May 2014
An Evidence-Based Policy Brief

Executive Summary
IMPROVING SKILLED BIRTH ATTENDANCE IN ETHIOPIA

Included:
- Description of a health system problem
- Viable options for addressing this problem
- Strategies for implementing these options

Not included: recommendations
This policy brief does not make recommendations regarding which policy option to choose

Who is this evidence brief for?
Policymakers, their support staff, and other stakeholders with an interest in the problem addressed by this evidence brief

Why was it prepared?
To inform deliberations about health policies and programmes by summarizing the best available evidence about the problem and viable solutions

What is an evidence brief for policy?
Evidence briefs for policy bring together global research evidence (from systematic reviews*) and local evidence to inform deliberations about health policies and programmes

*Systematic Review: A summary of studies addressing a clearly formulated question that uses systematic and explicit methods to identify, select, and critically appraise the relevant research, and to collect and analyse data from this research

Full Report
The evidence summarised in this Executive Summary is described in more detail in the Full Report

This evidence brief was prepared by the Technology Transfer and Research Translation Directorate of the Ethiopian Public Health Institute.
Key messages

The problem

Low level of skilled birth attendance
The level of skilled birth attendance in Ethiopia is amongst the lowest in the world and is one of the reasons why the maternal mortality ratio in Ethiopia remains high and why progress towards the Millennium Development Goal 5 has been slow. Important barriers impacting the level of skilled birth attendance include:

- Sociocultural factors
- Economic accessibility
- Physical accessibility
- The quality of available healthcare

Policy options:

Community mobilization, the cultural adaptation of birthing services, the use of maternity waiting homes, and conditional cash transfers are potential strategies to address the low level of skilled birth attendance in Ethiopia.

1. Community mobilization probably increases the proportion of institutional deliveries.
2. The cultural adaptation of birthing places might address one of the reasons why, particularly in rural populations, some women do not use birth facilities. The effects of cultural adaptations to birthing services on the level of skilled birth attendance are uncertain.
3. The use of maternity waiting homes for rural populations that have limited access to emergency obstetric care, might help to overcome the problem of people having to travel long distances between their homes and the birthing facilities. The effects of constructing maternity waiting homes on the level of skilled birth attendance are uncertain.
4. Conditional cash transfer programmes could provide incentives for women to go to birthing facilities. The effects of conditional cash transfer programmes on increasing the level of skilled birth attendance are uncertain.
5. Given the limitations of the currently available evidence, rigorous evaluative research is needed for all the options prior to widespread implementation.

Implementation strategies:

A combination of strategies is needed to implement the proposed optionseffectively

Barriers to implementing all four options include inadequate guidelines, suboptimal quality of care, and a lack of financial resources. Strategies to implement the proposed options include:

- the production of clear guidelines (manuals)
- the use of quality improvement guidance
- improvements in supervision, and
- the mobilization of financial resources
The problem

There is a very low level of skilled birth attendance in Ethiopia. Finding ways to overcome demand-side barriers (sociocultural, geographical and financial) could help to address this problem. The objective of this evidence brief is to summarize the best available evidence describing the low levels of skilled birth attendance in Ethiopia and to outline potential solutions to address this problem. Little attention has been given to demand-side barriers of healthcare by policy makers or researchers, even though such barriers are particularly important to poor communities.

Size of the problem

Approximately 90% of births in Ethiopia occur at home, without skilled birth attendance (ECSA 2012). This level is amongst the highest in the world (WHO 2007), and even in developing countries approximately 59% of all mothers receive skilled birth attendance (Santon 2008). The maternal mortality ratio in Ethiopia is among the highest in the world with 676 deaths per 100,000 live births, or 19,000 maternal deaths per year - levels worse than the average maternal mortality for developing countries of 290 deaths per 100,000 births (IRIN 2012). This level also falls far short of the MDG 5 target set for the country, of 350 deaths per 100,000 live births (FMoH 2006). It is estimated that approximately 16%-33% of all maternal deaths could be avoided through the primary or secondary prevention of complications during delivery by skilled attendance (Graham 2001).

Cause of the problem

The effects of poverty in Ethiopia – one of the poorest and least developed countries in Africa (UNDP 2011) – cannot be overemphasized, including the effects on maternal healthcare. Studies have noted that additional factors may also impact on the low level of skilled birth attendance in Ethiopia, and these can be classified (according to Gabrysch, 2009a), into the four categories, namely:

1. sociocultural factors
2. economic accessibility factors
3. physical accessibility factors
4. poor healthcare delivery

Socio-cultural factors

Socio-cultural factors have a direct influence on the decisions of mothers to seek healthcare or not to seek healthcare (Gabrysch 2009a). According to the recent Demographic and Health Survey of Ethiopia (ECSA 2012), 61% of women believed that delivery at a health facility was not necessary, while 30% stated that it was not customary. The decision by mothers to
seek skilled birth attendance is also influenced by their level of education. Highly educated mothers (i.e. those who have received tertiary education) are most likely to give birth assisted by a skilled provider (74%) [ECSA 2012]. The decision to take mothers to a health facility may also be made by a husband or relatives, and requests to go to a health facility by mothers who are experiencing difficulties in labour may be ignored (Bedford 2012).

A study in north-west Ethiopia, for example, found that the need for closer attention from relatives during delivery (61%), the tradition of giving birth at home (58%), and the influence of family members (14%) are the main reasons women do not seek skilled birth attendance (Tefera 2004).

In a qualitative study in southern Wollo, one of the zones in the Amhara region, (Bedford 2012), the following beliefs and perceptions were identified as deterrents to mothers delivering at health facilities:

- The perception that health facilities do not allow relatives or neighbours to accompany mothers into the delivery unit, which is thought to make mothers feel lonely in spite of the presence of care providers during labour.
- The perception that health facilities prohibit mothers delivering in a kneeling position, and instruct them instead to lie on their back with their legs open. Physical exposure of this kind is considered by mothers to be invasive, especially in front of people unknown to them.
- The perception that internal physical examinations during delivery are disliked by mothers, as mothers do not want to show their bodies to people they do not know.

**Economic accessibility**

Family income is also associated with the utilization of skilled birth attendance because of the costs of transportation and care, and the opportunity costs incurred (Gabrysch 2009a).

**Physical accessibility**

Ethiopia’s road network is not well developed (Wikipedia 2014) and the country has too few ambulances. The majority of rural dwellers (83.9% of the total population) [Population Census Commission 2008] are therefore left isolated and with little or no access to health facilities. Lack of transport to the nearest health facility (71% of respondents) and the distance to a health facility (66% of respondents) are the most important factors hindering the use of
skilled birth attendance. Fourteen percent of women in rural areas said that they either did not have the necessary transportation to reach health facilities, or that the facilities were too far away (ECSA 2012). As Teferra (2012) and Amano (2012) note, urban residency is closely associated with higher levels of skilled birth attendance: in urban areas, 50% of births occur at health facilities, compared to just 4% in rural areas (ECSA 2012).

**Healthcare delivery problems**

Although more than 30,000 health extension workers (HEWs) in Ethiopia contribute to healthcare provision through family planning, antenatal care and HIV testing services, their contribution to the improvement of skilled birth attendance remains insignificant (Medhanyie 2012; Karim 2010).

In addition, health facilities typically face shortages of supplies and equipment for obstetric care due to poor coordination and management (FMoH, 2006). A lack of immediate treatment and onwards referrals, and a lack of the desired skills among care providers, are deterrents to going to health facilities (Bedford 2012). As Kruk (2010) observes, the quality of services provided, such as the availability of drugs and equipment, access to a physician provider, and service providers’ attitudes towards mothers, are also factors impacting on the utilization of facilities by mothers.

A lack of maternity waiting rooms may also contribute to the low utilization of skilled birth attendance. Mothers who present at health facilities when in the early stages of labour are often turned away and asked to return later. Instances in which, for example, mothers are sent back home on a stretcher because there are no maternal waiting rooms; can give health facilities a bad image (Bedford 2012).
Policy options

Options to increase skilled birth attendance in Ethiopia include: community mobilization, the cultural adaptation of birthing services, the use of maternity waiting homes, and the use of conditional cash transfers (CCT). These four options and their potential impacts on skilled birth attendance are described below.

Policy Option 1

Community mobilization
Community mobilization empowers people to organize themselves, recognize opportunities, identify their collective potential, and utilize available resources to realize a shared goal through unified action. Mobilization strategies are diverse, may result in differing intensity levels of engagement and ownership (USAID 2007; Rosato 2008), and require an understanding of the social structure of local contexts (Hounton 2009). It has also been suggested that community mobilization has substantial potential to change behaviours and enable access to healthcare (Lawn 2009), and can potentially increase the number of facility-based births. Different community mobilization strategies have been used in many low-income countries, particularly in Asia, to increase use of maternal and neonatal services (Lee 2009).

Impact of community mobilization:
A systematic review evaluated the impact of community mobilization on institutional (facility-based) deliveries (Lee 2009; Steinmann 2010). The evidence indicated that community mobilization probably increases the proportion of institutional (facility-based) deliveries. The effect of community mobilization depends on the intensity of the mobilization efforts.

Policy Option 2

Cultural adaptation of birthing services
The cultural adaptation of birthing services entails altering the environment of delivery units at health facilities to better suit the personal and cultural needs of mothers. This entails allowing traditional cultural practices as a way to encourage women to give birth at health facilities.

The impacts of cultural adaptation to birthing services:
We were unable to find a systematic review of the impacts of cultural adaptations to birthing services. Only one study from Peru had evaluated an intervention of this kind. The changes consisted of: the use of a rope and a bench for a vertical delivery position, and allowing family members and traditional birth attendants to be with the mother during the delivery process, and the use of a local language at
the health facilities. Facility based deliveries were found to increase from 6% to 83% in nine years (Gabrysch 2009b).

*The cultural adaptation of birthing services may address some of the key reasons why some women, particularly in rural populations, do not go to birth facilities. Whether such changes will increase levels of skilled birth attendance is uncertain.*

**Policy Option 3**

**Building maternity waiting homes**

Maternity waiting homes are residential facilities, located within easy reach of a health facility, where women defined as "high risk" can await their delivery and be transferred to a nearby medical facility shortly before delivery, or earlier should complications arise (WHO 1996).

*The impact of building maternity waiting homes:*

No systematic reviews have been conducted on the effect of the use of maternity waiting homes on the level of skilled birth attendance. A systematic review on the effect of maternity waiting homes for improving maternal and neonatal outcomes in low-resource settings identified no randomized control trials investigating this question (van Lonkhuijzen 2009; Dudley 2011).

*For rural populations with limited access to emergency obstetric care, maternity waiting homes might address the problem of long distances between where people live and birthing facilities. The effects of maternity waiting homes on increasing skilled birth attendance is uncertain.*

**Policy Option 4**

**Conditional cash transfers (CCT)**

Conditional cash transfer programmes give money to poor people in return for fulfilling specific behavioural conditions such as children's school attendance, up-to-date vaccinations or regular visits to a healthcare facility by pregnant women (WHO 2008).

*The impacts of conditional cash transfers:*

We were unable to identify any systematic reviews in which the use of skilled birth attendance was a direct outcome of a CCT intervention. However, we did identify one systematic review of the impact of CCTs on care-seeking behaviour and immunization
coverage (Lagarde 2008) which reported that CCT programmes can be effective in increasing the use of preventive services and can sometimes improve immunization coverage and health status (Pantoja 2008).

*Conditional cash transfer programmes could provide incentives for women to go to birthing facilities. Conditional cash transfer programmes may increase skilled birth attendance.*
**Implementation considerations**

The potential barriers to the four implementation options and strategies to address these barriers are summarized in Tables 1 to 5.

### Table 1. Barriers and implementation strategies for all options

<table>
<thead>
<tr>
<th>Barriers</th>
<th>Descriptions</th>
<th>Implementation strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategies or guidelines</td>
<td>There are no strategies/and or guidelines in place for the implementation of the options for community mobilization</td>
<td>Formative research to understand local culture, beliefs and practices and the design of suitable strategies and manuals (ACCESS 2010).</td>
</tr>
<tr>
<td>Financial resources</td>
<td>There may be insufficient financial resources to implement these options</td>
<td>Pilot study to evaluate the costs and cost-effectiveness of the options before full-scale implementation. Resource mobilization through coordination of governmental and non-governmental organizations. Establishment of a consortium of stakeholders for maternal health to pool resources and use these to achieve the common goal of increasing the level of skilled birth attendance in Ethiopia. Cost sharing with the community (Poovan 1990).</td>
</tr>
<tr>
<td>Poor quality of care</td>
<td>Poor quality of care could discourage mothers from seeking skilled birth attendance (Kruk 2012)</td>
<td>Interventions to improve the quality of care in birthing facilities</td>
</tr>
<tr>
<td>Sustainability</td>
<td>Implementation of options may be halted when a decision maker is replaced</td>
<td>Integrate the options into institutional structures</td>
</tr>
<tr>
<td>Inadequate supervision</td>
<td>All the options are new and are not integrated institutionally. Implementation may therefore require more supervision</td>
<td>Integrate the options into an institutional structure and provide adequate supervision (ACCESS 2010).</td>
</tr>
<tr>
<td>Competing priorities</td>
<td>Options might end up as one-off efforts due to competing priorities</td>
<td>Integrate the options into institutional structures (ACCESS 2010).</td>
</tr>
</tbody>
</table>

### Table 2. Barriers and implementation strategies for Option 1: Community mobilization

<table>
<thead>
<tr>
<th>Barriers</th>
<th>Descriptions</th>
<th>Implementation strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural barriers</td>
<td>Presence of a heterogeneous culture might necessitate culturally sensitive community mobilization strategies</td>
<td>Conduct formative research to understand local cultures, beliefs and practices and design suitable strategies and manuals (ACCESS 2010).</td>
</tr>
<tr>
<td>Sustainability</td>
<td>As activists are volunteers, a lack of accountability may mean that the sustainability of this option could be a challenge</td>
<td>Integrate community mobilization into institutional structures (ACCESS 2010).</td>
</tr>
<tr>
<td>Absence of institutional structures for community mobilization</td>
<td></td>
<td>Integrate community mobilization into institutional structures (ACCESS 2010).</td>
</tr>
</tbody>
</table>
Table 3. Barriers and implementation strategies for Option 2: Cultural adaptation of birthing services

<table>
<thead>
<tr>
<th>Barriers</th>
<th>Descriptions</th>
<th>Implementation strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burnout of health extension workers (CNHDE, 2011)</td>
<td>Health extension workers who could be key players in community mobilization are already overworked</td>
<td>Involves other stakeholders, such as community and religious leaders, volunteers, social institutions, and civil societies (Hounton 2009; ACCESS 2010). Reducing workload of health extension workers by redesigning the health extension program, introducing motivation packages and increasing the number of health extension workers.</td>
</tr>
<tr>
<td>Absence of strategic plan</td>
<td>There are no strategic plans or manuals available for the cultural adaptation of birthing places</td>
<td>Strategic plans with clear goals, policies and management accountability for cultural competence should be put in place (Anderson 2003).</td>
</tr>
<tr>
<td>Cultural beliefs, norms and values</td>
<td>If there are different cultural beliefs, norms and values in a certain area, they should all be accommodated in one health facility</td>
<td>Mapping of cultural beliefs, values and norms of local communities (Hounton 2009) and adaptation of birthing services to various cultural beliefs, values and norms prevalent in a community</td>
</tr>
<tr>
<td>Inappropriate norms</td>
<td>Current standards of healthcare practice may conflict with the option</td>
<td>Establishment of a culturally competent primary healthcare system by developing relevant cultural competence guidelines (Anonymous 2005)</td>
</tr>
<tr>
<td>Motivation to change</td>
<td>People may not be motivated to go to health facilities regardless of the changes made to the health facilities</td>
<td>Dissemination of information that is designed to motivate the community to change their practice; financial or other incentives</td>
</tr>
<tr>
<td>Attitude of care providers</td>
<td>Possible resistance from care providers to allowing cultural adaptations to the health facilities</td>
<td>Establishment of a culturally competent primary healthcare system by developing relevant cultural competence guidelines (Anonymous 2005)</td>
</tr>
<tr>
<td>Lack of motivation of care providers</td>
<td>Health workers may not be motivated to change their practices</td>
<td>Dissemination of information that is designed to motivate health workers to change their practice; provision of incentives, reduction of the burden of changing practices</td>
</tr>
</tbody>
</table>
Table 4. Barriers and implementation strategies for Option 3: Maternity waiting homes

<table>
<thead>
<tr>
<th>Barriers</th>
<th>Descriptions</th>
<th>Implementation strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Culture</td>
<td>Absence of culturally appropriate practices in maternity waiting homes (WHO 1996)</td>
<td>Cultural adaptation of maternity waiting homes (Gabrysch 2009b; Lee 2009)</td>
</tr>
<tr>
<td>Competency of care providers</td>
<td>Absence of the capacity to identify and refer high-risk women (WHO 1996)</td>
<td>Establishment of an effective system of community health services staffed by providers who have been specifically trained in the identification and referral of high-risk pregnancies (WHO 1996).</td>
</tr>
<tr>
<td>Blueprints for maternity waiting homes</td>
<td>Lack of a ‘blueprint’ of what maternity waiting homes should be and what they should provide</td>
<td>Developing national guidelines for maternal waiting homes</td>
</tr>
<tr>
<td>Inadequate internal communication</td>
<td>Lack of proper referral systems might result in high-risk women being missed; maternity waiting homes might be occupied with women not at risk (WHO 1996)</td>
<td>Establishment of an effective system of community health services staffed by providers who have been specifically trained in the identification and referral of high-risk pregnancies (WHO 1996).</td>
</tr>
<tr>
<td>Absence of a guideline</td>
<td>Absence of standardized guidelines for medical care, indications for admission, and documentation</td>
<td>Development of a national guideline for maternal waiting homes</td>
</tr>
</tbody>
</table>

Table 5. Barriers and implementation strategies for Option 4: Conditional cash transfers (CCT)

<table>
<thead>
<tr>
<th>Barriers</th>
<th>Descriptions</th>
<th>Implementation strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiscal sustainability</td>
<td>Fiscal sustainability could be a challenge (Handa 2006)</td>
<td>Carefully designed exit strategies consistent with CCT programme objectives(Handa 2006)</td>
</tr>
<tr>
<td>Motivation to change</td>
<td>Participation of mothers could be low due to socio-cultural barriers</td>
<td>Adjust the design of CCT programmes to the prevailing heterogeneous socio-cultural factors in Ethiopia</td>
</tr>
<tr>
<td>Poor capacities of health facilities</td>
<td>Health facilities might find it difficult to meet the additional demand likely to arise when beneficiary households try to meet the conditions.</td>
<td>Pilot study to assess possible rise in demand and the capacity of health facilities before full-scale implementation</td>
</tr>
<tr>
<td>Implementation capacities</td>
<td>Capacities for managing cash transfer schemes may be weak in low-income countries. Health systems may not be able to meet the additional administrative demands related to conditionality(Schubert 2006)</td>
<td>Prepare CCT implementation guidelines CCT-related organizational change and capacity building in the relevant bodies within the civil service(Schuber 2006)</td>
</tr>
<tr>
<td>Feasibility</td>
<td>CCTs may be difficult to implement</td>
<td>Pilot study to assess the feasibility of CCTs</td>
</tr>
<tr>
<td>Over reporting skilled birth attendance</td>
<td>Abuse of money allotted to pregnant mothers may occur via, for example, the over-reporting of skilled birth attendance</td>
<td>Establish appropriate auditing mechanisms</td>
</tr>
<tr>
<td>Cumbersome bureaucracy</td>
<td>Bureaucracy and paperwork associated with the provision of cash to mothers may discourage them from returning to a health facility again</td>
<td>Minimize the paperwork required</td>
</tr>
</tbody>
</table>
Next steps

The aim of this policy brief is to foster dialogue and judgements that are informed by the best available evidence. The intention is not to advocate specific options or close off discussion. Further actions will flow from the deliberations that the policy brief is intended to inform. These might include, for example:

- Careful consideration of the need for cultural adaptation of birthing services
- Careful consideration of the need for community mobilization
- Careful consideration of the need for building maternity waiting homes
- Careful consideration of conditional cash transfers to mothers giving birth at health facilities
- Monitoring and evaluation of the suggested policy options and implementation strategies
- Consideration of appropriate implementation strategies for each of the four options

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