT and/or GTP4 to generate a 300 Word Background for your chosen research topic (fully sceintifically referenced)
- Critically appraise the text.
- What do you think?



# Useful prompts for ChatGPT/ GPT3,5

Always provide

Topic;; Context;; Requirement;; Language:

Get CHatGPT to provide you with **feedback on your draft**:  
*“Please critique the following passage and let me know if my argument is clear or not.”*

**Ask for clarification:**

*“Please explain the following passage in simple words. I am having difficulty understanding [a particular point].”*

**Get ChatGPT to discuss things with you:**

*“Can you engage with me in a Socratic dialog on [topic]? Then start asking questions.”*

Help with **writing Introduction / Conclusion:**

*“Please rewrite this paragraph as a Introduction.” [or conclusion]*

Write a **“zero draft”** – 20mins non-stop about your topic, whatever comes to mind, don't worry about grammar, language, spelling or structure.

Open up ChatGPT

Use the following prompt:

**Please remove redundant words and phrases from the following passage and make it coherent and cohesive.**

Chat GPT will give you a coherent paragraph

**What do you think?**



# Take home messages

- Outsource your labour to AI **not** your thinking.
- Use AI as your research assistant not your supervisor.
- Use AI to create structure (e.g., outline of a paper) not content.
- Don't over-rely on AI and don't not forget to use your common sense.
  
- Ai can NOT take responsibility YOU are ultimately responsible for the work you produce.
- Ai is “artificial” NOT “intelligent” (yet!)

Ai can NOT take responsibility YOU are ultimately responsible for the work you produce.

**Ai IS “artificial” but it’s NOT “intelligent” (yet!)**

# Your expectations?



**Thank you**

