Summary of Malawi Country experience – implementing PNC home visits: March 26, 2012

1. Background

Maternal and newborn health activities in Malawi are guided by the *Road Map for Accelerating Reduction of Maternal and Newborn Mortality and Morbidity in Malawi* (Road Map), the national framework adopted by the Government of Malawi (GOM) in 2005 and launched officially in March 2007. The *Road Map* lays out details of interventions that cross nine strategic areas including improving the availability and access to quality services, strengthening human resources and empowering communities. Resources to implement *Road Map* activities are drawn from the Government of Malawi Program of Work or Sector Wide Approach (SWAp)—comprising an Essential Health Package (EHP) of interventions and basket of funds made up of government and donor health sector resources. The year before the launch of the *Road Map*, the Government endorsed the *Integrated Management of Childhood Illness for Accelerated Child Survival and Development in Malawi (ACSD/IMCI)* as the primary approach for reducing child morbidity and mortality. Implementation of all maternal, newborn and child health activities is done in the context of a decentralized health system, in which districts develop annual implementation plans, budget these plans and submit plans for funding from the SWAp.

2. Policy/strategy adoption: improving early PNC home visits, 2004-2011

2.1 Process of adoption

Early PNC home visits were included in the National *Road Map* for maternal and newborn health, formally adopted in 2007. Implementation has been coordinated by the Reproductive Health Unit (RHU) of the MOH. A National Task Force on community-based maternal and newborn care was established in the MOH/RHU; monthly meetings were funded by the SC/MNHP project and UNICEF. This body was later incorporated into the National Safe Motherhood Task Force, a sub-committee of the Reproductive Health Working Group. The task force included MOH staff and development partners. It has focused on improving the technical quality of newborn and maternal health programming through the national system and on increasing resources allocated for implementation of maternal and newborn health activities– in order to expand these activities to all 28 districts in the country. Activities include the development or revision of national policies, guidelines and training materials, better coordination of partners, advocacy and documentation and dissemination of lessons learned. Key policy and guidelines inputs are summarized in Table 1.

The National task force was responsible for the development, adoption and implementation of the community-based maternal and newborn care package (CBMNC) as the primary approach for community-based maternal and newborn care. This approach was endorsed by the MOH, and used by all partners. The task force planned and coordinated early implementation. Collaboration between partners improved the technical inputs into development of guidelines, and also resulted in more resources being made available for rolling out the CBMNC package in several districts in the country.

Concurrently, the MOH and the task force developed a national *Integrated Maternal and Newborn Care (IMNC) Training Manual* for facility-based health workers. This integrated manual incorporates updated technical guidelines on essential newborn care, basic emergency obstetric and newborn care, kangaroo mother care (KMC) and post-natal care, which had previously been taught separately. Implementation of this package for facility-based health workers began concurrently with the CBMNC package.

The task force also oversaw the development of an approach to community-based management of newborn sepsis. Newborn sepsis management has been integrated the community case-management (CCM) approach. The case-management protocol allowing HSAs to classify sick newborns and treat with the first dose of oral amoxicillin and then refer has been adopted nationally. Community case-management guidelines for treatment of the young infant 0-2 months are now ready to be rolled out.

Table 1: Key inputs: policies, guidelines and coordination, September 2011

Activity area	Inputs	Year completed
Policies and guidelines	Management of sick newborn incorporated into IMCI guidelines	2007
	Community-IMCI adopted as national strategy	2007
	IMNC training materials developed and endorsed as national approach by MOH	2007
	CBMNC package developed and endorsed as national approach by the MOH	2008
	National KMC guidelines revised to include ambulatory and community care	2009
	Launch of WHO/UNICEF joint statement on post natal care visits	2009
	Addition of newborn sepsis management component to community case management guidelines	2010
Coordination	National task-force on community-based maternal and newborn care established in MOH/RHU and meeting monthly	2007
	National CBMNC task force integrated with national safe motherhood task force sub-committee	2009

2.2 Content of policy

PNC home visits are implemented by Health Surveillance Assistants (HSAs). HSAs are trained to identify pregnant women, make three visits during pregnancy, one visit within 24 hours of childbirth, and two PNC visits at days 3 and 8. At these visits they give counseling and refer the woman and child for ANC, facility delivery or emergency care if needed. Mothers and newborns are screened at the same time. The training package includes the 7 core competencies recommended by WHO and others – in order to deliver key maternal and newborn interventions [1].

2.3 Supporting policies and strategies

A number system and policy inputs were made by the MOH during the period 2004-2011. All contributed to increased access and availability of maternal and newborn services, including postnatal care. Key inputs included:

- Service agreements with Christian Health Association of Malawi (CHAM) facilities to provide services for free to mothers and children (CHAM provides around 39% of facility-based services in Malawi).

- Development of the Sector Wide Approach (SWAp) mechanism to support the implementation of an Essential Health Package of key interventions – aimed at addressing the 11 most important causes of mortality in Malawi. The SWAp 2004-2010 was a comprehensive framework to unify donor and government health policies, strategies, implementation and financing. Maternal and newborns health activities, including PNC were included in the EHP.

- The MoH six-year Emergency Human Resource Programme (EHRP). This aimed to increase the number of professional health workers through additional training, incentives and salary top ups and strengthen the capacity of all health training institutions. As a result of this programme, between 2004 and 2009, there was an increase of professional health workers (including doctors and nurses) from 5,500 to 8,400 and of HSAs from 4,900 to 10,500[2]. Both of these key systems inputs are likely to have affected access, availability and demand for maternal and newborn services.

- Development of the 'The Road Map for Accelerating Reduction of Maternal and Newborn Mortality and Morbidity in Malawi' (MoH, 2005). This outlined the main strategies required for reducing mortality – including essential newborn care KMC and improved community demand. It was used to focus planning and increase resource allocation for MNH from the SWAp.

[1] Core PNC competencies: Promotion of NB care (early/exclusive BF, warmth, hygiene); Promotion of optimal care for mother (nutrition & family planning); Promotion of care-seeking for mother & newborn; Identification of danger signs in mother + referral; Identification of danger signs in newborn + referral; Support for breastfeeding; Care of low birth weight infant (feeding, skin-to-skin contact)

[22] Dfid, Management Sciences for Health. 2010. *Evaluation of Malawi's Emergency Human Resource Progromme*. Cambridge, MA: Management Sciences for Helath.

- Redefinition of the roles of Traditional Birth Attendants (TBA). A 2006 assessment of TBA roles in Malawi by the MoH and WHO recommended that TBAs no longer conduct home deliveries – and promote facility-based deliveries[3]. In 2008 leaders in many communities introduced by-law which fined households and TBAs when home deliveries were conducted, unless they could prove that the case was an emergency and the woman was unable to reach facility care.

Lessons learned: policy and strategy adoption

- A national task force including both MOH and development partners was essential for developing technical standards and planning implementation.

- Implementation was facilitated by complementary policy and planning inputs, including training of additional community health workers, a change in the role of TBAs, improved availability of financial resources and increased availability of free services for mothers and newborns through CHAM.

- An approach to improve facility-based MN care and KMC was implemented in tandem with implementation of the CBMNC package; materials were updated and integrated to improve quality of training. This approach recognized that improving community visits will result in more facility referrals.

- Involving development partners from the outset resulted in more resources being made available for implementation – and helped begin implementation in several districts.

3. Selection and training of community health volunteers

3.1 Selection criteria for community health workers

Health Surveillance Assistants (HSAs) receive 12 weeks of basic training and are government salaried. Their primary role is to live in communities and to provide health education and counseling on key topics; in some areas they provide community-case management services. HSAs are recruited and trained within each district by the District Health Teams, and their 12-week basic training is done at health centers. HSAs are required to have at least 12 years of primary and secondary education. HSAs can be women or men. They are expected to live in the communities that they serve, and to conduct household visits and record visits using a community register. Most HSAs are required to spend 2-3 days a week in health facilities assisting with immunization and curative clinics, due to staff shortages.

Monthly HSA salaries are approximately 12,000 Kwacha per month, or $80 USD; however, HSAs receive about 5,000 Kwacha per day for attending trainings. The current salary includes the 52% salary top-up that HSAs began receiving in 2007 as part of the EHRP, though the actual salary increase after taxes is only 20%. There is no allowance provided for travelling while doing

[3] MoH [Malawi], WHO Malawi. 2006. *Assessment of Future Roles of Traditional Birth Attendants (TBAs) in Maternal and Neonatal Health in Malawi*. Lilongwe, Malawi: Ministry of Health Malawi.

outreach activities. Their duties are also hampered due to lack of transportation. Many feel that the 12-week training is not adequate for the tasks they are expected to perform.

Lessons learned: characteristics of HSAs

- Many HSAs do not live in their communities – this limits their ability to provide home visits, particularly early PNC home visits. Reasons for not living in communities include lack of available housing, and marriage to a spouse who needs to live outside of the district. A regular presence in the community is central to the role of the HSA.

- Multiple vertical programs are using HSAs to deliver activities in the ground, including CCM, malaria, tuberculosis and family planning. Multiple responsibilities increase the workload for HSAs and potentially compromise the quality of their activities. Multiple trainings are inefficient and take HSAs away from their communities.

3.2 Training of CHWs

The CBMNC training package includes two components – home visit guidelines and community mobilization guidelines.

CBMNC home visit guidelines: Training in the CBMNC home visit package takes 10 days. HSAs are trained to identify pregnant women, make three visits during pregnancy, one visit within 24 hours of childbirth, and two PNC visits at days 3 and 8. At these visits they give counseling and refer the woman and child for routine care or emergency care if needed. HSAs receive basic supplies, including: a weighing scale, a thermometer, a community register, counseling cards for home visits, picture cards for community mobilization sessions, guidelines for facilitating the community action cycle, and a bag for carrying supplies. In some areas, HSAs are given bicycles for making home visits. HSAs complete community registers; for each pregnant woman they record home visits, deliveries, PNC contacts and any maternal and newborn deaths.

CBMNC community mobilization guidelines: Community mobilization guidelines were developed by the MOH in collaboration with the USAID ACCESS project, SC/SNL Maternal and Newborn Health Project (MNHP), UNFPA, UNICEF and other stakeholders. The mobilization training is 7 days in duration and uses the "community action cycle" approach developed by SC. The training is designed to provide HSAs and their supervisors with the skills necessary to facilitate community interaction and dialogue for improved maternal and newborn care. HSAs work with Village Health Committees and influential leaders in villages to mobilize "core groups" of women and men who are willing to work on newborn health. These groups identify barriers to recommended practices and help develop and implement local activities to make improvements.

Both training packages used a number of methods, including role plays and small group sessions; field practice in communities was included in both. Pre- and post-training assessments were conducted to track changes in knowledge. Participants were required to achieve a score of at least 50% in order to pass the course – those who did not were given additional support from

supervisors. Training used a cascade training approach, with a core group of national trainers training district trainers. District trainers were responsible for training supervisors and HSAs in their own districts.

The core content of the CBMNC package is currently included in the HSA pre-service training curriculum – although there are gaps in some areas that need to be strengthened, in particular the identification and management of low birth weight babies.

Lessons learned: training of CHWs

- Training was well accepted by HSAs who reported that it was clear and prepared them for work in communities.

- Pre- and post-training assessments were useful for determining changes in knowledge – and identifying participants who would need more support in the field.

- Training packages are endorsed by the MOH and now used nationally. Content includes updated guidelines on ANC, delivery care, ENC and KMC.

- The TOT approach – in which district trainers are trained and are then available to conduct local training – has worked well.

- DHMTs and DHOs strongly support the training packages and want training to continue.

- The CBMNC package is not yet incorporated into pre-service training for facility-based health workers. Currently only HSAs are trained in this package. Many senior staff report that the content should be incorporated into pre-service training for facility-based health workers. Better links between facility and community-based workers are increasingly recognized as important to motivate and support HSAs.

4. Implementation

4.1 Training coverage

The CBMNC package has been implemented most intensively in three MOH early implementation districts - Chitipa, Dowa, and Thyolo. Roll-out of the community-based package was led by the Ministry of Health (MOH) Reproductive Health Unit (RHU) and partially funded by UNICEF with technical, material, and funding inputs from the SC/MNHP project. In these districts, 81% of HSAs had been trained by September 2011. Other collaborating partners were responsible for further implementing the CBMNC package in other districts. As a result of this collaboration, CBMNC training was rolled-out nationally. Nationally, 17/28 districts have begun training in the CBMNC package and an estimated 17% of HSAs nationally have been trained.

Training coverage is summarized in Table 2. Districts that have begun training by district, implementing partner and year of implementation are shown in Figure 1.

Figure 1: Map of CBMNC implementation by district and implementing partner, Sept 2011

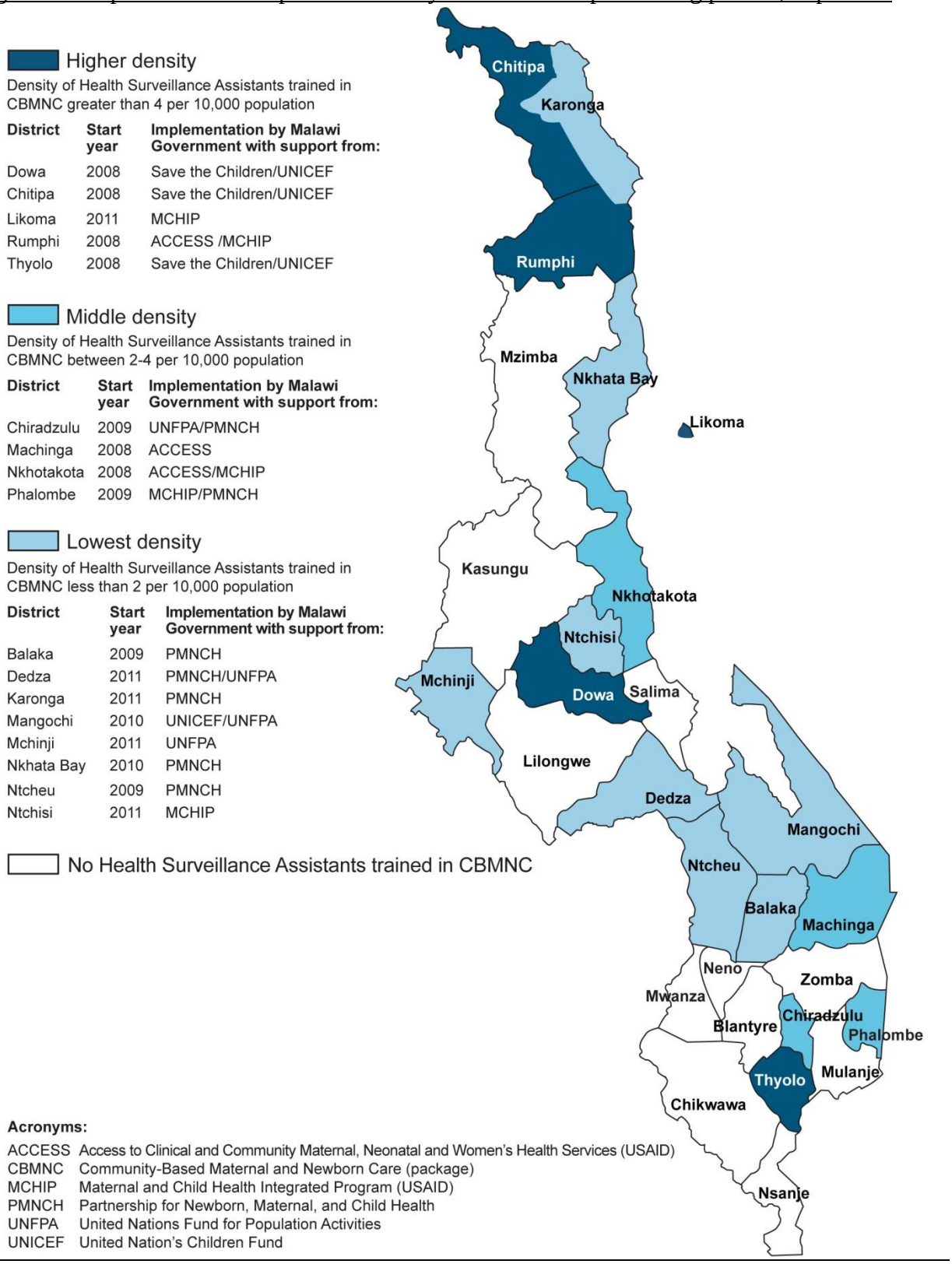


Table 2: CBMNC package training coverage, September 2011

Activity area	Indicator	National	3 districts
	Proportion of districts that have begun training in CBMNC	17/28 (61%)	3/3 (100%)
	Proportion of HSAs trained in CBMNC*	1781/10322 (17%)	917/1134 (81%)

*Estimates of the total number of HSAs from: Evaluation of the Malawi Emergency Human Resources Program, MSH, 2010

4.2 Trends in coverage indicators: 2004 - 2010

Population-based data are available from two sources:

National data: Progress was evaluated using large-sample population-based surveys. Demographic and Health Surveys (DHS) were conducted in 2004 and 2010, and a MICS in 2008.

Three early implementation districts (Chitipa, Dowa, and Thyolo). In these districts, 30-cluster household surveys were used to evaluate whether targets for intervention coverage were met between 2008 and 2011. Standard 30-cluster survey methods were used. Background characteristics of the sample population at baseline and end-line were similar.

No data are yet available from the community-based surveillance system (using HSA registers) – which was not functional in September 2011. Coverage data are summarized in Annex 1.

Antenatal care

Over 90% of women report making at least one ANC visit and most ANC is provided by a skilled provider. In the 3 early implementation districts in 2011 95% of women received at least one ANC contact from a skilled provider – a small increase over baseline. However, nationally and in the three focus districts, less than half of women report making 4 or more ANC visits – this has not changed over time. The national standard is for 4 ANC visits with the first visit in the first trimester - in order to identify and manage problems early. A high proportion of women report making their first visit ANC after the first trimester (86% nationally) - this has not changed over time.

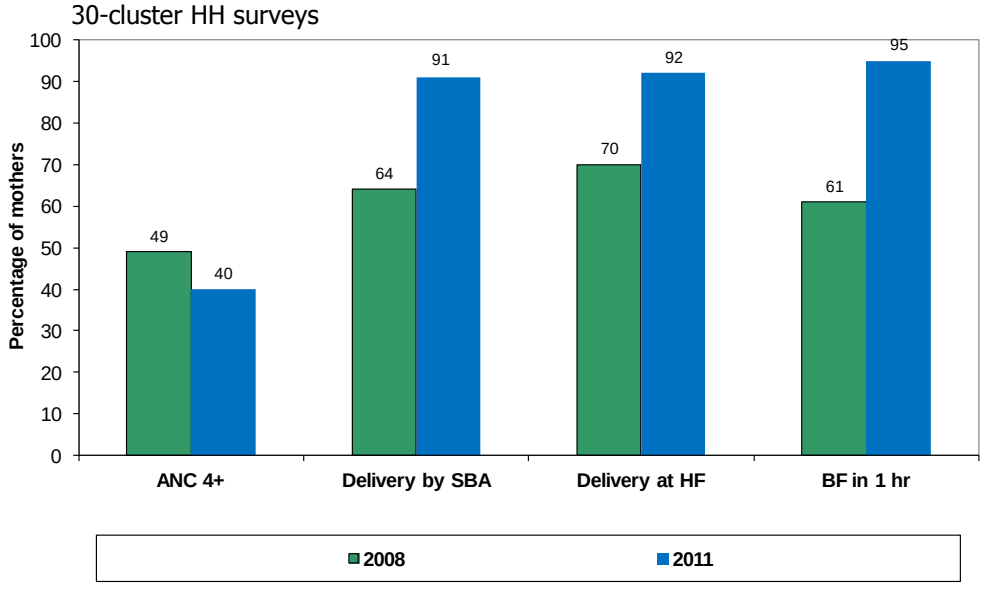
A high proportion of newborns are protected against newborn tetanus at birth nationally (89%) and a high proportion of women receive iron during pregnancy – these rates have not changed significantly over time. National survey data show that a number of key elements of the FANC package are provided to pregnant women, including weighing, checking blood pressure, taking blood for anemia and syphilis screening and key counseling tasks. Reported use of at least 2 doses of SP during pregnancy to prevent malaria has declined nationally over time and use of insecticide bed-nets by pregnant women has shown steady improvements. In the three early implementation districts, the proportion of women counseled on danger signs during pregnancy has shown improvement between 2008 and 2011.

Delivery and immediate post-delivery period

A dramatic increase in the proportion of women delivering at health facilities, and with a skilled provider, is noted both nationally and in the three early implementation districts. A national policy decision in 2008 prohibiting TBAs from conducting deliveries is likely to have contributed to this increase. In many areas maternity waiting homes have also helped improve access to facilities. Women are allowed to stay free of charge in waiting homes when near term, which allows access to the facility at the onset of labor.

Early breastfeeding rates (within 1 hour of birth) have shown dramatic improvements nationally and in the three early implementation districts. The early implementation districts also show improvements in post-delivery practices, including: delayed bathing, drying and wrapping, and proportion of babies weighed at birth. Health worker knowledge of newborn danger signs and care-seeking and management of LBW babies have shown improvements. Detailed data on changes in clinical practices such as cord care, AMTSL and newborn resuscitation are not available. Fifty-percent of facilities in the 3 focus districts report having a functional bag and mask available for newborn resuscitation. Increasing facility deliveries has put pressure on facilities and often resulted in a lack of beds, equipment and supplies. High numbers of women coming to facilities makes it more difficult to apply quality standards.

Figure 2: Coverage of Maternal and Newborn Interventions, 3 Districts, Malawi, 2008 and 2011



CBMNC package early implementation districts

Newborn period

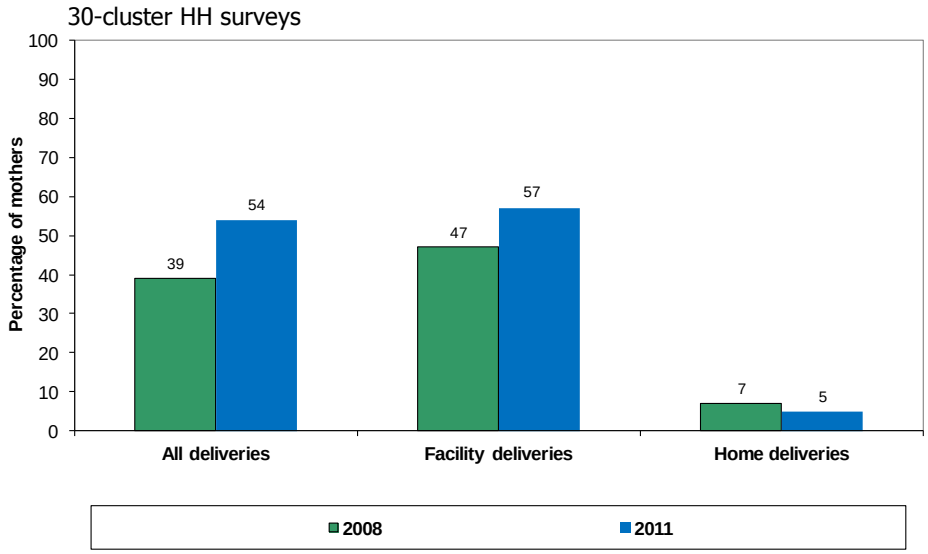
Early maternal PNC contacts - within 2 days of birth - has shown an upward trend both nationally and in 3 early implementation districts. In the 3 early implementation districts, the proportion of mothers receiving early PNC contacts improved between 2008 and 2011 for facility deliveries but not for home deliveries. Most of this increase is attributed to improved PNC at facilities before discharge home - in 2011, 57% of women delivering at a facility received a PNC check in 2011 versus 5% of women delivering at home. Implementation of the CBMNC package is not associated with any improvements in home-based maternal PNC care. It may have contributed to increased referral of women for facility deliveries.

Early PNC contacts for the newborn. In the 3 early implementation districts, early PNC contacts for the newborn improved between 2008 and 2011 for both facility and home deliveries. Never-the-less the proportion of newborns receiving PNC contacts remains relatively low (32% for facility deliveries and 20% for home deliveries in 2011). The proportion of newborns born at facilities receiving early PNC is lower than for mothers – suggesting that newborns are sometimes not checked when mothers receive a check in facilities. The proportion of newborns born at home receiving early PNC is higher than for mothers – suggesting that at home mothers are not always checked when the newborn receives a check.

In 2011, 92% of women reported delivering at a health facility in the 3 early implementation districts. Missed opportunities to provide early PNC for both mothers and newborns are therefore common. Approximately 35% of women delivering at health facilities have a missed opportunity for early PNC. Approximately 60% of newborns delivered at a health facility have a missed opportunity for early PNC. Household survey data from 3 districts show that over 55% of women report spending at least 24 hours at the facility after delivery – this did not change between surveys. No observational data are available on the quality of PNC or of KMC for low birth weight babies.

An upward trend for in rates of exclusive breastfeeding for newborns and infants 0-5 months is noted both nationally and in the 3 early implementation districts. In the 3 early implementation districts, improvements are noted in maternal knowledge of danger signs for seeking care with their newborns.

Figure 3: Maternal PNC contacts within 48 hours, 3 Districts, Malawi, 2008 and 2011



CBMNC package early implementation districts

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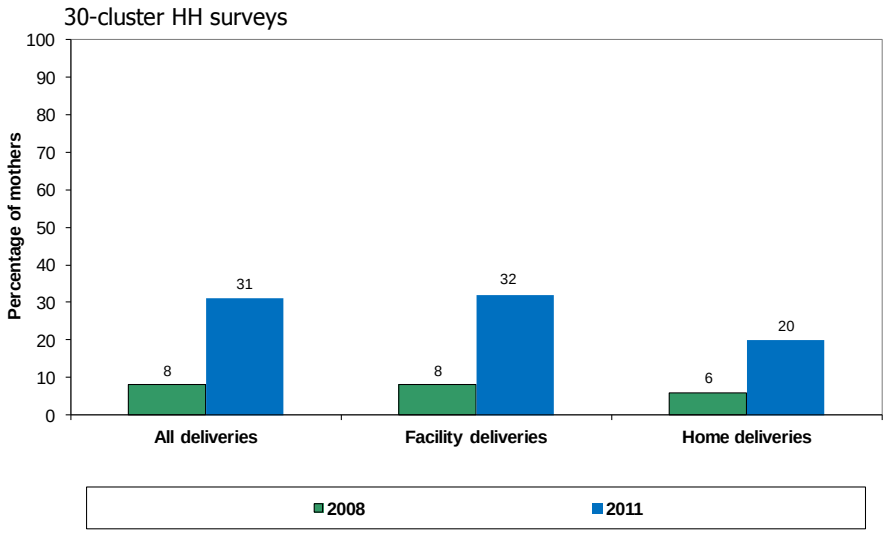
Figure 4: Newborn PNC contacts within 48 hours, 3 Districts, Malawi, 2008 and 2011



CBMNC package early implementation districts

4.3 Programme activity areas

4.3.1 **Community-based activities**

Household survey data on HSA activities in communities and on community mobilization activities – in the three early implementation districts - are shown in Tables 3 and 4. The principal findings from survey data and field interviews are:

- HSAs are well accepted and seen as effective communicators by community members. Many are making home visits and providing counseling – they are able to use community registers and job aids.

- Community mobilization skills training is reported to give useful skills for working in communities. The core group approach is liked and well accepted where it has been introduced – 34% of mothers report that a core group is present in their community. However, of those with a core group only 28% reported contact with the group. In some communities the core group is responsible for identifying pregnant women and notifying the HSA, so the HSA do not have to do home visits. In these areas HSAs report that the core group is essential to making community activities work. In communities where they have been established, core group members sometimes request incentives such as training and t-shirts.

- The majority of HSAs are completing summary reports each month and submitting them to health centers. Reports are often not being compiled and sent up the system, however, and the community surveillance system is not yet operational (see the section on monitoring and evaluation).

- A high proportion of HSAs report receiving supervisory visits in the previous 6 months (68%).

- In the three early implementation districts, HH survey data show that HSAs are often not making home visits, as follows:

    - 36% of women report receiving any home visit from an HSA during pregnancy – the CBMNC package recommends that HSAs visit pregnant women at home once in each trimester (for a minimum of 3 home visits).

    - 31% of mothers report that the HSA was notified of the birth. Of those cases where the HSA was informed of the birth, 54% (151/280) received at least one home visit from an HSA within the first month after birth compared with only 7% of those where the HSA was not informed (46/620). These data suggest that informing HSAs is important for ensuring that home visits take place.

    - 22% of mothers report that they received a PNC visit from an HSA within the first month after pregnancy.

A number of informants felt that it is plausible that HSAs influence knowledge and practices through community mobilization and health education sessions – even when home visits are not being made.

Table 3: Community mobilization activities reported by mothers, Household Survey, Chitipa, Dowa and Thyolo Disticts, June 2011

Activity area	Indicator	3 districts
	Proportion of mothers who received at least 1 visit from an HSA during pregnancy	36%
	Proportion of mothers who report that an HSA was informed about their most recent birth	31%
	Proportion of mothers who received at least one visit from an HSA in the first month after delivery	22%
	Proportion of mothers of young children reporting that there is a core group in their community	34%
	Proportion of mothers who report a core group who were visited by a member of core group at least once during their pregnancy	28%

Table 4: Activities of HSAs in communities, Health Facility Assessment, Chitipa, Dowa and Thyolo Districts, June 2011.

Activity area	Indicator	3 districts
Systems – community	Proportion of HSAs that reside in their catchment area	47%
	Proportion of HSAs with all equipment and supplies	26%
	Proportion of HSAs that report at least one supervisory visit in the last 6 months	68%
	Proportion of HSAs that report spending 3 or fewer days in the community in the last week	54%
	Proportion of HSAs that report spending 3 or more days at the health facility in the last week	27%
	Proportion of HSA with knowledge of 2 pregnancy danger signs	66% - during pregnancy 51% - after delivery
	Proportion of HSAs that have submitted a report on MN activities in the previous 3 months	86%

Lessons learned: community activities

- HSAs often do not make home visits to women before and after delivery. Fewer home visits are partly the result of HSAs living out of communities. In addition, there is pressure on HSAs to work at health facilities or health posts – most spend 1 -2 days a week at government health facilities helping to provide preventive services. In areas implementing CCM, HSAs are required to staff a health post/village clinic. For a number of reasons, therefore, it is increasingly difficult for HSAs to conduct door-to-door household visits. In some communities visited, core groups have been used to identify pregnant women and notify HSAs. In one community visited the HSA asked women to call her on her cell phone when they delivered, in order to ensure that she was notified.

- Notification of the delivery is important to getting HSAs to conduct a PNC visit – never-the-less, few of these visits are being made in the first 48 hours after birth.

- Community-mobilization and health education activities may be contributing to increased intervention coverage, even when home visits and counseling are not being conducted. However, in the early implementation districts, coverage with core groups remains relatively low.

4.3.2 **Quality of care**

There are limited observational data are available on the quality of the technical components of delivery care, ENC or PNC. Observational data are needed to identify gaps and develop approaches to addressing these gaps. In the 3 districts supported by SC/MNHP, activities to support quality were shared with UNICEF and the district MOH. The SC/MNHP trained health workers, supported quarterly supervisory visits and provided equipment and supplies for KMC. Equipment, supplies and medicines for other facility services were supplied by UNICEF. The district MOH was responsible for routine supervision and all other costs of routine activities. In other districts, interventions to improve the quality of maternal and newborn care varied considerably and were generally shared between the district MOH and development partners – in some areas development partners supported intensive quality improvement activities at health facilities, and some routine costs, including the costs of routine supervision. In areas implementing CCM, the costs of medicines and supplies, as well as costs of routine supervisory visits to HSAs, are supported by development partners. Main issues identified include:

- Quality of supervision. . HSAs are supervised by both health center and district staff; health center supervisors include senior HSAs, medical assistants and nurses; district supervisors are Environmental Health Officers. Supervision is scheduled quarterly. In the 3 focus districts, facility survey data show that approximately 68% of HSAs report at least one supervisory visit in the previous 6 months. Some supervisors do not regularly have resources for field supervision visits – and there is limited coordination between different technical areas. HSAs report that supervisors often do not use a checklist, give feedback or solve problems. Some supervisors complained of lack of supervisory skills. Many HSAs visited in the field report that they need more supervision. HSAs report that the CCM

program provides better supervision – in these areas the program pays facility and district costs of supervision.

- HSAs receive basic supplies, including: a weighing scale, a thermometer, a community register, counseling cards for home visits, picture cards for community mobilization sessions, guidelines for facilitating the community action cycle, and a bag for carrying supplies. In some areas, HSAs are given bicycles for making home visits. HSAs often do not have all basic equipment. A functional bicycle is most often not available – spare parts are often difficult to procure. Transportation to villages remains a problem for many HSAs. Equipment has been provided by UNICEF - funds are not yet available from the routine SWAp budget.

- Care-seeking remains a problem in all areas for several reasons, including: lack of vehicles, lack of money to pay for fuel or transportation, distance and concerns about the quality of care at facilities. Local ambulances work well in some areas, but are less available for remote areas, and there are not enough of them to meet needs. In some cases phones or airtime are not available for calling ambulances.

- There are gaps in the quality of Basic and Comprehensive EmONC in most referral hospitals, according to the facility assessment conducted in 2010[4].

- Shortages of nurse midwives remains an important problem nationally. Many facilities are understaffed – this is exacerbated by increase in facility deliveries. The Clinton Health Access Initiative with the MOH has analyzed and costed staff needs – this report has been submitted to the Human Resources for Health Technical Working Group of the SWAp - although there is no current strategy for addressing gaps. Retention of midwives, particularly in rural areas, is also a problem. A number of key informants wanted more attention given to retaining midwives at their posts - solutions mentioned include encouraging district assemblies to support nurse midwives in their areas by providing accommodation, land and assistance with farming.

<u>Lessons learned: quality of care</u>

- Improving the both the frequency and quality of supervision remains an important problem. Designated supervisors are generally present at the district and health center level but may not always be able to reach HSAs. Checklists are not always used due to time constraints. Better coordination between different technical areas providing supervisory visits may help improve the ability of supervisors to reach HSAs in the field.

- Approaches to improving referral of sick mothers and newborns are needed – possibly by better linking HSAs with families by use of cell-phones.

[4] Republic of Malawi MOH. Malawi 2010 EmONC Needs Assessment. Draft Report. November 2010. MOH, UNICEF, UNFPA, WHO, AMDD.

- Quality of facility-based maternal and newborn care remains an important challenge. High facility delivery rates present an important opportunity to provide high quality delivery, ENC and postnatal care. Available data suggest quality needs improvement in all areas. Opportunities to provide PNC for mothers and newborns are often missed. System issues that will need to be addressed include: quality of training, supervision, availability of essential medicines and supplies and approaches to training. Shortages of midwives remain an important barrier to delivering maternal and newborn services in health facilities. Costed plans for addressing shortages are available, but have not yet been implemented. Alternative approaches to improving retention of nurse midwives in districts are needed.

4.3.3 **District planning and management**

All CBMNC activities have been implemented through district MOH systems, in close collaboration with DHMTs and DOs. Districts have coordinated training activities, quarterly supervision visits, and distribution of equipment and supplies. The MOH has advocated for the inclusion of maternal and newborn activities into annual implementation plans. By encouraging the inclusion of key activities into annual plans, the MOH aims to have the costs of these activities funded by SWAp funds – in the long term, it is hoped that this will result in sustainable activities.

Achievements include:

- Districts are engaged with MNH activities and have supported roll-out of the CBMNC package. There is increased district awareness of the importance of newborn health. Districts have generally included MNH activities in annual plans for SWAp funding.

- The three early implementation districts have allocated staff to newborn and maternal health. EHOs have assumed responsibility for supervising HSAs implementing the CBMNC package, and overseeing the community-based surveillance system.

- The SC/SNL MNHP has supported joint supervisory visits to health centers and HSAs quarterly in the 3 early implementation districts. Districts feel that their capacity in this area has increased.

<u>Lessons learned – district planning and management</u>

- SWAp funds are often inadequate to complete annual implementation plans. Funds for newborn health are allocated to districts under a reproductive health budget line, but there is no earmarking of funds. If newborn activities are not prioritized by district staff then funds may not be allocated to this area. A new financial management system is currently being rolled out, which prevents districts from moving funds between budget lines – this means that all reproductive health funds must be used for reproductive health activities, and not transferred out for another purpose. Better allocation of available resources is required in order to sustain newborn health activities.

- District staff often have no formal training in planning and management. Essential MNH activities are sometimes not prioritized, especially when SWAp funds are limited. Managers report that they are more likely to drop activities if they think that development partners will have funds to cover costs directly. SWAp funds are often released late making it difficult to implement activities effectively.
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- Funds for supervision of HSAs are often not available. EHOs, who are responsible for supervising HSAs, often do not have resources available to make field visits. In many cases they rely on quarterly SC/MNHP-funded supervisory visits to reach field sites.

4.3.4 Monitoring and evaluation

A community-based maternal and newborn health reporting system using HSA registers has been implemented in the 3 early implementation districts. HSAs use household registers to complete recording forms monthly and submit them to health centers. Health center staff complete summary forms and submit them to the district. The district enters forms and sends reports to the national level. Reviews of the system in 2009 found that forms were too complicated for health staff to complete routinely. Forms were revised and shortened. HSAs are currently being trained in use of the revised forms. A data-base for the new forms is not yet available, nor are revised community registers. A CBMNC Monitoring and Evaluation Coordinator, funded by the MNHP, has recently been placed in the RHU. This position has a number of responsibilities, including rolling out the new HSA recording forms, supervising staff responsible for data, assisting district staff to enter and use data. The coordinator will be responsible for summarizing data as indicators and sharing findings with RHU staff and stakeholders. This support position is funded for 18 months – after that the RHU has secured CDC funds to continue support of this position for a further 2 years.

Achievements include:

- In the early implementation districts, HSAs have been able to complete community registers and recording forms. Community registers have acted as "job-aids" which HSAs find useful for tracking pregnant women.

- The MNHP and RHU have contributed to revisions of the HMIS – currently in development. Proposed modifications to the HMIS include: addition of early PNC indicators to routine facility reporting forms; and addition of indicators of home practices – collected from HSA community registers. The revised system proposes to use web-based data entry at the district level. Since the HMIS is still in development, it is not yet clear which indicators will be included for routine collection.

- District and national staff generally feel that routine community-level surveillance data will be useful for tracking progress and planning in the long term.

Lessons learned: monitoring and evalutation

- Currently the community-based information system is a parallel system, running alongside the routine HMIS. Overburdened health facility staff often do not have time to complete summary forms, particularly at the district level. The revised national HMIS system will include new community-level indicators, and will be a web-based data entry system, but this system will take time to develop; many districts still do not have functional computers or internet connections. In the interim, the new maternal and newborn health Monitoring and Evaluation Coordinator, placed in the RHU, is responsible for helping districts enter data into an interim data base – and to use these data for tracking progress.

- The community-based surveillance system is not functional. Implementation of the revised system has slowed roll-out. Currently HSAs are still being re-trained, revised community registers have not yet been sent to the field, and there is no data-entry program for use by districts. HSAs often lack new recording forms. No summarized data are available from the community-based reporting system.

- Staff at community and facility levels are generally not using the data they collect for local planning or decision-making.

- Sustainability. There remain concerns about the sustainability of the community-based surveillance system. It adds an extra work burden on already over-burdened staff. It is still reliant on outside project funding – and will require this support for some time in order to become functional. Without oversight by MNHP staff, it is unlikely that local staff will continue completing and submitting forms. Links with the CCM community surveillance system should be considered in order to better integrate supervision and reporting of HSAs.

4.3.5 **Sustainability**

Long term sustainability of the CMNH approach is promoted by:

- Ownership of the project by the MOH/RHU. Key policies, guidelines and strategies have been jointly developed, endorsed and adopted by the national program. These are consistent with the national *Road Map* and *ACSD/IMCI* strategies.

- Implementation conducted using routine staff and systems. District teams have been responsible for implementation. HSAs are salaried government employees. In the 3 early implementation districts, funds for routine activities such as staff costs, routine supervision or referral care have not been allocated.

- Establishment of mechanisms for better coordination between the MOH, donors and other local and international partners. As a result activities have been planned more effectively, and donor resources have been made available. Collaboration between partners has been central to developing new materials and methods and to increasing resources for newborn health, particularly at the community level. Coordination and between partners is essential in the longer term for ensuring that maternal and newborn activities continue.

Long term sustainability of the CMNH approach may be made less likely by:

- SWAp funds are currently inadequate to cover all current routine district implementation costs. It is therefore unlikely that SWAp allocations will cover the additional costs required to further expand and support the CBMNC package. In the 3 early implementation districts, the MNHP and UNICEF have provided resources for early implementation of the CBMNC package - including training, medicines and equipment, support for the community-based surveillance system, and periodic supervisory visits.

- The capacity of HSAs remains limited. In the 3 early implementation districts they were not able to make home visits in the early postnatal period. It is recognized that HSAs – central to the delivery of the CBMNC package – are under pressure due to multiple competing responsibilities. This is not sustainable in the long term. Alternative approaches to supporting and sustaining HSAs in communities are needed. Expansion of community mobilization approaches appear to be important to improving demand for PNC.

Indicator Table: PNC home visit review - Malawi

		NATIONAL LEVEL				THREE FOCUS DISTRICTS Chitipa, Dowa, and Thyolo		
Objective/ Result	**Indicator**	**2004 DHS**	**2006 MICS**	**2010 DHS**	**Target**	**HHS 2008**	**HHS 2011**	**EOP target**
IR1: Increased availability of and access to key MNC services	Proportion of mothers who received at least 4 ANC visits	57%	-	46%	80%	49%	40%	63%
	Proportion of mothers who received TT2+ during pregnancy	66%	71%	69%	80%	56%	57%	73%
	Proportion of newborns protected against NNT at birth	-	89%	89%	95%	-	-	-
	Proportion of deliveries by skilled birth attendants	56%	54%	71%	60%	64%	91%	79%
	Proportion of deliveries at a health facility	57%	54%	73%	60%	70%	92%	71%
	Proportion of rural pregnancies having a c-section	3%	-	4%	5-15%	-	-	-
	Proportion of mothers who had a care contact in the first 2 days after delivery	21% - home births	18%	43%	30%	47%(FB) 7% (HB) 39%(All)	57%(FB) 5% (HB) 54%(All)	73% (HB)
	Proportion of newborns who had a care contact within 2 days after delivery	-	3% (home births)	-	30%	8% (FB) 6% (HB) 8% (All)	32% (FB) 20% (HB) 31%(All)	73% (HB)

		NATIONAL LEVEL				THREE FOCUS DISTRICTS Chitipa, Dowa, and Thyolo		
Objective/ Result	**Indicator**	**2004 DHS**	**2006 MICS**	**2010 DHS**	**Target**	**HHS 2008**	**HHS 2011**	**EOP target**
IR 2: Improved quality of key maternal and newborn care services	Proportion of mothers women who received iron tablets or syrup during pregnancy	79%	81%	91%	86%	88%	94%	90%
	# of pregnant women who took 2 doses of Sp as IPT during pregnancy	81% (IPT at ANC)	47%	55%	60%	-	-	
	Proportion of babies who had the cord cut with a clean instrument	-	-	-	-	-	91%	94%
	Proportion of babies who were dried, wrapped immediately after birth	-	-	-	-	73% (D) 86% (W)	69% (D) 92%(W)	83% 83%
	Proportion of children age 0-23 months whose first bath was delayed at least 24 hours after birth	-	-	-	-	60%	81%	83%
	Proportion of mothers who initiated BF within 1 hour of birth	70%	-	95%	65%	61% (no PLF)	95%	98%
	Proportion of babies weighed at birth	-	48%	-	100%	70%	93%	-

		NATIONAL LEVEL				THREE FOCUS DISTRICTS Chitipa, Dowa, and Thyolo		
Objective/ Result	**Indicator**	**2004 DHS**	**2006 MICS**	**2010 DHS**	**Target**	**HHS 2008**	**HHS 2011**	**EOP target**
IR 3: Improved household level knowledge and attitudes for key essential newborn care and related maternal care behaviors	Proportion of pregnant women who slept under an ITN the previous night	15%	26%	35%	40%	31% (under bednet – not ITN)		65%
	Proportion of newborns exclusively breastfed	75%	-	93%		25%`	75%	
	Percentage of infants age 0-5 months exclusively breastfed	53%	57%	71%	80%	53%	64%	
	Proportion of children born in the last 5 years who were born least 24 months after the previous surviving child	85%	70%	85%	90%			