

Systematic review draft protocol*

Review title: Community-based interventions for improving maternal health and for reducing maternal health inequalities in high-income countries: a systematic map of research

**This document is complemented by a more comprehensive protocol developed for the review of literature on interventions in low- and middle-income countries. This simplified version was prepared to assist Mascot partners in the parallel review on community-based interventions in high-income countries.*

Version 4. August 2013

<p>This review is part of the European Union Mascot project funded under the Seventh Framework Programme (FP7/2007-2013) grant agreement n° 282507.</p>

Definitions and key concepts in the review

Community-based intervention are interventions delivered in community settings (any activities occurring outside of health facilities)

Maternal health. Classified as pregnancy, childbirth and the postpartum period (defined as the first two years after childbirth). Fertility treatment is excluded. Only family planning services specifically provided for women in the postpartum period will be included, not other family planning services. Women of all ages are included in this review, including adolescent women.

PROGRESS-Plus. The review uses this acronym to define disadvantage, the key nexus of social stratification. These categories are: Place of Residence, Race/Ethnicity, Occupation, Gender, Religion, Education, Socioeconomic Status, and Social Capital, and Plus represents additional categories such as Age, Disability, and Sexual Orientation. The acronym PROGRESS-Plus is used by the Campbell and Cochrane Equity methods Group and the Cochrane Public Health Review Group.

High Income Countries. For the purposes of the protocol. High income countries those classified by the World Bank as high income countries which are also members of the OECD (<http://data.worldbank.org/about/country-classifications/country-and-lending-groups>). These countries are: Australia, Austria , America , Belgium , Canada , Czech Republic , Denmark , Estonia , Finland , France , Germany , Greece , Hungary , Iceland , Ireland , Italy , Israel , Japan , Korea , Luxembourg , Netherlands , New Zealand , Norway , Poland , Portugal , Slovak , Slovenia , Spain , Switzerland , United Kingdom , UK , United States , USA.

Mascot reviews:

- **Low- and middle-income countries Review** (*hereafter referred to as LMIC Review*) is on health systems and community-based interventions for improving maternal health and for reducing maternal health inequalities in LMIC. Through a 3 stage process, the review will map MH interventions, analyse the Health System articles, in particular trying to identify those with an effect on equity, and provide a repository of interventions for further systematic and in-depth analysis and research.
- **High-income countries Review** (*hereafter referred to as HIC Review*) which only focuses on Community-based interventions. The review will identify and map the literature to include in Mascot's repository of practices.

Background & Rationale

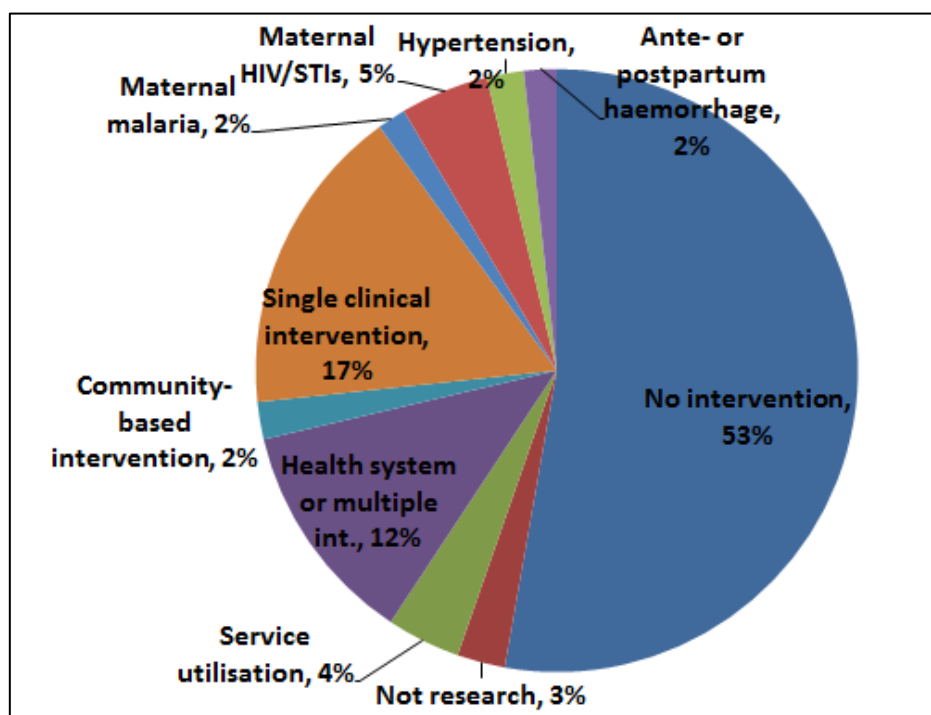
According to the project's Description of Work, the main objective of MASCOT is to stimulate the cooperation between countries from 3 world regions (**Europe**, Africa, and Latin America) in order to identify and implement adequate and efficient country-specific strategies for tackling health inequalities preferentially affecting children, adolescents and mothers.

As part of this work, the project will create links between **North-South** and South-South efforts and provide evidence on best practice and policy advice to address MCH and reduce MCHI.

One important discussion among the MASCOT partners has been to identify a way to strengthen the "North-South" collaboration aspect of the project and better ways to include the learning from the North. Whilst the European report for MASCOT provides information on the MCH status in the region and how on average results are more positive than for other regions, the report did not capture transferable learning in terms of what European countries have done to achieve these results.

Therefore, it was decided to add the experience from the North as part of the systematic review after completing Stage 1 of the LMIC review and try to fill a gap identified in existing literature. This ensures a more streamlined process, it makes more sense methodologically and the project is making a unique contribution in the field by introducing a new approach to research.

The figure shows the results from Stage 1, where the results show Community-based interventions only represented 2% of the literature found. Evidence and practice suggests the community and stakeholders at that level can play a key role in fostering change in low resource settings. Therefore, MASCOT Consortium members agreed to focus the review of literature from the North on this area.



This review will follow the same principle as the LMIC review and in a first stage it will screen abstracts for inclusion/exclusion criteria, and in a second stage it will map full text articles according to a set of basic variables . Depending on the results and time and resources available, a decision will be made as whether a more comprehensive review paper will be prepared, in line with the LMIC review.

Roles and Responsibilities

The HIC Review will be coordinated by HAPI with support from Josephine Kavanagh for the research support, the development of the protocol and technical administration of EPPI Reviewer.

The following MASCOT partners will participate in the review at both Stage 1a (Screening titles and abstracts) and Stage 1b (Screening articles for the map). Because of time constraints and the limitation of coding criteria to community-based interventions, the review will include a **limited number of MASCOT partners** who can realistically commit time to this review and completing the LMIC review:

COHRED: Francisco Becerra

INSP: Victor Becerril, Emily Vargas

HAPI: Martha Perry, Josephine Kavanagh (IE, EPPI)

EQY: Angéline Serre

Literature Search Strategy

Search terms

Search terms for maternal health, and high-income countries only will be used. We will exclude low- and middle-income countries, acknowledging that this means missing out on international studies, but it will give us a more manageable number of results for the limited timeframe available to complete the work. OECD countries will determine the high-income countries; therefore not limiting them to European countries, but also others to reflect the same strategy as the LMIC Review.

Searches for community-based interventions will combine free-text and controlled language terms which describe community interventions for maternal health . Both broad and specific terms will be used.

Searches will be limited to the period from 2000 to 2012.

The languages will be restricted to those of the Mascot countries (English, French, Spanish and Portuguese).

Search terms used in the databases are included in Annex A.

Databases

The following databases will be researched to identify relevant literature. PubMed indexes a wide range of biomedical research which will be complemented by searches of CINAHL which has a focus on nursing and allied health literature.

Sources
CINAHL (Cumulative Index to Nursing and Allied Health Literature)
MEDLINE

Stage 1a: Screening titles & abstracts

Eligibility criteria for Stage 1

This first review stage will enable us to describe the proportion of maternal health literature that focuses on community-based interventions since 2000 in High Income Countries.

All study designs which provide evidence to answer the review question will be included in the Stage 1a. Thus, no restrictions will be placed in the selection criteria for study designs, so that all studies reporting outcomes of a community-based intervention are included, both trial and observational studies. Quantitative and qualitative studies have to include an outcome of an intervention. Those only describing an intervention and not its outcomes will be excluded.

Inclusion criteria for Stage 1a

1. **Population included.** Interventions must target a maternal health population (*women in pregnancy, childbirth, or within two years postpartum*). If the intervention is among a maternal health population, but is primarily for the benefit of the child, it must still be included nonetheless.
2. **Study outcomes included.** Quantitative or qualitative outcomes, or data on the impact of MH interventions at a population level must be reported. The intervention **must** directly or indirectly involve a maternal health population (defined immediately above), but outcomes may be measured in either the woman, or the newborn child. Biological, process, health systems and other outcomes measures are all applicable. In addition, given the context of the search, outcomes could also include other population, such as nurses, midwives, the community.
3. **Community-based interventions**, provided they also meet the other inclusion criteria 1, 2 above and 4-8 below, **are interventions delivered in community settings, defined as any activities occurring outside of health facilities, they describe some outcome (including process/uptake outcomes), even delivery of single clinical interventions.**
4. **HICs.** Only countries classified by the World Bank as high income countries which are also members of the OECD (<http://data.worldbank.org/about/country-classifications/country->

and-lending-groups) will be included. These countries are: **Australia, Austria , America , Belgium , Canada , Czech Republic , Denmark , Estonia , Finland , France , Germany , Greece , Hungary , Iceland , Ireland , Italy , Israel , Japan , Korea , Luxembourg , Netherlands , New Zealand , Norway , Poland , Portugal , Slovak , Slovenia , Spain , Switzerland , United Kingdom , UK , United States , USA.**

5. **Study designs included.** All study designs will be included provided they report on an assessment of the outcome of an intervention. These studies may thus be with or without a control group, (e.g. RCTs, cluster randomised trials, pre-test/post-test studies), process evaluations (provide data on aspects such as design, content, delivery, satisfaction and evaluation of an intervention), or qualitative research (conducted as part of process or outcome evaluation, or to provide women's views of intervention acceptability, appropriateness or the barriers and facilitators of uptake of relevant health care). Only systematic reviews will be included, narrative reviews are classified as "Not research". If the study is a systematic review or a RCT, it is coded as such for Stage 1b review on full text.
6. **Dates of publication included.** Studies published between 2000 and 2012 will be included.
7. **Languages included.** English, French, Portuguese and Spanish language studies will be included. During screening, if the title or abstract is one of these languages, but you do not know that language (or you are unsure what language it is), and thus cannot decide on eligibility of the title/abstract then please mark it as a query and state the language that it is. If in doubt, mark as a query and always note the reason for your query.
8. **Academic theses included.** PhD theses will be included if located in the search. Masters thesis will not be included.

Exclusion criteria for Stage 1a

1. **Study designs excluded.** Exclude descriptive studies, such as those documenting prevalence of conditions and needs assessments. **The study has to describe and evaluate an intervention to be included.** Studies merely describing an intervention are excluded, outcome data are required. Policy discussion papers on system or multiple/complex interventions will be excluded unless they provide outcome data.
2. **Single-clinical interventions excluded** Studies of the effectiveness of single clinical interventions will be excluded (apart from the tracer conditions listed above). Thus, excluded are studies of single drug interventions, single surgical interventions, single laboratory procedures or single clinical procedures. Studies comparing a single clinical intervention to another single clinical intervention (or to two other single clinical interventions) are also excluded (e.g. an efficacy trial comparing two drugs, or two surgical procedures). Also exclude articles on use of single tools to monitor individual patients, such as a partogram. However, include tools for monitoring of overall services (such as an audit), as a health system intervention. **Often case studies of an intervention are single clinical interventions.**

3. **Topics excluded.** We exclude interventions related to infertility or fertility (such as contraception failure rates). We only include interventions around contraception if part of a postnatal or post-abortion care intervention, and if they meet other inclusion criteria. Kangaroo care, and similar interventions, in the postpartum are excluded as they aim largely to enhance child health.
4. **Academic theses excluded.** Exclude masters theses.

General instructions for Stage 1a

EPPI-Reviewer 4 will also be used for screening of titles, abstracts and full text, and for several steps in mapping in Stage 1 of the review. This software is developed and maintained by the EPPI-Centre of the Institute of Education at the University of London, UK.

Please use Firefox internet, rather than Internet explorer or any other option.

The login page for EPPI-Reviewer 4 can be found at: <http://eppi.ioe.ac.uk/eppireviewer4/>. Enter your user name and password. **Click on Go next to Mascot HIC**, then the Collaborate tab (2nd from right in top row of tabs). Locate the articles allocated to you in the list of coding assignments. It is important that you click on the articles allocated to your user name and screen only those articles.

Look for your name under the reviewer column (if you click on another person's allocation that work will not be saved). The allocations are named using the first 4 letters of the two reviewers' first names and the date of allocation (mmdd). elin_jose_1008 is the allocation for Elinor and Josephine made on October 8.

Then **click on number in the remaining column** to open your allocations **(DO NOT CLICK ON ROWS THAT DO NOT CORRESPOND TO YOUR LOG-ON OR CLICK ON NUMBERS IN ANY OTHER COLUMN THAN REMAINING)**. Once your list of articles to screen has opened, click on GO at the top left of the page to open your allocated articles for screening.

If you are unclear on coding, code the study as a QUERY. You must note the reason you are unclear in the notes box which is called "info". Click on "info" to add any notes or queries you have (this applies throughout, note any issues in the info box as you go along, rather than noting issues in emails or other places). If the study meets all the inclusion criteria then INCLUDE it. Note that the definition of each code can be viewed by clicking on the code name and looking at the grey-shaded box at the bottom left of the screen.

Please do not alter the definitions, the codes or coding structure. Rather contact Martha or Josephine with any suggestions about how to improve the codes or definitions.

Stage 1b: Screening Full text

At this stage, we screen the full text of all articles included in the screening of title and abstract, which are either systematic reviews or a RCTs.

The full text articles are checked to ensure that the codes applied when the titles and abstracts were screened are correct.

Full text codes for screening, included studies

For the HIC review, codes for Include intervention study fall only within one category: community-based interventions: Single or multiple interventions in field or community settings. Outcomes must be described.

Full text codes for screening, excluded studies

The exclude category uses a hierarchy approach, whereby the reviewer must mark only the exclusion criteria highest on the list that applies to the study. Thus, for excluded articles, mark only one code. Mark the highest option, e.g. if an article describes a study in the USA (not a LMIC) and is in Chinese, then mark “Language” as “Language” is higher on the list than “Not LMIC”

Exclude codes (in the hierarchy order) are:

- 1.1 Language not included in our list of languages: Exclude studies published in any language other than English, French, Portuguese and Spanish.
- 1.2 Publication is pre-2000. This refers to the date of publication, not the date of the intervention.
- 1.3 Population not Maternal Health: Exclude studies on infertility, fertility (such as studies on population-level effects of fertility rates) or on failure of contraception. Maternal health=women in pregnancy, intrapartum, or 2 years postpartum (studies on abortion are included as maternal health).
- 1.4 No intervention: Paper doesn't report outcomes of an intervention, it describes burden of disease, risk factors or a possible intervention without reporting any intervention outcomes, for example.
- 1.5 Single clinical intervention: Exclude studies of single clinical interventions, e.g. giving a single drug, a single surgical procedure or use of a single laboratory test. Studies comparing a single clinical intervention to another single clinical intervention (or to more than one other single clinical intervention) are also excluded (e.g. an efficacy trial comparing two drugs, or two surgical procedures). Case studies, which report the outcome of an intervention or more than one intervention on a single clinical case, is considered a single clinical intervention. This means we classify reports of single clinical cases as a single intervention even if more than one intervention was done on the case. Note the case studies of a health system or service intervention must not be classified as a single clinical intervention, only clinical cases must. Case series (reports of more than one case) should not be treated as single case studies, but follow rules for other study designs.

- 1.6 Not HIC: Exclude any study which does not take place in a high income country. **HICs**. Only countries classified by the World Bank as high income countries which are also members of the OECD (<http://data.worldbank.org/about/country-classifications/country-and-lending-groups>) will be included. These countries are: Australia, Austria , America , Belgium , Canada , Czech Republic , Denmark , Estonia , Finland , France , Germany , Greece , Hungary , Iceland , Ireland , Italy , Israel , Japan , Korea , Luxembourg , Netherlands , New Zealand , Norway , Poland , Portugal , Slovak , Slovenia , Spain , Switzerland , United Kingdom , UK , United States , USA.
- 1.7 Not research: Paper includes only policy discussion, descriptions of government policies, editorials, or an opinion on a topic. This does not include articles that are systematic reviews, which should be considered research.

Extraction of data on Full Text articles in Stage 1b: mapping of community-based interventions in high-income countries

Ensure the article has been coded in the section called Screening Full text

The articles included from the HIC review will be added to the LMIC review map. The map developed will be used to identify potential topics for systematic review, as well as the studies to be included in these reviews. The map will thus identify where there are gaps in systematic review evidence in this field, and the available research data.

The map developed in stage 1 will also produce a freely available and searchable resource open to any user.

The HIC review will complement the limited number of results found for community-based interventions in LMIC based on the definition of a community-based intervention of the MASCOT project, which refers to interventions delivered in community settings (any activities occurring outside of health facilities). However, **we will code full text using the same codes as the LMIC review.** This would make the repository more methodologically sound and allow those searching the database to also retrieve HIC references in more categories than those limited to 'community interventions'.

Generic codes apply to all included FULL TEXT articles:

Excluded on Full text

Language not English

1. Country(ies) where research conducted tick next to name of country(ies) or type name of country(ies) in "other details"
2. Country(ies) of first author affiliation tick next to name of country(ies) or type name of country(ies) in other details
3. Paper addresses health inequalities/SDOH? Tick yes if intervention is targeted at or delivered to a PROGRESS-Plus group.
4. Paper addresses WHO health promotion

5. Research question(s) study might answer (tick all applicable) Health systems; Community settings; Tracer conditions/single clinical interventions; Tracer conditions / other interventions; Health service utilisation/non-intervention research; Health promotion; Other (details)
6. Study design, enter name of study if provided. Also coded as: Systematic review; Other review; Randomised controlled trial; Effectiveness evaluation including process evaluation (not RCT); Qualitative study; Formative non-intervention research; Unclear
7. Intervention topic(s) (self-reported aims of paper, tick all applicable) Emergency obstetric care; Prolonged or obstructed labour; Maternal bleeding/haemorrhage; Sepsis/infection; HIV or MTCT; STIs other than HIV; Malaria; Hypertension/blood pressure; Induced abortion; Miscarriage; Male involvement; Transport schemes or patient referral; Traditional birth attendants; Maternity waiting homes; Birth and complications preparedness; Fistula; Female genital mutilation; Family planning (post-partum or post abortion); Other
8. Intervention recipient/population (tick all that apply): women; family; male partner; traditional birth attendant; community health worker; midwife/nurse; other mid-level provider (give details); doctor/obstetrician; community; manager(s); policy maker(s) give details; system (details); rural setting; urban setting; other (details)
9. Period targeted by intervention (tick all that apply) Pregnancy (includes abortion and miscarriage); Childbirth; Post birth
10. Data collected Quantitative; Qualitative; Cost / health economics
11. Funder (details) Copy, paste directly from the funding acknowledgements section

Definitions of variables to extract

1. Tick the box **“Excluded on Full text”** if study excluded on full text. Do this as otherwise the system will not note that you have coded the article and your number remaining will not decrease
2. Tick the box **“Language not English”** if the paper is not in English (we need to note these articles so we can assign non-English articles to corresponding people). Code the article if you understand the language, or just tick “Language not English” if you don’t.
3. **Country(ies) where study done** (tick the correct box(es) or type name of country(ies). Use a capital letter for writing the first letter of the country name (e.g. South Africa is correct, incorrect is south Africa). Do not use acronyms such as USA. Multiple responses are required if study done in more than one country. List both high-income country (HIC) names and LMIC country(ies) names if a study was done in both LMIC and HIC.
 - a. HIC countries are not listed and should be included as other with the country in the info box.
 - b. **For systematic review articles** that do not state the name of the countries in which the primary studies were done, in other include “systematic review” on the info box.
4. **Country(ies) of first author** (type name of country(ies) of affiliation of author). **Multiple responses are possible.** Enter all country names if 1st author has more than one country of affiliation.

5. **Study population is a PROGRESS-Plus group?** Tick Yes, if study population is one of the PROGRESS-PLUS groups: Place of Residence, Race/Ethnicity, Occupation, Gender, Religion, Education, Socioeconomic Status, and Social Capital, and Plus represents additional categories such as Age, Disability and Sexual Orientation. Tick NO if, the intervention is **Universal**, *i.e. is aimed at the whole group population, not on the basis of individual needs/risks*. No is thus ticked if the intervention(s) target the general public or a whole population group that has not been identified on the basis of individual risk or needs. Tick Unclear if uncertain.
We use this code to capture if paper addresses health inequalities/SDOH. If a paper has been done in a rural area do not tick “yes” unless there is very clear indication that the study was done in the area to specifically target the population, as opposed to other populations, for example. Being done in a rural area or urban area is insufficient reason to tick yes, there must be other reasons to make one tick yes.
6. **Paper addresses WHO health promotion?** Health promotion includes: activities within the community, for the community or with the community, including that which occurs in health service settings, or that which reports community or user involvement, empowerment or engagement. The main objectives of health promotion are to increase individual, family or community capacity to contribute to improved health or to increase use of maternal and new born health services. Key topics of interest are: health education; birth and complication preparedness; promotion of human rights/reproductive rights: role of men/ role of other community influential; transport schemes; finance schemes; role of TBAs in the health services; maternity waiting homes; community participation in development/ delivery/quality/evaluation of intervention/ services/programme; community participation in maternal death reviews; community participation in public accountability; participatory learning and action cycles; companion of choice at birth; respectful care, and improved interpersonal and cultural competencies of health providers and services. Tick **Yes, No or** Unclear.
7. **Research question(s) study might answer** (tick all applicable). The categories are:
- a. Health systems;
 - b. Community settings (*services provided within community settings, i.e. outside of the health setting*);
 - c. WHO Health promotion (See definition above);
 - d. Tracer conditions with a single clinical intervention (*a single clinical intervention for one of the tracer conditions, e.g. just drug provision*);
 - e. Tracer conditions with complex/multiple interventions (*provision of several interventions or a complex/social intervention for one of the tracer conditions*);
 - f. Health service utilisation/non-intervention research;
 - g. Other (details)
8. **Study design codes** Multiple responses are possible as NB a paper may report more than one study e.g. RCT and Process evaluation. The review covers all studies designed to evaluate outcomes of an intervention. We do not exclude studies based on their design alone.
- a. **If specified**, enter the **name** of the study/intervention programme in the info box next to the variable “Name of study/intervention. Use the **spelling exactly as given** in the report; this is the **only case** in which the requirement for English spelling does not have to be maintained, in all other cases use UK English spelling.

- b. Systematic review. A systematic brings together the findings/opinion/conclusions from a range of previous studies in a systematic explicit manner. A systematic review is explicit in its reporting of the search for studies (i.e. reports the search strategy for specified databases) and the criteria for including and excluding studies; it may or may not include a meta-analysis. It may include a range of study designs including qualitative research.
 - c. Review (other). Use this code for any non-systematic reviews (i.e. those which do not have an explicit search strategy and inclusion/exclusion criteria). Sometimes called a narrative literature review or overview.
 - d. Randomised controlled trial (RCT) A study in which an intervention is allocated randomly. RCT includes trials of interventions involving individual or group trials (cluster or stepped wedge etc.). Control groups may receive a placebo or other intervention. An RCT study compares different groups i.e. groups receiving different interventions or different intensities/levels of an intervention with each other; and/or with a group which does not receive any intervention at all. IMPORTANTLY, the participants in an RCT are allocated to the different groups in a random manner i.e. the report states 'randomised' and that a random numbers table, a random code or numbered sealed envelopes were used to allocate participants to study groups.
 - e. Effectiveness evaluation including process evaluation (not RCT) Any method of allocation different from randomisation as above, or the method of allocation is not stated or unclear. A process evaluation examines the acceptability and feasibility of an intervention; studies the ways in which the intervention is delivered; assesses the quality of the procedures performed by the programme staff etc. It is designed to describe what goes on rather than to establish whether it works or not, and may suggest ways in which the programme design and implementation could be improved. Other designs included are controlled (non-random) trials, where the comparison is between two unrelated groups and receipt of the intervention was not randomly assigned. The following methods also fit this category: "We recorded blood pressure in all 1004 pregnant women using the two different blood pressure machines". Includes observational, non-experimental studies where the researcher does not intervene, but describes and analyses people or situations e.g. case study, case series, case-control study, cross-sectional survey, needs assessment, surveys of user perspectives, policy analysis articles, studies on the validity of new diagnostic tests; among other designs.
 - f. Qualitative design, using techniques such as focus groups, in depth interviews, key informant interviews, ethnography.
 - g. Formative non-intervention research This includes studies that use modelling methods as the research technique.
 - h. Other (details), put health economic studies here if they do not provide information on effectiveness of an intervention.
 - i. Unclear (details) Code as unclear if unsure of design, noting reason for query
9. **Intervention topic(s)** (tick all that apply) This information should be available in the title and abstract, or aims of study. It is the topics covered by the intervention in the paper. Tick all topics that apply, not only the main primary focus of the study:
- a. Emergency obstetric care;
 - b. Prolonged or obstructed labour Other terms to look for include: cephalo-pelvic disproportion; malpresentation; malposition;

- c. Maternal bleeding/haemorrhage (**this includes studies of uterine rupture and blood transfusions**);
- d. Sepsis/infection;
- e. STIs - other than HIV;
- f. Malaria;
- g. HIV or MTCT; Relevant HIV related maternal health issues, and Mother to Child Transmission;
- h. Hypertension/blood pressure;
- i. Induced abortion or PAC; Includes studies about post-abortion care PAC; Demand side financing; Miscarriage;
- j. Male involvement;
- k. Transport schemes;
- l. Traditional birth attendants;
- m. Maternity waiting homes;
- n. Birth and complications preparedness;
- o. Female genital mutilation;
- p. Family planning (postpartum or post abortion);
- q. Other (add details);
- r. Not applicable mark if none of the above applies

10. **DIRECT intervention recipient/population** (tick all that apply). Actual population that receives the intervention

- a. Women. This includes interventions for fetal health, such as ANC ultrasound
- b. Family
- c. ***Male partner (any intervention that includes the male)***
- d. Community. The community that pregnant/birthing/post-partum women inhabit. Includes neighbourhoods, schools, local businesses, places of worship
- e. Community health worker. Includes village health workers, field workers, similar cadres
- f. Traditional birth attendant
- g. Midwife/Nurse
- h. Other mid-level provider (add details) Mid-level provider, but not midwife or nurse, e.g. Medical assistant, clinical officer
- i. Doctor/Obstetrician
- j. Managers/Planners/Policy makers. Managers of health services - personnel managers, finance managers, care team managers etc. Policy maker(s) is the person responsible for policy making which impacts on health services, it can be at the level of a single institution (clinic/hospital) or beyond (area/town/region/nation).
- k. Other (add details)
- l. Not applicable (add details)
- m.

11. **Period mainly targeted by intervention or utilisation study** (tick all the period(s) that apply).

This is the period(s) which the intervention mainly was delivered. For service utilisation articles, which assess the use of services in one of the tracer conditions, code the period that utilisation is assessed:

- a. Pregnancy (this includes abortion and miscarriage)

- b. Childbirth
- c. Post birth (postpartum haemorrhage <6 hours after childbirth is not considered post-birth, but childbirth).

12. **Data collected:** Here tick all boxes that cover an outcome provided in the paper. **Tick Other only if none of the boxes above are ticked.**

- a. Maternal health outcomes (this includes maternal biomedical and mental health outcomes); Maternal health outcomes consist of maternal mortality and morbidity measures in the woman only (this does not include outcome of pregnancy such as stillbirth or low birth weight baby). Use this code for clinical measures of morbidity, including diagnoses of postnatal depression. For the purposes of this review, social support, adherence to medication and measures of mental and emotional well being must also be coded as maternal health outcomes.
- b. Service utilisation;
- c. Cost / health economics (Use for studies which report any cost data linked to an outcome, or an economic analyses of the intervention, e.g. cost effectiveness, cost utility studies etc). Merely reporting the cost of an intervention without linking that to effectiveness or outcomes is not included. These studies are sometimes called cost-of-illness studies.
- d. Child health outcomes; Child outcomes include stillbirths, fetal outcomes and low birth weight, for example.
- e. Other. Code factors such as knowledge, satisfaction as "Other".

13. **Funder name,** including name of government if mentioned as the funder. This captures the funder of the study, which is not always the same as the funder of the intervention. *To find funder name, search PDF using the terms "fund", "support", "financ", "acknowledge".* Copy text on funders acknowledged. If no funder acknowledged, tick "No funding acknowledgement". Tick no funder acknowledgements if no funder mentioned. Copy the name of funders of the study or of individuals mentioned, e.g. enter National Institutes of Health if the paper says: "Christy R. Goverder was funded by National Institutes of Health". Extract also the funder of an investigator's salary if mentioned.

14. **HIC specific codes** (tick all that apply), these refer to the type of community-setting where the intervention is delivered and on who the intervention provider is. In both cases there can be more than one delivery setting and provider.

- a. Intervention delivery: home; telephone; peer delivered; other
- b. Intervention provider: health professional; peer (women who have themselves had children or have the same socioeconomic background, ethnicity, or locality as the women they are supporting); community volunteer (different from peers in that they were not mothers or women necessarily); other

General instructions for Stage 1b

Click on Go next to MASCOT Demo, then the Collaborate tab (2nd from right in top row of tabs).

Locate the articles allocated to you in the list of coding assignments. It is important that you click on the articles allocated to your user name and screen only those articles. Look for your name under the reviewer column (if you click on another person's allocation that work will not be saved). The

allocations are named using the first 4 letters of the two reviewers' first names and the date of allocation (mmdd). elin_jose_1008 is the allocation for Elinor and Josephine made on October 8. Then click on number in the remaining column to open your allocations **(DO NOT CLICK ON ROWS THAT DO NOT CORRESPOND TO YOUR LOG-ON OR CLICK ON NUMBERS IN ANY OTHER COLUMN THAN REMAINING)**. Once your list of articles to screen has opened, click on GO at the top left of the page to open your allocated articles for screening.

When you upload a PDF, in the coding group "retrieval of full text", click the box "Retrieved and uploaded to ER4"

Once you have opened your allocation of articles to screen, on the top left, click on the code set "Screening of ALL full text". When the categories are expanded, you will be able to see the phrase "Duplicate" at the top of the list. Also click on the code set "Full text keywords".

Perform Full Text Screening, by checking the article is eligible, and reclassify if required.

Please confirm that the PDF that was uploaded is the same as the abstract, some errors in uploading may occur. Delete the PDF if it is the incorrect one.

Each article must be coded within only one of the following categories: exclude (only one exclude category, the highest applicable category); include (multiple responses are possible, **please tick all include categories that apply**), query or duplicate. A few articles will be coded into one of these four categories and also into the category background (defined below).

Note that some articles that were included on screening of title and abstract will be excluded on review of full text. If the full text article does not meet the inclusion criteria (as defined below) then EXCLUDE it. The exclude category uses a hierarchy approach, whereby the reviewer must mark only the exclusion criteria highest on the list that applies to the study. For excluded articles, mark only one code. Mark the highest option, e.g. if an article describes a study in the USA (not a LMIC) and is in Chinese, then mark "Language" as "Language" is higher on the list than "Not LMIC" **In particular, recode any high-income country papers into this category. Check the list of LMICs (Annex 4) if unsure whether country of study is LMIC.**

If you are unclear, code the study as a "QUERY unclear". You must note the reason you are unclear in the notes box which is called "info". Click on "info" to add any notes or queries you have. If the study meets the inclusion criteria then INCLUDE and click all applicable INCLUDE categories.

Appendix A: Search strategies

CINAHL:

Results from search on 7 May 2013

7. CINAHL; "Women's health group*".ti,ab; 7 results.
8. CINAHL; "women's group*".ti,ab; 88 results.
9. CINAHL; "health group*".ti,ab; 372 results.
10. CINAHL; "participatory intervention*".ti,ab; 22 results.
11. CINAHL; "Lay health worker*".ti,ab; 53 results.
12. CINAHL; "home based".ti,ab; 2223 results.
13. CINAHL; "home visit*".ti,ab; 2419 results.
14. CINAHL; "Maternity waiting home*".ti,ab; 6 results.
15. CINAHL; "waiting home*".ti,ab; 7 results.
16. CINAHL; "Birth preparedness".ti,ab; 11 results.
17. CINAHL; "male involv*".ti,ab; 61 results.
18. CINAHL; "transport scheme*".ti,ab; 1 results.
19. CINAHL; transport.ti,ab,ti; 5690 results.
20. CINAHL; "community scheme*".ti,ab; 4 results.
21. CINAHL; "traditional birth attendant*".ti,ab; 206 results.
23. CINAHL; "community organisation*".ti,ab; 68 results.
24. CINAHL; "community organization*".ti,ab; 467 results.
27. CINAHL; *"SOCIAL SUPPORT (IOWA NOC)"/; 1 results.
29. CINAHL; *LAY MIDWIVES/ OR *LAY MIDWIFERY/; 237 results.
30. CINAHL; "lay person".ti,ab; 43 results.
31. CINAHL; "lay people".ti,ab; 228 results.
33. CINAHL; *PEER GROUP/ OR *SUPPORT GROUPS/; 4847 results.
34. CINAHL; "peer deliver*".ti,ab; 23 results.
35. CINAHL; "peer support".ti,ab; 1010 results.

36. CINAHL; *COMMUNITY NETWORKS/ OR *CONSUMER PARTICIPATION/; 5789 results.
37. CINAHL; *COMMUNITY HEALTH WORKERS/ OR *RURAL HEALTH PERSONNEL/; 783 results.
39. CINAHL; exp CHILDBIRTH/ OR *PREGNANCY/; 14517 results.
40. CINAHL; ((Birth OR childbirth OR pregnant OR pregnancy OR post-partum OR post-natal OR postnatal OR postpartum OR intrapartum OR "maternal mortality" OR "maternal health" OR "maternal morbidity" OR "maternal death*" OR puerperal OR puerperium OR obstetric*)).ti,ab; 73051 results.
41. CINAHL; 39 OR 40; 78813 results.
42. CINAHL; (Australia OR Austria OR America OR Belgium OR Canada OR Czech AND Republic OR Denmark OR Estonia OR Finland OR France OR Germany OR Greece OR Hungary OR Iceland OR Ireland OR Italy OR Israel OR Japan OR Korea OR Luxembourg OR Netherlands OR New AND Zealand OR Norway OR Poland OR Portugal OR Slovak OR Slovenia OR Spain OR Switzerland OR United AND Kingdom OR UK OR United AND States OR USA).ti,ab,af; 2781406 results.
43. CINAHL; "community based".ti,ab; 12175 results.
44. CINAHL; "community intervention*".ti,ab; 456 results.
45. CINAHL; "community program*".ti,ab; 349 results.
46. CINAHL; husband.ti,ab; 991 results.
47. CINAHL; husbands.ti,ab; 957 results.
48. CINAHL; 7 OR 8 OR 9 OR 10 OR 11 OR 12 OR 13 OR 14 OR 15 OR 16 OR 17 OR 18 OR 19 OR 20 OR 21 OR 23 OR 24 OR 27 OR 29 OR 30 OR 31 OR 33 OR 34 OR 35 OR 36 OR 37 OR 43 OR 44 OR 45 OR 46 OR 47; 37571 results.
49. CINAHL; 41 AND 42 AND 48; 2113 results.
50. CINAHL; 49 [Limit to: Publication Year 2000-2013 and Abstract Available]; 1498 results.

PubMed

Results from search on 7 May 2013.

The results of the original search strategy developed for the low income review were, removed from the results of this prior to screening.

((((((((((((((((((("community-based"[Title/Abstract] OR "community intervention"[Title/Abstract]) OR "community program*"[Title/Abstract]) OR "social support"[Title/Abstract]) OR ("husband"[Title] OR "husbands"[Title]) OR "Women's health groups"[Title/Abstract]) OR "Women's groups"[Title/Abstract]) OR "participatory intervention"[Title/Abstract]) OR "Lay health worker*"[Title/Abstract]) OR "home based"[Title/Abstract]) OR "home visit*"[Title/Abstract]) OR

"Maternity waiting home*" [Title/Abstract] OR "Birth preparedness" [Title/Abstract] OR "Male involvement" [Title/Abstract] OR "Transport scheme*" [Title/Abstract] OR "community scheme*" [Title/Abstract] OR "traditional birth attendant*" [Title/Abstract] OR community [Title] OR "community organisation*" [Title/Abstract] OR "community organization*" [Title/Abstract] OR "Social Support" [Mesh] OR ("lay community" [All Fields] OR "lay people" [All Fields] OR "lay person" [All Fields] OR (peer [All Fields] AND deliver [All Fields]) OR "peer support" [Title/Abstract])) OR "Community Networks" [Mesh] OR "Community Health Workers" [MESH] OR "Community-Based Participatory Research" [MESH] OR "Consumer Participation" [Mesh] NOT (("dentists" [MeSH Terms] OR "dentists" [All Fields] OR "dentist" [All Fields]) OR ("dentists" [MeSH Terms] OR "dentists" [All Fields]) OR ("dental clinics" [MeSH Terms] OR ("dental" [All Fields] AND "clinics" [All Fields]) OR "dental clinics" [All Fields] OR "dental" [All Fields]) OR dentistry [Title/Abstract])) AND (((Australia OR Austria OR America OR Belgium OR Canada OR Czech Republic OR Denmark OR Estonia OR Finland OR France OR Germany OR Greece OR Hungary OR Iceland OR Ireland OR Italy OR Israel OR Japan OR Korea OR Luxembourg OR Netherlands OR New Zealand OR Norway OR Poland OR Portugal OR Slovak OR Slovenia OR Spain OR Switzerland OR United Kingdom OR UK OR United States OR USA [Affiliation])) OR (Australia OR Austria OR America OR Belgium OR Canada OR Czech Republic OR Denmark OR Estonia OR Finland OR France OR Germany OR Greece OR Hungary OR Iceland OR Ireland OR Italy OR Israel OR Japan OR Korea OR Luxembourg OR Netherlands OR New Zealand OR Norway OR Poland OR Portugal OR Slovak OR Slovenia OR Spain OR Switzerland OR United Kingdom OR UK OR United States OR USA [Title/Abstract])) AND (((("Parturition" [Mesh] OR "Midwifery" [Mesh] OR "Maternal Mortality" [Mesh])) OR (Birth OR childbirth OR pregnant OR pregnancy OR post-partum OR post-natal OR postnatal OR postpartum OR intrapartum OR maternal mortality OR maternal health OR maternal morbidity OR maternal death OR puerperal OR puerperium OR obstetric* [Title/Abstract])) AND ("2000/01/01" [PDat] : "2013/12/31" [PDat]))))