SUPPLEMENTAL FILES

Appendix A. Glossary of terms

CMO configuration (CMOC)	A heuristic in realist research which identifies the causative relationship between context, mechanism, and outcome.[1 2]
Community	A geographical location or a group of people with diverse characteristics who are linked by social ties, share common perspectives, and engage in joint action in geographical locations or settings.[3 4]
Context	The backdrop or environment of an intervention or program. Contexts involve characteristics of both individuals and settings. Examples of context include individual beliefs and attitudes, relationships between individuals and larger social networks, history of a community, cultural norms, existing practices, and legislation.[1 5 6]
Gatekeeper	An individual who controls access to benefits that are valued by others or access to an institution or an organisation. Examples include a tribal leader, an elder(s), traditional birth attendants, safe motherhood action groups (SMAGs), local business owners.[7 8]
Health literacy	A health promotion outcome whose measures include health related attitudes, motivation, behavioural intentions, personal skills, and self-efficacy. It is a product of educational activities that aim to impart knowledge and skills necessary for finding, evaluating and integrating health information from a variety of sources. It also involves skills to engage with and navigate the health system.[9]
Implementation	Active and planned efforts to mainstream an innovation within a health system.[10]
Initial programme theory	A preliminary, rough theory regarding the intervention or program. An initial programme theory helps to "sketch the terrain" that will be explored by a realist review and it can provide a preliminary structure for its findings. An initial programme theory can be developed by a variety of methods including a stakeholder workshop, document review, or an initial literature review.[6]
Integration	The extent, pattern, and rate of adoption and eventual assimilation of health interventions into each of the critical functions of a health system,[11] which include, among others: (i) governance, (ii) financing, (iii) planning,(iv) service delivery, (v) monitoring and evaluation (M&E),and (vi) demand generation.[12]
Mechanism	Change in an individual's perception, belief, or motivation. A mechanism is triggered by a context(s) and is a response to a resource(s) offered by an intervention or program. A mechanism generates an outcome(s). A mechanism can be explicit or hidden, intended or

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	unintended.[13 14]
Middle-range theory	A theory that is "sufficiently abstract to deal with different spheres of social behaviour and social structure, so that they transcend sheer description or empirical generalisation"[15]
Outcome	The change or result of an intervention or program. An outcome is based on context-mechanism interaction(s). An outcome can be intended or unintended. An outcome that occurs close in time and space to an intervention or program can be considered proximal. A distal outcome relates to longer-term objective of an intervention or program. Multiple contexts and mechanisms may interact for a single outcome. [2 16 17]
Realist review	Originally developed by Pawson and Tilley, a realist review is a type of narrative review focused on interpretation, critique and deepening of understanding of a complex system. Realist review seeks to illuminate a programme theory with the development of generative, causal hypotheses regarding how, for whom and in what contexts an intervention or program may work.[16-20]
Refined programme theory	Product of a realist review that hypotheses how an intervention or program works by considering its contextual influences and mechanisms of action.[6]
Retroductive reasoning	Retroductive reasoning is used in realist methodology to identify a hidden mechanism(s) that may be related to an outcome(s). In realism, retroduction assumes that causation should not be assumed solely by what is observable. Retroductive reasoning asks an analyst to think through and contemplate what context-dependent cause(s) may be producing an outcome. This process can involve both inductive and deductive logic, as well as personal insights or hunches. [21 22]
Rigour and relevance	Realist research appraises evidence according to rigour and relevance. These criteria are considered under a “fitness to purpose” lens. Rigour considers the methodological quality of a study, while relevance considers the extent that a research study can potentially contribute information toward the development of programme theory.[2 6]
Scale up	Scale up refers to deliberate efforts to increase the impact of an innovation(s) by improving coverage and equitable access. It involves expanding or replicating effective pilot or small-scale projects by transferring it from a local level to a regional, national, or international level. It is not simply copying and pasting but also adapting innovations to new local contexts. [23 24]
Stakeholder engagement	A bidirectional process whereby an organization or a research team involves individuals, groups, or organisations who have the potential to influence, or who may be influenced, by

	actions or aims to achieve an outcome(s)[25 26]
Sustainability	The longer-term capacity of an intervention, program, organisation, or system to be self-reliant in its ability to secure and allocate resources necessary for its activities. Examples of resources include manpower, technology, information, and finance.[27 28]
Take up/uptake	The action of making use of something that is available. Whilst the use of the term 'uptake' within health implementation research has not been formally defined, it has been used synonymously with acceptability and adoption of, adherence to, and engagement with a health intervention.
Traditional birth attendant	An individual who assists a pregnant woman during childbirth and initially acquired her skills by delivering babies herself or through apprenticeship to other traditional birth attendants.[29]

REFERENCES

1. Pawson R. Evidence-based policy: a realist perspective: sage 2006.
2. Jagosh J. Realist synthesis for public health: building an ontologically deep understanding of how programs work, for whom, and in which contexts. *Annual Review of Public Health* 2019;40:361-72.
3. Green LW, Mercer SL. Can public health researchers and agencies reconcile the push from funding bodies and the pull from communities? *American journal of public health* 2001;91(12):1926-29.
4. MacQueen KM, McLellan E, Metzger DS, et al. What is community? An evidence-based definition for participatory public health. *American journal of public health* 2001;91(12):1929-38.
5. Pawson R, Greenhalgh T, Harvey G, et al. Realist review – a new method of systematic review designed for complex policy interventions. 2005;10:21-34.
6. Geoff W, Gill W, Ray P, et al. Realist synthesis. RAMESES training materials: The RAMESES Project, 2013.
7. Corra M, Willer D. The gatekeeper. *Sociological Theory* 2002;20(2):180-207.
8. Singh S, Wassenaar DR. Contextualising the role of the gatekeeper in social science research. *South African Journal of Bioethics and Law* 2016;9(1):42-46.
9. Nutbeam D. Health literacy as a public health goal: a challenge for contemporary health education and communication strategies into the 21st century. *Health promotion international* 2000;15(3):259-67.
10. Greenhalgh T, Robert G, Macfarlane F, et al. Diffusion of innovations in service organizations: systematic review and recommendations. 2004;82:581-629.
11. Atun R. Health systems, systems thinking and innovation. *Health Policy and Planning* 2012;27(suppl_4):iv4-iv8. doi: 10.1093/heapol/czs088
12. Atun R, de Jongh T, Secci F, et al. Integration of targeted health interventions into health systems: a conceptual framework for analysis. *Health Policy and Planning* 2009;25(2):104-11. doi: 10.1093/heapol/czp055
13. Westhorp G. Understanding mechanisms in realist evaluation and research. *Doing realist research London: Sage* 2018
14. Pawson R, Tilley N. Realistic Evaluation. London: SAGE Publications Ltd 1997.
15. Pawson R. Middle-range realism. *European Journal of Sociology/Archives Européennes de Sociologie* 2000;41(2):283-325.
16. Pawson R, Tilley N, Tilley N. Realistic evaluation: sage 1997.

17. Rycroft-Malone J, McCormack B, Hutchinson AM, et al. Realist synthesis: illustrating the method for implementation research. *Implementation Science* 2012;7(1):1-10.
18. Goodridge D, Westhorp G, Rotter T, et al. Lean and leadership practices: development of an initial realist program theory. *BMC health services research* 2015;15(1):1-15.
19. Greenhalgh T, Thorne S, Malterud K. Time to challenge the spurious hierarchy of systematic over narrative reviews? *European Journal of Clinical Investigation* 2018;48(6):e12931. doi: https://doi.org/10.1111/eci.12931
20. Zibrowski E, McDonald S, Thiessen H, et al. Developing a program theory of patient engagement in patient-oriented research and the impacts on the health care system: protocol for a rapid realist review. *CMAJ open* 2020;8(3):E530.
21. Greenhalgh T, Pawson R, Wong G, et al. Retroduction in realist evaluation. The RAMESES II project, 2017. *URL: www ramesesproject org/media/RAMESES_II_Retroduction pdf (accessed 12 July 2018)* 2018
22. Micklitz K, Wong G, Howick J. Mindfulness-based programmes to reduce stress and enhance well-being at work: a realist review. *BMJ open* 2021;11(3):e043525.
23. Meuse-Rhin E, Organization WH. Scaling up projects and initiatives for better health: from concepts to practice. 2016
24. Spicer N, Hamza YA, Berhanu D, et al. 'The development sector is a graveyard of pilot projects!' Six critical actions for externally funded implementers to foster scale-up of maternal and newborn health innovations in low and middle-income countries. *Global Health* 2018;14(1):74. doi: 10.1186/s12992-018-0389-y [published Online First: 2018/07/29]
25. Ekirapa-Kiracho E, Ghosh U, Brahmachari R, et al. Engaging stakeholders: lessons from the use of participatory tools for improving maternal and child care health services. *Health Research Policy and Systems* 2017;15(2):17-28.
26. Akwanalo C, Njuguna B, Mercer T, et al. Strategies for effective stakeholder engagement in strengthening referral networks for management of hypertension across health systems in Kenya. *Global heart* 2019;14(2):173-79.
27. Olsen IT. Sustainability of health care: a framework for analysis. *Health policy and planning* 1998;13(3):287-95.
28. LaFond A. Sustaining primary health care: Routledge 2013.
29. Organization WH. Traditional birth attendants: a joint WHO/UNFPA/UNICEF statement: World Health Organization 1992.

Appendix B. Initial programme theory of maternal waiting home-facility birth interventions in low- and middle-income countries

IPT 1: Sociocultural factors

1.11 If women perceive benefits to MWH use, including reduced risk of poor birth outcomes, access to emergency obstetric services, opportunity for rest, choice in deciding when to access care, ease in accessing care, and family, health staff, and community support for MWH use, then women will see a stay at a MWH as necessary and possible and feel an appreciation for MWHs, leading to MWH use.

1.12 If women can rely on others to fulfill household commitments (childcare, cooking/cleaning, chores, other work) in their absence, then they will feel more comfortable about spending time away from home, leading to MWH use.

1.13 If traditional birth practices (including the use of traditional birth attendants, and traditional birth ceremonies and food) are permitted to support prenatal and birth services in MWHs the adjoining healthcare facilities then women will feel comforted by traditional care and traditional birth attendants are likely to encourage women to use MWHs, leading to increased use and user satisfaction.

1.14 If nurses advise women to rest whilst staying at the MWH but older women counsel against inactivity because they believe it delays labour, then potential MWH users prefer to stay at home and keep working until the onset of labour, leading to non-MWH use.

1.21 If MWH use is culturally acceptable to household decision-makers, community members and healthcare workers and they believe that MWHs are necessary and beneficial, then they will be motivated to enable women to use them, leading to MWH use.

IPT 2**:** MWH characteristics

2.11 If a MWH has adequate space, privacy, security, amenities for users, then women feel that the MWH is appealing, accommodations are safe and comfortable, and conditions uphold dignity, leading to appropriate MWH use and user satisfaction.
2.12 If women are permitted to bring a companion, then women and their spouses feel more protected from false accusations, leading to increased MWH use.
2.13 If users are treated respectfully by MWH staff, then women value the service, leading to community investment and ownership.
2.14 If MWH staff provide users with clear information to make informed choices about sexual Reproductive maternal and neonatal health (SRMNH), then women feel respected and uncoerced in decision-making, leading to user satisfaction.
2.15 If MWHs are exclusively used by pregnant women and their companions, or postpartum women and infants, then users feel that the MWHs are culturally appropriate, and they do not fear exposure to illness or security issues during their stay, leading to MWH use and user satisfaction.
2.16 If MWHs provide dedicated space for postpartum women and infants, then there is reduced congestion in the health centres and women are motivated to attend immediate postnatal visits, leading to higher postnatal coverage.

2.17 If a MWH provides high quality SRMNH education and other skills programming (which could including income-generating activities), then women gain knowledge, awareness, and self-efficacy, leading to increased exercise of acquired skills.

2.21 If a MWH is successfully implemented and accepted as an essential component of the healthcare system by clinicians, policy-makers, MWH users and communities, and if roles and responsibilities for the MWH are well-defined, then MWH and auxiliary staff feel valued, equipped, and recognized as well as responsible and proud of the high-quality care provided, leading to employee satisfaction.

2.22 If training and protocols are in place for MWH data collection, audit, and staff and programming evaluation, then MWH staff are motivated to work toward stated goals, leading to continuous quality improvement.

IPT 3: Health facility characteristics

3.11 If women think a MWH-affiliated health facility has low quality maternity care (inadequate staffing and/or training, overcrowding, lack of essential medical supplies, disrespectful, abusive, and/or discriminatory care, unsafe environment), culturally insensitive care (male health professionals or unwillingness to accommodate different delivery positions) or will not allow traditional practices, then there is a sense of futility in seeking care and women are unwilling to use the healthcare facility leading to homebirth and non-use of MWHs.

3.21 If health facilities can increase staff to patient ratios resulting from the introduction of MWHs and increased number of facility births, and healthcare providers are not expected to provide non-clinical services at the MWHs (e.g., cleaning), then staff value the MWHs because they feel more in control of their workload (i.e., more confident in anticipating births, managing complications, referring to higher levels of care appropriately and in a timely manner) leading to employee satisfaction and higher quality of care.

3.22 If infectious disease (e.g., Ebola) has reduced healthcare service use, overwhelmed facilities, and led to pregnant women being turned away from health services, then loss of trust in the healthcare system and fear of contracting the infectious disease leads to low facility birth and MWH use.

3.23 If MWH data are routinely reported at the MWH-affiliated healthcare facility, then the importance and scope of the MWH services are recognized and valued by healthcare providers and policy-makers, leading to greater integration into the healthcare system.

IPT 4 Individual factors

4.11 If women have had a positive experience with the healthcare system (including MWHs) or have heard of others' positive experiences, then they will trust the healthcare system, leading to appropriate MWH use.

4.12 If multiparous women have had positive experiences with homebirth, then they feel confident in their ability to birth without a skilled professional and a sense of control over their circumstances, leading to low MWH use.

4.13 If the cost (direct and indirect) of hospital or MWH use, distance to the MWH, and inconvenience is perceived to be too great, then obstacles to use feel insurmountable for potential users and their families, leading to low MWH use.

4.14 If young and primiparous women and their families are informed about the purpose and use of MWHs and/or birth facilities, and the services have widespread adoption, then women and their families

are aware of the benefits, availability and means of accessibility and feel internal and external motivation to use the services, leading to facility birth and appropriate MWH use.

4.15 If poverty and food insecurity are prevalent and women are expected to bring food, baby clothes and supplies to the MWH, then women and families consider these requirements to be prohibitive, leading to low MWH use.

4.16 If women perceive that they live too close to a health facility to warrant MWH use or multigravida women believe that they will recognize the signs of labour in time to go to a healthcare facility, then they will not believe that they need the service, leading to low MWH use.

4.17 If women know their estimated due date (by tracking their period or through ultrasound) then they will feel more certainty around when it is appropriate to use an MWH, enhancing appropriate use.

IPT 5 Community engagement

5.21 If community members are interested in and feel a sense of ownership for the MWH and there is an opportunity for them to contribute to the management of the MWH, then community members feel empowered to ensure good governance leading to a reinforced sense of community ownership, responsibility and investment in the success of the MWH and MWH sustainability.

5.22 If community members are interested in having a MWH, and are involved in the design, operation, programme delivery, maintenance and governance of a MWH, then a sense of responsibility, collective ownership, and investment in the success of the MWH develops, leading to operational sustainability.

5.23 If MWHs are perceived as highly beneficial and needed by community members, including community health workers, then community members will be motivated to advocate for and contribute toward the MWHs, leading to MWH use and community ownership and sustainability.

5.24 If the introduction of a MWH is not accompanied by adequate allocation of human and financial resources and there is irregular delivery of funds, then MWH management committees feel incapable of carrying out their roles, leading to a lack of community engagement and MWH sustainability.

5.25 If MWHs are community owned and community members are actively involved in the day to day operations of the MWH, (e.g. sharing in the cleaning) then health staff feel relieved of some of their workload, leading to greater MWH and health facility staff satisfaction.

IPT 6 Government support

6.21 If health policy (local or national) supports MWH programme availability, accessibility, delivery, and/or use then healthcare facility staff and community members, including community health workers, promote MWHs as part of the healthcare system, leading to MWH use and operational and financial sustainability.

Appendix C. Characteristics of data sources

Lead author (year)	Country	Research aim	Study design
Abdulkadir (2017)	Kenya	Assess awareness, attitude towards and utilization of maternity waiting home by mothers in Merti Sub County, Isiolo County	Mixed methods
Andemichael (2009)	Eritrea	Assess pregnancy outcomes verified through maternal mortality and perinatal mortality rates since the introduction of maternity waiting homes in some hard-to-reach sub-zobas of Eritrea	Quantitative
Awor (2020)	Uganda	Describe three top innovative community-based solutions and their contributions to maternal health	Mixed methods
Bergen (2019)	Ethiopia	Explore the barriers and enablers that health extension workers (HEWs) encounter when engaging with communities about maternity waiting areas. To generate an in-depth understanding of HEW perspectives and experiences related to the maternity waiting areas initiative in Ethiopia	Mixed methods
Bonawitz (2019) a	Zambia	Describe: 1) maternal awareness and utilization of maternity waiting homes in rural Zambia among HIV positive women, and 2) health outcomes for HIV positive women and their infants with regards to utilization of maternity waiting homes s	Quantitative
Bonawitz (2019) b	Zambia	Describe the quality of implementation at intervention sites compared to existing maternity waiting homes at other CEmONC facilities in the same districts and to describe the utilization patterns of these interventions and compare CEmONC maternity waiting homes over time	Mixed methods

Bragg (2012)	Cuba	Assess maternal and child healthcare in Cuba, detail the system of community-based regional maternity homes, and outline specific recommendations for the US	Quantitative
Bruns (2019)	Cuba	Present a field case study of one of Cuba's national public health policies. Specifically, we explored Cuba's Hogares Maternos, or maternity homes, which focuses on social determinants of health	Literature review
Buser (2017)	Lao Asia Guatemala Central America	Examine the impact of maternity waiting homes on new-born outcomes and to inform the development of targeted interventions and services to decrease neonatal mortality	Literature review
Buser (2019) a	Zambia	Explore and describe the cultural practices, knowledge, and beliefs of essential newborn care and health-seeking in the context of maternity waiting homes and the Saving Mothers, Giving Life (SMGL) initiative in rural Zambia	Mixed methods
Buser (2019) b	Liberia	Analyze the cost-effectiveness of maternity waiting homes in rural Liberia by examining the cost per life saved and economic effect of MWHs on maternal mortality to inform future policy	Quantitative
Calero (2017)	Nicaragua	Analyze the factors that influence the attendance of pregnant women at the maternal home Adilia Trejos of the municipality of San Juan de Oriente Masaya II semester 2016	Quantitative
Chibuye (2018)	Zambia	Examine the experiences with maternity homes; to assess women's and community's needs, use patterns, collaboration between maternity homes, facilities and communities, and promising practices and models	Mixed methods

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Clementino (2008)	Brazil	Identify the meanings of giving birth in the birthing centre from the perspective of postpartum women, to know the reasons for giving birth there, and to identify the means that led them to get to know the birthing centre	Qualitative
Clensay (2007)	Nicaragua	Evaluation of Casa Materna organizational structure, outreach methods and daily activities to discover inconsistencies regarding five prominent issues (finance, client sustenance, medical services, education, and the facility's environment) and to provide recommendations to improve Casa Materna's organizational methods and structure	Qualitative
Cuad Hist Salud Pública (2007)	Cuba	The contribution of Cuba's maternal households to maternal and child health	Editorial
Dari (2019)	Indonesia	Examine the association between socialization and the use of maternity waiting home in East Aceh	Quantitative: cross-sectional study
Eckermann (2008)	Laos	Establish whether the maternity waiting homes concept would be affordable, accessible, and most importantly acceptable, as a strategy to improve maternal outcomes in the remote communities of Thateng with a high proportion of the population from ethnic minority groups.	Mixed methods
Ekunwe (2017)	Zambia Zimbabwe Eritrea Ethiopia Timor Leste	Examine whether observational studies on maternity waiting homes demonstrate decreased maternal and perinatal mortality in low- and middle-income countries when compared with the standard of care	Literature review
Endalew (2017)	Ethiopia	Assess intention to use maternity waiting homes among pregnant women in Jimma District, Southwest Ethiopia.	Mixed methods

Endayehu (2020)	Ethiopia	Assess pregnant women's intentions to use maternity waiting homes and associated factors in East Bellesa district, northwest Ethiopia	Quantitative
Figa'-Talamanca (1996)	Cuba Ethiopia Uganda Malawi Colombia Nicaragua Bangladesh	Illustrate some typical examples of maternity waiting homes in different countries	Review
Fleites (2009)	Cuba	Describe the unique characteristics of Cuban maternity waiting homes from which excellent results have been obtained	Descriptive narrative of MWH
Fogliati (2017)	Tanzania	Determine whether Maternity Waiting Homes may be a tool to improve access of lower socio-economic women to such facilities (facilities providing advanced management of childbirth complications)	Quantitative
Fraser (2008)	Peru	Report of problems contributing to the slow reduction in maternal and neonatal mortality despite implementation of MWHs in rural communities.	Qualitative
Friedman (2008)	Nicaragua	Explore the structural causes of maternal mortality in Nicaragua and how the Casa Materna addresses these causes. To discuss the organization and activities of the Casa Materna and the challenges it faces in the struggle to break the link between poverty and poor maternal health	Mixed methods
Garcia (2012)	Nicaragua	Explore the factors associated with the use of maternity waiting homes and institutional birth in Nicaragua	Mixed methods
Gaym (2012)	Ethiopia	Describe the current status of maternity waiting home services in Ethiopia	Mixed methods

Getachew (2019)	Ethiopia	Estimate health expenditure for delivery care was the outcome variable that was then classified into out-of-pocket (OOP) payments, women's costs, total costs, and overall costs.	Quantitative
Getachew (2020)	Ethiopia	Identify the influence of perceived geographic barriers to the utilization of maternity waiting homes (MWHs) and to explore factors associated with current delivery complications among MWH users and nonusers.	Quantitative
Gorry (2011)	Cuba	Describe the history of Cuban maternity waiting homes (MWHs) and their evolution from 15 homes at inception in 1962 into a national programme employing a uniform practice for women presenting certain risk factors during pregnancy.	Feature article
Guillen (2016)	Nicaragua	Identify sociodemographic and work characteristics of the staff, characteristics socio demographic of the users, activities carried out by health personnel, conditions, and material resources available to the staff and the degree of satisfaction of the users	Quantitative
Henry (2017)	Zambia	Assess the relationship between maternity waiting home quality and the likelihood of facility delivery in Kalomo and Choma Districts in Southern Province, Zambia	Quantitative
Holmes (2010)	Global	Conceptualise and describe the second delay to reaching emergency obstetric care and produce policy recommendations	Literature review
Japanese Organization for International Cooperation in Family Planning (2015)	Zambia	Support development of a maternity waiting home from an old shipping container	Grey literature

Jarquín (2015)	Nicaragua	Analyzing the contributions that this Maternal House has made in the Prevention of Mortality Maternal in the period from 2012 to the first semester of 2015	Qualitative
Kaiser (2019)	Zambia	Assessed how maternity waiting homes affect the health workforce and maternal health service delivery at their associated rural health centers	Qualitative
Kanengoni (2019)	Zimbabwe	Explore women's experiences and perceptions of disrespect and abuse from their maternity care providers in a low resource rural setting in Zimbabwe	Qualitative
Kebede (2019)	Ethiopia	Assess women's maternity waiting home satisfaction	Quantitative
Kebede (2020)	Ethiopia	Explore the factors influencing women's access to the maternity waiting homes in rural Southwest Ethiopia.	Qualitative
Kurji (2019)	Ethiopia	Identify individual-, household- and community-level factors associated with maternity waiting home use in Ethiopia	Quantitative
Kyokan (2016)	Sierra Leone	Explore the factors influencing women's use of birth waiting homes in the Northern Bombali district, Sierra Leone	Qualitative
Laguna (2015)	Nicaragua	Identify the knowledge, attitude, and practices of pregnant and post-harsh women in relation to the use of the Mother House "Doña Maurita", New Guinea in the period July 2014 to October 2014	Quantitative
Lampson (2002)	Nicaragua	Understand awareness of and barriers to maternity waiting home utilisation of the in the Cabezas RAAN maternity home and describe characteristics of users and their perceptions of the home	Mixed methods
López (2015)	Cuba	Share the Cuban experience of gender mainstreaming in maternity waiting homes (MWHs)	Grey literature

Lori (2013) b	Liberia	Examine the structural and sociocultural factors influencing maternity waiting home use through the lens of women, families, and communities in one rural county in post conflict Liberia	Qualitative
Lori (2013) a	Liberia	Examine the views of traditional midwives on their integration into health teams	Qualitative
Lori (2016)	Zambia	Explore Zambian stakeholders' beliefs regarding the acceptability, feasibility, and sustainability of maternity waiting homes) to inform a model for rural Zambia	Qualitative
Lori (2017)	Liberia	Examine women's satisfaction with their stay at a maternity waiting home and compares utilization rates before and during the Ebola outbreak	Mixed methods
Lori (2018)	Zambia	Obtain data on current maternity waiting home (MWH) characteristics and the women who use them as well as women's perceptions and experiences with MWHs among seven Saving Mothers Giving Life (SMGL) supported districts in Zambia	Quantitative
Lori (2019)	Zambia	Assess the associations among maternity waiting home use and antenatal care and PNC attendance, family planning, and immunization rates of newborns for mothers living in seven rural districts in Zambia	Quantitative
Lori (2020)	Liberia	Describe the evolutionary scale up of maternity waiting homes as a component of health system strengthening efforts and document the successes, challenges, and barriers to sustainability in Liberia	Mixed methods
Martey (1995)	Ghana	Explore the utilization of maternal health services in Ejisu district of Ghana	Mixed methods

McIntosh (2018)	Malawi	Assess satisfaction with maternity waiting home built spaces and features in women who are at risk for underutilizing maternity waiting homes	Quantitative
Ministry of Health Nicaragua (1999)	Nicaragua	Described a project for the development of local systems of integral health care - PROSILAIS"	Grey literature
Ministry of health, Peru (2006)	Peru	Provide a work tool that allows the health worker and other social actors to implement a Maternal Waiting House supported by communal management	Grey literature
Mosley (2020)	Tanzania	To understand psychosocial preferences, agency for decision-making, and access barriers that influence where a woman in the ward will deliver	Qualitative
Mramba (2010)	Rural Kenya	Investigated the reasons for the low utilization of a maternity waiting home in rural Kenya	Quantitative
Nabudere (2013)	Uganda	Describe findings for a policy brief on increasing access to skilled birth attendants, and subsequent use of the report by policy makers and others from the health sector in Uganda	Qualitative
Ngoma (2019)	Uganda Zambia	To addresses how SMGL (saving mothers, giving life) partners implemented strategies to decrease the distance to facilities capable of managing emergency obstetric and new-born complications, ensuring sufficient numbers of skilled birth attendants, and addressing transportation challenge	Mixed methods
Ngoma-Hazemba (2019)	Zambia	Assess community perceptions of the intervention package, including (1) messaging about use of maternal health services, (2) access to maternal health services, and (3) quality improvement of maternal health services	Qualitative

Nhindiri (1996)	Zimbabwe	Estimate the degree and pattern of utilization of institutional maternity services in a rural area of Zimbabwe	Quantitative
Penn-Kekana (2017)	Eritrea Zambia Zimbabwe Honduras Lao People's Democratic Republic (PDR) Peru Mozambique Cuba Nicaragua Ethiopia Malawi Ghana Liberia South Africa Kenya Guatemala Timor-Leste	Explore factors related to maternity waiting home (MWH) implementation, share with policy makers and implementers who are thinking about implementing MWHs key learnings from other implementation experiences, so that they can apply lessons to their own contexts	Qualitative
Perosky (2019)	Liberia	Estimate the impact of Ebola outbreak on maternity waiting home utilization	Quantitative

Powell, (2019)	Guatemala Zambia Ethiopia Zimbabwe Liberia Kenya Malawi Timor Leste Lao People's Democratic Republic Guatemala	Examine previously published literature to identify the impact maternity waiting homes (MWHs) have had on reducing maternal mortality. Also examined the factors that have been found to influence a woman's decision and ability to use a MWH	Quantitative
Quintana (2012)	Nicaragua	1. Know what maternal house caregivers think, know, and feel about sexual violence and pregnancies in girls and adolescents, 2. Identify the capacities, resources, and limitations of Maternal Homes staff to provide comprehensive care to pregnant girls and adolescents, 3. Know the expectations of teenage girls and their assessment about the care received in the Mother Houses	Qualitative
Rajaram (1993)	India	Strategies for reducing maternal mortality in India are suggested for prioritizing maternal and child health (MCH) nationally, for including MCH within welfare services, and for integrating vertical programs into MCH	Commentary
Republic of Mozambique Ministry of Health (2009)	Mozambique	Strategy of Expecting Homes for pregnant women	Grey literature

Rojas-Ochoa (2019)	Cuba	Provide a historical perspective of this process, describe the changes and results during the 55 years examined, and take a critical look at the challenges to successful implementation of this model, a mainstay at the primary healthcare level of the public health system's Maternal and Child Health Program	Qualitative
Rollo (2019)	Cuba	Analyze maternal health services (which in Cuba are called Maternal Homes) as a biopolitical strategy	Thesis
Ruiz (2013)	Guatemala	Explore experiences with maternity waiting homes, focusing on the users' perspectives, but also including a variety of other stakeholders' opinions	Qualitative
Satti (2013)	Lesotho	To present lessons learned from maternity waiting home implementation in rural areas in Lesotho	Grey literature
Schooley (2009)	Guatemala	Identify and better understand factors that influence care-seeking behaviour for women's health among indigenous Mayan populations in the highlands of Guatemala	Qualitative
Scott (2018)	Zambia	To design a maternity waiting home intervention that could 1) overcome barriers to access to facility delivery; 2) be acceptable to the community; and 3) be both financially and operationally sustainable.	Mixed methods
Scott (2018)	Zambia	Assess the determinants of home delivery among remote women in rural Zambia	Mixed methods
Shrestha (2007)	Nepal	To ascertain the views of expectant mothers, communities, service providers and managers on the concept of maternity waiting homes and its applicability in Nepal	Mixed methods

Sialubanje (2015)	Zambia	Explore women's experiences and beliefs concerning utilisation of maternity waiting home (MWHs) in rural Zambia; the decision-making process regarding the use of MWHs, and factors affecting utilisation of MWHs were explored	Qualitative
Sialubanje (2016)	Zambia	Explore men's experience and beliefs regarding the use of maternity waiting homes in Kalomo District, Zambia	Qualitative
Sialubanje (2017)	Zambia	To test the association between the presence of maternity waiting homes and personal and environmental factors that affect the use of MWHs	Quantitative
Singh (2017)	Malawi	To determine whether two maternity waiting homes supported by the Safe Motherhood Initiative are reaching vulnerable women during the early phase of their implementation	Quantitative
Singh (2018)	Malawi	Examining whether two program-supported maternity waiting homes in Malawi are reaching women in need and if there are changes in women reached over time	Quantitative
Solidar (2013)	Mozambique	To a) Investigate the local beliefs regarding pregnancy, childbirth and care for the newborn; b) analyze the behavior of the local community, when confronted with an emergency situation during pregnancy and childbirth; c) investigate the barriers that women face to reach the health center; and d) analyze the role of the system formal health care in pregnancy and normal and abnormal delivery, including the use of Nursing Homes Waiting for Pregnant Women by the community	Mixed methods
Spaans (1998)	Zimbabwe	Investigate the use and effective-ness of maternity waiting homes	Brief Communication

Sri (2020)	Indonesia	To see how the process of socializing maternal waiting home is in suppressing maternal mortality Rate in Wonogiri Regency	Qualitative
Stekelenburg (2006)	Zambia	A systematic literature review of effectiveness of maternity waiting homes is presented	Literature review
Suarez (2005)	Nicaragua	Determine the contribution of the maternal home and extension strategies	Quantitative
Sundu (2017)	Malawi	Explore antenatal mothers' experiences of staying in the maternity waiting homes in Thyolo District	Qualitative
Suwedi-Kapesa (2018)	Malawi	To assess quality of care in the maternity waiting homes in Mulanje, Malawi	Qualitative
Swanson (2019)	Democratic Republic of Congo (DRC) Guatemala Kenya, Pakistan Zambia	To review the First Look Study, reconsidering the assumptions upon which it was built	Mixed methods
Tiruneh (2016)	Ethiopia	Assess the situation of maternity waiting homes and the experiences and challenges of mothers using waiting homes	Mixed methods
Tiruneh (2019)	Ethiopia	Addresses gaps in maternity waiting homes as well as their association with perinatal mortality and obstetric complication rates	Mixed methods
Urwin (2017)	Malawi	To gather information about one Malawian maternity waiting home and the women who used it	Quantitative

Uzochukwu (2004)	Nigeria	Determine the patterns of utilization of Maternal Health Services (MHS), (antenatal clinic, delivery, and post-natal services) and willingness to stay in a maternity waiting home by women	Quantitative
Van den Heuvel (1999)	Zimbabwe	Determine the coverage of antenatal and delivery care and the determinants of non-compliance in a rural area of Zimbabwe to improve the quality and efficiency of maternal health care services	Quantitative
van Lonkhuijzen (2003)	Zambia	Assess the results from the use of a maternity waiting home. A comparison of the risk status and pregnancy outcomes in women staying as maternal waiting home with those women who give birth in hospital after direct admission	Quantitative
van Lonkhuijzen (2011)	Zambia Zimbabwe Papua New Guinea	To explore three delays in safe motherhood in different contexts	Quantitative
van Rijn (2013)	Tanzania	To identify (contextual) factors that influence women to decide to make use of a maternity waiting home (MWH) and factors that influence satisfaction with the MWH use	Mixed methods
Vermeiden (2017)	Global	Discusses maternity waiting homes as part of a program for maternal and neonatal health improvements	Commentary
Vermeiden (2018)	Ethiopia	Describe factors and perceived barriers associated with potential utilization of a maternity waiting home among recently delivered and pregnant women in Southern Ethiopia	Quantitative
Vermeiden (2018)	Ethiopia	Describe facilitators for maternity waiting home (MWH) utilisation from the perspectives of MWH users and health staff	Mixed methods

Vian (2017)	Zambia	To estimate willingness to pay for maternity waiting home services based on a survey of 167 women, men, and community elders	Quantitative
Wayte (2008)	Timor-Leste	Assess the health sector's response to reproductive health needs during the crisis	Qualitative
Wester (2018)	Ethiopia	To describe best practices to address the socio-cultural barrier to the uptake of reproductive, maternal, and neonatal health services in the pastoralist communities of Afar, Ethiopia	Qualitative
Wild (2012)	Timor-Leste	Examine the impact of maternity waiting homes on the use of facility-based birthing services for women in two remote districts of Timor-Leste	Mixed methods
Wilson (1997)	Ghana	Identify factors related to maternal death in the study areas. To identify factors that affect access to care and to explore knowledge, attitudes, and practices with regard to complications of pregnancy and delivery	Qualitative
World Health Organisation (2015)	Namibia	Documentary focuses on one of the core components of PARMaCM, the importance of keeping pregnant women and young mothers safe via the construction of maternity waiting homes in Namibia	Documentary film
Yismaw (2018)	Ethiopia	Assess intention to use maternity waiting home among pregnant women in Mettu district, southwest Ethiopia	Quantitative

Appendix D MWH-facility Birth Intervention Realist Synthesis Interview Guide for Programme Implementers, Designers and Policy Makers (V2)

A. **Introductory Interview Questions**

1. Can you tell me a bit about the MWH in your area and your involvement with it?
   a. How long has the MWH been running? What is the MWH like?
   b. How long have you been involved with it? What is your role?
   c. Who is likely to use it (first-time moms, women living far away, OB complications)? How are women using it (length of stay, with a companion, with kids)?
2. What do you consider the outcomes of the MWH programme to have been for women who have used it? How about for their families? Their communities? Have there been any good/bad outcomes?

B. Testing PTs: Implementer

1. PT 1: Some people think that allowing cultural practices in the MWH and health facilities, like traditional birth ceremonies/traditional food preparation and accompaniment by a traditional birth attendant, increases MWH use and satisfaction in use. What do you think? Why do you think that is? What is it about traditional practices that impacts use and satisfaction?

2. PT 1: We've read that young women and first-time moms are especially influenced by the information, encouragement or recommendation they receive from others about MWHs, as they decide whether or not to use an MWH. We are trying to understand what is it about the information that they may receive from nurses at antenatal care visits or friends and family that influences their intention to use or not use an MWH. Do you have any insight you could share about how the information women receive about MWHs may be shaping women's desire to use the services?

3. PT 2: Another idea we've come across in the literature is that when poverty and hunger are common, and women and families are expected to bring supplies to the MWH (food, baby clothes, medical supplies) then often women will not use the MWHs. Is the problem only a financial issue, (if there was food provided for women in need, would that solve the problem) or are there other factors preventing MWH use in this situation? What is it about a lack of supplies that prevents MWH use?

4. PT 2: Do you think there is a link between MWHs providing health education and/or skills programming and women's desire to use MWHs and promote their use? What is about health education/skills programming that motivates women? Are there certain groups of women for whom this is an especially large draw? Why?

5. PT 2: Some say if MWHs are exclusively used by pregnant or postpartum women and infants and their companions it increases MWH acceptability. Do you think that is true? Why or why not?

6. PT 3: We've read that when an MWH is accepted as an essential component of the healthcare system by clinicians and policy makers and roles and responsibilities for the MWH are well-defined, then MWH staff have increased employee satisfaction. Do you think this is true? What is about the MWH being accepted as an essential component of the healthcare system that impacts employee job satisfaction?

7. PT3: We wonder if MWH data collection/reporting (number of women using the home, LOS, number/type of complicated pregnancies) were routinely sent to the affiliated health facility, whether that would improve MWH integration into the healthcare system. What do you think? Could data reporting be linked to increased MWH integration in the health care system? If so, how and why would routine information about the MWH services impact its integration into the health care system?

8. PT 4: It's been said that if women have had a positive experience with MWHs and the healthcare system, or have heard of others' positive experiences, then they will recommend them to others and use them again themselves. Do you think that is true? What do you think it is about a positive MWH or health facility experience that encourages use?

9. PT 4: The literature shows that if MWH services have widespread adoption in a community then there can be a social expectation that women will use an MWH leading to steady use. Is this apparent in your context? What is it about social expectation for use that motivates women?

10. Another idea is that if local or national health policy prioritises MWH programmes and if there is a clear implementation strategy health workers and communities will view MWHs as an important and indispensable component of the maternal and child health care continuum. Do you think this is true? Why or why not?

11. Some say that if health policy prioritises MWH programmes then this will lead to support, cooperation and participation in MWH implementation by community members and organisations and healthcare facility staff. Do you see a connection between 1) MWH policy and 2) community or health staff engagement and support for MWH implementation? Why do you think there is a link between the two?

B. **Concluding Questions**

1. What aspect of implementation made a difference to how it worked and why?
2. We have read about MWHs working differently in different places. What is it about this location that makes it work [well, less well]?
3. If you could change something about the MWH programme you are involved with, to make it work more effectively, what would you change and why?

Appendix E Initial programme theories and sources of evidence associated with each PT plus examples of resources

Examples of resources	**Associated Initial Programme Theories (IPTs) and sources of evidence**
Theme 1: Engaging stakeholders to develop, integrate, sustain, and scale up MWH-facility birth interventions	
CMOC 1: Generating evidence of MWH-facility birth intervention effectiveness Examples of evidence sources − Implementing stakeholder conducted formative research using interviews and focus groups with community members, including gatekeepers. − Maternity waiting home staff maintained records regarding service utilisation including women's duration of stay at the home, transfer to the delivery ward, postpartum stay, participation in educational, and skill acquisition activities − Maternity waiting home staff maintained an inventory of resources within the home such as beddings and utensils − Maternity waiting home staff conducted regular assessments of user experiences through client satisfaction surveys, evaluations and feedback meetings with community members − Implementing stakeholders presented local data to health system stakeholders on a regular basis, e.g. quarterly basis	**IPT:** 2.22, 3.21, 3.23 **Sources** 10 secondary sources: 1-10 Six interviews: one from Liberia, four from Zambia, one from Zimbabwe . **Sources representing evidence from:** Asia Pacific, Cuba, Ethiopia, Liberia, Nicaragua, Zambia, Zimbabwe
CMOC 2: Galvanizing government buy-in for MWH-facility birth implementation and sustainability Examples of resources mobilised by stakeholders within relevant MDAs: − MDAs mobilised health system contributions such as cooking utensils, bedding, mosquito nets, and staff for a MWH − MDAs garnered the support of external aid partners, local health administrators and community members − MDAs facilitated community access through community leaders in communities resistant to change − MDAs allowed community outreach channels within the formal health system such as community health workers, health extension worker and other local development structures to support awareness and generate demand for MWH	**IPT:** 3.23, 5.23, 5.24, 6.21 **Sources** 18 secondary sources: 1 2 5 7 11-21 Ten interviews: two from Ethiopia, one from Liberia, two from Mozambique, and five from Zambia **Sources representing evidence from:** Asia Pacific, Cuba, Ethiopia, Liberia, Mozambique, Namibia, Nicaragua, Peru Zambia

− MDAs developed policies with standard guidelines regarding data collection and reporting and protocols regarding staff roles and responsibilities and culturally appropriate care	
CMOC 3: Empowering communities for MWH-facility birth implementation and sustainability Examples of resources mobilised by the community − Community gatekeepers mobilised individuals, community groups, local businesses, and churches for constructing and maintaining the intervention through in kind contributions of money, livestock, crop grains, baby clothes for pregnant women and babies, and food. − Community gatekeepers used their influence to support demand creation efforts by creating awareness and fostering the community's trust in the intervention − Management and governance committee members given entrepreneurship, leadership and advocacy training − Management and governance committees had clear role descriptions, records, audits and membership criteria − Income generated through community-driven businesses such as gardens, a maize mill, sunflower oil extraction, and soap making was used to pay MWH staff and volunteer allowances − Management committee maintained feedback processes with the community	**Contributing IPT** 2.11, 2.21, 2.22, 2.17, 3.11, 4.11, 4.13, 4.15, 5.21, 5.22, 5.23, 5.24, 6.21 **Sources** 21 secondary sources: 2 5 7-9 11 13 18 22-33 Eight interviews: two from Ethiopia, one from Liberia, one from Mozambique, and four from Zambia **Sources representing evidence from:** Asia Pacific region, Bangladesh, Colombia, Cuba, Ethiopia, Liberia, Malawi, Mexico, Mozambique, Namibia, Nicaragua, Uganda, Zambia
Theme 2: Promoting and enabling MWH-facility birth utilisation	
CMOC 4: Generating demand for MWH Examples of demand creation information and approaches − Antenatal care providers and other stakeholders involved in demand generation should provide pregnant women with adequate information about the expected length of stay at a MWH − Males from male dominated communities were targeted with information and education to reframe their perspectives and garner their support − Mothers-in laws in patrilineal communities were targeted with information to gain their approval and support − Implementers created community based support groups for women of childbearing age in male dominated communities where pregnant women interacted with previous MWH users who shared positive reviews of their stay − Traditional leaders established bylaws penalising home deliveries to persuade male partners from male dominated communities to support women to have a MWH-facility birth	**Contributing IPT:** 1.11, 1.12, 1.14, 1.21, 2.14, 4,11, 4.14, 4.16, 4.17 **Sources** 47 secondary sources: 1 2 4 5 9 13 15 16 22-24 26 28 30 31 33-64 Ten interviews: two from Ethiopia, one from Liberia, three from Mozambique, three from Zambia, one from Zimbabwe **Sources representing evidence from:** Asia Pacific region, Bangladesh, Colombia, Cuba, Ethiopia, Eritrea, Ghana, Guatemala, Honduras, Kenya, Indonesia, Lao People's Democratic

experience – Implementers failed to provide services and information to change negative perceptions of facility birth services within a community	Republic, Lesotho, Liberia, Malawi, Mozambique, Namibia, Nepal, Nicaragua People's Democratic Republic, Peru, Sierra Leone, South Africa, Tanzania, Timor Leste, Uganda, Zambia, Zimbabwe
CMOC 5: The need to removing roadblocks to MWH-facility birth use Examples of resources – Implementers enlisted the support of transport union executives in finding solutions to support women to get to an MWH at low or no cost – Implementers provided economic empowerment to women from male dominated communities through income generating activities and savings groups to enable women to afford a MWH-facility birth experience – Maternity waiting homes allowed women to bring their children with them	**Contributing IPTs:** 1.12, 1.14, 1.21, 2.11 2.12 **Sources** 31 secondary sources: 1 3 9 10 13 34-36 40 44 46 48-51 61 64-78 Six interviewees: one from Liberia, two from Mozambique, and three from Zambia **Sources representing evidence from:** Cuba, Ethiopia, Guatemala, Kenya, Lao People's Democratic Republic, Liberia, Malawi, Mozambique, Namibia, Nepal, Nicaragua, Sierra Leone, Tanzania, Timor Leste, Uganda, Zambia, Zimbabwe
Theme 3: Creating positive and memorable MWH-facility birth user experiences	
CMOC 6: Creating a home-like environment within a MWH Examples of resources – MWHs were designed to emulate traditional homesteads of the targeted community – MWHs should provide culturally appropriate security, e.g. male security officers to guard the MWH may be considered culturally inappropriate – MWHs provided recreational spaces, access to a television, art projects, games, and opportunities to exercise as contextually appropriate – Provided meals that were prepared in a culturally appropriate manner. Companions could help women to source and prepare 'homelike' meals for women – MWHs allowed cultural pastime activities such as drumming, singing, and dancing	**Contributing IPT:** 1.12, 1.14, 1,21, 2.11, 2.12, 2.13, 2.15, 2.16, 4.14 **Sources** 51 secondary sources: 1 4 7 8 12 16 20 22-24 27 28 30-33 35 36 38 40-43 45 48 50 51 67 69 76 78-99 Eight interviews: two from Ethiopia, one from Liberia, four from Zambia, and one from Zimbabwe

− MWHs allowed cultural birth-related, celebratory ceremonies such as tea ceremonies	**Sources representing evidence from:** Bangladesh, Brazil, Colombia, Cuba, Eritrea, Ethiopia, Ghana, Guatemala, Honduras, Kenya, Lao People's Democratic Republic, Lesotho, Peru, Liberia, Malawi, Nepal, Nicaragua, Sierra Leone, South Africa, Timor Leste, Uganda, Zambia, Zimbabwe
CMOC 7: Circumventing incidents of discrimination and shaming in MWH Examples of resources − MWH-facility birth services were provided free of charge − MWHs provided food for duration of women's stay at MWH − MWHs should provide all necessary supplies such as bleach and clothing − MWHs should not require parental consent for young women and respecting their right to confidentiality − MWH staff speak indigenous language(s)	**Contributing IPT:** 4.15 **Sources** 17 secondary sources: 2 8-10 16 26 28 31 38 44 51 52 64 69 70 76 100 Six interviews: two from Ethiopia and four from Zambia **Sources representing evidence from:** Asia Pacific, Ethiopia, Guatemala, Lao People's Democratic Republic, Liberia, Malawi, Mozambique, Nepal, Nicaragua, Tanzania, Zambia, Zimbabwe
CMOC 8: Empowering MWH users through education and skills building Examples of resources − MWHs provided SRMNH education such as recognizing symptoms and signs of complication and labour, causes of perinatal maternal mortality, postnatal rest, new-born care, nutritional counselling, family planning, and HIV/AIDS education including prevention of mother-to-child transmission − MWHs provided skills based training such as fish farming, gardening, sewing, and making soap	**Contributing IPT:** 2.17 **Supporting sources** 12 secondary sources: 3 5 12 22-24 28 94 100-102 Six interviews: one from Liberia, four from Zambia, one from Zimbabwe **Sources representing evidence from:** Bangladesh, Colombia, Cuba, Liberia, Ethiopia, Guatemala, Malawi, Nicaragua, Uganda, Zambia, Zimbabwe

CMOC 9: Linking human and material resources to MWH and MWH affiliated facility Examples of resources − Obstetric providers should be available at all hours of the day to care for and monitor MWH users − The maternity ward should have an adequate number of delivery beds to accommodate increased caseload − An ambulance(s) should be available to transport women from the health facility to higher levels of care − Obstetric providers or MWH staff should take the responsible for scheduling and dispatching the ambulance − The health facility should be adequately equipped with medical supplies, drugs and technologies − Health workers should receive training regarding the importance of compassionate, dignified, or humanised care − The health facility should allow traditional birthing practices including traditional birthing positions − Health providers should be fairly compensated for their clinical work, including caring for MWH users	**Contributing IPT:** 2.21, 3.11, 3.21, 5.25 **Sources** 27 secondary sources: 1 9 12 22 23 29 31 35 38 42-44 48 50 52 70 76 82 84 85 89 98 101 103-106 Four interviews: two from Liberia and two from Zambia **Sources representing evidence from:** Bangladesh, Brazil, Colombia, Cuba, Eritrea, Ethiopia, Guatemala, Kenya, Lesotho, Liberia, Malawi, Mozambique, Nepal, Nicaragua, Tanzania, Timor-Leste, Uganda, Zambia, Zimbabwe

REFERENCES

1. Gaym A, Pearson L, Soe Khynn Win W. Maternity Waiting Homes in Ethiopia--Three Decades Experience. *Ethiop Med J* 2012;50(3):209-19.
2. Holmes W, Kennedy E. Reaching Emergency Obstetric Care: Overcoming the 'Second Delay'. 2010
3. Bragg M, Salke R, Taraneh, et al. No Child or Mother Left Behind; Implications for the Us from Cuba's Maternity Homes. *Health promotion perspectives* 2012;2(1):9-19. doi: 10.5681/hpp.2012.002
4. Bonawitz R, McGlasson Kathleen L, Kaiser Jeanette L, et al. Quality and Utilization Patterns of Maternity Waiting Homes at Referral Facilities in Rural Zambia: A Mixed-Methods Multiple Case Analysis of Intervention and Standard of Care Sites. *PLoS One* 2019;14(11):e0225523. doi: https://dx.doi.org/10.1371/journal.pone.0225523
5. Jarquín Karen L. Aportes De La Casa Materna “Las Flores” Del Municipio El Cuá, En La Prevención De La Mortalidad Materna, Durante El Periodo 2012 Al Primer Semestre Del Año 2015, 2015.
6. Tiruneh GT, Taye BW, Karim AM, et al. Maternity Waiting Homes in Rural Health Centers of Ethiopia: The Situation, Women’s Experiences and Challenges. *Ethiopian Journal of Health Development* 2016;30(1):19-28.

7. Gorry C. Cuban Maternity Homes: A Model to Address at-Risk Pregnancy. *MEDICC Rev* 2011;13(3):12-5.
8. Ruiz Marta J, van D, Marieke G, et al. Barriers to the Use of Maternity Waiting Homes in Indigenous Regions of Guatemala: A Study of Users' and Community Members' Perceptions. *Culture, health & sexuality* 2013;15(2):205-18. doi: https://dx.doi.org/10.1080/13691058.2012.751128
9. Lori Jody R, Munro-Kramer Michelle L, Mdluli Eden A, et al. Developing a Community Driven Sustainable Model of Maternity Waiting Homes for Rural Zambia. *Midwifery* 2016;41:89-95. doi: https://dx.doi.org/10.1016/j.midw.2016.08.005
10. Scott NA, Vian T, Kaiser JL, et al. Listening to the Community: Using Formative Research to Strengthen Maternity Waiting Homes in Zambia. *PLoS One* 2018;13(3):e0194535. doi: http://dx.doi.org/10.1371/journal.pone.0194535
11. Perú Ministerio de Salud. Dirección General de Promoción de l, Salud. Casas De Espera Materna: Modelo Para La Implementación. Documento Técnico. 2006:59-59.
12. Friedman Lily E. Give Life without Losing Life: The Casa Materna of Matagalpa and the Struggle to Prevent Maternal Death. 2008
13. World Health Organization. Maternity Waiting Homes in Namibia: Hope for the Future Online: World health Organisation
2015 [Available from: https://www.youtube.com/watch?v=yiUPw9h4vN8 accessed August 2021.
14. Getachew B, Liabsuetrakul T. Health Care Expenditure for Delivery Care between Maternity Waiting Home Users and Nonusers in E Thiopia. *The International journal of health planning and management* 2019
15. Rojas-Ochoa F. Cuba’s Maternity Homes, 1962–2017: History, Evolution, Challenges. *International Journal of Cuban Health and Medicine* 2019;21(4)
16. Tiruneh, Gizachew Tadele Belaynew W, Taye, et al. Maternity Waiting Homes in Rural Health Centers of Ethiopia: The Situation, Women's Experiences and Challenges. *Ethiopian Journal of Health Development* 2016;30(1):19-28.
17. Bonawitz R, McGlasson Kathleen L, Kaiser Jeanette L, et al. Maternity Waiting Home Use by Hiv-Positive Pregnant Women in Zambia: Opportunity for Improved Prevention of Maternal to Child Transmission of Hiv. *International journal of MCH and AIDS* 2019;8(1):1-10. doi: https://dx.doi.org/10.21106/ijma.267
18. Republic of Mozambique. Pregnant Women Waiting House Strategy. 2009
19. World Health Organization African Region. Maternity Waiting Homes in Namibia: Hope for the Future: World health Organisation, 2015.
20. Bruns DP, Pawloski L, Robinson C. Can Adoption of Cuban Maternity Care Policy Guide the Rural United States to Improve Maternal and Infant Mortality? *World Medical & Health Policy* 2019;11(3):316-30. doi: 10.1002/wmh3.312
21. López Roxana G, Bernal Zoe D, Ochoa Francisco Raúl R, et al. Los Hogares Maternos. *La experiencia cubana hacia la transversalización de género y etnicidad en salud [Internet] Cuba: OPAS* 2015
22. Figa'-Talamanca I. Maternal Mortality and the Problem of Accessibility to Obstetric Care; the Strategy of Maternity Waiting Homes. *Soc Sci Med* 1996;42(10):1381-90. doi: http://dx.doi.org/10.1016/0277-9536(95)00286-3
23. Schooley J, Mundt C, Wagner P, et al. Factors Influencing Health Care-Seeking Behaviours among Mayan Women in Guatemala. *Midwifery* 2009;25(4):411-21.
24. Clensay Maruja A. " Mis Derechos, Mi Matriz": An Evaluation of the Women's Organization" Casa Materna," Ocotal, Nicaragua, 2007.
25. Garcia P, Cortez R. Maternity Waiting Homes and Institutional Birth in Nicaragua: Policy Options and Strategic Implications. *Int J Health Plann Manage* 2012;27(2):150-66. doi: http://dx.doi.org/10.1002/hpm.1107

26. Lori JR, Munro ML, Rominski S, et al. Maternity Waiting Homes and Traditional Midwives in Rural Liberia. *International Journal of Gynecology & Obstetrics* 2013;123(2):114-18. doi: http://dx.doi.org/10.1016/j.ijgo.2013.05.024
27. Japanese Organization for International Cooperation in Family Planning, Africa Regional Office (JOICFP); Planned Parenthood Association of Zambia (PPAZ). Maternity Waiting House Design Guide. In: Mother Architecture, ed. Tokyo: JOICFP, 2015.
28. Chibuye Peggy S, Bazant Eva S, Wallon M, et al. Experiences with and Expectations of Maternity Waiting Homes in Luapula Province, Zambia: A Mixed-Methods, Cross-Sectional Study with Women, Community Groups and Stakeholders. *BMC Pregnancy Childbirth* 2018;18(1):42. doi: https://dx.doi.org/10.1186/s12884-017-1649-1
29. Scott NA, Henry EG, Kaiser JL, et al. Factors Affecting Home Delivery among Women Living in Remote Areas of Rural Zambia: A Cross-Sectional, Mixed-Methods Analysis. *International Journal of Women's Health* 2018;Volume 10:589-601. doi: 10.2147/ijwh.s169067
30. Lori Jody R, Munro-Kramer Michelle L, Shifman J, et al. Patient Satisfaction with Maternity Waiting Homes in Liberia: A Case Study During the Ebola Outbreak. *Journal of midwifery & women's health* 2017;62(2):163-71. doi: https://dx.doi.org/10.1111/jmwh.12600
31. Calero G, María T, Muñoz O, et al. Factores Asociados a La Asistencia De Embarazadas a La Casa Materna Adilia Trejos, San Juan De Oriente, Masaya. Ii Semestre 2016, 2017.
32. Wester KC, Medhanyie AA, Spigt M, et al. Best Practices for Addressing Socio-Cultural Barriers to Reproductive, Maternal and Neonatal Health Service Utilization among Women from Pastoralist Communities of Afar, Ethiopia. *The Ethiopian Journal of Health Development* 2018;32(Special Is)
33. Lori JR, Perosky JE, Rominski S, et al. Maternity Waiting Homes in Liberia: Results of a Countrywide Multi-Sector Scale-Up. *PLoS One* 2020(6):e0234785. doi: https://doi.org/10.1371/journal.
34. Wilson JB, Collison AHK, Richardson D, et al. The Maternity Waiting Home Concept: The Nsawam, Ghana Experience. *International Journal of Gynecology & Obstetrics* 1997;59:S165-S72. doi: https://doi.org/10.1016/S0020-7292(97)00162-8
35. Sialubanje C, Massar K, van der P, et al. Improving Access to Skilled Facility-Based Delivery Services: Women's Beliefs on Facilitators and Barriers to the Utilisation of Maternity Waiting Homes in Rural Zambia. *Reproductive Health* 2015;12(1):1-13. doi: 10.1186/s12978-015-0051-6
36. Kyokan M, Whitney-Long M, Kuteh M, et al. Community-Based Birth Waiting Homes in Northern Sierra Leone: Factors Influencing Women's Use. *Midwifery* 2016;39:49-56. doi: https://dx.doi.org/10.1016/j.midw.2016.04.013
37. Singh K, Speizer I, Kim ET, et al. Reaching Vulnerable Women through Maternity Waiting Homes in Malawi. *International Journal of Gynecology & Obstetrics* 2017;136(1):91-97. doi: 10.1002/ijgo.12013
38. Urwin L. Maternity Waiting Homes-a Solution for Malawian Mothers? *African Journal of Midwifery & Women's Health* 2017;11(3):147-51. doi: 10.12968/ajmw.2017.11.3.147
39. Yismaw W. Intention to Use Maternity Waiting Home among Pregnant Women in Mettu District. *South-western Ethiopia* 2018
40. Vermeiden T, Schiffer R, Langhorst J, et al. Facilitators for Maternity Waiting Home Utilisation at Attat Hospital: A Mixed-Methods Study Based on 45 Years of Experience. *Trop Med Int Health* 2018;23(12):1332-41.
41. Vermeiden T, Braat F, Medhin G, et al. Factors Associated with Intended Use of a Maternity Waiting Home in Southern Ethiopia: A Community-Based Cross-Sectional Study. *BMC Pregnancy Childbirth* 2018;18(1):38. doi: 10.1186/s12884-018-1670-z
42. Mramba L, Nassir FA, Ondieki C, et al. Reasons for Low Utilization of a Maternity Waiting Home in Rural Kenya. *International Journal of Gynecology & Obstetrics* 2010;108(2):152-53. doi: http://dx.doi.org/10.1016/j.ijgo.2009.08.029

43. Partners in Health. The Role of Maternity Waiting Homes as Part of a Comprehensive Maternal Reduction Strategy in Lesotho Partners in Health Report. Boston, MA, 2013.
44. van R, Maaike J. Factors and Perceptions That Influence Women to Use a Maternal Waiting Home (Mwh) in Ifakara, Tanzania. 2013
45. Penn-Kekana L, Pereira S, Hussein J, et al. Understanding the Implementation of Maternity Waiting Homes in Low- and Middle-Income Countries: A Qualitative Thematic Synthesis. *BMC Pregnancy Childbirth* 2017;17(1):269. doi: https://dx.doi.org/10.1186/s12884-017-1444-z
46. Ngoma-Hazemba A, Hamomba L, Silumbwe A, et al. Community Perspectives of a 3-Delays Model Intervention: A Qualitative Evaluation of Saving Mothers, Giving Life in Zambia. *Global Health-Science and Practice* 2019;7:S139-S50. doi: 10.9745/ghsp-d-18-00287
47. The Importance of Socializing Maternity Waiting Home in the Attempt of Reducing Maternal Mortality Rate in Wonogiri Regency. Third International Conference on Social Transformation, Community and Sustainable Development (ICSTCSD 2019); 2020 2020. Atlantis Press.
48. Lampson D, Kerry, Peralta F, et al. Principales Factores Que Influyen En La Poca Asistencia a La Casa Materna Por Parte De Las Embarazadas De Las Comunidades De Puerto Cabezas, Raan, Abril-Septiembre 2002, 2002.
49. Powell SM. Maternity Waiting Homes and the Impact on Maternal Mortality in Developing Countries : A Rapid Evidence Assessment. 2019
50. Kebede KM, Mihrete KM. Factors Influencing Women’s Access to the Maternity Waiting Home in Rural Southwest Ethiopia: A Qualitative Exploration. *BMC Pregnancy Childbirth* 2020;20
51. Lori Jody R, Wadsworth Anna C, Munro Michelle L, et al. Promoting Access: The Use of Maternity Waiting Homes to Achieve Safe Motherhood. *Midwifery* 2013;29(10):1095-102. doi: 10.1016/j.midw.2013.07.020
52. Solidar M. Avaliação Da Situação Materna E Neo-Natal Das Comunidades Do Distrito De Chiure, 2013:79.
53. Vermeiden T, Stekelenburg J. Commentary: Maternity Waiting Homes as Part of an Integrated Program for Maternal and Neonatal Health Improvements: Women’s Lives Are Worth Saving. *J Midwifery Women’s Health* 2017;62(2):151-54.
54. Nhindiri P, Munjanja S, Zhanda I, et al. A Community-Based Study on Utilisation of Maternity Services in Rural Zimbabwe. *Afr J Health Sci* 1996;3(4):120-25.
55. Kaiser Jeanette L, Fong Rachel M, Ngoma T, et al. The Effects of Maternity Waiting Homes on the Health Workforce and Maternal Health Service Delivery in Rural Zambia: A Qualitative Analysis. *Human Resources for Health* 2019;17(1):93. doi: 10.1186/s12960-019-0436-7
56. Andemichael G, Haile B, Kosia A, et al. Maternity Waiting Homes: A Panacea for Maternal/Neonatal Conundrums in Eritrea. *Journal of the Eritrean Medical Association* 2009;4(1)
57. Uzochukwu BSC, Nwagbo DFE, Onwujekwe OE, et al. Patterns and Determinants of Utilization of Maternal Health Services: Implications for Reducing Maternal Mortality and Morbidity in South-East, Nigeria. *Journal of College of Medicine* 2004;9(1):20-24.
58. Laguna A, Jaxira K, Romero D, et al. Conocimientos, Actitudes Y Prácticas De Las Mujeres Embarazadas Y Puérperas En Relación Al Uso De La Casa Materna" Doña Maurita" Nueva Guinea En El Período De Julio 2014 a Octubre De 2014, Nueva Guinea, 2015.
59. Martey JO, Djan JO, Twum S, et al. Utilization of Maternal Health Services in Ejisu District, Ghana. *West Afr J Med* 1995;14(1):24-28.
60. Rajaram P, Agarwal A, Swain S. How Safe Is Motherhood in India? *Indian J Matern Child Health* 1993;4(4):94-6.
61. Singh K, Speizer Ilene S, Kim Eunsoo T, et al. Evaluation of a Maternity Waiting Home and Community Education Program in Two Districts of Malawi. *BMC Pregnancy Childbirth* 2018;18(1):457. doi: https://dx.doi.org/10.1186/s12884-018-2084-7

62. Endalew Getnet B, Gebretsadik Lakew A, Gizaw Abraham T. Intention to Use Maternity Waiting Home among Pregnant Women in Jimma District, Southwest Ethiopia. *Global Journal of Medical Research* 2017
63. Ngoma T, Asiimwe AR, Mukasa J, et al. Addressing the Second Delay in Saving Mothers, Giving Life Districts in Uganda and Zambia: Reaching Appropriate Maternal Care in a Timely Manner. *Global Health-Science and Practice* 2019;7:S68-S84. doi: 10.9745/ghsp-d-18-00367
64. Endayehu M, Yitayal M, Debie A. Intentions to Use Maternity Waiting Homes and Associated Factors in Northwest Ethiopia. *BMC Pregnancy Childbirth* 2020;20(1):281. doi: 10.1186/s12884-020-02982-0 [published Online First: 2020/05/13]
65. Sialubanje C, Massar K, Hamer Davidson H, et al. Personal and Environmental Factors Associated with the Utilisation of Maternity Waiting Homes in Rural Zambia. *BMC Pregnancy Childbirth* 2017;17(1):136. doi: https://dx.doi.org/10.1186/s12884-017-1317-5
66. Nabudere H, Asiimwe D, Amandua J. Improving Access to Skilled Attendance at Delivery: A Policy Brief for Uganda. *Int J Technol Assess Health Care* 2013;29(2):207-11. doi: http://dx.doi.org/10.1017/S0266462313000081
67. Abdulkadir, Rukia W. Awareness, Attitude Towards and Utilization of Maternity Waiting Home by Mothers in Merti Sub County, Isiolo County, 2017.
68. Kurji J, Gebretsadik Lakew A, Wordofa Muluemebet A, et al. Factors Associated with Maternity Waiting Home Use among Women in Jimma Zone, Ethiopia: A Multilevel Cross-Sectional Analysis. *BMJ open* 2019;9(8):e028210. doi: https://dx.doi.org/10.1136/bmjopen-2018-028210
69. Eckermann E, Deodato G. Maternity Waiting Homes in Southern Lao Pdr: The Unique 'Silk Home'. *J Obstet Gynaecol Res* 2008;34(5):767-75.
70. Shrestha SD, Rajendra PK, Shrestha N. Feasibility Study on Establishing Maternity Waiting Homes in Remote Areas of Nepal. *Regional Health Forum* 2007;11(2)
71. Mosley PD, Saruni K, Lenga B. Factors Influencing Adoption of Facility-Assisted Delivery - a Qualitative Study of Women and Other Stakeholders in a Maasai Community in Ngorongoro District, Tanzania. *BMC Pregnancy Childbirth* 2020;20 doi: https://doi.org/10.1186/s12884-020-2728-2
72. Buser JM. Cultural Practices, Knowledge, and Beliefs of Newborn Care and Health-Seeking in Rural Zambia. University of Michigan, 2019.
73. Dari Atika T, Zulfendri Z, Aulia D. Association between Socialization and the Use of Maternity Waiting Home in East Aceh, Indonesia. *Journal of Health Policy and Management* 2019;4(2):86-90.
74. Fogliati P, Straneo M, Mangi S, et al. A New Use for an Old Tool: Maternity Waiting Homes to Improve Equity in Rural Childbirth Care. Results from a Cross-Sectional Hospital and Community Survey in Tanzania. *Health Policy Plan* 2017;32(10):1354-60. doi: https://dx.doi.org/10.1093/heapol/czx100
75. Spaans WA, Van R, Van W, et al. A Maternity Waiting Home Experience in Zimbabwe. *International Journal of Gynecology and Obstetrics* 1998;61(2):179-80.
76. Fraser B. Peru Makes Progress on Maternal Health. *The Lancet* 2008;371(9620):1233-34. doi: 10.1016/s0140-6736(08)60541-3
77. van L, Luc, Stegeman M, et al. Use of Maternity Waiting Home in Rural Zambia. *African journal of reproductive health* 2003;7(1):32-6.
78. Stekelenburg J, van L, Spaans W, et al. Maternity Waiting Homes in Rural Districts in Africa: A Cornerstone of Safe Motherhood? *Current Women's Health Reviews* 2006;2(4):235-38. doi: http://dx.doi.org/10.2174/157340406778699914

79. McIntosh N, Gruits P, Oppel E, et al. Built Spaces and Features Associated with User Satisfaction in Maternity Waiting Homes in Malawi. *Midwifery* 2018;62:96-103. doi: https://dx.doi.org/10.1016/j.midw.2018.03.020
80. Bergen N, Abebe L, Asfaw S, et al. Maternity Waiting Areas – Serving All Women? Barriers and Enablers of an Equity-Oriented Maternal Health Intervention in Jimma Zone, Ethiopia. *Global Public Health* 2019;14(10):1509-23. doi: 10.1080/17441692.2019.1597142
81. Wild K, Barclay L, Kelly P, et al. The Tyranny of Distance: Maternity Waiting Homes and Access to Birthing Facilities in Rural Timor-Leste. *Bull World Health Organ* 2012;90:97-103.
82. Sundu S, Mwale Omero G, Chirwa E. Antenatal Mothers' Experience of Staying in a Maternity Waiting Home at Malamulo Mission Hospital in Thyolo District Malawi: A Qualitative, Exploratory Study *Women's Heal Gynecol* 2017;3(1):10.
83. Fleites Rafael C, Martínez Ledis V, López Leysa Margarita G. Historia De Los Hogares Maternos En Villa Clara. *Medicentro Electrónica* 2009;13(4)
84. Clementino Maria Ofélia S, Silva José Vitor d. Os Significados E Os Motivos De Dar À Luz Em Casa De Parto: As Representações Sociais No Contexto Bioético De Puérperas De São Paulo, Sp. *The World of Health* 2008;32(4):452-57.
85. Suwedi-Kapesa Leticia C, Nyondo-Mipando Alinane L. Assessment of the Quality of Care in Maternity Waiting Homes (Mwhs) in Mulanje District, Malawi. *Malawi medical journal : the journal of Medical Association of Malawi* 2018;30(2):103-10. doi: https://dx.doi.org/10.4314/mmj.v30i2.10
86. Van den H, O A, De M, et al. Use of Maternal Care in a Rural Area of Zimbabwe: A Population-Based Study. *Acta Obstet Gynecol Scand* 1999;78(10):838-46. doi: 10.1034/j.1600-0412.1999.781002.x
87. Lori Jody R, Boyd Carol J, Munro-Kramer Michelle L, et al. Characteristics of Maternity Waiting Homes and the Women Who Use Them: Findings from a Baseline Cross-Sectional Household Survey among Smgl-Supported Districts in Zambia. *PLoS One* 2018;13(12):e0209815. doi: https://dx.doi.org/10.1371/journal.pone.0209815
88. Vian T, White EE, Biemba G, et al. Willingness to Pay for a Maternity Waiting Home Stay in Zambia. *Journal of midwifery & women's health* 2017;62(2):155-62.
89. Sialubanje C, Massar K, Kirch EM, et al. Husbands' Experiences and Perceptions Regarding the Use of Maternity Waiting Homes in Rural Zambia. *International Journal of Gynecology & Obstetrics* 2016;133(1):108-11. doi: 10.1016/j.ijgo.2015.08.023
90. Quintana ME, Chica M. Situación Del Personal De Las Casas Maternas Para La Detección Y Atención De Mujeres Y Adolescentes Víctimas De Violencia. 2012;2020
91. Buser Julie M, Lori Jody R. Newborn Outcomes and Maternity Waiting Homes in Low and Middle-Income Countries: A Scoping Review. *Maternal and child health journal* 2017;21(4):760-69. doi: https://dx.doi.org/10.1007/s10995-016-2162-2
92. Kebede Y, Abamecha F, Endalew C, et al. User's Satisfaction with Maternity Waiting Home Services in Jimma Zone, Oromia, Ethiopia: Implications for Maternal and Neonatal Health Improvement. *J Women's Health Care* 2019;8(464):2167-0420.1000464.
93. Suárez G, María E. Contribución De Las Estrategías Casa Materna Y Extensión De Cobertura Rural De Paquete Básico a La Reducción De La Mortalidad Materna Y Perinatal En El Municipio El Castillo Río San Juan, En El Período Comprendido De Enero 2002 a Diciembre 2004, 2005.
94. Guillen V, Noellys N, Tellez M, et al. Atención De Salud Que Se Brinda En La Casa Materna a Mujeres Durante El Embarazo, Parto Y Puerperio En La Ciudad De Camoapa–Boaco. Ii Semestre 2016, 2016.

95. Henry Elizabeth G, Semrau K, Hamer Davidson H, et al. The Influence of Quality Maternity Waiting Homes on Utilization of Facilities for Delivery in Rural Zambia. *Reproductive health* 2017;14(1):68. doi: https://dx.doi.org/10.1186/s12978-017-0328-z
96. Perosky Joseph E, McLean Karina Z, Kofa A, et al. Utilization of Maternity Waiting Homes: Before, During, and after the Ebola Virus Disease Outbreak in Bong County, Liberia. *International health* 2019 doi: https://dx.doi.org/10.1093/inthealth/ihz039
97. Wayte K, Zwi AB, Belton S, et al. Conflict and Development: Challenges in Responding to Sexual and Reproductive Health Needs in Timor-Leste. *Reproductive health matters* 2008;16(31):83-92.
98. Rollo Rosane M, Ramos Adriana R, Rocha Cristianne Maria F. Serviços De Saúde Materna Como Estratégia Biopolítica De Disciplinamento Dos Corpos Em Cuba. *Interface (Botucatu, Online)* 2019;23:e180339-e39.
99. Buser JM, Munro-Kramer ML, Carney M, et al. Maternity Waiting Homes as a Cost-Effective Intervention in Rural Liberia. *International Journal of Gynecology and Obstetrics* 2019;146(1):74-79. doi: http://dx.doi.org/10.1002/ijgo.12830
100. Kanengoni B, Andajani-Sutjahjo S, Holroyd E. Women's Experiences of Disrespectful and Abusive Maternal Health Care in a Low Resource Rural Setting in Eastern Zimbabwe. *Midwifery* 2019;76:125-31. doi: https://dx.doi.org/10.1016/j.midw.2019.06.003
101. Awor P, Nabiryo M, Manderson L. Innovations in Maternal and Child Health: Case Studies from Uganda. *Infectious Diseases of Poverty* 2020;9(1) doi: https://doi.org/10.1186/s40249-020-00651-0
102. Lori Jody R, Perosky J, Munro-Kramer Michelle L, et al. Maternity Waiting Homes as Part of a Comprehensive Approach to Maternal and Newborn Care: A Cross-Sectional Survey. *BMC Pregnancy Childbirth* 2019;19(1):228. doi: https://dx.doi.org/10.1186/s12884-019-2384-6
103. Ekunwe AB. The Efficacy of Maternity Waiting Homes in Decreasing Maternal and Perinatal Mortality in Low-Income Countries – a Systematic Review. 2017
104. Swanson DL, Franklin HL, Swanson JO, et al. Including Ultrasound Scans in Antenatal Care in Low-Resource Settings: Considering the Complementarity of Obstetric Ultrasound Screening and Maternity Waiting Homes in Strengthening Referral Systems in Low-Resource, Rural Settings. *Semin Perinatol* 2019;43:273-81. doi: https://doi.org/10.1053/j.semperi.2019.03.017
105. van L. Delay in Safe Motherhood, 2011.
106. Fleites Rafael C, Martínez Ledis V, López Leysa Margarita G. Historia De Los Hogaresmaternos En Villa Clara *Medicentro Electrónica* 2009;13(4)

Appendix F reflexivity statement

1. How does this study address local research and policy priorities?

Reducing maternal and neonatal morbidity and mortality (MNMM) is an issue of major priority in many low- and middle-income countries. This review identified contexts and mechanisms contributing to successful and unsuccessful uptake and scale up of the maternity waiting home intervention. Maternity waiting homes provide accommodation close to a delivery facility so that pregnant women can be attended to by skilled health professionals and have better access to emergency obstetric services when needed. When successfully implemented, the maternal waiting home intervention has the potential to contribute to reducing MNMM.

2. How were local researchers involved in study design?

This review was undertaken as part of the Mozambique-Canada Maternal Health project, which includes among others, constructing and implementing three maternal waiting homes in Mozambique. The team involved in implementing the maternal waiting homes in Mozambique was consulted when the study was being conceptualized and again during the theory building process.

3. How has funding been used to support the local research team?

The Mozambique-Canada Maternal Health project had funded a PhD student, a researcher who identifies as a woman, for 3 years including current year to build capacity and training in advanced research methodology under the mentorship of the senior author.

4. How are research staff who conducted data collection acknowledged?

The plan, as per our protocol, was to involve women in Mozambique and Ethiopia in data collection processes including participant recruitment, conducting interviews, transcription and translation. This plan was not carried out as it was not feasible due to practical considerations including difficulties pertaining to recruiting, preparing and supervising women to take on the role during the COVID-19 pandemic. The review will be followed up with a realist evaluation aimed at refining the emerging programme theory for the Mozambican context where our plans to involve local researchers will be realised.

Maternal waiting home implementers who participated in the interviews were offered an opportunity for their contribution to be acknowledged, and those who consented to this have been duly acknowledged in the manuscript.

5. Do all members of the research partnership have access to study data?

All members of the partnership have access to data.

6. How was data used to develop analytical skills within the partnership?

As this is the first time that realist methodology has been used to understand successful MWH implementation, our priority has been to increase awareness of the realist review methodology and how it relates to qualitative evidence synthesis and systematic review and meta-analysis approaches among members of the Mozambican team involved in MWH implementation as part of the Mozambique Canada maternal health project. We have shared knowledge about the realist review approach and the process involved and engaged the team in discussions about the programme theories at two different stages of its development. One of the team members is an early career researcher.

7. How have research partners collaborated in interpreting study data?

We met with the Mozambican team at two stages of the programme theory refinement process, presented the programme theories and the process through which it was developed. We asked the team to consider how the theory applied to their experiences of implementing the intervention in Mozambique and this insight was used to refine the theory.

8. How were research partners supported to develop writing skills?
Doctoral and postdoctoral early career researchers on the authorship team (IVU, and NSU,) were supported by the more senior academics on the team, especially EMZ, to develop their writing skills during the development of this manuscript.

9. How will research products be shared to address local needs?
A post-publication dissemination plan is being developed in collaboration with the advisory group and the Mozambican implementation team. Some of the planned dissemination activities envisioned include presentation at conferences, dissemination through blogs, and a workshop/symposium regarding MWH implementation involving researchers and implementers. The aim of the workshop will be to develop transferable recommendations for MWH implementation.

10. How is the leadership, contribution and ownership of this work by LMIC researchers recognised within the authorship?
We acknowledge that the entire authorship team is based in high-income countries. However, the authorship team member writing this statement, NSU, is a co-first author and a postdoctoral early career researcher of African descent. IVU is also of African descent.

11. **How have early career researchers across the partnership been included within the authorship team?**
NSU, IVU are early career researchers.

12. How has gender balance been addressed within the authorship?
The principal investigator (NM) is male while the rest of the authors are female.

13. How has the project contributed to training of LMIC researchers?
Two of the early career researchers on the authorship team are of African descent but based in high income countries. The realist evaluation that will aim to refine the programme theory emerging from this review will support employment and training of a research assistant(s) based in Mozambique

14. How has the project contributed to improvements in local infrastructure?
This study is part of the Mozambique-Canada Maternal Health project through which three maternal waiting homes have been developed in Mozambique. The findings from this research have informed implementation and will continue to do so as we also plan to refine the programme theory through a realist evaluation of these maternal waiting homes.

15. What safeguarding procedures were used to protect local study participants and researchers?
Members of the research team signed consent forms agreeing to keep the identity of individuals who took part in implementer interviews confidential. Signed consent forms with names and documents containing contact information of interviewed implementers were stored securely in line with GDPR guidelines. Implementers are anonymised in the manuscript. We have only named interviewed implementers who gave consent for their contribution to be acknowledged in this manner.