

## Supplemental Material

### Appendix 1- PRISMA 2020 Checklist

Section and Topic	Item #	Checklist item	Location where item is reported
<b>TITLE</b>			
Title	1	Identify the report as a systematic review.	p.1: Title
<b>ABSTRACT</b>			
Abstract	2	See the PRISMA 2020 for Abstracts checklist.	p.2: Abstract
<b>INTRODUCTION</b>			
Rationale	3	Describe the rationale for the review in the context of existing knowledge.	p.4: Introduction
Objectives	4	Provide an explicit statement of the objective(s) or question(s) the review addresses.	p.4: Introduction
<b>METHODS</b>			
Eligibility criteria	5	Specify the inclusion and exclusion criteria for the review and how studies were grouped for the syntheses.	p. 5: Types of studies; Topic of interest
Information sources	6	Specify all databases, registers, websites, organisations, reference lists and other sources searched or consulted to identify studies. Specify the date when each source was last searched or consulted.	p.5: Search methods for identification of studies; Appendix 3 – Search Strategy
Search strategy	7	Present the full search strategies for all databases, registers and websites, including any filters and limits used.	Appendix 3 – Search Strategy
Selection process	8	Specify the methods used to decide whether a study met the inclusion criteria of the review, including how many reviewers screened each record and each report retrieved, whether they worked independently, and if applicable, details of automation tools used in the process.	p. 5: Selection of studies; Figure 1 – PRISMA flow diagram
Data collection process	9	Specify the methods used to collect data from reports, including how many reviewers collected data from each report, whether they worked independently, any processes for obtaining or confirming data from study investigators, and if applicable, details of automation tools used in the process.	p.5-6: Search methods for identification of studies; Data extraction and assessing methodological limitations
Data items	10a	List and define all outcomes for which data were sought. Specify whether all results that were compatible with each outcome domain in each study were sought (e.g. for all measures, time points, analyses), and if not, the methods used to decide which results to collect.	p.5-6: Data extraction and assessing methodological limitations
	10b	List and define all other variables for which data were sought (e.g. participant and intervention characteristics, funding sources). Describe any assumptions made about any missing or unclear information.	p.5-6: Data extraction and assessing methodological limitations

Section and Topic	Item #	Checklist item	Location where item is reported
Study risk of bias assessment	11	Specify the methods used to assess risk of bias in the included studies, including details of the tool(s) used, how many reviewers assessed each study and whether they worked independently, and if applicable, details of automation tools used in the process.	p.5-6: Data extraction and assessing methodological limitations; Data management, analysis and synthesis
Effect measures	12	Specify for each outcome the effect measure(s) (e.g. risk ratio, mean difference) used in the synthesis or presentation of results.	Not applicable
Synthesis methods	13a	Describe the processes used to decide which studies were eligible for each synthesis (e.g. tabulating the study intervention characteristics and comparing against the planned groups for each synthesis (item #5)).	p.6: Data management, analysis and synthesis
	13b	Describe any methods required to prepare the data for presentation or synthesis, such as handling of missing summary statistics, or data conversions.	p.6: Data management, analysis and synthesis
	13c	Describe any methods used to tabulate or visually display results of individual studies and syntheses.	p.6: Data management, analysis and synthesis
	13d	Describe any methods used to synthesize results and provide a rationale for the choice(s). If meta-analysis was performed, describe the model(s), method(s) to identify the presence and extent of statistical heterogeneity, and software package(s) used.	p.6: Data management, analysis and synthesis
	13e	Describe any methods used to explore possible causes of heterogeneity among study results (e.g. subgroup analysis, meta-regression).	Not applicable
	13f	Describe any sensitivity analyses conducted to assess robustness of the synthesized results.	Not applicable
Reporting bias assessment	14	Describe any methods used to assess risk of bias due to missing results in a synthesis (arising from reporting biases).	Not applicable
Certainty assessment	15	Describe any methods used to assess certainty (or confidence) in the body of evidence for an outcome.	p.6: Data management, analysis and synthesis
<b>RESULTS</b>			
Study selection	16a	Describe the results of the search and selection process, from the number of records identified in the search to the number of studies included in the review, ideally using a flow diagram.	Figure 1 – PRISMA flow diagram
	16b	Cite studies that might appear to meet the inclusion criteria, but which were excluded, and explain why they were excluded.	Figure 1 – PRISMA flow diagram; Appendix 6- Excluded studies and reasons for exclusion
Study characteristics	17	Cite each included study and present its characteristics.	Appendix 7– Characteristics of included studies
Risk of bias in studies	18	Present assessments of risk of bias for each included study.	p.7: Findings Appendix 4 – Critical Appraisal Skills Programme (CASP) tool of included studies; Appendix 5 – Mixed-Methods

Section and Topic	Item #	Checklist item	Location where item is reported
			Appraisal Tool (MMAT) of included studies
Results of individual studies	19	For all outcomes, present, for each study: (a) summary statistics for each group (where appropriate) and (b) an effect estimate and its precision (e.g. confidence/credible interval), ideally using structured tables or plots.	Not applicable
Results of syntheses	20a	For each synthesis, briefly summarise the characteristics and risk of bias among contributing studies.	Appendix 4 – Critical Appraisal Skills Programme (CASP) tool of included studies; Appendix 5 – Mixed-Methods Appraisal Tool (MMAT) of included studies
	20b	Present results of all statistical syntheses conducted. If meta-analysis was done, present for each the summary estimate and its precision (e.g. confidence/credible interval) and measures of statistical heterogeneity. If comparing groups, describe the direction of the effect.	Not applicable
	20c	Present results of all investigations of possible causes of heterogeneity among study results.	Not applicable
	20d	Present results of all sensitivity analyses conducted to assess the robustness of the synthesized results.	Not applicable
Reporting biases	21	Present assessments of risk of bias due to missing results (arising from reporting biases) for each synthesis assessed.	Not applicable
Certainty of evidence	22	Present assessments of certainty (or confidence) in the body of evidence for each outcome assessed.	Table 1– Summary of qualitative findings Appendix 9 – Evidence profile Appendix 10 – Summary of quantitative findings supporting qualitative findings
<b>DISCUSSION</b>			
Discussion	23a	Provide a general interpretation of the results in the context of other evidence.	p. 11: Discussion
	23b	Discuss any limitations of the evidence included in the review.	p. 11-12: Discussion
	23c	Discuss any limitations of the review processes used.	p. 11-12: Discussion
	23d	Discuss implications of the results for practice, policy, and future research.	p.12-13: Implications for practice; Implications for research
<b>OTHER INFORMATION</b>			
Registration and protocol	24a	Provide registration information for the review, including register name and registration number, or state that the review was not registered.	p.5: Methods
	24b	Indicate where the review protocol can be accessed, or state that a protocol was not prepared.	p.5: Methods

Section and Topic	Item #	Checklist item	Location where item is reported
	24c	Describe and explain any amendments to information provided at registration or in the protocol.	Not applicable
Support	25	Describe sources of financial or non-financial support for the review, and the role of the funders or sponsors in the review.	p.13: Role of funding source
Competing interests	26	Declare any competing interests of review authors.	p.13: Competing interests
Availability of data, code and other materials	27	Report which of the following are publicly available and where they can be found: template data collection forms; data extracted from included studies; data used for all analyses; analytic code; any other materials used in the review.	p.13: Availability of data code and other materials

From: Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ* 2021;372:n71. doi: 10.1136/bmj.n71

## Appendix 2 – ENTREQ Statement

No	Item	Guide and description	Location
1	Aim	State the research question the synthesis addresses.	p. 4-5: Introduction
2	Synthesis methodology	Identify the synthesis methodology or theoretical framework which underpins the synthesis, and describe the rationale for choice of methodology (e.g. <i>meta-ethnography, thematic synthesis, critical interpretive synthesis, grounded theory synthesis, realist synthesis, meta-aggregation, meta-study, framework synthesis</i> ).	p. 5: Methods
3	Approach to searching	Indicate whether the search was pre-planned ( <i>comprehensive search strategies to seek all available studies</i> ) or iterative ( <i>to seek all available concepts until they theoretical saturation is achieved</i> ).	p.5: Search methods for identification of studies; Appendix 3 – Search Strategy
4	Inclusion criteria	Specify the inclusion/exclusion criteria (e.g. <i>in terms of population, language, year limits, type of publication, study type</i> ).	p. 5: Types of studies; Topic of interest
5	Data sources	Describe the information sources used (e.g. <i>electronic databases (MEDLINE, EMBASE, CINAHL, psycINFO, Econlit), grey literature databases (digital thesis, policy reports), relevant organisational websites, experts, information specialists, generic web searches (Google Scholar) hand searching, reference lists</i> ) and when the searches conducted; provide the rationale for using the data sources.	p.5: Search methods for identification of studies; Appendix 3 – Search Strategy
6	Electronic Search strategy	Describe the literature search (e.g. <i>provide electronic search strategies with population terms, clinical or health topic terms, experiential or social phenomena related terms, filters for qualitative research, and search limits</i> ).	Appendix 3 – Search Strategy
7	Study screening methods	Describe the process of study screening and sifting (e.g. <i>title, abstract and full text review, number of independent reviewers who screened studies</i> ).	p. 5: Search methods for identification of studies; Selection of studies; p.5-6: Data extraction and assessing methodological limitations; Figure 1 – PRISMA flow diagram

8	Study characteristics	Present the characteristics of the included studies ( <i>e.g. year of publication, country, population, number of participants, data collection, methodology, analysis, research questions</i> ).	Appendix 7 – Characteristics of included studies
9	Study selection results	Identify the number of studies screened and provide reasons for study exclusion ( <i>e.g. for comprehensive searching, provide numbers of studies screened and reasons for exclusion indicated in a figure/flowchart; for iterative searching describe reasons for study exclusion and inclusion based on modifications to the research question and/or contribution to theory development</i> ).	Figure 1 – PRISMA flow diagram; Appendix 6- Excluded studies and reasons for exclusion
10	Rationale for appraisal	Describe the rationale and approach used to appraise the included studies or selected findings ( <i>e.g. assessment of conduct (validity and robustness), assessment of reporting (transparency), assessment of content and utility of the findings</i> ).	p.5-6: Data extraction and assessing methodological limitations
11	Appraisal items	State the tools, frameworks and criteria used to appraise the studies or selected findings ( <i>e.g. Existing tools: CASP, QARI, COREQ, Mays and Pope [25]; reviewer developed tools; describe the domains assessed: research team, study design, data analysis and interpretations, reporting</i> ).	p.5-6: Data extraction and assessing methodological limitations Appendix 4 – Critical Appraisal Skills Programme (CASP) tool of included studies; Appendix 5 – Mixed-Methods Appraisal Tool (MMAT) of included studies
12	Appraisal process	Indicate whether the appraisal was conducted independently by more than one reviewer and if consensus was required.	p.5-6: Data extraction and assessing methodological limitations p.6: Data management, analysis and synthesis
13	Appraisal results	Present results of the quality assessment and indicate which articles, if any, were weighted/excluded based on the assessment and give the rationale.	p.6: Data extraction and assessing methodological limitations; Appendix 4 – Critical Appraisal Skills Programme (CASP) tool of included studies; Appendix 5 – Mixed-Methods Appraisal Tool (MMAT) of included studies
14	Data extraction	Indicate which sections of the primary studies were analysed and how were the data extracted from the primary studies? ( <i>e.g. all text under the headings "results /conclusions" were extracted electronically and entered into a computer software</i> ).	p.5-6: Data extraction and assessing methodological limitations
15	Software	State the computer software used, if any.	p.6: Data management, analysis and synthesis
16	Number of reviewers	Identify who was involved in coding and analysis.	p.6: Data management, analysis and synthesis
17	Coding	Describe the process for coding of data ( <i>e.g. line by line coding to search for concepts</i> ).	p.6: Data management, analysis and synthesis
18	Study comparison	Describe how were comparisons made within and across studies ( <i>e.g. subsequent studies were coded into pre-existing concepts, and new concepts were created when deemed necessary</i> ).	p.6: Data management, analysis and synthesis
19	Derivation of themes	Explain whether the process of deriving the themes or constructs was inductive or deductive.	p.6: Data management, analysis and synthesis
20	Quotations	Provide quotations from the primary studies to illustrate themes/constructs, and identify whether the quotations were participant quotations of the author's interpretation.	Not applicable
21	Synthesis output	Present rich, compelling and useful results that go beyond a summary of the primary studies ( <i>e.g. new interpretation, models of evidence, conceptual models, analytical framework, development of a new theory or construct</i> ).	p. 11-12: Discussion

## Appendix 3 – Search Strategy

### Search log

Database	Date searched	Strategy	Hits
Embase	20/1/2022	See below	943
MEDLINE	20/1/2022	See below	895
Web of Science	20/1/2022	See below	1064
CINAHL Complete	20/1/2022	See below	5435
			8337

### Search strategies

#### **CINAHL Complete**

S1 TX “(doula\*)”  
 S2 TX “(labour companion\* or labor companion\*)”  
 S3 TX “(labour assistant\* or labor assistant\*)”  
 S4 TX “(birth companion\* or childbirth companion\*)”  
 S5 TX “(labour support\* or labor support\*)”  
 S6 TX “(birth partner\*)”  
 S7 TX “(supportive companion\*)”  
 S8 TX “(labour coach\* or labor coach\*)”  
 S9 TX “(pregnan\* outreach)” N1  
 S10 TX (S1 OR S2 OR S3 OR S4 OR S5 OR S6 OR S7 OR S8 OR S9)  
 S11 TX “(labour\* or labor\* or birth\* or childbirth\* or deliver\*)”  
 S12 S10 OR S11

**EMBASE**

1. (doula\* or "MH Doulas").tw.
2. (labour companion\* or labor companion\*).tw.
3. (labour assistant\* or labor assistant\*).tw.
4. (birth companion\* or childbirth companion\*).tw.
5. (labour support\* or labor support\*).tw.
6. birth partner\*.tw.
7. supportive companion\*.tw.
8. (labour coach\* or labor coach\*).tw.
9. (pregnan\* adj1 outreach).tw.
10. 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9

**MEDLINE (OVID)**

1. ("doula\*" or "MH Doulas").tw.
2. ("labour companion\*" or "labor companion\*").tw.
3. ("labour assistant\*" or "labor assistant\*").tw.
4. ("birth companion\*" or "childbirth companion\*").tw.
5. ("labour support\*" or "labor support\*").tw.
6. "birth partner".tw.
7. "supportive companion".tw.
8. ("labour coach\*" or "labor coach\*").tw.
9. ("pregnan\*" adj1 "outreach").tw.
10. 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9

**Web of Science**

1. TS = ("doula\*")
2. TS = ("labour companion\*" OR "labor companion\*")
3. TS = ("labour assistant\*" OR "labor assistant\*")
4. TS = ("birth companion\*" OR "childbirth companion\*")
5. TS = ("labour support\*" OR "labor support\*")
6. TS = ("birth partner\*")
7. TS = ("supportive companion\*")
8. TS = ("labour coach\*" OR "labor coach\*")
9. TS = ("pregnan\* outreach")
10. #9 OR #8 OR #7 OR #6 OR #5 OR #4 OR #3 OR #2 OR #1

### Grey literature databases

We searched the grey literature databases: Informit APAFT (Australian Public Affairs Full Text); OpenGrey; PAIS (ProQuest XML); Trove (National Library of Australia); BASE (Bielefeld Academic Search Engine); British Library; JISC Library Hub Discover; Ethos; ProQuest Dissertations and Theses Global; Google; Gov.UK Publications, GreyNet International; National Archives; World Cat; National Institute for Health and Clinical Excellence (NICE); and the World Health Organization International Clinical Trials Registry Platform (WHO ICTRP) Search Porta. For databases which yielded thousands of search results, the first 100 studies were reviewed for relevance.

### Appendix 4 – Critical Appraisal Skills Programme (CASP) tool of included studies

RefID	Author, year	Was there a statement of the aims of the research?	Given the aim, was a qualitative methodology appropriate?	Was the research design appropriate to address the aim?	Was the recruitment strategy appropriate to the aims of the research?	Was the relationship between the researcher & participants adequately considered?	Have ethical issues been taken into consideration?	Was the data collected in a way that addressed the research issue?	Was the data analysis sufficiently rigorous?	Were the findings supported by the evidence?	How valuable is the research?	Overall assessment of methodological limitations
24.A	Akhavan & Edge 2012	Yes	Yes	Yes	Unclear	No	Partial	Yes	Yes	Yes	Valuable	Moderate concerns
24.B	Akhavan & Lundgren 2012	Yes	Yes	Yes	Partial	No (no reflexive statements by research team)	Partial (consent mentioned, no discussion on IRB)	Yes	Yes	Yes	Valuable	Moderate concerns
277	Gruber 2017 + Bredström & Gruber 2012	No	Unclear (all methods are qualitative but was not justified)	Unclear (IDIs and PO appear appropriate but was not justified)	Unclear (no discussion on recruitment processes)	No (no reflexive statements by research team)	Unclear	Unclear (no discussion on processes of data collection)	Unclear (no discussion on processes of data analysis)	Partial	Valuable	Serious concerns

RefID	Author, year	Was there a statement of the aims of the research?	Given the aim, was a qualitative methodology appropriate?	Was the research design appropriate to address the aim?	Was the recruitment strategy appropriate to the aims of the research?	Was the relationship between the researcher & participants adequately considered ?	Have ethical issues been taken into consideration?	Was the data collected in a way that addressed the research issue?	Was the data analysis sufficiently rigorous?	Were the findings supported by the evidence?	How valuable is the research?	Overall assessment of methodological limitations
277.A	Gruber 2017	No (It does not appear to be a research aim but rather an aim of the paper)	Unclear (all methods are qualitative but was not justified)	Unclear (IDIs and PO appear appropriate but was not justified)	Unclear (no discussion on recruitment processes)	No (no reflexive statements by research team)	Unclear (not mentioned in this paper but mentioned in Bredström & Gruber 2015 paper)	Unclear (no discussion on processes of data collection)	Unclear (no discussion on processes of data analysis)	Partial	Valuable	Serious concerns
277.B	Bredström & Gruber 2012	Yes	Partial (all methods are appropriate but not justified)	Partial (IDIs and PO are appropriate but not justified)	Unclear (no discussion on recruitment processes)	No (no reflexive statements by research team)	Partial (ethical approval stated but not consent processes)	Unclear (no discussion on processes of data collection)	Unclear (no discussion on processes of data analysis)	Partial	A bit valuable (in terms of cultural-interpretive doulas)	Serious concerns
297	Hardeman & Kozhumanil 2016	Yes	Yes	Yes	Yes	Partial (authors mentioned relationship but unclear how it may affect the study)	Yes	Yes	Yes	Yes	Valuable	Minor concerns
580	LaMancuso, Goldman & Nothnagle 2016	Yes	Yes	Yes	Yes	No (no reflexive statements by research team)	Yes	Yes	Yes	Yes	Valuable	Minor concerns

RefID	Author, year	Was there a statement of the aims of the research?	Given the aim, was a qualitative methodology appropriate?	Was the research design appropriate to address the aim?	Was the recruitment strategy appropriate to the aims of the research?	Was the relationship between the researcher & participants adequately considered ?	Have ethical issues been taken into consideration?	Was the data collected in a way that addressed the research issue?	Was the data analysis sufficiently rigorous?	Were the findings supported by the evidence?	How valuable is the research?	Overall assessment of methodological limitations
744	O'Rourke, Yelland, Newton & Shafiei 2019	Yes	Yes	Yes	No (recruitment through CEO may lead to bias as the informants appear to be staff under the CEO)	Yes	Yes	Partial (IDs appropriate but not justified)	Yes	Yes	Valuable	Moderate concerns
2691	Hazard, Callister, Birkhead & Nichols 2009	Yes	Yes	Yes	Unclear (no discussion on recruitment processes)	No (no reflexive statements by research team)	Yes	Yes	Partial (no discussion on processes of data analysis)	Partial	Valuable	Moderate concerns
GL1.0	Mendel, Sperlich & Finucane 2019	Yes	Yes	Yes	Partial (medical director and doula trainers were more senior than doulas which may result in bias of recruitment)	No (no reflexive statements by research team)	Yes	Yes	Yes	Yes	Valuable	Minor concerns

RefID	Author, year	Was there a statement of the aims of the research?	Given the aim, was a qualitative methodology appropriate?	Was the research design appropriate to address the aim?	Was the recruitment strategy appropriate to the aims of the research?	Was the relationship between the researcher & participants adequately considered?	Have ethical issues been taken into consideration?	Was the data collected in a way that addressed the research issue?	Was the data analysis sufficiently rigorous?	Were the findings supported by the evidence?	How valuable is the research?	Overall assessment of methodological limitations
1302	Spiby et al. 2015	Yes	Yes	Unclear (no discussion on why mixed-methods was chosen)	Yes	No (no reflexive statements by research team)	Yes	Partial (no justification of why questionnaire was used)	Yes	Yes	Valuable	Moderate concerns
1302. A	Spiby, Green, Darwin, Wilmot, Knox, McLeish & Smith 2015	Yes	Yes	Yes	Yes	No (no reflexive statements by research team)	Yes	Yes	Yes	Yes	Valuable	Moderate concerns
1302. B	McLeish, Spiby, Darwin, Wilmot and Green 2016	Yes	Yes	Yes	Unclear (no discussion on recruitment processes)	No (no reflexive statements by research team)	Yes	Yes	Yes	Yes	Valuable	Moderate concerns
1302. C	McLeish and Redshaw 2018	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Valuable	No or very minor concerns
1302. D	Darwin, Green, McLeish, Willmot & Spiby 2017	Yes	Yes	Unclear (no discussion on why mixed-methods was chosen)	Yes	No (no reflexive statements by research team)	Yes	Partial (no justification of why questionnaire was used)	Yes	Yes	Valuable	Moderate concerns

RefID	Author, year	Was there a statement of the aims of the research?	Given the aim, was a qualitative methodology appropriate?	Was the research design appropriate to address the aim?	Was the recruitment strategy appropriate to the aims of the research?	Was the relationship between the researcher & participants adequately considered ?	Have ethical issues been taken into consideration?	Was the data collected in a way that addressed the research issue?	Was the data analysis sufficiently rigorous?	Were the findings supported by the evidence?	How valuable is the research?	Overall assessment of methodological limitations
5294	Schytt et al. 2021	Yes	Yes	Yes	Yes	Partial (authors mentioned relationship but unclear how it may affect the study)	Yes	Yes	Partial (no relationships between researchers and participants stated)	Yes	Valuable	Minor concerns
5294. A	Schytt, Wahlberg, Small, Eltayb & Lindgren 2021	Yes	Yes	Yes	Yes	Partial (authors mentioned relationship but unclear how it may affect the study)	Yes	Yes	Partial (no relationships between researchers and participants stated)	Yes	Valuable	Minor concerns
5294. B	Lindgren, Eltayb, Wahlberg, Tsekhmetruk, Small & Schytt, 2022	Yes	Yes	Yes	Yes	Partial (authors mentioned relationship but unclear how it may affect the study)	Yes	Yes	Partial (no relationships between researchers and participants stated)	Yes	Valuable	Minor concerns

RefID	Author, year	Was there a statement of the aims of the research?	Given the aim, was a qualitative methodology appropriate?	Was the research design appropriate to address the aim?	Was the recruitment strategy appropriate to the aims of the research?	Was the relationship between the researcher & participants adequately considered ?	Have ethical issues been taken into consideration?	Was the data collected in a way that addressed the research issue?	Was the data analysis sufficiently rigorous?	Were the findings supported by the evidence?	How valuable is the research?	Overall assessment of methodological limitations
5547	Gomez, Arteaga, Arcara, Cuentos, Armstead, Mehra, Logan, Jackson & Marshall 2021	Yes	Yes	Yes	Yes	Yes	Partial (confidentiality not mentioned)	Yes	Yes	Yes	Valuable	Minor concerns
GL2.0	Lee 2020	Yes	Yes	Yes	Yes	No (no reflexive statements by research team)	Partial (ethics was mentioned as exempting study from ethics approval but no justification provided)	Yes	Yes	Yes	Valuable	Moderate concerns

## Appendix 5- Mixed-Methods Appraisal Tool (MMAT) of included studies

RefID	First author & Year	Methodology	SCREENING QUESTIONS		4. QUANTITATIVE DESCRIPTIVE STUDIES					5. MIXED METHODS STUDIES					MMAT RATING
			S1. Are there clear research questions?	S2. Do the collected data allow to address the research questions?	4.1. Is the sampling strategy relevant to address the research question?	4.2. Is the sample representative of the target population?	4.3. Are the measurements appropriate?	4.4. Is the risk of nonresponse bias low?	4.5. Is the statistical analysis appropriate to answer the research question?	5.1. Is there an adequate rationale for using a mixed methods design to address the research question?	5.2. Are the different components of the study effectively integrated to answer the research question?	5.3. Are the outputs of the integration of qualitative & quantitative components adequately interpreted?	5.4. Are divergences and inconsistencies between quantitative & qualitative results adequately addressed?	5.5. Do the different components of the study adhere to the quality criteria of each tradition of the methods involved?	
1302	Spiby 2015	Mixed methods	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	"Moderate" (minor flaws impacting credibility/validity)
1302	Spiby 2016	Quantitative	Yes	Yes	Yes	Yes	Yes	No	Yes	-	-	-	-	-	"Moderate" (minor flaws impacting credibility/validity)
1302	Darwin 2017	Mixed methods	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes	"Moderate" (minor flaws impacting credibility/validity)

## Appendix 6- Excluded studies and reasons for exclusion

	RefID	Excluded studies	Title	Reasons for exclusion	Comments
1.	#5232	Adams 2021	Countervailing powers in the labor room: The doula-doctor relationship in the United States	Not community-based doula program (private practicing, professional doulas, hospital-based doula program)	
2.	#1992	Baas 2013	Continuous Support During Childbirth by Maternity Care Assistants: An Exploration of Opinions in the Netherlands	Not community-based doula program (private practicing, professional doulas, hospital-based doula program)	
3.	#389	Berbyuk Lindstrom 2020	Perspectives of Nurses and Doulas on the Use of Information and Communication Technology in Intercultural Pediatric Care: Qualitative Pilot Study	Not doula support during labour and birth (e.g. abortion/death)	
4.	#1718	Bondas 2018	Becoming a voluntary doula: personal and caring motives	Not population of interest (general population, migrant women not from LMICs, not specifying migrant population groups)	Discussed with MAB concluded exclusion as no migrant women in study

	RefID	Excluded studies	Title	Reasons for exclusion	Comments
5.	#1743	Breedlove 2001	A description of social support and hope in pregnant and parenting teens receiving care from a doula	Not population of interest (vulnerable women, African-American, adolescent, etc)	
6.	#430	Breedlove 2005	Perceptions of social support from pregnant and parenting teens using community-based doulas	Not population of interest (vulnerable women, African-American, adolescent, etc)	
7.	#436	Brisco 2017	Doula Support During Childbearing--Aiming for the Best Birthing Experience: A Phenomenological Study	Not community-based doula program (private practicing, professional doulas, hospital-based doula program)	
8.	#5294	Byrskog 2020	Community-based bilingual doulas for migrant women in labour and birth - findings from a Swedish register-based cohort study	Not perspectives and/or experiences of migrant women, community-based doulas, health care providers, stakeholders	Discussed with RZ and concluded excluded as not perspectives or experiences
9.	#1811	Callister 2008	Supporting vulnerable women: Hispanic labor friends outcomes evaluation	Secondary data analysis (reviews, news articles, commentary, opinion, editorial, case studies, protocols) care providers, stakeholders	

	RefID	Excluded studies	Title	Reasons for exclusion	Comments
10.	#5852	Cameron 2021	"COVID affected us all:" the birth and postnatal health experiences of resettled Syrian refugee women during COVID-19 in Canada	Not community-based doula program (private practicing, professional doulas, hospital-based doula program)	
11.	#474	Cattelona 2015	The Impact of a Volunteer Postpartum Doula Program on Breastfeeding Success: A Case Study	Secondary data analysis (reviews, news articles, commentary, opinion, editorial, case studies, protocols) care providers, stakeholders	
12.	#94	Coley 2016	Understanding Factors That Influence Adolescent Mothers' Doula Use: A Qualitative Study	Not population of interest (vulnerable women, African-American, adolescent, etc)	
13.	#136	Deitrick 2008	Attitudes towards Doula Support during Pregnancy by Clients, Doulas, and Labor-and-Delivery Nurses: A Case Study from Tampa, Florida	Not population of interest (vulnerable women, African-American, adolescent, etc)	

	RefID	Excluded studies	Title	Reasons for exclusion	Comments
14.	#4210	Shelp 2004	Establishment of a Somali doula program at a large metropolitan hospital	Not community-based doula program (private practicing, professional doulas, hospital-based doula program)	Discussed with RZ and concluded excluded as hospital-based doula programs not community-based doula programs
15.	#4210	Shelp 2004	Women helping women: the Somali Doula Initiative	Not community-based doula program (private practicing, professional doulas, hospital-based doula program)	Discussed with RZ and concluded excluded as hospital-based doula programs not community-based doula programs
16.	#169	Edwards 2013	Breastfeeding and complementary food: randomized trial of community doula home visiting	Not population of interest (vulnerable women, African-American, adolescent, etc)	
17.	#184	Everson 2018	Outcomes of Care for 1,892 Doula-Supported Adolescent Births in the United States: The DONA International Data Project, 2000 to 2013	Not population of interest (vulnerable women, African-American, adolescent, etc)	
18.	#5192	Font 2020	Doula programs improve cesarean section rate, breastfeeding initiation, maternal and perinatal outcomes	Not population of interest (vulnerable women, African-American, adolescent, etc)	

	RefID	Excluded studies	Title	Reasons for exclusion	Comments
19.	#243	Gentry 2010	"Going beyond the call of doula": a grounded theory analysis of the diverse roles community-based doulas play in the lives of pregnant and parenting adolescent mothers	Not population of interest (vulnerable women, African-American, adolescent, etc)	
20.	#268	Green 2013	Multiple perspectives on the working relationships between volunteer doulas and midwives	Secondary data analysis (reviews, news articles, commentary, opinion, editorial, case studies, protocols) care providers, stakeholders	
21.	#276	Gruber 2013	Impact of doulas on healthy birth outcomes	Not population of interest (vulnerable women, African-American, adolescent, etc)	
22.	#2610	Hamilton 2015	Expanding the service: Goodwin Trust volunteer doula project	Secondary data analysis (reviews, news articles, commentary, opinion, editorial, case studies, protocols) care providers, stakeholders	

	RefID	Excluded studies	Title	Reasons for exclusion	Comments
23.	#289	Hans 2018	Randomized Controlled Trial of Doula-Home-Visiting Services: Impact on Maternal and Infant Health	Not population of interest (vulnerable women, African-American, adolescent, etc)	
24.	#294	Hans 2013	Promoting Positive Mother-Infant Relationships: A Randomized Trial of Community Doula Support For Young Mothers	Not population of interest (vulnerable women, African-American, adolescent, etc)	
25.	#5108	Haugaard 2020	Norwegian multicultural doulas' experiences of supporting newly-arrived migrant women during pregnancy and childbirth: A qualitative study	Not community-based doula program (private practicing, professional doulas, hospital-based doula program)	
26.	#747	Hmiel 2019	"We have this awesome organization where it was built by women for women like us": Supporting African American women through their pregnancies and beyond	Not population of interest (vulnerable women, African-American, adolescent, etc)	
27.	#762	Hofmeyr 1991	Companionship to modify the clinical birth environment: effects on progress and perceptions of labour, and breastfeeding	Not population of interest (vulnerable women, African-American, adolescent, etc)	

	RefID	Excluded studies	Title	Reasons for exclusion	Comments
28.	#762	Hofmeyr 1991	Companionship to modify the clinical birth environment: effects on progress and perceptions of labour, and breastfeeding	Not population of interest (vulnerable women, African-American, adolescent, etc)	
29.	#2768	Howe 2010	Doula care for vulnerable populations	Secondary data analysis (reviews, news articles, commentary, opinion, editorial, case studies, protocols) care providers, stakeholders	
30.	#781	Humphries 2012	The good, the bad, and the ambivalent: Quality of alliance in a support program for young mothers	Not population of interest (vulnerable women, African-American, adolescent, etc)	
31.	#341	Kang 2014	Influence of culture and community perceptions on birth and perinatal care of immigrant women: doulas' perspective	Not community-based doula program (private practicing, professional doulas, hospital-based doula program)	
32.	#345	Karbeah 2019	Identifying the Key Elements of Racially Concordant Care in a Freestanding Birth Center	Not population of interest (vulnerable women, African-American, adolescent, etc)	

	RefID	Excluded studies	Title	Reasons for exclusion	Comments
33.	#564	Kozhimannil 2016	Modeling the Cost-Effectiveness of Doula Care Associated with Reductions in Preterm Birth and Cesarean Delivery	Not population of interest (general population, migrant women not from LMICs, not specifying migrant population groups)	
34.	#561	Kozhimannil 2013	Doula care supports near-universal breastfeeding initiation among diverse, low-income women	Not population of interest (vulnerable women, African-American, adolescent, etc)	
35.	#569	Kozhimannil 2016	Disrupting the Pathways of Social Determinants of Health: Doula Support during Pregnancy and Childbirth	Not population of interest (vulnerable women, African-American, adolescent, etc)	
36.	#566	Kozhimannil 2013	Doula care, birth outcomes, and costs among Medicaid beneficiaries	Not population of interest (vulnerable women, African-American, adolescent, etc)	

	RefID	Excluded studies	Title	Reasons for exclusion	Comments
37.	#2905	Legendyk 2005	A case study of volunteers providing labour and childbirth support in hospitals in Canada	Secondary data analysis (reviews, news articles, commentary, opinion, editorial, case studies, protocols) care providers, stakeholders	
38.	#339	Low 2006	Doulas as community health workers: lessons learned from a volunteer program	Not population of interest (vulnerable women, African-American, adolescent, etc)	
39.	#640	Maher 2012	The role of the interpreter/doula in the maternity setting	Secondary data analysis (reviews, news articles, commentary, opinion, editorial, case studies, protocols) care providers, stakeholders	
40.	#3053	McCarthy 2013	Evaluating the impact of befriending for pregnant asylum-seeking and refugee women	Secondary data analysis (reviews, news articles, commentary, opinion, editorial, case studies, protocols) care providers, stakeholders	

	RefID	Excluded studies	Title	Reasons for exclusion	Comments
41.	#668	McComish 2009	Domains of postpartum doula care and maternal responsiveness and competence	Not community-based doula program (private practicing, professional doulas, hospital-based doula program)	
42.	#1	McGarry 2016	How Do Women with an Intellectual Disability Experience the Support of a Doula During Their Pregnancy, Childbirth and After the Birth of Their Child?	Not community-based doula program (private practicing, professional doulas, hospital-based doula program)	
43.	#676	McKinley 2013	Tapping powerful resources: Community-based doula programs	Secondary data analysis (reviews, news articles, commentary, opinion, editorial, case studies, protocols) care providers, stakeholders	
44.	#681	McLemore 2013	Birth outcomes associated with doula support during labor	Secondary data analysis (reviews, news articles, commentary, opinion, editorial, case studies, protocols) care providers, stakeholders	

	RefID	Excluded studies	Title	Reasons for exclusion	Comments
45.	#682	McLemore 2017	Making the case for innovative reentry employment programs: previously incarcerated women as birth doulas - a case study	Secondary data analysis (reviews, news articles, commentary, opinion, editorial, case studies, protocols) care providers, stakeholders	
46.	#1302	McLeish 2019	"Being the best person that they can be and the best mum": a qualitative study of community volunteer doula support for disadvantaged mothers before and after birth in England	Not doula support during labour and birth (e.g. abortion/death)	
47.	#1038	Morton 2018	Bearing witness: United States and Canadian maternity support workers' observations of disrespectful care in childbirth	Not community-based doula program (private practicing, professional doulas, hospital-based doula program)	
48.	#694	Munoz 2015	Establishing a volunteer doula program within a nurse-midwifery education program: a winning situation for both clients and students	Secondary data analysis (reviews, news articles, commentary, opinion, editorial, case studies, protocols) care providers, stakeholders	

	RefID	Excluded studies	Title	Reasons for exclusion	Comments
49.	#721	Neel 2019	Integrating Doulas Into Hospital Births: Provider Perceptions of Doulas and Doula Care	Not community-based doula program (private practicing, professional doulas, hospital-based doula program)	
50.	#719	Neel 2019	Hospital-based maternity care practitioners' perceptions of doulas	Not population of interest (general population, migrant women not from LMICs, not specifying migrant population groups)	
51.	#736	Nommsen-Rivers 2009	Doula care, early breastfeeding outcomes, and breastfeeding status at 6 weeks postpartum among low-income primiparae	Not population of interest (vulnerable women, African-American, adolescent, etc)	
52.	#4868	Ogunwole 2020	Community-Based Doulas and COVID-19: Addressing Structural and Institutional Barriers to Maternal Health Equity	Secondary data analysis (reviews, news articles, commentary, opinion, editorial, case studies, protocols) care providers, stakeholders	

	RefID	Excluded studies	Title	Reasons for exclusion	Comments
53.	#803	Pascoe 1993	Social support during labor and duration of labor - a community-based study	Not population of interest (general population, migrant women not from LMICs, not specifying migrant population groups)	
54.	#805	Paterno 2012	Evaluation of a student-nurse doula program: an analysis of doula interventions and their impact on labor analgesia and cesarean birth	Secondary data analysis (reviews, news articles, commentary, opinion, editorial, case studies, protocols) care providers, stakeholders	
55.	#3681	Raine 2003	Promoting breast-feeding in a deprived area: the influence of a peer support initiative	Not community-based doula program (private practicing, professional doulas, hospital-based doula program)	
56.	#4801	Rogers 2021	Cross Cultural Workers for women and families from migrant and refugee backgrounds: a mixed-methods study of service providers perceptions	Not doula support during labour and birth (e.g. abortion/death)	

	RefID	Excluded studies	Title	Reasons for exclusion	Comments
57.	#927	Schroeder 2005	Labor support for incarcerated pregnant women: The doula project	Not population of interest (vulnerable women, African-American, adolescent, etc)	
58.	#926	Schroeder 2005	Doula birth support for incarcerated pregnant women	Not population of interest (vulnerable women, African-American, adolescent, etc)	
59.	#929	Schytt 2020	Community-based doula support for migrant women during labour and birth: study protocol for a randomised controlled trial in Stockholm, Sweden (NCT03461640)	Secondary data analysis (reviews, news articles, commentary, opinion, editorial, case studies, protocols) care providers, stakeholders	
60.	#951	Shlafer 2015	Doulas' Perspectives about Providing Support to Incarcerated Women: A Feasibility Study	Secondary data analysis (reviews, news articles, commentary, opinion, editorial, case studies, protocols) care providers, stakeholders	

	RefID	Excluded studies	Title	Reasons for exclusion	Comments
61.	#1308	Stanley 2015	Evaluation of the East Bay Community Birth Support Project, a Community-Based Program to Decrease Recidivism in Previously Incarcerated Women	Not population of interest (vulnerable women, African-American, adolescent, etc)	
62.	#1316	Steel 2013	The value of care provided by student doulas: an examination of the perceptions of women in their care	Not community-based doula program (private practicing, professional doulas, hospital-based doula program)	
63.	#1317	Steel 2015	Trained or professional doulas in the support and care of pregnant and birthing women: a critical integrative review	Secondary data analysis (reviews, news articles, commentary, opinion, editorial, case studies, protocols) care providers, stakeholders	
64.	#1318	Steel 2013	A preliminary profile of Australian women accessing doula care: findings from the Australian Longitudinal Study on Women's Health	Secondary data analysis (reviews, news articles, commentary, opinion, editorial, case studies, protocols) care providers, stakeholders	

	RefID	Excluded studies	Title	Reasons for exclusion	Comments
65.	#3967	Stitt 2019	Women's Beliefs Regarding the Importance of Information About Birth Healthcare Provider Options: An Experimental Approach	Not community-based doula program (private practicing, professional doulas, hospital-based doula program)	
66.	#5252	Strom 2021	Experiences of working as a cultural doula in Sweden: An interview study	Not doula support during labour and birth (e.g. abortion/death)	
67.	#1346	Takagishi 2010	Doulas and residents together (DART) program: Novel educational approach to teach breastfeeding and cultural competency to residents	Secondary data analysis (reviews, news articles, commentary, opinion, editorial, case studies, protocols) care providers, stakeholders	
68.	#1366	Thomas 2017	Doula Services Within a Healthy Start Program: Increasing Access for an Underserved Population	Not population of interest (vulnerable women, African-American, adolescent, etc)	
69.	#1369	Thomassen 2003	Doula - A new concept within obstetric care	Not community-based doula program (private practicing, professional doulas, hospital-based doula program)	

	RefID	Excluded studies	Title	Reasons for exclusion	Comments
70.	#1369	Thomassen 2003	Doula - A new concept within obstetric care	Not community-based doula program (private practicing, professional doulas, hospital-based doula program)	
71.	#1373	Thullen 2014	Father participation in a community-doula home-visiting intervention with young, African American mothers	Not population of interest (vulnerable women, African-American, adolescent, etc)	
72.	#1382	Torres 2015	Expertise and Sliding Scales: Lactation Consultants, Doulas, and the Relational Work of Breastfeeding and Labor Support	Not community-based doula program (private practicing, professional doulas, hospital-based doula program)	
73.	#1379	Torres 2015	Families, markets, and medicalization: the role of paid support for childbirth and breastfeeding	Not community-based doula program (private practicing, professional doulas, hospital-based doula program)	
74.	#1381	Torres 2013	Breast milk and labour support: lactation consultants' and doulas' strategies for navigating the medical context of maternity care		

	RefID	Excluded studies	Title	Reasons for exclusion	Comments
75.	#1392	VanZandt 2005	Lower epidural anesthesia use associated with labor support by student nurse doulas: implications for intrapartal nursing practice	Not population of interest (general population, migrant women not from LMICs, not specifying migrant population groups)	
76.	#1393	VanZandt 2016	Nursing Student Birth Doulas' Influence On the Childbearing Outcomes of Vulnerable Populations	Not perspectives and/or experiences of migrant women, community-based doulas, health care providers, stakeholders	
77.	#1405	Vonderheid 2011	Group Prenatal Care and Doula Care for Pregnant Women	Secondary data analysis (reviews, news articles, commentary, opinion, editorial, case studies, protocols) care providers, stakeholders	
78.	#1410	Wang 1997	Clinical observation on Doula delivery	Not conducted in a HIC	
79.	#1413	Wen 2016	Change over time in young mothers' engagement with a community-based doula home visiting program	Not population of interest (vulnerable women, African-American, adolescent, etc)	

	RefID	Excluded studies	Title	Reasons for exclusion	Comments
80.	#1414	Wen 2010	Young mothers' involvement in a prenatal and postpartum support program	Not population of interest (vulnerable women, African-American, adolescent, etc)	
81.	#1415	Whaley 2016	The women who serve: A qualitative study of abortion doulas	Secondary data analysis (reviews, news articles, commentary, opinion, editorial, case studies, protocols) care providers, stakeholders	
82.	#979	Wint 2019	Experiences of Community Doulas Working with Low-Income, African American Mothers	Not population of interest (vulnerable women, African-American, adolescent, etc)	
83.		Bey 2019	Advancing birth justice: community-based doula models of standard care for ending racial disparities United States.	Secondary data analysis (reviews, news articles, commentary, opinion, editorial, case studies, protocols) care providers, stakeholders	

	RefID	Excluded studies	Title	Reasons for exclusion	Comments
84.		Deitrick 2001	Supporting the mother: a preliminary evaluation of the Central Hillsborough Healthy Start Doula Program	Not population of interest (general population, migrant women not from LMICs, not specifying migrant population groups)	
85.		Egal 2020	A Community-Based Participatory Action Approach to Bridging Perinatal Care Gaps in Seattle's Somali Community	Not doula support during labour and birth (e.g. abortion/death)	
86.		Ellmann 2020	Community-based doulas and midwives	Not population of interest (general population, migrant women not from LMICs, not specifying migrant population groups)	
87.		Holland 2009	Relational spaces in maternal healthcare a qualitative study of young mothers' experiences with community-based doula care	Not population of interest (vulnerable women, African-American, adolescent, etc)	
88.		Horsley 2018	Doula services to address the gap in infant mortality between Blacks and Whites in Allegheny County	Not population of interest (vulnerable women, African-American, adolescent, etc)	

	RefID	Excluded studies	Title	Reasons for exclusion	Comments
89.		Luna-Martinez 2017	Paying it Forward: Training doulas as a form of reintegration and support for communities of color	Not population of interest (general population, migrant women not from LMICs, not specifying migrant population groups)	
90.		Mangindin 2018	Briding the gap in maternity care: community-based doulas who interpret	Secondary data analysis (reviews, news articles, commentary, opinion, editorial, case studies, protocols) care providers, stakeholders	
91.		Resnick 2016	Bridging birth the Birth Sisters as an adpatation to hospital birth	Not community-based doula program (private practicing, professional doulas, hospital-based doula program)	
92.		Rohwer 2010	Information, kinship and community perceptions of doula support by teen mothers through an evolutionary lens	Not population of interest (vulnerable women, African-American, adolescent, etc)	
93.		Shade 2011	Defining a successful community-based doula replication site	Not population of interest (vulnerable women, African-American, adolescent, etc)	

## Appendix 7 - Characteristics of included studies

RefID	Author and year	Title	High-income country, region	Facility types	Type of participants	Participants	Data collection method(s)	Data analysis method(s)
24.A	Akhavan & Edge 2012	Foreign-born women's experience of community-based doulas in Sweden – a qualitative study	Sweden, Västra Götaland region	Various hospitals	Migrant women	10	IDIs	Content analysis
24.B	Akhavan & Lundgren 2012	Midwives' experiences of doula support for immigrant women in Sweden – a qualitative study	Sweden, Västra Götaland region	Obstetric units at different hospitals or a Maternity Health Care Centers (MHCC)	Health care providers	10	IDIs	Content analysis
277	Gruber 2017 + Bredström & Gruber 2015	(see below for the titles of the 2 papers of this included qualitative study)	Sweden, two different regions of Sweden, located in urban cities, small town areas	Primary health care settings including: four publicly funded maternity clinics; health care centres and youth clinics	Community-based doulas; Health care providers; Program managers and communications officers	50, unclear	IDIs; PO	Not specified
277.A	Gruber 2017	Migration: National Welfare Institutions, Doulas as Border Workers in Obstetric Care in Sweden	Sweden, two different regions of Sweden, located in urban cities, small town areas	Primary health care settings including: four publicly funded maternity clinics; health care centres and youth clinics	Community-based doulas; Health care providers; Program managers and communications officers	Unclear	IDIs; PO	Not specified

RefID	Author and year	Title	High-income country, region	Facility types	Type of participants	Participants	Data collection method(s)	Data analysis method(s)
277.B	Bredström & Gruber 2015	Language, culture and maternity care: 'Troubling' interpretation in an institutional context	Sweden, two different regions of Sweden, located in urban cities, small town areas	Primary health care settings including: four publicly funded maternity clinics; health care centres and youth clinics	Healthcare providers & program stakeholders.	50	IDIs; PO; Review of written materials (i.e. local policy documents and patient information brochures)	Not specified
297	Hardeman & Kozhumanni 2016	Motivations for entering the doula profession: perspectives from women of color	United States, Minneapolis and St Paul areas	Not specified	Community-based doulas which included women of colour clients including migrant and refugee women	12	Open-interview application review; IDIs	Critical social theoretical framework
580	LaMancuso, Goldman & Nothnagle 2016	"Can I Ask That?": Perspectives on Perinatal Care After Resettlement Among Karen Refugee Women, Medical Providers, and Community-Based Doulas	United States, Buffalo, New York	Community health center	Migrant women; Health care providers; Key informants from Buffalo's Karen community (including community-based doulas)	28	IDIs	Three phased analysis: 1) immersion and crystallisation approach for individual interviews; 2) iterative group discussions for emergent themes; 3) Template Style approach for development of codebook and discussion with co-authors
744	O'Rourke, Yelland, Newton & Shafiei 2019	An Australian doula program for socially disadvantaged women: Developing realist evaluation theories	Australia, Melbourne, Victoria	Not specified	Key informants	3	IDIs	Realist evaluation

RefID	Author and year	Title	High-income country, region	Facility types	Type of participants	Participants	Data collection method(s)	Data analysis method(s)
2691	Hazard, Callister, Birkhead & Nichols 2009	Hispanic labor friends initiative: supporting vulnerable women	United States, Ogden, Utah	Community health center or clinic and hospitals	Migrant women who received HFL care; Migrant women who received standard care; Community-based doulas; Health care providers.	24 + unknown health care providers	IDIs	Not specified
1302	Spiby et al. 2015	(see below for the titles of the 4 papers of this included mixed-methods study)	England, Site A (original site), Site W, X, Y and Z (roll-out sites) in low income communities	Five doula services in England, five NHS trusts providing maternity care	Disadvantaged women (including newly arrived migrant women and women from refugee and asylum seeking backgrounds), health care providers (midwives), volunteer doulas, doula service managers, doula service staff, local champions and commissioners	368	IDIs (F2F; Phone) FG; Questionnaires	Realist evaluation & descriptive statistics and chi-squared with Yates' continuity correction

RefID	Author and year	Title	High-income country, region	Facility types	Type of participants	Participants	Data collection method(s)	Data analysis method(s)
1302.A	Spiby, Green, Darwin, Wilmot, Knox, McLeish & Smith 2015	Multisite implementation of trained volunteer doula support for disadvantaged childbearing women: a mixed-methods evaluation	England, Site A (original site), Site W, X, Y and Z (roll-out sites) in low income communities	Five doula services in England, five NHS trusts providing maternity care	Disadvantaged women (including newly arrived migrant women and women from refugee and asylum seeking backgrounds), health care providers (midwives), volunteer doulas, doula service managers, doula service staff, local champions and commissions	368	IDIs (F2F; Phone) FG; Questionnaires	Realist evaluation & descriptive statistics and chi-squared with Yates' continuity correction
1302.B	McLeish, Spiby, Darwin, Wilmot and Green 2016	The process of implementing and sustaining an intensive volunteer one-to-one support (doula) service for disadvantaged pregnant women	England, Site A (original site), Site W, X, Y and Z (roll-out sites) in low income communities	Five doula services in England, five NHS trusts providing maternity care	Project managers and project workers, former managers, local commissioners and local champions	20	IDIs; FG; two interviews a year a part	Thematic analysis
1302.C	McLeish and Redshaw 2018	A qualitative study of volunteer doulas working alongside midwives at births in England: mothers' and doulas' experiences	England, Site A (original site), Site W, X, Y and Z (roll-out sites) in low income communities	Three community volunteer doula projects run by a third sector organisation	Disadvantaged women, including newly arrived migrant women and women from refugee and asylum seeking backgrounds; and community-based doulas	35	IDIs	Thematic analysis

RefID	Author and year	Title	High-income country, region	Facility types	Type of participants	Participants	Data collection method(s)	Data analysis method(s)
1302.D	Darwin, Green, McLeish, Willmot & Spiby 2017	Evaluation of trained volunteer doula services for disadvantaged women in five areas in England: women's experiences	England, Site A (original site), Site W, X, Y and Z (roll-out sites) in low income communities	Five doula services in England, five NHS trusts providing maternity care	Disadvantaged women, including newly arrived migrant women and women from refugee and asylum seeking backgrounds	137	Questionnaires; IDIs; FG	Realist evaluation & descriptive statistics and chi-squared with Yates' continuity correction
5294	Schytt et al., 2021	(see below for the titles of the 2 papers of this included study)	Sweden, Stockholm XX, Sweden	Four different maternity wards from four different hospitals	Health care providers; community-based doulas	20	IDIs	Thematic analysis
5294.A	Schytt, Wahlberg, Small, Eltayb & Lindgren 2021	The community-based bilingual doula – A new actor filling gaps in labour care for migrant women. Findings from a qualitative study of midwives' and obstetricians' experiences	Sweden, Stockholm	Four different maternity wards from four different hospitals	Health care providers	11	IDIs	Thematic analysis

RefID	Author and year	Title	High-income country, region	Facility types	Type of participants	Participants	Data collection method(s)	Data analysis method(s)
5294.B	Lindgren, Eltayb, Wahlberg, Tsekhmestruk, Small & Schytt 2022	Multi-tasking community-based doulas are bridging gaps-Despite standing on fragile ground, A qualitative study of doulas' experiences in Sweden	XX, Sweden	Four different maternity wards from four different hospitals (Schytt et al. 2021)	Community-based doulas	9	IDIs	Thematic analysis
5547	Gomez, Arteaga, Arcara, Cuentos, Armstead, Mehra, Logan, Jackson & Marshall 2021	"My 9 to 5 Job Is Birth Work": A Case Study of Two Compensation Approaches for Community Doula Care	United States, San Francisco, California.	Two local hospitals	Community-based doulas and leaders	11	IDIs	Rapid Assessment Process (RAP)
GL1.0	Mendel, Sperlich & Finucane 2019	The Doulas of the Priscilla Project: understanding the experiences of refugee women navigating the US maternity-care system	United States, Buffalo, New York	Community health center or clinic and hospitals	Community-based doulas who were refugee women	13	IDIs; FG	Grounded theory

RefID	Author and year	Title	High-income country, region	Facility types	Type of participants	Participants	Data collection method(s)	Data analysis method(s)
GL2.0	Lee 2020	Holding Space for Birth with Open Arms: A Qualitative Study Exploring the Experiences of Community-Based Doulas Providing Perinatal Services in Washington State	United States, Washington, Pacific Northwest	Community-based doula organisation	Community-based doulas who were women of colour who supported clients which included migrant and refugee women	9	IDIs	Content analysis

## Appendix 8 – Community-based doula program characteristics of included studies

RefID	Authors and year	High-income country, region and setting	Program name, organisation, non-profit status	Program funding	Training providers, curriculum details, accreditation, supervision	Matched and time period when matched	Volunteer or paid position, cost to clients	Community-based doula role	Requirements of migrant women and doulas to participate in the program
24.A, 24.B	Akhavan & Edge 2012; Akhavan & Lundgren 2012	Sweden, Västra Götaland  Hospitals in urban settings	Community-Based Doulas (CBD)  Birth House Association (BHA) (unspecified: non-profit) & Västra Götaland Public Health Committee  Started: 2008	Swedish National Public Health Committee, Västra Götaland, Sweden	Detailed theoretical and practical curriculum facilitated by midwives from Birth House Association delivered 52 hours of training, over 2 months  Orientation to hospital provided  Doula accreditation and requirements: unspecified  Supervision provided: unspecified	Based on understanding of language and culture  Met in pregnancy	Volunteer, unpaid  Free service to migrant women	· Pregnancy, labour and birth and postnatal support provided, unspecified duration of support	<b>Migrant women</b> · Non-European migrant women, foreign born  <b>CBD</b> · Swedish-speaking · Non-European migrant women, foreign born · Experienced giving birth · Had own child/children · Living in Sweden >5 years · Available to be on-call · Interested in program
277	Gruber 2017 + Bredström & Gruber 2015	Sweden  Public maternity clinics (4) in urban, small town and rural settings in two regions in Sweden	Culture interpreter doula project (kulturtolks doula)  Collaborative partnership between: a private maternity clinic; Public Health Committee; and maternity care providers  Started: 2007	Public Health Committee provides year-by-year funding according to available funding not based on demand of program	Training curriculum and provider: unspecified  Duration of course: unspecified  Orientation to hospital: unspecified  Discussed a specific topic exploring cultural traditions in home countries versus Sweden and recommended doulas who had not birthed in home countries to as a family member for their experiences.  Doula accreditation	Based on understanding of language  Unspecified when doulas meet clients	Paid by the hour, receiving a salary  Free service to migrant women	· Hours of care provided to migrant to women is dependent on funding received · Hours required of doulas during labour and birth support unspecified · Unsure if pregnancy and postnatal care is also provided	<b>Migrant women</b> · Non-Swedish speaking migrant women  <b>CBD</b> · Shared language and culture as migrant women they support · Things preferred by program managers: familiar with Swedish maternity care system and society and experienced birthing in Swedish maternity systems

RefID	Authors and year	High-income country, region and setting	Program name, organisation, non-profit status	Program funding	Training providers, curriculum details, accreditation, supervision	Matched and time period when matched	Volunteer or paid position, cost to clients	Community-based doula role	Requirements of migrant women and doulas to participate in the program
					and requirements: unspecified Supervision provided: unspecified				
297	Hardeman & Kozhumannil 2016	United States, Minnesota  Hospitals in urban settings	Everyday Miracles (Doula Access Project), non-profit  Started: 2014	Funding provider unspecified	Training was provided by a certified DONA International trainer  Duration of course: unspecified  Orientation to hospital: unspecified  Doula accreditation and requirements: unspecified  Supervision provided: unspecified	By shared racial or ethnic background  Unspecified when doulas meet clients	Unspecified if volunteer or paid position  Unspecified if free service to women	Pregnancy, labour and birth and postnatal support provided, unspecified duration of support	<b>Clients</b> · Women of colour (including migrant women) · Low-income  <b>CBD</b> · Can speak English · Can speak languages fluently · Experienced in supporting pregnant women and providing birth support · Interested in supporting specific communities · Financial support required for doula training
580	LaMancuso, Goldman & Nothnagle 2016	United States, Buffalo, New York  Hospitals in urban settings	Name of community-based doula program unspecified, Unspecified if non-profit  Started: unspecified	Funding provider unspecified	Training curriculum and provider: unspecified  Duration of course: unspecified  Orientation to hospital: unspecified  Doula accreditation and requirements: unspecified  Supervision provided: unspecified	By shared refugee background, language and culture  Unspecified when doulas meet clients	Unspecified if volunteer or paid position  Unspecified if free service to women	Labour and birth support and navigating maternity settings.  Unspecified duration of support and whether pregnancy and postnatal support is provided.	<b>Migrant women</b> · Karen refugee women  <b>CBD</b> · From refugee communities

RefID	Authors and year	High-income country, region and setting	Program name, organisation, non-profit status	Program funding	Training providers, curriculum details, accreditation, supervision	Matched and time period when matched	Volunteer or paid position, cost to clients	Community-based doula role	Requirements of migrant women and doulas to participate in the program
744	O'Rouke, Yelland, Newton & Shafiei 2019	Australia, Melbourne  Hospitals in urban settings	Birth for Humankind (non-profit)  Started: 2014	Non-profit  Philanthropic funding	Able to attend 2day orientation program  Required to have: completed doula accredited training; current midwifery student; or completed midwifery training  No orientation to hospital  Bicultural doula training, accreditation, and requirements: 18-week training program (4 hours a week) and weekly tasks and reading  Doula certification received after providing support for 3 births  Opportunities for part and full scholarship opportunities for doulas requiring financial support  Supervision provided from an experienced doula	Volunteer doulas can choose clients according to availabilities and clients' individual requirements  Met in pregnancy	Volunteer, unpaid  Reimbursement for parking expenses	Pregnancy visits (2-3), on-call 24/7 labour and birth support (availability from 38 weeks onwards postnatal visit (2), postnatal support can extend to 12 hours or 6 weeks if required 18-month primary doula support for 3 clients  18-month backup doula support for 3 clients	<p><b>Clients</b></p> <ul style="list-style-type: none"> <li>· Limited financial support</li> <li>· Experiencing one of more forms of social disadvantage: <ul style="list-style-type: none"> <li>· Refugee or asylum seeker background</li> <li>· Newly arrived migrant</li> <li>· Limited social support</li> <li>· Aboriginal and Torres Strait Islander women</li> <li>· Mental health issues (current/at risk of)</li> <li>· Family violence</li> <li>· Trauma</li> <li>· Under 25 years old</li> <li>· Homelessness</li> <li>· Substance use (current/past)</li> </ul> </li> </ul> <p><b>CBD</b></p> <ul style="list-style-type: none"> <li>· Completed accredited doula (private doulas, student doulas), or</li> <li>· Completed midwifery training (midwives, student midwives)</li> <li>· Experience in birth support professionally</li> </ul> <p>Bicultural doulas criteria:</p> <ul style="list-style-type: none"> <li>· Can speak English</li> <li>· Bicultural speaking another language (e.g. Arabic, Urdu, Vietnamese, Oromo, Burmese)</li> </ul>

RefID	Authors and year	High-income country, region and setting	Program name, organisation, non-profit status	Program funding	Training providers, curriculum details, accreditation, supervision	Matched and time period when matched	Volunteer or paid position, cost to clients	Community-based doula role	Requirements of migrant women and doulas to participate in the program
2691	Hazard, Callister, Birkhead & Nichols 2009	United States, Ogden, Utah  Hospitals in urban settings	Hispanic Labor Friends (HLF) (non-profit unspecified) Midtown Community Health Center  Started: 2001	Funding provider unspecified	Training was provided, however, no details on specifics on provider  Duration of course: unspecified  Orientation to hospital provided  Translation accreditation provided  Doula accreditation and requirements: unspecified	Based on understanding of culture and language  Meet by 32 weeks	Paid \$100 USD per client they supported  Unspecified if free service to women	<ul style="list-style-type: none"> <li>· One visit in pregnancy</li> <li>· Labour and birth support</li> <li>· Providing discharge education on postnatal ward</li> <li>· One postnatal visit</li> </ul>	<p><b>Migrant women</b></p> <ul style="list-style-type: none"> <li>· Hispanic</li> <li>· Spanish-speaking</li> <li>· Unpartnered or adolescent</li> <li>· Low socioeconomic status</li> <li>· Newly arrived to the United States</li> <li>· Short birth spacing</li> <li>· Limited social networks</li> <li>· Limited education</li> </ul> <p><b>CBD</b></p> <ul style="list-style-type: none"> <li>· Hispanic, bilingual 'wise woman' from the community (e.g. church, local neighbourhoods)</li> <li>· Had given birth</li> </ul>

RefID	Authors and year	High-income country, region and setting	Program name, organisation, non-profit status	Program funding	Training providers, curriculum details, accreditation, supervision	Matched and time period when matched	Volunteer or paid position, cost to clients	Community-based doula role	Requirements of migrant women and doulas to participate in the program
1302	Spiby et al. 2015	England, 5 sites: 1 original site and 4 rollout sites, England  Hospitals in urban and low-income settings  Original site was established as a social enterprise	Unspecified name of program  Started: 2005	National Institute for Health Research Health Services and Delivery Research programme	Orientation to hospital: unspecified  Open College Network (OCN) provided both training and doula accreditation  Detailed curriculum which included "birth and the birthing process, breastfeeding, child protection, domestic abuse awareness training, cultural diversity and communication skills" (p.3)  Yearly mandatory training (4 sessions)  Supervision and support provided by experienced doulas and program staff	Volunteer doulas were matched with clients according to compatibility with personalities, shared backgrounds (i.e. ethnic or socioeconomic status) where they lived and availability of doulas  Met in pregnancy	Volunteer, unpaid  Reimbursement for expenses related to childcare to attend training sessions and travel related costs.	Pregnancy visits, on-call support for labour and birth and postnatal support is provided.  Unspecified duration of support hours provided	<p><b>Clients</b></p> <ul style="list-style-type: none"> <li>· Disadvantaged women experiencing the following: <ul style="list-style-type: none"> <li>· Limited social support</li> <li>· Low socioeconomic backgrounds</li> <li>· Refugee and asylum seeking backgrounds</li> <li>· Black and Minority Ethnic (BME) communities</li> <li>· Solo parenting</li> <li>· Adolescent pregnancy</li> <li>· Substance misuse</li> <li>· Mental health issues</li> <li>· Family violence</li> <li>· Social services involvement</li> </ul> </li> </ul> <p><b>CBD</b></p> <ul style="list-style-type: none"> <li>· Women from the community who had children</li> </ul>

RefID	Authors and year	High-income country, region and setting	Program name, organisation, non-profit status	Program funding	Training providers, curriculum details, accreditation, supervision	Matched and time period when matched	Volunteer or paid position, cost to clients	Community-based doula role	Requirements of migrant women and doulas to participate in the program
5294	Schytt, Wahlberg, Small, Eltayb & Lindgren 2021  Lindgren, Eltayb, Wahlberg, Tsekhmestruk, Small & Schytt 2022	Sweden, Gothenburg, Stockholm  Hospitals in urban settings	Name of community-based doula program unspecified  Mira (non-profit community organisation)  Established in 2016  Pilot program: 2018-2020	Stockholm County Council (Schytt et al. 2020)  Country Council in XX (Lindfren et al. 2021)	Detailed theoretical and practical curriculum facilitated by Mira on: "anatomy and physiology, strategies for providing continuous labour support, comfort measures, obstetric interventions, practical strategies for facilitating communication, and the boundaries of the CBD role" (Schytt et al., 2021, p.2)  Supervision provided by experienced community-based doula  Doula accreditation and requirements: Provide labour and birth support for 3 women prior to accreditation and supporting clients of the study  Formally recognised doula certification and accreditation: unspecified	Based on understanding of culture and language  Met in late pregnancy  Only 2 clients per month	Employed by Mira receiving: ~\$13USD/hour; ~\$5USD/hour if out of hours/weekend shifts. Primary doula receives \$100USD per labour and birth; secondary doula ~\$50USD  Unspecified if free service to women	· 1-2 visits (1-2 hours) for pregnancy support; · 25 hours for labour and birth support; · 1-2 hours for postnatal visit and ending the doula-client relationship	<b>Migrant women</b> · From "Arabic, Polish, Russian, Somali and Tigrinya-speaking" (Schytt et al., 2021, p.2) backgrounds  <b>CBD</b> · From "Arabic, Polish, Russian, Somali and Tigrinya-speaking" (Schytt et al., 2021, p.2) backgrounds · Complete training and accreditation requirements

RefID	Authors and year	High-income country, region and setting	Program name, organisation, non-profit status	Program funding	Training providers, curriculum details, accreditation, supervision	Matched and time period when matched	Volunteer or paid position, cost to clients	Community-based doula role	Requirements of migrant women and doulas to participate in the program
5547	Gomez, Arteaga, Arcara, Cuentos, Armstead, Mehra, Logan, Jackson & Marshall 2021	United States, San Francisco, California	SisterWeb programs: Kindred Birth Companions (KBC), M.A.N.A Pasefika, and Semilla Sagrada  SisterWeb (non-profit community-organisation)  Established in 2018	Local government, San Francisco's Public Trainee (PST) program	Training curriculum and provider: unspecified  Duration of course: unspecified  Orientation to hospital: unspecified  Doula accreditation and requirements: unspecified  Regular professional development opportunities  Supervision provided through mentorship opportunities where there is one mentor supporting two to three doulas	Based on understanding of culture  Met in pregnancy	Paid 25 USD per hour with a set 32 hours a week.  Unspecified if free service to women	· 3 visits in pregnancy · labour and birth support · 4 postnatal visits · Communication via text message or phone · 2-3 doulas per cohort	<b>Clients</b> · Pacific Islander communities · Lantinx communities · Black and African American communities  <b>CBD</b> · Culturally matched with clients

RefID	Authors and year	High-income country, region and setting	Program name, organisation, non-profit status	Program funding	Training providers, curriculum details, accreditation, supervision	Matched and time period when matched	Volunteer or paid position, cost to clients	Community-based doula role	Requirements of migrant women and doulas to participate in the program
GL1.0	Mendel, Sperlich & Finucane 2019	United States, Buffalo, Western New York  Hospitals in urban settings	Priscilla Project of Buffalo (PPB), Jericho Road Community Health Center (non-profit unspecified),  Started: unspecified	Funding provider unspecified	Training curriculum, duration and provider: unspecified  Orientation to hospital: unspecified  Doula accreditation and requirements: unspecified  Supervision provided: unspecified	By shared refugee background, language and culture  Unspecified when doulas meet clients	Unspecified if volunteer or paid position  Unspecified if free service to women	Pregnancy, labour and birth, and postnatal support (e.g. breastfeeding), and interpretation support  Unspecified duration of support	<b>Migrant women</b> · Refugee women  <b>CBD</b> · Shared dialect or language as client · From the same home country as client
GL2.0	Lee 2020	United States, Washington, Pacific Northwest  Hospitals in urban settings	Open Arms Perinatal Services (non-profit)  Started: unspecified	Funding provider unspecified	Training curriculum, duration and provider: unspecified  Orientation to hospital: unspecified  Doula accreditation and requirements: unspecified  Supervision provided: unspecified	Based on understanding of culture and first language  Unspecified when doulas meet clients	Employed by program but no specifics regarding payment provided  Low-cost doula support (clarity \$700-\$800)	Pregnancy, labour and birth, and postnatal support and parental education which can be up to 2 years postpartum.  Unspecified duration of support hours provided	<b>Clients</b> · Women from underserved communities (e.g. women of colour, migrant women, LGBTQIA+) · Low-income backgrounds  <b>CBD</b> · Shared first language · Shared culture

## Appendix 9 –Evidence profile

#	Summary of review finding	Studies contributing to the review finding	Methodological limitations	Coherence assessment	Relevance assessment	Adequacy assessment	Overall CERQual assessment	Explanation of overall assessment
F1.0	<b>Continuous woman-centred support</b> Community-based doulas provided individualised, woman-centred, continuous emotional, social and physical support for migrant women throughout their labour and birth. Community-based doulas may fill the gap in trained continuous emotional, social and physical support in labour and birth for migrant women in maternity settings.	[39, 41, 42, 61-63, 66, 67, 69, 70, 72, 73]	Moderate concerns  3 studies with minor concerns, 5 studies with moderate concerns, 1 study with serious concerns.	No or very minor concerns  Very minor concerns of coherence, we deleted 'pain relief' as the finding of evidence did not support this initial thought to the review finding.	Minor concerns  Out of the 9 studies, 3 studies represented community-based doula programs which supported migrant women or women of colour with migrant and/or refugee backgrounds and non-migrant women from disadvantaged backgrounds.	No or very minor concerns  9 out of 12 studies supported this finding, with 7 moderate to thick data and 2 thin data.	<b>High confidence</b>	No or very minor concerns on coherence and adequacy, minor concerns on relevance (3 out of 9 studies may include non-migrant women's perspectives), and moderate concerns on methodological limitations (research aims and design, recruitment, reflexivity, ethics, data collection and analysis, support for findings).
F2.0	<b>Knowledgeable in childbirth and navigating maternity systems</b> Community-based doulas were perceived as knowledgeable sources of informational support, providing migrant women with childbirth education and guidance in accessing and navigating their new country's maternity systems.	[39, 41, 42, 61, 66, 67, 69-72]	Moderate concerns  1 study with minor concerns, 4 studies with moderate concerns, 1 study with serious concerns.	No or very minor concerns  No issues on coherence.	Minor concerns  Our of the 6 studies, 1 study represented a community-based doula program which supported migrant women and non-migrant women from disadvantaged backgrounds.	Minor concerns  6 out of 12 studies supported this finding, with 6 moderate to thick data.	<b>High confidence</b>	No concerns on coherence, minor concerns on relevance (1 out of 6 studies may include non-migrant women's perspectives), minor concerns on adequacy (6 out of 12 studies supported this finding), and moderate concerns on methodological limitations (research aims and design, recruitment, reflexivity, ethics, data collection and analysis, support for findings).

#	Summary of review finding	Studies contributing to the review finding	Methodological limitations	Coherence assessment	Relevance assessment	Adequacy assessment	Overall CERQual assessment	Explanation of overall assessment
F3.0	<b>Engaging partners</b> Community-based doulas provided support to the partners of migrant women by enhancing their connection and involvement during labour and birth, particularly when there were differing cultural expectations of partners in providing birth support in HICs.	[39, 42, 61, 63, 66, 67, 70]	Moderate concerns  1 study with minor concerns, 4 studies with moderate concerns, 1 study with serious concerns.	No or very minor concerns of coherence concerns  No or very minor concerns of coherence, we included that it became evident that migrant partners and husbands were unfamiliar with their role as birth support in maternity settings of HIC to the review finding.	Minor concerns  Out of 6 studies, 2 studies represented community-based doula programs which supported migrant women or women of colour with migrant and/or refugee backgrounds and non-migrant women from disadvantaged backgrounds.	Minor concerns  6 out of 12 studies supported this finding, with 6 moderate to thick data.	<b>High confidence</b>	Minor concerns on adequacy (6 out of 12 studies supported this finding), no or very minor concerns on coherence, minor concerns on relevance (2 out of 6 studies may include non-migrant women's perspectives), and moderate concerns on methodological limitations (research aims and design, recruitment, reflexivity, ethics, data collection and analysis, support for findings).
F4.0	<b>Shared language and culture benefits</b> Community-based doulas created a culturally safe space in labour and birth for migrant women, particularly if they were newly arrived or experiencing social isolation in their new countries. This was enhanced when community-based doulas shared the same language and/or culture as the woman, as this helped to reduce the barriers (e.g. cultural or language) migrant women may experience when accessing and using maternity care. These community-based doulas were also perceived as cultural facilitators for both migrant women and healthcare providers.	[38, 39, 41, 42, 61-63, 67-73]	Moderate concerns  4 studies with minor concerns, 6 studies with moderate concerns, 1 study with serious concerns.	No or very minor concerns  No issues on coherence.	Minor concerns  Out of 12 studies, 4 studies represented community-based doula programs which supported migrant women or women of colour with migrant and/or refugee backgrounds and non-migrant women from disadvantaged backgrounds.	No or very minor concerns  11 out of 12 studies supported this finding, with 9 moderate to thick data, 2 thin data.	<b>High confidence</b>	No or very minor concerns on coherence and adequacy, minor concerns on relevance (4 out of 12 studies may include non-migrant women's perspectives), and moderate concerns on methodological limitations (research aims and design, recruitment, reflexivity, ethics, data collection and analysis, support for findings).

#	Summary of review finding	Studies contributing to the review finding	Methodological limitations	Coherence assessment	Relevance assessment	Adequacy assessment	Overall CERQual assessment	Explanation of overall assessment
F5.0	<b>Respectful treatment and advocacy</b> Community-based doulas' presence and support enhanced respectful treatment of migrant women from healthcare providers. In circumstances where community-based doulas perceived mistreatment, they actively advocated for migrant women by communicating to healthcare providers (direct advocacy).	[38, 41, 42, 62, 63, 67, 68, 70]	Moderate concerns  3 studies with minor concerns, 3 studies with moderate concerns, 1 study with serious concerns.	No or very minor concerns  No issues on coherence.	Minor concerns  Out of 7 studies, 4 studies represented community-based doula programs which supported migrant women or women of colour with migrant and/or refugee backgrounds and non-migrant women from disadvantaged backgrounds.	Moderate concerns  7 out of 12 studies supported this finding, with 3 moderate to thick data and 4 thin data.	<b>Moderate confidence</b>	No concerns on coherence, minor concerns on relevance (4 out of 7 studies may include non-migrant women's perspectives), moderate concerns on adequacy (7 out of 12 studies supported this finding, 3 moderate to thick data and 4 thin data), and moderate concerns on methodological limitations (research aims and design, recruitment, reflexivity, ethics, data collection and analysis, support for findings).

#	Summary of review finding	Studies contributing to the review finding	Methodological limitations	Coherence assessment	Relevance assessment	Adequacy assessment	Overall CERQual assessment	Explanation of overall assessment
F6.0	<p><b>Going above and beyond due to social justice work and volunteering</b></p> <p>Community-based doulas demonstrated high motivation and commitment to continuous support for migrant women in labour and birth where in some circumstances doulas went above and beyond their expected roles taking on added responsibilities, despite being unpaid volunteers. This was often driven by their motivation to advocate and support migrant women from their own communities due to a strong sense of social justice.</p>	[41, 42, 61-63, 66, 67, 69, 70, 72, 73]	<p>Moderate concerns</p> <p>3 studies with minor concerns, 4 studies with moderate concerns, 1 study with serious concerns.</p>	<p>No or very minor concerns</p> <p>No issues on coherence.</p>	<p>Minor concerns</p> <p>Out of 8 studies, 3 studies represented community-based doula programs which supported migrant women or women of colour with migrant and/or refugee backgrounds and non-migrant women from disadvantaged backgrounds.</p>	<p>No or very minor concerns</p> <p>8 out of 12 studies supported this finding, with 6 moderate to thick data and 2 thin data.</p>	<b>High confidence</b>	<p>No or very minor concerns on coherence, minor concerns on adequacy (6 moderate to thick data, 2 thin data), minor concerns on relevance (3 out of 8 studies may include non-migrant women's perspectives), and moderate concerns on methodological limitations (research aims and design, recruitment, reflexivity, ethics, data collection and analysis, support for findings).</p>

#	Summary of review finding	Studies contributing to the review finding	Methodological limitations	Coherence assessment	Relevance assessment	Adequacy assessment	Overall CERQual assessment	Explanation of overall assessment
F7.0	<b>Considerations with non-matched community-based doulas</b> Community-based doulas who were carefully matched with migrant women by a needs-based approach (e.g. socio-economic hardship) rather than culturally or linguistically, were well received however, training into cultural backgrounds and having access to interpreters was recommended to ensure quality of care, positive relationships and rapport was established.	[41, 67, 68, 73]	Moderate concerns  1 study with minor concerns, 2 studies with moderate concerns.	No or very minor concerns  Very minor concerns on coherence, we included non-matched community-based doulas were valued to the review finding.	Minor concerns  Out of 3 studies, 2 studies represented community-based doula programs which supported migrant women and non-migrant women from disadvantaged backgrounds.	Moderate concerns  3 out of 12 studies supported this finding, with 2 moderate to thick data and 1 thin data.	<b>Moderate confidence</b>	No or very minor concerns on coherence, minor concerns on relevance (2 out of 3 studies may include non-migrant women's perspectives), moderate concerns on methodological limitations (research design, recruitment, reflexivity, data collection), and moderate concerns on adequacy (3 out of the 12 studies supported this finding).
F8.0	<b>Role of community-based doula and position in maternity healthcare team</b> Community-based doulas were perceived as different from interpreters and trusted members of the maternity healthcare team, particularly when healthcare providers understood and valued their roles – which was enhanced when they gained experience working together. The roles and expectations of community-based doulas in providing non-clinical support to migrant women (e.g. emotional and social) in contrast to healthcare providers' clinical care should be clearly defined to strengthen collaborative care opportunities and relationships.	[39, 41, 42, 61, 63, 65, 67-73]	Moderate concerns  2 studies with minor concerns, 6 studies with moderate concerns, 1 study with serious concerns.	No or very minor concerns  Very minor concerns on coherence, we included community-based doulas were perceived as different from interpreters to the review finding.	Minor concerns  Out of 9 studies, 3 studies represented community-based doula programs which supported migrant women or women of colour with migrant and/or refugee backgrounds and non-migrant women from disadvantaged backgrounds.	No or very minor concerns  9 out of 12 studies supported this finding, with 7 moderate to thick data and 2 thin data.	<b>High confidence</b>	No or very minor concerns on coherence and adequacy, minor concerns on relevance (3 out of 9 studies may include non-migrant women's perspectives), and moderate concerns on methodological limitations (research aims and design, recruitment, reflexivity, ethics, data analysis, support for findings, data collection and analysis).

#	Summary of review finding	Studies contributing to the review finding	Methodological limitations	Coherence assessment	Relevance assessment	Adequacy assessment	Overall CERQual assessment	Explanation of overall assessment
F9.0	<p><b>Communication, interpretation and informed decision making/consent</b></p> <p>Community-based doulas enhanced communication between both migrant women and their healthcare providers during labour and birth, through language interpretation or translating to plain language. They also validated and encouraged migrant women to communicate with healthcare providers (indirect advocacy) and enhanced migrant women's understanding of informed consent in labour and birth.</p>	[39, 41, 42, 61, 62, 66, 67, 69, 70, 72, 73]	<p>Moderate concerns</p> <p>3 studies with minor concerns, 4 studies with moderate concerns, 1 study with serious concerns.</p>	<p>No or very minor concerns</p> <p>No issues on coherence.</p>	<p>Minor concerns</p> <p>Out of 8 studies, 2 studies represented community-based doula programs which supported migrant women or women of colour with migrant and/or refugee backgrounds and non-migrant women from disadvantaged backgrounds.</p>	<p>No or very minor concerns</p> <p>8 out of 12 studies supported this finding, with 6 moderate to thick data and 2 thin data.</p>	<b>High confidence</b>	<p>No or very minor concerns on coherence and adequacy, minor concerns on relevance (2 out of 8 studies may include non-migrant women's perspectives), and moderate concerns on methodological limitations (research aims and design, recruitment, reflexivity, ethics, data collection and analysis, support for findings).</p>
F10.0	<p><b>Difference from private practising doulas</b></p> <p>Some healthcare providers were often cautious when working with community-based doulas due to previous negative experiences with private-practising doulas. However, community-based doulas were perceived as favourable and different by healthcare providers once they had more experience working with doulas and understood programs were often not-for-profit volunteer organisations, supporting underserved communities such as migrant and refugee populations.</p>	[41, 65, 70]	<p>Moderate concerns</p> <p>1 study with minor concerns, 1 study with moderate concerns.</p>	<p>No or very minor concerns</p> <p>No issues on coherence.</p>	<p>Minor concerns</p> <p>Out of 2 studies, 1 study represented community-based doula programs which supported migrant women and non-migrant women from disadvantaged backgrounds.</p>	<p>Serious concerns</p> <p>2 out of 12 studies supported this finding, with 1 thick data and 1 thin data.</p>	<b>Low confidence</b>	<p>No concerns on coherence, minor concerns on relevance (1 out of 2 studies may include non-migrant women's perspectives), moderate concerns on methodological limitations (research design, reflexivity, data collection and analysis), and serious concerns on adequacy (2 out of the 12 studies supported this finding).</p>

#	Summary of review finding	Studies contributing to the review finding	Methodological limitations	Coherence assessment	Relevance assessment	Adequacy assessment	Overall CERQual assessment	Explanation of overall assessment
F11.0	<b>Social connectivity and emotional relationships</b> Community-based doulas created emotional connections with migrant women similar to the intimate relationships shared with a family member or friend, which established a sense of trust. This relationship helped migrant women to feel a sense of community and social connectedness in their new country of residence.	[39, 41, 42, 61-64, 66, 67, 69, 70, 72, 73]	Moderate concerns  3 studies with minor concerns, 5 studies with moderate concerns, 1 study with serious concerns.	No or very minor concerns  No issues on coherence.	Minor concerns  Out of 9 studies, 3 studies represented community-based doula programs which supported migrant women or women of colour with migrant and/or refugee backgrounds and non-migrant women from disadvantaged backgrounds.	No or very minor concerns  9 out of 12 studies supported this finding, with 7 moderate to thick data and 2 thin data.	<b>High confidence</b>	No or very minor concerns on coherence and adequacy, minor concerns on relevance (3 out of 9 studies may include non-migrant women's perspectives), and moderate concerns on methodological limitations (research aims and design, recruitment, reflexivity, ethics, data collection and analysis, support for findings).
F12.0	<b>Empowerment</b> Migrant women, community-based doulas and healthcare providers felt women were empowered during their labour and birth through the encouragement and reassurance that community-based doulas offered. Migrant women felt that the community-based doula's belief in their abilities to labour and birth transformed their own beliefs of feeling fear, incompetence or self-doubt to confidence in their own capabilities.	[39, 61-63, 66, 67, 72]	Moderate concerns  1 study with minor concerns, 5 studies with moderate concerns.	No or very minor concerns  No issues on coherence.	Minor concerns  Out of 6 studies, 3 studies represented community-based doula programs which supported migrant women or women of colour with migrant and/or refugee backgrounds and non-migrant women from disadvantaged backgrounds.	Minor concerns  6 out of 12 studies supported this finding, with 5 moderate to thick data and 1 thin data. 1 of the 6 studies supporting this finding were interpretations rather than participant perspectives.	<b>High confidence</b>	No or very minor concerns on coherence, minor concerns on relevance (3 out of 6 studies may include non-migrant women's perspectives), minor concerns on adequacy (6 out of 12 studies supported this finding), and moderate concerns on methodological limitations (research design, recruitment, reflexivity, ethics, data collection, support for findings).

#	Summary of review finding	Studies contributing to the review finding	Methodological limitations	Coherence assessment	Relevance assessment	Adequacy assessment	Overall CERQual assessment	Explanation of overall assessment
F13.0	<p><b>Longer-term benefits for community-based doula support</b></p> <p>Migrant women and their families may experience long-term benefits to their health and wellbeing due to community-based doulas signposting migrant women to relevant support services or through health promotion of specific public health priorities. Community-based doula programs may provide doulas and their local communities with educational or employment opportunities that may have been limited to them prior to their involvement with the program. A database is recommended to record and demonstrate the possible long-term family-centred impacts of community-based doula programs on underserved populations and to gain potential investment opportunities.</p>	[41, 42, 63, 65, 69, 74]	<p>Moderate concerns</p> <p>2 studies with minor concerns, 2 studies with moderate concerns, 1 study with serious concerns.</p>	<p>No or very minor concerns</p> <p>No issues on coherence.</p>	<p>Minor concerns</p> <p>Out of 5 studies, 3 studies represented community-based doula programs which supported migrant women or women of colour with migrant and/or refugee backgrounds and non-migrant women from disadvantaged backgrounds.</p>	<p>Moderate concerns</p> <p>5 out of 12 studies supported this finding, with 4 moderate to thick data and 1 thin data.</p>	<b>Moderate confidence</b>	<p>No concerns on coherence, minor concerns on relevance (3 out of 5 studies may include non-migrant women's perspectives), moderate concerns on methodological limitations (research aims and design, recruitment, reflexivity, ethics, data collection and analysis, support for findings), moderate concerns on adequacy (5 out of 12 studies supported this finding).</p>

#	Summary of review finding	Studies contributing to the review finding	Methodological limitations	Coherence assessment	Relevance assessment	Adequacy assessment	Overall CERQual assessment	Explanation of overall assessment
F14.0	<p><b>Impact of limited clarity of community-based doula role in the maternity care team</b></p> <p>When the purpose, roles and boundaries of community-based doulas within labour and birth were unclear among community-based doulas and healthcare providers, tension and conflict may result. Community-based doulas who engaged in clinical decision-making or roles outside of their scope of practice were negatively received by healthcare providers. Whereas healthcare providers either misperceived them as interpreters often rejecting their roles (i.e. advocacy, birth support), delegated them clinical tasks, or perceived them as replacing providers' or women's partners' roles.</p>	[41, 42, 61, 63, 65, 67, 69-71]	<p>Moderate concerns</p> <p>1 study with minor concerns, 3 studies with moderate concerns, 1 study with serious concerns.</p>	<p>No or very minor concerns</p> <p>Very minor concerns, we included health care providers were delegating community-based doulas tasks and perceived them as replacing women's partners to the review finding.</p>	<p>Minor concerns</p> <p>Out of 5 studies, 2 studies represented community-based doula programs which supported migrant women or women of colour with migrant and/or refugee backgrounds and non-migrant women from disadvantaged backgrounds.</p>	<p>Minor concerns</p> <p>5 out of 12 studies supported this finding, with 5 moderate to thick data.</p>	<b>High confidence</b>	<p>No or very minor concerns on coherence, minor concerns on adequacy (5 out of 12 studies supported this finding), minor concerns on relevance (2 out of 5 studies may include non-migrant women's perspectives), and moderate concerns on methodological limitations (research aims and design, recruitment, reflexivity, ethics, data collection and analysis, support for findings).</p>

#	Summary of review finding	Studies contributing to the review finding	Methodological limitations	Coherence assessment	Relevance assessment	Adequacy assessment	Overall CERQual assessment	Explanation of overall assessment
F15.0	<p><b>Impact of limited clarity of community-based doula role with being on-call</b></p> <p>Some community-based doulas were unable to provide on-call support for migrant women in labour and birth due to their own individual or cultural limitations working during night-time hours. Migrant women expressed disappointment in their doulas' absence at their labour and birth as they had desired continuity of doula support.</p>	[39, 41, 65, 66]	<p>Moderate concerns</p> <p>2 studies with moderate concerns.</p>	<p>No or very minor concerns</p> <p>No issues on coherence.</p>	<p>Minor concerns</p> <p>Out of 2 studies, 1 study represented a community-based doula program which supported migrant women and non-migrant women from disadvantaged backgrounds.</p>	<p>Serious concerns</p> <p>2 out of 12 studies supported this finding, with 2 moderate to moderately thick data.</p>	<b>Low confidence</b>	<p>No or very minor concerns on coherence and relevancy (1 out of 2 studies may include non-migrant women's perspectives) moderate concerns on methodological limitations (research design, recruitment, reflexivity, ethics, data collection), and serious concerns on adequacy (2 out of 12 studies supported this data).</p>
F16.0	<p><b>Limited continuity due to meeting too late</b></p> <p>Some migrant women who first met their community-based doulas in labour and birth were disappointed in the limited continuity of support offered by their doulas and would have preferred to establish relationships with their doulas earlier in their pregnancy.</p>	[39, 41, 66]	<p>Moderate concerns</p> <p>2 studies with moderate concerns.</p>	<p>No or very minor concerns</p> <p>No issues on coherence.</p>	<p>Minor concerns</p> <p>Out of 2 studies, 1 study represented a community-based doula program which supported migrant women and non-migrant women from disadvantaged backgrounds.</p>	<p>Serious concerns</p> <p>2 out of 12 studies supported this finding, with 2 thin to moderately thin data.</p>	<b>Low confidence</b>	<p>No or very minor concerns with coherence, minor concerns with relevance (1 out of 2 studies may include non-migrant women's perspectives), moderate concerns for methodological limitations (research design, recruitment, reflexivity, ethics, data collection), and serious concerns with adequacy (2 out of 12 studies supported this finding).</p>

#	Summary of review finding	Studies contributing to the review finding	Methodological limitations	Coherence assessment	Relevance assessment	Adequacy assessment	Overall CERQual assessment	Explanation of overall assessment
F17.0	<b>Limited childbirth knowledge</b> Some migrant women expressed dissatisfaction and feeling unsupported during labour and birth when they perceived a gap in their community-based doulas' training, specifically when doulas lacked specialised childbirth knowledge, birth support training and culturally competent care. Similarly, some doulas expressed inadequate knowledge and desired more education.	[39, 41, 69, 72]	Moderate concerns  1 study with minor concerns, 3 studies with moderate concerns.	No or very minor concerns.  Very minor concerns on coherence, we included that doulas expressed knowledge gaps and wanted more education to the review finding.	Minor concerns  Out of 4 studies, 1 study represented a community-based doula program which supported migrant women and non-migrant women from disadvantaged backgrounds.	Moderate concerns  4 out of 12 studies supported this finding, with 2 moderate to thick data and 2 thin data.	<b>Moderate confidence</b>	No or very minor concerns on coherence, minor concerns on relevance (1 out of 4 studies may include non-migrant women's perspectives), moderate concerns on methodological limitations (research design, recruitment, reflexivity, ethics, data collection and analysis, support for findings), and moderate concerns for adequacy (4 out of 12 studies supported this finding).

#	Summary of review finding	Studies contributing to the review finding	Methodological limitations	Coherence assessment	Relevance assessment	Adequacy assessment	Overall CERQual assessment	Explanation of overall assessment
F18.0	<p><b>Establishing credibility and marketing of community-based doula programs</b></p> <p>Community-based doula programs implemented by a non-profit organisation external to maternity settings experienced concerns with networking opportunities and accountability that led to challenges in establishing credibility and receiving referrals to the program. Similarly, volunteer programs with doula-like support may limit recruitment and funding opportunities available for community-based doula programs. Community-based doula programs which engaged in community networking opportunities and advertised doula services to prospective clients and organisations outside of maternity settings may improve the credibility, marketing and uptake of program services.</p>	[41, 42, 65]	<p>Moderate concerns</p> <p>1 study with moderate concerns, 1 study with serious concerns.</p>	<p>No or very minor concerns</p> <p>No issues on coherence.</p>	<p>Minor concerns</p> <p>Out of 2 studies, 1 study represented a community-based doula program which supported migrant women and non-migrant women from disadvantaged backgrounds.</p>	<p>Serious concerns</p> <p>2 out of 12 studies supported this finding, with 2 moderate to thick data.</p>	<b>Low confidence</b>	<p>No concerns on coherence, minor concerns on relevance (1 out of 2 studies may include non-migrant women's perspectives), moderate concerns on methodological limitations (research aims and design, recruitment, reflexivity, ethics, data collection and analysis, support for findings), and serious concerns on adequacy (2 out of 12 studies supported this finding).</p>

#	Summary of review finding	Studies contributing to the review finding	Methodological limitations	Coherence assessment	Relevance assessment	Adequacy assessment	Overall CERQual assessment	Explanation of overall assessment
F19.0	<b>Funding and sustainability</b> The impact of partially or unfunded community-based doula programs meant that program staff and local champions were tasked with sourcing alternative funding streams (e.g. paid doula work) in the short-term. This included some non-profit organisations using fundraising or paid community-based doula models to sustain their programs. Networking and establishing strategic partnerships may appear to be valuable in strengthening community-based doula program funding applications and pursuing alternative collaborative funding streams. Community-based doula programs may have to consider aligning their priorities to local public health priorities areas to be considered for funding opportunities and as a possible cost-effective measure.	[41, 63, 65, 74]	Moderate concerns  1 study with minor concerns, 2 studies with moderate concerns.	No or very minor concerns  Very minor concerns, we included that some non-profit organisations used fundraising or paid community-based doula models to sustain their programs to the review finding.	Minor concerns  All 3 studies represented community-based doula programs which supported migrant women and non-migrant women from disadvantaged backgrounds.	Moderate concerns  3 out of 12 studies supported this finding, with 2 moderate to thick data and 1 thin data.	<b>Moderate confidence</b>	No or very minor concerns on coherence, minor concerns on relevance (3 out of 3 studies may include non-migrant women's perspectives), moderate concerns on methodological limitations (research design, reflexivity, ethics, data collection), and moderate concerns on adequacy (3 out of 12 studies supported this finding).
F20.0	<b>Professionalisation and organisation of community-based doula programs</b> Community-based doula programs may need to change current organisational processes to attract prospective clients and to motivate and retain volunteers. This may include flexibility among recruitment of clients (eg, broadening eligibility criteria) and volunteers (e.g. alternative referee options, contracts) and including volunteers in strategic program meetings and mandatory training opportunities.	[41, 63, 65]	Moderate concerns  2 studies with moderate concerns.	No or very minor concerns  No issues on coherence.	Minor concerns  All 2 studies represented community-based doula programs which supported migrant women and non-migrant women from disadvantaged backgrounds.	Serious concerns  2 out of 12 studies supported this finding, with 2 moderate to thick data.	<b>Moderate confidence</b>	No concerns on coherence, minor concerns on relevance (2 out of 2 studies may include non-migrant women's perspectives), moderate concerns on methodological limitations (research design, reflexivity, ethics, data collection), and serious concerns with adequacy (2 out of 12 studies supported this finding).

#	Summary of review finding	Studies contributing to the review finding	Methodological limitations	Coherence assessment	Relevance assessment	Adequacy assessment	Overall CERQual assessment	Explanation of overall assessment
F21.0	<p><b>Challenges with the resource-intensiveness of community-based doula programs</b></p> <p>Community-based doula programs are resource intensive and are often faced with logistical and financial challenges, particularly if there are additional expenses associated with maintaining the program. Programs often required a dedicated team to run them, in which staff appeared to go beyond their role by volunteering their time to cover shortfalls in program activities.</p>	[41, 65]	<p>Moderate concerns</p> <p>1 study with moderate concerns.</p>	<p>No or very minor concerns</p> <p>No issues on coherence.</p>	<p>Minor concerns</p> <p>The included study represented community-based doula programs which supported migrant women and non-migrant women from disadvantaged backgrounds.</p>	<p>Serious concerns</p> <p>1 out of 12 studies supported this finding, with 1 thick data.</p>	<b>Low confidence</b>	<p>No concerns on coherence, minor concerns with relevance (the only included study may include non-migrant women's perspectives), moderate concerns on methodological limitations (research aims and design, recruitment, reflexivity, ethics, data collection and analysis, support for findings), and serious concerns on adequacy (1 out of 12 studies supported this finding).</p>
F22.0	<p><b>Motivation of community-based doulas and their engagement with the program</b></p> <p>Community-based doula's own motivation and time available to be a doula may impact how motivated and engaged they were in their role. Similarly, community-based doula programs which had limited clients to support found doulas became unmotivated if they remained unmatched.</p>	[41, 65, 68]	<p>Moderate concerns</p> <p>2 studies with moderate concerns.</p>	<p>No or very minor concerns</p> <p>No issues on coherence.</p>	<p>Minor concerns</p> <p>All 2 studies represented community-based doula programs which supported migrant women and non-migrant women from disadvantaged backgrounds.</p>	<p>Serious concerns</p> <p>2 out of 12 studies supported this finding, with 1 thick data and 1 thin data.</p>	<b>Low confidence</b>	<p>No concerns on coherence, minor concerns on relevance (2 out of 2 studies may include non-migrant women's perspectives), moderate concerns on methodological limitations (research design, recruitment, reflexivity, data collection), and serious concerns on adequacy (2 out of 12 studies supported this finding).</p>

#	Summary of review finding	Studies contributing to the review finding	Methodological limitations	Coherence assessment	Relevance assessment	Adequacy assessment	Overall CERQual assessment	Explanation of overall assessment
F23.0	<p><b>Challenges with receiving limited or no remuneration and demanding work</b></p> <p>Some community-based doulas perceived being unpaid volunteers or receiving minimal reimbursement for their services as challenging especially if they were from the same communities as the migrant women they were supporting. Similarly, some women expressed feeling challenged knowing that their community-based doulas were unpaid volunteers.</p>	[63, 66, 69]	<p>Moderate concerns</p> <p>1 study with minor concerns, 2 studies with moderate concerns.</p>	<p>No or very minor concerns</p> <p>No issues on coherence.</p>	<p>Minor concerns</p> <p>Out of 3 studies, 2 studies represented community-based doula programs which supported migrant women or women of colour with migrant and/or refugee backgrounds and non-migrant women from disadvantaged backgrounds.</p>	<p>Serious concerns</p> <p>3 out of 12 studies supported this finding, with 2 thin data and 1 moderately thick data.</p>	<b>Very low confidence</b>	No concerns on coherence, minor concerns on relevance (2 out of 3 studies may include non-migrant women's perspectives), moderate concerns on methodological limitations (research design, reflexivity, ethics, data collection), and serious concerns with adequacy (3 out of 12 studies supported this finding).
F24.0	<p><b>Demanding nature of community-based doula work</b></p> <p>Community-based doulas expressed the demanding nature of being on-call through the physical and emotional toll on themselves, their partners and families. For some employed doulas, they found timekeeping their birth work hours challenging given the on-call nature of their work, and possibly are restricted in how much support they can provide, particularly when balancing other commitments (e.g, paid work).</p>	[63, 69, 74]	<p>Moderate concerns</p> <p>2 studies with minor concerns, 1 study with moderate concerns.</p>	<p>No or very minor concerns</p> <p>Very minor issues on coherence, we included more information on the challenges associated community-based doulas' practice to the review finding.</p>	<p>Minor concerns</p> <p>2 studies represented community-based doula programs which supported women of colour who had migrant and/or refugee backgrounds.</p>	<p>Moderate concerns</p> <p>3 out of 12 studies supported this finding, with 3 moderate to thick data.</p>	<b>Moderate confidence</b>	No or very minor concerns with coherence, minor concerns with relevance (2 of the 3 studies may include non-migrant women's perspectives), moderate concerns with methodological limitations (reflexivity, ethics, data analysis), and moderate concerns with adequacy (3 out of 12 studies supported this finding).

#	Summary of review finding	Studies contributing to the review finding	Methodological limitations	Coherence assessment	Relevance assessment	Adequacy assessment	Overall CERQual assessment	Explanation of overall assessment
F25.0	<p><b>Mentorship and support opportunities may facilitate community-based doulas' motivation and engagement with program</b></p> <p>When programs ensured that community-based doulas felt supported and valued within their organisation, a sense of community among doulas and program staff ensued. Mentorship opportunities may be valuable in motivating and creating the sense of community among community-based doulas and program staff, especially for newly recruited volunteer doulas.</p>	[41, 63, 65, 69]	<p>Moderate concerns</p> <p>1 study with minor concerns, 2 studies with moderate concerns.</p>	<p>No or very minor concerns</p> <p>No concerns on coherence.</p>	<p>Minor concerns</p> <p>Out of the 3 studies, 2 studies represented community-based doula programs which supported migrant women or women of colour with migrant and/or refugee backgrounds and non-migrant women from disadvantaged backgrounds.</p>	<p>Moderate concerns</p> <p>3 out of 12 studies supported this finding, with 1 very thin data and 2 thick data.</p>	<b>Moderate confidence</b>	No concerns on coherence, minor concerns on relevance (2 out of 3 studies may include non-migrant women's perspectives), moderate concerns on methodological limitations (research design, reflexivity, ethics, data collection), and moderate concerns with adequacy (3 out of 12 studies supported this finding).
F26.0	<p><b>Moving towards paid community-based doula models may sustain the workforce and provide financial and health benefit for doulas and their families</b></p> <p>Some community-based doulas working as employees of a community-based doula program received hourly remuneration; a set number of hours per week; paid attendance to meetings and training, leave entitlements; and health insurance for both doulas and their families. Doulas felt this paid-model symbolically represented value and recognition of the importance of their birth work, particularly as they were supporting women from their communities.</p>	[74]	<p>Minor concerns</p> <p>1 study with minor concerns.</p>	<p>No or very minor concerns</p> <p>No concerns on coherence.</p>	<p>Minor concerns</p> <p>The included study represented a community-based doula program which supported women of colour with migrant and non-migrant backgrounds.</p>	<p>Serious concerns</p> <p>1 out of 12 studies supported with finding, with 1 thick data.</p>	<b>Very low confidence</b>	No concerns on coherence, minor concerns on relevance (the only included study may include non-migrant doulas' perspectives), minor concerns on methodological limitations (ethics), and serious concerns with adequacy (1 out of 12 studies supported this finding).

## Appendix 10 – Summary of quantitative findings supporting qualitative findings

#	Summary of review finding	Qualitative studies contributing to the review finding	Quantitative studies contributing to this review finding	Support from quantitative evidence (none, partial, different)	Theme
F1.0	<b>Continuous woman-centred support</b> Community-based doulas provided individualised, woman-centred, continuous emotional, social and physical support for migrant women throughout their labour and birth. Community-based doulas may fill the gap in trained continuous emotional, social and physical support in labour and birth for migrant women in maternity settings.	[39, 41, 42, 61-63, 66, 67, 69, 70, 72, 73]	[41, 66]	Partial	Complementary support to maternity care team
F2.0	<b>Knowledgeable in childbirth and navigating maternity systems</b> Community-based doulas were perceived as knowledgeable sources of informational support, providing migrant women with childbirth education and guidance in accessing and navigating their new country's maternity systems.	[39, 41, 42, 61, 66, 67, 69-72]	[41]	Partial	Complementary support to maternity care team

#	Summary of review finding	Qualitative studies contributing to the review finding	Quantitative studies contributing to this review finding	Support from quantitative evidence (none, partial, different)	Theme
F3.0	<p><b>Engaging partners</b> Community-based doulas provided support to the partners of migrant women by enhancing their connection and involvement during labour and birth, particularly when there were differing cultural expectations of partners in providing birth support in HICs.</p>	[39, 42, 61, 63, 66, 67, 70]	[66]	Partial	Complementary support to maternity care team
F4.0	<p><b>Shared language and culture benefits</b> Community-based doulas created a culturally safe space in labour and birth for migrant women, particularly if they were newly arrived or experiencing social isolation in their new countries. This was enhanced when community-based doulas shared the same language and/or culture as the woman, as this helped to reduce the barriers (e.g. cultural or language) migrant women may experience when accessing and using maternity care. These community-based doulas were also perceived as cultural facilitators for both migrant women and healthcare providers.</p>	[38, 39, 41, 42, 61-63, 67-73]	None	None	None

#	Summary of review finding	Qualitative studies contributing to the review finding	Quantitative studies contributing to this review finding	Support from quantitative evidence (none, partial, different)	Theme
F5.0	<b>Respectful treatment and advocacy</b> Community-based doulas' presence and support enhanced respectful treatment of migrant women from healthcare providers. In circumstances where community-based doulas perceived mistreatment, they actively advocated for migrant women by communicating to healthcare providers (direct advocacy).	[38, 41, 42, 62, 63, 67, 68, 70]	None	None	None

#	Summary of review finding	Qualitative studies contributing to the review finding	Quantitative studies contributing to this review finding	Support from quantitative evidence (none, partial, different)	Theme
F6.0	<p><b>Going above and beyond due to social justice work and volunteering</b></p> <p>Community-based doulas demonstrated high motivation and commitment to continuous support for migrant women in labour and birth where in some circumstances doulas went above and beyond their expected roles taking on added responsibilities, despite being unpaid volunteers. This was often driven by their motivation to advocate and support migrant women from their own communities due to a strong sense of social justice.</p>	[41, 42, 61-63, 66, 67, 69, 70, 72, 73]	[64]	Partial	Culturally-responsive and respectful care
F7.0	<p><b>Considerations with non-matched community-based doulas</b></p> <p>Community-based doulas who were carefully matched with migrant women by a needs-based approach (e.g. socio-economic hardship) rather than culturally or linguistically, were well received however, training into cultural backgrounds and having access to interpreters was recommended to ensure quality of care, positive relationships and rapport was established.</p>	[41, 67, 68, 73]	[41]	Partial	Culturally-responsive and respectful care

#	Summary of review finding	Qualitative studies contributing to the review finding	Quantitative studies contributing to this review finding	Support from quantitative evidence (none, partial, different)	Theme
F8.0	<p><b>Role of community-based doula and position in maternity healthcare team</b></p> <p>Community-based doulas were perceived as different from interpreters and trusted members of the maternity healthcare team, particularly when healthcare providers understood and valued their roles – which was enhanced when they gained experience working together. The roles and expectations of community-based doulas in providing non-clinical support to migrant women (e.g. emotional and social) in contrast to healthcare providers' clinical care should be clearly defined to strengthen collaborative care opportunities and relationships.</p>	[39, 41, 42, 61, 63, 65, 67-73]	[41]	Partial	Complementary to maternity care team
F9.0	<p><b>Communication, interpretation and informed decision making/consent</b></p> <p>Community-based doulas enhanced communication between both migrant women and their healthcare providers during labour and birth, through language interpretation or translating to plain language. They also validated and encouraged migrant women to communicate with healthcare providers (indirect advocacy) and enhanced migrant women's understanding of informed consent in labour and birth.</p>	[39, 41, 42, 61, 62, 66, 67, 69, 70, 72, 73]	[41, 64]	Partial	Complementary to maternity care team

#	Summary of review finding	Qualitative studies contributing to the review finding	Quantitative studies contributing to this review finding	Support from quantitative evidence (none, partial, different)	Theme
F10.0	<p><b>Difference from private practising doulas</b></p> <p>Some healthcare providers were often cautious when working with community-based doulas due to previous negative experiences with private-practising doulas. However, community-based doulas were perceived as favourable and different by healthcare providers once they had more experience working with doulas and understood programs were often not-for-profit volunteer organisations, supporting underserved communities such as migrant and refugee populations.</p>	[41, 65, 70]	None	None	None
F11.0	<p><b>Social connectivity and emotional relationships</b></p> <p>Community-based doulas created emotional connections with migrant women similar to the intimate relationships shared with a family member or friend, which established a sense of trust. This relationship helped migrant women to feel a sense of community and social connectedness in their new country of residence.</p>	[39, 41, 42, 61-64, 66, 67, 69, 70, 72, 73]	[66]	Partial	Immediate and short-term benefits

#	Summary of review finding	Qualitative studies contributing to the review finding	Quantitative studies contributing to this review finding	Support from quantitative evidence (none, partial, different)	Theme
F12.0	<b>Empowerment</b> Migrant women, community-based doulas and healthcare providers felt women were empowered during their labour and birth through the encouragement and reassurance that community-based doulas offered. Migrant women felt that the community-based doula's belief in their abilities to labour and birth transformed their own beliefs of feeling fear, incompetence or self-doubt to confidence in their own capabilities.	[39, 61-63, 66, 67, 72]	[41]	Partial	Immediate and short-term benefits
F13.0	<b>Longer-term benefits for community-based doula support</b> Migrant women and their families may experience long-term benefits to their health and wellbeing due to community-based doulas signposting migrant women to relevant support services or through health promotion of specific public health priorities. Community-based doula programs may provide doulas and their local communities with educational or employment opportunities that may have been limited to them prior to their involvement with the program. A database is recommended to record and demonstrate the possible long-term family-centred impacts of community-based doula programs on underserved populations and to gain potential investment opportunities.	[41, 42, 63, 65, 69, 74]	[41, 64]	Partial	Longer-term benefits beyond maternity care

#	Summary of review finding	Qualitative studies contributing to the review finding	Quantitative studies contributing to this review finding	Support from quantitative evidence (none, partial, different)	Theme
F14.0	<p><b>Impact of limited clarity of community-based doula role in the maternity care team</b></p> <p>When the purpose, roles and boundaries of community-based doulas within labour and birth were unclear among community-based doulas and healthcare providers, tension and conflict may result. Community-based doulas who engaged in clinical decision-making or roles outside of their scope of practice were negatively received by healthcare providers. Whereas healthcare providers either misperceived them as interpreters often rejecting their roles (i.e. advocacy, birth support), delegated them clinical tasks, or perceived them as replacing providers' or women's partners' roles.</p>	[41, 42, 61, 63, 65, 67, 69-71]	[41, 64]	Partial	Limited community-based doula role clarity

#	Summary of review finding	Qualitative studies contributing to the review finding	Quantitative studies contributing to this review finding	Support from quantitative evidence (none, partial, different)	Theme
F15.0	<p><b>Impact of limited clarity of community-based doula role with being on-call</b></p> <p>Some community-based doulas were unable to provide on-call support for migrant women in labour and birth due to their own individual or cultural limitations working during night-time hours. Migrant women expressed disappointment in their doulas' absence at their labour and birth as they had desired continuity of doula support.</p>	[39, 41, 65, 66]	[41, 64, 66]	Partial	Limited community-based doula role clarity
F16.0	<p><b>Limited continuity due to meeting too late</b></p> <p>Some migrant women who first met their community-based doulas in labour and birth were disappointed in the limited continuity of support offered by their doulas and would have preferred to establish relationships with their doulas earlier in their pregnancy.</p>	[39, 41, 66]	[41, 66]	Partial	Limited community-based doula role clarity

#	Summary of review finding	Qualitative studies contributing to the review finding	Quantitative studies contributing to this review finding	Support from quantitative evidence (none, partial, different)	Theme
F17.0	<p><b>Limited childbirth knowledge</b> Some migrant women expressed dissatisfaction and feeling unsupported during labour and birth when they perceived a gap in their community-based doulas' training, specifically when doulas lacked specialised childbirth knowledge, birth support training and culturally competent care. Similarly, some doulas expressed inadequate knowledge and desired more education.</p>	[39, 41, 69, 72]	[64]	Partial	Limited community-based doula role clarity
F18.0	<p><b>Establishing credibility and marketing of community-based doula programs</b> Community-based doula programs implemented by a non-profit organisation external to maternity settings experienced concerns with networking opportunities and accountability that led to challenges in establishing credibility and receiving referrals to the program. Similarly, volunteer programs with doula-like support may limit recruitment and funding opportunities available for community-based doula programs. Community-based doula programs which engaged in community networking opportunities and advertised doula services to prospective clients and organisations outside of maternity settings may improve the credibility, marketing and uptake of program services.</p>	[41, 42, 65]	[41]	Partial	Sustaining the community-based doula program as an external organisation

#	Summary of review finding	Qualitative studies contributing to the review finding	Quantitative studies contributing to this review finding	Support from quantitative evidence (none, partial, different)	Theme
F19.0	<p><b>Funding and sustainability</b></p> <p>The impact of partially or unfunded community-based doula programs meant that program staff and local champions were tasked with sourcing alternative funding streams (e.g. paid doula work) in the short-term. This included some non-profit organisations using fundraising or paid community-based doula models to sustain their programs. Networking and establishing strategic partnerships may appear to be valuable in strengthening community-based doula program funding applications and pursuing alternative collaborative funding streams. Community-based doula programs may have to consider aligning their priorities to local public health priorities areas to be considered for funding opportunities and as a possible cost-effective measure.</p>	[41, 63, 65, 74]	[41]	Partial	Sustaining the community-based doula program as an external organisation
F20.0	<p><b>Professionalisation and organisation of community-based doula programs</b></p> <p>Community-based doula programs may need to change current organisational processes to attract prospective clients and to motivate and retain volunteers. This may include flexibility among recruitment of clients (i.e. broadening eligibility criteria) and volunteers (e.g. alternative referee options, contracts) and including volunteers in strategic program meetings and mandatory training opportunities.</p>	[41, 63, 65]	None	None	None

#	Summary of review finding	Qualitative studies contributing to the review finding	Quantitative studies contributing to this review finding	Support from quantitative evidence (none, partial, different)	Theme
F21.0	<p><b>Challenges with the resource-intensiveness of community-based doula programs</b></p> <p>Community-based doula programs are resource intensive and are often faced with logistical and financial challenges, particularly if there are additional expenses associated with maintaining the program. Programs often required a dedicated team to run them, in which staff appeared to go beyond their role by volunteering their time to cover shortfalls in program activities.</p>	[41, 65]	None	None	None
F22.0	<p><b>Motivation of community-based doulas and their engagement with the program</b></p> <p>Community-based doula's own motivation and time available to be a doula may impact how motivated and engaged they were in their role. Similarly, community-based doula programs which had limited clients to support found doulas became unmotivated if they remained unmatched.</p>	[41, 65, 68]	None	None	None

#	Summary of review finding	Qualitative studies contributing to the review finding	Quantitative studies contributing to this review finding	Support from quantitative evidence (none, partial, different)	Theme
F23.0	<b>Challenges with receiving limited or no remuneration and demanding work</b> Some community-based doulas perceived being unpaid volunteers or receiving minimal reimbursement for their services as challenging especially if they were from the same communities as the migrant women they were supporting. Similarly, some women expressed feeling challenged knowing that their community-based doulas were unpaid volunteers.	[63, 66, 69]	None	None	None
F24.0	<b>Demanding nature of community-based doula work</b> Community-based doulas expressed the demanding nature of being on-call through the physical and emotional toll on themselves, their partners and families. For some employed doulas, they found timekeeping their birth work hours challenging given the on-call nature of their work, and possibly are restricted in how much support they can provide, particularly when balancing other commitments (e.g, paid work).	[63, 69, 74]	None	None	None
F25.0	<b>Mentorship and support opportunities may facilitate community-based doulas' motivation and engagement with program</b> When programs ensured that community-based doulas felt supported and valued within their organisation, a sense of community among doulas and program staff ensued. Mentorship opportunities may be valuable in motivating and creating the sense of community among community-based doulas and program	[41, 63, 65, 69]	None	None	None

#	Summary of review finding	Qualitative studies contributing to the review finding	Quantitative studies contributing to this review finding	Support from quantitative evidence (none, partial, different)	Theme
	staff, especially for newly recruited volunteer doulas.				
F26.0	<p><b>Moving towards paid community-based doula models may sustain the workforce and provide financial and health benefit for doulas and their families</b></p> <p>Some community-based doulas working as employees of a community-based doula program received hourly remuneration; a set number of hours per week; paid attendance to meetings and training, leave entitlements; and health insurance for both doulas and their families. Doulas felt this paid-model symbolically represented value and recognition of the importance of their birth work, particularly as they were supporting women from their communities.</p>	[74]	None	None	None