An evidence map of social, behavioural and community engagement interventions for reproductive, maternal, newborn and child health
An evidence map of social, behavioural and community engagement interventions for reproductive, maternal, newborn and child health
Acknowledgements

This evidence map was developed through collaboration between the World Health Organization (WHO), led by the department of Maternal, Newborn, Child and Adolescent Health, working with the departments of Reproductive Health and Research; Immunization, Vaccines and Biologicals; Public Health, Environmental and Social Determinants; Prevention of Non-communicable Diseases; Nutrition for Health and Development; Mental Health and Substance Misuse; Service Delivery and Safety; and the International Initiative for Impact Evaluation (3ie).

Financial support was provided by the Partnership for Maternal, Newborn & Child Health (PMNCH), the Norwegian Agency for Development Cooperation (NORAD), and the United States Agency for International Development (USAID).

Authors

<table>
<thead>
<tr>
<th>For WHO</th>
<th>For 3ie</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anayda Portela</td>
<td>Jennifer Stevenson</td>
</tr>
<tr>
<td>Rachael Hinton</td>
<td>Birte Snilstveit</td>
</tr>
<tr>
<td>Marianne Emler</td>
<td>Stella Tsoli</td>
</tr>
</tbody>
</table>

WHO acknowledges the important contributions of the expert groups who met in December 2015 and November 2016 (see full list in Annex 7) and the particular contributions of Antje Becker-Benton, Jess Davis, Shawn Malarcher and Caroline Sugg.

Research assistance was provided by Hannah Jobse, Paul Fenton-Villar, Pradyot Bharadwaj Komaragiri, and Georgina Chrisp. Technical editing was done by Margaret Harris. Support for final production was provided by Brynne Gilmore.

Development of the section on implementation principles (see Annex 6) was led by Melanie Morrows and Eric Sarriot on behalf of the United States Agency for International Development- supported Maternal and Child Survival Program. The authors’ views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development of the United States Government.
Foreword

The Every Woman Every Child (EWEC) Global Strategy for Women’s, Children’s and Adolescents’ Health (2016–2030) calls for action towards three objectives: Survive (end preventable deaths), Thrive (ensure health and well-being) and Transform (expand enabling environments). The strategy recognizes that “women, children and adolescents are potentially the most powerful agents for improving their own health and achieving prosperous and sustainable societies”.

Social, behavioural and community engagement (SBCE) interventions are key to empowering individuals, families and communities to contribute to better health and well-being of women, children and adolescents. Policy-makers and development practitioners need to know which interventions work best. The World Health Organization (WHO) has provided global guidance on some key SBCE interventions, and we recognize there is more work to be done as this will be an area of increasing importance in the era of the Sustainable Development Goals (SDGs) and the EWEC Global Strategy.

This document provides an evidence map of existing research into a set of selected SBCE interventions for reproductive, maternal, newborn, and child health (RMNCH), the fruit of a collaboration between the World Health Organization (WHO), the Partnership for Maternal, Newborn & Child Health (PMNCH) and the International Initiative for Impact Evaluations (3ie), supported by other partners. It represents an important way forward in this area, harnessing technical expertise, and academia to strengthen knowledge about the evidence base.

The evidence map provides a starting point for making available existing research into the effectiveness of RMNCH SBCE interventions, a first step toward providing evidence for decision-making. It will enable better use of existing knowledge and pinpoint where new research investments can have the greatest impact. An online platform that complements the report provides visualization of the findings, displaying research concentrations and gaps.
Beyond providing a map of important studies, this evidence map can catalyse a shift in thinking about planning social, behavioural and community engagement interventions to further strengthen the links between the Survive, Thrive and Transform agenda.

We see this work as a good example of the strong commitment from WHO and PMNCH in support of the EWEC Global strategy. We embrace this first step and invite partners to join us in our efforts to strengthen the evidence base for social, behavioural and community engagement interventions and their uptake in country programmes and to use this evidence base to invest strategically in empowerment. We must work together to ensure that women, children and adolescents have the capacities and voice to become the agents of change for their own sustainable health and wellbeing.

Dr Flavia Bustreo  
Assistant Director-General  
Family, Women’s and Children’s Health  
World Health Organization

Helga Fogstad  
Executive Director  
The Partnership for Maternal, Newborn & Child Health

Emmanuel Jimenez  
Executive Director  
3ie
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3ie</td>
<td>International Initiative for Impact Evaluation</td>
</tr>
<tr>
<td>DDs</td>
<td>Difference-in-differences</td>
</tr>
<tr>
<td>EWEC</td>
<td>Every Woman Every Child</td>
</tr>
<tr>
<td>GFF</td>
<td>Global Financing Facility</td>
</tr>
<tr>
<td>IEC</td>
<td>Information, education, and communication</td>
</tr>
<tr>
<td>IPC</td>
<td>Interpersonal communication</td>
</tr>
<tr>
<td>ITS</td>
<td>Interrupted-time series</td>
</tr>
<tr>
<td>LMIC</td>
<td>Low-and middle-income country</td>
</tr>
<tr>
<td>MCSP</td>
<td>Maternal and Child Survival Program</td>
</tr>
<tr>
<td>MDGs</td>
<td>The United Nations Millennial Development Goals</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-governmental organization</td>
</tr>
<tr>
<td>NORAD</td>
<td>The Norwegian Agency for Development Cooperation</td>
</tr>
<tr>
<td>PMNCH</td>
<td>Partnership for Maternal, Newborn &amp; Child Health</td>
</tr>
<tr>
<td>RCT</td>
<td>Randomized controlled trial</td>
</tr>
<tr>
<td>RDD</td>
<td>Regression discontinuity design</td>
</tr>
<tr>
<td>RMNCAH</td>
<td>Reproductive, maternal, newborn, child, and adolescent health</td>
</tr>
<tr>
<td>RMNCH</td>
<td>Reproductive, maternal, newborn, and child health</td>
</tr>
<tr>
<td>SBCE</td>
<td>Social, behavioural and community engagement</td>
</tr>
<tr>
<td>SDGs</td>
<td>The United Nations Sustainable Development Goals 2030</td>
</tr>
<tr>
<td>USAID</td>
<td>The United States Agency for International Development</td>
</tr>
<tr>
<td>WASH</td>
<td>Water, sanitation and hygiene</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
<tr>
<td>WHO/MCA</td>
<td>WHO Department of Maternal, Newborn, Child and Adolescent Health</td>
</tr>
</tbody>
</table>
Operational definitions

The following terms are used in this document as defined below:

**Evidence map:** provides an overview of existing impact evaluations and systematic reviews, and categorizes the key characteristics of included studies

**Impact evaluation:** programme evaluations or field experiments that use experimental or observational data to measure the effect of a programme relative to a counterfactual situation representing what would have happened to the same group in the absence of the programme

**Social, behavioural and community engagement interventions:** interventions that address the capabilities of individuals, families and communities to contribute to improving their own health. A number of different titles have been used to refer to SBCE interventions including health promotion, demand creation, empowerment, social and behaviour change.

**Systematic review:** a review of a clearly formulated question that uses systematic and explicit methods to identify, select and critically appraise relevant research, and to collect and analyse data from the studies that are included in the review
Summary

Women’s and children’s health has seen significant progress in recent decades, however, gains have been uneven and inequalities persist. The Every Woman Every Child (EWEC) Global Strategy for Women’s, Children’s, and Adolescent’s Health (2016-2030), (‘the EWEC Global Strategy’), released in parallel with the United Nations’ Sustainable Development Goals 2030 (SDGs) in September 2015, calls for action towards three objectives: Survive (end preventable deaths), Thrive (ensure health and wellbeing) and Transform (expand enabling environments).

Achieving these objectives will depend on successfully scaling-up programmes that go beyond clinical and service delivery. Social, behavioural and community engagement (SBCE) interventions that address the capabilities of individuals, families and communities to contribute to improving their own health are fundamental to the realization of these objectives. Their role in programmes has possibly been neglected in the past due to a lack of evidence of their effectiveness.

Decision-makers considering SBCE interventions need high-quality evidence on intervention effectiveness, particularly where, as is true of this domain, global guidance is limited although growing. A large number of research studies are produced every year but these are scattered across subjects, sources and locations. Research evidence needed to inform policies and programmes may be difficult to find and it is not clear which areas need further or new research.

To address these issues, the World Health Organization (WHO) worked with the International Initiative for Impact Evaluation (3ie) to conduct an exercise to develop an evidence map of selected SBCE interventions related to reproductive, maternal, newborn and child health (RMNCH). The purpose was to identify existing and ongoing impact evaluations and systematic reviews of selected SBCE interventions to inform RMNCH programmes and identify evidence gaps where new impact evaluations, systematic reviews and WHO guidelines could add value. This report provides information on the methods used to develop the evidence map and summarizes the key findings. An interactive platform that visually presents the findings can be found at this link: http://gapmaps.3ieimpact.org/evidence-maps/social-behavioural-and-community-engagement-interventions-reproductive-maternal-0.
Who should use this document?

This document is primarily intended for RMNCH policy-makers and development practitioners that commission research to inform policies and programmes. However, different audiences will have different uses for this evidence document. National and local governments and their key partners can use it to identify existing research related to interventions of interest; universities and evidence searchers can identify areas suitable for evidence synthesis; researchers and research funders can better prioritize research needs and move away from areas which may be saturated; partners advocating that governments and programmes apply SBCE interventions can refer to the map to identify experiences; WHO can identify areas for global guidance and rally partners around research priorities.

Methods

This evidence map was based on a methodology developed by 3ie. The scope of the evidence map includes impact evaluations and systematic reviews assessing the effects of selected RMNCH SBCE interventions in low- and middle-income countries. Adolescent health interventions were not included because a separate document on adolescent sexual and reproductive health was recently published. This evidence map is based on a systematic search of a large number of academic databases and websites. Included studies were published from 2000 to 2016. Information on three key characteristics were extracted from studies: health topic, intervention and outcome. Data visualization of these key characteristics has been used to display the findings. This map does not address the same questions as a systematic review and does not provide details on the findings of each study nor the overall effectiveness of interventions studied.

Results

Of the documents meeting inclusion criteria, 142 were completed systematic reviews and 457 were completed impact evaluations. A further 38 ongoing impact evaluations and 13 ongoing reviews were also identified. From the year 2000, the number of published impact evaluations has increased incrementally, with a notable increase in the number of studies published after 2011. However, although the total number of systematic reviews of SBCE interventions for RMNCH continues to increase, the number of new reviews published per year was greatest 2013 and has declined since.

Impact evaluations are predominantly randomized controlled trials (76%) and are unevenly distributed across intervention areas. For types of intervention, there is a heavy focus on interpersonal communication and health education activities, followed by demand-side financing approaches and community mobilization, delivered alone or packaged with other SBCE approaches. There are relatively few evaluations of mass media and entertainment education programmes, social media and m-health and social marketing. There have also been fewer evaluations of interventions involving community participation in health service planning and programmes and social accountability.

The most frequently measured outcomes are health-related outcomes, including child growth and development (n=155), morbidity (n=103), mortality (n=60) and care practices (n=221)
and care seeking (n=171). Very few evaluations measured community capacity, participation in health programming, or outcomes related to household communication, social norms and gender equity. Few studies reported on knowledge and attitudes of health providers for engagement or provider communication and engagement skills, despite the large proportion of studies examining interpersonal communication and health education activities.

Impact evaluations are also unevenly distributed across regions and countries. While most were conducted in Africa and South-East Asia, reflecting the highest regional burdens of maternal and neonatal mortality, studies are concentrated within a fairly small number of countries in those regions. Over half of the studies (n=270) come from 10 low- and middle-income countries. There are countries with high burdens of both maternal and neonatal mortality where no studies could be identified, particularly in West Africa.

Over 60% of the impact evaluations considered equity; most considered place of residence, typically a rural area, or socio-economic status. Ethnic group, language, culture, and disability were rarely considered.

**Systematic reviews:** The systematic review evidence base is large, but unevenly distributed, similar to the uneven distribution of identified impact evaluations. A large proportion (76%) of the reviews focused on interpersonal communication and health education approaches, particularly home visits and group approaches. It may be helpful to conduct a ‘review of reviews’ in this area to help identify more specific lessons learned and gaps in the knowledge.

Many of the included systematic reviews were assessed to have methodological limitations. In particular, for healthy timing and spacing of pregnancy, there were few reviews rated as high confidence across all intervention areas. There are a large number of reviews, rated low or medium confidence, of social media and m-health, despite the relatively low number of impact evaluations. Thus, more systematic reviews in this area may not contribute much to the knowledge base in this domain until new impact evaluations are published. There are several areas where new systematic reviews could be of value, including community mobilization packages for WASH, infant feeding and nutrition, and early child development.

The outcomes assessed in the systematic reviews are largely inline with the outcomes assessed in impact evaluations. The most commonly included outcome measures are health outcomes – mortality, morbidity and child growth and development (n=163). The outcomes least mentioned include community capacity, participation and accountability, parenting skills, joint decision-making in the household and crosscutting outcomes like status of women or social cohesion. The majority of systematic reviews (75%) did not consider equity.

**Conclusions**

Investing in SBCE interventions will be of increasing importance to achieving the SDGs and the objectives set out in the EWEC Global Strategy. This mapping exercise is an important step to identify priority areas for rigorous impact evaluations and systematic reviews of SBCE interventions for RMNCH and key outcomes for the next five years. Findings from this evidence map show that there are a considerable amount of impact evaluations and systematic reviews from which we can draw lessons learned and conclusions. Nonetheless, there are still important
gaps in the evidence base for SBCE interventions for RMNCH. We identify initial next steps that will help improve and advance research on SBCE interventions:

- It would be useful for global and country partners to work together to identify common intervention categories for SBCE interventions across RMNCH areas, highlighting specificities of particular health areas/topics as needed. Having common frameworks and drawing lessons learned across RMNCH and different health areas, where possible, may expand the usefulness of the lessons we are drawing from the current research and implementation experience, and help inform future investment in SBCE research and programmes for RMNCH.

- Efforts could then follow to achieve consensus on priority areas for research and evidence synthesis. Where research priority areas are identified, further consensus on optimal study designs, key intervention components and key outcomes would be useful so that an evidence base can be built and synthesized over the next five to ten years.

- Further research on SBCE interventions should consider the measurement of distal and process outcomes, carefully considering what the core contributions SBCE interventions are making toward achieving the social, health and development goals.

- Research on SBCE interventions can also measure their contributions to the broader social outcomes aspired to in the new EWEC Global Strategy, including community participation and social accountability. The link to improved health may come from contributions to the enabling environment and improvement of social determinants as well as from direct health outcomes.

- More studies are needed to fill an important gap in measuring interventions to meet the needs of vulnerable populations. The map identifies gaps in targeting these populations and measuring direct and differential effects on them would be important. This includes incorporating more consistently considerations of equity (including gender, education, socioeconomic status, place of residence, ethnicity, culture and disability), and targeting research in high-burden countries and other countries where no studies were identified, such as francophone Africa.

- Future research should also consider the use of mixed-methods impact evaluations and systematic reviews and studies that involve causal chain analysis and process evaluation techniques to provide a more in-depth understanding of how change occurs. The evidence for SBCE would also benefit from more studies that include cost data.

- Further research can be undertaken to complement the findings from this evidence map, including on additional health areas (for example, expanding sexual and reproductive health); on other SBCE interventions and approaches that were not included; and with study designs that were not included, specifically qualitative research and research related to implementation and delivery mechanisms.

- Reporting of intervention implementation needs to improve in order for the quality of reviews to be improved, a problem encountered in this mapping exercise. WHO has recently released *Programme reporting standards for sexual, reproductive, maternal, newborn, child and adolescent health*, specifically intended to support programmes to better document key contextual and implementation factors (27).
An evidence map of social, behavioural and community engagement interventions for reproductive, maternal, newborn and child health

<table>
<thead>
<tr>
<th>Interventions</th>
<th>Knowledge and attitudes</th>
<th>Household dynamics / communication</th>
<th>Care practices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home visits</td>
<td><img src="image1" alt="Icon" /></td>
<td><img src="image2" alt="Icon" /></td>
<td><img src="image3" alt="Icon" /></td>
</tr>
<tr>
<td>Facility-based Interpersonal Communication (IPC)</td>
<td><img src="image4" alt="Icon" /></td>
<td><img src="image5" alt="Icon" /></td>
<td><img src="image6" alt="Icon" /></td>
</tr>
<tr>
<td>Group IPC - any setting</td>
<td><img src="image7" alt="Icon" /></td>
<td><img src="image8" alt="Icon" /></td>
<td><img src="image9" alt="Icon" /></td>
</tr>
<tr>
<td>Mass media and entertainment education</td>
<td><img src="image10" alt="Icon" /></td>
<td><img src="image11" alt="Icon" /></td>
<td><img src="image12" alt="Icon" /></td>
</tr>
<tr>
<td>Social media and m-health</td>
<td><img src="image13" alt="Icon" /></td>
<td><img src="image14" alt="Icon" /></td>
<td><img src="image15" alt="Icon" /></td>
</tr>
<tr>
<td>Social marketing</td>
<td><img src="image16" alt="Icon" /></td>
<td><img src="image17" alt="Icon" /></td>
<td><img src="image18" alt="Icon" /></td>
</tr>
<tr>
<td>Demand-side financing</td>
<td><img src="image19" alt="Icon" /></td>
<td><img src="image20" alt="Icon" /></td>
<td><img src="image21" alt="Icon" /></td>
</tr>
<tr>
<td>Community-based health insurance</td>
<td><img src="image22" alt="Icon" /></td>
<td><img src="image23" alt="Icon" /></td>
<td><img src="image24" alt="Icon" /></td>
</tr>
<tr>
<td>Community mobilization</td>
<td><img src="image25" alt="Icon" /></td>
<td><img src="image26" alt="Icon" /></td>
<td><img src="image27" alt="Icon" /></td>
</tr>
<tr>
<td>Community participation and social accountability</td>
<td><img src="image28" alt="Icon" /></td>
<td><img src="image29" alt="Icon" /></td>
<td><img src="image30" alt="Icon" /></td>
</tr>
<tr>
<td>Provider training and service delivery adjustments</td>
<td><img src="image31" alt="Icon" /></td>
<td><img src="image32" alt="Icon" /></td>
<td><img src="image33" alt="Icon" /></td>
</tr>
<tr>
<td>Mixed IPC approaches</td>
<td><img src="image34" alt="Icon" /></td>
<td><img src="image35" alt="Icon" /></td>
<td><img src="image36" alt="Icon" /></td>
</tr>
<tr>
<td>Community mobilization packages</td>
<td><img src="image37" alt="Icon" /></td>
<td><img src="image38" alt="Icon" /></td>
<td><img src="image39" alt="Icon" /></td>
</tr>
<tr>
<td>IPC and mass media and entertainment education</td>
<td><img src="image40" alt="Icon" /></td>
<td><img src="image41" alt="Icon" /></td>
<td><img src="image42" alt="Icon" /></td>
</tr>
<tr>
<td>IPC and social media and m-health</td>
<td><img src="image43" alt="Icon" /></td>
<td><img src="image44" alt="Icon" /></td>
<td><img src="image45" alt="Icon" /></td>
</tr>
<tr>
<td>IPC and social marketing</td>
<td><img src="image46" alt="Icon" /></td>
<td><img src="image47" alt="Icon" /></td>
<td><img src="image48" alt="Icon" /></td>
</tr>
<tr>
<td>IPC and demand-side financing</td>
<td><img src="image49" alt="Icon" /></td>
<td><img src="image50" alt="Icon" /></td>
<td><img src="image51" alt="Icon" /></td>
</tr>
<tr>
<td>IPC and community participation and social accountability</td>
<td><img src="image52" alt="Icon" /></td>
<td><img src="image53" alt="Icon" /></td>
<td><img src="image54" alt="Icon" /></td>
</tr>
<tr>
<td>Care-seeking behaviour</td>
<td>Quality of care / satisfaction</td>
<td>Community participation and accountability</td>
<td>Health outcomes</td>
</tr>
<tr>
<td>------------------------</td>
<td>-------------------------------</td>
<td>------------------------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Outcome variables</td>
<td>Interventions</td>
<td>Community mobilization packages</td>
<td>IPC</td>
</tr>
<tr>
<td>Family planning</td>
<td>Care-seeking behaviour</td>
<td>Care-seeking for complications</td>
<td>Perception of quality of care</td>
</tr>
<tr>
<td></td>
<td>Care-seeking for complications</td>
<td>Care-seeking for complications</td>
<td>Provider communication and engagement skills</td>
</tr>
<tr>
<td></td>
<td>Knowledge and attitudes</td>
<td>Household dynamics / communication</td>
<td>Community capacity</td>
</tr>
<tr>
<td></td>
<td>Community capacity</td>
<td>Participation in planning and programmes</td>
<td>Social accountability</td>
</tr>
<tr>
<td></td>
<td>Quality of care</td>
<td>Maternal, newborn and child morbidity</td>
<td>Maternal, newborn and child mortality</td>
</tr>
<tr>
<td></td>
<td>Satisfaction</td>
<td>Child growth and development</td>
<td>Gender equity / status of women</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Social cohesion</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Cost</td>
</tr>
</tbody>
</table>
Introduction and background

Women’s and children’s health has seen significant progress in recent decades (1). However, health gains have been uneven and inequalities persist due to social and economic factors such as gender, education and income, along with geographical and structural determinants (2).

The need for a broader vision to improve women’s and children’s health has been addressed by more recent global policies, notably the Every Woman Every Child (EWEC) Global Strategy for Women’s, Children’s, and Adolescent’s Health (2016-2030) (referred to as the ‘EWEC Global Strategy’ from hereon). The EWEC Global Strategy was released in parallel with the United Nations Sustainable Development Goals 2030 (SDGs) (3) in September 2015. Both strategies promote the establishment of an enabling environment for women and children to realize health and wellbeing, calling for interventions that go beyond service delivery.

The EWEC Global Strategy calls for action towards three objectives for health: Survive (end preventable deaths), Thrive (ensure health and wellbeing) and Transform (expand enabling environments). To reach the three objectives, strategies need to be built on evidence based, effective and sustainable interventions from both the biomedical and the social sciences. Women, children and adolescents are recognized as potentially the most powerful agents for improving their own health and achieving prosperous and sustainable societies (4).

The health impact of efficacious clinical and health system interventions must be maximized while simultaneously addressing inequity and the needs of underserved groups through a sustainable and transformative approach that includes strengthening the capabilities of individuals, families and communities to contribute to improved health (2,5). The EWEC Global Strategy calls for an enabling environment, a concept that has been embraced and defined over the years in different global frameworks. For example, in 1986 the Ottawa Charter put forward a concept of the enabling environment as one where all people have access to information, life skills and opportunities for making healthy choices (6).
Social, behavioural and community engagement (SBCE) interventions that address the capabilities of individuals, families and communities to contribute to improving their own health, are fundamental to the realization of these global objectives. A number of different terms have been used to refer to SBCE interventions including health promotion, demand creation, empowerment, social and behaviour change. In this publication, the term SBCE interventions is used to capture the breadth of the different dimensions these interventions address.

Evidence to guide investments in SBCE interventions

Given the global priorities set by the SDGs and the EWEC Global Strategy, it is likely that investments in SBCE interventions will increase in the next decade. However, to date investment in SBCE interventions has varied and is poorly documented. A search for information on past investment in SBCE within international aid and development assistance funding revealed no such specific information. We reviewed national health expenditure on SBCE interventions for RMNCAH for the 16 countries currently working with the Global Financing Facility (GFF) using expenditure on information, education and communication (IEC) programmes as a proxy. Data showed that only six of the 16 countries provided any information on this item. Of those countries reporting, expenditure varied from 0.26% of total health expenditure in Cameroon to 11% in the Democratic Republic of Congo, with three countries spending less than 0.50% (7). Other reports also suggest that funding in this area is insufficient (8).

Decision-makers choosing where and how to spend funds and other resources need access to high quality evidence to support the selection and implementation of effective and sustainable programmes that include SBCE interventions. Social, behavioural, structural, and economic interventions to facilitate an enabling environment have been in use for decades, however, policymakers often underestimate their value, and their inclusion in national strategies and programmes is lacking. This may be partly due to a weak and scattered evidence base that does not give policymakers the information needed to make decisions. At the same time funding for social science research to inform such intervention strategies has been consistently low over the past several decades compared to other science areas, particularly biomedical research (9).

To date there has been no attempt to map the evidence on SBCE interventions across RMNCH. And comparatively few guidelines have been developed for these types of interventions (see Annex 1 for a list of WHO SBCE-related guidelines available to date). This report takes stock of effectiveness research relating to SBCE interventions, identifying what research exists, gaps and areas to be prioritized for new research.
How SBCE interventions can contribute to improved reproductive, maternal, newborn and child health (RMNCH)

It is increasingly recognized that SBCE interventions are essential elements of health strategies for women, children and adolescents (2), by aiming to:

• strengthen the capabilities of individuals to take better care of themselves, including appropriate care seeking and practices in the home;
• increase household capabilities and support for RMNCH needs, including more equitable household dynamics;
• strengthen community capabilities and actions for improved health;
• improve the capabilities of health services to engage with communities and provide more responsive services.

The conceptual framework below illustrates how SBCE interventions can contribute to achieving the EWEC Global Strategy objectives. We outline the specific interventions covered in this map below, with full details and definitions of all interventions mapped in Annex 2.

What is a 3ie evidence map?

This evidence map was based on a methodology developed by the International Initiative for Impact Evaluation (3ie) for conducting evidence gap maps (10). It does not address the same questions as a systematic review and does not provide details on the findings of each study nor the overall effectiveness of interventions studied.

Mapping the evidence combines use of a systematic method to identify current evidence with data visualization and an interactive platform developed by 3ie that allows users to explore the available studies and access user-friendly summaries and links to the full text of included studies.
**Figure 1** Conceptual framework to strengthen individual, family and community capabilities for reproductive, maternal, newborn, child and adolescent health

**Health outcomes**
- Reduction in MNCA disabilities, morbidity and mortality
- Improved child growth and development
- Improved adolescent wellbeing

**Social outcomes**
- Improved quality of the supportive environment
- Improved social cohesion
- Increased accountability and community participation
- Reduced inequity and discrimination
- Improved status of women
- Increased education and employment

**Structural and policy actions**
- Actions to strengthen capabilities for reproductive, maternal, newborn, child and adolescent health (RMNCAH)
- Individuals: Individual capabilities are strengthened
  - Individual members of the household and the community have the capabilities to live a healthy lifestyle, engage in dialogue on and advocate for health issues and respond to RMNCAH needs.
- Households: Household capabilities and support are strengthened
  - Household members can rely on family/husband/partner support to make healthy decisions and together respond to RMNCAH needs.
- Communities: Community capabilities and actions are strengthened
  - Communities have the capabilities to take action and advocate for RMNCAH and engage with other stakeholders in health, education and development policies and programming.
- Health services: Health service capabilities are strengthened
  - Health management and workforce have the capabilities to engage with communities and other stakeholders for more responsive RMNCAH services and programmes in health and development.

**Health outcomes**
- Survive End preventable
- Thrive Ensure health and wellbeing
- Transform Expand enabling

**Self-care and care in the household improves**
- e.g. appropriate self-care and care for pregnant women, women after birth, adolescents, newborns and children; improved adherence to health worker advice; adequate nutrition; adequate hygiene; prevention of accidents, etc.

**Care seeking improves**
- e.g. for antenatal care; childbirth; postnatal care; care in case of MNC complications and illnesses; adolescents access sexual and reproductive health and mental health services; increased access to RMNCAH services by vulnerable groups, etc.

**Equitable household dynamics**
- e.g. improved couple and parent-child communication; increased joint decision-making; increased financial support and access to household resources for women; increased physical support; increased emotional support; increased support for girls to secondary education, etc.

**Support for RMNCAH in the community increases**
- e.g. community leaders engaged; increased community dialogue and support; increased collective action and measurement of progress; balanced gender roles; formal mechanisms established for community engagement in services, programme and policies, etc.

**Health service responsiveness and quality improves**
- e.g. safe respectful maternity care; adolescent-friendly services; baby- and child-friendly services; formal mechanisms for community engagement, including voices of women; improved community-service relations, etc.

**Structural and policy change**
- e.g. legislation for improved gender equity and social inclusion; roads and transport available to reach services; healthy markets and community spaces; improved infrastructure for water and sanitation; policy to address age of marriage; tobacco control measures in place; optimal use of information and communication technologies, etc.
Box 1: Differentiating between an evidence map, a systematic review and a WHO evidence review

This report uses the term “evidence map” to refer to a collection of impact evaluations and systematic reviews. It does not address the same questions as a systematic review of effectiveness, which would provide details on the findings of each study, an assessment of the methodological quality of each study and a conclusion on the overall effectiveness of the intervention(s) studied. An evidence review process in WHO would entail further steps including the collection of systematic reviews on the intervention of interest. Additional steps, beyond the remit of this report, would include an analysis of the outcomes of the included studies, an assessment of the quality of the body of evidence gathered, a review of additional criteria in addition to impact outcomes and a consensus by an expert panel.

For complex interventions, such as SBCE interventions, additional information beyond the impact evaluation would also be required to better understand reasons for effectiveness. Additional study designs including qualitative and mixed methods would be considered. Information on the context, key implementation-specific considerations, deviation or adherence to the theory of change, values and opinions of key stakeholders, should be integral parts of the evidence compiled. These additional aspects would be captured and discussed in a WHO evidence review process or within evidence-based planning for programmes. However, it is beyond the scope of the map to capture all of these elements. The impact evaluation and systematic reviews gathered herein would be considered essential input but not sufficient for evidence-based decision making.

Objectives

The overall aim of this exercise is to identify, map and describe existing empirical evidence on the effects of key SBCE interventions to strengthen individual, family and community capabilities for RMNCH. Specific major objectives of this SBCE evidence map are:

1. To identify existing and ongoing impact evaluations and systematic reviews on the effects of SBCE interventions that can be used to inform policy and programmes for RMNCH; and
2. To identify gaps where new evaluations, systematic reviews and/or the development of WHO guidance could add value.
Who should use this evidence map?

This document is primarily intended for RMNCH policy-makers and development practitioners that commission research to inform policies and programmes. However, different audiences will have different uses for this evidence map. National and local governments and their key partners can use it to identify existing research related to interventions of interest; universities and evidence searchers can identify areas suitable for evidence synthesis; researchers can better prioritize research needs and move away from areas which may be saturated; partners advocate that governments apply SBCE interventions can refer to the map to identify successful experiences. For researchers and research-funders the evidence map provides a better understanding of the existing research landscape, explicitly identifying gaps in knowledge. It can thus support prioritization of better-targeted impact evaluations and evidence syntheses. For WHO and partners, the map can help identify where a substantial body of evidence needed to inform guideline development exists and could be synthesized. The pathway to evidence in Figure 2 below highlights the points at which the SBCE evidence map can inform decision-makers and researchers.

Figure 2 Pathway to evidence
Scope

What is, and is not, included in the SBCE evidence map

This is an overview of impact evaluations and systematic reviews for a selected set of SBCE interventions for RMNCH, specifically:

- Reproductive health interventions that addressed the timing and spacing of pregnancies
- Maternal health interventions that addressed pregnancy, childbirth and 28 days after birth
- Newborn health interventions that addressed the period from birth up to 28 days after birth
- Child health interventions that addressed the period 28 days after birth to 10 years of age

Adolescent health interventions were not included because a separate evidence map on adolescent sexual and reproductive health conducted by the International Initiative for Impact Evaluation (3ie) had already been published (see Box 2).

Our objective was to map impact evaluations and systematic reviews of select SBCE interventions to improve select RMNCH outcomes, focusing on interventions of relevance to the conceptual framework (Figure 1). The substantive scope of this study is delineated along three key categorizations: health topics, interventions and outcomes. To keep the scope manageable, it was not possible to include all RMNCH topics or all SBCE interventions in the evidence map. We outline the key categories below, with detailed definitions in Appendix 2.

Included studies were limited to published or ongoing, quantitative or mixed methods impact evaluations and systematic reviews of effectiveness. Qualitative research is particularly useful for illuminating the reasons why interventions did or did not work in different contexts, but it is outside the scope of this map.
Box 2: Evidence mapping for adolescent health

What happened to the A?

The life course includes reproductive health, pregnancy, childbirth and postnatal care, as well as child health and development and adolescent health and development. This evidence map looks at reproductive, maternal, newborn, child health (RMNCH) only. We refer the reader to the Brief, *Mapping the evidence on Social, Behavioural, and Community Engagement (SBCE) for Reproductive, Maternal, Child, Newborn and Adolescent Health (RMNCAH)*, that was produced as a complementary publication to this report. The Brief integrates the findings from a recent 3ie publication on Adolescent Sexual and Reproductive Health (11) with the findings from this RMNCH SBCE evidence map. More comprehensive work on adolescent health and SBCE interventions has been published in other sources, including the Lancet Commission on Adolescent Health and Wellbeing (12) and the WHO Global Accelerated Action for the Health of Adolescents (13).

This evidence map on SBCE interventions is intended to complement two previous publications produced by WHO and the Partnership for Maternal, Newborn & Child Health (PMNCH): (1) an overview of the evidence on key interventions and policies for RMNCH (14) focusing on essential clinical and service delivery interventions provided at different levels of the health system; and (2) a compendium of the policies required to implement RMNCH interventions (15). Although structural and policy changes are essential SBCE interventions, given the scope of the WHO & PMNCH policy compendium for RMNCH, such interventions have not been addressed in this SBCE evidence map.

Development of this evidence map began with a scoping exercise. A preliminary mapping of the academic and global policy literature was performed by the WHO team. The team developed a draft framework drawing on existing literature, and in particularly the *The Social and Behavior Change Interventions Landscaping Study: A Global Review* (16) and the ‘Behavior Change Framework’ developed by the United States Agency for International Development (9). In consultation with an expert group, intervention and outcome categories were agreed and used to set the scope. The expert group was composed of WHO staff from relevant departments and external experts who were programme implementers, policymakers, academics and funders.

Experts were consulted at four key stages:

• at the inception stage to define the scope of the mapping and review a draft conceptual framework (meeting in December 2015);

• for review of a draft method guide for the evidence map and a revised conceptual framework (virtual consultation through May 2016);

• for review of preliminary results (meeting November 2016); and

• for review of the draft report (virtual consultation in May 2017).

The full list of WHO and external experts participating in different steps of the process is provided in Annex 7.
Selection of RMNCH topics

To keep the scope manageable, it was not possible to include all RMNCH topics or all SBCE interventions in the evidence map, thus the WHO team selected priority topics based on policy and guideline documents. Key references included the ‘Behavior Change Framework’ developed by the United States Agency for International Development (9), which identifies behaviours with highest potential for preventing maternal, newborn and child deaths. The sections below provide further detail about the RMNCH and SBCE interventions selected for inclusion in the evidence map.

Table 1 presents the RMNCH topics selected for coverage in the evidence map and links them to the specific health areas. More detail and definitions of the topics and interventions are provided in Annex 2.

Table 1 Reproductive, maternal, newborn and child health topics selected

<table>
<thead>
<tr>
<th>Health topic</th>
<th>Relevant health area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthy timing and spacing of pregnancy</td>
<td>Reproductive health</td>
</tr>
<tr>
<td>Care during pregnancy, childbirth and after childbirth</td>
<td>Maternal and newborn health</td>
</tr>
<tr>
<td>Care seeking for newborn illness</td>
<td>Newborn health</td>
</tr>
<tr>
<td>Infant / child feeding and nutrition</td>
<td>Newborn and child health</td>
</tr>
<tr>
<td>Immunizations</td>
<td>Maternal, newborn and child health</td>
</tr>
<tr>
<td>Care seeking for childhood illnesses</td>
<td>Child health</td>
</tr>
<tr>
<td>Malaria</td>
<td>Maternal, newborn and child health</td>
</tr>
<tr>
<td>Pneumonia</td>
<td>Newborn and child health</td>
</tr>
<tr>
<td>Diarrhoea</td>
<td>Newborn and child health</td>
</tr>
<tr>
<td>Water, sanitation and hygiene (WASH)</td>
<td>Child health</td>
</tr>
<tr>
<td>Early child development</td>
<td>Newborn and child health</td>
</tr>
</tbody>
</table>

Selection of interventions

The selected health topics were then used to focus the evidence map on a group of selected SBCE interventions. Because the overall scope was very broad—covering four different health areas and eleven health topics—it was not feasible to include all SBCE interventions. The preliminary selection of interventions was based on a review of relevant academic and policy literature, including, The Social and Behavior Change Interventions Landscaping Study: A Global Review (16) and consultation with the expert group. The aim was to identify the SBCE interventions most commonly included in government and nongovernmental organization (NGO) portfolios. Definitions and more detail are provided in Annex 2.
<table>
<thead>
<tr>
<th>Intervention category</th>
<th>Intervention</th>
<th>Intervention definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpersonal communication and educational activities (IPC)</td>
<td>Home visits</td>
<td>Provision of education, information and counselling in the home by a health professional or trained volunteer/ peer</td>
</tr>
<tr>
<td></td>
<td>Facility-based IPC and counselling</td>
<td>Provision by health worker/ health professional of education, information and/or counselling to individuals in a facility</td>
</tr>
<tr>
<td></td>
<td>Group IPC – any setting</td>
<td>Provision of information, education and/or counselling to a group rather than one-to-one, in any setting</td>
</tr>
<tr>
<td>Mass and social media</td>
<td>Mass media and entertainment education</td>
<td>Use of a diverse set of technologies, including the internet, television, print materials film and radio, capable of simultaneously reaching audiences on a large scale</td>
</tr>
<tr>
<td></td>
<td>Social marketing</td>
<td>Using marketing concepts — product design, appropriate pricing, sales and distribution, and communication — to influence behaviours that benefit individuals and communities</td>
</tr>
<tr>
<td></td>
<td>Social media and m-health</td>
<td>Use of a variety of web-based and mobile technologies and software applications that enable users to engage in dialogue and share information</td>
</tr>
<tr>
<td>Interventions to address financial barriers</td>
<td>Demand-side financing</td>
<td>A supplementary model to supply-side financing of health care in which some funds are instead channelled through, or to, prospective users</td>
</tr>
<tr>
<td></td>
<td>Community-based health insurance</td>
<td>A form of micro-insurance used to help low-income households manage risks and reduce their vulnerability to financial shocks</td>
</tr>
<tr>
<td>Intervention category</td>
<td>Intervention</td>
<td>Intervention definition</td>
</tr>
<tr>
<td>-----------------------</td>
<td>--------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>Community mobilization and participation activities</td>
<td>Community mobilization</td>
<td>Interventions to encourage community individuals, groups (including in schools), or organizations to plan, carry out, and evaluate activities on a participatory and sustained basis to improve their health and other needs</td>
</tr>
<tr>
<td></td>
<td>Community participation (in health service planning and programmes) and social accountability</td>
<td>Activities to create ongoing relationships between community members and health service delivery. The objective is to institutionalize community participation in decision-making within health services and programmes</td>
</tr>
<tr>
<td>SBCE service and programme strengthening activities</td>
<td>Provider training and service delivery adjustments</td>
<td>Training of health providers, and other service providers, such as teachers and pharmacists, in skills and techniques related to communication, health education and community engagement and any adjustments made to service provision based on community perspective of quality, i.e. hours for service delivery</td>
</tr>
<tr>
<td>SBCE packages</td>
<td>Mixed IPC approaches (more than one IPC and educational activity: a combination of home visits, facility-based and / or group approaches)</td>
<td>See definitions above</td>
</tr>
<tr>
<td></td>
<td>Community mobilization packages</td>
<td>See definitions above</td>
</tr>
<tr>
<td></td>
<td>IPC and educational activities and mass media and education entertainment</td>
<td>See definitions above</td>
</tr>
<tr>
<td></td>
<td>IPC and educational activities and social media and m health</td>
<td>See definitions above</td>
</tr>
<tr>
<td></td>
<td>IPC and educational activities and social marketing</td>
<td>See definitions above</td>
</tr>
<tr>
<td></td>
<td>IPC and educational activities and demand-side financing</td>
<td>See definitions above</td>
</tr>
<tr>
<td>Intervention category</td>
<td>Intervention</td>
<td>Intervention definition</td>
</tr>
<tr>
<td>-----------------------</td>
<td>--------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>SBCE packages (continued)</td>
<td>IPC and educational activities and community participation in health service and programmes delivery and social accountability</td>
<td>See definitions above</td>
</tr>
</tbody>
</table>

In some cases, SBCE interventions were implemented with non-SBCE interventions. Non-SBCE components refer to any intervention component in a package that does not fall into one of the categories of interventions included in this map. These are typically a health service delivery component or a policy or structural intervention.

Common packages are discussed further in Annex 2. When interventions studied did not fit neatly into the categories in the table above, they were placed in the intervention category that most closely matched the intervention description in the study report. When this occurred it was noted by the study team.

**Outcomes**

Table 3 presents outcomes selected and included in the evidence map. The outcomes are structured along the causal chain, as portrayed in the conceptual framework. These include intermediate outcomes, as well as social and health outcomes, of relevance to the topics covered by the map. Definitions and more detail are provided in Annex 2.
### Table 3 Broad outcome categories and outcomes

<table>
<thead>
<tr>
<th>Broad outcome category</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge and attitudes</td>
<td>Knowledge and attitudes of individuals and members of the households regarding RMNCH</td>
</tr>
<tr>
<td></td>
<td>Social norms in the community for RMNCH</td>
</tr>
<tr>
<td></td>
<td>Knowledge and attitudes of health providers for community engagement</td>
</tr>
<tr>
<td>Household dynamics / communication</td>
<td>Couple / mothers / mothers-in law / parent-child communication</td>
</tr>
<tr>
<td></td>
<td>Parenting skills</td>
</tr>
<tr>
<td></td>
<td>Joint decision-making in the household</td>
</tr>
<tr>
<td>Care practices</td>
<td>Self-care practices (prevention and treatment)</td>
</tr>
<tr>
<td></td>
<td>Family planning method use</td>
</tr>
<tr>
<td></td>
<td>Caregiver practices (prevention and treatment)</td>
</tr>
<tr>
<td></td>
<td>Household environmental practices</td>
</tr>
<tr>
<td>Care-seeking behaviour</td>
<td>Routine care-seeking behaviour</td>
</tr>
<tr>
<td></td>
<td>Care seeking for complications/illness</td>
</tr>
<tr>
<td>Quality of care / satisfaction</td>
<td>Perception of quality of care / Satisfaction with services</td>
</tr>
<tr>
<td></td>
<td>Provider communication and engagement skills</td>
</tr>
<tr>
<td>Community participation and accountability</td>
<td>Community capacity</td>
</tr>
<tr>
<td></td>
<td>Participation in planning and programmes</td>
</tr>
<tr>
<td></td>
<td>Social accountability</td>
</tr>
<tr>
<td>Health</td>
<td>Maternal, newborn and child morbidity and disability</td>
</tr>
<tr>
<td></td>
<td>Maternal, newborn and child mortality</td>
</tr>
<tr>
<td></td>
<td>Child growth and development</td>
</tr>
<tr>
<td>Cross-cutting</td>
<td>Gender equity / status of women</td>
</tr>
<tr>
<td></td>
<td>Social cohesion</td>
</tr>
<tr>
<td></td>
<td>Cost</td>
</tr>
</tbody>
</table>
Methods

The evidence map is based on a comprehensive search for impact evaluations and systematic reviews corresponding to the framework of interventions, outcomes and health areas outlined above. It draws on 3ie methodology for evidence gap maps (10,17). Inclusion criteria and search, screening and data extraction methods are described in brief below and in detail in Annex 3.

Inclusion criteria

When the scope and interventions had been agreed and clearly defined, these were used to set the inclusion criteria for the map. The methods guide and intervention and outcome categories were later revised, following consultation with the expert group in 2016.

Studies were included if they met all of the following criteria:

• Correspond to at least one reproductive, maternal, newborn and/or child health topic of interest and at least one of the sub-topics defined in Table 1;
• Evaluate SBCE intervention(s) as defined in Table 2;
• Measure at least one of the outcomes in Table 3;
• Assess intervention effects using either impact evaluations techniques or systematic reviews of such studies (as defined below);
• Published between January 2000 and July 2016;¹
• Conducted in a low- and middle-income country, as categorized by the World Bank Country and Lending Groups (18) at the time of study publication - except for systematic reviews;
• Published in any language;
• Are completed studies, protocols and ongoing studies meeting all other agreed inclusion criteria.

¹ These dates allow for the inclusion of studies and reviews published within the past 15 years.
Inclusion criteria specific to impact evaluations

Impact evaluations may be published (e.g. as a journal article, book chapter) and unpublished (e.g. as a report or working paper). They are defined as programme evaluations or field experiments that use experimental or observational data to measure the effect of a programme relative to a counterfactual situation representing what would have happened to the same group in the absence of the programme (19). Impact evaluations may also test different programme designs.

Impact evaluations were included in the evidence map if they had the following study designs:

- randomized controlled trial (RCT);
- regression discontinuity design (RDD);
- controlled before and after study using appropriate methods to control for selection bias and confounding such as propensity score matching or other matching methods, instrumental variable estimation (or other methods using an instrumental variable such as the Heckman two step approach), difference-in-differences (DD) or a fixed- or random-effects model with an interaction term between time and intervention for baseline and follow-up observations;
- cross-sectional or panel studies with an intervention and comparison group using methods to control for selection bias and confounding as described above;
- interrupted-time series (ITS)–a study that uses observations made at a minimum of three time points before and after an intervention (the ‘interruption’);
- mixed method approaches that combine any of the above designs with qualitative research.

Efficacy trials were excluded because these determine whether an intervention produces the expected result under ideal circumstances, whereas effectiveness trials aim to measure the degree of beneficial effect in ‘real world’ settings. Other study types excluded were qualitative studies that were not combined with one or more of the aforementioned quantitative method, observational studies with a comparison group but no control for confounding, and opinion pieces. Finally, studies addressing questions other than intervention effects (e.g. risk factors, epidemiology, implementation) were also excluded.

Additional inclusion criteria for systematic reviews

Published or ongoing systematic reviews were included in the evidence map that were either explicitly described as a systematic review, or described methods used for the search, data collection and synthesis, as per the protocol for the 3ie database of systematic reviews (20).

Although the general inclusion criteria specified that studies should be performed in low- and middle-income countries, systematic reviews which may have reviewed studies in high-income countries were included if these reviews also contained studies performed in low- and middle-income countries. If a review only considered studies of interventions implemented in high-income countries, it was excluded.

Non-systematic literature reviews, systematic reviews of efficacy trials, qualitative reviews and reviews addressing questions other than intervention effects (e.g. risk factors, epidemiology, implementation) were also excluded.
Procedures for search, screening, data extraction and analysis

An information specialist assisted the team to develop a detailed search strategy covering a combination of academic databases, organizational websites, libraries of impact evaluations and systematic reviews, and citation tracking. The detailed search strategy is provided in Annex 3, Methods. All search results were imported to Eppe-Reviewer (Version 4) (21). The expert group provided information about potential additional studies and sources of potentially relevant studies. Impact evaluations were also identified via the bibliographies of systematic reviews.

Text mining software was used to prioritize results according to relevance. After double screening a sample of studies, relevant records were screened by one person, first at abstract and then at full text. Whenever the first screener was uncertain about inclusion/exclusion of a study, it was allocated to a second person for assessment. Questions and problems were resolved through group discussion. A random selection of included and excluded references were reviewed for quality control. Finally, all studies identified for inclusion were screened by a second person before being included.

A data extraction form was used to extract descriptive characteristics of included studies. The research team tested the form on a small number of studies to ensure consistency in coding and to resolve any issues or ambiguities. Data extraction was then completed by a single coder, with the majority of data reviewed by a second coder. All included systematic reviews were appraised using an appraisal tool and were classified according to the confidence in findings using a traffic light system. The appraisal was conducted by one person, and reviewed by two others.

Data was analysed using descriptive statistics. Initial findings and the 3ie data visualization platform were reviewed by an expert group in November 2016. Following this review, the searches conducted were verified to respond to queries raised, through using bibliographic checking and review of studies submitted by experts. The coding of data was verified and modified to improve the categorization and presentation of data for users. The detailed search strategy, data extraction form and coding decisions are outlined in Annex 3.

---

2 Checklist available on the 3ie website: http://www.3ieimpact.org/media/filer_public/2012/05/07/quality_appraisal_checklist_srdatabase.pdf
Results

This section presents the findings of the evidence map. We discuss the characteristics of the included impact evaluations and systematic reviews across RMNCH. We also present an analysis of the quality of the included systematic reviews. More detailed analysis on each health area – reproductive, maternal, newborn and child health – is included in Annex 4.

Studies identified

As described in the PRISMA diagram (see Figure 3), of 28,402 records initially identified, 20,955 records were retained for screening at title and abstract after removal of duplicate records. Most did not meet inclusion criteria leaving 2,487 full texts. The main reasons for exclusion were study design (35%) and intervention (22%).

After screening, 457 completed impact evaluations, including 25 multi-arm trials, and 38 ongoing impact evaluations were included. For multi-arm trials, each comparison arm was treated as an individual study for the coding of interventions—therefore multi-arm trials yielded 491 unique comparisons. The number of impact evaluations identified includes 17 linked pairs of evaluations. Studies were considered linked if there were multiple papers by the same study team on the same impact evaluation reporting different outcomes or different follow-up periods. If they reported the same information, the study was excluded as a duplicate.

In addition, 142 systematic reviews and 13 ongoing systematic reviews were identified. An additional 22 systematic reviews met all the inclusion criteria, but included no evidence from low- and middle-income countries. Thus, although their inclusion criteria specified studies from low- and middle-income countries, they failed to find any such studies. These 22 reviews are included in a list provide in Annex 5 but were not coded and therefore not included in the findings below.
**Figure 3 PRISMA Diagram**

- **27,897** records identified through academic database searching
- **505** records identified through grey literature search and citation tracking

**20,955** records screened at title (after duplicates removed)

- **18,468** records excluded
  - Excluded on country: 60
  - Excluded on intervention: 556
  - Excluded on study design: 875
  - Excluded on outcome: 74
  - Excluded as duplicate / older version of included article: 57
  - Excluded as protocol pre-2012: 48
  - Unclear - no access to paper: 57
  - Unclear - language: 6
  - Unclear - paper unavailable: 82

- **2,487** articles screened at full-text

- **457** included impact evaluations + 38 ongoing
- **142** included systematic reviews + 13 ongoing

- **22** systematic reviews that included no LMIC evidence
Trends and characteristics of the impact evaluations

Box 3: Tips for the reader

When coding interventions, each comparison arm in an impact evaluation was treated as an individual study. Thus, although there were 457 completed studies, 25 of them were multi-arm trials, yielding 491 unique comparisons.

In addition, remember that one study can only have one intervention (either a single intervention or a package). However it may cover multiple health areas, health topics and outcomes. This is highlighted again in the text below.

Publication of impact evaluations over time

The graph in Figure 4 shows the number of impact evaluations covering SBCE interventions for RMNCH published each year between 2000 and 2016. Each blue bar represents the number of studies published in that year while the orange line represents the cumulative increase in impact evaluations over the period. Since 2000, there has been a year-on-year increase in the number of published impact evaluations, going from just one impact evaluation published in 2000 to 63 new studies published in 2015. There was a notable increase in the number of studies published between 2010 and 2011, a jump from 28 to 38 studies. Indeed, 290 of the included studies were published in 2011 or after. The search was conducted in July 2016, and thus only captures studies available in the first half of 2016. Nevertheless, the number of studies published by July 2016 (n = 39) suggests that this growth trend will continue.
The majority of included studies were RCTs (n=351), including 25 multi-arm trials, while about one third of studies (n=106) used a quasi-experimental design. Two of these studies used a RDD, while the rest combined data on treatment and comparison groups (cross-sectional or panel) with one or more analysis method to address selection bias and confounding. This included 72 that used DDs, 41 that used a matching method, five that used instrumental variables and three that used another method to control for confounding and selection bias. Only 15 of the 458 impact evaluations combined a quantitative impact evaluation with a qualitative component.
Geographical location of impact evaluation studies

Impact evaluations were performed in 61 different low- and middle-income countries (LMIC), but their distribution across WHO regions is relatively uneven. However, this distribution corresponds to the burden of RMNCH mortality and morbidity. Most studies are from either the African Region (n=154) or the South-East Asia Region (n=137); with 84 studies from the Region of the Americas, 42 from the Eastern Mediterranean Region and 40 from the Western Pacific Region. There were only seven studies from the European Region, most of them from one country–Turkey, with a study each from Armenia and Belarus.

Impact evaluations are more unevenly distributed by country. Over half of the studies (n=270) come from 10 LMICs. These are, in order of frequency: Bangladesh, India, Mexico, China, Pakistan, Uganda, Kenya, Brazil, Ghana, and South Africa (see Figure 5). There were no studies from several countries with high levels of maternal and child mortality. Of the 19 countries with highest estimated maternal mortality ratios in 2015, (all in sub-Saharan Africa) (22), only nine countries were represented in the included studies.

Figure 5 Countries with the largest number of impact evaluations
Distribution of impact evaluations by health area

A relatively large number of impact evaluations were identified but they are unevenly distributed across health areas. As can be seen from Table 4 below, more than two thirds of studies cover child health interventions, possibly reflecting the larger number of child health topics included in the scope. Also, studies identified as WASH often targeted the household level, such as household uptake of latrines, hand washing etc. Rather than coding the study for each of maternal, newborn and child, these studies were coded as child as most water and sanitation interventions are evaluated primarily for benefits for young children.

A study could target multiple health areas and health topics, for example, an intervention targeting exclusive breastfeeding, complementary breastfeeding and diarrhoea. In this case the study would be coded as newborn and child health as well as the sub topics. These combinations are discussed in more detail in the individual health area report provided in Annex 4. It is fairly common for multiple health areas to be targeted within one SBCE programme: of the 457 evaluations, 109 targeted multiple RMNCH areas.

Table 4 Distribution of impact evaluations by health area

<table>
<thead>
<tr>
<th>Health Area</th>
<th>Impact evaluations</th>
<th>Ongoing impact evaluations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reproductive health</td>
<td>50</td>
<td>6</td>
</tr>
<tr>
<td>Maternal health</td>
<td>105</td>
<td>4</td>
</tr>
<tr>
<td>Newborn health</td>
<td>114</td>
<td>6</td>
</tr>
<tr>
<td>Child health</td>
<td>322</td>
<td>30</td>
</tr>
</tbody>
</table>

Note: A study may cover more than one health area

Studies by health topic

Table 5 below details the number of studies per health topic. The area with the largest number of studies is infant and child feeding and nutrition (n=195), covering a range of caregiver practices including early initiation of breastfeeding, introduction of complementary foods and provision of appropriate management and treatment for malnutrition. A large number of studies targeted care during pregnancy, childbirth and after childbirth (n=131), covering behaviours such as attendance by pregnant women at antenatal care visits with a skilled professional, having a birth preparedness and complications plan, birth in a health facility and care seeking after birth for the mother and newborn. There are fewer studies on the remaining topic areas: 50 studies targeted healthy timing and spacing of pregnancy, 29 on care seeking for childhood illness, 22 on care seeking for newborn illness and 22 studies across intervention areas targeting pneumonia.
Table 5 Impact evaluation studies by health topic

<table>
<thead>
<tr>
<th>Health Topic</th>
<th>No. of Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthy timing and spacing of pregnancy</td>
<td>50</td>
</tr>
<tr>
<td>Care during pregnancy, childbirth and after childbirth</td>
<td>131</td>
</tr>
<tr>
<td>Care seeking for newborn illness</td>
<td>22</td>
</tr>
<tr>
<td>Infant feeding and nutrition</td>
<td>195</td>
</tr>
<tr>
<td>Immunizations</td>
<td>37</td>
</tr>
<tr>
<td>Care seeking for childhood illnesses</td>
<td>29</td>
</tr>
<tr>
<td>Malaria</td>
<td>33</td>
</tr>
<tr>
<td>Pneumonia</td>
<td>22</td>
</tr>
<tr>
<td>Diarrhoea</td>
<td>30</td>
</tr>
<tr>
<td>Water, sanitation and hygiene (WASH)</td>
<td>54</td>
</tr>
<tr>
<td>Early child development</td>
<td>49</td>
</tr>
</tbody>
</table>

Impact evaluation studies by intervention area

The graph in Figure 6 presents the distribution of impact evaluations\(^3\) according to the 18 SBCE interventions (singular interventions and packages of SBCE interventions), disaggregated by whether the intervention also included a non-SBCE component. Non-SBCE components are those that do not fit into any of the categories included in this map—typically a health service delivery component or a policy or structural intervention.

Half of the studies (286) focus on interpersonal communication and health education activities, delivered as a single intervention (n=186), as a mixed package of interpersonal communication and education approaches (n=60) or as a package with other SBCE interventions (n=54). This includes 92 evaluations of home visit interventions, 68 evaluations of group approaches, 26 evaluations of facility-based approaches and 60 evaluations of interventions using a combination of the three approaches (home visits, groups, facility-based). Interpersonal communication and health education activities were frequently combined with a non-SBCE intervention component (n=132), and were also often combined in packages with other SBCE interventions: interpersonal communication some form of mass media (n=28), interpersonal communication with a social media or m-health approach (n=5) and interpersonal communication with community participation and social accountability approaches (n=4).

\(^3\) For this section of the report, numbers refer to the number of comparisons, reflecting the inclusion of a number of multi-arm trials testing different SBCE interventions – thus N=491.
A large number of the evaluations assess demand-side financing interventions (n=66), predominately conditional cash transfer programmes. Only three evaluations address demand-side financing as part of a package. Many studies evaluate community mobilization activities (n=42) as well as community mobilization activities combined with another SBCE approach (community mobilization packages, n= 22). Nearly half of the community mobilization and community mobilization packages (48%) were combined with non-SBCE interventions. There were relatively few evaluations of social media and m-health interventions (n=13), social marketing (n=18) and mass media and education-entertainment (n=20) and very few evaluating community participation and social accountability interventions focusing on RMNCH (n=6). Figure 7 presents the number of studies disaggregated by SBCE intervention and health topic area.
Figure 7 RMNCH: Distribution of impact evaluations by intervention area and health topic

Note: A study/comparison covers only one intervention area but may cover more than one health topic.
Box 4: Male involvement interventions

Different programmes have directed efforts to harness the support and active involvement of men for improved RMNCH outcomes. Studies addressing male involvement were evenly distributed across different health areas (28 in total – none were multi-arm trials). Male involvement was addressed in 10 studies on maternal health, five for newborn health, 10 for child health and in 11 studies on reproductive health. Most interventions focused on the provision of interpersonal communication and health education either through individual and/or group health education with men (as husbands or a parent), or couple counselling. Group, couple and individual counselling and education interventions were provided in the home, in the community and in the facility. Interventions such as group education, dialogue, seminars and workshops were undertaken in a community setting. Seven studies explicitly targeted male community leaders and decision-makers. We also found eight systematic reviews that included interventions for male involvement in RMNCH.

Impact evaluation outcomes assessed

The most commonly measured health outcomes were child growth and development (n=155), morbidity (n=103) and mortality (n=60), (see Figure 8). Other commonly studied outcomes were care practices, either by a caregiver (n=177) or for self-care (n=44). Forty-three studies reported on use of a family planning method. Routine care-seeking behaviour, such as use of antenatal care and the uptake of immunizations, is also a commonly measured outcome (n=124). Knowledge and attitudes of individuals and households are also frequently measured (n=119).
Figure 8 Distribution of impact evaluations by outcome area

Note: A study may cover more than one outcome
Several outcomes were measured less frequently. Few impact evaluations measured community capacity (n=3), social accountability (n=3) or measures of community participation in planning or programmes (n=1). A limited number of studies reported on gender equity or indicators of the status of women (n=12). Similarly, few studies measured household dynamics and communication such as couple / mothers / mothers-in-law / parent-child communication (n=18) and joint-decision making the household (n=8). Very few studies measured how interventions affect social norms at the community level (n=5). Only seven studies measured knowledge and attitudes of health providers for community engagement and only 15 measured provider communication and engagement skills, even though many studies included some form of interpersonal communication or community engagement. Finally, only 25 impact evaluations presented any cost data.

Consideration of equity

Over 60% of the impact evaluation studies consider equity in some way (n=279). Figure 9 presents data on how studies consider equity, and for which population characteristics. The majority of studies are classified as considering equity because the intervention is targeting a specific disadvantaged group or population (n=258). Most of these studies are of interventions targeting groups living in rural areas and/or far from health facilities or the beneficiaries are of low socio-economic status.

A smaller number of studies undertook a subgroup analysis by one of the dimensions of equity (n=72). The most common dimensions of equity considered in subgroup analyses were place of residence (n=40), socio-economic status (n=44) and education level (n=28). Few studies assessed the effect of an intervention on equity of outcomes, for example inequities in neonatal mortality or equity in vaccination coverage. Disability and level of social capital, referring to relationships and social networks, are not considered in any of the included studies.

Figure 9 Consideration of equity

Note: A study may cover more than one equity component
Overview of ongoing impact evaluations

There were 38 ongoing impact evaluations across the RMNCH areas, including seven multi-arm trials, thus yielding 45 unique comparisons coded for interventions in the evidence map. The distribution of studies across health areas is relatively consistent with that for completed studies. Most studies are targeting child health (n=30), with fewer than 10 on reproductive health (n=6), maternal health (n=4) and newborn health (n=6).

Figure 10 presents the number of ongoing studies by intervention area. Studies of interpersonal communication and educational activities continue to be well represented in the map (n=27), including seven studies involving home visits, four of group approaches, two facility-based studies, and 14 combining multiple approaches. As with the completed impact evaluations, these different approaches are often compared with a non-SBCE intervention (11 of 27).

A comparatively high number of ongoing studies are evaluating the impact of social media and m-health interventions, either as an individual SBCE intervention (n=4) or combined with interpersonal communication and education activities (n=4). This is an intervention area with few completed impact evaluations, so these new studies will contribute to addressing this gap. Of the ongoing studies identified, none were evaluating six intervention areas of interest to this evidence map, including, social marketing, provider training and service delivery adjustment and community health insurance.

**Figure 10 Ongoing impact evaluations by intervention area**

Note: Reflects studies/comparisons for which each covers one intervention area
Unlike completed studies, very few of the identified ongoing studies (only two) have a quasi-experimental design; the rest are RCTs. Although this may represent a trend in current study design, it is probably because RCT protocols are more often published prior to commencement of the study.

The geographic spread of the ongoing studies is similar to that of the published studies. The highest number of ongoing studies are taking place in the African Region (n=16), 14 are taking place in the South East Asian region, five are taking place in the Western Pacific and only one is in the Region of the Americas. There were no ongoing studies in the European Region.

**Characteristics and trends of the systematic reviews**

**Trends in the publication of systematic reviews by health area over time**

Figure 11 shows the number of completed systematic reviews covering SBCE interventions for RMNCH published each year between 2000 and 2016. The number of systematic reviews on SBCE interventions for RMNCH peaked in 2013, with 30 systematic reviews published. Since then the number has dropped, with 24 published in 2014 and 27 in 2015. Child health was the area most often reviewed (91 reviews), many of which have been published since 2013.

**Figure 11** Trends in the publication of systematic reviews of RMNCH over time
Distribution of systematic reviews by health area

Table 6 Numbers of systematic reviews in each health area

<table>
<thead>
<tr>
<th>Health Area</th>
<th>Systematic reviews</th>
<th>Ongoing systematic reviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reproductive health</td>
<td>28</td>
<td>3</td>
</tr>
<tr>
<td>Maternal health</td>
<td>60</td>
<td>6</td>
</tr>
<tr>
<td>Newborn health</td>
<td>51</td>
<td>3</td>
</tr>
<tr>
<td>Child health</td>
<td>91</td>
<td>8</td>
</tr>
</tbody>
</table>

As mentioned previously, 142 systematic reviews and 13 ongoing systematic reviews were identified. An additional 22 systematic reviews met all the inclusion criteria, but included no evidence from low- and middle-income countries. Thus, although their inclusion criteria specified studies from low- and middle-income countries, they failed to find any such studies. These 22 reviews are identified in Annex 5. They were not coded and therefore are not included in the findings below.

The systematic reviews are unevenly distributed across health areas, as can be seen from Table 6 above. Almost 65% of the reviews cover child health interventions, possibly reflecting the larger number of child health topics included in the scope. As for the impact evaluations, reviews identified as WASH were coded as child. We identified 60 reviews covering maternal health and 51 reviews of newborn health topics. The health area with the smallest number of reviews was reproductive health, with 28 reviews. A review could also target multiple health areas and health topics; of the 142 completed systematic reviews, 61 targeted multiple RMNCH areas.

Systematic reviews by health topic

Most of the systematic reviews were concerned with care during pregnancy, childbirth and after childbirth. The next most common categories were infant feeding and nutrition, healthy timing and spacing of pregnancy and malaria. Pneumonia, care seeking for childhood illness and early child development were the topics least covered by systematic reviews.
Table 7 Reviews by health topic

<table>
<thead>
<tr>
<th>Health Topic</th>
<th>No. of Reviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>Care during pregnancy, childbirth and after childbirth</td>
<td>70</td>
</tr>
<tr>
<td>Infant feeding and nutrition</td>
<td>53</td>
</tr>
<tr>
<td>Immunizations</td>
<td>34</td>
</tr>
<tr>
<td>Healthy timing and spacing of pregnancy</td>
<td>28</td>
</tr>
<tr>
<td>Malaria</td>
<td>25</td>
</tr>
<tr>
<td>Diarrhoea</td>
<td>17</td>
</tr>
<tr>
<td>Water, Sanitation and Hygiene (WASH)</td>
<td>17</td>
</tr>
<tr>
<td>Care seeking for newborn illness</td>
<td>16</td>
</tr>
<tr>
<td>Care seeking for childhood illnesses</td>
<td>10</td>
</tr>
<tr>
<td>Early child development</td>
<td>11</td>
</tr>
<tr>
<td>Pneumonia</td>
<td>9</td>
</tr>
</tbody>
</table>

Distribution of interventions in systematic reviews

The intervention category most often considered in the systematic reviews was interpersonal communication/health education activities and packages that included interpersonal communication (home visits, n=52; group approaches, n=44; facility-based approaches, n=19; mixed interpersonal approaches, n=70; interpersonal communication and educational activities with other interventions, n=17)\(^4\). The next most studied intervention category is demand-side financing interventions (n=34), followed by community mobilization interventions and packages (n=33 and n=14, respectively). There is a relatively smaller number of reviews of mass media and education entertainment interventions (n=20), social media and m-health interventions (n=12), followed by SBCE provider training and service delivery adjustments (n=11) and social marketing (n=11). Packages of interventions are considered in fewer reviews, including interpersonal communication and mass media and entertainment education (n=9), interpersonal communication and social marketing (n=3) and intervention communication and social media and m-health (n=2). There are seven reviews covering community-based health insurance and seven reviews of community participation in health programming and social accountability.

---

\(^4\) Interventions were coded according to the particular review’s inclusion criteria. When the inclusion criteria were not clear, the relevant interventions captured in the included studies in the review were coded. Many reviews covered multiple interventions.
### Figure 12 Distribution of systematic reviews by intervention area

<table>
<thead>
<tr>
<th>Intervention Area</th>
<th>Number of Reviews</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interpersonal communication (IPC) / educational activities</strong></td>
<td></td>
</tr>
<tr>
<td>Home visits</td>
<td></td>
</tr>
<tr>
<td>Group- any setting</td>
<td></td>
</tr>
<tr>
<td>Facility based</td>
<td></td>
</tr>
<tr>
<td>Mixed interpersonal</td>
<td></td>
</tr>
<tr>
<td><strong>Mass and social media activities</strong></td>
<td></td>
</tr>
<tr>
<td>Mass media and education entertainment</td>
<td></td>
</tr>
<tr>
<td>Social media and m-health</td>
<td></td>
</tr>
<tr>
<td>Social marketing</td>
<td></td>
</tr>
<tr>
<td><strong>Community mobilization / participation activities</strong></td>
<td></td>
</tr>
<tr>
<td>Community mobilization</td>
<td></td>
</tr>
<tr>
<td>Community participation and social accountability</td>
<td></td>
</tr>
<tr>
<td><strong>SBCE Service / programme strengthening activities</strong></td>
<td></td>
</tr>
<tr>
<td>Provider training and service delivery adjustments</td>
<td></td>
</tr>
<tr>
<td><strong>Interventions to address financial barriers</strong></td>
<td></td>
</tr>
<tr>
<td>Demand-side financing</td>
<td></td>
</tr>
<tr>
<td>Community health insurance</td>
<td></td>
</tr>
<tr>
<td><strong>SBCE packages</strong></td>
<td></td>
</tr>
<tr>
<td>IPC and mass media and education entertainment</td>
<td></td>
</tr>
<tr>
<td>IPC and social media and m-health</td>
<td></td>
</tr>
<tr>
<td>IPC and social marketing</td>
<td></td>
</tr>
<tr>
<td>IPC and demand-side financing</td>
<td></td>
</tr>
<tr>
<td>IPC and community participation and social accountability</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** One review may report on multiple interventions.

### Outcomes assessed in systematic reviews

The outcomes assessed by the systematic reviews are largely in line with the outcomes assessed in the impact evaluations. The most commonly included outcome measures are health outcomes (n=163), that is mortality (n=62), morbidity and disability (n=59) and child growth and development (n=42). These are followed by care-seeking behaviour (for routine, n=64; for complications, n=26) and care practices by a caregiver (n=44) or self-care (n=30). The outcomes least mentioned include community capacity, participation and accountability, parenting skills, joint decision-making in the household and crosscutting outcomes like status of women or social cohesion.

---

5 As with interventions, outcomes were coded according to the particular review’s inclusion criteria. When the inclusion criteria were not clear, the relevant outcomes captured in the included studies in the review were coded. Many reviews covered multiple outcomes.
Figure 13 Distribution of systematic reviews by outcomes

Number of reviews

- Knowledge and attitudes of individuals and households
- Social norms in the community for RMNCH
- Knowledge and attitudes of health providers for engagement
- Couple /mothers / mothers-in-law /parent-child communication
- Parenting skills
- Joint decision-making in the household
- Self-care practices
- Caregiver practices
- Family planning method use
- Household environmental practices
- Routine care-seeking behaviour
- Care seeking for complications/illness
- Perception of quality of care / satisfaction with services
- Provider communication and engagement
- Community capacity
- Participation in planning programmes
- Social accountability
- Morbidity and disability
- Mortality
- Child growth and development
- Gender equity / status of women
- Social cohesion
- Cost

- Knowledge and attitudes
- Household dynamics / communication
- Care practices
- Care-seeking behaviour
- Quality of care / satisfaction
- Community capacity, participation and accountability
- Health
- Cross-cutting
Consideration of equity in systematic reviews

Most systematic reviews (75%) did not consider equity (n=107). A small number explicitly considered interventions that targeted a vulnerable group (n=17) or undertook a subgroup analysis by populations (n=13) typically either place of residence (such as living in rural areas) or socioeconomic status. Six of the systematic reviews included studies that assessed an outcome measure of equity (or inequity).

Figure 14 Consideration of equity in systematic reviews
Rating confidence in the systematic reviews

Each included systematic review was appraised for confidence in the methods and findings, based on a standardized checklist (for detail see Annex 3, Methods). The checklist assesses methods used to identify, include and appraise studies in the review. Just over a quarter of the studies were rated as high confidence in the findings based on the methodological approach (n=40). There were a similar number of reviews of medium and low confidence (n=44 and n=58, respectively).

Most reviews had clear inclusion criteria (92%), had reasonably comprehensive searches, including searching the minimum required number of relevant databases to identify studies (82%), and included both published and unpublished literature (85%). Common reasons for reviews being assessed as medium or low confidence were: not reporting any independent screening of studies at full text to reduce bias in the selection of studies (35%), not reporting any independent data extraction by two or more reviewers to reduce bias in the extraction of data (34%), including studies of differing risks of bias, but not reporting or analysing the findings separately according to risk of bias status (61%) or using vote counting to synthesise findings, based on the direction of effect or statistical significance (15%).

While most reviews reported some sort of quality assessment of included studies (85%), 47% did not report the full results of the quality assessment and 35% did not make it clear which evidence was subject to low or high risk of bias.
Summary of key findings

What are the main gaps in the evidence?

Figure 15 displays all the included impact evaluations and systematic reviews, with each study mapped according to the intervention/outcome intersection(s) they cover. Grey bubbles represent impact evaluations, while the coloured bubbles represent systematic reviews, with different colours corresponding to the level of confidence in the review. The size of each bubble indicates the relative size of the number of studies for each intersection. The evidence map reveals two types of gaps: gaps in the impact evaluations, where few or no studies have been conducted, and synthesis gaps, where up-to-date, high-quality systematic reviews are lacking. An interactive platform that visually presents the findings can be found at this link: http://gapmaps.3ieimpact.org/evidence-maps/social-behavioural-and-community-engagement-interventions-reproductive-maternal-0
### Figure 15  Evidence map of SBCE interventions

<table>
<thead>
<tr>
<th>Interventions</th>
<th>Knowledge and attitudes</th>
<th>Household dynamics / communication</th>
<th>Care practices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home visits</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facility-based Interpersonal Communication (IPC)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group IPC - any setting</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mass media and entertainment education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social media and m-health</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social marketing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demand-side financing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community-based health insurance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community mobilization</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community participation and social accountability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provider training and service delivery adjustments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mixed IPC approaches</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community mobilization packages</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IPC and mass media and entertainment education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IPC and social media and m-health</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IPC and social marketing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IPC and demand-side financing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IPC and community participation and social accountability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Care-seeking behaviour</td>
<td>Quality of care / satisfaction</td>
<td>Community participation and accountability</td>
<td>Health outcomes</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-------------------------------</td>
<td>-------------------------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Provider training and service delivery adjustments</td>
<td>Community capacity</td>
<td>Participation in planning and programmes</td>
<td>Social accountability</td>
</tr>
<tr>
<td>Community participation and social accountability</td>
<td>Community mobilization packages</td>
<td>Social marketing</td>
<td>Demand-side financing</td>
</tr>
<tr>
<td>Community-based health insurance</td>
<td>Routine care-seeking behaviour</td>
<td>Perception of quality of care of health services</td>
<td>Self-care practices</td>
</tr>
<tr>
<td>Maternal, newborn and child morbidity and disability</td>
<td>Social cohesion</td>
<td>Cost</td>
<td>Social accountability</td>
</tr>
</tbody>
</table>

Impact evaluations
- High confidence
- Medium confidence
- Low confidence
- Protocol

Figure 15: Evidence map of SBCE interventions
Summary of key findings on impact evaluations

Interventions

The distribution of impact evaluations across intervention areas is uneven. There is a heavy focus on interpersonal communication and health education activities, specifically, home visits and group-based approaches. A large number of studies combined several of the interpersonal communication approaches or combined one or more of these approaches with mass media. A similarly large number of evaluations of demand-side financing approaches, typically conditional cash transfers, were identified. Community mobilization, either alone or packaged with other SBCE approaches, has also been commonly studied.

There are, however, relatively few impact evaluations in the mass and social media activities intervention category and very few evaluations of mass media and entertainment education programmes. Moreover, there were few completed evaluations of social-media and m-health interventions targeting RMNCH. This is surprising given the growth in programmes piloting these approaches around the world (23). A number of ongoing m-health evaluations were identified, however, they are concentrated in one health topic, mainly introducing vaccination reminders. Few evaluations of social marketing programmes were found.

There are few evaluations of community participation in health service planning and programmes and social accountability programmes for RMNCH, either alone or combined with an interpersonal communication approach, although some may be captured under community mobilization. Finally, we identified relatively few studies of community based health insurance programmes.

In terms of the health topics targeted in the identified evaluations of SBCE interventions we find a relatively uneven distribution between the 11 topics we focused on. Infant feeding and nutrition and care during pregnancy, childbirth and after childbirth are by far the most frequently targeted health topics in the interventions assessed in included studies. There is a smaller number of studies targeting immunizations, healthy timing and spacing of pregnancy, WASH and early child development. There are also relatively few evaluations of SBCE interventions targeting pneumonia, most of which use interpersonal communication and educational activities, care seeking for newborn illness and care seeking for childhood illness.

Reproductive health

The trends in studies targeting reproductive health are similar to the high-level trends in interventions across RMNCH described above, although this is the health area with the fewest number of impact evaluations overall. There is a focus on interpersonal communication and health education approaches, including home visits, facility-based and mixed approaches to interpersonal communication around reproductive health. There is a small number of studies of social marketing, mass media and education entertainment and provider training and service delivery adjustments targeting this area. However, there are several intervention gaps specific to reproductive health. We did not identify any evaluations of social media or m-health

---

6 Expert consultation on this issue suggested that a number of mass media evaluations were published before the publication date cut-off (the year 2000). Alternatively, a number may have been excluded from the map due to study designs that would not meet the inclusion criteria, such as a before and after comparison without a control group.
programmes targeting reproductive health, although there is one ongoing RCT of a mass media programme to promote the uptake of family planning services in Burkina Faso. There are also relatively few community mobilization programmes targeting reproductive health. The large number of evaluations of demand-side financing programmes typically target maternal or child health, with fewer targeting use of family planning methods. Finally, there are relatively few evaluations of packages of SBCE interventions targeting reproductive health.

Maternal health
The trends in the studies of interventions targeting maternal health largely follow the trends across RMNCH described above. A large proportion of the maternal health studies focus on interpersonal communication and health education approaches, demand-side financing or community mobilization, either alone or packaged with other SBCE interventions. A small number of studies evaluate mass media and education entertainment, social media and m-health, community participation and social accountability interventions and provider training and service delivery adjustments for maternal health. One difference of note is the number of social marketing studies, where we identify just one study targeting maternal health.

Newborn health
Also for studies of interventions targeting newborn health, we see a trend largely consistent with the trends across RMNCH, although there is an especially heavy focus in the newborn health area on interpersonal communication and health education approaches, particularly home visits and mixed interpersonal communication approaches. A number of studies also evaluate community mobilization, either alone or packaged with other SBCE interventions. Few studies evaluate mass media and education entertainment, social media and m-health, community participation and social accountability interventions and provider training and service delivery adjustments. We identified just one social marketing study targeting newborn health.

Child health
Child health is the health area with the largest number of included impact evaluations, with child health targeted in 70% of the included studies. The intervention types that have been studied follow the trends mentioned for the other health areas. A large proportion of the child health studies focus on interpersonal communication and health education approaches, particularly home visits or group-based approaches, demand-side financing or community mobilization, either alone or packaged with other SBCE interventions. Few studies evaluate mass media and education entertainment, social media and m-health, community participation and social accountability interventions and provider training and service delivery adjustments around child health. However, there are some differences of note. There are a relatively large number of child health studies that use an interpersonal communication approach combined with mass media and education entertainment. In addition, almost all of the included social marketing programmes targeted child health, including around WASH, malaria and infant and child feeding issues.
Outcomes

The most frequently measured outcomes were health-related outcomes, such as mortality and child growth and development, care seeking and care practices. This is in line with the focus of the Millennium Development Goals (MDGs) on mortality and care seeking, which coincided with the years of our inclusion criteria (2000 to 2016). Using the terminology of the EWEC Global Strategy, this would also correspond to the focus on the Survive agenda, with knowledge and care seeking for RMNCH interventions being on the pathway to reaching the final health outcomes.

There are several gaps in the outcomes studied. Very few evaluations measured outcomes such as community capacity or participation in health programming. Outcomes related to household communication, social norms and gender equity were also rarely reported. Finally, few studies reported on knowledge and attitudes of health providers for engagement or on provider communication and engagement skills, despite the large proportion of studies that involve interpersonal communication and health education activities. The role of these types of outcomes for achieving important health and social development goals is now better understood. There is, therefore, a need for well-designed studies to address these in the future.

The distribution of outcomes studied at the individual health area level largely reflects the distribution of outcomes at the aggregate RMNCH level. These findings highlight the need for the global health community to consider how research can better capture outcome, equity and human rights issues associated with the Thrive and Transform agendas in the EWEC Global Strategy.

Other findings

Studies are unevenly distributed across regions and countries. Sub-Saharan Africa and South East Asia, reflecting the highest regional burdens of maternal, neonatal and child mortality. Almost 60% of the included studies come from just 10 countries. There were no studies in several countries with a high maternal and infant mortality, notably Sierra Leone, Cote d’Ivoire, Liberia, Angola and Chad. This finding is largely consistent across the different health areas, although a greater proportion of the reproductive health studies take place in Africa than the other health areas.

Most studies were RCTs, with a relatively small proportion of quasi-experimental studies. However, there are relatively more quasi-experimental studies of maternal and reproductive health interventions than of newborn and child health. Few of the studies included qualitative components, process evaluation and information on costs or cost effectiveness, potentially leaving important questions around programme design, implementation and affordability unanswered. As the focus on sustainability will be even stronger in the era of the SDGs, the demand for studies to consider costs of interventions may increase.

Of the small proportion of impact evaluations that considered equity—by targeting the interventions at a vulnerable group, undertaking subgroup analysis or assessing an equity outcome—most targeted place of residence, typically a rural area, or socioeconomic status. Other important dimensions of equity such as ethnic group, language, culture, or disability
were rarely considered in impact evaluations. This trend is consistent across reproductive, maternal, newborn and child health.

Although not systematically captured in the results, the study team noted a lack of detailed information on interventions in the included impact evaluations. This made coding difficult, but more importantly reduces the potential for learning from what has already been studied. Work is underway to improve reporting on context and implementation issues (24), however, publication limitations and accessibility of the information will remain a challenge.

**Summary of key findings on systematic reviews**

There are a large number of systematic reviews, spread across the different health topics. The distribution of those reviews is however uneven, similar to the impact evaluation evidence base. A large proportion of the reviews focused on interpersonal communication and health education approaches, particularly home visits and group approaches. This includes a large number of high confidence reviews. There is also a large number of reviews of demand-side financing interventions, and also a number of reviews that cover community mobilization or community mobilization packages.

Surprisingly, considering the low number of impact evaluations of social media and m-health interventions across the health areas, a large number of reviews were identified. Many of these are of low or medium confidence, however. Commissioning more systematic reviews in this area is unlikely to contribute much to the knowledge base until new impact evaluations are published.

Although there are a number of high confidence systematic reviews that include some evaluations of community mobilization approaches, many of these have broad intervention inclusion criteria without a specific focus on systematically capturing the community mobilization literature. New systematic reviews focusing on community mobilization or community mobilization packages for the different health topics covered by the map, particularly WASH and infant feeding and nutrition where there are a number of impact evaluations and no high or medium confidence systematic reviews, may therefore be of value.

Similarly, while we identify a small number of high confidence reviews that include some evaluations of provider training and service delivery adjustments, and a small body of impact evaluation literature in this area, these reviews often provide only a cursory analysis of this intervention and it is not clear if they comprehensively cover the literature. There are no high or medium confidence reviews focusing exclusively on systematically covering this literature across any of the health topics.

There are fewer systematic reviews in the reproductive health area and only a small proportion were assessed as high confidence. The high confidence reviews are focused on key areas such as interpersonal communication and health education approaches for family planning method use after birth.

There are several intervention areas where there are small bodies of impact evaluations but no high confidence systematic reviews. These include demand-side financing, group-based interpersonal approaches, community mobilization and community mobilization packages.
Early child development is an area of growing interest. Several high confidence reviews have assessed outcomes including child growth and development and knowledge and attitudes of households. However, there are several gaps where new systematic reviews could be beneficial including those considering demand-side financing, specifically conditional cash transfers and their effect on child growth and development outcomes, as well as a review looking at parenting skills.

Outcomes such as parenting skills, household dynamics, community participation and social accountability were less frequently identified, reflecting the fact that these outcomes are rarely assessed in primary studies.

A significant proportion of the systematic reviews identified had methodological limitations. The issue is not necessarily a call for more reviews, but a call for better designed, conducted and reported reviews. Consideration should be given to ways of improving the quality of reviews to address the most important concerns. Reporting was often poor and in many cases, it was difficult to determine the scope of the review as the basic review inclusion criteria were not clearly presented. Limitations in reporting can be addressed by future studies adhering to reporting guidelines, such as PRISMA (25).

**Limitations of the evidence map**

This evidence map provides a rich source of information on existing impact evaluations and systematic reviews of SBCE interventions for RMNCH, but as with any such exercise, there are limitations.

Time, financial and human resource constraints meant that key health areas and interventions had to be prioritized over others, thus some health areas, interventions, and outcomes were not addressed.

The search strategy was systematic, but not as comprehensive as it would be for a specific systematic review.

This map focussed on effectiveness studies, which quantify the size of a chosen effect, thus qualitative research was not included unless it was part of a mixed methods study. To fully understand effectiveness, a broader array of study designs would need to be searched than those included here. Qualitative research is particularly important for understanding how and why interventions did or did not work in different contexts. However, this was beyond the scope of this map.

Studies may have been missed but several steps were taken to reduce this risk. The search of eight academic databases/ portals using a detailed search strategy was supplemented by a search of grey literature databases. Along with expert verification, other methods such as reference checking of included systematic reviews and other literature reviews were used to identify additional papers. For example, the search strategy did not include terms that captured any interrupted time series studies. The expert group pointed out some key studies that they thought were missed in the search, including interrupted time series, however these studies were not included as they did not meet the other study inclusion criteria.
The majority of the abstract and full text screening was conducted by individual reviewers. While measures were introduced to limit error, such as involving a second review in the case of uncertainty and having a second reviewer screen a random proportion of articles, having two reviewers independently assess articles for inclusion would have made the screening more robust.

This map includes studies published from 2000 to 2016. The expert group pointed out several studies which were not included due to the date of publication.

A quality assessment of included impact evaluations was not conducted, and thus unlike the case with systematic review findings, this evidence map does not identify areas with high confidence evaluation studies.

Finally, it was often difficult for the study team to categorize interventions. In many cases this was due to insufficient reporting of intervention characteristics in included studies. Therefore, categorizations were made based on the information that we had available which in some cases required some assumptions about the intervention in question.
Conclusion

Investing in SBCE interventions will be of increasing importance to achieve the SDGs and the goals set out in the EWEC Global Strategy. This evidence map provides a starting point for researchers, decision makers and programme managers to access the available research evidence on the effectiveness of SBCE interventions. Findings from this evidence map show that there are a considerable amount of impact evaluations and systematic reviews from which we can draw lessons learned and conclusions. Nonetheless, there are still important gaps in the evidence base pertaining to SBCE interventions for RMNCH. We identified a number of important findings that should be considered in the design and reporting of future impact evaluations and systematic reviews to help improve and advance research on SBCE interventions.

Because this map is limited to identifying and describing the evidence base of included studies and reviews, it is not a systematic review and does not synthesise the evidence, so the map does not provide conclusions as to the effectiveness of the interventions included.

We identified 457 impact evaluations and 142 systematic reviews published since 2000, with the trend for impact evaluations being one of year on year growth in publication of new studies.

With a rapidly growing evidence base, it is important to take stock before making additional research investments to ensure that scarce resources go to address gaps in our knowledge of these interventions.

Overall, the map identified a large and growing body of effectiveness research on SBCE interventions, however the distribution of the evidence base is uneven across interventions, outcomes, health topics and geography. The majority of studies measured health outcomes, but they do not assess the effects of interventions on broader social outcomes. There is a lack of studies considering equity, in particular, the effects on vulnerable populations. Those studies that considered equity, most only
considered targeting of an intervention to rural areas, or by socioeconomic status, and important dimensions of equity were rarely or never considered (such as ethnicity, language, culture, disability).

The intervention and outcome categories used for this evidence map were oriented by the policy literature and frameworks available at the time we began this exercise (14). However, new frameworks continue to be developed, for example a recent publication by Kaufman and colleagues (2017) provides another categorization of interventions and outcomes, specifically for childhood vaccination communication (26). To be able to draw lessons from the existing research, it would be useful for global organizations, country partners and researchers to start building common frameworks and terminology for SBCE across RMNCH areas.

The evidence map can be explored in more depth by health topics of interest. The online visualization, list of references for each topic area, summary of systematic reviews appraisals, as well as links to the article pdfs will facilitate access to and use of the research. Key findings of the SBCE evidence map around the impact evaluation and systematic review evidence base are summarised below.

**Impact evaluations**

There is a heavy emphasis in past impact evaluations on interpersonal communication and health education activities. Many of these activities were delivered by community health workers, often via home visits and were part of a package of interventions. Demand-side financing and community mobilization were also frequently studied. Interventions related to community participation and social accountability, mass media and education-entertainment, social media and m-health, social marketing, community based health insurance and provider training and service delivery adjustments were less studied.

The most frequently measured outcomes included mortality and child growth and development, with other more intermediate outcomes such as care seeking and household care practices. Using the terminology of the EWEC Global Strategy, this corresponds to the important focus on the Survive agenda, with knowledge and care seeking for RMNCH interventions being on the pathway to reaching the final health outcomes. These will continue to be important, but future research will need to consider outcomes important to the Thrive and Transform agendas as well.

Few studies measured outcomes such as those related to the enabling environment, for example health provider attitudes and communication skills, household communication, changes in social norms, perceptions of quality of health services and participation and accountability outcomes. As we move to the SDGs era and embrace the goals of the EWEC Global Strategy, there is a need for research to measure effects on broader social, health and development objectives. This includes more impact evaluations to assess gender transformation and equity, in particular for vulnerable populations.

Studies are concentrated in Africa and South-East Asia, reflecting the highest regional burdens of maternal and neonatal mortality. However, over half of the studies come from only 10 LMICs: Bangladesh, India, Mexico, China, Pakistan, Uganda, Kenya, Brazil, Ghana, and South Africa. There are countries with a high burden of maternal and infant mortality where we identified
no studies, particularly in West Africa. Future SBCE research should consider studies in high-burden countries where no studies were identified, including francophone Africa.

The studies included in this evidence map were predominately RCTs, and a few quasi-experimental studies. This suggests that there may be potential for more high-quality quasi-experimental studies in the RMNCH area. Moreover, few studies include qualitative components, process evaluation and information on costs.

Finally, the study team noted a lack of detailed information on the interventions studied in the impact evaluations. When interventions are not described well, it is difficult for readers to understand what was done, how it was done and how this links to observed effects. This had direct implications for the SBCE map (making coding difficult) and has broader implications for the usefulness and quality of studies, as well as the feasibility of undertaking systematic reviews. Therefore, future impact evaluations should prioritize mixed-method studies that carefully describe intervention design and include assessment of process, implementation and costs.

Systematic reviews

The systematic review evidence base is large but unevenly distributed, mirroring the distribution of identified impact evaluations. A large proportion focus on interpersonal communication and health education, including a number of high confidence reviews. It may be helpful to conduct a review of reviews of these to identify more specific lessons learned and gaps in the knowledge. Given the large number of existing impact evaluations and reviews for these interventions, there may be opportunities to use these to develop global guidance. Where feasible, guidance and reviews should attempt to look across health areas to determine the key intervention components and implementation characteristics.

A significant share of the systematic reviews were assessed to have methodological limitations, particularly those on healthy timing and spacing of pregnancy. There is also a considerable number of low or medium confidence systematic reviews of social media and m-health interventions, despite the low number of impact evaluations identified in this area. Additional systematic reviews in this area would not contribute much to the knowledge base until new impact evaluations are published.

There are several areas where new systematic reviews could be of value, however, including community mobilization packages for WASH, infant feeding and nutrition, and early child development.

Implications

This mapping exercise is the first step in identifying priority areas for rigorous impact evaluations and systematic reviews of SBCE interventions for RMNCH and key outcomes for the next five years. Based on the findings, a systematic research prioritization exercise should now be undertaken. We identify initial next steps that will help improve and advance research on SBCE interventions:

- It would be useful for global and country partners to work together to identify common intervention categories for SBCE interventions across RMNCH areas, highlighting specificities
of particular health areas/topics as needed. Having common frameworks and drawing lessons learned across RMNCH and different health areas, where possible, may expand the usefulness of the lessons we are drawing from the current research and implementation experience, and help inform future investment in SBCE research and programmes for RMNCH.

• Efforts could then follow to achieve consensus on priority areas for research and evidence synthesis. Where research priority areas are identified, further consensus on optimal study designs, key intervention components and key outcomes would be useful so that an evidence base can be built and synthesized over the next five to ten years.

• Further research on SBCE interventions should consider the measurement of distal and process outcomes, carefully considering what the core contributions SBCE interventions are making toward achieving the social, health and development goals.

• Research on SBCE interventions can also measure their contributions to the broader social outcomes aspired to in the new EWEC Global Strategy, including community participation and social accountability. The link to improved health may come from contributions to the enabling environment and improvement of social determinants as well as from direct health outcomes.

• More studies are needed to fill an important gap in measuring interventions to meet the needs of vulnerable populations. The map identifies gaps in targeting these populations and measuring direct and differential effects on them would be important. This includes incorporating more consistently considerations of equity (including gender, education, socioeconomic status, place of residence, ethnicity, culture and disability), and targeting research in high-burden countries and other countries where not studies were identified, such as francophone Africa.

• Future research should also consider the use of mixed-methods impact evaluations and systematic reviews, and studies that involve causal chain analysis and process evaluation techniques, to provide a more in-depth understanding of how change occurs. The evidence for SBCE would also benefit from more studies that include cost data.

• Further research can be undertaken to complement the findings from this evidence map, including on additional health areas (for example, expanding sexual and reproductive health); on other SBCE interventions and approaches that were not included; and with study designs that were not included, specifically qualitative research and research related to implementation and delivery mechanisms.

• Reporting of intervention implementation needs to improve in order for the quality of reviews to be improved, a problem encountered in this mapping exercise. WHO has recently released *Programme reporting standards for sexual, reproductive, maternal, newborn, child and adolescent health*, specifically intended to support programmes to better document key contextual and implementation factors (27).
References


Annex 1. Recent SBCE-related WHO guidance (up to May 2017)

General

Healthy timing and spacing of pregnancy


Care during pregnancy, childbirth and after childbirth


---

7 Includes recommendations approved by the WHO Guideline Review Committee


**Infant/child feeding and nutrition**


**Pneumonia**


**Malaria and dengue fever**

### Annex 2. Detailed definitions of health topics, interventions and outcomes

#### Health topics

<table>
<thead>
<tr>
<th>Health topic</th>
<th>Sub-topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthy timing and spacing of pregnancy</td>
<td>Sexually active men and women, who do not intend pregnancy use a modern contraceptive until they are desirous of pregnancy</td>
</tr>
<tr>
<td></td>
<td>After a live birth, women or their partners use a modern contraceptive method to avoid pregnancy for at least 24 months</td>
</tr>
<tr>
<td></td>
<td>After a miscarriage or induced abortion, women or their partners use a modern contraceptive method to avoid pregnancy for at least six months</td>
</tr>
<tr>
<td>Care during pregnancy, childbirth and after childbirth</td>
<td>Pregnant women attend antenatal care visits with a skilled health professional within the first trimester of pregnancy</td>
</tr>
<tr>
<td></td>
<td>Pregnant women attend at least four antenatal care sessions with a skilled health professional</td>
</tr>
<tr>
<td></td>
<td>Pregnant women receive timely basic vaccinations</td>
</tr>
<tr>
<td></td>
<td>Pregnant women do not consume alcohol or smoke during pregnancy</td>
</tr>
<tr>
<td></td>
<td>Pregnant women have a birth preparedness and complications plan</td>
</tr>
<tr>
<td></td>
<td>Pregnant women give birth at a health facility or in the presence of a skilled health professional</td>
</tr>
<tr>
<td></td>
<td>After an uncomplicated vaginal birth in a health facility, healthy mothers and newborns should receive care in the facility for at least 24 hours after birth. If birth is at home, women and their newborn should receive postnatal care within 24 hours of birth</td>
</tr>
<tr>
<td></td>
<td>Women and their newborns attend postnatal care with a skilled health professional on day 3 (48–72 hours), between days 7–14 after birth, and six weeks after birth</td>
</tr>
<tr>
<td></td>
<td>Members of the household and the community recognize that smoking and second-hand smoke harm health and take appropriate measures</td>
</tr>
<tr>
<td>Health topic</td>
<td>Sub-topic</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>---------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Care seeking for newborn illness</td>
<td>Caregivers seek prompt and appropriate care for signs and symptoms of newborn illness</td>
</tr>
<tr>
<td>Infant / child feeding and nutrition</td>
<td>Early initiation of breastfeeding (within one hour) after birth</td>
</tr>
<tr>
<td></td>
<td>Mothers continue to exclusively breastfeed for six months after birth</td>
</tr>
<tr>
<td></td>
<td>Mothers and caregivers introduce appropriate complementary foods at 6 months, while continuing to breastfeed up to or beyond 2 years</td>
</tr>
<tr>
<td></td>
<td>School-age children achieve adequate daily intake of diverse, fresh fruit and vegetables and receive supplementary foods when at risk of undernutrition</td>
</tr>
<tr>
<td></td>
<td>School-age children undertake sufficient physical activity to reduce chance of obesity</td>
</tr>
<tr>
<td></td>
<td>Mothers and caregivers provide appropriate management and treatment for malnutrition</td>
</tr>
<tr>
<td>Immunizations</td>
<td>Caregivers seek a full course of timely basic vaccinations for infants and children e.g. rotavirus, measles, pneumococcal conjugate vaccine, haemophilus influenzae type b (Hib), pertussis, DTP1, DTP3, OPV, IPV)</td>
</tr>
<tr>
<td>Care seeking for childhood Illnesses</td>
<td>Caregivers recognize when sick children need treatment outside the home and seek care from appropriate providers</td>
</tr>
<tr>
<td></td>
<td>Caregivers follow health worker’s advice about treatment, follow up and referral</td>
</tr>
<tr>
<td>Malaria and dengue fever</td>
<td>Members of the household take up malaria / dengue fever prevention and control interventions, such as the use of insecticide treated bed nets (ITNs), in malaria-endemic areas</td>
</tr>
<tr>
<td>Pneumonia</td>
<td>Caregivers adopt preventive behaviours as reflected in infant feeding and nutrition and immunization health areas, as well as take measures to reduce household air pollution</td>
</tr>
<tr>
<td></td>
<td>Members of the household and the community recognize that smoking and secondhand smoke harm health and take appropriate measures</td>
</tr>
<tr>
<td>Diarrhoea</td>
<td>Caregivers adopt preventive behaviours, as reflected in infant feeding and nutrition, immunization and WASH health areas</td>
</tr>
<tr>
<td></td>
<td>Caregivers provide appropriate treatment for children with diarrhoea at onset of symptoms</td>
</tr>
</tbody>
</table>
### Health topic

| Water, Sanitation and Hygiene (WASH) | Members of the household dispose of faeces safely, including children’s faeces, and handwash with soap at critical times (i.e., after defecation, after changing diapers and before food preparation and eating).

Members of the household drink safe water.

| Early child development | Caregivers promote mental and social development by responding to a child’s needs for care, and through talking, playing and providing a stimulating environment.

### Interventions

<table>
<thead>
<tr>
<th>Intervention category</th>
<th>Intervention</th>
<th>Intervention description</th>
</tr>
</thead>
</table>
| Interpersonal communication and educational activities | Home visits | The primary objective of home visits is to bring RMNCH education, information and counselling directly to the home via a health professional or trained volunteer/peer. Contact with the household may be provided face-to-face or indirectly by phone. Those delivering the household outreach may be physicians, nurses, midwives, paraprofessionals, traditional providers, cadres, trained peer-educators, other health workers and volunteers.

These types of interventions may include the provision of print or electronic materials as part of the home visit. They also often include an element of training for the provider undertaking the household outreach / home visits. |
<p>| Facility-based interpersonal communication and counselling | These interventions involve a health professional of some kind providing RMNCH education, information and/or counselling one-on-one to individuals in a facility, such as a health centre. As above a key element of these interventions is the face-to-face interaction between the health professional and clients and may also include the provision of written and electronic educational aids, such as pamphlets, posters, cd rom etc. These types of interventions may include the provision of print or electronic materials as part of the facility interpersonal communication and counselling. They also often include an element of training for the provider undertaking the interpersonal communication. |</p>
<table>
<thead>
<tr>
<th>Intervention category</th>
<th>Intervention</th>
<th>Intervention description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpersonal communication and educational activities</td>
<td>Group – any setting</td>
<td>Group-based interventions involve the provision of RMNCH information, education and/or counselling in a group-setting rather than one-to-one. Interventions can include meetings with a select group (e.g. pregnant women), village health clubs, community dialogue, client-provider forums, workshops, fairs and other events in different settings such as schools, health facilities and community settings. These interventions may also include the provision of written and electronic educational aids, such as pamphlets, posters, video etc. Those delivering the group-based interventions may be physicians, nurses, midwives, paraprofessionals, traditional providers, cadres, trained teachers, trained peer-educators, other health workers and volunteers. These types of interventions may include the provision of print or electronic materials as part of the group interpersonal communication and counselling. They also often include an element of training for the provider undertaking the interpersonal communication.</td>
</tr>
<tr>
<td>Mass and social media</td>
<td>Mass media and entertainment education</td>
<td>Mass media refers to the use of a diverse set of technologies including the internet, television, print materials (e.g. newspapers, posters and leaflets), film and radio, which are capable of simultaneously—almost instantaneously—reaching audiences on a large scale, often over considerable distance. Such media may or may not have interactive capabilities. Mass media programmes are often theory-based and target a large population. For the purpose of this evidence map mass media also includes other types of written materials such as a letter to parents or spouse, pamphlet on breastfeeding and MNCH booklets and home-based records. Like print materials, these can serve to inform, remind, educate and motivate people about specific RMNCH topics.</td>
</tr>
<tr>
<td>Intervention category</td>
<td>Intervention</td>
<td>Intervention description</td>
</tr>
<tr>
<td>-----------------------</td>
<td>--------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>Mass and social media (continue)</td>
<td>Mass media and entertainment education</td>
<td>Mass media are often used to deliver entertainment-education programmes or materials. These interventions have educational, motivational or persuasive messages delivered through an entertaining format, such as a radio health drama or health messages inserted into the storyline of a popular television programme. These interventions can use film, television, radio, comic books, traditional storytelling forms, as well as the internet to provide information and messages.</td>
</tr>
<tr>
<td>Social marketing</td>
<td>Social marketing strategies use marketing concepts — product design, appropriate pricing, sales and distribution, and communications — to influence behaviours that benefit individuals and communities. Social marketing involves coordinating many communication forms and approaches to reinforce and complement each other. These can include: • advertising • social franchising • public relations • internet communication • community mobilization • counselling • print and electronic materials • network marketing All forms communicate the same content associated with the “product” and behavioural outcomes.</td>
<td></td>
</tr>
<tr>
<td>Social media and m-health</td>
<td>These interventions refer to a variety of web-based and mobile technologies and software applications permit users to engage in dialogue with each other, often over great distances and share information. These interventions may take an individual, one to one approach, (e.g. SMS reminder of an upcoming appointment) or attempt to connect with people on a large scale (e.g. social media).</td>
<td></td>
</tr>
<tr>
<td>Intervention category</td>
<td>Intervention</td>
<td>Intervention description</td>
</tr>
<tr>
<td>------------------------</td>
<td>--------------</td>
<td>-------------------------</td>
</tr>
</tbody>
</table>
| Mass and social media (continue) | Social media and m-health (continue) | Interventions can include:  
  • mHealth/mobile phone such as smartphone/feature phone/tablet/personal data assistant (PDA)/other mobile devices, Short Message Service (SMS), Multimedia Messaging Service (MMS), Interactive Voice Response (IVR)  
  • Helpline, hotlines  
  • eHealth/eLearning/websites  
  • Information Communication Technology  
  • Digital Media  
  • Social Media (e.g. Facebook and Twitter) |
| Interventions to address financial barriers | Demand-side financing | Demand-side financing offers a supplementary model to supply-side financing of health care in which some funds are instead channelled through, or to, prospective users. Demand side financing schemes to increase maternity healthcare utilization and promote maternal, perinatal, neonatal and infant health outcomes include (1):  
  • unconditional cash transfers  
  • conditional cash transfers  
  • short-term payment to offset costs of access  
  • vouchers for maternity services  
  • vouchers for merit goods |
<p>| | Community health insurance | Community-based health insurance schemes are a form of micro-insurance used to help low-income households manage risks and reduce their vulnerability in the face of financial shocks (2) Other schemes can include rural health insurance, mutual health insurance, revolving drug funds and community involvement in user-fee management. |</p>
<table>
<thead>
<tr>
<th>Intervention category</th>
<th>Intervention</th>
<th>Intervention description</th>
</tr>
</thead>
</table>
| Community mobilization and participation activities       | Community mobilization    | Community mobilization is a community capacity-strengthening process through which community individuals, groups (including in schools), or organizations plan, carry out, and evaluate activities on a participatory and sustained basis to improve their health and other needs, either on their own initiative or stimulated by others (3). Community capacity refers to the skills, knowledge, and expertise of community members which individually and collectively constitute a community’s ability to identify and address its needs (3). The objective of these approaches can include (4):  
• developing the general capacity of community members and groups to work effectively together as an end in itself, regardless of any particular aim or goal (for example supporting leadership, governance, management, problem solving etc.)  
• developing the technical knowledge and skills of community members to carry out a specific task or function (e.g. developing advocacy skills to advocate for a change in local government health policy), supporting communities to strengthen both their technical knowledge and skills and general capacity to work effectively together to achieve a common goal or results, such as maternal and child health etc.  
Community mobilization activities can be strategically integrated across different levels: households, communities, service delivery systems and the political environment. |
<table>
<thead>
<tr>
<th>Intervention category</th>
<th>Intervention</th>
<th>Intervention description</th>
</tr>
</thead>
</table>
| Community mobilization and participation activities (continue) | Community mobilization (continue) | Community mobilization can often also involve use of the following activities:  
• participatory learning and action cycles (e.g. women’s groups)  
• community dialogue and working with community leaders, religious leaders, health service providers, Traditional Birth Attendants (TBAs)  
• stakeholder groups  
• participatory research and assessment  
• rapid rural appraisal  
• strength based strategies such as positive deviance approaches  
• community advocacy activities  
• community organized transport schemes  
• engaging school children as agents of change  
\textbf{Note:} many of these activities can overlap with community participation in planning and programmes. The intervention was coded based on the description provided in the studies but there is potential overlap for some studies |
| Community participation in health service planning and programmes and social accountability | Interventions to increase community participation in planning and programmes involve activities to create ongoing relationships between community members and health service delivery. The objective is to institutionalize community participation in decision-making within health services and at the district and national levels to ensure the interests of the community are represented. Approaches to involve communities in decision-making around planning and programmes include:  
• health facility management committees  
• village health committees  
• participatory planning and budgeting processes (allowing communities to have a say in how budgets for their locality are spent)  
• participatory monitoring and evaluation processes such as community dialogue and collective planning (e.g. through interactive public events). |
<table>
<thead>
<tr>
<th>Intervention category</th>
<th>Intervention</th>
<th>Intervention description</th>
</tr>
</thead>
</table>
| Community mobilization and participation activities (continue) | Community participation in health service planning and programmes and social accountability (continue) | Social accountability refers to the broad range of actions and mechanisms that community members can use to hold the state, public officials and service providers to account for their obligations, as well as actions on the part of government, civil society, media and other societal actors that promote or facilitate these efforts (5). Approaches include:  
  - community monitoring  
  - social audits  
  - public hearings and community meetings  
  - citizen report cards and community scorecards  
  - verbal and social autopsies  
  - partnership defined quality  
  - other client feedback mechanisms  
  - citizen-led budget advocacy  
  - community participation in verification/validation of data for results-based financing |

| Service and programme strengthening activities | Provider training and service delivery adjustments | Provider training focuses on the training of health providers, and other service providers, such as teachers and pharmacists, in skills and techniques related to communication, health education and community engagement for example (6):  
  - community participation and engagement  
  - interpersonal communication  
  - intercultural skills  
  - gender and human rights  
  - counselling  
Service delivery adjustments are the changes made to service delivery and programmes in response to community perceptions of quality of care or to improve community perceptions of quality of care. |
### Intervention category

<table>
<thead>
<tr>
<th>Other</th>
<th>Non-SBCE interventions</th>
</tr>
</thead>
</table>

Includes activities such as clinical services, programme adjustments, household technology provision (e.g. WASH, cookstoves), other commodity provision (e.g. soap, fuel), livelihood activities and policy activities.

These types of intervention are only included when combined with another included intervention and are coded for information only. They will not appear in the evidence map.

### Outcomes

<table>
<thead>
<tr>
<th>Broad outcome category</th>
<th>Outcome</th>
<th>Outcome definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge and attitudes</td>
<td>Knowledge and attitudes of individuals and members of the household regarding RMNCH</td>
<td>Knowledge and attitudes of individuals and members of the household regarding care practices (self-care and caregiver) and care-seeking behaviour</td>
</tr>
<tr>
<td>Social norms in the community for RMNCH</td>
<td>Social norms / normative beliefs in the community in relation RMNCH, particularly related to care practices and care seeking</td>
<td></td>
</tr>
</tbody>
</table>
| Knowledge and attitudes of health providers for community engagement | Health provider knowledge and attitudes regarding communication, health education and community engagement, including:
  - community participation and engagement
  - interpersonal communication
  - intercultural skills
  - gender and human rights
  - counselling |
<table>
<thead>
<tr>
<th>Broad outcome category</th>
<th>Outcome</th>
<th>Outcome definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household dynamics / communication</td>
<td>Couple / mothers / mothers-in-law / parent-child communication</td>
<td>Communication between women and their partners / mothers / mothers-in-law in the household about RMNCH-related issues, particularly related to care practices and care seeking. Parent and caregiver communication and interaction with children in their care.</td>
</tr>
<tr>
<td>Parenting skills</td>
<td>Parenting style and parenting skills of parents and caregivers</td>
<td></td>
</tr>
<tr>
<td>Joint decision-making in the household</td>
<td>Joint decision-making by members of the household (e.g. woman and her partner) on RMNCH-related issues, particularly related to care practices and care seeking.</td>
<td></td>
</tr>
<tr>
<td>Caregiver practices</td>
<td>Caregiver practices (prevention and treatment)</td>
<td>Prevention and treatment practices by caregivers for children under their care.</td>
</tr>
<tr>
<td>Household environmental practices</td>
<td>Household environmental practices</td>
<td>Individual / household adoption and use of environmental/infrastructure interventions to address for example, air pollution (e.g. cook stoves), mosquito breeding (covering containers), water, sanitation and hygiene (e.g. latrines; water jars) etc.</td>
</tr>
<tr>
<td>Care seeking behaviour</td>
<td>Routine care-seeking behaviour</td>
<td>Routine care seeking by individuals and caregivers, such as antenatal care, postnatal care, skilled care at birth, family planning, childhood immunization, etc.</td>
</tr>
<tr>
<td>Broad outcome category</td>
<td>Outcome</td>
<td>Outcome definition</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>----------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Care seeking for complications/illness</td>
<td>Individual and caregiver care seeking for illness and complications, such as childhood illness, complications during pregnancy and childbirth, etc.</td>
<td></td>
</tr>
<tr>
<td>Quality of care / satisfaction</td>
<td>Perception of quality of care / Satisfaction with services</td>
<td>Individual and community satisfaction with quality of care provided</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Individual and community satisfaction with provider communication and/or level of respect shown for their choices and preferences</td>
</tr>
<tr>
<td>Provider communication and engagement skills</td>
<td>Health service provider interpersonal and intercultural competencies, counselling skills, skills in community participation and engagement</td>
<td></td>
</tr>
<tr>
<td>Community capacity, participation and accountability</td>
<td>Community capacity</td>
<td>In addition to outcomes for care-seeking behaviour and quality, other outcomes for community capacity include:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Capacity for collective action: (7)16</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Learning opportunities and skills development</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Resource mobilization</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Leadership</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Partnerships/linkages/networking</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Participatory decision-making</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Sense of community</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Communication</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Organizational development</td>
</tr>
<tr>
<td>Broad outcome category</td>
<td>Outcome</td>
<td>Outcome definition</td>
</tr>
<tr>
<td>------------------------</td>
<td>---------</td>
<td>--------------------</td>
</tr>
<tr>
<td>Participation in planning and programmes</td>
<td>In addition to outcomes for community capacity and social accountability, other outcomes for community participation in planning and programmes include: programme design and service delivery that responds to the priorities and needs of communities</td>
<td></td>
</tr>
<tr>
<td>Social accountability</td>
<td>In addition to outcomes for community capacity and community participation in planning and programmes, other social accountability outcomes include: improved efficiency of service delivery, governance processes and resource allocation decisions, or claiming rights</td>
<td></td>
</tr>
<tr>
<td>Health</td>
<td>Maternal, newborn, and child morbidity and disability</td>
<td>Maternal, newborn and child morbidity and / or disability</td>
</tr>
<tr>
<td></td>
<td>Maternal, newborn, and child mortality</td>
<td>Maternal, newborn and/or child mortality</td>
</tr>
<tr>
<td></td>
<td>Child growth and development</td>
<td>Physical, socio-emotional, language and cognitive development, nutrition</td>
</tr>
<tr>
<td>Cross-cutting</td>
<td>Gender equity / status of women</td>
<td>Differences in participation, benefits, outcomes, and impacts for women, men, boys, and girls</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Changes in gender relations (positive or negative) between men and women, and between girls and boys</td>
</tr>
<tr>
<td></td>
<td>Social cohesion</td>
<td>The extent to which people feel included in their society, that they can participate in and contribute to their community</td>
</tr>
<tr>
<td></td>
<td>Cost</td>
<td>Examination of the cost of interventions</td>
</tr>
</tbody>
</table>
References


Annex 3. Detailed methods

Databases and other literature searched

Three main types of source information were searched as outlined below.

1. Publication database searches:
   - Cochrane Library (Wiley)
   - Econlit (Ovid)
   - Global Health (CABI) – Ovid
   - Global Health Library
   - Medline
   - Popline
   - Web of Science
   - Scopus
   - WHO Reproductive health library

2. Topical databases and organization searches: Targeted searches of specialist websites and databases, in particular, established online repositories of systematic reviews and impact evaluations on topics relevant to the research question were conducted as listed below:

   Systematic review repositories
   - 3ie database of systematic reviews
   - Centre for Reviews and Dissemination DARE database
   - Campbell Collaboration Library
   - Department for International Development (DFID) - R4D
   - EPPI-Centre
   - Google Scholar
   - Health Evidence.org
   - IDEAS/RepEC
   - Joanna Briggs Institute
   - International prospective register of systematic reviews (PROSPERO)
   - World Bank–(can also be searched for impact evaluations)

   Impact evaluation repositories
   - Innovations for Poverty Action (IPA)
   - J-Poverty Action Lab: http://www.poverty-action.org/project-evaluations
International Impact Initiative (3ie) repository of impact evaluations
- Department for International Development (DFID) - R4D
- 3ie RIDIE (Registry for International Development Impact Evaluations): http://ridie.3ieimpact.org/
- USAID Development Experience Clearing House: https://dec.usaid.gov/dec/content/search.aspx

3. Bibliographic and expert searches: Bibliographies of reviews identified through the scoping exercise were screened for any other studies meeting the inclusion criteria. Reverse searching of the study bibliographies of included systematic reviews was also performed. Citation tracking was not performed for included impact evaluations due to the large number of included studies. Finally, experts, including the expert group were asked to nominate additional studies

Search

An information specialist assisted with development of a search strategy designed to identify studies meeting the inclusion criteria. A search string for searching online publication databases and search engines was compiled using an initial set of English search terms relevant to different components of the research question (interventions, populations, study designs). The search strategy was then adapted for each individual database. An example is provided below. The search strategies for additional databases are available on request from the authors.

Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations, Ovid MEDLINE(R) Daily and Ovid MEDLINE(R) <1946 to Present>—Searched 16th July 2016

1. community health services/ or «early intervention (education)>>/ or maternal-child health services/ or community health nursing/ or home health nursing/ or family planning services/ or home nursing/ or maternal health services/ or perinatal care/ or postnatal care/ or preconception care/ or prenatal care/ or reproductive health services/ or rural health services/ or rural nursing/ or women's health services/ or preventive health services/ or primary health care/ or child health services/ (209368)
2. ((maternal or women* or reproductive or «family planning» or child* or infant* or newborn* or neonatal or preventive or primary) adj health service*).ti,ab. (4050)
3. (community* or communities* or village* or local or rural or non-urban).ti,ab. (971622)
4. or/1-3 (1130014)
5. Birth Intervals/ or Pregnancy Rate/ or Reproductive Behavior/ or Contraception Behavior/ or Pregnancy Outcome/ (56996)
6. ((birth or pregnan* or reproductive) adj3 (interval* or spacing or rate* or outcome* or behavio* or control or contracepti* or «family planning»)).ti,ab. (80078)
7. child mortality/ or infant mortality/ or maternal mortality/ or perinatal mortality/ (35010)
An evidence map of social, behavioural and community engagement interventions for reproductive, maternal, newborn and child health
or ehea lth* or (electronic adj health) or (mobile adj3 technol*) or ((mobile or smartphone or smart-phone or phone or software) adj3 app*) or MMS or multimedia messaging service or SMS or short messag* service or (text* adj messag*) or text-messag* or voice messag* or interactive voice response or IVR).ti,ab. (38610)

35. Advertising as Topic/ (13610)
36. House Calls/ (2794)
37. ((house* or home) adj2 (call* or visit*)).ti,ab. (9032)
38. hotlines/ or communications media/ or audiovisual aids/ or radio/ or cell phones/ or television/ (29750)
39. (hotline* or radio or television or TV or phone* or telephon* or mobiles or campaign* or advert* or boards or newspaper* or maga?In* or brochure* or leaflet* or pamphlet* or cinema* or (mass adj (communication or media)) or internet or social media or blog* or facebook or twitter or instagram or podcast* or broadcast* or audiovisual or film* or movie* or edutainment).ti,ab. (367188)

40. teaching materials/ (6149)
41. (teach* adj2 material*).ti,ab. (924)
42. Social Media/ (2854)
43. Capacity Building/ (1303)
44. (capacity adj2 build*).ti,ab. (4139)
45. Community Health Aides/ (3861)
46. Home Health Aides/ (552)
47. Allied Health Personnel/ (10597)
48. Voluntary Workers/ (8351)
49. ((lay or voluntary or volunteer? or untrained or unlicensed or nonprofessional? or non professional?) adj5 (worker? or visitor? or attendant? or aide or aides or support$ or person$ or helper? or carer? or caregiver? or care giver? or consultant? or assistant? or staff or visit$ or midwife or midwives) adj3 (information or outreach or train* or educat* or capacity building)).ti,ab. (720)
50. ((paraprofessional? or paramedic or paramedics or paramedical worker? or paramedical personnel or allied health personnel or allied health worker? or support worker? or home health aide?) adj3 (information or outreach or train* or educat* or capacity building)).ti,ab. (880)
51. (trained adj3 (volunteer? or health worker? or mother?)).ti,ab. (1400)
52. ((community or village?) adj3 (health worker? or health care worker? or healthcare worker?)).ti,ab. (3364)
53. (community adj3 (volunteer? or aide or aides or support)).ti,ab. (5402)
54. ((birth or childbirth or labor or labour) adj (attendant? or assistant?)).ti,ab. (1768)
An evidence map of social, behavioural and community engagement interventions for reproductive, maternal, newborn and child health

55. (peer adj (volunteer? or counsel$ or support or intervention? or educator*)).ti,ab. (3293)
56. (outreach or (home adj (care or aide or aides or nursing or support or intervention? or treatment? or visit$)) or ((care or aide or aides or nursing or support or intervention? or treatment? or visit$) adj3 (lay or volunteer? or voluntary))).ti,ab. (36852)
57. Consumer Advocacy/ (3159)
58. ((consumer* or patient* or communit*) adj2 advoca*).ti,ab. (3694)
59. social responsibility/ or moral obligations/ (21720)
60. ((communit* or social) adj2 (monitor* or particip* or empower* or control* or develop* or governanc* or superv* or «report* card*» or audit* or (informat* adj3 campaign*)) or scorecard* or «score card*» or accountab* or watchdog* or democrati* or «people power» or responsibility or obligation*)).ti,ab. (32818)
61. Healthcare Financing/ (302)
62. ((financial or cash or pay$ or monetary or money) adj3 (transfer$ or measure$ or incentive$ or reward* or allowance$ or exclu$ or reform$ or gain$ or credit$1 or benefit$1)).ti,ab. (12288)
63. (((health* or medical) adj2 (financ* or budget* or cost* or insur*)) or ((social or community) adj3 (insurance? or financ$))).ti,ab. (76716)
64. Insurance, Health/ (31419)
65. Maternal-Child Health Centres/ (2274)
66. ((maternal or maternity or mother*) adj2 (waiting home* or birth* home*)).ti,ab. (41)
67. ((communit* or village* or rural) adj2 transport*).ti,ab. (182)
68. or/5-67 (1638720)
69. ((match* adj3 (propensity or coarsened or covariate)) or «propensity score» or («difference in difference*» or «difference-in-difference*» or «differences in difference*» or «differences-in-difference*» or «double difference*») or («quasi-experimental» or «quasi experimental» or «quasi-experiment» or «quasi experiment») or ((estimator or counterfactual) and evaluation*)) or «instrumental variable*» or (IV adj2 (estimation or approach))).ti,ab,kw. (20023)
70. (((experiment or experimental) adj2 (design or study or research or evaluation or evidence)) or (random* adj4 (trial or assignment or treatment or control or intervention* or allocat*)])).ti,ab,kw. (335510)
71. Randomized Controlled Trial/ or Randomized Controlled Trials as Topic/ or random allocation/ or Propensity Score/ or Models, Econometric/ or Quasi-Experimental Studies/ (604293)
72. Program Evaluation/ or Evaluation Studies/ (266259)
73. ((impact adj2 (evaluat* or assess* or analy* or estimat* or measure)) or (effectiveness adj2 (evaluat* or assesse* or analy* or estimat* or measure])).ti,ab,kw. (113059)
74. («program* evaluation» or «project evaluation» or «evaluation research» or «natural experiment*» or «program* effectiveness»).ti,ab,kw. (9122)
75. meta analysis/ (71057)
76. ((systematic* adj2 review*) or «meta-analy*» or «meta analy*»).ti,ab,kw. (155565)
77. or/69-76 (1254820)
78. Developing Countries.sh,kf. (77224)
79. Africa/ or Asia/ or Caribbean/ or West Indies/ or South America/ or Latin America/ or Central America/ (66295)
80. (Africa or Asia or Caribbean or West Indies or South America or Latin America or Central America).tw. (136466)
81. (Afghanistan or Albania or Algeria or Angola or Argentina or Armenia or Armenian or Azerbaijan or Bangladesh or Benin or Byelorussia or Byelorussian or Belarus or Belorussian or Belorussia or Belize or Bhutan or Bolivia or Bosnia or Herzegovina or Hercegovina or Botswana or Brazil or Bulgaria or Burkina Faso or Burkina Fasso or Upper Volta or Burundi or Urundi or Cambodia or Khmer Republic or Kampuchea or Cameroon or Cameroons or Cameroon or Camerons or Cape Verde or Central African Republic or Chad or China or Colombia or Comoros or Comoro Islands or Comores or Mayotte or Congo or Zaire or Costa Rica or Cote d'Ivoire or Ivory Coast or Cuba or Djibouti or French Somaliland or Dominica or Dominican Republic or East Timor or East Timur or Timor Leste or Ecuador or Egypt or United Arab Republic or El Salvador or Eritrea or Ethiopia or Fiji or Gabon or Gabonese Republic or Gambia or Gaza or Georgia Republic or Georgian Republic or Ghana or Grenada or Guatemala or Guineu or Guiana or Guyana or Haiti or Honduras or India or Maldives or Indonesia or Iran or Iraq or Jamaica or Jordan or Kazakhstan or Kazakh or Kenya or Kiribati or Korea or Kosovo or Kyrgyzstan or Kirghizia or Kyrgyz Republic or Kirghiz or Kirgistan or Lao PDR or Laos or Lebanon or Lesotho or Basutoland or Liberia or Libya or Macedonia or Madagascar or Malagasy Republic or Malaysia or Malaya or Malay or Sabah or Sarawak or Malawi or Mali or Marshall Islands or Mauritania or Mauritius or Agalega Islands or Mexico or Micronesia or Middle East or Moldova or Moldovia or Mongolia or Montenegro or Morocco or Ifni or Mozambique or Myanmar or Myanma or Burma or Namibia or Nepal or Netherlands Antilles or Nicaragua or Niger or Nigeria or Muscat or Pakistan or Palau or Palestine or Panama or Paraguay or Peru or Philippines or Philippine Islands or Papua New Guinea or Romania or Rumania or Roumania or Rwanda or Ruanda or Saint Lucia or St Lucia or Saint Vincent or St Vincent or Grenadines or Sao Tome or Somaliland or Somoa or Somaliland or Samoa or Southern Africa or Swaziland or South Africa or Syria or Tajikistan or Tadjikistan or Tadzhikistan or Tadjikistan or Tadzhikistan or Tanzania or Thailand or Togo or Togolese Republic or Tonga or Tunisia or Turkey or Turkmenistan or Turkmen or Uganda or Ukraine or Uzbekistan or Uzbek or Vanuatu or New Hebrides or Venezuela or Vietnam or Viet Nam or West Bank or Yemen or Zambia or Zimbabwe).tw. (767010)
82. exp africa/ or exp africa, northern/ or algeria/ or egypt/ or libya/ or morocco/ or tunisia/ or exp «africa south of the sahara»/ or africa, central/ or cameroon/ or central african republic/ or chad/ or congo/ or «democratic republic of the congo»/ or equatorial guinea/ or gabon/ or africa, eastern/ or burundi/ or djibouti/ or eritrea/ or ethiopia/ or egypt/ or rwanda/ or somalia/ or south sudan/ or sudan/ or tanzania/ or uganda/ or africa, southern/ or angola/ or botswana/ or lesotho/ or malawi/ or mozambique/ or namibia/ or south
africa/ or swaziland/ or zambia/ or zimbabwe/ or africa, western/ or benin/ or burkina faso/ or cape verde/ or cote d'ivoire/ or gambia/ or ghana/ or guinea/ or guinea-bissau/ or liberia/ or mali/ or mauritania/ or niger/ or nigeria/ or senegal/ or sierra leone/ or togo/ or americas/ or exp caribbean region/ or exp west indies/ or exp central america/ or belize/ or costa rica/ or el salvador/ or guatemala/ or honduras/ or nicaragua/ or panama/ or panama canal zone/ or latin america/ or mexico/ or exp south america/ or argentina/ or bolivia/ or brazil/ or chile/ or colombia/ or ecuador/ or french guiana/ or guyana/ or paraguay/ or peru/ or suriname/ or uruguay/ or venezuela/ or asia/ or asia, central/ or kazakhstan/ or kyrgyzstan/ or tajikistan/ or turkmenistan/ or uzbekistan/ or exp asia, southeastern/ or borneo/ or brunei/ or cambodia/ or timor-leste/ or indonesia/ or laos/ or malaysia/ or mekong valley/ or myanmar/ or philippines/ or singapore/ or thailand/ or vietnam/ or asia, western/ or bangladesh/ or bhutan/ or india/ or sikkim/ or middle east/ or afghanistan/ or bahrain/ or iran/ or iraq/ or israel/ or jordan/ or kuwait/ or lebanon/ or oman/ or qatar/ or saudi arabia/ or syria/ or turkey/ or united arab emirates/ or yemen/ or nepal/ or pakistan/ or sri lanka/ or far east/ or china/ or beijing/ or macau/ or tibet/ or korea/ or mongolia/ or taiwan/ or indian ocean islands/ or comoros/ or madagascar/ or mauritius/ or reunion/ or seychelles/ or pacific islands/ or exp melanesia/ or exp micronesia/ or polynesia/ or pitcairn island/ or exp samoa/ or tonga/ or prince edward island/ or west indies/ or «antigua and barbuda»/ or bahamas/ or barbados/ or cuba/ or dominica/ or dominican republic/ or grenada/ or guadeloupe/ or haiti/ or jamaica/ or martinique/ or netherlands antilles/ or puerto rico/ or «saint kitts and nevis»/ or saint lucia/ or «saint vincent and the grenadines»/ or «trinidad and tobago»/ or united states virgin islands/ or oceania/ (863952)

83. ((developing or less* developed or under developed or underdeveloped or middle income or low* income or underserved or under served or deprived or poor*) adj (countr* or nation? or population? or world or state*)).ti,ab. (70868)

84. ((developing or less* developed or under developed or underdeveloped or middle income or low* income) adj (economy or economies or population*)).ti,ab. (1685)

85. (low* adj (gdp or gnp or gross domestic or gross national)).tw. (186)

86. (low adj3 middle adj3 countr*).tw. (6495)

87. (limic or limics or third world or lami countr*).tw. (4229)

88. transitional countr*.tw. (125)

89. or/78-88 (1286167)

90. 4 and 68 and 77 and 89 (9916)

91. limit 90 to yr=»2000-Current» (7551)
**Screening and data extraction**

**Screening**

Manual screening and text mining were used to assess studies for inclusion at the title and abstract stage. To ensure consistent application of screening criteria all screeners assessed the same sample of 100 abstracts. Any discrepancies were discussed within the team and inclusion criteria were clarified as necessary. When all screeners had been trained, a random sample of 1000 abstracts was screened as a quality control exercise.

An initial set of 2825 records was screened to permit text-mining training, permitting prioritisation of studies according to relevance. Text-mining technology was used through Eppi-Reviewer 4 to prioritize studies for screening based on relevance. One researcher screened each title/abstract.

Due to time and resource constraints, full text papers were not screened independently by two people. But to minimize bias and human error a sample of studies was double-screened. Following this, any study where the first screener was uncertain about inclusion/exclusion was allocated to screening by a second person. Finally, all studies identified for inclusion were screened by a second person before being included to the evidence map.

**Data extraction**

A data extraction form was used to extract metadata from all studies meeting the inclusion criteria. Data extracted included bibliographic details, intervention type, outcome type and definition, study design, geographical location and intervention scale.

The data extraction form was tested on a small subset of studies by everyone in the research team to ensure consistency in coding and to resolve any issues or ambiguities. Data extraction was then completed by a single coder, with the majority of data reviewed by a second coder.

In addition the following coding rules were applied:

a) RMNCH area was coded by looking at the effect of the intervention and not who the intervention was targeting. For example, interventions related to breastfeeding were coded as maternal, newborn and child. Where relevant, these have been coded to only newborn and/or child (effect of intervention), and not maternal (target of the intervention).

b) Several studies which included WASH or cookstove interventions targeted the household level, such as household uptake of latrines, hand washing etc. These studies were initially coded as maternal, newborn and child, but were coded as child. WASH colleagues in the expert group were consulted and agreed with this option, as many water and sanitation interventions are primarily evaluated by assessing the benefits for young children.

c) To avoid multiple coding of interventions, the categorization of interventions was revised to yield single interventions, as well as 'packages' of interventions. If a study looked at the effect of more than one intervention, e.g. interpersonal communication (IPC) and mass media vs a control group, the study would show only once in the evidence map, that is under the package '(IPC) and mass media'. If the study had an additional arm, such as (IPC) and mass media vs mass media alone, vs control group, the study would show in the package '(IPC) and mass media' as well as in the category of 'mass media'. Not all interventions fit neatly into the categories, but they were placed where they fitted best.
d) Intervention categories were reviewed to make the distinction between some of the categories clearer and to split very broad intervention categories into more useful and descriptive categories. For example, community participation and social accountability; interpersonal communication and education conducted in groups and community mobilization; and provider SBCE training and SBCE service delivery adjustments. Some intervention categories were also merged when the expert group suggested there was too much overlap. Distinction was made between interpersonal communication and education conducted as home visits, one-on-one in a facility and interpersonal communication and education conducted in groups. A distinction was also made between community mobilization, which is a process of motivating collective action, and the intervention 'group interpersonal communication and education' which includes group discussions for health education and information sharing only.

e) Systematic reviews were coded by their 'intent', i.e. what the systematic review intended to look for, rather than their findings. For example, if the intent was to search for effects of home visits on maternal, newborn and child health, the systematic review was coded as M,N,C (health area) and home visits (intervention), regardless of whether the systematic review identified studies for these areas.

When the systematic review intent was not clear and the intervention description was very broad (e.g. interventions to improve child survival) we looked at the studies identified in the systematic review and coded the interventions accordingly.

**Equity-coding**

Data was extracted on the extent to which the included studies addressed vulnerable groups either because they may have less access to services or because programme benefits may be differently distributed. The PROGRESS-Plus framework was used to identify the relevant groups we drew on.

The following groups were considered:

- Place of residence: location of household e.g. distance from health facility; distinctions such as living in more remote areas.
- Ethnicity, culture and language: Any targeting or sub-group analysis, including for instance ethnic minority communities living in rural/remote areas.
- Gender: any studies undertaking a gender analysis, such as decision-making between men and women in the household; female/male participation on health committees.
- Socioeconomic status: this may be measured in different ways, including grouping results by income level, defining people as poor etc.
- Other vulnerable group: Open category, to be used iteratively to record details of any vulnerable groups identified a-priori.

It was planned that age disaggregation be captured in the coding. However, given that the evidence map addressed multiple health areas, i.e. reproductive, maternal, newborn and child, it was deemed that differentiating by age would not be useful. In addition, adolescent health has already been captured in a separate evidence map.
Studies were coded according to whether they:

• Assess a programme targeting a specific group considered vulnerable;
• Assess a programme aiming to reduce inequity or inequality;

Use a subgroup analysis to assess the effects on different groups. If a subgroup analysis was conducted, we assessed whether the sample size was sufficiently large for such an analysis.
Annex 4. Results for individual health areas

Reproductive health

Note to the Reader: Each study was coded for all the health areas, health topics and outcomes addressed. However, when coding, each study was only coded for one intervention (either a single intervention or a package). For example a study on the promotion of birth spacing may also address care during pregnancy or newborn health. Thus, some interventions and outcomes listed for reproductive health may not seem directly relevant.

An interactive platform that visually presents the findings for Reproductive Health can be found at this link: http://gapmaps.3ieimpact.org/evidence-maps/social-behavioural-and-community-engagement-interventions-reproductive-health

Characteristics and trends of the evidence base for impact evaluations

The search identified 50 impact evaluations, including four multiple-arm trials, targeting reproductive health, specifically healthy timing and spacing of pregnancy. Studies around the healthy timing and spacing of pregnancy were combined with other health topics (n=50), the most frequent being care during pregnancy, childbirth and after childbirth and immunizations. This probably reflects the focus on addressing post-partum family planning and integrated postnatal care for mothers and newborns.

Distribution of studies across interventions

Figure 16 presents the distribution of impact evaluations by the 18 SBCE interventions (singular interventions and packages of SBCE interventions), disaggregated by whether the intervention also included a non-SBCE component. The intervention category with the highest numbers of single component interventions was interpersonal communication (IPC) and health education activities (n=17). In this category, home visits (n=7) was the intervention most frequently studied, followed by facility-based (n=7), followed by group approaches (n=3). Packages of mixed IPC approaches were similar (n=7). More than half of these IPC and health education interventions were conducted in conjunction with non-SBCE interventions. IPC was also delivered in packages with mass media interventions in four studies.

There were a small number of studies on community mobilization and community mobilization packages (n=5), demand-side financing (n=5), community participation in health service and programmes and social accountability (n=5) and mass media and entertainment education.

---

8 Multi arm trials led to 56 unique comparisons being coded in the evidence map for interventions for healthy timing and spacing of pregnancy. Thus N=50 studies for all variable descriptions except for interventions where N=56.

9 For this section of the report, numbers refer to the number of comparisons, reflecting the inclusion of a number of multi arm trials testing different SBCE interventions. There are 56 comparisons.
We identified no impact evaluations of social media and m-health interventions for reproductive health.

**Figure 16 Reproductive health - Distribution of studies by intervention area**

Outcomes assessed in included studies

The included studies assessed a range of outcomes (Figure 17). The most studied outcome was uptake of a family planning method (n=42). This was measured in various ways, including family planning method use, addressing unmet need for family planning and timing and spacing of pregnancy. Knowledge and attitudes of individuals and households was also frequently measured (n= 22). Nine studies measured household dynamics and communication, including couple communication, and three studies assessed joint-decision making in the household. Six studies included a measure of gender equity or the status of women.

None of the included studies measured social norms in the community. Three studies examined social accountability outcomes. In terms of quality of care / satisfaction with services, only six studies assessed individual and community satisfaction with quality of services and four studies measured provider communication and engagement skills. One study measured knowledge and attitudes of service providers for community engagement.
Figure 17 Reproductive health - Distribution of studies by outcomes

An evidence map of social, behavioural and community engagement interventions for reproductive, maternal, newborn and child health
**Geographical location**

As with all the impact evaluations for RMNCH, most studies were performed in the WHO African Region (n=24), followed by South East Asia Region (n=12) and the Eastern Mediterranean Region (n=7). A few studies were identified from the Region of the Americas (n=5) and the Western Pacific Region (n=3) and only one study was performed in the European Region. In the African Region, most studies were performed in Uganda, Kenya and Ghana, with the remainder split across nine other countries.

**Study types**

The most common study designs used in the reproductive health area was a RCT (n=33). Of the 17 studies that used a quasi-experimental design, 10 studies used a difference-in-difference analysis or a statistical matching approach (n=9) to deal with selection bias and confounding. Two studies were mixed method evaluations, including a qualitative component.

**Consideration of equity**

An assessment was made of the extent to which the included studies for reproductive health considered equity in their assessment of the intervention or in the programme design. Just over half of the studies (n=27) considered equity. In the majority of these studies, the intervention targeted specific groups, especially those in particular places of residence (n=20), typically rural areas, or those of low socioeconomic status (n=9). Only two of the included studies targeted a specific group based on ethnicity, culture or language and only one based on religion. Just six of the reproductive health studies undertook subgroup analysis by any vulnerable group. One study assessed impact on an outcome measure of equity.

**Ongoing impact evaluations**

Six ongoing reproductive health impact studies were identified, including one multi-arm trial\(^9\). There are four evaluations of IPC and education activities, including mixed approaches (n=1), home visits (n=1) and facility-based IPC (n=1). Five of the identified ongoing reproductive studies are assessing impact on the use of family planning methods and routine care-seeking behaviour. A smaller number are assessing health outcomes like morbidity and disability (n=2), as well as couple / mothers / mothers-in law /parent-child communication (n=1), social accountability (n=1). Four are taking place in the African region (Uganda, Malawi, Burkina Faso, and a multi-arm trial in Zambia) and one each in India and Pakistan. All but the study in Pakistan are using RCT methods; the study in Pakistan will use a controlled before and after study approach using a difference-in differences analysis.

---

\(^9\) Given the multi-arm trials, 7 unique comparisons were therefore coded in the evidence map for Interventions for Healthy Timing and Spacing of Pregnancy. Thus n=6 studies for all variable descriptions except for interventions where n=7.
Characteristics and trends of the evidence base for systematic reviews

There were 28 systematic reviews and three ongoing reviews of interventions for healthy timing and spacing of pregnancy.

Distribution of reviews across interventions and outcomes

As in the impact evaluations for healthy timing and spacing and the systematic reviews for RMNCH, the largest intervention category in the systematic reviews was IPC and health education activities delivered as single interventions (n=24), packages of mixed IPC approaches (n=12) and packages of these approaches with other SBCE interventions (n=3). These were often assessed together with non-SBCE interventions. Another large category is demand-side financing interventions (n=12). There were 14 systematic reviews on the intervention category mass and social media, split fairly evenly across mass media and entertainment, education, social marketing and social media and m-health. There were very few studies of community participation in planning and programmes and social accountability and provider training and service delivery adjustments.

The outcome most often studied was uptake of family planning methods (n=18). Knowledge and attitudes of individuals and households (n=10) was also relatively frequently studied. Health outcomes such as morbidity and mortality were frequently assessed (n=19) whereas gender equity outcomes were rarely assessed (n=3) nor were social norms in the community (n=2).

Consideration of equity

Less than half of the systematic reviews considered equity, either by intervention / outcome inclusion criteria or by analysis method. Of these, nine of the reviews included interventions that targeted specific vulnerable groups.

Results of critical appraisal of systematic reviews

Each included systematic review was appraised for confidence in the methods and findings, based on a standardized checklist and, 57% of the identified systematic reviews were rated as low confidence, (n=16), which is considerably higher than the RMNCH of 40%. Only four of the 28 reviews were assessed as high confidence while eight were assessed as medium confidence.

Ongoing studies

Three ongoing systematic reviews on reproductive health topics were identified. Two of these reviews will include studies on the effectiveness of mixed interpersonal approaches for reproductive health and the other will include studies of provider training and service delivery adjustments. Two reviews are interested in routine care-seeking behaviour, and one of these is also interested in family planning method use. One of these reviews will focus on reproductive health in crisis settings.
Maternal health

An interactive platform that visually presents the findings for Maternal Health can be found at this link: http://gapmaps.3ieimpact.org/evidence-maps/social-behavioural-and-community-engagement-interventions-maternal-health

Characteristics and trends of the evidence base for impact evaluations

We identified 105 completed impact evaluations, including four multi-arm trials\(^\text{11}\). Most studies categorized as ‘maternal health’ address care during pregnancy, childbirth and after childbirth.

Distribution of studies across interventions

**Figure 18 Maternal health - Distribution of studies by intervention area**

<table>
<thead>
<tr>
<th>Intervention Area</th>
<th>Number of Comparisons</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interpersonal communication (IPC) / educational activities</strong></td>
<td></td>
</tr>
<tr>
<td>Home visits</td>
<td></td>
</tr>
<tr>
<td>Group - any setting</td>
<td></td>
</tr>
<tr>
<td>Facility based</td>
<td></td>
</tr>
<tr>
<td>Mixed interpersonal</td>
<td></td>
</tr>
<tr>
<td><strong>Mass and social media activities</strong></td>
<td></td>
</tr>
<tr>
<td>Mass media and education entertainment</td>
<td></td>
</tr>
<tr>
<td>Social media and m-health</td>
<td></td>
</tr>
<tr>
<td>Social marketing</td>
<td></td>
</tr>
<tr>
<td><strong>Community mobilization / participation activities</strong></td>
<td></td>
</tr>
<tr>
<td>Community mobilization</td>
<td></td>
</tr>
<tr>
<td>Community participation and social accountability</td>
<td></td>
</tr>
<tr>
<td><strong>SBCE Service / programme strengthening activities</strong></td>
<td></td>
</tr>
<tr>
<td>Provider training and service delivery adjustments</td>
<td></td>
</tr>
<tr>
<td><strong>Interventions to address financial barriers</strong></td>
<td></td>
</tr>
<tr>
<td>Demand-side financing</td>
<td></td>
</tr>
<tr>
<td>Community health insurance</td>
<td></td>
</tr>
<tr>
<td><strong>SBCE packages</strong></td>
<td></td>
</tr>
<tr>
<td>Community mobilization packages</td>
<td></td>
</tr>
<tr>
<td>IPC and mass media and education entertainment</td>
<td></td>
</tr>
<tr>
<td>IPC and social media and m-health</td>
<td></td>
</tr>
<tr>
<td>IPC and social marketing</td>
<td></td>
</tr>
<tr>
<td>IPC and demand-side financing</td>
<td></td>
</tr>
<tr>
<td>IPC and community participation and social accountability</td>
<td></td>
</tr>
</tbody>
</table>

Note: This graph reflects number of comparisons and not number of studies.

\(^{11}\) Due to the multi-arm trials there were 111 unique comparisons coded in the evidence map for maternal health. Thus n=105 studies for all variable descriptions except for interventions where n=111.
Programmes related to maternal health are often combined with interventions targeting other health areas. For example, many of the studies also related to infant feeding and nutrition (n=27), immunization (n=13) and care seeking for newborn and child illnesses (n=10 and 12, respectively), largely reflecting interventions with the pregnant woman or mother to affect newborn and child health as well.

Figure 18 displays SBCE interventions that were implemented as a singular intervention or package and those that include non-SBCE interventions. The interventions with the highest number of impact evaluations studied is IPC and health education activities, either delivered as single interventions (n=32), packages of mixed IPC approaches (n=5) and packages of these approaches with other SBCE interventions (n=8). Demand-side financing (n=24) was also frequently studied alone or as part of a package, as was community mobilization interventions (n=21). Four mass media and education entertainment interventions and five social media and m-health interventions were identified. There were only two package interventions containing mass media or education entertainment. The communication and health education interventions, particularly home visits, demand-side financing interventions and community mobilization interventions were those interventions that were most often implemented with non-SBCE components.

**Outcomes assessed in included studies**

Maternal health interventions can have an impact on a wide range of outcomes for both a woman’s health as well as that of the newborn, child and household. Figure 19 presents the distribution of studies by outcomes assessed. The majority of outcomes studied were related to care seeking, care practices or health (morbidity and mortality outcomes). Of the 66 studies that looked at health outcomes, only 20 measured maternal morbidity or disability. Of the 33 maternal health studies that measured mortality, only 13 of these assessed maternal mortality, with the rest measuring either neonatal or child mortality. This may be due to difficulty measuring maternal mortality, or may reflect a group of studies assessing the impact of interventions during pregnancy on the health of the newborn and/or child.
Figure 19 Maternal health - Distribution of studies by outcomes

Knowledge and attitudes of individuals and households
Social norms in the community for RMNCH
Knowledge and attitudes of health providers for engagement
Couple /mothers / mothers-in-law /parent-child communication
Parenting skills
Joint decision-making in the household
Self-care practices
Caregiver practices
Family planning method use
Household environmental practices
Routine care-seeking behaviour
Care seeking for complications/illness
Perception of quality of care / satisfaction with services
Provider communication and engagement
Community capacity
Participation in planning programmes
Social accountability
Morbidity and disability
Mortality
Child growth and development
Gender equity / status of women
Social cohesion
Cost

Number of studies

Knowledge and attitudes
Household dynamics / communication
Care practices
Care-seeking behaviour
Quality of care / satisfaction
Community capacity, participation and accountability
Health
Cross-cutting
There is a paucity of studies measuring outcomes related to gender equity or strengthening supportive environments. Only three studies looked at joint decision-making in the household and three looked at household communication in terms of communication between couples, mothers and mothers-in-law or between the parent and child. Only one study looked at gender equity/status of women. In terms of larger social norms or community capacity, only five studies measured outcomes related to community capacity, participation and accountability. No study measured outcomes related to social norms. This may reflect a tendency to focus on measurements of individual behaviour change, or less interest in measuring social outcomes that can be more difficult to quantify. Nine studies measured satisfaction with services or perceptions of quality.

**Geographical location**

Most studies focused on regions where maternal mortality and morbidity are highest. There were 41 studies from the South East Asia Region and 38 from the African Region. There are few studies from the other WHO regions, including none from the European Region. Nearly 40% of the studies addressing maternal health were performed in just four countries: India, Bangladesh, Nepal and Uganda. Only four studies were performed in francophone African countries, including Benin and Burkina Faso.

**Study types**

The most frequent study design used was a RCT (n=70), with only one of those including a qualitative component. Thirty-six studies used difference-in-differences as the mode of analysis and 11 used some form of statistical matching.

**Consideration of equity**

Most maternal studies (n=70) consider equity in some way, either through interventions targeted to specific groups or through subgroup analysis. Subgroup analysis was usually done by place of residence (n=11), typically rural versus urban area, level of education (n=11) or socioeconomic status (n=11). Interventions that targeted social groups, usually targeted them based on place of residence (rural vs urban, n=57), or based on low socioeconomic status (n=24). Only four studies directly assessed the impact on an inequality outcome.

**Ongoing impact evaluations**

Four ongoing maternal health studies were identified, corresponding to five unique comparisons of interventions. Two of these ongoing maternal studies will evaluate a home visits programme. One will evaluate a community mobilization package and the other a facility-based IPC programme. All of the studies are RCTs. One of these is a multi-arm trial in Zimbabwe, and the others are being performed in Bangladesh, Nepal and Indonesia. These studies will evaluate a broad range of outcomes including routine care-seeking behaviour (n=4), child growth and development (n=2), community capacity (n=1) and knowledge and attitudes of health providers for community engagement (n=1).
**Characteristics and trends of the evidence base for systematic reviews**

Sixty completed systematic reviews related to maternal health and six ongoing studies were identified.

**Distribution of reviews across interventions and outcomes**

In addition to addressing interventions related to care during pregnancy, childbirth and after childbirth (n=60), health topics covered by the systematic reviews of maternal health included interventions related to infant feeding and nutrition (n=19), care seeking for newborn illness (n=12) malaria (n=11) and immunizations (n=15).

Similar to the identified impact evaluations, the intervention area most frequently studied in the systematic reviews is IPC and health education activities, either delivered as single interventions (n=44), packages of mixed IPC approaches (n=26) and packages of these approaches with other SBCE interventions (n=5). Community mobilization interventions were also frequently studied, either alone, or as part of a package. (n=28). Less-studied intervention areas include provider training and service delivery adjustments (n=7) and demand-side financing (n=5).

The outcomes studied most often in the systematic reviews of maternal health were care practices (n=44) and care-seeking behaviours (n=60) as well as health outcomes (mortality and morbidity – n=74). As with the impact evaluations, household communication and dynamics, perceptions of quality, provider engagement and skills and social accountability were less predominant in the outcomes.

**Consideration of equity in the systematic reviews**

Equity was considered in 33% of the systematic reviews (n=21)–either through inclusion criteria or in the analysis. Twelve reviews explicitly included interventions designed to target specific groups, while five did subgroup analysis by a vulnerable group.

**Results of critical appraisal of systematic reviews**

In the area of maternal health, 45% of the systematic reviews (n=27) were assessed as lower confidence. The remaining reviews were assessed as having largely medium (n=16) or high (n=17) confidence in the findings of the review.

**Ongoing studies**

Six ongoing systematic reviews on maternal health topics were identified. These cover a range of intervention areas including social media and m-health (n=2), provider training and service delivery adjustments (n=1), community-based health insurance (n=1) and mixed IPC approaches (n=1). Two will look specifically at SBCE packages, one looking at IPC and demand-side financing and the other at IPC and social media and m-health. The reviews will also cover a diverse range of outcomes such as routine care-seeking behaviour (n=4), morbidity and disability (n=4), mortality (n=3). One study on social media and m-health will also look at cost-effectiveness. Finally, one of the reviews will consider maternal health in crisis settings.
Newborn health

An interactive platform that visually presents the findings for Newborn Health can be found at this link: http://gapmaps.3ieimpact.org/evidence-maps/social-behavioural-and-community-engagement-interventions-newborn-health

Characteristics and trends of the evidence base for impact evaluations

One hundred and fourteen completed studies, including four multi-arm trials\(^{12}\), of interventions in the area of newborn health were identified.

Most studies categorized under the newborn health area address care during pregnancy, childbirth and after birth (n=72) and infant feeding and nutrition (n=65)—often early initiation of breastfeeding and exclusive breastfeeding—followed by care seeking for newborn illness (n=20). A smaller number of studies targeted immunizations (n=11), malaria (n=6), diarrhoea (n=9) and pneumonia (n=5). Only one study looked at early child development.

Distribution of studies across interventions

**Figure 20 Newborn health - Distribution of studies by intervention area**

Note: This graph reflects number of comparisons and not number of studies

\(^{12}\) Given the multi arm trials, there were therefore 121 unique comparisons coded in the evidence map for newborn health. Thus n=115 studies for all variable descriptions except for interventions where n=121.
Figure 20 presents the distribution of interventions studied in newborn health, disaggregated by whether the intervention also included a non-SBCE component. As in other health areas, the largest number of newborn health studies were studies of IPC and educational activities, either delivered as single interventions (n=49), packages of mixed IPC approaches (n=19) and packages of these approaches with other SBCE interventions (n=8). In this category, the intervention most frequently studied was home visits (n=36), 15 of which were delivered in combination with a non-SBCE intervention. Community mobilization interventions alone and in packages (n=20) were also frequently studied. The other intervention categories were less studied for newborn health. Only nine looked at demand-side financing, four studied mass media and education entertainment interventions and three looked at social media and m-health.

Outcomes assessed

Of the outcomes reported, caregiver practices (which includes early initiation of and exclusive breastfeeding) was the most commonly evaluated outcome in the newborn health studies (n=74). Routine care-seeking behaviour (n=49) and health-related outcomes (including newborn mortality (n=44), morbidity and disability (n=29), child growth and development (n=23), and care seeking for complications and illness (n=24)) were recorded in a relatively large proportion of the studies.
Figure 21 Newborn health - Distribution of studies by outcomes

An evidence map of social, behavioural and community engagement interventions for reproductive, maternal, newborn and child health.

- Knowledge and attitudes of individuals and households
- Parenting skills
- Social norms in the community for RMNCH
- Joint decision-making in the household
- Self-care practices
- Caregiver practices
- Family planning method use
- Household environmental practices
- Routine care-seeking behaviour
- Care seeking for complications/illness
- Perception of quality of care / satisfaction with services
- Provider communication and engagement
- Community capacity
- Participation in planning programmes
- Social accountability
- Morbidity and disability
- Mortality
- Child growth and development
- Gender equity / status of women
- Social cohesion
- Cost

Number of studies
A small number of studies assessed outcomes in the area of household dynamics and communication, quality of care and satisfaction with services, community participation and accountability. Seven studies included information on programme costs. There were no studies included that measured parenting skills, social norms in the community or community capacity.

**Geographical distribution**

There were 48 studies from the South East Asia Region, followed by 35 from the African Region and 12 from the Eastern Mediterranean Region. Fewer studies were found in the Region of the Americas (n=10) and the Western Pacific Region (n=7). Only two studies were conducted in the European Region.

**Study types**

Most newborn health studies included employed a randomized controlled trial study design (n=99) with the remainder having a quasi-experimental design. Of those studies using a quasi-experimental design, most used a difference-in-difference approach (n=14), with three studies using some sort of statistical matching. Two studies included a qualitative component and were classified as mixed-methods.

**Consideration of equity**

A number of the identified studies considered equity in more than one way. More than half of the studies assessed an intervention targeting a specific group, typically populations living in rural areas (n=50), or populations of low socioeconomic status (n=18). A few interventions also adopted targeting strategies by education (n=6), ethnicity, culture and language (n=5), and by religion (n=2).

In addition, ten studies conducted subgroup analysis for one or more vulnerable groups such as education (n=7) or socioeconomic status (n=6). Three studies undertook subgroup analysis by place of residence, ethnicity, culture and language, gender and other vulnerable groups.

Finally, 13 studies assessed the impact of the intervention on an outcome measure of inequity.

**Characteristics and trends of the evidence base for systematic reviews**

There were 51 completed and three ongoing systematic reviews of newborn health interventions.

**Distribution of reviews across interventions and outcomes**

Most of the reviews looked at interventions related to care during pregnancy, childbirth and after childbirth (n=38); 29 looked at infant feeding and nutrition. Fourteen reviews were concerned specifically with care seeking for newborn illness.

As with the newborn health impact evaluations, this health area is dominated by systematic reviews of IPC and health education interventions either delivered as single interventions (n=53), packages of mixed IPC (n=26) and packages of these approaches with other SBCE interventions (n= 3). For the single interventions, home visits were the intervention most frequently studied (n=26). Community mobilization approaches as either single interventions
(n=17) or as a package were also frequently studied (n=8), as were demand-side financing interventions (n=13). Social marketing approaches and mass media and entertainment education were less frequently studied.

Mortality is the most frequently studied outcome (n=34) followed by routine care seeking (n=30), caregiver practices (which includes breastfeeding) (n=25), child growth and development (n=13) and care seeking for complications or illness (n=13).

**Consideration of equity in the systematic reviews**

Very few of the systematic reviews in newborn health areas considered equity, either by design of the review’s inclusion criteria or by analysis (n=13). Of these reviews, eight looked at an intervention that targeted a specific vulnerable group, while four carried out subgroup analysis of results by group.

**Results of critical appraisal of systematic reviews**

Just under half of the systematic reviews (47%) were rated as being of low confidence in the findings based on the methodological approach.

**Child health**

An interactive platform that visually presents the findings for Child Health can be found at this link: http://gapmaps.3ieimpact.org/evidence-maps/social-behavioural-and-community-engagement-interventions-child-health

**Characteristics and trends of the evidence base for impact evaluations**

Child health is the health area most frequently studied across RMNCH, with 322 completed studies, including 21 multi-arm trials

The majority of the child health studies were in infant/child feeding and nutrition health area (n=179), with 53 studies for WASH, followed by 34 for immunizations. Most other studies considered the common childhood illnesses including diarrhoea (n=29), pneumonia (n=22) and malaria (n=32). Care seeking for childhood illness was targeted in 28 studies.

Forty-nine studies involved early childhood development. These were mainly delivered through IPC interventions either alone (n=27) or as a package (n=14). These interventions were also commonly delivered through demand-side financing programmes (n=12). Child growth and development was the most commonly measured outcome for early childhood development (n=42), along with household environmental practices (n=15) and caregiver practices (n=9).

---

13 Multi-arm trials yielded 352 unique comparisons coded in the evidence map for child health. Thus n=320 studies for all variable descriptions except for interventions where n=349.

14 Note to the Reader: Several studies which included WASH or cookstove interventions targeted the household level, such as household uptake of latrines, hand washing etc. Rather than coding the study for maternal, newborn and child, these studies were coded as child as many water and sanitation interventions are primarily (or possibly only) evaluated by assessing the benefits for young children.
Distribution of studies across interventions

Figure 22 presents the distribution of studies by intervention area, disaggregated by whether the intervention also included a non-SBCE component. As with the other RMNCH health areas, IPC and health education interventions were the most frequently studied child health interventions delivered either as single interventions (n=141), packages of mixed IPC approaches (n=47) and packages of these approaches with other SBCE interventions (n=33). These are broken down into home visits (n=69), group IPC approaches (n=60) and facility-based IPC (n=12). Intervention packages combining interpersonal communication and mass media or education entertainment also appeared a large number of times (n=19). Demand-side financing, typically in the form of conditional cash transfer programmes, was also studied often (n=43), as were community mobilization interventions, delivered either on their own or as part of a package, (n=37).

Figure 22 Child health - Distribution of studies by interventions

There were relatively fewer studies of mass media and entertainment education interventions provided alone (n=10), and studies of social media and m-health programmes (n=10).
**Outcomes assessed**

Health outcomes and care practices were the two outcomes most commonly measured in the child health studies. Health outcomes can be broken down into morbidity and disability (n=82), mortality (n=26) and child growth and development (n=149).

Care practice outcomes were also frequently studied, including caregiver practices (n=143), and household environmental practices\(^\text{15}\) (n=46). Self-care practices for the child were also frequently reported (n=30), usually dietary intake, physical activity and hand washing.

---

\(15\) Reminder that studies which included WASH or cookstove interventions that targeted the household level, were coded as child as many primarily (or possibly only) evaluated the benefits for children.
Figure 23 Child health outcomes

- Knowledge and attitudes of individuals and households
- Social norms in the community for RMNCH
- Knowledge and attitudes of health providers for community engagement
- Couple / mothers / mothers-in-law / parent-child communication
- Parenting skills
- Joint decision-making in the household
- Self-care practices
- Caregiver practices
- Family planning method use
- Household environmental practices
- Routine care-seeking behaviour
- Care-seeking for complications/illness
- Perception of quality of care / satisfaction
- Provider communication and engagement
- Community capacity
- Participation in planning programmes
- Morbidity and disability
- Mortality
- Child growth and development
- Gender equity / status of women
- Social cohesion
- Cost
Geographical location

The regional distribution of studies for child health follows the overall pattern for the aggregated RMNC health areas. The majority of studies included were from the African Region (n=109) followed by the South East Asian Region (n=83) and the Region of the Americas (n=70). As for other health areas, a low number (n=6) were from the European Region.

Study types

Most of the child health studies were randomized controlled trials (n=254). The remaining 68 studies used a quasi-experimental study design with a comparison group and one or more analysis methods to adjust for selection bias and confounding, with 47 using difference-in-differences analysis and 25 using some form of statistical matching. Thirteen studies included a qualitative component and were characterized as mixed-methods studies.

Consideration of equity

Over 60% of the child health studies considered equity, with most looking at interventions targeting specific groups selected by place of residence and socioeconomic status.

Systematic review characteristics and trends

There were 91 systematic reviews of SBCE interventions relating to child health and eight ongoing reviews.

Distribution of reviews across interventions and outcomes

Infant/child feeding and nutrition was the most studied health topic area (n=45), followed by malaria (n=22), diarrhoea and WASH (n=17 for each).

The SBCE interventions most commonly included in systematic reviews on child health are IPC and education interventions delivered as either single interventions (n=76) or packages of mixed IPC approaches (n=49). No reviews studied these approaches bundled with other SBCE interventions. Other commonly used interventions were demand-side financing (n=20), mass media and entertainment education (n=16) and community mobilization (n=15).

As with impact evaluations in this area, the most commonly evaluated outcomes in the child health systematic reviews were health outcomes (n=104), followed by care practices (n=62) and care-seeking behaviour (n=49).

Equity

Only 22 of the systematic reviews took equity into consideration in their design or analysis.

Critical appraisal of the systematic reviews

Overall, 40 reviews were assessed as being of low quality, 27 as medium quality, and 24 as high quality.
Annex 5. Impact evaluations and systematic reviews included in the Evidence Map

**Included impact evaluations – completed**


Attanasio OP, Fernandez C, Fitzsimons EO, Grantham-McGregor SM, Meghir C, Rubio-Codina M. Using the infrastructure of a conditional cash transfer program to deliver a scalable integrated early child development program in Colombia: cluster randomized controlled trial. BMJ. 2014;349:g5785. doi: 10.1136/bmj.g5785


Caldeira AP, Fagundes GC, de Aguiar GN. Educational intervention on breastfeeding promotion to the family health program team. Rev Saude Publica. 2008; 42(6):1027-33.


Jaime P C, Machado F M, Westphal M F, Monteiro C A. Nutritional education and fruit and 
vegetable intake: a randomized community trial. Revista de Saude Publica. 2007; 41(1):154-

Jakobsen MS, Sodemann M, Biai S, Nielsen J, Aaby P. Promotion of exclusive breastfeeding is 
not likely to be cost effective in West Africa. A randomized intervention study from Guinea-

Janssens W, Rosemberg C. The impact of a caribbean home-visiting child development program 

Janssens W. Externalities in program evaluation: the impact of a women’s empowerment 
4774.2011.01041.x.

Janssens W. Measuring externalities in program evaluation: spillover effects of a women’s 
empowerment programme in rural India. Tinbergen Institute Discussion Paper. Amsterdam: 
Tinbergen Institute; 2006. doi: 10.2139/ssrn.672304

Jennings L, Yebadokpo A, Affo J, Agbogbe M. Use of job aids to improve facility-based postnatal 
s10995-014-1537-5.

j.1365-2214.2007.00738.x.

Jin X, Sun Y, Jiang F, Ma J, Morgan C, Shen X. “Care for Development” intervention in rural 
dbp.0b013e31802d410b.

Jinadu MK, Adegbenro CA, Esmai AO, Ojo AA, Oyeleye BA. Health promotion intervention 
for hygienic disposal of children’s faeces in a rural area of Nigeria. Health Educ J. 2007; 

Johri M, Chandra D, Koné KK, Dudeja S, Sylvestre MP, Sharma JK et al. Interventions to increase 
immunisation coverage among children 12-23 months of age in India through participatory 
learning and community engagement: pilot study for a cluster randomised trial. BMJ Open 

Joshi S, Schultz TP. Family planning and women’s and children’s health: long-term consequences 
of an outreach program in Matlab, Bangladesh. Demography. 2013;50(1):149-80. doi: 

Joshi S, Sivaram A. Does it pay to deliver? An evaluation of India’s Safe Motherhood program. 

Kabahenda M, Mullis RM, Erhardt JG, Northrop-Clewes C, Nickols SY. Nutrition education to 
improve dietary intake and micronutrient nutriture among children in less-resourced areas: 


Mullany BC, Becker S, Hindin MJ. The impact of including husbands in antenatal health education services on maternal health practices in urban Nepal: results from a randomized controlled trial. Health Educ Res. 2007;22(2):166-76. doi: 10.1093/her/cyl060


Included impact evaluations – ongoing


Crowley L, Fink G, Karlan D. Increasing Vaccination Coverage Using a Mobile Phone Application in Mozambique. 2014.


Included systematic reviews – completed


**Included systematic reviews – ongoing**


Systematic reviews with two or less studies from an LMIC


Annex 6. Implementation principles for SBCE interventions

The expert group requested that a background paper on key implementation principles for SBCE interventions be included as part of the evidence map. This paper provides a definition of ‘implementation principles’, a description of the methods used, an overview of the key principles identified and a brief discussion section.

Working definition

The definition of principles was divided into two components:

1. a “truth” or “proposition” about how the world works for SBCE interventions, and
2. underlying practical steps and actions in programme implementation, applicable to a range of approaches.

Selected SBCE literature and guidance was reviewed to identify core intent principles and corresponding action principles to guide implementation. Intent principles represent the values and beliefs that drive authentic social and behavioural change and community engagement. The corresponding action principles provide guidance for practical actions that can lead to effectively reaching the intent.

Methods

A rapid review of the academic and grey literature was undertaken between July 2016 and November 2016, to identify implementation principles for SBCE interventions for RMNCAH across the intervention categories used in the SBCE evidence map. It should be noted the categories are not necessarily mutually exclusive, representing one way of organizing the interventions. Community service delivery of curative interventions is not included.

The search strategy for published articles was designed to identify literature that met the following criteria:

- RMNCAH target population;
- in a low- or middle-income country (LMIC) setting;
- focused on at least one of the interventions of interest;
- in English;
- published on or after 1 January 2000.

16 Melanie Morrow and Eric Sarriot were responsible for the development of this section, on behalf of the USAID- supported Maternal and Child Survival Program. The authors’ views expressed in this publication do not necessarily reflect the views of the USAID or the United States Government.
The PubMed database was searched. The basic search strategy paired a keyword or MeSH term for the intervention category with the keyword «implementation» or “community” in the article’s title or abstract; in addition, Boolean operators were applied to further narrow the search to RMNCAH and LMICs [(«maternal» OR «child» OR «adolescent» OR «reproductive» OR «neonatal» OR «newborn») AND “developing countries”]. A total of 11 searches were conducted in PubMed across the six intervention categories (see search terms below).

After a review of titles and abstracts and relevant publications identified, a total of 45 articles were included. Data extraction was conducted in an Excel matrix of the key elements of each article: authors, title, intervention category, intervention, RMNCAH areas, actors/funders, location, and potential implementation principles (‘dos and don’ts’).

A search for grey literature was also conducted. The search strategy included practitioner-friendly websites such as the Communication Initiative, CORE Group, Health COMpass and K4Health, in addition to solicitation of community health practitioners associated with the CORE Group (via the Social and Behavior Change and Community-Centered Health Systems Strengthening working groups) and SBCE experts identified by WHO, targeting documents that met the following inclusion criteria:

1. Addressed implementation of one or more SBCE interventions;
2. RMNCA target population (or cross-cutting);
3. Included implementation approaches applied by more than one organization and/or replicated beyond a single project/pilot;
4. Supporting evidence for the approach (es) could be identified, be it published studies or unpublished data from programme evaluations;
5. Had a publication date of 2000-2016;
6. Could be in the form of implementation manuals, guides, tools and curricula; or technical guidance, reports and articles provided it had sufficient detail on implementation and associated lessons learned to be informative for our purposes;
7. Based on experience in low- and middle-income countries;
8. Complemented overall composition of the sample, for which it was intended to have at least 2-3 documents with content pertaining to each of the six main intervention categories (18-20 documents total).

All promising grey literature documents were categorized according to the types of SBCE interventions reflected, the range of actors involved in funding, implementing and writing the documents, and their associated countries. The final list of texts was not intended to be exhaustive but rather a purposive sampling with representation across the described dimensions. Eighteen core texts were systematically analyzed using basic qualitative content analysis methods to identify themes, patterns and trends in word use and conceptual terminology. The principles that emerged were further shaped by an iterative process that included feedback from technical experts identified by WHO, who recommended revisions to be more comprehensive and inclusive of existing principles in SBCE. The next draft, which also included review of an additional reference, was shared with community health practitioners from CORE Group and from the Maternal and Child Survival Program. Thirty respondents provided feedback via an online questionnaire that allowed for open-ended comments. The principles included below reflects the collective feedback.

**Principles Identified**

Dominant themes such as “leadership”, “equity”, “quality”, “ongoing participation” and “consensus building” repeated across the materials as did the need to adapt approaches based on local context and continuous learning. Abstract, more “macro” principles that reflected intent, ideals and goal attainments such as “strive for equity” were related to more “micro” level terminology of principles related to more concrete actions. Please refer to Table 8 for the list of intent principles with illustrative action principles in the first two columns. A third column, labelled ‘stage’, refers to the phase of the programme (design or implementation) to which the action principle is most applicable.
Table 8 Principles for social, behavioural and community engagement interventions

<table>
<thead>
<tr>
<th>Intent Principles</th>
<th>Illustrative Action Principles</th>
<th>Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Design programmes based on formative and summative qualitative and quantitative evidence.</td>
<td>1.1 Build on available data and evidence. Use existing applicable qualitative and quantitative data to shape a context specific programme design. Learn from programmes that have already been successful in the context. Identify information gaps for additional data collection to further define the situation and target audience.</td>
<td>Design</td>
</tr>
<tr>
<td></td>
<td>1.2 Conduct formative research on needs, resources, behaviours and motivations of the target audience. Identify barriers and facilitators of key behaviours, including influential people and related cultural norms, beliefs and gender roles that affect access to information and services, control over resources, presence of social and emotional support, and decision making power.</td>
<td>Design</td>
</tr>
<tr>
<td></td>
<td>1.3 Use community-based participatory research exercises like social mapping to identify local resources, existing capacities, networks, marginalized populations, vulnerabilities and coping strategies.</td>
<td>Design</td>
</tr>
<tr>
<td></td>
<td>2. Design programmes based on a clear audience analysis, using social change or behaviour change models and theories.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.1 Address individual behaviour change and social and cultural norm change needs identified during formative research.</td>
<td>Design</td>
</tr>
<tr>
<td></td>
<td>2.2 Attend to barriers and drivers of behaviour on multiple levels, according to the pathways expected to lead to desired changes and outcomes.</td>
<td>Design</td>
</tr>
<tr>
<td></td>
<td>2.3 Distinguish between behaviours that require distinct types of support and needs that may differ with time. Consider variables like the complexity of the behaviour and intended frequency, the phase of adoption and other factors like prior experience, levels of trust, perceived benefits and social acceptability, among others.</td>
<td>Design</td>
</tr>
<tr>
<td>Intent Principles</td>
<td>Illustrative Action Principles</td>
<td>Stage</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>3. Adapt and fit strategy and approaches to sociocultural, economic, geographic, political and technological contexts.</td>
<td>3.1 Factor into programme design the political and management environment, available human and material resources, and budget cycles that affect community and health systems.</td>
<td>Design</td>
</tr>
<tr>
<td></td>
<td>3.2 Test strategies and communication content with a wide range of stakeholders, especially those most affected by the problem. Collect and incorporate feedback.</td>
<td>Design</td>
</tr>
<tr>
<td></td>
<td>3.3 Link promotion of key behaviours with the provision of corresponding services and products that are accessible, appropriate, available and acceptable to the target audience.</td>
<td>Design</td>
</tr>
<tr>
<td>4. Follow international best practices in designing and implementing strategic social and behaviour change communication strategies.</td>
<td>4.1 Prioritize behaviours and sequence communication content to avoid information overload. Build knowledge and skills incrementally over time.</td>
<td>Design</td>
</tr>
<tr>
<td></td>
<td>4.2 Use well-tested communication content and approaches to reach the target audience through mutually reinforcing channels such as mass media, public and private health services, community-based organizations and interpersonal networks, as appropriate.</td>
<td>Design</td>
</tr>
<tr>
<td></td>
<td>4.3 Equip health providers, community workers and volunteers responsible for social and behaviour change communication and community engagement with appropriate training, job aids, and supportive supervision related to communication, interpersonal and problem solving skills.</td>
<td>Implementation</td>
</tr>
<tr>
<td></td>
<td>4.4 Ask staff and volunteers responsible for training others to commit to applying new behaviours themselves before teaching others.</td>
<td>Implementation</td>
</tr>
<tr>
<td>5. Facilitate ongoing community participation in planning, implementation and monitoring of programmes and services that pertain to them.</td>
<td>5.1 Support forums for open dialogue and use community-based, participatory approaches to engage people affected by the programmes and services in question. Encourage participants to identify opportunities, set priorities, affirm positive health practices, provide feedback and solve problems using local knowledge and resources.</td>
<td>Design and Implementation</td>
</tr>
<tr>
<td></td>
<td>5.2 Use recurring peer group meetings, where appropriate, to provide opportunities for regular feedback from participants regarding their experience with interventions, in addition to helping members adopt and practice positive health behaviours, strengthen social ties and overcome barriers to access services.</td>
<td>Implementation</td>
</tr>
<tr>
<td>Intent Principles</td>
<td>Illustrative Action Principles</td>
<td>Stage</td>
</tr>
<tr>
<td>-------------------</td>
<td>--------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>5. Facilitate ongoing community participation in planning, implementation and monitoring of programmes and services that pertain to them. (continue)</td>
<td>5.3 Support the community to establish and follow explicit criteria and a transparent process for selection of community volunteers and committee representatives, as applicable.</td>
<td>Implementation</td>
</tr>
<tr>
<td>6. Collaborate to facilitate multi-sectoral interventions with active coordination and shared accountability across sectors and stakeholders.</td>
<td>5.4 Maximize opportunities for inclusion of marginalized groups.</td>
<td>Design and Implementation</td>
</tr>
<tr>
<td></td>
<td>6.1 Bring together representatives across sectors from community, civil society, private sector and government ministries to identify shared goals and develop concrete action plans with mutual accountability.</td>
<td>Design</td>
</tr>
<tr>
<td></td>
<td>6.2 Use participatory appraisal approaches to create shared understanding, dialogue, and ownership across stakeholders from different sectors and backgrounds.</td>
<td>Implementation</td>
</tr>
<tr>
<td></td>
<td>6.3 Establish clear terms of reference with all stakeholders to keep roles and expectations well-defined.</td>
<td>Implementation</td>
</tr>
<tr>
<td></td>
<td>6.4 Identify and support a person skilled in consensus building to maintain cooperation with primary stakeholders and other community institutions, such as the village council, religious bodies, and schools.</td>
<td>Implementation</td>
</tr>
<tr>
<td></td>
<td>6.5 Provide stakeholders regular opportunities for ongoing dialogue, networking, and action learning through joint implementation activities such as assessments, supportive supervision and participatory monitoring and evaluation.</td>
<td>Implementation</td>
</tr>
<tr>
<td>Intent Principles</td>
<td>Illustrative Action Principles</td>
<td>Stage</td>
</tr>
<tr>
<td>-------------------</td>
<td>--------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>7. Strive for equity and gender equality in all aspects of intervention design and implementation.</td>
<td>7.1 Sensitize programme implementers, local government, health workers, community leaders and other actors to gender and equity issues in the community.</td>
<td>Implementation</td>
</tr>
<tr>
<td>7.2 Mobilize the support of people and decision-makers who affect women and girls’ agency concerning their health and wellbeing. Build trust by demonstrating respect and identifying shared goals concerning the health of families</td>
<td></td>
<td>Implementation</td>
</tr>
<tr>
<td>7.3 At household level, involve family members in addition to the mother (e.g. fathers, mothers-in-law, youth and/or adolescents, as appropriate), so all are informed, supportive and contributing to positive family health outcomes.</td>
<td></td>
<td>Implementation</td>
</tr>
<tr>
<td>7.4 Seek regular feedback from women and marginalized groups to ensure that implementation respects, promotes and facilitates their choices and full participation in decision making.</td>
<td></td>
<td>Implementation</td>
</tr>
<tr>
<td>7.5 Document and share implementation guidance, resources required and lessons learned at local, regional and national levels to enable replication and scale up of successful programmes. Use well-functioning programme sites to host learning visits.</td>
<td></td>
<td>Implementation</td>
</tr>
<tr>
<td>8. From the start, promote institutionalization for sustainability and scale up.</td>
<td>8.1 Harmonize programmes and approaches with existing national and local systems for health, information and governance when possible.</td>
<td>Design</td>
</tr>
<tr>
<td>8.2 Advocate for laws, norms and practices that promote improved development outcomes particularly among the marginalized.</td>
<td></td>
<td>Implementation</td>
</tr>
<tr>
<td>8.3 Identify and support key advocates in the community, civil society, public and private sector to engage in communication, networking, action planning and advocacy efforts related to the programme.</td>
<td></td>
<td>Implementation</td>
</tr>
<tr>
<td>8.4 When feasible, educate policy makers and government officials about cost-effectiveness of community health (including SBCE) interventions, using existing data and investment cases.</td>
<td></td>
<td>Implementation</td>
</tr>
<tr>
<td>8.5 Document and share implementation guidance, resources required and lessons learned at local, regional and national levels to enable replication and scale up of successful programmes. Use well-functioning programme sites to host learning visits.</td>
<td></td>
<td>Implementation</td>
</tr>
<tr>
<td>Intent Principles</td>
<td>Illustrative Action Principles</td>
<td>Stage</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>9. Build leadership and management capacity at all levels, from health system managers to community volunteers.</td>
<td>9.1 Assess and address needs for capacity building related to management of people and programmes: communication and interpersonal skills, group facilitation, consensus building, community empowerment, supportive supervision, using data for decision making, planning and budgeting, among others.</td>
<td>Implementation</td>
</tr>
<tr>
<td></td>
<td>9.2 Entrust others with responsibility, sharing involvement and ownership over work. Mentor and empower others to take initiative and resolve problems.</td>
<td>Implementation</td>
</tr>
<tr>
<td></td>
<td>9.3 Encourage and support women to take leadership roles in their communities and programme activities.</td>
<td>Implementation</td>
</tr>
<tr>
<td></td>
<td>9.4 Support peer-to-peer exchanges for learning and skills transfer.</td>
<td>Implementation</td>
</tr>
<tr>
<td>10. Ensure quality, learning, and sustainability through regular monitoring and evaluation.</td>
<td>10.1 Develop monitoring and evaluation plans with indicators based on the programme’s desired outcomes and the pathways expected to achieve them.</td>
<td>Design</td>
</tr>
<tr>
<td></td>
<td>10.2 When possible, align indicators with global, national and local stakeholders to enable tracking, compatibility and shared learning.</td>
<td>Design</td>
</tr>
<tr>
<td></td>
<td>10.3 Support communities to jointly define and assess quality of programmes and services. Ensure that the voices of women and marginalized populations are heard.</td>
<td>Implementation</td>
</tr>
<tr>
<td></td>
<td>10.4 Measure key indicators to monitor implementation and track progress on plans. Disaggregate programme and outcome data by gender and age groups to help identify and target inequities.</td>
<td>Implementation</td>
</tr>
<tr>
<td></td>
<td>10.5 Create regular opportunities for data sharing and feedback with community members and stakeholders in formats they can understand. Use data, including social autopsies where relevant, to catalyse action for joint decision-making and course correction.</td>
<td>Implementation</td>
</tr>
</tbody>
</table>
The findings of the literature review emphasized understanding the local context and culture and adapting design to suit; engaging the population as participants and facilitators rather than as passive recipients of programmes and messages; and the use of tools and participatory approaches that foster collaborative learning and mutual understanding.

Some action principles relate to more than one intent principle due to the crosscutting and overlapping nature of themes. Despite integration of actions pertaining to gender and marginalized populations across intent principles as relevant, a separate intent principle on equity and gender equality was maintained to avoid losing sight of its overall importance. While action principles aim to illustrate the kinds of activities or steps that support realization of the intent principles, far greater detail can of course be found in corresponding implementation manuals specific to a given approach.

The principles that emerged as pertinent to implementation of SBCE interventions overlap with those associated with social determinants of health (SDH), human rights, and quality management of health programmes. As management of programmes with SBCE interventions takes place in a complex, changing context, not surprisingly, some apparent similarities also exist with principles from complex systems (e.g. those pertaining to trust, cooperation and learning, among others). Aspects of these interrelated approaches are reflected in the EWEC Global Strategy for Women’s, Children’s and Adolescents’ Health (2016-2030) and expected to contribute to its objectives to end preventable deaths, ensure health and well-being and expand enabling environments.
### Search Terms for Published Literature

<table>
<thead>
<tr>
<th>Database</th>
<th>Search Terms (Articles published after 1/1/2000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PubMed</td>
<td>«maternity waiting homes»</td>
</tr>
<tr>
<td>PubMed</td>
<td>«community»[tiab] and «scorecard»[tiab]</td>
</tr>
<tr>
<td>PubMed</td>
<td>«community-based monitoring»[tiab]</td>
</tr>
<tr>
<td>PubMed</td>
<td>«social marketing»[tiab] AND («maternal» OR «child» OR «adolescent» OR «reproductive» OR «neonatal» OR «newborn») AND «developing countries»</td>
</tr>
<tr>
<td>PubMed</td>
<td>«community mobilization»[tiab] AND («maternal» OR «child» OR «adolescent» OR «reproductive» OR «neonatal» OR «newborn») AND «developing countries»</td>
</tr>
<tr>
<td>PubMed</td>
<td>«Social Responsibility»[MeSH] AND («implementation» OR «delivery») AND («maternal» OR «child» OR «adolescent» OR «reproductive» OR «neonatal» OR «newborn») AND «developing countries»</td>
</tr>
</tbody>
</table>
Annex 7. External experts and WHO staff involved in development of the evidence map

Expert meeting – December 2015

Elfnish Bekele Habtemariam
Federal Ministry of Health
Addis Ababa, ETHIOPIA

Jess Davis
Burnet Institute
Melbourne, AUSTRALIA

Andres de Francisco
Partnership for Maternal, Newborn and Child Health (PMNCH)
Geneva, SWITZERLAND

Warren Feek
The Communication Initiative
Victoria, CANADA

Paul Hunter
University of East Anglia
Norwich, UNITED KINGDOM

Victoria Kimotho
African Medical and Research Foundation (AMREF)
Nairobi, KENYA

Adriane Martin-Hilber
University of Basel
Basel, SWITZERLAND

Christine Muzel
Philips Corporation
Amsterdam, THE NETHERLANDS

Nicola Reavley
University of Melbourne
Melbourne, AUSTRALIA
An evidence map of social, behavioural and community engagement interventions for reproductive, maternal, newborn and child health

Dhammica Rowel
Ministry of Health
Colombo, SRI LANKA

Eric Sarriot
Maternal and Child Survival Program
Washington DC, UNITED STATES OF AMERICA

Andrea Scheel
University College London
London, UNITED KINGDOM

Adelaida Trujillo-Caicedo
Citurna Producciones/Imaginario Foundation
Bogotá, COLOMBIA

Polly Walker
World Vision International
London, UNITED KINGDOM

Donor agencies

Nazo Kureshy
United States Agency for International Development (USAID)
Arlington, VA, UNITED STATES OF AMERICA

Stephanie Levy
USAID
Arlington, VA, UNITED STATES OF AMERICA

Jerker Liljestrand
Bill and Melinda Gates Foundation
Seattle, WA, UNITED STATES OF AMERICA

UN agencies

Erin Anastasi
United Nations Population Fund (UNFPA)
New York, NY, UNITED STATES OF AMERICA

Rafael Obregon
United Nations Children’s Fund (UNICEF)
New York, NY, UNITED STATES OF AMERICA
Expert meeting – November 2016

Patrick Aboagye
Ghana Health Service
Accra, GHANA

Rehana Abdus Salam
South Australian Health and Medical Research Institute
Adelaide, AUSTRALIA

Tina Asnake
Federal Ministry of Health
Addis Ababa, ETHIOPIA

Antje Becker-Benton
Save the Children
Washington DC, UNITED STATES OF AMERICA

Cecilia Capello
Enfants du Monde
Geneva, SWITZERLAND

Jess Davis
Burnet Institute
Melbourne, AUSTRALIA

Warren Feek
The Communication Initiative
Victoria, CANADA

Aparajita Gogo
White Ribbon Alliance
New Delhi, INDIA

Paul Hunter
University of East Anglia
Norwich, UNITED KINGDOM

Tamar Kabakian
American University of Beirut
Beirut, LEBANON

Patrick Kagurusi
Amref Health Africa
Kampala, UGANDA

Adriane Martin-Hilber
Swiss Tropical and Public Health Institute
Basel, SWITZERLAND
An evidence map of social, behavioural and community engagement interventions for reproductive, maternal, newborn and child health
UN agencies

Petra ten Hoope-Bender
United Nations Population Fund (UNFPA)

Rafael Obregon
United Nations Children's Fund (UNICEF)

Donor agencies

Shawn Malarcher
USAID
Arlington, VA, UNITED STATES OF AMERICA

Stephanie Levy
USAID
Arlington, VA, UNITED STATES OF AMERICA

Partnership for Maternal, Newborn and Child Health (PMNCH)

Emanuele Capobianco
Mimi Melles
Anshu Mohan
Kadi Toure

WHO staff

Family, Women’s and Children’s Health Cluster (WHO/FWC)

Anshu Banerjee
Shyama Kuruvilla

Department of Maternal, Newborn, Child and Adolescent Health (WHO/MCA)

Anthony Costello—Director
Anayda Portela
Rachael Hinton—Consultant
Marianne Emler—Intern
Samira Aboubaker
Valentine Baltag
Georgina Chrisp—Intern
Bernadette Daelmans
Nicole Grillon
Shamim Ahmad Qazi
Nigel Rollins
David Ross
An evidence map of social, behavioural and community engagement interventions for reproductive, maternal, newborn and child health
Department of Prevention of Noncommunicable Diseases (WHO/PND)
Glenn Laverack
Leendert Maarten Nederveen
Juana Willumsen

Department of Service Delivery and Safety (WHO/SDS)
Asiya Odugleh-Kolev
Photographer credits

Cover: © Oxfam East Africa/John Ferguson
Foreword: © The White Ribbon Alliance
Summary: © The White Ribbon Alliance
Page 1: © Flickr Creative Commons License/Trust for Africa’s Orphans (TAO)
Page 7: © UN Women Kenya/Kennedy Okoth
Page 14: © UN Women Cameroon/Fajong Joseph
Page 17: © UN Photo/Sophia Paris
Page 37: © European Commission DG ECHO/Vicente Raimundo
Page 46: © UN Photo/Albert Gonzalez Farran
Page 50: © Flickr Creative Commons License/Abbie Trayler-Smith