Advances in the development of clinical practice guidance – Scoping review protocol

June 2023

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About HRB-CICER

In 2016, the Department of Health requested that the Health Research Board (HRB) fund an evidence synthesis service called HRB-CICER (Collaboration in Ireland for Clinical Effectiveness Reviews) to support the activities of the Ministerial appointed National Clinical Effectiveness Committee (NCEC). Following a competitive process, HIQA was awarded research funding spanning the period from 2017 to 2024 to produce the evidence to support the development of National Clinical Guidelines and National Clinical Audits. The HRB-CICER team comprises a dedicated multidisciplinary research team supported by staff from the Health Technology Assessment team in HIQA, the Discipline of Public Health and Primary Care in the School of Medicine at Trinity College Dublin (TCD), the Department of General Practice at the RCSI University of Medicine and Health Sciences, as well as national and international clinical and methodological experts.

With regard to clinical guidelines, the role of the HRB-CICER team is to independently review evidence and provide scientific support for the development, by guideline development groups (GDGs), of National Clinical Guidelines for the NCEC. The HRB-CICER team undertakes systematic reviews of the clinical effectiveness and cost-effectiveness of interventions included in the guidelines as well as estimating the budget impact of implementing the guidelines. The HRB-CICER team also works closely with the GDGs and provides tailored training sessions; assists in the development of clinical questions and search strategies; performs systematic reviews of international clinical guidelines and supports the assessment of their suitability for adaption to Ireland; and supports the development of evidence-based recommendations informed by the evidence produced by HRB-CICER within the National Clinical Guidelines.

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List of abbreviations that appear in this report

ACP	American College of Physicians
AGREE	Appraisal of Guidelines for Research and Evaluation
AHRQ	Agency for Healthcare Research and Quality
AWMF	Association of the Scientific Medical Societies
bpac^{nz}	The Best Practice Advocacy Centre New Zealand
CADTH	Canadian Agency for Drugs and Technologies in Health
CEU	Clinical Effectiveness Unit
CPG	Clinical practice guidance
EUnetHTA	European Network for Health Technology Assessment
GDG	Guideline development group
GIN	Guidelines International Network
HIQA	Health Information and Quality Authority
HRB-CICER	Health Research Board – Collaboration in Ireland for Clinical Effectiveness Reviews
KCE	Belgian Health Care Knowledge Centre
NCEC	National Clinical Effectiveness Committee
NHMRC	Australian National Health and Medical Research Council
NICE	National Institute for Health and Care Excellence
NPSO	National Patient Safety Office
PICO	Population, intervention, comparator, outcome
PPPG	Policies, procedures, protocols and guidelines
PRISMA	Preferred Reporting Items for Systematic Reviews and Meta-Analyses
SIGN	Scottish Intercollegiate Guidelines Network
THL	Finnish Institute for Health and Welfare
USPSTF	US Preventive Services Task Force
WHO	World Health Organization

1 Background

1.1 Description of Standards for Clinical Practice Guidance development in Ireland

Clinical practice guidance (CPG) is defined as systematically developed statements or processes to assist clinician and patient decisions about appropriate healthcare for specific clinical circumstances, with the type of CPG determined by evidence-based criteria and clinical requirements.[(1)] CPG includes clinical policies, procedures, protocols and guidelines (PPPG). Care pathways, clinical decision aids and or tools, care bundles, flowcharts, checklists and algorithms can form components of PPPG.[(1)] In 2014, the National Clinical Effectiveness Committee (NCEC) was requested by the Minister for Health to develop standards for CPG. The NCEC Standards for Clinical Practice Guidance were published in 2015.[(1)] They were informed by a systematic literature review,[(2)] an Expert Advisory Group and public consultation. Their aim is to provide standards for healthcare staff developing evidence-based CPG for healthcare settings, ensure consistency of approach and minimise duplication in CPG.

Within the NCEC standards, a number of core elements form the basis for high quality evidence-based CPG, which can be grouped into four categories: governance; methodology; planning and implementation and communications. Figure 1.1 provides an overview of the current core elements and criteria to assist in the development of CPG.

Figure 1.1 Core elements – Standards for evidence-based clinical practice guidance

Governance	Governance model
	Audit, monitoring, review & evaluation process
	Service user and stakeholder involvement
	Knowledge management
Methodology	Clarity of scope and purpose
	Evidence-based
Planning & Implementation	Resource implications
	Planning & Implementation
Communications	Communications

Source: Standards for Clinical Practice Guidance, Department of Health (Ireland), 2015.[(1)]

1.2 Description of updating the Standards for Clinical Practice Guidance in Ireland

The Clinical Effectiveness Unit (CEU) of the National Patient Safety Office (NPSO) in the Department of Health (DOH) has responsibility for leading the clinical effectiveness policy

function, including supporting the NCEC, and for promotion of evidence-based healthcare through quality assured National Clinical Guidelines, National Clinical Audits, and CPG. The Terms of Reference for the NCEC include publication of the NCEC Standards for Clinical Practice Guidance.[3] As it is eight years since the publication of the original standards, it is timely to review and potentially update these standards to take account of, and incorporate, any relevant developments in the intervening years.

In October 2022, the NCEC agreed that work should commence on a review and potential update of the Standards; the following approach was approved:

- Commission an updated literature review to examine evidence since the original literature review and whether there has been a material change in approaches, and to capture innovation as driven by the COVID-19 pandemic and other reforms in using evidence to determine guidance content.
- Conduct a consultation with key stakeholders, including guidance developers, to determine if (and how) the standards can better support CPG development and implementation and whether the original scope is still appropriate.
- Establish an Expert Advisory Group.

1.3 Purpose of this systematic review

This scoping review will support the NCEC in considering updates to the current NCEC Standards for Clinical Practice Guidance through capturing new and updated CPG methodologies, particularly taking into account innovations brought about by the COVID-19 pandemic where the emphasis was on development and implementation of strategies to manage the rapidly evolving evidence base in response to a public health emergency.

2 Review questions

- What are the core elements of the various types of clinical practice guidance? (update of Research Question 2 from the 2015 systematic review)
- What quality measures and or criteria are available to examine the robustness of the methodological process utilised to develop the various types of clinical practice guidance? (update of Research Question 5 from the 2015 systematic review)
- What are the key innovations since 2015 in the development and implementation of clinical practice guidance? (new Research Question)

The remaining 11 Research Questions covered in the original systematic review will be updated by the NCEC through targeted consultation with key stakeholders.

3 Methods

This protocol outlines the proposed approach for this review. It will adhere to the Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) criteria.[4]

3.1 Search methods for identification of studies

Data for this review will be identified from methodological handbooks which detail the core elements, quality measures and key innovations in CPG used by international or national groups who provide methods guidance for developing CPG. A systematic literature review published in 2015[2] informed the development of the 2015 version of the NCEC Standards for Clinical Practice Guidance.[1] This systematic review will be considered an index document, from which forward citation searches of relevant included documents will be conducted.[2] The overall search span for this scoping review will be from 2015 to 2023. Data from 2015-2023 will be gathered through a grey literature search (see sections 3.1.1 and 3.1.2 for more detail).

Data will also be sourced from peer-reviewed articles which detail the development and or implementation of CPG, specifically relating to the core elements, quality measures and innovations in CPG. These articles may also provide data in relation to evaluations of the core elements, quality measures and key innovations in CPG. They may also serve as "sign-posts" to relevant handbooks and provide qualitative data relating to the usability of the handbooks. For peer-reviewed articles, data from 2015-2023 will be gathered through a database search (see section 3.1.3). Backwards citation searching of relevant identified articles will also be conducted and limited to 2015. As standards for CPG are intended to be generic across all conditions, disease-specific publications will considered out of scope.

3.1.1 Organisations

Websites of the organisations listed in Table 3.1.1 will be searched for relevant methodological handbooks. The organisations were chosen based on guidance being available in English and identification of the organisation from previous systematic reviews on this topic (that is, the systematic review published in 2015 to inform the NCEC Standards for Clinical Practice Guidance[2] and the HRB-CICER systematic review of update processes for guidelines[5]).

Table 3.1 1 Organisations whose websites will be searched for relevant methodological handbooks

Organisation name	Organisation URL
Agency for Healthcare Research and Quality (AHRQ), USA	https://www.ahrq.gov/
Appraisal of Guidelines for Research and Evaluation (AGREE) Advancing the science of practice guidelines	https://www.agreetrust.org/resource-centre/
Association of the Scientific Medical Societies (AWMF), Germany	https://www.verwaltung.awmf.org/en/awmf.html
Australian National Health and Medical Research Council (NHMRC), Australia	https://www.nhmrc.gov.au/
Belgian Health Care Knowledge Centre (KCE), Belgium	https://kce.fgov.be/en/
Canadian Agency for Drugs and Technologies in Health (CADTH), Canada	https://www.cadth.ca/
Clinical Guidelines Committee of the American College of Physicians (ACP), USA	https://www.acponline.org/
Estonian Health Insurance Fund, Estonia	https://www.tervisekassa.ee/en
European Network for Health Technology Assessment (EUnetHTA)	https://www.eunethta.eu/
Finnish Institute for Health and Welfare (THL), Finland	https://thl.fi/fi/
Guidelines International Network (GIN)	https://g-i-n.net/
Health Council of the Netherlands, The Netherlands	https://www.healthcouncil.nl/
Institute for Clinical Systems Improvement	https://www.icsi.org/
National Academy of Medicine, USA	https://nam.edu/about-the-nam/
McMaster GRADE centre, Canada	https://cebgrade.mcmaster.ca/
Monash University Centre for Clinical Effectiveness	https://monashhealth.org/health-professionals/cce/
National Institute for Health and Care Excellence (NICE), UK	https://www.nice.org.uk/
Ravijuhend, Estonia	https://www.ravijuhend.ee/
Scottish Intercollegiate Guidelines Network (SIGN), Scotland	https://www.sign.ac.uk/
National Board of Health and Welfare, Sweden	https://www.socialstyrelsen.se/en/regulations-and-guidelines/national-guidelines/
Public Health Agency of Sweden (PHAS), Sweden	https://www.folkhalsomyndigheten.se/the-public-health-agency-of-sweden/
Swiss Centre for International Health, Switzerland	https://www.swisstph.ch/en/
The Best Practice Advocacy Centre New Zealand, (bpac^{nz}), New Zealand	https://bpac.org.nz/guidelines/
US Preventive Services Task Force (USPSTF), USA	https://uspreventiveservicestaskforce.org/uspstf/
World Health Organization (WHO)	https://www.who.int/

When guidance manuals are not found online, or where any data gaps are identified, these will be addressed by contacting organisations (via email) to gather information relating to the core elements, quality measures and key innovations in CPG. Other relevant organisations identified during the searching process will also be included and searched.

3.1.2 Other sources

Other sources of grey literature will be searched for relevant methodological handbooks. These are listed in Table 3.1.2.

Table 3.1 2 Grey literature that will be searched for relevant methodological handbooks

Other literature sources	URL
Research Rabbit	www.researchrabbitapp.com
Pubmed 'Similar Articles' feature	www.pubmed.ncbi.nlm.nih.gov
Lights Database	www.lights.science

3.1.3 Databases

The following databases will be searched for peer-reviewed articles using the search strategy defined in Appendix 1:

- Medline (EBSCO)
- CINAHL (EBSCO)
- The Cochrane Library (Wiley)

3.2 Criteria for considering publications for this review

The review questions were formulated in line with the PICO (Population, Intervention, Comparison, Outcome) framework, as presented in Table 3.1.3.

Table 3.1 3 Population, Intervention, Comparison, Outcome

Population	▪ Publications regarding clinical practice guidance for any patient and or population group, excluding disease-specific publications.
Intervention	▪ Clinical practice guidance, including guidelines, pathways, policies, protocols, care bundles, standards of care, algorithms, checklists, decision aids.
Comparison	▪ Alternative methods to produce clinical practice guidance or no comparator (for articles considering the evaluation of methods)
Outcome	▪ Description of core elements of clinical practice guidance ▪ Description of quality measures/criteria to examine methodological robustness of clinical practice guidance development ▪ Description of key innovations since 2015 in the development and implementation of clinical practice guidance

The types of publications eligible for inclusion will be:

- methodological handbooks that provide information relating to the core elements, quality measures and key innovations in CPG.
- peer-reviewed articles that describe evaluations of the core elements, quality measures and key innovations in CPG.

Living guidance, modular and or partial updates, and changes in governance procedures for tracking guidance as it becomes due for update are the key innovations of interest in the development and implementation of CPG. We will also include any additional innovations identified during the search.

Only publications from 2015 onwards will be considered for inclusion, due to availability of the systematic review, conducted in 2015, to inform the development of the NCEC Standards for Clinical Practice Guidance.

3.3 Exclusion criteria

The following exclusion criteria will be applied:

- disease-specific publications
- editorials/commentaries/opinion pieces
- abstracts only
- animal studies
- non-English language publications.

3.4 Selection of eligible publications

Methodological handbooks will be identified through searching the websites of eligible organisations (see Table 3.1.1) and through screening the methodological handbooks included in the index document.[2] This will be done by one reviewer and relevant handbooks will be imported into Endnote (Version X20). Imported handbooks will be reviewed by a second reviewer to confirm their eligibility.

All citations identified from the collective search strategy (see Appendix 1) will be exported to EndNote (Version X20) for reference management, where duplicates will be identified and removed. Using Covidence (www.covidence.org), two reviewers will independently review the titles and abstracts of the remaining citations to identify those for full-text review. The full texts will be obtained and independently evaluated by two reviewers applying the defined inclusion and exclusion criteria. Where disagreements occur, discussions will be held to reach consensus and where necessary, a third reviewer will be involved. Citations excluded during the full-text review stage will be documented alongside the reasoning for their exclusion and included in the PRISMA-ScR flow diagram.

3.5 Data extraction and management

Data will be extracted from methodological handbooks and peer-reviewed articles by one reviewer and checked for accuracy and omissions by a second. Where disagreements occur, discussions will be held to reach consensus and where necessary, a third reviewer will be

involved. Data extraction will be conducted in Microsoft Word, using a data extraction form (Appendix 2). The data extraction form will be piloted first and refined as necessary.

3.6 Quality appraisal

Where appropriate, methodological handbooks will be quality appraised independently by two reviewers and any disagreements will be resolved by deliberation, or if necessary, a third reviewer. The GIN-McMaster Guideline Development Checklist, which is a checklist of items to consider during the development of guidelines,[7] will be used to quality appraise the included handbooks. Specifically, we will use the six criteria relating to guideline development. These six criteria are:

1. What framework was used to rate the quality of the evidence? Were the grading tools modified? If yes, what modifications were made?
2. Who was responsible for appraising the quality of the evidence?
3. How was the quality of evidence assessment for each important outcome performed? What was the assessed quality?
4. What was the assessment for the overall quality of evidence (e.g.: lowest quality of evidence from outcomes rated as most important or critical, or highest quality of evidence when all outcomes point in the same direction?)
5. Was the quality of evidence assessed for the outcomes and the body of evidence reported?
6. How were the judgements in appraising the quality of evidence ensured to be transparent and explicit?[7]

Methodological quality of peer-reviewed articles will be independently assessed by two reviewers. Depending on study design an appropriate quality appraisal tool will be used, such as an appropriate version of the Newcastle-Ottawa Scale.[8]

The tools will be piloted first on a small number of included studies or handbooks, and modifications made if needed, before applying them to the remaining studies or handbooks as appropriate. Any disagreements will be resolved by deliberation or, if necessary, a third reviewer.

3.7 Data synthesis

As the main data to be extracted for this review is descriptive in nature a narrative synthesis will be undertaken.

3.8 Timeline

It is estimated that this review will require three months to complete following agreement of the protocol. These timelines are based on preliminary scoping searches of the literature and are dependent upon available resources. The timelines are presented in Appendix 3.

References

1. Government of Ireland. National Clinical Effectiveness Committee Standards for Clinical Practice Guidance [updated 2015 Nov; cited 2023 Apr 14]. Available from: https://www.lenus.ie/handle/10147/621041.

2. Hegarty J, Savage E, Cornally N, Byrne S, Henn P, Flynn M. A systematic literature review to support a framework for the development of standards for clinical practice guidance. Dublin, Ireland: Department of Health, Dublin. 2015 Feb. Available from: https://assets.gov.ie/11684/d3c73d26cd744d8fbcef1382a40debda.pdf.

3. Government of Ireland. National Clinical Effectiveness Committee Terms of Reference [updated 2017 Dec; cited 2023 Apr 21]. Available from: https://www.gov.ie/pdf/?file=https://assets.gov.ie/11492/87f7550e1a21410a96da37d4aecf7ce6.pdf#page=null

4. Tricco AC, Lillie E, Zarin W, O'Brien KK, Colquhoun H, Levac D, Moher D, Peters MD, Horsley T, Weeks L, Hempel S. PRISMA extension for scoping reviews (PRISMA-ScR): checklist and explanation. Annals of internal medicine. 2018 Oct 2;169(7):467-73. https://doi.org/10.7326/M18-0850

5. Cardwell K, Quigley J, Clyne B, Tyner B, O'Neill M, Smith SM, Ryan M. Update processes for guidelines: a systematic review. Dublin: HRB-CICER, HIQA, 2022. Available from: https://www.hiqa.ie/sites/default/files/2022-06/Update-process-for-guidelines-report.pdf.

6. Richardson WS, Wilson MC, Nishikawa J, Hayward RS. The well-built clinical question: a key to evidence-based decisions. Acp j club. 1995 Nov 1;123(3):A12-3. https://doi.org/10.7326/acpjc-1995-123-3-a12.

7. GIN-McMaster. GIN-McMaster Guideline Development Checklist [updated 2014 Jun 02; cited 2023 May 05]. Available from: https://cebgrade.mcmaster.ca/guidelinechecklistprintable.pdf

8. Wells GA, Shea B, O'Connell D, Peterson J, Welch V, Losos M, et al. The Newcastle-Ottawa Scale (NOS) for assessing the quality of non randomised studies in meta-analyses [updated 2001; cited 2023 May 05]. Available from: http://www.ohri.ca/programs/clinical_epidemiology/oxford.asp

Appendix 1: Search strategy

Database: Medline (EBSCO) **Run: 25/05/2023**			
#	**Query**	**Limiters/Expanders**	**Results**
S1	(MH "Critical Pathways/ST")	Expanders - Apply equivalent subjects	946
S2	(MH "Clinical Protocols/ST")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	3,749
S3	(MH "Patient Care Bundles/ST")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	166
S4	(MH "Algorithms")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	301,398
S5	(MH "Checklist/ST")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	781
S6	(MH "Health Policy/ST") or (MH "Standard of Care+/ST")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	899
S7	AB ((standard* OR methodolog*) N3 (guideline* OR guidance CPGs OR pathway* OR policy OR policies OR bundl* OR algorithm* OR checklist* OR "standards of care")) OR TI ((standard* OR methodolog*) N3 (guideline* OR guidance OR CPGs OR pathway* OR policy OR policies OR bundl* OR algorithm* OR checklist* OR "standards of care"))	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	35,213
S8	S1 OR S2 OR S3 OR S4 OR S5 OR S6 OR S7	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	339,570
S9	(MH "Guidelines as Topic+") OR (MH "Evidence-Based Medicine/ST/MT")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	179,802
S10	S8 AND S9	Limiters - Date of Publication: 20150101-; English Language Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	2,499
S11	(MH "Guidelines as Topic+")	Expanders - Apply equivalent subjects	172,701

		Search modes - Boolean/Phrase	
S12	S7 OR S11	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	204,265
S13	((((((((((JN "Implementation science: IS [Implement Sci] NLMUID: 101258411")) OR (JN "BMC medical research methodology [BMC Med Res Methodol] NLMUID: 100968545")) OR (JN "International journal of evidence-based healthcare [Int J Evid Based Healthc] NLMUID: 101247063")) OR (JN "PloS one [PLoS One] NLMUID: 101285081")) OR (JN "Journal of clinical epidemiology [J Clin Epidemiol] NLMUID: 8801383")) OR (JN "F1000Research [F1000Res] NLMUID: 101594320")) OR (JN "BMJ open [BMJ Open] NLMUID: 101552874")) OR (JN "BMJ: British medical journal / British Medical Association [BMJ] NLMUID: 8900488")) OR (JN "PLoS medicine [PLoS Med] NLMUID: 101231360")) OR (JN "Journal of evaluation in clinical practice [J Eval Clin Pract] NLMUID: 9609066") OR (JN "BMC health services research [BMC Health Serv Res] NLMUID: 101088677")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	437,356
S14	MH "Systematic Review" OR MH "Meta Analysis" OR PT "Meta-Analysis" OR PT "Systematic Review" OR TI systematic* N1 (review* OR overview*) OR AB systematic* N1 (review* OR overview*) OR TI "meta analys*" OR TI "meta analyz*" OR AB "meta analys*" OR AB "meta analyz* OR TI literature N2 (review* OR overview*) OR AB literature N2 (review* OR overview*)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	774,693
S15	S12 AND S13 AND S14	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	791
S16	S10 OR S15	Expanders - Apply equivalent subjects	3,251

		Search modes - Boolean/Phrase	
S17	AB ((appraisal OR quality) N3 (guideline* OR guidance CPGs OR pathway* OR policy OR policies OR bundl* OR algorithm* OR checklist* OR "standards of care")) OR TI ((appraisal OR quality) N3 (guideline* OR guidance OR CPGs OR pathway* OR policy OR policies OR bundl* OR algorithm* OR checklist* OR "standards of care"))	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	20,763
S18	S1 OR S2 OR S3 OR S4 OR S5 OR S6 OR S17	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	326,961
S19	(MH "Quality Indicators, Health Care")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	17,342
S20	(MH "Quality Assurance, Health Care+/ST")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	28,047
S21	AB "quality indicator*" OR TI "quality indicator*"	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	10,244
S22	AB "quality criteri*" OR TI "quality criteri*"	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	5,432
S23	TI "quality measure*" OR AB "quality measure*"	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	9,567
S24	AB process N1 assessment OR TI process N1 assessment	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	5,469
S25	AB (quality N2 (assessment OR evaluation OR assurance OR appraisal)) OR TI (quality N2 (assessment OR evaluation OR assurance OR appraisal))	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	93,823
S26	TI "appraisal tool*" OR AB "appraisal tool*"	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	3,125
S26	S19 OR S20 OR S21 OR S22 OR S23 OR S24 OR S25 OR S26	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	159,417
S27	S9 AND S18 AND S26	Expanders - Apply	2,026

		equivalent subjects Search modes - Boolean/Phrase	
S28	S11 OR S17	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	190,449
S29	S26 AND S28	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	21,218
S30	((((((((((JN "Implementation science: IS [Implement Sci] NLMUID: 101258411")) OR (JN "BMC medical research methodology [BMC Med Res Methodol] NLMUID: 100968545")) OR (JN "International journal of evidence-based healthcare [Int J Evid Based Healthc] NLMUID: 101247063")) OR (JN "PloS one [PLoS One] NLMUID: 101285081")) OR (JN "Journal of clinical epidemiology [J Clin Epidemiol] NLMUID: 8801383")) OR (JN "F1000Research [F1000Res] NLMUID: 101594320")) OR (JN "BMJ open [BMJ Open] NLMUID: 101552874")) OR (JN "BMJ: British medical journal / British Medical Association [BMJ] NLMUID: 8900488")) OR (JN "PLoS medicine [PLoS Med] NLMUID: 101231360")) OR (JN "Journal of evaluation in clinical practice [J Eval Clin Pract] NLMUID: 9609066") OR (JN "BMC health services research [BMC Health Serv Res] NLMUID: 101088677") OR (JN "International journal for quality in health care: journal of the International Society for Quality in Health Care / ISQua [Int J Qual Health Care] NLMUID: 9434628")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	439,928
S31	S29 AND S30	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	1,020
S32	S27 OR S31	Limiters - Date of Publication: 20150101-; Human Expanders - Apply equivalent subjects	1,249

		Search modes - Boolean/Phrase	
S33	S16 OR S32	Limiters - Date of Publication: 20150101-; English Language Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	3,811

Appendix 2: Data extraction templates

Data extraction for methodological handbooks

Guideline identification	
Organisation	
Year	
Country	
URL	
Title of the publication	
RQ1: Description of core elements of clinical practice guidance	
What core elements have been stated in the document?	
RQ2: Description of quality measures/criteria for clinical practice guidance development	
What quality measure tools are there to examine the robustness of methodological process used to develop the various types of clinical practice guidance?	
What criteria does the tool use to assess quality?	
What are the strengths and limitations of the tool?	
RQ3: Description of key innovations in the development and implementation of clinical practice guidance	
What are the core elements of the key innovation?	
What innovative methodologies have been used to develop and or implement clinical practice guidance?	
What is the rationale behind the methodology? OR What criteria were used to determine if an innovation was necessary and if it was necessary, the type of innovation indicated?	
What changes have been made in governance procedures for tracking of guidance as it becomes available for updating?	
How is the innovation used in practice?	
Notes	
Reviewer notes	
Associated peer-reviewed article(s)	

Data extraction template for peer-reviewed articles

Publication identification	
Authors (year)	
Organisation	
Country	
DOI	
Publication description	
Design	
Objective	
RQ1: Description of core elements of clinical practice guidance	
What core elements have been stated in the document?	
RQ2: Description of quality measures/criteria for clinical practice guidance development	
What quality measure tools are there to examine the robustness of methodological process used to develop the various types of clinical practice guidance?	
What criteria does the tool use to assess quality?	
What are the strengths and limitations of the tool?	
RQ3: Description of key innovations in the development and implementation of clinical practice guidance	
What are the core elements of the key innovation?	
What innovative methodologies have been used to develop and or implement clinical practice guidance?	
What is the rationale behind the methodology? OR What criteria were used to determine if an innovation was necessary and if it was necessary, the type of innovation indicated?	
What changes have been made in governance procedures for tracking of guidance as it becomes available for updating?	
How is the innovation used in practice?	
Notes	
Reviewer notes	
Associated handbook(s)	

Appendix 3: Project timeline

Project task	Resources	Duration (weeks)	Week Number											
			1	2	3	4	5	6	7	8	9	10	11	12
Organisation searching and screening	🧍 🧍	2												
Database and grey literature search	🧍	2												
Database and grey literature title/abstract screening	🧍 🧍	1												
Full text review	🧍 🧍	2												
Data extraction	🧍 🧍	3												
Quality appraisal	🧍 🧍	3												
Write-up of full report	🧍	2												
Final report (review)	🧍	2												

Proposed start date: 6 June 2023

Estimated duration: 12 weeks

Estimated end date: 28 August 2023