The Centre for Effective Services

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TUSLA

An Ghníomhaireacht um Leanaí agus an Teaghlach

Child and Family Agency

Protocol for a Rapid Integrative Review

Service User Experience: Methodologies, Tools, Requirements and Feedback Mechanisms

7th July 2023

Although this protocol is written for a rapid integrative review, its content has been guided by the *Preferred Reporting Items for Systematic Review and Meta-Analysis Protocols (PRISMA-P) 2015 Statement*. PRISMA-P is a 17-item checklist intended to facilitate the preparation and reporting of a robust protocol for systematic reviews (Moher et al., 2015), or in this case a rapid integrative review.

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ADMINISTRATIVE INFORMATION

Registration

The protocol is not registered on any external or publicly available databases. It will, however, be submitted to the commissioning agency (Tusla) for appraisal and sign-off before proceeding with the review.

The finalised protocol was submitted to Tusla on the 7th July 2023, prior to proceeding with the review.

Authors

Karl McGrath (KMG)[1] and Jessica Scott (JS)[2] drafted the protocol. KMG is the project lead and guarantor. KMG and JS drafted the protocol. Both authors, in collaboration with the commissioners, contributed to the refinement of the review questions and eligibility criteria. KMG developed the search strategy; and data selection, collection and quality assessment procedures. JS led the development of the data synthesis approach.

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Amendments

It is intended that the review team will adhere strictly to the protocol when carrying out the review. However, if amendments to the protocol are (1) unavoidable or (2) enhance the quality of the methodology, they will be documented as advised by the *PRISMA-P 2015: Elaboration and Exploration* document (Shamseer et al., 2015, p. 25) by recording in tabular format (as shown below) the date, section, original protocol component, revised protocol component and rationale for change.

Table 1: Protocol amendments table

Date	Section	Original Protocol	Revised Protocol	Rationale
This should be the effective date of the change in protocol	*Specify where the change would be found in the protocol*	*Describe language of the original protocol*	*Describe the change in the protocol*	*Justify why the change will improve the report. If necessary, describe why the change does not introduce bias. Do not use justification such as "because the AE/TOO/TEP/Peer reviewer told us to do so", but explain what the change hopes to accomplish.*

The table will be contained in an appendix of the review.

Support

This rapid integrative review is commissioned and funded by Tusla, the Child and Family Agency. Relevant staff from Tusla provided feedback on earlier drafts of this protocol and also provided the review team with temporary access, for a period of three months, to paywalled academic databases and journals to which they are subscribed.

INTRODUCTION

Rationale

As the national child and family agency of the Republic of Ireland, Tusla provides a wide range of services to a wide range of service users. These services include child protection and welfare, alternative care and adoption, birth information and tracing, family support, children's services regulation, education support, and domestic, sexual and gender-based violence services. Tusla seeks to understand how services are experienced, to hear directly from service users about their experience, and to use this feedback for service improvement.

With this, Tusla has commissioned the Centre for Effective Services (CES) to systematically review international best practice methodologies and tools that are relevant to capturing the experiences of all Tusla service users across selected service strands.

Objectives

Aims and Objectives

Tusla's *Call for Quote* document states that the project has the following aims and sub-aims:

1. To systematically review existing international best practice methodologies and tools that are relevant to capturing the experiences of all Tusla service users across all service strands.
    a. The review will include an emphasis on segments of Tusla's:
        i. child protection and welfare service user cohort
        ii. alternative care service user cohort (including children in residential and foster care)
        iii. children in the community
        iv. parents
        v. foster parents.
2. To examine the related dependencies and system requirements for the implementation of such methods and tools.
3. To explore suitable feedback loops and mechanisms for the utilisation of service user feedback for service improvement.

To meet the above aims, the *Call for Quote* also stated the following objectives:

- Utilise best practice systematic review methods to synthesise international evidence across the agreed themes.
- Collate and synthesise international evidence and the key messages arising in plain language for a variety of relevant audiences.
- Collaborate with relevant personnel in Tusla to ensure that the systematic review methods align where possible to the emerging legal, policy and practice questions for the agency.

- To provide expertise and advise as required for the respective project.
- To provide a report.

Later discussions with Tusla supplemented the aims and objectives stated in the *Call for Quote* document. It was advised that the review should:

- Place an emphasis on *best practice* and/or *guiding principles of practice*, as opposed to the best methodologies and tools *per se*.
- Interpret the concepts of 'capturing and utilising service user experiences' broadly so as to also include concepts such as 'service user engagement' and 'co-production/co-design/co-creation'.
- Focus on selected Tusla service strands rather than all Tusla service strands. Namely, child protection and welfare services (CPWS); alternative care services (ACS); and prevention, partnership and family support (PPFS) services.
- Define the purpose of service user engagement as relating to developing service experience insights, improving services and enhancing outcomes for children and families.

With this, the original aims and objectives have been reformulated as follows:

Table 2: Objectives of the review

With the purpose of facilitating Tusla to develop service experience insights, improve services and enhancing outcomes for children and families, this review aims to: 1. To systematically review existing international best practice (or guiding principles of practice) of service user engagement in CPWS, ACS and PPFS services, for the purposes mentioned above. 2. To examine the related dependencies and system requirements for the implementation of best practice methods and tools in service user engagement, for the purposes mentioned above. 3. To explore suitable feedback loops and mechanisms for the utilisation of service experience insights, for the purposes mentioned above.

Defining Key Concepts

To help guide the review, key concepts from the aims of the review are defined below, using the 'PICo' mnemonic as a guide. The core elements of PICo are:

- **P**opulation
- phenomenon of **I**nterest
- **Co**ntext (Stern et al., 2014).

The PICo elements and their definitions, as they relate to this review, are listed below:

Table 3: Definitions of PICo elements

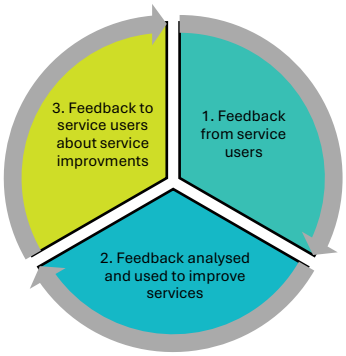
Population:
Service Users: For the purpose of this review, we define service users as those who are either (1) the direct recipients or beneficiaries of services, or (2) the parents/guardians/carers or immediate family members of direct recipients or beneficiaries (see 'All Tusla Service Strands' in the Context section of this table for a list of the services provided by Tusla). For example, the different types of service users may include, but are not limited to: • Children • Young adults (up to age 23) accessing aftercare services • Parents, foster parents and legal guardians of children (excluding social workers and social care workers in alternative care services). • Immediate family members of children in receipt of Tusla-related services.
Phenomena of Interest
Service User Engagement refers to involving service users in decision-making and in the planning, design, governance and/or delivery of services (De Weger et al., 2018). The extent or purposes of engagement are often described as occurring along a spectrum ranging from, for example, ignoring, informing, consulting, involving, collaborating, or deferring to individuals who receive or utilize services (Gonzalez, 2019). **Service Experience Insights** are developed when a service actively seeks out, gathers and analyses data and information: • From the people who come into contact with that service • About their experiences of that service • With the purpose of understanding their experiences for quality assurance and quality improvement of services, and • To identify positive service user experiences so that the service can replicate them. **Best Practice** is understood here to refer to procedures or practices that have been shown by research and experience to produce optimal results, and that is established or proposed as a standard suitable for widespread adoption (Merriam-Webster, 2023). **Guiding Principles of Practice** are understood as referring to ideas, values, concepts, assumptions or propositions that should be influential in guiding practices and procedures. **Tools, Methods and Methodologies for Engaging Service Users:** We define 'tools' as any instrument or piece of equipment that can help to achieve a particular task or aim. 'Methods' are defined here as systematic procedures for applying tools to achieve a particular task or aim, and 'methodologies' are understood as a system of methods. In the context of the review, the particular task or aim that the tools,

methods and methodologies are relevant to are engaging service users to improve services.

Dependencies and System Requirements for Implementation: This concept is understood as referring to factors (or things that are needed) at various levels (e.g. individuals, services, organisations and the broader context/environment that they are in) to support successful implementation.

Feedback Loops, for the purpose of the review, refer to a process of (1) getting feedback from service users about their experiences, (2) analysing and utilising that feedback to improve services in some way, and (3) then returning feedback to service users about how their feedback has or will influence service improvement in some way.

Figure 1: Conceptualisation of a service user feedback loop



Mechanisms for Utilising Service User Engagements for Service Improvement are understood as methods and methodologies for analysing, understanding and applying information, feedback and other inputs from service users to improve the quality of services and service user experiences.

Context:

Selected Tusla Service Strands, which relates to the following service and sub-service types:

- Child protection and welfare services
  - Child safeguarding services
  - Children's services regulation, inspection and monitoring
- Alternative care services
  - Emergency care
  - Foster care
  - Residential care
  - Special care (short-term care in a secure therapeutic environment that restricts the child's liberty to some extent)
  - After care
  - Services for separated children seeking international protection
- Prevention. Partnership and Family Support (PPFS)
  - Family support work (including parent support work)
  - Social work

- Youth work
- Family resource centres
- Support groups.

Review Questions

As well as defining key concepts, the aims of the review have also been converted into research questions (again with the assistance of the PICo mnemonic) to more clearly define the scope of the review. Table 4 lists the review questions:

Table 4: Review questions

In CPWS, ACS and PPFS services similar to those provided by Tusla for children and families:
1. What is considered 'best practice' (or good principles of practice) in service user engagement for the purpose of developing service experience insights, improving services and/or enhancing outcomes for children and families?
2. What mechanisms, methodologies and tools support service user engagements for the purpose of developing service experience insights, improving services and/or enhancing outcomes for children and families?
3. What dependencies and requirements need to be considered when implementing mechanisms, methodologies and tools to engage service users and utilise the information they share to develop service experience insights, improve services and/or enhance outcomes for children and families?
4. How can information about service experience insights, service improvements or enhanced outcomes for children and families based on service user engagements be communicated back to service users?

Review Design

The *Call for Quote* from Tusla requests "best practice systematic review methods to synthesise international evidence across the agreed themes". The review team are suggesting a similar yet alternative review methodology, which we refer to as a 'rapid integrative review'. This section of the protocol explains the differences between a systematic review and a rapid integrative review and outlines the review team's rationale for utilising a rapid integrative review.

What is an Integrative Review?

We outline what an integrative review is by comparing it with two other common review types: the narrative review and the systematic review.

A narrative review is the traditional type of literature review that most people are familiar with. It is a non-systematic way of locating and analysing selected studies.

Compared to more systematic review methods, narrative reviews are relatively quick, easy to conduct and allow greater flexibility, but they are less transparent and rigorous, making them more vulnerable to bias (Farrington & Jolliffe, 2017; Toronto, 2020).

Systematic reviews, on the other hand, are a form of literature review that are designed to locate, assess and synthesise the best available evidence on a *specific narrowly-focused research question*. The standard features of a systematic review are designed to increase the quality, transparency, objectivity and credibility of the review process and its conclusions (Dickson et al., 2017; Farrington & Jolliffe, 2017).

The methods of systematic reviews and integrative review have many similarities and overlaps. As Toronto (2020, p. 17) explains, both types of review:

> "…follow systematic steps, including asking a review question(s); identifying all the potential electronic databases and sources to search; developing an explicit search strategy; screening titles, abstracts, and articles based on inclusion and exclusion criteria; and abstracting data from selected literature in a standardised format. Both use critical appraisal methods to assess the quality of each study, identify sources of bias, and synthesise data using transparent methods. These explicit methods reduce the chance for reviewers to only select literature that supports their own opinions or research hypotheses".

The main differences between integrative reviews and systematic reviews are in their purpose, scope, types of literature included, and the time and resources needed. The nature of integrative review questions tend to be broader than systematic reviews and they allow for more diverse forms of literature. They also generally require less time and resources to complete (Toronto, 2020).

The table below, adapted from Toronto (2020, p. 16), more clearly explains the differences between narrative reviews, integrative reviews and systematic reviews at each stage of the review process.

Table 5: Differences between three common review types

	Narrative Review	Integrative Review	Systematic Review
Purpose	Provides an overview on a topic of inquiry for a research study, dissertation or standalone review	Critical analysis of empirical, methodological or theoretical literature, which draws attention to future research needs	Answers a single clinical question
Team member(s)	One or more reviewer	Two or more reviewers and librarian recommended	Three or more reviewers. Includes librarian or information specialist and statistician if meta-analysis is performed.
A priori review protocol (plan)	No	No*	Yes -- protocol registration encouraged (PROSPERO, Cochrane Collaboration)
Review question	No	Broadly defined purpose and/or review question(s)	Single clinical question generally in the format of PICO (i.e. P=population, I=intervention, C=comparison, O=outcome)
Established reporting guidelines	No	No**	Yes (PRISMA reporting guidelines)
Timeline	2-6 months	6-12 months	12-24 months
Use of a systematic search methodology	No	Yes	Yes
Sampling	Scholarly work on topic	Experimental/non-experimental research -- may include theoretical and methodological literature	Experimental research
Eligibility criteria (inclusion and exclusion criteria)	No	Yes	Yes
Search flow diagram	No	Yes	Yes (PRISMA flow diagram)
Critical appraisal	No	Yes	Yes
Data extraction	No	Yes	Yes
Analysis and synthesis	Narrative analysis	Narrative and/or thematic analysis with descriptive and qualitative synthesis	Narrative analysis with descriptive and qualitative synthesis -- may include quantitative synthesis (meta-analysis)
Evidence-based practice implications	No	Yes	Yes

*While a protocol is technically not required for an integrative review, one has been developed for this review to improve the transparency and rigor of the methodology.
**Though there are no established reporting guidelines for integrative reviews specifically, reporting in the final report will be guided by the *Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) 2020 statement* (Page et al., 2021) and the *Preferred Reporting Items for Overviews of Reviews (PRIOR) Statement* (Gates et al., 2022) to improve the transparency and quality of the review.

What is a Rapid Integrative Review?

As Table 5 above indicates, the methodological rigor of systematic reviews and integrative reviews mean they can be time and resource-intensive to conduct, limiting their ability to meet time and budget-sensitive needs. In response to growing demand for timely evidence to inform decision-making, 'rapid reviews' emerged as a way to streamline and accelerate the systematic review process (Garritty et al., 2021). A rapid review is defined as:

> "…a form of knowledge synthesis that accelerates the process of conducting a traditional systematic review through streamlining or omitting various methods to produce evidence for stakeholders in a resource-efficient manner" (Garritty et al., 2021, p. 15).

As the definition above alludes to, 'rapid review' methods are generally applied to systematic reviews, producing 'rapid systematic reviews'. However, given the overlap and similarities between systematic reviews and integrative reviews, the review team believe the features and methods of 'rapid reviews' are transferable to integrative reviews. As such, the methodology for this review is described as a 'rapid integrative review', defined as a form of knowledge synthesis that accelerates the process of conducting a traditional integrative review through streamlining or omitting various methods to produce evidence for stakeholders in a resource-efficient manner.

The 'methods' section of this protocol describes how the review team intends to streamline the traditional integrative review process.

Rationale for a Rapid Integrative Review?

A 6-month timeline between starting the review process (including protocol development) and production of the final report has been agreed between CES and Tusla. Within this 6-month period, the review team estimates that the budget available to the project will permit the review team to dedicate the equivalent of one full-time staff to the review for 30 days. That is, the review team have roughly 30 days within the 6-month review period to actually conduct the review, which includes developing the protocol.

Given that traditional integrative reviews are estimated to take 6-12 months (Toronto, 2020), a rapid integrative review is necessary to complete the review in a way that is systematic and sensitive to the time and resource-needs of the project.

METHODS

Eligibility Criteria

Studies will be selected according to inclusion and exclusion criteria that covers 6 domains, listed below:

1. Context (settings and services)
2. Population

3. Phenomena of Interest
4. Language
5. Types of Literature
6. Quality Assessment of Literature.

To be eligible, an article or data source must satisfy at least one inclusion criteria from five or six domains (depending on the type of literature it is). That is, models, frameworks and guidelines must satisfy inclusion criteria from domains 1-5. Evidence syntheses must satisfy inclusion criteria from domains 1-6, which will result in 'critically low quality' literature reviews being excluded from the review and allowing the review team to work with a more manageable volume of literature.

The exclusion criteria are not intended to be exhaustive, but rather to provide additional guidance to the review team. To be ineligible, an article or data source only needs to satisfy one exclusion criteria or fail to meet all relevant inclusion criteria.

The inclusion and exclusion criteria are listed in Table 6 below. Additional narrative explanations of the criteria are provided in the sub-sections after the table. The eligibility criteria are applied using a three-step process, which is also explained in a sub-section after Table 6.

Table 6: Eligibility criteria

Criteria	Inclusion	Exclusion

Context (Settings and Services)	-Specific settings and social services that provide supports and interventions for children, adults or families, similar to those provided by Tusla and prioritised for this review. Namely:
	• Child protection and welfare services (CPWS)
	  ○ Child safeguarding services
	  ○ Children's services regulation, inspection and monitoring
	• Alternative care services (ACS)
	  ○ Emergency homelessness care for children
	  ○ Foster care
	  ○ Residential care
	  ○ Special care (short-term care in a secure therapeutic environment that restricts the child's liberty to some extent)
	  ○ After care
	  ○ Services for separated children seeking international protection
	• Prevention, partnership and family support services (PPFS)
	  ○ Family support work
	  ○ Social work
	  ○ Youth work
	  ○ Family resource centres
	  ○ Support groups
		-Non-social service settings (e.g. criminal justice settings, healthcare settings, mental healthcare settings, etc.), unless they also target eligible settings and services.

Population	-Current and past service users	-Service staff and management

		-Service user advocates -Funders and commissioners of services -General communities, public or citizens
Phenomena of Interest	-Literature that describes one or more of the following phenomena for the purpose of developing service experience insights, improving services or enhancing outcomes for children and families: • Best practice or principles of practice in engaging service users, or analysing or utilising service user experiences • Methodologies, methods and tools for engaging service users, or analysing and utilising service user experiences, and factors or strategies that influence their implementation • Feedback loops with service users on insights gained or improvements made to services	-Literature that does not describe or relate to engaging service users for the purpose of developing service experience insight, service improvement or enhancing outcomes for children and families -Literature that describes gathering, analysing or utilising service user feedback as part of a social worker or social carer education course
Language	-English only	-Non-English
Types of Literature (by Context)	-Evidence syntheses -Models, frameworks and/or guidelines	-Primary research -Non-systematic narrative literature reviews -Protocols of proposed primary or secondary research -Opinion pieces, blogs, discussion papers -Books, book chapters, conference extracts
Quality of Literature	-Evidence syntheses assessed as 'low-to-high' quality	-Evidence syntheses assessed as 'critically low' quality

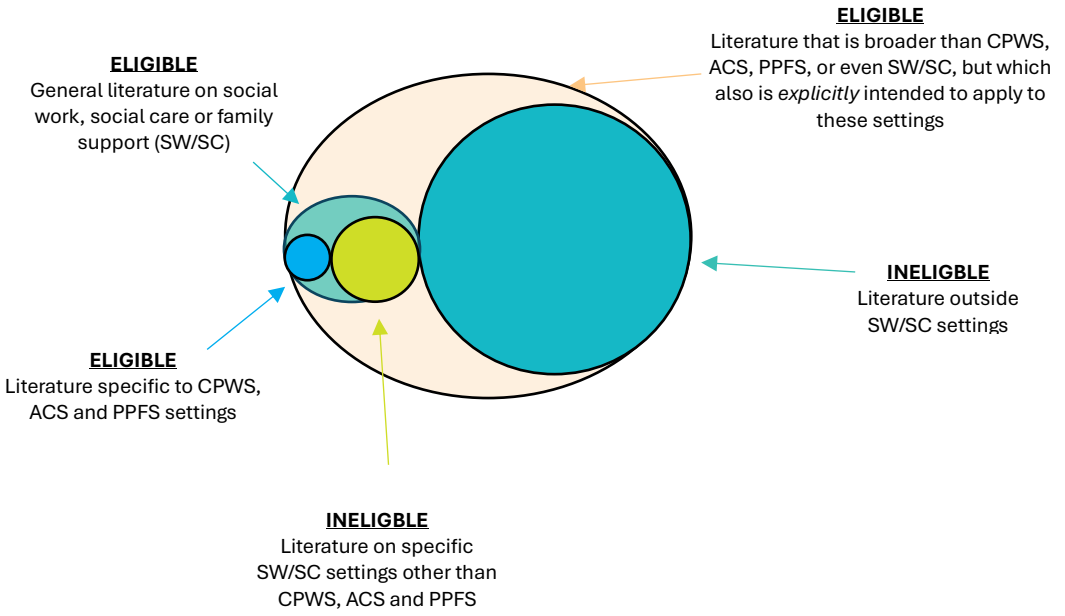
Context (Settings and Services)

As per the aims of the review, the context is intended to include settings and services that align with selected Tusla service strands. Namely:

- Child protection and welfare services
- Alternative care services
- Prevention, Partnership and Family support services.

Some reviews or studies cover both social care and health or mental healthcare jointly, suggesting that there may be some overlap between these contexts in some instances. Literature that doesn't exclusively focus on the areas of CPWS, AWS or PPFS will be considered eligible if the literature is also explicitly targeted towards the general areas of 'social work', 'social care' or 'family support', on the assumption that the literature will be transferable to CPWS, AWS and PPFS settings. Figure 2 is intended to provide extra clarity on this.

Figure 2: Eligible and ineligible settings and services



The rationale for this approach is to prevent the review team excluding potentially relevant material, while also trying to mitigate the risk of including so much literature that the review cannot be completed on time.

Population

Service users (also referred to as clients in some contexts) are the population of interest. As noted in Table 3, this review defines 'service users' as those who are either (1) the direct recipients or beneficiaries of past or present services, or (2) the parents/guardians/carers or immediate family members of direct recipients or beneficiaries.

For example, the different types of service users may include, but are not limited to:

- Children
- Young adults (up to age 23) accessing aftercare services
- Parents, foster parents and legal guardians of children (excluding social workers and social care workers in alternative care services)
- Families or groups in receipt of services.

Staff, management, funders and the commissioners of services are all populations excluded from the review, as are advocates or advocacy bodies for service users, or the general public or communities (unless they meet parts 1 or 2 of the definition of service users).

Phenomena of Interest

The review is interested in engaging service users, and/or analysing and utilising service user experiences, for the purpose of developing service experience insights, improving services and/or enhancing outcomes for children and families. Within this, there are four main phenomena of interest:

- Best practice guidance and/or guiding principles of practice
- Methodologies, methods and tools
- Dependencies and requirements for implementation, and
- Feedback loops.

Definitions of each of these phenomena are provided in Table 3.

During early scoping searches, literature was also identified that describes gathering, analysing or utilising service user feedback as part of a social worker or social carer college education course. This literature is excluded as it is not considered to be directly relevant to the aims of this review and to ensure the review can be completed within its time and budget constraints. For similar reasons, literature related to the broader concept of 'community engagement' rather than 'service user engagement' will also be excluded.

Language and Timeframe

English language studies only will be considered eligible to meet time and budget constraints. No constraints will be set on the year of publication.

Types of Literature

There are two main types of literature that are eligible for inclusion:

- evidence syntheses, and.
- models, frameworks and/or guidelines.

Table 7: Definitions and descriptions of types of literature eligible for inclusion

Evidence Synthesis is a form of secondary research and has been broadly defined as "the review of what is known using systematic and explicit methods in order to clarify the evidence base" (Gough et al., 2020). However, evidence syntheses vary in type and quality. To help assess whether a review is using "systematic and explicit methods", a review will be considered an 'evidence synthesis', and thus eligible for inclusion, if it possesses all of the following characteristics:

- Explicit aims, objectives and/or review questions
- Explicit eligibility criteria
- Explicit search strategy detailing the key terms and information sources used
- Explicit study screening and selection procedures, and
- Explicit data extraction procedures.

Evidence syntheses not possessing all five of these characteristics will be ineligible for selection.

Models provide a generalised or hypothetical description of a set of inter-related concepts that can be used to analyse, explain or understand a particular issue in certain contexts (Ashraf et al., 2021; Booth & Carroll, 2015).

Frameworks provide a structure for presenting inter-related concepts, without necessarily preserving the relationships between individual concepts (Ashraf et al., 2021; Booth & Carroll, 2015).

Guidelines are statements or documents that include recommendations intended to optimise processes or practices, informed (usually) by evidence. Within this, we also include 'standards' which we define as concise sets of statements intended to promote high-quality practice that is evidence-based and consistent. For the purpose of this review, standards will be treated the same as guidelines.

Due to the breadth of both the review questions and literature on service user engagement, plus the limited timeframe for completing the review, primary research will be excluded from this review. Instead, empirical data will be drawn from evidence syntheses, on the assumption that this will reduce the time needed to complete the review, while also providing empirical data of relevance to the review questions. Guidelines, frameworks and models are also included for their ability to inform best practice or principles of practice, though the extent to which evidence syntheses and guidelines/frameworks/models support each other will be considered during the analysis phase.

Quality Assessment of Literature

Literature from *evidence syntheses* and *guidelines* will be quality assessed by one reviewer using a series of validated, standardised quality assessment tools and adapted quality assessment tools.[1] See pg. 27-36 for further information about the tools to be used and how they will be applied.

The quality assessments of *evidence syntheses* will be used as an eligibility criteria. Based on the quality assessments, each evidence syntheses will be assigned one of the following four quality ratings:

Table 8: Standardised overall quality ratings for evidence syntheses

High	The evidence synthesis provides an accurate and comprehensive summary of the results of the available studies that address the question(s) of interest
Moderate	The evidence synthesis has weaknesses, but it may provide an accurate summary of the results of the available studies that were included in the review
Low	The evidence synthesis is relatively weak and may not provide an accurate and comprehensive summary of the available studies that address the question of interest
Critically Low	The evidence syntheses is weak and should not be relied on to provide an accurate and comprehensive summary of the available studies

[1] As the review team are not aware of any quality assessment tools for models and frameworks, they will not be quality assessed. However, the extent to which they align with the empirical literature included in the review will be analysed as part of the synthesis.

The quality ratings above are adapted from the AMSTAR-2 tool (Shea et al., 2017) and have been slightly re-worded to better reflect the broad range of evidence syntheses that can be included in this review. Evidence syntheses that receive a 'critically low' rating will be excluded from the review. This is intended to improve the efficiency of the review by reducing the number of evidence syntheses included, while also removing critically low quality and unreliable empirical data from the analysis.

While guidelines will also be quality assessed, the use of quality assessments as an eligibility criteria will only apply to evidence syntheses as early scoping searches suggest few guidelines will actually be included in the review.

Information Sources

The information sources for this review include:

- Articles saved or received during early scoping searches
- 4 electronic databases of peer-reviewed literature
- 3 peer-reviewed journals (not included in the databases)
- 9 databases and websites of grey literature sources
- Backward citation-chaining of included literature.

The specific information sources to be searched are listed in the table below:

Table 9: Specific information sources

Articles Downloaded or Received during Early Scoping Searches
• 42 articles downloaded during early scoping searches on Google and Google Scholar • 10 articles received from Tusla
Electronic Platforms and Databases of Peer-Reviewed Literature[2]

• EBSCO
  ○ Academic Search Complete
  ○ Sociology Source Ultimate
• Google Scholar
• York Research Database

Peer-Reviewed Journals (not included in the databases above)
• Campbell Systematic Reviews • British Journal of Social Work[3] • Child & Family Social Work
Databases and Websites of Grey Literature Sources

[2] Tusla have also provided the review team with access to the EBSCO databases SocIndex with Full-Text and CINAHL. These are not listed in Table 9 above as SocIndex is included within the Sociology Source Ultimate database, and CINAHL has been excluded as it focuses nursing literature, which is outside the scope of this review.

[3] The peer-review journals 'Social Work' and 'Journal of Social Work' were both considered as information sources but were dropped after scoping searches suggested these were not likely to return eligible studies.

- Barnardos Library and Information Service
- Health Information and Quality Authority (HIQA)
- Tusla Child and Family Agency
- National Institute for Care and Excellence (NICE)
- Social Care Online (SCIE)
- IRISS
- Child Welfare Information Gateway Library
- Childhub Online Library
- What Works for Children's Social Care

The information sources above were chosen for their accessibility to the review team and relevance to the review questions. Some information sources (e.g. additional grey literature sources, hand searching journals, contacting expert authors) have been excluded due to the time sensitive needs of the review.

Search Strategy

The search terms to be used as part of the search strategy of this systematic review were developed in 3 stages:

1. Identify a broad list of potentially relevant key terms by domain (i.e. Population, Phenomena of Interest, Context, Literature Types).
2. Consolidate the list of terms from stage 1
3. Trial the search term combinations and develop tailored search strategies.

Stage 1 involved an iterative process of defining core concepts of relevance to the review (see Table 3) and identifying synonyms for these concepts in the literature during early scoping searches. This produced an extensive list of potentially relevant words or phrases, which were grouped together by their relevance to Population, Phenomena of Interest, Context, and Literature Types.

At stage 2, the initial list of key terms generated at stage 1 were condensed into 39 search terms grouped together according to their most relevant domain, as shown in Table 10 below. Where multiple phrases repeated a certain word (e.g. 'social work', 'social care'), only the common word was usually retained as a search term (e.g. 'social').

Table 10: Consolidated list of search terms

PICo	Search Term Combinations
Population	"Service user" OR client* OR child* OR youth* OR "young person" OR adolescent* OR teen* OR parent* OR guardian* OR famil* OR juvenile OR "young adult"
Phenomena of Interest	feedback OR consult* OR engag* OR participat* OR involv* OR voice OR advoca* OR collaborat* OR co-de* OR co-produc* OR co-creat*
Context (1)	Service* OR support* OR system* OR program* OR project*

Context (2)	Social OR welfare OR protection OR “in care” OR “looked after”
Literature Type	Review* OR synthesis OR model OR framework OR guid* OR standard*

For stage 3, the search terms combinations in the table above were trialled in the information sources to test their sensitivity and specificity, and identify whether the search strategy would need to be tailored for certain databases. In order to meet the agreed timelines for completing the review, the search strategy has prioritised specificity over sensitivity.[4] The search strategy was developed under the assumption that the review team have capacity to screen a maximum of up to 6,000 titles and abstracts.[5] This figure was kept in mind when developing the tailored search strategies for each database, which are shown in Tables 11 and 12. Development of some the tailored search strategies are recorded in Appendix 3.

Although aiming for the search strategy to return a maximum of 6,000 results for screening, the search strategy is likely to return over 7,500 results, as shown in Tables 11 and 12. As a result, the review team will also implement ‘stopping criteria’ during searches to help determine if screening can be stopped before all titles and abstracts have been screened. The stopping criteria state:

1. Search results will, where possible, be ordered by relevance.
2. The first 250 titles/abstracts of each search will be screened, at a minimum.
3. Screening will stop at this interval if no titles/abstracts progress to full-text screening. For screening to continue, at least 1 article must be selected for full-text screening at each interval.
4. After the first 250 titles/abstracts, criteria 2 and 3 will be applied again at intervals of every 125 titles/abstracts.

This set of stopping criteria are based on the assumption that, if search results are ordered by relevance, then all eligible studies should appear relatively early in the search results, with few (if any) eligible studies likely to be found by screening later search results.

[4] A ‘sensitive’ search is exhaustive and can reasonably claim to have identified all eligible literature for a review. In practice this can be highly time and resource-consuming, and so reviews generally try to balance ‘sensitivity’ with ‘specificity’ (which minimises the amount of irrelevant results returned by a search) to improve its efficiency. Due to time and resource constraints for this review, the search strategy has been designed to favour specificity (efficiency) over sensitivity (exhaustiveness). In short, while the search strategy can be considered comprehensive, it is not exhaustive and the review team accept that some potentially relevant literature could be missed in order to complete the review within the agreed timeline.

[5] The budget allows for roughly 4 days of database searches and title and abstract screening. We estimate that roughly 1,500 titles and abstracts can be screened per day.

Table 11: Tailored Search Strategies for Databases

Database	Search No.	Search Options	Search Terms	Filters to Apply	Expected Results
EBSCO Academic Search Complete	1	**Expanders:** Apply equivalent subjects **Search Modes:** Boolean/Phrase	TI(“Service user” OR client* OR child* OR youth* OR “young person” OR adolescent* OR teen* OR parent* OR guardian* OR famil*) AND TI(feedback OR consult* OR engag* OR participat* OR involv* OR voice OR advoca* OR collaborat* OR co-de* OR co-produc* OR co-creat*) AND AB(Social OR welfare OR protection OR “in care” OR “looked after”) AND TI(Review* OR synthesis OR model OR framework OR guid*)	Language: English Search string 1: Title Search string 2: Title Search string 3: Abstract Search string 4: Title	588
EBSCO Sociology Source Ultimate	1	**Expanders:** Apply equivalent subjects **Search Modes:** Boolean/Phrase	TI(“Service user” OR client* OR child* OR youth* OR “young person” OR adolescent* OR teen* OR parent* OR guardian* OR famil*) AND TI(feedback OR consult* OR engag* OR participat* OR involv* OR voice OR advoca* OR collaborat* OR co-de* OR co-produc* OR co-creat*) AND TI(Social OR welfare OR protection OR “in care” OR “looked after”) AND TI(Review* OR synthesis OR model OR framework OR guid*)	Language: English Search string 1: Title Search string 2: Title Search string 3: Title Search string 4: Title Source types: Academic journals, reports, conference materials, reviews, dissertations/theses	1,822
Google Scholar	1		**All:** youth engagement **Exact Phrase:** **At Least One:** review synthesis model framework guidance guidelines **Without:** protocol	Language: English Where: Title	175
	2		**All:** family engagement **Exact Phrase:**	Language: English Where: Title	221

Database	Search No.	Search Options	Search Terms	Filters to Apply	Expected Results
			At Least One: review synthesis model framework guidance guidelines **Without:** protocol		
	3		**All:** parent engagement **Exact Phrase:** **At Least One:** review synthesis model framework guidance guidelines **Without:** protocol	Language: English Where: Title	72
	4		**All:** participation **Exact Phrase:** service user **At Least One:** review synthesis model framework guidance guidelines **Without:** protocol	Language: English Where: Title	11
	5		**All:** child participation **Exact Phrase:** **At Least One:** review synthesis model framework guidance guidelines **Without:** protocol	Language: English Where: Title	164
	6		**All:** child engagement **Exact Phrase:** **At Least One:** review synthesis model framework guidance guidelines **Without:** protocol	Language: English Where: Title	70
	7		**All:** youth participation **Exact Phrase:** **At Least One:** review synthesis model framework guidance guidelines **Without:** protocol	Language: English Where: Title	254
	8		**All:** social **Exact Phrase:** co-production	Language: English Where: Title	36

Database	Search No.	Search Options	Search Terms	Filters to Apply	Expected Results
			At Least One: review synthesis model framework guidance guidelines **Without:** protocol		
	9		**All:** social **Exact Phrase:** co-design **At Least One:** review synthesis model framework guidance guidelines **Without:** protocol	Language: English Where: Title	11
York Research Database	1		**All:** **Exact Phrase:** service user engagement **At Least One:** review synthesis model framework guidance guidelines **Without:**		14
	2		**All:** **Exact Phrase:** youth engagement **At Least One:** review synthesis model framework guidance guidelines **Without:**		13
	3		**All:** engagement **Exact Phrase:** social work **At Least One:** review synthesis model framework guidance guidelines **Without:**		522
	4		**All:** engagement **Exact Phrase:** social care **At Least One:** review synthesis model framework guidance guidelines **Without:**		628

Database	Search No.	Search Options	Search Terms	Filters to Apply	Expected Results
Campbell Systematic Reviews	1		(“Service user” OR client* OR child* OR youth* OR “young person” OR adolescent* OR teen* OR parent* OR guardian* OR famil*) AND (feedback OR consult* OR engag* OR participat* OR involv* OR voice OR advoca* OR collaborat* OR co-de* OR co-produc* OR co-creat*) AND (Social OR welfare OR protection OR “in care” OR “looked after”) AND TI(Review* OR synthesis OR model OR framework OR guid*)	Search string 4: Title	368
British Journal of Social Work	1		AB(“Service user” OR client* OR child* OR youth* OR “young person” OR adolescent* OR teen* OR parent* OR guardian* OR famil* OR juvenile OR “young adult”) AND AB(feedback OR consult* OR engag* OR participat* OR involv* OR voice OR advoca* OR collaborat* OR co-de* OR co-produc* OR co-creat*) AND TI(Review* OR synthesis OR model OR framework OR guid*)	Search string 1: Abstract Search string 2: Abstract Search string 3: Title	55
Child & Family Social Work	1		AB(feedback OR consult* OR engag* OR participat* OR involv* OR voice OR advoca* OR collaborat* OR co-de* OR co-produc* OR co-creat*) AND TI(Review* OR synthesis OR model OR framework OR guid* OR standard*)	Search String 1: Abstract Search String 2: Title	51
Barnardos Library and Information Service	1	Collection: -Main Lending -Archive -eDocument -Reports and Booklets	“service users” OR clients OR children OR youth OR “young people” OR adolescents OR teenagers OR parents OR guardians OR family OR “young adults” OR juveniles AND feedback OR consultation OR engagement OR participation OR involvement OR voice	All Search Terms: Title	153

Database	Search No.	Search Options	Search Terms	Filters to Apply	Expected Results
			OR collaboration OR co-design OR co-production OR co-creation AND review OR synthesis OR model OR framework OR guidelines OR standards		
SCIE Social Care Online	1		(“Service user” OR client* OR child* OR youth* OR “young person” OR adolescent* OR teen* OR parent* OR guardian* OR famil*) AND (feedback OR consult* OR engag* OR participat* OR involv* OR voice OR advoca* OR collaborat* OR co-de* OR co-produc* OR co-creat*) AND (Review* OR synthesis OR model OR framework OR guid*)	Search String 1: Abstract Search String 2: Abstract Search String 3: Abstract	1,096
Child Welfare Gateway Information Library[6]	1		TI(“Service user” OR client* OR child* OR youth* OR “young person” OR adolescent* OR teen* OR parent* OR guardian* OR famil* OR juvenile OR “young adult”) AND TI(feedback OR consult* OR engag* OR participat* OR involv* OR voice OR advoca* OR collaborat* OR co-de* OR co-produc* OR co-creat*) AND TI(Review* OR synthesis OR model OR framework OR guid* OR standard*)	Search String 1: Title Search String 2: Title Search String 3: Title	460
Childhub Online Library			Review* OR synthesis OR model OR framework OR guid* OR standard*	Topic: -Child Rights -Evaluation -Child Empowerment / Participation -Children without parental care	74

[6] Do a basic search first for advanced search to appear.

Database	Search No.	Search Options	Search Terms	Filters to Apply	Expected Results
				-Standards in social care and protection -International instruments and standards -Monitoring and research tools -Child-rights based approach Publication Type: -Academic publication -Evidence and learning -Grey Literature -Guide / Guidelines / Principle -Guides/Guidelines -Report -Secondary analysis -Sectoral guidance -Standard operating procedures (SOP) -Systematic review -Toolkit / Handbook / Manual	
				Total Expected Results	**6,858**

Table 12: Tailored Search Strategies for Websites

Database	Search No.	Webpages Search Process	Filters Applied	Results
HIQA	1	Home --> Areas we work in --> Standards and Quality --> National Standards and Guidance [Webpage link: https://www.higa.ie/areas-we-work/standards-and-quality]		16
	2	Home --> Reports & Publications --> Standards [Webpage link: https://www.higa.ie/reports-and-publications/standards]		20
	3	Home --> Reports & Publications --> Guides [Webpage link: https://www.higa.ie/reports-and-publications/guides]	Area: Children's Services	33
	4	Home --> Reports & Publications --> Academic Publications [Webpage link: https://www.higa.ie/reports-and-publications/academic-publications]	Output Type: Evidence Synthesis	43
Tusla	1	Home --> Publications [Webpage link: https://www.tusla.ie/publications/]		158
	2	Home --> Research Centre --> National Research Office --> Tusla Commissioned Research [Webpage link: https://www.tusla.ie/research/tusla-research-office/national-research-office-documents/]		50
	3	Home --> Research Centre --> National Research Office --> Links to Research [Webpage link: https://www.tusla.ie/research/links-to-research/]		32
NICE	1	Home --> Guidance --> View Guidance --> Guidance by Programme: NICE Guidelines	-Page: Published -Guidance Programme: Social Care Guidance	72
	2	Home --> Standards and Indicators --> View Our Quality Standards	Page: Published Search: 'social'	4

		[Webpage link: https://www.nice.org.uk/guidance/published?ndt=Quality+standard]		
IRISS	1	Home --> Resources --> Reports [Webpage link: https://www.iriss.org.uk/resources/reports]		142
	2	Home --> Resources --> Outlines [Webpage link: https://www.iriss.org.uk/resources/esss-outlines]		58
What Works for Children's Social Care	1	Home --> Evidence Store [Webpage link: https://whatworks-csc.org.uk/evidence-store/]	Service Areas: -Residential and secure -Adoption -Assessment -Child protection -Children in need -Children looked after (fostering) -Kinship care -Reunification	3
			Total Expected Results	**631**

Study Records

Data Management

Microsoft Word, Microsoft SharePoint and Mendeley reference management software will be used to manage data as each of these software tools are familiar and accessible to the review team. Search results (including the date, search terms used, number of studies screened, etc.) will be recorded in 'Search Strategy Tables' using Microsoft Word. Microsoft SharePoint will be used to store relevant results that make it through title and abstract screening to full-text screening. Before full-text screening begins, the articles will be uploaded from Microsoft SharePoint to Mendeley to remove duplicates.[7] Identified duplicates will then be removed from Microsoft SharePoint, and included and excluded studies will be separated into separate folders for ease of management.

Selection Process

The screening and selection process for each information source will be carried out by one review team member, rather than in duplicate, as a time and resource-saving measure. All search results will be screened against the review's 'eligibility criteria' and 'stopping criteria'. Initially, titles and abstracts will be screened. The references of all potentially eligible studies will be recorded and full-texts then sought and screened in line with the data management procedure outlined previously.

If, for whatever reason, the review team cannot access the full-text of an article, two strategies will be employed by the review team:

1. The review team will search for an open-access version of the article on Google scholar
2. The review team will make an inter-library loan request to Trinity College Dublin via the Barnardos Library and Information Service.

Articles that are still inaccessible after these two strategies will be excluded. The exclusion will be recorded and reported in the final report, with reasons for inaccessibility.

Discrepancies or uncertainties regarding eligibility will be discussed with the second review team member until a decision about inclusion or exclusion is made. Due to time sensitivities, the review team will not approach study authors for additional information if needed, and will not seek or assess the primary studies included in evidence syntheses. Rather, eligibility decisions will be made based on the available information in the relevant article. Ineligible full-text studies will be recorded with reasons for exclusion and the selection process will be visually displayed with an adapted PRISMA flow diagram (Page et al., 2021).

A common challenge when evidence syntheses are included as eligible studies is the issue of 'overlapping reviews'. That is, when two or more reviews investigate the

[7] This is only done prior to the full-text screening stage, rather than the title and abstract screening stage, as not all information sources facilitate direct exportation to Mendeley.

same phenomenon and include some (though not necessarily all) of the same primary studies. This can lead to some primary studies being over-represented in the data and potentially biasing the findings. There is no consensus in the literature, as yet, about how best to handle such situations, though several approaches exist (Ballard & Montgomery, 2017).

In this review, included studies will be sorted by PICo components and review aims/questions to identify potential overlap. If two or more systematic reviews address the same review question using the same PICo components, primary study overlap will then be calculated using the 'corrected covered area' (CCA) method outlined by Pieper et al (2014). If the CCA method identifies substantial overlap (defined for the purpose of this review as a CCA at 6 or higher), then the overlapping evidence syntheses to be included in this review will be restricted. The restriction will be based first on relevance, then quality, and then recency. That is, if evidence syntheses substantially overlap, then:

1. Only the most directly relevant evidence synthesis (ES) (i.e. most precisely focused on the review question and PICo) will be included. If ESs cannot be restricted by relevance, then
2. Only the highest quality ES will be included (according to the overall quality rating received in the quality assessments). If ESs cannot be restricted by quality, then
3. Only the most recent, up-to-date ES will be included.

Finally if -- after all the eligibility criteria, stopping criteria and selection processes have been applied -- there is still too much literature included in the review for the review team to be able to complete the review on time, then the eligibility criteria will be narrowed to only literature specifically focused on CPWS, ACS and PPFS services will be included (i.e. those within the green circle in Figure 2).

Data Collection Process & Data Items

Relevant data will be extracted into standardised data extraction forms on MS Word. Each extraction form will be completed by a single reviewer, rather than in duplicate, as a time and resource-saving measure. The types of data extracted vary by type of literature. Data will be extracted on items related to article/report characteristics and then also on characteristics specific to each type of literature, as shown in Tables 13-15.

The data extraction forms will not be piloted before data extraction begins, due to time and resource constraints, but their adequacy will be monitored during the data extraction process with a view to making any necessary adaptations as early in the data extraction process as possible.

Table 13: Data extraction items for models and frameworks

Article Characteristics	• Citation • Title • Country • Funder/Commissioner

Model & Framework Characteristics	• Name
	• Purpose/aim
	• PICo targets
	  ○ Target population(s)
	  ○ Target phenomena of interest
	  ○ Target context(s)
	• Components (brief description)
	• Proposed relations between components (brief description)
	• Location on spectrum of engagement
	• Strengths/weaknesses of model/framework (stated by authors)

Table 14: Data extraction items for guidelines

Article Characteristics	• Citation • Title • Country • Funder/Commissioner

Guideline Characteristics	• Name
	• Purpose/aim
	• PICo targets
	  ○ Target population(s)
	  ○ Target phenomena of interest
	  ○ Target context(s)
	• Location on spectrum of engagement
	• Main recommendations of relevance (brief description)
	  ○ Best practice/principles of practice
	  ○ Mechanisms, methodologies and tools
	  ○ Dependencies and requirements
	  ○ Feedback loops
	• Quality assessment result

Table 15: Data extraction items for evidence syntheses

Article Characteristics	• Citation • Title • Country • Funder/Commissioner

Evidence Syntheses Characteristics	• Review Type
	• Purpose/aim/review question(s)
	• PICo
	  ○ Population(s)
	  ○ Phenomena of interest
	  ○ Context(s) [settings and/or services]
	• Number and timeframe of included studies
	• Assessed quality (stated by authors) of included studies
	• Location on spectrum of engagement
	• Main findings of relevance (brief description)
	  ○ Best practice/principles of practice
	  ○ Mechanisms, methodologies and tools
	  ○ Dependencies and requirements
	  ○ Feedback loops
	• Assessed GRADE certainty of evidence (stated by authors) of included studies
	• Quality assessment result

Quality Assessments of Literature

Quality assessments of included evidence syntheses and guidelines will be performed by one reviewer.[8]

Where possible, the review team has opted to utilise standardised, validated quality assessment tools with which they have prior experience or familiarity. However, the potential diversity of literature types to be assessed presents two challenges to the review team: (1) there is no single quality assessment tool suitable for all types of literature to be quality assessed in this review, meaning multiple quality assessment tools must be applied; and (2) standardised, validated quality assessment tools have not been developed for all literature types eligible for this review, meaning some existing quality assessment tools must be adapted for certain literature types.

Table 16 below briefly describes the selected quality assessment tools and the types of literature they will be applied to. More detailed descriptions of the tools are provided after Table 16.

[8] As noted in footnote 1, quality assessments will not be performed on frameworks or models as the review team are unaware of assessment tools for these types of literature.

Table 16: Chosen Quality Assessment Tools

Quality Assessment Tool	Brief Tool Description	Applicable Literature Type	Rationale
		Evidence Syntheses	
AMSTAR-2 (Shea et al., 2017)	AMSTAR-2 (*A MeaSurement Tool to Assess systematic Reviews*) is a commonly-used 16-item tool for assessing the quality of systematic reviews of randomised and non-randomised intervention studies (Ma et al., 2020; Shea et al., 2017).	-Systematic Reviews of Randomised and Non-Randomised Quantitative Studies	AMSTAR-2 is a validated, standardised quality assessment tool for systematic reviews of randomised and non-randomised intervention studies (Shea et al., 2017). It is chosen because it is a validated tool that the review team are familiar with and have experience applying.
AMSTAR-2 (modified)	AMSTAR-2 with certain items added or modified to make it more applicable to evidence synthesis approaches other than systematic reviews of interventions.	-Systematic Reviews of • Qualitative Research • Mixed Methods Research -Rapid Reviews -Scoping Reviews -Overview of Reviews	There are currently no validated, standardised quality assessment tools for the evidence synthesis approaches listed on the left. Instead, AMSTAR-2 will be applied and adapted to make it more applicable to the literature types on the left.
RAMESES Quality Standards for Realist Reviews for Researchers and Peer-Reviewers (modified) (Wong et al., 2014)	The RAMESES Quality Standards for Realist Reviews is a commonly used 8-item tool for assessing the quality of realist reviews. The tool will be modified slightly by dropping one item (item 8) on the quality of reporting.	-Realist Reviews	The RAMESES tool is a validated, standardised quality assessment tool for realist reviews (Wong et al., 2014). The tool is slightly modified by dropping item 8 because it assesses the quality of a study's reporting rather than the quality of its methodology.

Guidelines			
AGREE-II	AGREE-II (*Appraisal of Guidelines Research & Evaluation Instrument 2*) is a 23-item tool for assessing clinical practice guidelines in healthcare settings.	-Guidelines providing recommendations at a practitioner or service level	AGREE-II is a validated, standardised quality assessment tool for practitioner-oriented guidelines. Although developed for a healthcare context, the review team believe the items in AGREE-II are also applicable to guidelines developed in a social work and social care context.
AGREE-HS	AGREE-HS (*Appraisal of Guidelines Research & Evaluation -- Health Systems*) is a 5-item tool for assessing health system guidelines.	-Guidelines providing recommendations at a organisational or system level	AGREE-II is a validated, standardised quality assessment tool for system-oriented guidelines. Although developed for a healthcare context, the review team believe the items in AGREE-II are also applicable to guidelines developed in a social work and social care context.

It should be noted that the range of evidence synthesis types listed in Table 16 above are not an exhaustive list of the literature types eligible for inclusion. Rather, they are types for which quality assessment preparations have been made *a priori*. If other evidence synthesis types are included in the review, the review team will consider how best to quality assess these materials at that time and record any deviations or additions to the protocol.

Evidence Syntheses

AMSTAR-2

AMSTAR-2 is a 16-item quality assessment tool designed to evaluate the methodological quality of systematic reviews of randomised and non-randomised

studies of interventions. An overall rating based on the assessment of each of the 16-items is provided at the end of the checklist and indicates the level of confidence that can be placed in the results of the review based on its methodological quality (Shea et al., 2017).

The ratings that can be assigned to each individual item vary, but can include 'Yes', 'Partial Yes', 'No' or 'No Meta-Analysis Conducted'. Specific criteria and detailed guidance have been developed to help reviewers decide the appropriate rating to assign for each item (Shea et al., 2017). Seven items are considered to be critical for a systematic review of studies of interventions to carry out. Assessing any of the critical items as not having taken place (that is, answering 'No' on a relevant critical item) is considered to seriously diminish the quality of the review, and thus, the confidence that can be placed in its results. Assessing a critical item as having partially taken place (that is, answering 'Partial Yes' on a relevant critical item) is *not* considered to seriously diminish the quality of the review, and thus, does not lead to a lower rating (B. Shea, personal communication, May 13th, 2020).

Table 17: AMSTAR-2 rating system (with slightly modified descriptions to accommodate the broad range of eligible evidence synthesis types)

AMSTAR-2 Rating System	
Rating	**Description**
High	**No or one non-critical weakness** The evidence synthesis provides an accurate and comprehensive summary of the results of the available studies that address the question(s) of interest.
Moderate	**More than one non-critical weakness*** The evidence synthesis has weaknesses, but it may provide an accurate summary of the results of the available studies that were included in the review.
Low	**One critical flaw with or without non-critical weaknesses** The evidence synthesis is relatively weak and may not provide an accurate and comprehensive summary of the available studies that address the question of interest.
Critically Low	**More than one critical flaw with or without non-critical weaknesses** The evidence synthesis is weak and should not be relied on to provide an accurate and comprehensive summary of the available studies.

**Multiple non-critical weaknesses may diminish confidence in a review and it may be appropriate to move the overall appraisal down a level of confidence. For transparency, we will treat 4-7 non-critical weaknesses in an evidence synthesis as equivalent to a critical flaw, and 8 or more non-critical weaknesses as equivalent to two critical flaws.*

However, for the purpose of this review, and for reasons previously noted, AMSTAR-2 will in this case be applied to a broader range of evidence synthesis methods than originally designed for. Namely, the tool will be applied to:

- Systematic reviews of quantitative, qualitative or mixed-methods research
- Scoping reviews
- Overviews of reviews
- Rapid reviews.

As such, some items have either been adapted or newly added so that the tool can be applied more broadly. Table 18 below shows, for the various evidence synthesis types, which items from the original AMSTAR-2 will be applied, which items have been adapted, which items have been newly added, and which items are considered not to be applicable.

Table 18: Application and adaptation of AMSTAR-2 items by evidence synthesis type

AMSTAR-2 Items	Evidence Synthesis Types*			
	Quantitative Systematic Reviews	**Qualitative Systematic Reviews**	**Scoping Reviews**	**Overviews of Reviews**
1. Review questions				
2. Review protocol	*Critical Item*	*Critical Item*	*Critical Item*	*Critical Item*
3. Study designs				
4. Literature search	*Critical Item*	*Critical Item*	*Critical Item*	*Critical Item*
5. Study selection				
6. Data extraction				
7. Excluded studies	*Critical Item*	*Critical Item*	*Critical Item*	*Critical Item*
8. Included studies				
9. Risk-of-bias assessment	*Critical Item*	*Critical Item*		*Critical Item*
9a. Primary study overlap				
9b. Discrepant data				
10. Funding source (studies)				
11. Meta-analysis methods	*Critical Item*			*Critical Item*
11a. Analytic overreach			*Critical Item*	
12. Impact of RoB results (1)				
13. Impact of RoB results (2)	*Critical Item*	*Critical Item*		*Critical Item*
14. Heterogeneity				
15. Publication bias	*Critical Item*			*Critical Item*
16. Funding source (review)				
	Original Item	Adapted Item	Additional Item	Non-Applicable Item

**Rapid reviews are another eligible evidence synthesis (ES) type that will be quality assessed. They are not included in the table above. All four ES types listed above can be done using 'rapid review' methods if time and resources are limited. As such, the particular AMSTAR-2 items of relevance to a rapid review will vary depending on the broader ES type they are combined with.*

The modified version of AMSTAR-2 has 19 items instead of 16 items. Two items (no. 9a and 9b) have been added specifically for Overviews of Reviews, and one item (no. 11a) has been added specifically for Scoping Reviews. Of the original AMSTAR-2 items, five items (no. 5, 6, 7, 10 and 16) will be applied as originally described to all evidence synthesis types. Overall, the total number of items that each evidence synthesis type will be assessed against, and the number of items considered critical, are listed in Table 19 below:

Table 19: Number of items and critical items for each eligible evidence synthesis type

Evidence Synthesis Types	Total Number of Items	Total Number of Critical Items
Systematic Review of Quantitative Research	16	7
Systematic Review of Qualitative Research	13	5
Scoping Reviews	12	4
Overviews of Reviews	18	7

Mixed-method systematic reviews will be judged against the relevant criteria of systematic reviews for quantitative research *and* qualitative research.

The adapted AMSTAR-2 tool, along with descriptions and rationale for the new and adapted items, criteria and assessment guidance are provided in Appendix 4.

RAMESES Quality Standards

The *RAMESES Quality Standards for Researchers Using the Methods and Peer Reviewers* (herein referred to as the 'RAMESES Quality Standards') are an 8-item quality assessment tool designed to evaluate the methodological rigour of realist reviews (Wong et al., 2014). Realist reviews (also referred to as 'realist synthesis') are a type of systematic evidence synthesis that ask 'What works for whom, under what circumstances, how and why?' (Wong et al., 2013). To this extent, realist reviews may be helpful for this review by identifying the populations and contexts within which certain best practices in service user engagement are most appropriate, and how or why they work to produce service user insights, improve services or improve outcomes for children and families.

The eight items of the RAMESES Quality Standards consider:

1. The research problem
2. Understanding and applying the underpinning principles of realist reviews
3. Focussing the review
4. Constructing and refining a realist programme theory

5. Developing a search strategy
6. Selection and appraisal of documents
7. Data extraction
8. Reporting (Wong et al., 2014).

Items 1-7 will be assessed for the purpose of this review. Item 8 will be dropped as a time and resource-saving measure, and also because it assesses the quality of reporting rather than methodological rigour, *per se*.

There are four ratings that can be assigned to each item: 'Inadequate', 'Adequate', 'Good' and 'Excellent'. Specific criteria and detailed guidance have been developed to help reviewers decide the appropriate rating for each item (Wong et al., 2014).

Unlike AMSTAR-2, the RAMESES Quality Standards does not assign any items as 'critical' or 'non-critical', and does not assign an overall confidence level in the results of the evidence synthesis. To assist with applying the quality assessments as an eligibility criteria, we have developed overall quality ratings based on the AMSTAR-2 rating system of 'High', 'Moderate', 'Low' and 'Critically Low' confidence in the results of a review.

To help determine an overall rating, points will be assigned to each potential response for an item. That is:

- 'Inadequate' = 0 points
- 'Adequate' = 1 point
- 'Good' = 2 points
- 'Excellent' = 3 points.

The points for all items will then be added together to produce an overall points score ranging from 0-21 points, which will be used to determine the overall rating. The overall ratings are based on the following thresholds:

Table 20: Overall quality ratings for RAMESES Quality Standards

Overall Ratings	Overall Quality Scores
High	16-21 points
Moderate	11-15 points
Low	5-10 points
Critically Low	0-4 points

Guidelines

Two different tools will be used to quality assess guidelines included in the review. These are:

- AGREE-II
- AGREE-HS.

AGREE-II is a validated quality assessment tool (Brouwers et al., 2010) for clinical practice guidance in healthcare (AGREE-HS Research Team, 2018). AGREE-II has 23-items organised into 6 domains, followed by 2 ‘global rating’ items which provide an overall quality rating of a guideline. Descriptions of the domains are provided in Table 21 below (AGREE Next Steps Consortium, 2017):

Table 21: AGREE-II domains

Domain	Description	# of Items
1. Scope and Purpose	Concerned with the overall aim, specific questions, and the target population of the guidelines.	3
2. Stakeholder Involvement	Focuses on the extent to which the guideline was developed by the appropriate stakeholders and represents the views of its intended users.	3
3. Rigour of Development	Relates to the process used to gather and synthesise the evidence, the methods to formulate the recommendations, and to update them.	8
4. Clarity of Presentation	Deals with the language, structure, and format of the guideline.	3
5. Applicability	Pertains to the likely barriers and facilitators to implementation, strategies to improve uptake, and resource implications of applying the guideline,.	4
6. Editorial Independence	Concerned with the formulation of recommendations not being unduly biased with competing interests.	2
Overall Assessment	Includes rating the overall quality of the guideline and whether the guideline would be recommended for use in practice.	2

AGREE-HS is also a validated quality assessment tool (Brouwers et al., 2018), though its focus is on health system guidance rather than clinical practice guidance (AGREE-HS Research Team, 2018). AGREE-HS has 5-items, followed by 2 ‘global rating’ items which provide an overall quality rating of a guideline. Descriptions of the items are provided in Table 22 below (AGREE-HS Research Team, 2018):

Table 22: AGREE-HS items

Item	Description
1. Topic	Addresses the description of the health system challenge, the causes of the challenge, the priority accorded to it, and relevance of the guidance.
2. Participants	Addresses the composition of the health systems guidance development team and the management of competing interests and funder influence.

3. Methods	Addresses the use of systematic methods and transparency in reporting; the use of the best available and up-to-date evidence; the consideration of effectiveness and cost-effectiveness of the potential options; and the weighing of benefits and harms in the guidance document.
4. Recommendations	Addresses the outcomes orientation and comprehensiveness of the guidance; the ethical and equity considerations drawn upon in its development; the details for its operationalisation; the sociocultural and political alignment of the guidance; and the updating plan.
5. Implementability	Addresses the barriers and enablers to implementing the recommendations; the cost and resource considerations in implementing the recommendations; the affordability of implementation and the anticipated sustainability of outcomes; the flexibility and transferability of the guidance; and the strategies for disseminating the guidance, monitoring its implementation and evaluating its impact.
Overall Assessment	Requires a judgement about the overall quality of the guidance, taking into account the 5 items above.

All items in AGREE-II and AGREE-HS are rated on a 7-point scale, ranging from 1 ('strongly disagree') to 7 ('strongly agree'). The assignment of ratings by a reviewer are guided by a series of 'criteria' and 'other considerations' outlined in the *User's Manuals* of AGREE-II and AGREE-HS, respectively (AGREE-HS Research Team, 2018; AGREE Next Steps Consortium, 2017). This guidance states that:

> "Score of 1 (*Strongly Disagree*). A score of 1 should be given when there is no information that is relevant to the AGREE-II item, if the concept is very poorly reported, or if the author's state explicitly that criteria were not met.
>
> Score of 7 (*Strongly Agree*). A score of 7 should be given if the reporting quality of reporting is exceptional and where the full criteria and considerations articulated in the User's Manual have been met.
>
> Scores between 2 and 6. A score between 2 and 6 is assigned when the reporting of the AGREE-II item does not meet the full criteria or considerations. A score is assigned depending on the completeness and quality of reporting. Scores increase as more criteria are met and considerations addressed" (AGREE Next Steps Consortium, 2017, p. 8).

This guidance implies that for an item to receive a rating of '7' (strongly agree), it should meet all the criteria and considerations for that item. Furthermore, the more criteria and considerations that are met, the higher the rating that should be given for that item. Using this guidance, the review team have developed response options to identify if, to what extent, and how many criteria have been met for each specific item. That is, the reviewer has the following response options available when assessing if a guideline has met a particular criteria for a particular item:

- Yes (*Criteria/consideration met*)

- Partially (*Criteria/consideration partially met*)
- No (*Criteria/consideration not met*)
- Not applicable.

To help determine an overall rating for each item, scores will be assigned to each response option for its respective criteria and considerations. However, how scores are assigned will differ for 'criteria' compared to 'considerations'. That is, the scores for criteria is defined as:

Criteria Scores
=
7 (i.e. the number of possible ratings for an item) ÷ the number of criteria for that particular item

The review team will define the scores for considerations differently though, as they typically refer to the quality of reporting rather than to the quality or rigour of the guideline and its development, *per se*. So, while the extent to which a 'criteria' is met can lead to a rating being higher or lower, 'considerations' will only lead to the initial criteria score staying the same (if all considerations are met) or going down by a maximum of 2 points (if all considerations are not met). That is, the scoring of a consideration is defined as:

Consideration Scores
=
-2 (i.e. the max number of ratings for a consideration) ÷ the number of considerations for that particular item

Furthermore, the response options will also be assigned different weights. For criteria scores, the weights assigned are:

- Yes (*Criteria/consideration met*) = Full (100%) score
- Partially (*Criteria/consideration partially met*) = Half (50%) score
- No (*Criteria/consideration not met*) = No (0%) score
- Not applicable. = Removed as a criteria.

For 'other considerations' scores, the weights above will be reversed.

To demonstrate how the response options and weighting procedures will work together in practice to produce a rating for an item, two examples are shown in Table 24 on the next page (examples 1 and 2).

When all 23 items have been rated, the overall ratings will be scored using the mean average of the ratings for the 23 items. An overall quality rating will then be assigned using the same four categories as AMSTAR-2 to improve consistency and readability for the reader:

Table 23: Overall quality ratings for AGREE-II and AGREE-HS

Quality Ratings	Overall Quality Scores
High	5.26 - 7.00

Moderate	3.51 - 5.25
Low	2.76 - 3.50
Critically Low	1.00 - 2.75

An example of the overall ratings procedure and how it will work in practice is shown in Table 24 (example 3).

Table 24: Examples of procedure for rating items in AGREE-II and AGREE-HS

Worked Demonstration	Explanatory Comments
Example 1: Item Rating	
Item 1: The overall objective(s) of the guideline is (are) specifically described Does the item content include the following ***criteria***: 1. Intent (e.g. prevention, diagnosis, treatment, etc.) ☒ Yes ☐ Partially ☐ No ☐ N/a. 2. Expected benefit or outcome ☐ Yes ☐ Partially ☒ No ☐ N/a. 3. Target(s) (e.g. service user population, society, etc.) ☐ Yes ☒ Partially ☐ No ☐ N/a. Additional ***considerations***: 1. Is the item well written? Are the descriptions clear and concise? ☐ Yes ☒ Partially ☐ No ☐ N/a. 2. Is the item content easy to find in the guideline? ☒ Yes ☐ Partially ☐ No ☐ N/a. Response Option Weightings for Criteria: • Yes = 2.33 • Partially = 1.17 • No = 0 • Not Applicable = Remove as a criteria. Criteria ratings: • 1 Yes = 2.33 • 1 Partially = 1.17 • 1 No = 0 ***Total Criteria Score*** ***= 3.5*** out of 7 Response Option Weightings for Considerations: • Yes = 0 • Partially = -0.5 • No = -1 • Not Applicable = Remove as a criteria. Consideration ratings: • 1 Yes = 0 • 1 Partially = -0.5 ***Total Consideration Score = -0.5*** out of -2 **Item 1 rating** = Total Criteria Score + Total Consideration Score = 3.5 - 0.5	Item 1 from AGREE-II is used for this example. This item has 3 ‘criteria’, and 2 ‘additional considerations’. As item 1 is to be given an overall rating of between 1 and 7, and there are 3 criteria for item 1, the calculation of the score for each response option starts by dividing 7 (# of possible ratings) by 3 (# of criteria). This gives a score of 2.33 for each criteria met. A 50% weighting is then assigned for ‘Partially’ responses (1.17) and 0% weighting assigned for ‘No’ responses. As the ‘additional considerations’ are scored between 0 and -2, and there are 2 additional considerations for item 1, the calculation of the score for each response option starts by dividing -2 (# of possible ratings) by 2 (# of considerations). This gives a score of -1 for each consideration not met. A 50%

= 3.0	weighting is then assigned for 'partially' responses (-0.5) and 0% weighting is assigned for 'Yes' responses as guidelines will not be punished for meeting additional considerations.

Example 2: Item Rating

Item 2: The question(s) covered by the guidelines is (are) specifically described		Item 2 from AGREE-II is used for this example. This item has 5 'criteria', and 3 'additional considerations'.
Does the item content include the following ***criteria***:		Of the 5 criteria for this item, 1 is deemed to be 'not applicable' and is removed from the scoring. As item 2 is to be rated between 1 and 7, and there are 4 criteria applicable to item 2, the calculation of the score for each response option starts by dividing 7 (# of possible ratings) by 4 (# of criteria). This gives a score of 1.75 for each criteria met. A 50% weighting is then assigned for 'Partially' responses (0.88) and 0% weighting assigned for 'No' and 'Can't Tell' responses.
1. Target population	☒ Yes ☐ Partially ☐ No ☐ N/a.	
2. Intervention(s), exposure(s) or phenomena of interest	☒ Yes ☐ Partially ☐ No ☐ N/a.	
3. Comparisons (if appropriate)	☐ Yes ☐ Partially ☐ No ☒ N/a.	
4. Outcomes	☐ Yes ☐ Partially ☒ No ☐ N/a.	
5. Setting(s) or context	☐ Yes ☒ Partially ☐ No ☐ N/a.	
Additional ***considerations***:		
1. Is the item well written? Are the descriptions clear and concise?	☐ Yes ☒ Partially ☐ No ☐ N/a.	
2. Is the item content easy to find in the guideline?	☒ Yes ☐ Partially ☐ No ☐ N/a.	
3. Is there enough information provided in the question(s) for anyone to initiate the development of a guideline on this topic or to understand the populations and contexts profiled in the guideline?	☒ Yes ☐ Partially ☐ No ☐ N/a	

Response Option Weightings for Criteria:

- Yes = 1.75
- Partially = 0.88
- No = 0
- Not Applicable = Remove as a criteria.

Response Option Weightings for Considerations:

- Yes = 0
- Partially = -0.33
- No = -0.67
- Not Applicable = Remove as a criteria.

As the 'additional considerations' are scored between 0 and -2, and there are 3 additional considerations

Criteria ratings:

- 2 Yes = 3.5
- 1 Partially = 0.88
- 1 No = 0

Total Criteria Score ***= 4.38*** out of 7

Consideration ratings:

- 2 Yes = 0
- 1 Partially = -0.33

Total Consideration Score = -0.33 out of -2

Item 2 rating = Total Criteria Score + Total Consideration Score
= 4.38 - 0.33
= 4.05

for item 2, the calculation of the score for each response option starts by dividing -2 (# of possible ratings) by 3 (# of considerations). This gives a score of -0.67 for each consideration not met or not reported. A 50% weighting is then assigned for 'partially' responses (-0.33) and 0% weighting is assigned for 'Yes' responses as guidelines will not be punished for meeting additional considerations.

Example 3: Overall Quality Rating

Overall Guideline Assessment

Item	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**Mean**
Rating	3	6	5	4	4	1	1	2	5	1	3	6	6	3	2	2	2	7	5	6	7	1	4	**3.74**

Overall quality rating: **3.74. = Moderate**

The ratings for each item in this example are hypothetical.

The mean average rating for all 23-items is calculated (3.74) and then categorised according to the quality ratings shown in Table 23, where 3.74 is equivalent to a 'moderate' quality rating.

Data Synthesis

Due to time and resource constraints, data analysis and synthesis will be conducted primarily by one reviewer. Meetings will be held periodically (weekly to fortnightly) with the second review team member to critically discuss interpretations of the data and emerging insights and findings from the analysis.

It is anticipated that non-empirical data (i.e. models, frameworks and guidelines) will be analysed first, to identify and organise relevant concepts, practices and requirements into an initial framework. This will be followed by an analysis of empirical data (i.e. evidence syntheses) to further develop and refine the framework, and identify areas that are supported by empirical data. To this extent, the analysis can be said to start with an inductive form of qualitative analysis for non-empirical data, and proceed to a combination of deductive and inductive analysis of empirical data.

It has been noted that “inconsistencies and inappropriateness in the analytical approaches undertaken in the analysis and presentation of the data” can be recurrent challenges within some forms of evidence syntheses (Pollock et al., 2023, p. 521). So, in keeping with a robust methodological approach, the review team have opted to combine the approaches of thematic synthesis and qualitative meta-summary, due to their suitability to their ability to accommodate rigorous analysis of multiple forms of data within relatively short timeframes (Booth et al., 2016).

Thematic synthesis is noted as a “tried and tested method” in systematic reviewing that synthesises the results of primary research in a transparent way, while allowing for the production of new concepts and hypotheses (Thomas & Harden, 2008, p. 99). Thematic synthesis involves three stages:

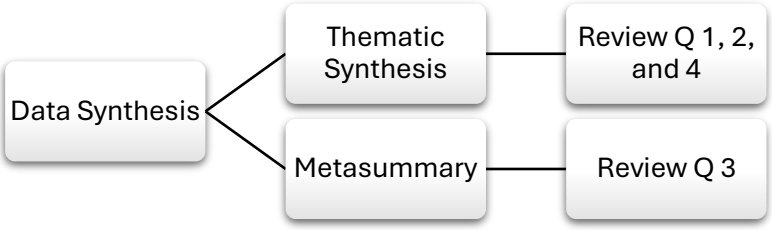
1. Coding text
2. Developing ‘descriptive’ themes
3. Developing ‘analytic’ themes.

Descriptive themes usually stay very close to the original meanings in primary studies. Analytical themes, however, ‘go beyond’ the original meaning and facilitate the reviewer in identifying additional concepts, understandings, and hypotheses beyond the original findings. A thematic synthesis approach is favoured because it permits the review team flexibility in choosing between developing descriptive themes or furthering this to form analytic themes, depending on the time constraints present and the results of the yielded searches. For review questions 1, 2, and 4 the review team is preferring to follow such a thematic synthesis approach.

For review question 3, the review team aims to use meta-summary as their analysis technique. Meta-summary is useful in synthesising the findings of quantitative and qualitative studies (Sandelowski et al., 2007). Meta-summary involves the extraction, grouping, and formatting of findings. It also can involve the calculation of frequency and intensity effect sizes in order to assess the relative magnitude of abstracted findings and the contribution of these findings to the final report.

To summarise, considering the needs of the research questions, our approach at this time has been identified as following a thematic synthesis approach, along with meta-summary.

Figure 3: Planned approach to data synthesis



Out-of-Scope Evidence Synthesis Activities

Due to limited resources and time, several activities that are usually recommended for systematic evidence syntheses will not be performed in this rapid integrative review. These include:

- Statistical meta-analyses, investigations of heterogeneity, and sub-group or sensitivity analyses
- Investigations of discrepancies or discordance across evidence syntheses
- Assessments of publication, dissemination or reporting biases
- Assessments of the certainty of evidence.

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Appendices

Appendix 1: Review Budget & Costings

The review has a budget of €20,000. The breakdown of staff time and costings are shown in the table below. In total, the review team are estimated to dedicate 31.5 days to the review, across three staff, at a cost of €19,975.

Table 25: Estimated project costings

Role	**Daily Rate**
Senior Manager [SM]	€950
Project Specialist w/ 3-5 years' experience [PS (3-5y)]	€650
Project Specialist w/ 0-3 years' experience [PS (0-3y)]	€600

	Days			**Cost**		
	SM	**PS (3-5y)**	**PS (0-3)**	**SM**	**PS (3-5y)**	**PS (0-3)**
Package 1	0.5	5	2.5	€475	€3,250	€1,500
Package 2	0	3.5	12.5	€0	€2,275	€7,500
Package 3	1	2.5	4	€950	€1,625	€2,400
	1.5	**11**	**19**	**€1,425**	**€7,150**	**€11,400**
	Total Days = 31.5			**Total Cost = €19,975**		

Appendix 2: Review Timeline

CES's Tender Response document proposes dividing the project into three incremental work packages:

1. **Scoping package**: The scope of the review is defined and future planning for work packages 2 and 3 commences.
2. **The review**: The review team commence the rapid integrative review.
3. **Final report**: The final report is produced and a formal presentation of the review findings is made to Tusla.

A 6-month timeline between starting work package 1 and ending work package 3 has been agreed between CES and Tusla. Assuming a project start date of Monday 17th April 2023 (the day before the first proposal meeting between Tusla and CES was held), it is estimated the project will end by Friday 13th October 2023. The table below provides a more detailed breakdown of the project tasks and their estimated timings:

Table 26: Project tasks and estimated timeline

Month	April		May					June				July				August					September				October	
Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
Package 1																										
Development, review & sign-off of Protocol																										
Development of data management forms/templates																										
Package 2																										
Search relevant databases																										
Screen titles & abstracts																										
Retrieve & screen full-texts																										
Extract data																										
Quality assess data																										
Analyse/synthesise data																										
Package 3																										
Write progress update																										
Write final report																										
Internal CES review																										
Present final report																										→

Appendix 3: Scoping Search Results

Database	Date	Search No.	Search Options	Search Terms	Filters Applied	Results
EBSCO Academic Search Complete	13.06.23	1	**Expanders:** Apply equivalent subjects **Search Modes:** Boolean/Phrase	(“Service user” OR client* OR child* OR youth* OR “young person” OR adolescent* OR teen* OR parent* OR guardian* OR famil*) AND (feedback OR consult* OR engag* OR participat* OR involv* OR voice OR advoca* OR collaborat* OR co-de* OR co-produc* OR co-creat*) AND (Service* OR support* OR system* OR program* OR project*) AND (Social OR welfare OR protection OR “in care” OR “looked after”) AND (Review* OR synthesis OR model OR framework OR guid*)		87,428
		2	As above.	(“Service user” OR client* OR child* OR youth* OR “young person” OR adolescent* OR teen* OR parent* OR guardian* OR famil*) AND (feedback OR consult* OR engag* OR participat* OR involv* OR voice OR advoca* OR collaborat* OR co-de* OR co-produc* OR co-creat*) AND (Service* OR support* OR system* OR program* OR project*) AND (Social OR welfare OR protection OR “in care” OR “looked after”) AND (Review* OR synthesis OR model OR framework OR guid*)	Language: English	84,662
		3	As above.	(“Service user” OR client* OR child* OR youth* OR “young person” OR adolescent* OR teen* OR parent* OR		109,416

Database	Date	Search No.	Search Options	Search Terms	Filters Applied	Results
				guardian* OR famil*) AND (feedback OR consult* OR engag* OR participat* OR involv* OR voice OR advoca* OR collaborat* OR co-de* OR co-produc* OR co-creat*) AND (Social OR welfare OR protection OR “in care” OR “looked after”) AND (Review* OR synthesis OR model OR framework OR guid*)		
		4	As above.	(“Service user” OR client* OR child* OR youth* OR “young person” OR adolescent* OR teen* OR parent* OR guardian* OR famil*) AND (feedback OR consult* OR engag* OR participat* OR involv* OR voice OR advoca* OR collaborat* OR co-de* OR co-produc* OR co-creat*) AND (Social OR welfare OR protection OR “in care” OR “looked after”) AND TI(Review* OR synthesis OR model OR framework OR guid*)	Search string 4: Title	19,868
		5	As above.	AB(“Service user” OR client* OR child* OR youth* OR “young person” OR adolescent* OR teen* OR parent* OR guardian* OR famil*) AND AB(feedback OR consult* OR engag* OR participat* OR involv* OR voice OR advoca* OR collaborat* OR co-de* OR co-produc* OR co-creat*) AND AB(Social OR welfare OR protection OR “in care” OR “looked after”) AND TI(	Search string 1: Abstract Search string 2: Abstract Search string 3: Abstract Search string 4: Title	8,920

Database	Date	Search No.	Search Options	Search Terms	Filters Applied	Results
				Review* OR synthesis OR model OR framework OR guid*)		
		6	As above.	TI(“Service user” OR client* OR child* OR youth* OR “young person” OR adolescent* OR teen* OR parent* OR guardian* OR famil*) AND AB(feedback OR consult* OR engag* OR participat* OR involv* OR voice OR advoca* OR collaborat* OR co-de* OR co-produc* OR co-creat*) AND AB(Social OR welfare OR protection OR “in care” OR “looked after”) AND TI(Review* OR synthesis OR model OR framework OR guid*)	Search string 1: Title Search string 2: Abstract Search string 3: Abstract Search string 4: Title	3,607
		7	As above.	TI(“Service user” OR client* OR child* OR youth* OR “young person” OR adolescent* OR teen* OR parent* OR guardian* OR famil*) AND TI(feedback OR consult* OR engag* OR participat* OR involv* OR voice OR advoca* OR collaborat* OR co-de* OR co-produc* OR co-creat*) AND AB(Social OR welfare OR protection OR “in care” OR “looked after”) AND TI(Review* OR synthesis OR model OR framework OR guid*)	Search string 1: Title Search string 2: Title Search string 3: Abstract Search string 4: Title	600
		8	As above.	TI(“Service user” OR client* OR child* OR youth* OR “young person” OR adolescent* OR teen* OR parent* OR guardian* OR famil*) AND TI(feedback	Language: English Search string 1: Title	588

Database	Date	Search No.	Search Options	Search Terms	Filters Applied	Results
				OR consult* OR engag* OR participat* OR involv* OR voice OR advoca* OR collaborat* OR co-de* OR co-produc* OR co-creat*) AND AB(Social OR welfare OR protection OR “in care” OR “looked after”) AND TI(Review* OR synthesis OR model OR framework OR guid*)	Search string 2: Title Search string 3: Abstract Search string 4: Title	
EBSCO Sociology Source Ultimate	13.06.23	1	**Expanders:** -Also search within the full-text of the articles -Apply equivalent subjects **Search Modes:** Boolean/Phrase	(“Service user” OR client* OR child* OR youth* OR “young person” OR adolescent* OR teen* OR parent* OR guardian* OR famil*) AND (feedback OR consult* OR engag* OR participat* OR involv* OR voice OR advoca* OR collaborat* OR co-de* OR co-produc* OR co-creat*) AND (Service* OR support* OR system* OR program* OR project*) AND (Social OR welfare OR protection OR “in care” OR “looked after”) AND (Review* OR synthesis OR model OR framework OR guid*)		20,424,093
		2	As above.	(“Service user” OR client* OR child* OR youth* OR “young person” OR adolescent* OR teen* OR parent* OR guardian* OR famil*) AND (feedback OR consult* OR engag* OR participat* OR involv* OR voice OR advoca* OR collaborat* OR co-de* OR co-produc* OR co-creat*) AND (Service* OR support* OR system* OR program* OR	Language: English	11,339,974

Database	Date	Search No.	Search Options	Search Terms	Filters Applied	Results
				project*) AND (Social OR welfare OR protection OR “in care” OR “looked after”) AND (Review* OR synthesis OR model OR framework OR guid*)		
		3	As above.	(“Service user” OR client* OR child* OR youth* OR “young person” OR adolescent* OR teen* OR parent* OR guardian* OR famil*) AND (feedback OR consult* OR engag* OR participat* OR involv* OR voice OR advoca* OR collaborat* OR co-de* OR co-produc* OR co-creat*) AND (Social OR welfare OR protection OR “in care” OR “looked after”) AND (Review* OR synthesis OR model OR framework OR guid*)	Language: English	11,851,213
		4	As above.	(“Service user” OR client* OR child* OR youth* OR “young person” OR adolescent* OR teen* OR parent* OR guardian* OR famil*) AND (feedback OR consult* OR engag* OR participat* OR involv* OR voice OR advoca* OR collaborat* OR co-de* OR co-produc* OR co-creat*) AND (Social OR welfare OR protection OR “in care” OR “looked after”) AND TI(Review* OR synthesis OR model OR framework OR guid*)	Language: English Search string 4: Title	645,105
		5	As above.	AB(“Service user” OR client* OR child* OR youth* OR “young person” OR adolescent* OR teen* OR parent* OR guardian* OR famil*) AND AB(feedback	Language: English Search string 1: Abstract	68,667

Database	Date	Search No.	Search Options	Search Terms	Filters Applied	Results
				OR consult* OR engag* OR participat* OR involv* OR voice OR advoca* OR collaborat* OR co-de* OR co-produc* OR co-creat*) AND AB(Social OR welfare OR protection OR “in care” OR “looked after”) AND TI(Review* OR synthesis OR model OR framework OR guid*)	Search string 2: Abstract Search string 3: Abstract Search string 4: Title	
		6	**Expanders:** Apply equivalent subjects **Search Modes:** Boolean/Phrase	AB(“Service user” OR client* OR child* OR youth* OR “young person” OR adolescent* OR teen* OR parent* OR guardian* OR famil*) AND AB(feedback OR consult* OR engag* OR participat* OR involv* OR voice OR advoca* OR collaborat* OR co-de* OR co-produc* OR co-creat*) AND AB(Social OR welfare OR protection OR “in care” OR “looked after”) AND TI(Review* OR synthesis OR model OR framework OR guid*)	Language: English Search string 1: Abstract Search string 2: Abstract Search string 3: Abstract Search string 4: Title	68,667
		7	As above.	TI(“Service user” OR client* OR child* OR youth* OR “young person” OR adolescent* OR teen* OR parent* OR guardian* OR famil*) AND AB(feedback OR consult* OR engag* OR participat* OR involv* OR voice OR advoca* OR collaborat* OR co-de* OR co-produc* OR co-creat*) AND AB(Social OR welfare OR protection OR “in care” OR “looked after”) AND TI(Review* OR	Language: English Search string 1: Title Search string 2: Abstract Search string 3: Abstract Search string 4: Title	25,798

Database	Date	Search No.	Search Options	Search Terms	Filters Applied	Results
				synthesis OR model OR framework OR guid*)		
		8	As above.	TI(“Service user” OR client* OR child* OR youth* OR “young person” OR adolescent* OR teen* OR parent* OR guardian* OR famil*) AND TI(feedback OR consult* OR engag* OR participat* OR involv* OR voice OR advoca* OR collaborat* OR co-de* OR co-produc* OR co-creat*) AND AB(Social OR welfare OR protection OR “in care” OR “looked after”) AND TI(Review* OR synthesis OR model OR framework OR guid*)	Language: English Search string 1: Title Search string 2: Title Search string 3: Abstract Search string 4: Title	4,236
		9	As above.	TI(“Service user” OR client* OR child* OR youth* OR “young person” OR adolescent* OR teen* OR parent* OR guardian* OR famil*) AND TI(feedback OR consult* OR engag* OR participat* OR involv* OR voice OR advoca* OR collaborat* OR co-de* OR co-produc* OR co-creat*) AND SU(Social OR welfare OR protection OR “in care” OR “looked after”) AND TI(Review* OR synthesis OR model OR framework OR guid*)	Language: English Search string 1: Title Search string 2: Title Search string 3: Subject Terms Search string 4: Title	3,963
		10	As above.	TI(“Service user” OR client* OR child* OR youth* OR “young person” OR adolescent* OR teen* OR parent* OR guardian* OR famil*) AND TI(feedback	Language: English Search string 1: Title	22,500

Database	Date	Search No.	Search Options	Search Terms	Filters Applied	Results
				OR consult* OR engag* OR participat* OR involv* OR voice OR advoca* OR collaborat* OR co-de* OR co-produc* OR co-creat*) AND TI(Review* OR synthesis OR model OR framework OR guid*)	Search string 2: Title Search string 3: Title	
		11	As above.	TI(“Service user” OR client* OR child* OR youth* OR “young person” OR adolescent* OR teen* OR parent* OR guardian* OR famil*) AND TI(feedback OR consult* OR engag* OR participat* OR involv* OR voice OR advoca* OR collaborat* OR co-de* OR co-produc* OR co-creat*) AND TI(Social OR welfare OR protection OR “in care” OR “looked after”) AND TI(Review* OR synthesis OR model OR framework OR guid*)	Language: English Search string 1: Title Search string 2: Title Search string 3: Title Search string 4: Title	3,149
		12	As above.	TI(“Service user” OR client* OR child* OR youth* OR “young person” OR adolescent* OR teen* OR parent* OR guardian* OR famil*) AND TI(feedback OR consult* OR engag* OR participat* OR involv* OR voice OR advoca* OR collaborat* OR co-de* OR co-produc* OR co-creat*) AND TI(Social OR welfare OR protection OR “in care” OR “looked after”) AND TI(Review* OR synthesis OR model OR framework OR guid*)	Language: English Search string 1: Title Search string 2: Title Search string 3: Title Search string 4: Title Source types: Academic journals, reports, conference	1,822

Database	Date	Search No.	Search Options	Search Terms	Filters Applied	Results
					materials, reviews, dissertations/theses	
Google Scholar	13.06.23	1		**All:** engagement **Exact Phrase:** service user **At Least One:** review synthesis model framework guidance guidelines **Without:**	Language: English	51,300
		2		**All:** engagement **Exact Phrase:** service user **At Least One:** review synthesis model framework guidance guidelines **Without:** protocol	Language: English	39,100
		3		**All:** engagement **Exact Phrase:** service user **At Least One:** review synthesis model framework guidance guidelines **Without:** protocol	Language: English Where: Title	5
		4		**All:** youth engagement **Exact Phrase:** **At Least One:** review synthesis model framework guidance guidelines **Without:** protocol	Language: English	2,780,000
		5		**All:** youth engagement **Exact Phrase:** **At Least One:** review synthesis model framework guidance guidelines **Without:** protocol	Language: English Where: Title	175
		6		**All:** social **Exact Phrase:** youth engagement	Language: English	22,800

Database	Date	Search No.	Search Options	Search Terms	Filters Applied	Results
				At Least One: review synthesis model framework guidance guidelines **Without:** protocol		
		7		**All:** social **Exact Phrase:** youth engagement **At Least One:** review synthesis model framework guidance guidelines **Without:** protocol	Language: English Where: Title	7
		8		**All:** services **Exact Phrase:** youth engagement **At Least One:** review synthesis model framework guidance guidelines **Without:** protocol	Language: English Where: Title	2
		9		**All:** family engagement **Exact Phrase:** **At Least One:** review synthesis model framework guidance guidelines **Without:** protocol	Language: English	4,110,000
		10		**All:** family engagement **Exact Phrase:** **At Least One:** review synthesis model framework guidance guidelines **Without:** protocol	Language: English Where: Title	221
		11		**All:** parent engagement **Exact Phrase:** **At Least One:** review synthesis model framework guidance guidelines **Without:** protocol	Language: English	3,010,000
		12		**All:** parent engagement **Exact Phrase:**	Language: English Where: Title	72

Database	Date	Search No.	Search Options	Search Terms	Filters Applied	Results
				At Least One: review synthesis model framework guidance guidelines **Without:** protocol		
		13		**All:** participation **Exact Phrase:** service user **At Least One:** review synthesis model framework guidance guidelines **Without:** protocol	Language: English	56,300
		14		**All:** participation **Exact Phrase:** service user **At Least One:** review synthesis model framework guidance guidelines **Without:** protocol	Language: English Where: Title	11
	14.06.23	15		**All:** child participation **Exact Phrase:** **At Least One:** review synthesis model framework guidance guidelines **Without:** protocol	Language: English	5, 620,000
		16		**All:** child participation **Exact Phrase:** **At Least One:** review synthesis model framework guidance guidelines **Without:** protocol	Language: English Where: Title	164
		17		**All:** child engagement **Exact Phrase:** **At Least One:** review synthesis model framework guidance guidelines **Without:** protocol	Language: English Where: Title	70
		18		**All:** youth participation **Exact Phrase:**	Language: English	3,600,000

Database	Date	Search No.	Search Options	Search Terms	Filters Applied	Results
				At Least One: review synthesis model framework guidance guidelines **Without:** protocol		
		19		**All:** youth participation **Exact Phrase:** **At Least One:** review synthesis model framework guidance guidelines **Without:** protocol	Language: English Where: Title	254
		20		**All:** parent participation **Exact Phrase:** **At Least One:** review synthesis model framework guidance guidelines **Without:** protocol	Language: English	4,870,000
		21		**All:** parent participation **Exact Phrase:** **At Least One:** review synthesis model framework guidance guidelines **Without:** protocol	Language: English Where: Title	80
		22		**All:** family participation **Exact Phrase:** **At Least One:** review synthesis model framework guidance guidelines **Without:** protocol	Language: English	5,970,000
		23		**All:** family participation **Exact Phrase:** **At Least One:** review synthesis model framework guidance guidelines **Without:** protocol	Language: English Where: Title	129
		24		**All:** co-production **Exact Phrase:**	Language: English	538,000

Database	Date	Search No.	Search Options	Search Terms	Filters Applied	Results
				At Least One: review synthesis model framework guidance guidelines **Without:** protocol		
		25		**All:** co-production **Exact Phrase:** **At Least One:** review synthesis model framework guidance guidelines **Without:** protocol	Language: English Where: Title	446
		26		**All:** social **Exact Phrase:** co-production **At Least One:** review synthesis model framework guidance guidelines **Without:** protocol	Language: English Where: Title	36
		27		**All:** co-design **Exact Phrase:** **At Least One:** review synthesis model framework guidance guidelines **Without:** protocol	Language: English Where: Title	696
		28		**All:** social **Exact Phrase:** co-design **At Least One:** review synthesis model framework guidance guidelines **Without:** protocol	Language: English Where: Title	11
York Research Database	14.06.23	1		**All:** engagement **Exact Phrase:** service user **At Least One:** review synthesis model framework guidance guidelines **Without:**	Content Type: Publications	326
		2		**All:** engagement **Exact Phrase:** service user		195

Database	Date	Search No.	Search Options	Search Terms	Filters Applied	Results
				At Least One: review synthesis model framework guidance guidelines **Without:** protocol		
		3		**All:** **Exact Phrase:** service user engagement **At Least One:** review synthesis model framework guidance guidelines **Without:**		14
		4		**All:** **Exact Phrase:** youth engagement **At Least One:** review synthesis model framework guidance guidelines **Without:**		13
		5		**All:** **Exact Phrase:** child engagement **At Least One:** review synthesis model framework guidance guidelines **Without:**		1
		6		**All:** **Exact Phrase:** parent engagement **At Least One:** review synthesis model framework guidance guidelines **Without:**		10
		7		**All:** **Exact Phrase:** family engagement **At Least One:** review synthesis model framework guidance guidelines **Without:**		14
		8		**All:** engagement		522

Database	Date	Search No.	Search Options	Search Terms	Filters Applied	Results
				Exact Phrase: social work **At Least One:** review synthesis model framework guidance guidelines **Without:**		
		9		**All:** engagement **Exact Phrase:** social care **At Least One:** review synthesis model framework guidance guidelines **Without:**		628
		10		**All:** engagement **Exact Phrase:** family support **At Least One:** review synthesis model framework guidance guidelines **Without:**		126
		11		**All:** **Exact Phrase:** service user participation **At Least One:** review synthesis model framework guidance guidelines **Without:**		6
		12		**All:** participation **Exact Phrase:** service user **At Least One:** review synthesis model framework guidance guidelines **Without:**		337
		13		**All:** participation social **Exact Phrase:** service user **At Least One:** review synthesis model framework guidance guidelines **Without:**		330
		14		**All:** participation user		341

Database	Date	Search No.	Search Options	Search Terms	Filters Applied	Results
				Exact Phrase: social work **At Least One:** review synthesis model framework guidance guidelines **Without:**		
		15		**All:** participation user **Exact Phrase:** social care **At Least One:** review synthesis model framework guidance guidelines **Without:**		406
		16		**All:** participation user **Exact Phrase:** child protection **At Least One:** review synthesis model framework guidance guidelines **Without:**		40
		17		**All:** participation user **Exact Phrase:** child welfare **At Least One:** review synthesis model framework guidance guidelines **Without:**		27
		18		**All:** **Exact Phrase:** co-production **At Least One:** review synthesis model framework guidance guidelines **Without:**		301
		19		**All:** co-production social **Exact Phrase:** **At Least One:** review synthesis model framework guidance guidelines **Without:**		3,018
		20		**All:** social		268

Database	Date	Search No.	Search Options	Search Terms	Filters Applied	Results
				Exact Phrase: co-production **At Least One:** review synthesis model framework guidance guidelines **Without:**		
		21		**All:** co-production **Exact Phrase:** service user **At Least One:** review synthesis model framework guidance guidelines **Without:**		196
		22		**All:** co-production social **Exact Phrase:** service user **At Least One:** review synthesis model framework guidance guidelines **Without:**		193
		23		**All:** co-production **Exact Phrase:** child protection **At Least One:** review synthesis model framework guidance guidelines **Without:**		36
		24		**All:** co-production **Exact Phrase:** child welfare **At Least One:** review synthesis model framework guidance guidelines **Without:**		24
		25		**All:** **Exact Phrase:** co-design **At Least One:** review synthesis model framework guidance guidelines **Without:**		216
		26		**All:** co-design		541

Database	Date	Search No.	Search Options	Search Terms	Filters Applied	Results
				Exact Phrase: service user **At Least One:** review synthesis model framework guidance guidelines **Without:**		
		27		**All:** co-design **Exact Phrase:** child protection **At Least One:** review synthesis model framework guidance guidelines **Without:**		94
		28		**All:** co-design **Exact Phrase:** child welfare **At Least One:** review synthesis model framework guidance guidelines **Without:**		71
Campbell Systematic Reviews	13.06.23	1		(“Service user” OR client* OR child* OR youth* OR “young person” OR adolescent* OR teen* OR parent* OR guardian* OR famil*) AND (feedback OR consult* OR engag* OR participat* OR involv* OR voice OR advoca* OR collaborat* OR co-de* OR co-produc* OR co-creat*)		706
		2		(“Service user” OR client* OR child* OR youth* OR “young person” OR adolescent* OR teen* OR parent* OR guardian* OR famil*) AND (feedback OR consult* OR engag* OR participat* OR involv* OR voice OR advoca* OR collaborat* OR co-de* OR co-produc* OR co-creat*) AND (Service* OR		636

Database	Date	Search No.	Search Options	Search Terms	Filters Applied	Results
				support* OR system* OR program* OR project*) AND (Social OR welfare OR protection OR “in care” OR “looked after”) AND (Review* OR synthesis OR model OR framework OR guid*)		
		3		(“Service user” OR client* OR child* OR youth* OR “young person” OR adolescent* OR teen* OR parent* OR guardian* OR famil*) AND (feedback OR consult* OR engag* OR participat* OR involv* OR voice OR advoca* OR collaborat* OR co-de* OR co-produc* OR co-creat*) AND (Social OR welfare OR protection OR “in care” OR “looked after”) AND (Review* OR synthesis OR model OR framework OR guid*)		636
		4		(“Service user” OR client* OR child* OR youth* OR “young person” OR adolescent* OR teen* OR parent* OR guardian* OR famil*) AND (feedback OR consult* OR engag* OR participat* OR involv* OR voice OR advoca* OR collaborat* OR co-de* OR co-produc* OR co-creat*) AND (Social OR welfare OR protection OR “in care” OR “looked after”) AND TI(Review* OR synthesis OR model OR framework OR guid*)	Search string 4: Title	368
SCIE Social Care Online	20.06.23	1		(“Service user” OR client* OR child* OR youth* OR “young person” OR adolescent* OR teen* OR parent* OR		17

Database	Date	Search No.	Search Options	Search Terms	Filters Applied	Results
				guardian* OR famil*) AND (feedback OR consult* OR engag* OR participat* OR involv* OR voice OR advoca* OR collaborat* OR co-de* OR co-produc* OR co-creat*) AND (Service* OR support* OR system* OR program* OR project*) AND (Social OR welfare OR protection OR “in care” OR “looked after”) AND (Review* OR synthesis OR model OR framework OR guid*)		
		2		(“Service user” OR client* OR child* OR youth* OR “young person” OR adolescent* OR teen* OR parent* OR guardian* OR famil*) AND (feedback OR consult* OR engag* OR participat* OR involv* OR voice OR advoca* OR collaborat* OR co-de* OR co-produc* OR co-creat*) AND (Social OR welfare OR protection OR “in care” OR “looked after”) AND (Review* OR synthesis OR model OR framework OR guid*)		89
		3		(“Service user” OR client* OR child* OR youth* OR “young person” OR adolescent* OR teen* OR parent* OR guardian* OR famil*) AND (feedback OR consult* OR engag* OR participat* OR involv* OR voice OR advoca* OR collaborat* OR co-de* OR co-produc* OR co-creat*) AND (Review* OR		1,671

Database	Date	Search No.	Search Options	Search Terms	Filters Applied	Results
				synthesis OR model OR framework OR guid*)		
		4		(“Service user” OR client* OR child* OR youth* OR “young person” OR adolescent* OR teen* OR parent* OR guardian* OR famil*) AND (feedback OR consult* OR engag* OR participat* OR involv* OR voice OR advoca* OR collaborat* OR co-de* OR co-produc* OR co-creat*) AND (Review* OR synthesis OR model OR framework OR guid*)	Search String 3: Abstract	1,354
		5		(“Service user” OR client* OR child* OR youth* OR “young person” OR adolescent* OR teen* OR parent* OR guardian* OR famil*) AND (feedback OR consult* OR engag* OR participat* OR involv* OR voice OR advoca* OR collaborat* OR co-de* OR co-produc* OR co-creat*) AND (Review* OR synthesis OR model OR framework OR guid*)	Search String 3: Title	902
		6		(“Service user” OR client* OR child* OR youth* OR “young person” OR adolescent* OR teen* OR parent* OR guardian* OR famil*) AND (feedback OR consult* OR engag* OR participat* OR involv* OR voice OR advoca* OR collaborat* OR co-de* OR co-produc* OR co-creat*) AND (Review* OR	Search String 1: Abstract Search String 2: Abstract Search String 3: Abstract	1,096

Database	Date	Search No.	Search Options	Search Terms	Filters Applied	Results
				synthesis OR model OR framework OR guid*)		
		7		(“Service user” OR client* OR child* OR youth* OR “young person” OR adolescent* OR teen* OR parent* OR guardian* OR famil*) AND (feedback OR consult* OR engag* OR participat* OR involv* OR voice OR advoca* OR collaborat* OR co-de* OR co-produc* OR co-creat*) AND (Review* OR synthesis OR model OR framework OR guid*)	Search String 1: Abstract Search String 2: Abstract Search String 3: Title	714
Journal of Social Work Practice	23.06.23	1	Taylor & Francis Online: Advanced Search	AB(“Service user” OR client* OR child* OR youth* OR “young person” OR adolescent* OR teen* OR parent* OR guardian* OR famil* OR juvenile OR “young adult”) AND AB(feedback OR consult* OR engag* OR participat* OR involv* OR voice OR advoca* OR collaborat* OR co-de* OR co-produc* OR co-creat*) AND TI(Review* OR synthesis OR model OR framework OR guid*)	Search String 1: Abstract Search String 2: Abstract Search String 3: Title Journal: Journal of Social Work Practice	14
The British Journal of Social Work	23.06.23	1		(“Service user” OR client* OR child* OR youth* OR “young person” OR adolescent* OR teen* OR parent* OR guardian* OR famil* OR juvenile OR “young adult”) AND (feedback OR consult* OR engag* OR participat* OR involv* OR voice OR advoca* OR		6,076

Database	Date	Search No.	Search Options	Search Terms	Filters Applied	Results
				collaborat* OR co-de* OR co-produc* OR co-creat*) AND (Social OR welfare OR protection OR “in care” OR “looked after”) AND (Review* OR synthesis OR model OR framework OR guid*)		
		2		(“Service user” OR client* OR child* OR youth* OR “young person” OR adolescent* OR teen* OR parent* OR guardian* OR famil* OR juvenile OR “young adult”) AND (feedback OR consult* OR engag* OR participat* OR involv* OR voice OR advoca* OR collaborat* OR co-de* OR co-produc* OR co-creat*) AND (Review* OR synthesis OR model OR framework OR guid*)		6,077
		3		(“Service user” OR client* OR child* OR youth* OR “young person” OR adolescent* OR teen* OR parent* OR guardian* OR famil* OR juvenile OR “young adult”) AND TI(Review* OR synthesis OR model OR framework OR guid*)	Search string 2: Title	2,078
		4		AB(“Service user” OR client* OR child* OR youth* OR “young person” OR adolescent* OR teen* OR parent* OR guardian* OR famil* OR juvenile OR “young adult”) AND AB(feedback OR consult* OR engag* OR participat* OR involv* OR voice OR advoca* OR	Search string 1: Abstract Search string 2: Abstract Search string 3: Title	55

Database	Date	Search No.	Search Options	Search Terms	Filters Applied	Results
				collaborat* OR co-de* OR co-produc* OR co-creat*) AND TI(Review* OR synthesis OR model OR framework OR guid*)		
Social Work	23.06.23	1		(“Service user” OR client* OR child* OR youth* OR “young person” OR adolescent* OR teen* OR parent* OR guardian* OR famil* OR juvenile OR “young adult”) AND (feedback OR consult* OR engag* OR participat* OR involv* OR voice OR advoca* OR collaborat* OR co-de* OR co-produc* OR co-creat*) AND (Social OR welfare OR protection OR “in care” OR “looked after”) AND (Review* OR synthesis OR model OR framework OR guid*)		6,011
		2		(“Service user” OR client* OR child* OR youth* OR “young person” OR adolescent* OR teen* OR parent* OR guardian* OR famil* OR juvenile OR “young adult”) AND (feedback OR consult* OR engag* OR participat* OR involv* OR voice OR advoca* OR collaborat* OR co-de* OR co-produc* OR co-creat*) AND (Review* OR synthesis OR model OR framework OR guid*)		6,011
		3		AB(“Service user” OR client* OR child* OR youth* OR “young person” OR adolescent* OR teen* OR parent* OR	Search string 1: Abstract	23

Database	Date	Search No.	Search Options	Search Terms	Filters Applied	Results
				guardian* OR famil* OR juvenile OR “young adult”) AND AB(feedback OR consult* OR engag* OR participat* OR involv* OR voice OR advoca* OR collaborat* OR co-de* OR co-produc* OR co-creat*) AND TI(Review* OR synthesis OR model OR framework OR guid*)	Search string 2: Abstract Search string 3: Title	
Barnardos Information & Library Service	04.07.23	1	Collection: -Main Lending -Archive -eDocument -Reports and Booklets	“service user”	Search Term: Title	10
		2	Collection: -Main Lending -Archive -eDocument -Reports and Booklets	“service user”	Search Term: Keyword	110
		3	Collection: -Main Lending -Archive -eDocument -Reports and Booklets	“service user” OR client OR child OR youth OR “young people” AND feedback OR consult OR engagement OR participation OR involvement OR voice AND review OR synthesis OR model OR framework OR guidelines OR standards	All Search Terms: Title	152
		4	Collection: -Main Lending -Archive -eDocument	“service users” OR clients OR children OR youth OR “young people” OR adolescents OR teenagers OR parents OR guardians OR family OR “young	All Search Terms: Title	153

Database	Date	Search No.	Search Options	Search Terms	Filters Applied	Results
			-Reports and Booklets	adults” OR juveniles AND feedback OR consultation OR engagement OR participation OR involvement OR voice OR collaboration OR co-design OR co-production OR co-creation AND review OR synthesis OR model OR framework OR guidelines OR standards		

Database	Date	Search No.	Webpage Search Path	Filters Applied	Results
HIQA	19.06.23	**1**	Home --> Areas we work in --> Standards and Quality --> National Standards and Guidance [Webpage link: https://www.higa.ie/areas-we-work/standards-and-quality]		16
		2	Home --> Reports & Publications --> Standards [Webpage link: https://www.higa.ie/reports-and-publications/standards]		20
		3	Home --> Reports & Publications --> Guides [Webpage link: https://www.higa.ie/reports-and-publications/guides]		103
		4	Home --> Reports & Publications --> Guides [Webpage link: https://www.higa.ie/reports-and-publications/guides]	Area: Children's Services	33
		5	Home --> Reports & Publications --> Health Technology Assessments [Webpage link: https://www.higa.ie/reports-and-publications/guides]	HTA Publication Page	118
		6	Home --> Reports & Publications --> Health Technology Assessments [Webpage link: https://www.higa.ie/reports-and-publications/guides]	Area: Children's Services	0
		7	Home --> Reports & Publications --> Academic Publications [Webpage link: https://www.higa.ie/reports-and-publications/academic-publications]		93
		8	Home --> Reports & Publications --> Academic Publications [Webpage link: https://www.higa.ie/reports-and-publications/academic-publications]	Output Type: Evidence Synthesis	43
Tusla	20.06.23	**1**	Home --> Publications [Webpage link: https://www.tusla.ie/publications/]		158

		2	Home --> Publications --> Children First 2017 Support Documents [Webpage link: https://www.tusla.ie/children-first/publications-and-forms/]		15
		3	Home --> Research Centre --> National Research Office --> Tusla Commissioned Research [Webpage link: https://www.tusla.ie/research/tusla-research-office/national-research-office-documents/]		50
		4	Home --> Research Centre --> National Research Office --> Links to Research [Webpage link: https://www.tusla.ie/research/links-to-research/]		32
NICE	20.06.23	1	Home --> Guidance --> View Guidance --> Guidance by Programme: NICE Guidelines	Page: Published	340
		2	Home --> Guidance --> View Guidance --> Guidance by Programme: NICE Guidelines	-Page: Published -Guidance Programme: Social Care Guidance	72
		3	Home --> Guidance --> View Guidance --> Guidance by Programme: NICE Guidelines	-Page: In Development -Guidance Programme: Social Care Guidance	0
		4	Home --> Guidance --> View Guidance --> Guidance by Programme: NICE Guidelines	-Page: In Consultation -Guidance Programme: Social Care Guidance	0

		5	Home --> Standards and Indicators --> View Our Quality Standards [Webpage link: https://www.nice.org.uk/guidance/published?ndt=Quality+standard]	Page: Published	200
		6	Home --> Standards and Indicators --> View Our Quality Standards [Webpage link: https://www.nice.org.uk/guidance/published?ndt=Quality+standard]	Page: Published Search: 'social care'	4
		7	Home --> Standards and Indicators --> View Our Quality Standards [Webpage link: https://www.nice.org.uk/guidance/published?ndt=Quality+standard]	Page: Published Search: 'social'	4
The Institute for Research and Innovation in Social Services (IRISS)	20.06.23	**1**	Home --> Resources --> Reports [Webpage link: https://www.iriss.org.uk/resources/reports]		142
		2	Home --> Resources --> Outlines [Webpage link: https://www.iriss.org.uk/resources/esss-outlines]		58
		3	Home --> Resources --> Tools [Webpage link: https://www.iriss.org.uk/resources/tools]		36
		4	Home --> Resources --> Student Research [Webpage link: https://www.iriss.org.uk/resources/studentresearch]		6

Appendix 4: The Modified AMSTAR-2 Quality Assessment Tool

Below, a general description of the adaptations made to the original guidance for AMSTAR-2 are described, along with the actual additions or adaptations made which are shown blue coloured text. The rationale for changes are also described and are generally based on the review team's understanding of recent methodological guidance for each of the relevant evidence synthesis types.

A template of the modified AMSTAR-2 assessment tool is provided after the guidance.

Item 1: Did the research questions and inclusion criteria for the review include the components of PICO or PICo?

Adaptations made:
Wording of the item and guidance adapted, and new item criteria added, to broaden applicability to wider range of evidence syntheses.

It is common practice to use PICO description (population, intervention, control group and outcome) as an organising framework for a study question in evidence synthesis of interventions. Sometimes timeframe should be added if this is critical in determining the likelihood of a study capturing relevant clinical outcomes (e.g. an effect of the intervention is only expected after several years). There are many different organising frameworks for evidence syntheses of qualitative research (e.g. PICo, PCC, SPIDER, SPICE, etc.). PICO and similar organising frameworks identify the elements that should be described in detail in the report of the evidence synthesis and should enable the appraiser to judge selection of studies, and their combinability, and enable the user of the review to determine applicability of the results. Authors of evidence syntheses do not always make the elements of PICO (or similar frameworks) explicit but they should be discernable through a careful reading of the abstract, introduction and methods sections. To score 'Yes' appraisers should be confident that for reviews of intervention research the 4 elements of PICO are described somewhere in the report. Similarly for reviews of qualitative research, appraisers should be confident that the 3 elements of PICo are described somewhere in the report. PICo has been chosen as the organising framework to examine for reviews of qualitative research in this quality assessment because the elements tend to be present across most organising frameworks (albeit with using different terms). As such, we consider the PICo components to be 'core' components that should be present.

Item 2: Did the report of the review contain an explicit statement that the review methods were established prior to conduct of the review and did the report justify any significant deviations from the protocol?

Adaptations made:
Wording of guidance adapted, and item criteria adjusted, to broaden applicability to wider range of evidence syntheses.

Systematic evidence syntheses are a form of observational research and the methods for the review should be agreed on before the review commences. Adherence to a well-developed protocol reduces the risk of bias in the review. Authors should demonstrate that they worked with a written protocol with independent verification. This can take the form of registration (e.g. at PROSPERO - https://www.crd.york.ac.uk/PROSPERO/), an open publication journal (e.g. BMJ Open) or a dated submission to a research office or research ethics board. The research questions and the review study methods should have been planned ahead of conducting the review. At a minimum this should be stated in the report (scores 'Partial Yes'). To score 'Yes' authors should demonstrate that they worked with a written protocol with independent verification (by a registry or another independent body, e.g. research ethics board or research office) before the review was undertaken. Appraisers should compare the published report of the review with the registered protocol, when the latter is available. If there are deviations from the protocol, appraisers should determine whether these are reported and justified by review authors. Obvious unexplained discrepancies should result in downgrading of the rating.

A minor adaptation made to the criteria for this item is that a 'risk of bias assessment' is not necessary when rating scoping reviews (ScRs), as ScRs are not expected to perform these assessments (Peters et al., 2022).

In addition to the original AMSTAR-2 guidance, De Santis et al (2023) suggest that access to the protocol is required to rate this item fully. If a protocol cannot be accessed by the review team, a 'partial yes' will be the highest rating that can be assigned for this item.

Item 3: Did the review authors explain their selection of the study designs for inclusion in the review?

Adaptations made:
Wording of guidance adapted, and item criteria adjusted, to broaden applicability to wider range of evidence syntheses.

The selection of study types for inclusion in evidence syntheses should not be arbitrary. The authors should indicate that they followed a strategy.

The general rule (this may have to be inferred from what the authors actually wrote) is that they asked first whether a review restricted to specific study designs (e.g. RCTs) would have given an incomplete summary of a phenomenon in relation to the review question. In an the context of a systematic review of interventions, this might be because there were no relevant RCTs or because of missing outcomes in

available RCTs [usually harms], inadequate statistical power, restrictive populations, or unrepresentative control/intervention treatments. If the answer to this general question is yes, the inclusion of non-randomised studies of the intervention(s) is justified.

Conversely, to justify restriction of the review to specific study designs (e.g. RCTs) the authors should argue that they can provide a complete picture of the phenomenon they are interested in. For example, restriction of a review to only NRSI is justified when RCTs cannot provide the necessary outcome data, or in the case where reviews of RCTs have been completed and the review of NRSI will complement what is already known. Inclusion of both RCTs and NRSI may be justified to get a complete picture of the effectiveness and harms associated with an intervention. In this situation we recommend (see below) that these two types of studies are assessed and combined independently (if meta-analysis is appropriate). This is a somewhat neglected area and even with guidance it can be difficult to judge the extent to which a review meets the rating criteria. The justification for selection of study designs may have to be inferred from a careful reading of the complete study report.

Item 4: Did the review authors use a comprehensive literature search strategy?

Adaptations made:
Wording of guidance adapted, and item criteria adjusted, to broaden applicability to wider range of evidence syntheses.

At least two bibliographic databases should be searched. The report should include years and databases examined (e.g., Central, EMBASE, and MEDLINE). Key words and/or MESH terms (if applicable) should be reported and the full search strategy available on request. Searches should be supplemented by checking published reviews, specialised registers (in the case of systematic reviews and rapid reviews of quantitative research on interventions), or experts in the particular field of study, and by reviewing the reference list from the studies found. Sometimes it is necessary to approach authors of original studies to clarify results or obtain updates or corrections. Publications in all relevant languages should be sought and a justification provided when there are language restrictions. We have highlighted the need for searching the grey literature in some cases. Grey literature is sometimes important with reports of policy and program evaluations that are only available from web sites (e.g. government, non-government or health technology agencies). These may or may not have been subject to peer review and such appraisals should be looked for. Where the grey literature is considered important, authors should have searched appropriate sources, such as trial registries, conference abstracts, dissertations, and unpublished reports on personal websites (e.g. universities, ResearchGate). In addition, trials of medical interventions may not have been published in peer-reviewed journals but can be obtained directly from company sponsors or directly from investigators.

To score ‘Yes’ appraisers should be satisfied that all relevant aspects of the search have been addressed by review authors. Trial registries will only considered to be

necessary for evidence syntheses of experimental research on interventions, as the research of trial registries is not always relevant to other types of evidence syntheses.

Item 5: Did the review authors perform study selection in duplicate?

Adaptations made:
None.

Best practice requires two review authors to determine eligibility of studies for inclusion in systematic reviews. This involves checking the characteristics of a study (from title, abstract and full text) against the elements of the research question In the response options, we point to the desirability of review authors describing inter-rater agreement across a sample of studies being considered for inclusion in the review. A consensus process should have been used when disagreements arose in study selection. If one individual carried out selection of all studies, with a second reviewer checking agreement on a sample of studies, we recommend that a Kappa score indicating 'strong' agreement (0.80 or greater) should have been achieved. There should have been at least two independent assessors for study selection. A consensus process should have been used when disagreements arose in study selection. In the event that one individual carried out selection of studies a second reviewer should have checked agreement on a sample of representative studies and they should have achieved a kappa score of 0.80 or greater.

Item 6: Did the review authors perform data extraction in duplicate?

Adaptations made:
None.

As in Item 5, there should have been at least two independent assessors performing data extraction. A consensus process should have been used when disagreements arose. In the event that one individual carried out data extraction a second reviewer should have checked agreement on a sample of studies and they should have achieved a kappa score of 0.80 or greater.

Item 7: Did the review authors provide a list of excluded studies and justify the exclusions?

Adaptations made:
None.

This item requires review authors to provide a complete list of potentially relevant studies with justification for the exclusion of each. Non-inclusion of studies may be necessary for a range of reasons, based on inappropriate/ irrelevant populations, interventions and controls. Exclusion should not be based on risk of bias, which is dealt with separately and later in the review process. Unjustified exclusion may bias the review findings and we encourage an inclusive approach in the early stages of a

review. This item requires review authors to provide a complete list of potentially relevant studies with justification for the exclusion of each one.

Item 8: Did the review authors describe the included studies in adequate detail?

Adaptations made:
Wording of guidance adapted, and item criteria adjusted, to broaden applicability to wider range of evidence syntheses.

For evidence syntheses of quantitative research, the description of subjects, interventions, controls, outcomes, design, analysis and settings of the studies should be provided. For evidence syntheses of qualitative research, the description of populations, phenomena of interest (concepts), contexts (services and settings), and design should be provided. The detail should be sufficient for an appraiser, or user, to make judgments about the extent to which the studies were appropriately chosen (in relation to the PICO or PICo structure) and were relevant their own practice or policy. The descriptors also provide a framework for studying heterogeneity study findings (e.g. by dose, age range, clinical setting etc.).

Item 9: Did the review authors use a satisfactory technique for assessing the risk of bias (RoB) or methodological quality in individual studies/evidence syntheses that were included in the review?

Adaptations made:
Wording of item and guidance adapted, and item criteria adjusted, to broaden applicability to wider range of evidence syntheses.

This is a crucial part of the appraisal of any systematic review or overview of reviews. From the perspective of the review team, given the broad range of potential evidence synthesis types that are eligible for inclusion and the limited time and resources to complete the review, the main criteria guiding assessment of this item have been simplified for this review. Rather the guiding criteria will be:

1. Whether a systematic approach using a validated assessment instrument appropriate to the research designs included in the evidence synthesis was used OR
2. Where validated assessment instruments are not available or have not yet been developed for certain research designs (e.g. qualitative systematic reviews), review authors are still expected to justify the assessment tool used and any adaptations made or not made to it to ensure its applicability.

This item is not considered relevant to scoping reviews (ScRs) because risk-of-bias and quality assessments are not recommended for these types of reviews (Peters et al., 2020). However, if a scoping review performs a risk-of-bias or quality assessment, it will then be treated as a systematic review rather than a scoping review.

Item 9a: Did the review authors identify primary study overlap in their Overview of Reviews, and account for it when interpreting the results of the review?

Adaptations made:
New item added specifically for Overviews of Reviews.

This item is added only for Overviews of Reviews (OoRs). Overlap can occur when multiple evidence syntheses focus on the same question and include the same primary studies. Primary studies that are present across multiple reviews can have a stronger influence on the findings, potentially introducing bias, than those studies which are just as relevant but not as prevalent across the evidence syntheses (Ballard & Montgomery, 2017).

There is no consensus, as of yet, about how best to handle overlap in evidence syntheses, though guidance is reported to be strengthening in this area (Gates et al., 2020). A recent scoping review of guidance on OoRs suggests that there is a growing expectation that authors of evidence syntheses should investigate primary study overlap to avoid double-counting, report the size of the overlap, and consider the weight or potential biasing influence of overlap on the findings (Gates et al., 2020).

With this guidance in mind, the two guiding criteria for this item are:

1. Whether the authors investigated and reported primary study overlap in their OoR, AND
2. Whether the authors explicitly considered and discussed the potential biasing influence of overlap on the findings.

Because there is no consensus yet on how best to handle overlap, this item will not be considered a critical item for OoRs.

Item 9b: Did the review authors specify methods to manage discrepancies/discordance in the evidence syntheses included Overview of Reviews, and account for it when interpreting the results of the review?

Adaptations made:
New item added specifically for Overviews of Reviews.

This item is added only for Overviews of Reviews (OoRs). “Sometimes systematic reviews present different study characteristics, different results data, or different assessments of risk of bias or methodological quality for the same primary studies. When this occurs, we refer to the data or assessments as being discrepant across included systematic reviews. To a degree, some discrepancy can be expected because risk of bias appraisals are not completely objective, and data extraction errors are prevalent in systematic reviews. The term “discordant” has been also used to refer to these issues or to systematic reviews on the same topic that draw different conclusions… we consider the terms to be equivalent” (Gates et al., 2022, p. 7).

As the inclusion of incorrect information from systematic reviews can lead to bias, this item has been added for OoRs. To the best of this review team's knowledge, however, there is no consensus, as of yet, about how best to handle discrepant or discordant data in evidence syntheses, though various methods exist (Gates et al., 2022 Explanation and Elaboration document; Lunny et al., 2018). Nevertheless, review teams are expected to justify the processes used to identify and account for discrepancies (Gates et al., 2022).

With this guidance in mind, the two guiding criteria for this item are:

1. Whether the authors explicitly identified and attempted to manage the potential biasing influence of discrepancies or discordance in their OoR, AND
2. Whether the authors explicitly considered and discussed the potential biasing influence of discrepancies or discordance in their OoR.

Because there is no consensus yet on how best to handle overlap, this item will not be considered a critical item for OoRs.

Item 10: Did the review authors report on the sources of funding for the studies included in the review?

Adaptations made:
None.

Several investigations have shown that commercially sponsored studies are more likely to have findings that favour a sponsor's product than independently funded studies. It is valuable for review authors to document the funding sources for each study included in the review or to record that the information was not provided in the study reports. Depending on this information it may be possible to analyse separately the results from commercially funded and independently funded studies.

Item 11: If meta-analysis was justified did the review authors use appropriate methods for statistical combination of results? (Only complete this item if meta-analysis of other data synthesis techniques were reported)

Adaptations made:
Wording of item and guidance adapted, and item criteria adjusted, to broaden applicability to wider range of evidence syntheses.

Review authors should have stated explicitly in the review protocol the principles on which they based their decision to perform meta-analysis of data from the included studies. These include the desire to obtain a single pooled effect (for instance from a number of compatible but underpowered studies) and the extent to which the studies are compatible (in terms of populations controls and interventions) and therefore capable of being combined.

For Overviews of Reviews

This item is applicable for Overviews of Reviews (OoRs) if OoR authors choose to re-analyse data from the included systematic reviews using standard meta-analytic techniques. A justification for the approach should be provided (Gates et al., 2022). Depending on whether RCTs or NRSIs are statistically meta-analysed, the original AMSTAR criteria below will apply.

RCTs

Where meta-analysis was considered appropriate authors should have explained their decisions to use fixed or random effects models in the case of RCTs, and set out the methods they intended to use to investigate heterogeneity.

NRSIs

With NRSI, study populations vary greatly in size from small cohorts (of tens or hundreds of participants) to studies of hundreds of thousands of individuals and thousands of events. If these results, are going to be combined with those from smaller RCTs the pooled estimates of effect will be dominated by the data from the non-randomized studies. In addition, the results from NRSI may be affected by a range of biases (see above), meaning that the overall pooled estimates may be precise but biased.

Review authors should report pooled estimates separately for the different study types. In the case of NRSI, pooling may result in a very precise and ‘statistically significant’, but biased, estimate of effect. However, the confidence interval is calculated on the assumption that there is no bias (i.e. the estimates are as accurate as if obtained from a high quality RCT with the same number of participants). It is rare for a NRSI to have as low risk of bias as a high quality RCT of the same research question and confidence intervals for NRSI (and pooled estimates based on NRSI) should be viewed with caution. This issue is important when considering the varying risk of bias, and uncertainty about the risk of bias across NRSI.

Heterogeneity is an important issue in any meta-analysis. It is particularly important in a review of NRSI because of the more diverse methods that are likely to have been used across different studies. In addition to the usual sources of heterogeneity [different comparators, variations in baseline risk of outcomes or other characteristics of the study population, differing interventions (e.g. dose effects, context/setting, practitioner experience) and different definitions of outcomes], it is important to consider heterogeneity in source of participants, completeness of data, methods of data management and analysis. Statistical adjustment of intervention effects for confounders may result in estimates that are quite different from the unadjusted estimate derived from the raw data.

Generally, when combining the results of NRSI review authors should pool the fully adjusted estimates of effect, not the raw data. If they do the latter there should be a clear justification. However, different studies are very likely to report treatment effects that have been adjusted for different sets of covariates (or covariates measured or

fitted in different ways); this diversity represents another source of potential heterogeneity.

Item 11a: Is the analytic method used appropriate for a scoping review?

Adaptations made:
New item added specifically for Scoping Reviews.

This item has been added for scoping reviews (ScRs) only, based on recent guidance for the conduct of analysis in scoping reviews (Peters et al., 2020; Pollock et al., 2023). The aim of this item is to assess what the review authors will refer to as 'analytic overreach'. That is, to assess whether the analytic methods used in a particular scoping review go beyond (or 'overreach') the purpose of a scoping review, and therefore produce findings that cannot be supported with the use of a scoping review methodology. The analytic methods of scoping reviews should be descriptive, rather than inferential (in the case of quantitative research) or interpretative (in the case of qualitative research). For instance, Pollock et al. (2023) write:

> "Scoping review authors may be tempted to perform more advanced statistical or qualitative analysis within a scoping review. The intention of synthesis methods, such as meta-analysis, meta-ethnography, thematic analysis, realist synthesis, or meta-aggregation, among others, is to answer questions or inform understandings regarding the feasibility, appropriateness, meaningfulness, and effectiveness of a particular intervention or phenomenon. Therefore, for these questions, the most appropriate review type is a systematic review where the findings/results have undergone critical appraisal, and approaches to establish certainty of those results have been applied to generate conclusions that can inform practice and policy recommendations. Scoping reviews do not address questions of feasibility, appropriateness, meaningfulness, or effectiveness, and, as such, will not and should not apply advanced analysis methods… Most scoping reviews will analyse data items by quantifying text and doing frequency counts of data extraction items. These are relatively easy to manage, and should only require the use of descriptive statistics, such as percentages/proportions… In scoping reviews that include qualitative evidence, it is not uncommon for authors to use qualitative synthesis approaches that go beyond the scope of a scoping review, such as thematic synthesis or a meta-aggregative approach… Synthesis approaches that aim to reinterpret evidence are not consistent with the purposes of a scoping review. Scoping reviews are descriptive in nature; they aim to map the available evidence or identify characteristics or factors… However, there may be times when it would be appropriate to use a basic qualitative content analysis, such as if the scoping review has the objective of informing the development of a conceptual framework or theory… JBI scoping review guidance recommends using basic qualitative content analysis, which is a descriptive approach to analysis and involves a process of open coding

to allocate concepts or characteristics into overall categories. This can be applied to any evidence source or study design in any scoping review" (Pollock et al., 2023, pp. 525–526).

With this guidance in mind, the criteria for this item states:

1. The method of analysis is descriptive. That is, it aims to describe or map the available evidence while staying very close to the original interpretations or meanings of the evidence.

To help assess whether an analytic method goes beyond a descriptive approach, the review team can compare the objective of the review against the analytic method (e.g. if the stated objective is to inform understandings regarding the feasibility, appropriateness, meaningfulness, and effectiveness of a particular intervention or phenomenon, then analytic overreach is likely if a scoping review is the chosen methodology to meet the objective).

This item will be considered critical for scoping reviews, for a similar reason that risk-of-bias and methodological assessments are considered critical for systematic reviews. Namely, in the absence of a methodological quality or risk-of-bias assessment, analytic overreach means "authors and readers may be susceptible to making assumptions based on a naïve or incomplete reading of the results" (Pollock et al., 2023, pp. 524–525).

Item 12: If meta-analysis was performed did the review authors assess the potential impact of RoB in individual studies on the results of the meta-analysis or other evidence synthesis?

Adaptations made:
None.

In cases where review authors have chosen to include only high quality RCTs there may be little discussion of the potential impact of bias on the results. But where they have included RCTs of variable quality they should assess the impact of this by regression analysis, or by estimating pooled effect sizes with only studies at low ROB. In the case of NRSI they should estimate pooled effect sizes while including only studies at low or moderate risk of bias, and/or only those at low ROB (if there are any). If meta-analyses (or other data synthesis techniques such as regression analysis) were not performed the authors should still provide some commentary on the likely impact of ROB on individual study results.

Item 13: Did the review authors account for RoB/methodological quality in included studies when interpreting/discussing the results of the review?

Adaptations made:
Wording of item and guidance adapted, and item criteria adjusted, to broaden applicability to wider range of evidence syntheses.

Even if meta-analyses were not conducted review authors should include discussion of the impact of ROB/methodological quality in the interpretation of the results of the review. This discussion should not be limited to the impact of ROB/methodological quality on the pooled estimates if meta-analysis has been carried out (see above), but should also consider whether it may account for differences between the results of individual studies or individual evidence syntheses. The authors should make an explicit consideration of ROB/methodological quality if they make any recommendations that are likely to have an impact on practice or policy. For Overviews of Reviews, such discussions and considerations should be made at both the primary and secondary study level.

This item is considered to be applicable to Systematic Reviews of quantitative and qualitative evidence, overviews of reviews and rapid reviews. Given the wide range of evidence synthesis types that this item is applicable to, the criteria have been simplified and restated to improve the ease of assessment. The new criteria states:

1. The review provided a discussion of the likely impact of RoB or methodological quality (at both primary and secondary level if an OoR) on the results.

This item is not considered relevant to scoping reviews (ScRs) because risk-of-bias and quality assessments are not recommended for these types of reviews (Peters et al., 2020).

Item 14: Did the review authors provide a satisfactory explanation for, and discussion of, any heterogeneity observed in the results of the review?

Adaptations made:
Wording of guidance adapted to broaden applicability to wider range of evidence syntheses.

There are many potential causes of heterogeneity in the results. Many factors considered in this instrument, including different study designs, different methods of analysis, different populations, different contexts or differing intensities of the intervention(s) – dosages in the case of drugs. Both the PICO and PICo elements and the domains of bias listed in Item 9 should also be considered as important potential sources of heterogeneity in the results. Review authors should explore these possibilities and discuss the impact of heterogeneity on the results, conclusions and any recommendations.

This item is not considered to be applicable to scoping reviews. It is, however, considered to be appropriate to systematic reviews, rapid reviews and overviews of reviews of qualitative evidence. For the purpose of this review, when assessing

qualitative evidence heterogeneity is not taken to refer to statistical heterogeneity, as is the case with the original AMSTAR-2. Rather, for evidence syntheses of qualitative research, heterogeneity can refer to any kind of variability amongst studies in evidence syntheses. For example, population diversity, contextual diversity, conceptual diversity and methodological diversity are forms of heterogeneity that may be relevant to evidence syntheses of qualitative research.

Item 15: If they performed quantitative synthesis did the review authors carry out an adequate investigation of publication bias (small study bias) and discuss its likely impact on the results of the review?

Adaptations made:
None.

This is a very important issue, but can be difficult for review authors and appraisers to resolve completely. Typically, statistical tests or graphical displays are used and if they are positive then it indicates the presence of Publication Bias (PB). However, negative tests are not a guarantee of the absence of PB as the tests are insensitive. To some extent the importance of PB depends on context and setting. For instance, a series of apparently methodologically sound industry-sponsored studies (e.g. drugs, devices, putative toxins) might be more likely to be affected by PB than similar studies conducted independently of industry. The key issues are whether the authors have done their best to identify PB through deeper and intensive literature searches (as needed and according to the setting), shown an awareness of the likely impact of PB in their interpretation and discussion of the results and performed a sensitivity analyses to determine how many missing ‘null’ studies would be needed to invalidate the results they obtained.

In the context of qualitative evidence syntheses, the term ‘dissemination bias’ is preferred over ‘publication bias’ and refers to “a systematic distortion of the phenomenon of interest due to selective dissemination of qualitative studies or the findings of qualitative studies” (Booth et al., 2018, p. 65). However, research on the extent and impact of dissemination bias in qualitative research is limited. Similarly, the extent to which dissemination bias needs to be into account in qualitative research is not yet established (Booth et al., 2018). As such, this item is not considered applicable to evidence syntheses of qualitative research.

Item 16: Did the review authors report any potential sources of conflict of interest, including any funding they received for conducting the review?

As noted above (under ROB), individual studies funded by vested interests may generate results that are more likely to favour the intervention than do independent studies. The same assumption applies to systematic reviews and authors should report their direct funding sources. Journals generally will require this. But assessment of the reviewers’ conflicts of interest doesn’t stop there. They should report their other ties. The review may be independently funded, but the authors have ties to companies that manufacture products included in the systematic review.

Professional conflicts of interest are powerful, but harder to discern as they are seldom reported. When investigators have a career-long investment in a field of research, a review that conflicts with their long-held beliefs can be confronting. Potential conflicts of interest of this type will be hard to assess, but may be inferred from the fact that the reviewers have published extensively in the field being reviewed and their studies are included in the systematic review. While it can be argued that the effects of competing interests might manifest as flaws in the other domains of bias we believe that this item should always be rated separately.

Item No.	New / Adapted Item?	Critical Item?	Applicable ES Types	Items			Appraisal
Study:							
1	**Yes**	**No**	**-SRs -ScRs -OoRs -RRs**	**Q: Did the review questions and inclusion criteria include the components of PICO or PICo?**			
				For Yes:		**Optional (recommended):**	
				Quantitative Reviews	***Qualitative Reviews***	***Quantitative Reviews***	
				☐ Population ☐ Intervention ☐ Comparison ☐ Outcome	☐ Population ☐ Phenomena of Interest (Concept) ☐ Context	☐ Timeframe for follow-up	
2	**Yes**	**Yes**	**-SRs -ScRs -OoRs -RRs**	**Q: Did the report of the review contain an explicit statement that the review methods were established prior to conduct of the review and did the report justify any significant deviations from the protocol?**			
				For Partial Yes: The authors state that they had a written protocol or guide that included ALL the following:		**For Yes:** As for partial yes, plus the protocol should be registered and should also have specified:	
				☐ Review question(s) ☐ Search strategy ☐ Inclusion/Exclusion criteria		☐ A meta-analysis/synthesis plan, if appropriate, *and* ☐ A plan for investigating	

Item No.	New / Adapted Item?	Critical Item?	Applicable ES Types	Items		Appraisal
				☐ Risk of bias assessment (*except for ScRs*)	causes of heterogeneity ☐ Justification for any deviations from the protocol	
3	**Yes**	**No**	**-SRs -ScRs -OoRs -RRs**	**Q: Did the review authors explain their selection of the study designs for inclusion in the review?**		
				For Yes: The review should:		
				☐ Explain (explicitly or implicitly) its justification for the selection of study designs that are eligible for inclusion		
4	**Yes**	**Yes**	**-SRs -ScRs -OoRs -RRs**	**Q: Did the review authors use a comprehensive literature search strategy?**		
				For Partial Yes: ALL of the following:	**For Yes:** As for partial yes, plus ALL of the following:	
				☐ Searched at least 2 databases (relevant to the research question) ☐ Provided key word and/or search strategy ☐ Justified publication restrictions (e.g. language)	☐ Searched the reference lists/bibliographies of included studies ☐ Searched trial/study registries (*for SRs and RRs of intervention studies only*) ☐ Included/consulted content experts in the field ☐ Where relevant, searched for grey literature	

Item No.	New / Adapted Item?	Critical Item?	Applicable ES Types	Items		Appraisal
				☐ Conducted search within 24 months of completion of the review		
5	**No**	**No**	**-SRs -ScRs -OoRs -RRs**	**Q: Did the review authors perform study selection in duplicate?**		
				For Yes: Either ONE of the following:		
				☐ At least two reviewers independently agreed on selection of eligible studies and achieved consensus on which studies to include OR ☐ Two reviewers selected a sample of eligible studies <u>and</u> achieved good agreement (at least 80%), with the remainder selected by one reviewer		
6	**No**	**No**	**-SRs -ScRs -OoRs -RRs**	**Q: Did the review authors perform data extraction in duplicate?**		
				For Yes: Either ONE of the following:		
				☐ At least two reviewers achieved consensus on which data to extract from included studies OR ☐ Two reviewers extracted data from a sample of eligible studies <u>and</u> achieved good agreement (at least 80%), with the remainder extracted by one reviewer.		
7	**No**	**Yes**	**-SRs -ScRs -OoRs -RRs**	**Q: Did the review authors provide a list of excluded studies and justify the exclusions?**		
				For Partial Yes:	**For Yes:** As for partial yes, plus the following:	
				☐ Provided a list of potentially relevant studies that were read in full-text form but excluded from the review	☐ Justified the exclusion from the review of each potentially relevant study	

Item No.	New / Adapted Item?	Critical Item?	Applicable ES Types	Items		Appraisal
8	**Yes**	**No**	**-SRs -ScRs -OoRs -RRs**	**Q: Did the review authors describe the included studies in adequate detail?**		
				For Partial Yes: All of the following:	**For Yes:** As for Partial Yes, plus ALL of the following:	
				Quantitative Reviews		
				☐ Described populations ☐ Described interventions ☐ Described comparators ☐ Described outcomes ☐ Described research designs	☐ Described populations in detail ☐ Described interventions in detail ☐ Described comparators in detail ☐ Described study's setting ☐ Described timeframe for follow-up	
				Qualitative Reviews		
				☐ Described populations ☐ Described phenomenon of interest (concept) ☐ Described context (settings and services) ☐ Described research designs	☐ Described populations in detail ☐ Described phenomenon of interest (concept) in detail ☐ Described context (settings and services) in detail	
9	**Yes**	**Yes**	**-SRs -OoRs -RRs**	**Q: Did the review authors use a satisfactory technique for assessing the risk of bias (RoB) or methodological quality in individual studies/evidence syntheses that were included in the review?**		
				For Yes:		
				☐ A systematic approach using a validated assessment instrument		

Item No.	New / Adapted Item?	Critical Item?	Applicable ES Types	Items	Appraisal
				appropriate to the research designs included in the evidence synthesis was used OR ☐ If there is no validated assessment instrument appropriate to the research designs included in the evidence synthesis (e.g. qualitative systematic reviews), the review authors justified the assessment tool used *and* any adaptations made or not made to it to ensure its applicability.	
9a	**Yes**	**No**	**-OoRs**	**Q: Did the review authors identify primary study overlap in their Overview of Reviews, and account for it when interpreting the results of the review?** **For Yes:** All of the following: ☐ The authors investigated and reported primary study overlap ☐ The authors explicitly considered and discussed the potential biasing influence of overlap on the findings	
9b	**Yes**	**No**	**-OoRs**	**Q: Did the review authors specify methods to manage discrepancies/discordance in the evidence syntheses included in their Overview of Reviews, and account for it when interpreting the results of the review?** **For Yes:** All of the following: ☐ The authors explicitly identified and had a procedure to manage the potential biasing influence of discrepancies or discordance across the evidence syntheses included in the OoR ☐ The authors explicitly considered and discussed the potential biasing influence of discrepancies or discordance across the evidence syntheses included in the OoR	

Item No.	New / Adapted Item?	Critical Item?	Applicable ES Types	Items	Appraisal
10	**No**	**No**	**-SRs -ScRs -OoRs -RRs**	**Q: Did the review authors report on the sources of funding for studies included in the review?** **For Yes:** ☐ Must have reported on the sources of funding for individual studies included in the review *Note: Reporting that the reviewers looked for this information but it was not reported by the study author also qualifies*	
11	**Yes**	**Yes**	**-SRs -OoRs -RRs**	**Q: If meta-analysis was performed, did the review authors use appropriate methods for statistical combination of results?** ***For Overviews of Reviews (OoRs)*** *If statistical meta-analysis was performed:* ☐ RCT criteria below are applicable ☐ NRSI criteria below are applicable ☐ RCT and NRSI criteria below are both applicable *If statistical meta-analysis was not performed:* ☐ Item is not applicable to OoRs ***For RCTs:*** **For Yes:** ☐ The authors justified combining the data in a meta-analysis AND ☐ They used an appropriate weighted technique to combine study results and adjusted for heterogeneity if present AND ☐ Investigated the causes of heterogeneity ***For NRSIs:*** **For Yes:** ☐ The authors justified combining the data in a meta-analysis AND	

Item No.	New / Adapted Item?	Critical Item?	Applicable ES Types	Items	Appraisal
				☐ They used an appropriate weighted technique to combine study results and adjusted for heterogeneity if present AND ☐ They statistically combined effect estimates from NRSI that were adjusted for confounding raw data when adjusted effect estimates were not available AND ☐ They reported separate summary estimates for RCTs and NRSI separately when both were included in the review	
11 a.	**Yes**	**Yes**	**-ScRs**	**Q: Is the analytic method used appropriate for a scoping review?** **For Yes:** ☐ The method of analysis is descriptive. That is, it aims to describe or map the available evidence while staying very close to the original interpretations or meanings of the evidence.	
12	**No**	**No**	**-SRs -OoRs -RRs**	**Q: If meta-analysis was performed, did the review authors assess the potential impact of risk of bias in individual studies on the results of the meta-analysis of other evidence synthesis?** **For Yes:** ☐ Included only low-risk of bias RCTs OR ☐ If the pooled estimate was based on RCTs and/or NRSI at variable RoB, the authors performed analyses to investigate possible impact of RoB on summary estimates of effect	
13	**Yes**	**Yes**	**-SRs -OoRs -RRs**	**Q: Did the review authors account for risk of bias/methodological quality in included studies when interpreting/discussing the results of the review?** **For Yes:**	

Item No.	New / Adapted Item?	Critical Item?	Applicable ES Types	Items	Appraisal
				☐ The review provided a discussion of the likely impact of RoB or methodological quality (at both primary and secondary study level if an OoR) on the results	
14	Yes	No	-SRs -ScRs -OoRs -RRs	**Q: Did the review authors provide a satisfactory explanation for, and discussion of, any heterogeneity observed in the results of the review?** **For Yes:** ☐ There was no significant heterogeneity in the results OR ☐ If heterogeneity was present the authors performed an investigation of sources of any heterogeneity in the results and discussed the impact of this on the results	
15	No	Yes	-SRs -OoRs -RRs	**Q: If they performed quantitative synthesis did the review authors carry out an adequate investigation of publication bias (small study bias) and discuss its likely impact on the results of the review?** **For Yes:** ☐ Performed graphical or statistical tests for publication bias and discussed the likelihood and magnitude of impact of publication bias	
16	No	No	-SRs -ScRs -OoRs -RRs	**Q: Did the review authors report any potential sources of conflict of interest, including any funding they received for conducting the review?** **For Yes:** ☐ The authors reported no competing interests OR ☐ The authors described their funding sources and how they managed potential conflicts of interest	
				Overall Confidence in the Results of the Review	

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TUSLA

An Ghníomhaireacht um Leanaí agus an Teaghlach

Child and Family Agency